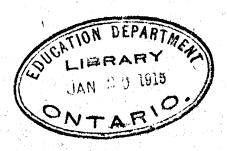
# The Western School Journal

Henry, R. Alley, Librarian, Educational Library, Normal School Building TORONTO, Ont.



Ring out the old, ring in the new, Ring happy bells across the snow; The year is going, let him go; Ring out the false, ring in the true.

Ring out old shapes of foul disease, Ring out the narrowing lust of gold; Ring out the thousand wars of old, Ring in the thousand years of peace.

Ring in the valiant and the free,
The larger heart, the kindlier hand;
Ring out the darkness of the land,
Ring in the Christ that is to be.

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#### The Western School Journal

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## The Western School Journal

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No. 1

### **Editorial**

#### A Happy New Year

What is the secret of happiness? If you would know read over the story of the Blue Bird. In short form the wonderful little tale is told in this issue; in dramatic form it may be had from any book-dealer for a quarter. True happiness springs from service in the ordinary affairs of life. It will be found in every schoolroom by every teacher who lives and loves. Yes, and the loving is an essential part of it. Let us not forget that. It is impossible for the Blue Bird to show his colors in an atmosphere of fault-finding and scolding and complaint.

When the spirit of love reigns in a school it is wonderful how much may be accomplished. Work is doubled because desire and will are harmonized; play is rendered more enjoyable because it is relieved of all rancour and bitterness. It was no idle advice of the Apostle when he urged us to seek earnestly the best gifts. He made no mistake when he singled out love as the greatest gift of all.

Yet there are some teachers who appear to conduct their schools as if a betrayal of affection, or even an unbetrayed feeling of affection were a crime. To such, teaching is a matter of business, and in matters of business there is no room for emotion. Fortunately the profession is year by year losing members who take this point of view. It is now in civilized lands recognized.

nized that teaching is a spiritual service, and that teachers must possess all the attributes of those engaged in other spiritual callings. If a parent without love in her heart cannot retain the affection of her husband nor win the willing obedience of her children; if a preacher wanting in love cannot gather around him the members of his flock, and inspire confidence and goodwill; a teacher lacking in this quality can neither arouse real intellectual earnestness nor kindle those finer feelings which are recognized as the highest manhood possession of ideal womanhood

Teddy O'Rourke was not far astray when he remarked that "a pig is the only animal that should be driven instead of being led." Boys and girls there are all over this western land waiting to be led. Are you going to lead a few of them? Are you going to take them with you on excursions into the wide and fruitful fields of truth and beauty and goodness? Are you already picturing the homecoming at the end of the year, when they shall all return from their harvesting, bringing with them their precious sheaves? To you, if to any workers on this green earth were the words of the old hymn intended:

Go labor on, spend and be spent,
Thy joy to do the Father's will,
This is the way the Master went,
Shall not the servant tread it still?

## Special Articles

#### THE GARY PUBLIC SCHOOL SYSTEM

By GERALDINE S. BELL

On the southernmost shore of Lake Michigan, at a distance of about 30 miles southeast of Chicago, is the city of Gary, Indiana. The United States Steel Corporation selected this place as the site of one of its greatest manufacturing enterprises, and named it Gary in honor of one of the chief officials of the company. Eight years ago this locality was a waste of shifting sand dunes, dotted here and there with clumps of scrub-oak trees, and broken in places by swamps. Today Gary is a city of 45,000 inhabitants, with all the features and utilities of a modern city. The industrial development of the city has been rapid, and Gary bids fair to become one of the most important industrial centres of the United States.

It is by no means an unusual thing to find the population of many of the great manufacturing cities of this continent made up principally of foreigners. Gary can rival cities many times its size in the cosmopolitan character of its populace, about 30 nationalities being represented. The bulk of the laboring class is unskilled, large numbers are illiterate; many of them are recent immigrants, and hence are ignorant of the English language. There is, however, a great number of skilled workmen, officials, and scientific specialists connected with the various industries, and these make up a well educated and important part of the population.

The mushroom growth of Gary rivals that of any of our Western Canadian cities, and this rapid growth, combined with the composite character of the people, presented a problem of uncommon difficulty in providing adequate and suitable educational facilities. Provision for these, however, was a first

consideration of the city officials, and while keeping pace with the increase in population, there has been evolved in this city a unique and ingenious synthesis of educational influences, which I shall endeavor to describe from what I saw during a visit to the schools of Gary.

It seems almost necessary at the outset to mention the name of Superintendent Wirts, the originator of the Gary system of public schools. Mr. Wirts came to Gary on the invitation of the Steel Corporation to undertake the direction of the city's educational work.

The first school building in Gary was erected by the Steel Company according to the plans of a traditional schoolhouse. Mr. Wirts set to work to design a type of building to meet the special requirements of his system. The Emerson School has five acres of ground, the Froebel School has ten acres, and two other schools now planned or under construction have fifteen and twenty acres respectively. All of the grades, from the kindergarten to the end of the high school are under one roof. is no accident. The arrangement is intentional, and is valuable both from the economic and educational standpoints. From the economic point of view it is decidedly cheaper to have a few fully equipped school centres than to duplicate this equipment in several times that number of centres. From an educational point of view it removes the gap between the elementary grades and the high school-that is, there is removed from the thought of the pupil the conception of the high school as a separate and distinct institution to be "entered" and "graduated" from, and

so materially lessening the tendency to stop school at the end of the eighth grade. In fact, the distinction between the traditional elementary and high schools are effectually blotted out both by the arrangement of classrooms and the school programme.

As early as the fifth grade several of the usual high school subjects, chiefly the sciences, taught by the regular high school teachers, are introduced. In addition to this a grade room is placed next to a science room, so as to present to the younger pupils an inviting future opportunity. Again, the pupils from grade five up are permitted to watch the senior students at work, and "fag" for them by weighing and measuring materials or cleaning appar-All this tends to emphasize the continuity of the course of studies, and in a more practical way sets one standard of discipline for all grades, with the senior pupils setting the example of right conduct to the juniors. Thus by eliminating any radical break in teachers as well as subjects, and by holding out something new and alluring each year they are able to prevent, to a very large extent, the decrease in attendance usually found in grades five to eight.

Departmental teaching has been introduced very considerably into the Gary schools. Teachers with special preparation and ability are employed for various branches of study, such as music, drawing, nature study and gardening, physical training, manual and industrial work. All pupils are kept one-half of the time under a classroom teacher for the regular traditional studies, and the other half spent with special teachers. The regular studies are divided between two classroom teachers, one having charge of the reading, writing, spelling and formal language work; the other, the history, geography and arithmetic.

This division of labor, and direction of school work by teachers specially trained and selected, removes all necessity for the employment of supervisors.

This greatly reduces overhead charges. Moreover, the character of the daily programme and the manner in which the plant is utilized, with the scheme for the alternation between regular and special work, make it possible to accommodate a far larger number of pupils in the same building, with a teaching corps less in number than that necessary where special supervisors are employed. The Emerson and Froebel Schools can each accommodate about 3.000 pupils, or almost three times as many as under the usual school arrangements.

The schools are equipped with ordinary classrooms, auditorium; science laboratories, workshops—these include printing, moulding, cabinet and painting, and machine shops; studios for music and drawing, gymnasiums, swimming pools, playrooms and playgrounds. The various manual and vocational departments are self-supporting, and in most cases an asset to the school. All iron-work for desks, all furniture and desks, all printing, painting, etc., required around the school, is manufactured or done by pupils working under the direction of skilled instructors.

The school day is eight and onefourth hours in length, and is divided as follows:

- 1. History, geography, English and mathematics—2 hours.
- 2. Manual training, science, drawing and music—2 hours.
- 3. Auditorium, exercises for mass instruction—1 hour.
- 4. Play, physical training, and application by means of free activities—2 hours.
  - 5. Lunch—1‡ hours.

The first line of work, which we will call Department 1, is conducted in the ordinary classrooms. The second line of work, Department 2, is conducted in the shops, laboratories and studios. The third, Department 3, is carried on in the auditorium. The fourth, Department 4, is conducted in the gymnasium, swimming pool, playrooms and play-

Four groups of children are simultaneously engaged in these four different departments throughout the day.

Suppose, for illustration, that the school is divided into four groups of pupils, one-half of grades 1 to 4 being group A; one-half of grades 5 to 8, group B; the other half of grades 1 to 4, group C; and the other half of grades 5 to 8, group D. The plan of operation may be indicated thus:

poses, such as exhibitions of class work, dramatics, stereopticon views and motion pictures, or addresses by distinguished visitors and business and professional men from their own city. For example, a class beginning the study of French is assigned a certain hour. They take their places upon the stage, and anyone in the audience may ask them to give the name of any object in the hall; the person designated must give the answer in French.

Plan of Operation of Four Departments

TIME	Department 1—Language, Mathematics, History and Geography	Department 2—Science, Manual Training, Drawing and Music	Department 3—Audi- torium	Department 4—Physical Training, Play, Application
8.15- 9.15	A	В		C-D
9.15-10.15	В	A	C	D D
10.15-11.15	- C	D	A	В
11.15-12.15	D	C		• • • • •
12.15- 1.30	$^{-}$ ${f A}$	В	· · · <u>· ·</u> · · ·	
1.30- 2.30	В	A	D	C
2.30- 3.30	~	D	В	$\mathbf{A}$
3.30- 4.30		c		B

What we have, in fact, with this simple arrangements, is two schools with grades 1 to 8 in each, one school working in Departments 1 and 2, while the other is occupied in Departments 3 and 4, alternately engaged thus throughout the day as indicated above.

In all grades the time assigned under Department 4 is divided between the teachers of physical training and play and the teachers of Departments 1 and 2. That is, one hour of the time in this Department may be definitely planned to give the formal work of the school expression through self-activity. example, the music and literature teachers use this application period for folk dramatics, games, musical modelling in clay and sand, and free play construction in the "busy corners" of the playground or playroom.

Special mention must be made of the auditorium period, which is regarded as one of the most interesting and helpful periods in the school programme. This period is used for various pur-

The school programme is so flexible, by reason of its alternation of regular studies and special activities with classes in progress in each the whole day long, that it is possible to adapt the programme to the pupil instead of attempting the reverse. If a pupil is backward in one subject, he can do double work in that subject and "catch up" by attending the class dealing with that work which he does not well understand, and omitting temporarily some of the special activities in progress at the same period of the day. He is promoted by subjects instead of being held back on account of failure in one or two branches. For instance, a boy may be doing Grade 6 work in all subjects but arithmetic, which he may be studying with Grade 4. If a pupil is defective, retarded, or exceptionally bright, he can go as slow or fast as he is able. Of course, this applies only to the work up to Grade 8, as the work in Grades 9 to 12 is under the direction of the

State Board of Education, and they demand uniformity of work in these grades.

The Gary idea of a school plant, we are told in a little pamphlet which is handed to visitors, is a playground, garden, workshop, social centre, library and traditional school combined under the same management. It is considered of the greatest importance that right conditions be provided for the pleasure and recreation of the child and adult. In addition, a properly organized playground, workshop and school secure the same attitude of mind toward the reading, writing and arithmetic that the child normally has for play. Also the shop and school features greatly increase the value of the plant as a recreation and social centre for adults. From this we can readily see that the aim is to link up the school with the community life, to make the school such an attractive place that the boys and girls will prefer the school and its playgrounds to the streets and back alleys. Instructors are on duty on the playgrounds six days a week to direct and oversee the play of the children. The equipment includes baseball diamond, tennis courts, wading pool, and complete outfit of playground appara-

One of the most remarkable features about the whole system is the night school work carried on by some of the day teachers and University graduates employed in the Steel Mills. The enrollment in the night schools last year exceeded the day enrollment. Thousands of foreigners and native born of both sexes are taking advantage of the opportunities afforded for development in cultural studies and vocational work. Mr. Wirts is planning a scheme whereby the schools, instead of being open for ten months and closed for two months, will be open all the year round by having four quarters of twelve weeks each. The pupils must attend three quarters each year, electing which one he desires to miss, or he may attend all four, if he so wishes.

advantages of such a scheme are so numerous and so obvious that it is unnecessary for me to dwell upon them in this survey.

Particular attention is also given to the development of the moral side of the pupil's life. The boys' secretary of the Y.M.C.A. is in close touch with the workers in the various schools, and gives valuable assistance by talks, and leadership in athletics, etc. With the consent of the parents any child may take one hour a day from Department 4 to attend any classes of religious instruction given by a minister or other authorized person of his own faith.

The boys of each school elect a mayor and council of aldermen, who have extensive jurisdiction over the life and discipline of the school. Some time ago they passed on their own initiative several very significant by-laws and motions. "They passed an ordinance making the kids cut out going over people's vacant lots in the school neighborhood. They sent a delegation down to the Gary city council, requesting more garbage cans for Gary and pledging the kids of Boyville to pick up the waste papers and put them in the cans and help keep the town clean. The delegation further demanded stricter enforcement of the law against the sale of cigarettes to young boys."

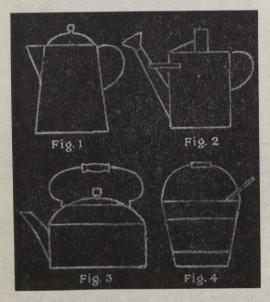
One could write a great deal more about the many interesting features of the Gary schools, but enough has been given to show that Gary is determined to save its boys and girls for an intelligent and helpful manhood and womanhood. The individual is given the fullest scope for development, and at the same time taught to co-operate with others and to consider all his actions in relation to the well-being of the entire school community. From this stage it is but a step into the bigger and fuller life of citizenship, and it will be most interesting to watch the development of the community life of Gary in all its phases when these boys and girls go out to assume the greater responsibilities of maturer life.

#### DRAWING, DESIGN AND CONSTRUCTION

Lesson V. A Series of Normal Art Lessons for Teachers. By BONNIE E. SNOW, formerly Supervisor of Art in Minneapolis, Minn.

Object Drawing

The best way to learn to draw is to draw from objects. Copying a drawing that some one else has made is no more learning to draw than copying a fine bit of literature is learning to write. This is not saying that copying should never be done; but it is saying that copying should never be substituted for object drawing. There is a time when the copying of a fine technique or method of handling is of benefit; but this time is not in the earlier school years. Children should learn to draw in a simple but definite way, using outline

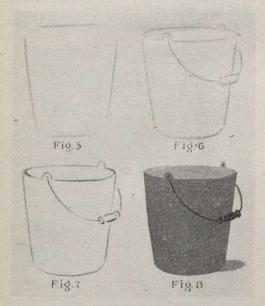


only, before they are concerned with processes of technique. A carpenter who wishes to show by a sketch the proportions and the construction of a box does not use nor desire a highly finished drawing, in "light and shade." A dressmaker who aims to give her patron or her apprentice some idea of the draping of a skirt would be glad to be able to do this by means of a few lines, intelligently placed. She would not care for a "full color" plate or sketch. It is this ability to sketch freely and easily that we should try to cul-

tivate in the schools, rather than to attempt the impossible task of picture making. We have neither the time, nor the studios nor the art-trained teachers, which are necessary for training in picture making. The art schools are equipped for this, and to them the students who are fitted for this special work should be directed. Every one can learn to draw, however, and the principles which underlie successful free hand sketching are neither numerous nor confusing. Sketching from objects leads to the study of perspective, and all pupils in the grammar grades should be well grounded in at least as many of the principles as are touched upon in this article and in the next.

Object Drawing for Primary Grades. Before perspective is touched upon, children should draw from a variety of objects, for the purpose of expressing ideas of form and proportion, and for cultivation of the great art of correct "seeing." Common objects, of large size, are best. Those shown in Figs. 1, 2, 3, and 4 illustrate objects that have some inherent interest, and yet are not too difficult to represent in two dimentions only. An interesting device is suggested in the use of black or dark gray paper and white chalk, reversing the usual means of expression, which is black crayon or pencil on white or light paper. Give a few definite and simple directions, training the children to draw the shape of the largest part of the object first, and adding after this such elements as handles, covers or spouts. The drawings should be made large enough to well fill a 6 in. x 9 in. sheet of paper, and should show truthfully the height, width and characteristic shape of the object studied.

Memory drawing may be advantageously used in this work, and will stimulate interest. In presenting memory exercises, the teacher should see that pupils are provided with chalk and paper, and should then produce an object which had not been previously in



sight. The object should then be removed, and the children told to draw what they had seen.

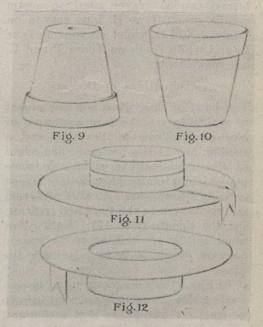
#### The Next Step.

When pupils have reached the third or fourth grade, and have had considerable practice in showing objects in two dimensions only, they may be asked to represent "the distance across," that is, the distance from front to back. For this study the object or objects must be placed so that children can see the appearance which they are asked to rep-To accomplish this a large resent. cylindric or conic object may be placed on a table in front of the room, and tilted a little, so that the pupils may see into the object. A tub, a pail, a halfbushel measure or a round waste-basket are suggestions. The idea of foreshortening (the apparent reduction of width from front to back) may be brought out by asking children to tell how far down into the object they can see. Lead them to express themselves definitely, by saying that they can see about a quarter or a fifth of the way down, or that the top appears to be two

inches or three inches wide, according to the proportion of the object, and the amount that it is tipped forward. Lines to express the height, width and slant sides, if any, should first be lightly sketched (See Fig. 5). Then the shape of the top should be drawn, then the bottom curve and finally the handle or any other individual feature (Fig. 6). The drawing is now ready to be corrected, and the right lines strengthened in certain places (Fig. 7). If desired a gray wash or a tone of color may be added. When this is done, the outlines should not be strengthened as in Fig. 7. Fig. 8 shows the result of a drawing that has been "washed in."

#### For Intermediate Grades.

The showing of an object in two positions will often prove an incentive to keen observation. The objects illustrated in Figs. 9 to 12 are examples. The perspective principle involved should be presented informally, rather as a "seeing" lesson, than as a scientific study of ellipses. The term "foreshortened" should be explained, some-



what as follows: "When a surface, because of its position, appears less wide than it really is, we say that it is fore-

shortened. The top and bottom of the flower-pot are really circular, but when they are placed before us in the positions shown in Figs. 9 and 10, we can see that the shapes appear narrower than circles. Such shapes are called ellipses. A sailor hat, though its crown is not circular, is foreshortened as it lies before you, in the positions shown in Figs. 11 and 12. Study the shapes carefully and then make drawings in outline, to show what you have seen."

This group of sketches shows the use of the accented line. Accents are dark spots or portions of lines, and should be most carefully placed, after close observation of the object. It is true that edges appear strong in some places and almost entirely disappear in others. This is due to the action of light. The expression of these variations results in the accented line.

Colored crayons and colored papers are useful and attractive, and sustain interest, in these somewhat technical exercises. Green crayon used on Tone P of the Prang Construction Papers, brown (sepia) crayon used on cream manila or on Tone E, blue crayon on Tones J and O, violet crayon on Tone L, and white chalk on Tones T and U, are suggestions.

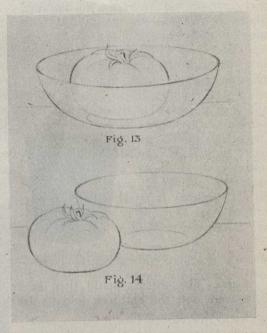
#### Combinations of Objects.

A bowl of clear glass is a fine object in which to see the foreshortening of two circles,—one at the top, and a smaller one at the bottom. The edges of the glass look very dark in some places while in other places they almost entirely disappear. A still different quality is seen in the line used in drawing the tomato (Fig. 13). Notice how much lighter the outline of the tomato appears, when it is seen through the glass.

In Fig. 14 is a simple group. In presenting this lesson, it is essential to have at least six groups, so that each pupil may see the group in a position that will enable him to make a suitable sketch. It will simplify matters for the teacher, in beginning the sketching of

groups, if the six groups are all alike; that is, if she can arrange six glass bowls and six pieces of fruit in groups that are alike, or nearly so.

Place the fruit a little in front of the



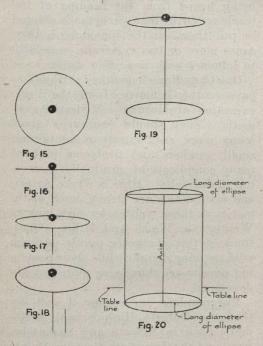
bowl, and to one side, as indicated in Fig. 14. Lead the children to see that "nearness" is expressed by drawing the nearer object a little lower on the paper than the farther object is drawn.

Shallow baskets, pans or earthenware bowls may be substituted for glass bowls, if the latter are not available.

#### A Lesson in Perspective: The Foreshortened Circle.

A circular face or shape when held in different positions illustrates the effect of perspective in a very clear and definite way. Cut from cardboard a circle not less than four inches in diameter. Through the center, push a hatpin so that the entire length of the pin passes through the center of the cardboard and the head of the pin rests against it. Hold the hat pin horizontally from front to back so that the full face view of the circular disc is opposite the eyes. The appearance of the cardboard in this position is a circle (Fig. 15). Next, hold

the hatpin in a vertical position so that the edge of the cardboard is exactly opposite the eye level. Its appearance in this position will be a horizontal line (Fig. 16). Still holding the hat pin

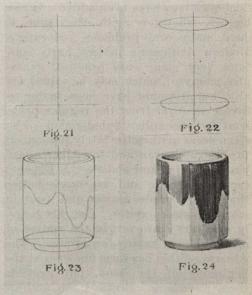


vertically, lower the cardboard slightly. Its appearance in this position is a narrow ellipse (Fig. 17). Lower the disc still more. The ellipse appears wider; the apparent width from front to back increases, though the apparent width from left to right remains the same (Fig. 18). In Fig. 19 another disc of the same size has been placed near the end of the hatpin, and the two discs, with the hatpin acting as an axis, suggest a cylinder. The disc at the top appears narrower than the disc at the bottom, because it is nearer the eye level. Fig. 20 gives the construction lines or skeleton of a cylinder.

Four Steps in Drawing from Cylindric Objects.

Construction lines such as those shown in Fig. 21 are the result of the study of the two pasteboard discs. They should always be drawn as a means of determining correct perspective, when

sketching from cylindric objects. First draw a light line, somewhat longer than the full height of the object to be studied. Near the top and bottom of this line, draw horizontals, indicating upon them the width from left to right of the top and the bottom of the object (Fig. 21). Indicate now upon the vertical axis the widths from front to back of the two ellipses. Remember that the lower ellipse should measure wider in proportion (from front to back) than



the upper ellipse (Fig. 22). Next sketch the outlines of the sides, modifying the vertical lines of the cylindric skeleton to suit the contour of the object studied. Next sketch the additional lines for the base. The subject of the sketch shown in Fig. 24 was a Japanese jar, showing a "drip" of very dark color over a light gray glaze. The shape of this drip was therefore sketched in Fig. 23. All necessary corrections should next be made, and all construction lines not needed should be erased. Pencil values to express the color tones of the model should be added as a finishing touch.

In our next article we shall present a helpful device to be used in developing the perspective of rectangular objects.

#### SOME CANADIAN ARITHMETICS.

Saskatchewan Teacher

Of making many arithmetics there is no end, and yet it is a question whether we have in the whole Dominion an acceptable text-book of this science. Perhaps the best is "The New Hamblin Arithmetic' by Scott Fletcher. A great many of the conundrums of the first edition have been omitted, and an abundance of good practical questions have been added. It has besides, what few arithmetics give, a good many oral problems. Morang's Modern Arithmetic in two parts contains very many easy practical examples, many of which may be solved orally, but it would have been better to divide the oral from the regular problems by an explicit sub-division. elementary arithmetics lately prescribed for Saskatchewan and for Alberta, are based on Kirkland and Scott's Elementary Arithmetic and are much better than their predecessors, and contain more copious exercises. They are largely a failure, however, in the matter of oral problems, having few or none. The Alberta edition has some fine ones at the beginning of the book, but neglects them elsewhere. Perhaps the authors think the teacher should use a separate oral text-book. However such questions can be solved more readily, if they

are before the pupils' eyes, instead of being heard from the reading of the teacher. Or, if the instructor is obliged to put them on the blackboard, they cause more or less eyestrain, especially to scholars with imperfect vision.

Our Canadian elementary arithmetics have another deficiency, with the single exception of Morang's Modern Arithmetic. They should contain a great many more easy questions containing small numbers and problems without many complications, gradually increasing in difficulty. Here is where American arithmetics are strong, such arithmetics as those written by such men as Wentworth, Walsh and Milne. Questions of this character pupils perform with genuine delight while their reasoning powers are thus being more quickly developed.

To complete our review, I will say that the Ontario High School Arithmetic used in Alberta and Saskatchewan, and the Twentieth Century Hamblin Smith Arithmetic, prescribed in British Columbia, are fair text-books, but have the fatal deficiency of the other books, namely, the omission of mental problems. Moreover many problems that would suit western conditions, do not find their way into these books.

#### The color of water

It was long ago discovered that water  $\mathbf{of}$ pure the natural color white, most as and not is blue. supposed. **Opinions** of us usually have not agreed on the cause of the green and yellow tints; these, it has been discovered by W. Spring, are due to extraneous substances. solved calcium salts, though apparently giving a green tint, due to a fine invisible suspension, have no effect on the color of the water when adequate precautions are taken. The brown or yellow color due to iron salts is not seen when calcium is present. The green tint is often due to a condition of equilibrium between the color-effect of the iron salts and the precipitating action of the calcium salts.

## The Year's Programme

#### JANUARY STUDIES

First Week—The New Year. Snow. Snowflakes. Ice. Sleds. Skates. Winter sports.

Second Week—The heavens in January. Teach "Twinkle, twinkle, little star." The Big Dipper. The Little Dipper. Orion, How we keep warm in winter. What food we eat in winter that we do not in summer.

Third Week—The cold North Land. The Eskimos: houses, clothing, food, fuel, animals (dogs). Their sleds: what are they made of? Their boats (cajacks), sports, occupations.

Fourth Week—Animals of the North Country: seal, polar bear, walrus, whale, eider duck.

#### THE MONTHLY PLAN BOOK OF THE RURAL TEACHER

By ELLA M. POWERS

The teacher of the rural school has many a problem to solve of which her co-partners in the graded eity schools know little. She must drill untiringly upon the three R's, and in addition she must plan work for her primary children which will harmonize with the thought of each month. She must be prepared with ideas for construction work, drawing, language work, supplementary blackboard reading lessons, number work, paper cutting, sewing cards, etc.

In order that this work may be available, a note-book containing her plan outline is kept for reference throughout the year. She has access to this at any moment and thus saves herself much unnecessary worry and research when the time comes to use the material.

One rural teacher keeps the following outline to which she constantly refers.

Suggestions for Sewing Cards.
January—Eskimo house.
February—Hatchet.
March—Rabbit.
April—Umbrella.
May—Chicken.
June—Watering-pot.
September—Apple.
October—Pumpkin.
November—Wigwam.
December—Stocking.

Suggestions for Paper Cutting.
January—Sled.
February—Flag.
March—Kite.
April—Bird-house.
May—Flight of birds.
June—Butterfly.
September—Melon.
October—Jack-o'lantern, or leaves.
November—Turkey.
December—Holly or silver star.

Suggestions for Color Work. Mount on January-Red mittens and red cap gray. February-Red, white and blue flag or shieldgray. March—Gray windmills green. April - Light wood-colored bird-housebrown. May—Bluebirds or robins ecru. June—Yellow butterflies— September—Red apple, green leaves, brown stemgray. October — Yellow carrots, green leaves November — Brown canoe, brown paddle—

December—Colored candles:
red, yellow, blue— gray.
Stories to Illustrate from Mother Goose.
January — Four-and-twenty Blackbirds.

February-Old Mother Hubbard.

March—Little Miss Muffett.
April—Tom, Tom, the Piper's Son.
May—Little Bo-Beep.
June—Hickory, Dickory, Dock.
September—Jack and Jill.
October—Little Boy Blue.
November—Pussy Cat, Pussy Cat.
December—Little Jack Horner.

Stories to Dramatize.

Mother Goose melodies, as given above, for first grade.

Stories read or told during the month for second and third grades. Also

dramatize:-

January—Jack and the Bean-stalk.
February—The Ginger-bread Boy.
March—The Sleeping Beauty.
April—Cinderella.
May—Belling the Cat.
June—The Lark and Her Little Ones.
September—Little Red Riding Hood.
October—Golden Hair and Three
Bears.

November—Old Woman and Her Pig.
December—Night Before Christmas.
Stories to Read or Tell
January—Story of Agoonack.
February—Stories of Washington.

March—The Wind and the Sun.
April—The Ugly Duckling.
May—Phaeton.
June—Vacation Stories.
September—Story of Clytie.
October—Apple Seed John.
November—Hiawatha's Childhood.
December—Story of Piccola.

Nearly all these stories are found in the reading books and are supplied to the teacher and school.

It is really better to read less to the children than to read so much that they can retain none of the stories told.

Poems to Memorize.

January—Twinkle, Twinkle, Little
Star.

February—Our Country's Flag.
March—The Wind (Stevenson).
April—Boats Sail the Rivers.
May—I Once Had a Sweet Little
Doll (Kingsley).

June—The Swing (Stevenson).
September—Great, Wide Beautiful
World.

October—Wynken, Blynken and Nod. November—Father, We Thank Thee. December—Christmas (Eugene Field).

Be you to others kind and true, As you'd have others be to you; And neither do nor say to men What e'er you would not take again.

If boys and girls are only good, With happy hearts and faces, The world will never miss at all Fine clothes and frills and laces.

#### Coal

Who am I as black as jet,
Older than any you ever met?
Down in a dungeon long I lay,
Never seeing the light of day.
At length men called me,
"Your help we need,"
They opened the door and I was freed.

## In the School Room

#### NOTES ON THE SECOND READER

From month to month there will appear in the Journal notes on the lessons in the Manitoba Readers. These notes will not take the form of lesson plans. Each lesson is supposed to be more than a mere reading lesson, more than an exercise in thought-getting, and thoughtgiving. It should suggest many lines of activity, further reading, drawing, or some other form of seat work. In other words, a selection in the reader has value for purposes of reading and literature, but it has additional value as a suggestion. The suggestions in this issue are made by the students of the present Normal Class.

#### Second Reader

We Thank Thee.

The study of this selection should develop reverence and gratitude. As introductory there might be a talk regarding the blessings we enjoy, and the blessings we may confer upon others. Then pupils read the selection and find what the author has said with regard to these blessings. Next comes oral readingsingly, and even in concert. If music can be found to match the words so much the better. If the selection is read often enough with feeling and meaning it will be momorized without conscious effort. Other poems and quotations with similar sentiment will be supplied by the teacher and pupils.

#### Running Away.

The study should give the children a good laugh. They should picture the pig on his journey, step by step, and prove that they see the pictures by their reading. Afterwards they might dramatize the selection—one pupil taking the part of the pig, another the part of the dog, etc. The pupils may tell parallel stories, e.g., "The chicken that wandered away;" "The stray lamb;" and the

teacher may read "The little boy who ran away."

#### A New Game.

The aim here is to develop a keen appreciation of the beauties and wonders of the night. There might be a short introduction to arouse the interest and enthusiasm necessary in beginning a new game. The children are informed that the moon and stars are about to play a game. Can they imagine what it Then they read silently. aloud, taking parts. Then they tell what they would add to the pictures in the book. As oral composition they could tell stories such as "What the wind sees," "What the brook sees on its way to the ocean," etc. The teacher may read "Four little sunbeams came earthward one day," "The star and the diamond," "The child and the star."

#### The Clock.

This follows a lesson on reading the clock. The table of time will be taught in connection with it. On the pasteboard clock made by teacher have pupils indicate the school hours of opening, closing and recess. Then comes the reading of the lesson, followed by memorizing the usual rhymes pertaining to time. There are many forms of appropriate seat work to follow the lesson—such as writing numbers in Roman and Arabic notation; drawing picture of clock; making the same on cardboard with yarn.

#### The Wind and the Sun.

There may be an introductory discussion on the topic—what the wind does for us, and what the sun does for us. (1) The wind distributes seeds, drives the clouds, waves the grain, drives windmills, causes destruction on land and sea; (2) The sun gives light and heat, aiding growth of plants and flowers,

purifies, cheers; on the other hand it burns up vegetation, causes discomfort to man and beast, dries up ponds. The teacher may read poems on the Wind and on Light. Then comes the silent reading of the lesson, followed by reading in dialogue form. Pupils may write or tell parallels in which they contrast (1) horse and cow, (2) dog and cat, (3) soldier and sailor.

#### The Carpenter.

Aim to teach the children to appreciate honest labor and to know the pleasure of working for others. Introduce by means of a little chat about some carpenter, the tools he uses, their names, etc., what a carpenter makes. Ask the children whether they ever use these tools and try to make things. Tell them this story is about a little boy who meant to become a carpenter. Let the children read the story. Get the children to tell why the little boy found so much pleasure in his work that he ran the risk of cut fingers, etc. He was trying to give pleasure to his little sister and the thought of her joy made him happy.

Encourage the children to try to

make little gifts for others.

E.M.B.

The Carpenter (Another Method).

An introductory talk on tradesespecially the trades small boys like to imitate. Pupils read silently paragraph by paragraph describing the pictures they see. Then they give the complete picture as it is presented. Next comes oral reading. Pupils follow by giving accounts of other trades and callingsthe young mason, the young doctor, the young farmer. Similarly girls may tell about the young nurse and the young dressmaker. A reading lesson should always be considered as suggestive. It requires appreciation. The lesson and all that is suggested by it will pave the way for exercises in composition, drawing, making and speaking.

#### The Wind.

In introducing this lesson I should ask the children questions about the wind,

as: Where does it come from? Always from the same direction? Are they always cold? etc. In this way I should get them to give their own ideas about I might ask them to imitate different kinds of winds, as the roaring, whistling and the soft ooing wind. Having worked them up to an appreciation of winds, I would then read the selection, carefully, slowly and with expression. Then I would ask them how the leaves and the trees appear when a soft wind passes through and when a harsh shrill whistling wind blows past. By this time the children should know enough about the selection to be able to read it. Call upon one here and there, then have the whole class recite, without their books if possible. An interesting finale might be given by setting the poetry to music and having the children sing it, taking care not to omit the various shades of expression in the A.B. rendering.

#### Autumn.

This lesson should help the children to love the beautiful in nature and to be unselfish. There should be an introductory talk on the sights of autumn with special reference to harvesting operations. The pupils then read the selection—seeing the pictures. For afterwork they may gather colored leaves, nuts, seeds and the like.

O.C.

#### The Little Red Hen.

An old folk story, with a good moral -people who do the work should reap the reward. In teaching, the moral truth should be felt rather than stated explicitly. The story should be enjoyed as a story. The introduction might consist of a talk on farm animals—particularly with regard to their method of obtaining food. Then the pupils might read over the story, seeing the pictures. after which they could put it into their own words and act it. Then would come the reading-much of it-and afterwards the dramatizing. This lesson might well lead to a talk on sowing, harvesting, milling and baking. story makes a splendid exercise in oral composition for grade II. pupils. For parallel reading consider "The Lazy Frog," "Little Gold Finger."

#### North and South.

A fine little poem full of contrasts contrasts of climate, natural environment, feelings, language. The pupils can picture the glories of a summer day in the warm South, and the loneliness of a cold cheerless day in the far North. They can see the little bird coming north in the spring time. With his song the trees break into bud and the flowers begin to bloom. The country smiles in harmony with the song. On a second reading attention can be called to the beautiful use of words. It will be no harm if attention is called to the alliteration. Nor will it be out of place for the teacher to lead out from this lesson to describe the tropical lands—the lands of the little dark-skinned people, and the far northern lands—the home of the greasy Eskimos. Then there is room for talk on the birds. Above all there should be much reading, and oft-repeated reading until the little gem is stored in memory as a picture that will remain forever. This lesson should teach love for the song birds, even though not one word is said about the subject in a formal way.

#### Guess Who I Am.

The name of the lesson suggests the method. As the first line is read pupils supply answers that will suit, e.g., muskrat, beaver, leech; the second line suggests other answers, as snake; the third suggests toad, frog, etc. Pupils may after the reading make up other exercises of similar kind. Four or five pupils give separate facts about a chosen object and the rest of the class guess what the object is. This is a good exercise in oral expression and develops alertness. Good objects are

clock, robin, baby. Another good after exercise is an oral description of the frog and his habits. M.A.

#### A Letter.

The introduction is suggested by the lesson. Pupils are told just enough to be in an expectant attitude. As they read silently they picture each portion clearly. Then they read aloud. Naturally they will follow the reading by appropriate exercises, such as (1) copying the letter to get right form—punctuation, capitals and placing; (2) writing letters to imaginary friends concerning school happenings; (3) writing to children in other lands. Some letters could be written on the board for class instruction or criticism.

#### Kind Words.

Pupils on reading this over independently may not be able to understand it and the various parts may require concrete illustration. Name things that have locks. How are the locks opened? What can people lock up in their hearts? -secrets, affection. Show how a kind or loving word may open a heart, by reference to Lord Fauntleroy and his grandfather. Show how blows and scolding can not open a heart, by reference to two children in the same family. Refer to story of the Wind and the Sun. Ask children what happens when they smile before a looking glass, when they frown. Tell the story of Echo. What effect has it to say Thank you, and If you please? When should these terms be used? With small children let them ask for and give things, using appropriate language. As after work play the game "Thank you," with flinch cards or any other cards of the kind. The selection will be memorized as the result of repeated reading. It is needless to say that the precept should be followed by practice.

It is better to prefer honorable defeat to a mean victory, to lowering the level of our aim that we may more certainly escape the complacency of success.

—John Ruskin.

#### ENGLISH LITERATURE..

By A. H. HOOLE

The vast realm of literature contains the accumulated knowledge and experience of the ages, and gives us the loftiest thoughts of the world's greatest men and women. In it we may meet and commune with those who have seen visions and dreamed dreams; who have lived and striven for ideals; who have received the noblest inspirations and experienced the most intense emotions. No one explores it in vain or finds there a need unsatisfied. It is a priceless heritage handed down to us—ours to appreciate, ours to profit by, ours to enjoy.

Literature inspires to the best that is in us; broadens the mind; reveals the pure and beautiful; cultivates the aesthetic sense; and strengthens imagination by giving it full play. Through it we gain knowledge, power and insight. It develops a balanced intellect, a discerning judgment and a sympathy which is catholic in its interests. Nowhere can we find keener and more lasting pleasure. It lifts us above "the daily round of common task" on to the higher plane of the ideal. ministers to every mood of the human spirit because it is the product of hu-In a word, it is the indispenmanity. sable complement of complete living.

Literary taste is not merely an elegant accomplishment or the faculty by means of which we are able to appreciate technical skill, subtleties of style, or delicacy of touch; it is the means by which we enter in and take possession of the treasures which are ours. It is our duty to see that the child has it fully developed, that the awakening and quickening influence of literature shall call into being the fullest possible life; for "the child is father of the man" and the man who has not claimed his heritage and exercised his privileges has not yet attained to full consciousness of life. He does not live, he exists. We deplore the lack of literary and artistic taste today. We are apprehensive of the materialistic spirit so evi-

dent and we forget that to a great extent the root of the trouble lies in the fact that the child mind has not been During the most trained properly. plastic stage of its life, its tastes have been neglected, it has been left to form its own unguided. The emphasis must be laid on this point. How vivid and l'asting are the impressions made in childhood, we know from our own experience. As early as possible the child should be introduced to literature, to good books; interesting books; books that will set him thinking; that will exercise his imagination, that will present high ideals and all that is beautiful and true. In this way we may mould character and bring culture to our boys and girls.

There is also a negative good-none the less valuable—which results. Instead of reading the empty, frivolous and highly flavored trash of which we have so much-not to mention the vile products of filthy imaginations-our young men and women should devote their leisure to reading that which is recreative and profitable. There is undoubtedly a place for light, entertaining literature and there are many books of this type which are wholesome and not worthless. The moral value of the study of literature cannot be overestimated and is only equalled by its educational value. It is possible to present books to children so that they begin to hate them, and on the other hand it is possible to make them live before them, so that they become a part of their lives.

When we consider all that the world owes to literature today; how it binds nations together; how it links the past and present; brings distant lands and peoples to us at our pleasure; makes life more expansive and more perfect, we cannot fail to recognize our duty to the rising generation, that what is ours may be theirs—and theirs more fully.

## A DOZEN QUESTIONS FOR NEW TEACHERS AND SOME CARELESS OLDER ONES

#### By A. A. HERRIOTT

- 1. Have you notified the Department and the inspector of your engagement this term?
- 2. Have you carefully looked over the record of work covered in the various grades by your predecessor?
- 3. Have you filled in the blanks on the Register covers outside and in as they should be?
- 4. Have you looked up the text-book record and inventory and checked same with books on hand?
- 5. Have you carefully entered up whatever distribution of text-books you have made?
  - 6. Have you a copy of the programme

of studies handy and do you know its contents pretty well?

- 7. Are you setting a high enough standard of work and refusing to accept anything less than a pupil's best?
- 8. Are to-day's lessons any better than yesterday's?
- 9. Are you giving the best you have to your work?
- 10. Are you getting acquainted with the ratepayers of your district?
- 11. Are you trying to make the best of conditions as you find them?
- 12. Are you giving good value for your salary, both inside and outside the school?

#### THE VALUE OF LITERATURE AND A COMMENT ON READING.

#### By ALICE BUCHAN

"A good book is the precious lifeblood and a masterspirit, embalmed and treasured up to a life beyond life."— Milton.

Books are the treasuries of mind. On their pages are photographed thought after thought, introducing us to all ages and all conditions of men. They serve as the vehicle of all the ideas and burning questions that seethe in the minds of men and women. Every human interest is represented. Socialism, politics, religion, travel and adventure—all have their place. The manners and habits of other nationalities; their modes of life and thought; the growth and progress of humanity in them,—these are the important and distinguishing factors which literature enshrines.

Is it not a grand thing to be the possessor of keys which will open the doors of the "House of Knowledge?" To him who reads all ways are free and open; therein he may journey as he will. He may gather knowledge whereever he chooses. Science, art, history, invention, industry, bird, fish, beast are

to him as servants. He has acquired a power, a great valuable power, the power of a cultured mind.

Books are to us as the "Wealth of nations." They provide us with information on almost every subject, and offer help in each department of life. They are our intellectual companions and teachers, though ages intervene and oceans divide. To read is an accomplishment of high value; to read intelligently is peculiarly advantageous; to read sympathetically is a lasting joy.

Reading should be choice in quality, only the best books being selected; it ought to be regarded as to quantity, so that the books used may be fully and deliberately mastered. The intensity with which our minds are concentrated on what we read is the measure of the good we derive from reading as a whole. Profitable reading is that sort which compels us to think while reading, and impels us to reflect afterwards.

Thus reading becomes one of the best agencies in self-culture. It awakens the intellect, arouses the imagination, provides material for thought, and places before us ideas which have been excited in the minds of others.

Books are numerous. But it is not the man of many books who is wisest. There is an old saying, "Beware of the man of one book." He is well informed so far as it goes. He is not overmastered by his book but has mastered it. He has not only knowledge but wisdom.

Every literature has its special character and peculiarities. English literature is the literature of individuality and independence. The whole national culture and personal thought of the people, stored up and communicated to

us in books is one of our choicest blessings. Should we neglect this great gift? Too much time is spent on the light superficial fiction of modern life. The great classics have of late seemed to sing into oblivion. Are there not readers today who say they cannot read Scott, do not care for Dickens and leave Thackeray severely alone? This is not right and it is incumbent on us as teachers, to implant in the children, the men and women of a future generation, a familiarity with these great authors, that they may look on the past as the long lesson of experience, written, that they may be the better for it.

## PURPOSEFUL SEAT OCCUPATION FOR THE LITTLE ONES

By SUSAN M. KANE

In the first and second primary grades, purposeful seat occupation for the children requires thoughtful study on the part of the teacher. Lessons in nature study, history, reading, etc., under the direction of the teacher must be followed by related work at the seats. To have the materials at hand for this related work, makes it necessary for the teacher to have her lesson plans outlined days, and even weeks, in advance, for profitable seat work requires time for its preparation.

Scissors, paper, paste, ink, water colors, colored crayons, charcoal sticks, lentils, corn, melon, squash, sunflower, and other flat seeds should be at hand; cardboard patterns of birds, animals, trees, insects, fruits, toys, stockings, hats and a hundred other things must be made; charts are needed to place before the children, and the whole course of seat occupation should be as well planned and classified by the individual teacher as are the lessons in the books from which the children read.

In the suggestions which follow, the teacher must meet her own needs in the subject matter she is preparing and select her steps of advancement, and it is to be understood that there is enough of whatever is being used, so that each

child has the work before him. Much of the work should be numbered to correspond with the numbered box or envelope which holds it. This prevents loss and mixing sets of words and cards which may be accidentally upset.

Outlining.

This work is done with seeds, pegs, toothpicks, lentils, gummed squares and circles, and with water colors and crayons.

1. Have large cards with script or printed words. Outline.

- 2. Outline freehand on desk the model on blackboard or chart. (This may be a picture, words, phonic work, figures, groups. The list might be indefinitely increased.)
- 3. With white crayon write a word on the child's desk. Outline and make a picture of the word in seeds.

4. Write freehand in seeds.

- 5. Print freehand with material for outlining.
- 6. Make a picture of object in seeds. This may illustrate a story or some feature of the story.

Alphabet Cards (Script and Printed).

- 1. Have two large cards of capital and small letters. Cut one apart. Match identical letters.
  - 2. Have a large card with letters and

blank spaces. Place letters in the blank spaces.

- 3. Have a large card of words with omitted letters to match with words on the blackboard or on other cards.
- 4. Make words with letters like words on small cards.
- 5. Find the printed letter to match script.
- 6. Make the printed word to match script.

Arrange the alphabet in order. Script. Printed.

#### Pictures.

- 1. Place pictures on desks. Teacher writes the names below with crayon. Outline.
- 2. Have pictures and adjectives on cards describing the same. Place the adjectives below the pictures on the desk.
  - 3. Make the pictures in seeds.
  - 4. Match the pictures and words.
- 5. Write or print in seeds the name of the picture.
- 6. Have large cards divided into squares. In each square have a picture, below it the word. Match pictures and words

#### Words.

- 1. Envelope of words. Place familiar words on one side of desk and unfamiliar on the other.
- 2. Large eard with the alphabet on one side. Place words beginning with a certain letter in the row headed by that letter.
- 3. Match identical words on the large
- 4. Find words contained in the lesson in the primer. Match the printed and script words in the lessons.
- 5. Large cards with ten words on each. All cards different, as b-by, d-ll. Build words using alphabet cards.
- 6. Large card with row of words. Envelopes containing the same words. Lay the words on the desk in the same order as on the cards.
- 7. Words on small cards. Children make these with letters.
  - 8. Envelopes containing names of

children and grown-ups. Arrange the family according to age. This work may have many variations, such as giving each member a pet, a piece of furniture, something he loves, etc.

9. Finish sentences, using the alpha-

bet cards to build the words.

10. Make sentences with words that are found on the card.

11. Build sentences with words found

within the envelopes.

- 12. Teach a rhyme. Have the rhyme cut up in envelopes and match words, placing them on the large card on which the rhyme is written.
- 13. Cut up sentences to be put together correctly, first by having the lesson on the board, then without.

14. Word envelope, to be used later in the year when children are able to tell

a story of the day.

15. Large card containing a wellknown poem for cutting apart. child first arranges from the poem written on the blackboard. Next arranges from memory. Takes home and arranges for mother if he has kept all his words and can so arrange from memory.

16. Large cards containing sentences, and pictures to be colored from directions written on blackboard as:

"Color the apple red, the stem brown, and the leaf green."

"Color the girl's cap, coat and sled red," etc.

#### Phonic Work.

- 1. Card with drawings and families.
- 2. Family names and consonant sounds to combine to form words.
- 3. Families to be cut apart and be arranged.
- 4. Family names on card. Script words from an envelope to be placed under the families.
- 5. Same as above, except that families are printed.
- 6. Use alphabet cards to build words in these families. Find family words in
  - 7. Group words according to families.
  - 8. Group words that rhyme.
- 9. Place correct letter before the family name to build words.

Calendars.

1. Get calendars with large figures. Cut apart and place on squares corresponding to a calendar on the board.

2. Make the name of the month in ways suggested under other headings.

3. Arrange the names of the months in order. Days of the week.

4. Make a calendar, using the rule.

#### Color.

1. Match word and color.

2. Use sticks to illustrate color, number and form.

3. Match word with the word and the

4. Designs made with scraps of colored paper.

5. Complete sentences with appropri-

ate objects in color.

6. Place colored pegs, sticks or lentils of given color around each word. Color objects cut from a pattern,—fruit, birds, sleds, etc.

Freehand Cutting.

1. Cutting to illustrate the work of the days of the week as, Monday—the tub, washboard, clothes on a line, etc.

2. To connect each letter of the alphabet with some known word.

3. To connect a sound with some known object.

4. Freehand cutting related to nature study.

5. Freehand cutting related to the different holidays.

6. Cutting connected with work related to calendars as fruits, birds, flowers, etc.

7. To illustrate words, sentences and stories.

8 To illustrate home life. Life on the sea. Life in the forest.

#### Industrial Work.

- 1. Making cardboard furniture for a house.
- 2. Crocheting chains. Do this work with the fingers. Toy reins for the horse; mats for the table, etc.
- 3. Spool knitting. Doll's muff, reins, mat, mufflers, etc.

#### A METHOD IN SPELLING

Principal C. E. Vance, of Danville, Illinois, has the teachers of his school follow a method in spelling which he finds very greatly increases the efficiency of teaching spelling. He says the outline is intended to displace such lessons as the following:

Assignment—"Take the next twenty words tomorrow."

Recitation—The teacher pronounces words, pupils write them, and exchange papers. Teacher spells words; pupils check, grade, and change back.

Just Talk—"How many got a hundred?"

"Is that all? Well, you must do better tomorrow."

"Get your histories."

The plan followed in Mr. Vance's school is this:

#### Assignment

1. Time—
Just before the study period.

2. Consists of—

Teacher's pronouncing words or having the pupils sound them.

Pupils pronounce the words singly or in concert. Pupils spell words singly or in concert. Point out difficulties and show where they are likely to make mistakes.

Explain meanings by using in sentences the words whose meanings are not clear. Have members of class do this if they can.

#### Study Period

1. Time—

Short but intensive period of study.

2. Method—

Do not allow the child to write the word more than once.

#### Recitation Proper

1. Preliminaries—

Short drill on pronunciation, singly or in concert.

Short oral drill in spelling, singly or in concert.

#### 2. Written Lesson—

Teacher pronounces the word, the pupils repeating it. Pupils then write the word and look at the teacher.

Correcting Errors—

By teacher. (This is preferred in the lower grades because it is economical of time.)

By pupils. (There are pedagogical reasons for this in the upper grades, but two pitfalls must be avoided: carelessness and waste of time.)

Short oral drill after written lesson, with the emphasis on the mis-spelled words. Spell around class and in concert.

The emphasis in the foregoing outline is placed on the assignment and the recitation proper; but this does not signify that the short period of intensive study is not important. It is a necessity.

The recitation proper should require about fifteen minutes.—West Virginia School Journal.

#### STORY-TELLING—THE STORY OF "THE BLUE BIRD"

AUTHOR'S NOTE—This version of "The Bluc Bird" eliminates many characters, otherwise even upper grade children could not understand it.

It was Christmas Eve. Mytyl and Tyltyl had gone to bed and everything was as still as could be.

All at once there came the sound of sweet music through the windows and Tyltyl opened his eyes wide and listened. Then he reached over to his little sister and whispered, "Mytyl, it's the party at the little rich boy's! Let's go and peep through the window."

The children bounded out of bed and ran to the window to look out. Surely enough, there just across the street were the musicians going into the big house. All the shades were up and Mytyl and Tyltyl could see the little boys and girls.

Yes, and there was a great Christmas tree with oh! so many golden toys hanging from the branches! There were swords, guns, soldiers, and even cannons!

Just then the door opened and a big black man wearing a snow-white apron came into the room. He was carrying a great tray upon which was everything in the world that is good to eat.

Mytyl and Tyltyl sat spellbound gazing at the great party, when suddenly there came a knock at their own door.

They started, looked at each other, then stood perfectly still, staring toward the door. Tap, tap, tap, it came again, and as they looked the great latch began slowly to lift itself, then with a grating noise the door opened half-way and in came a little old woman.

She had on a bright green dress and wore a red hood. She had a hump on her back and she was very lame. Her nose and her chin met.

Mytyl and Tyltyl were so frightened that they could not speak or move. The old woman came right up to them.

"Have you any grass here that sings or the bird that is blue?" she said.

Now, Tyltyl had a bird which he loved very much, and he would not give it away to anybody in the whole world; and when the old woman asked for a bird he ran straight to his for fear that she would take it.

The old woman followed him and putting on her glasses, examined the bird. She turned away and said to the children: "I don't want your bird; it is not blue enough. You will have to go and find me one. I must have it for my little girl. She is very sick and the Blue Bird will make her well and happy. I am the Fairy Berylune."

The fairy then took a little green hat out of her pocket, and while the chil-

dren were getting dressed she pinned a beautiful diamond in the band of the hat.

When Mytyl and Tyltyl were dressed the fairy gave Tyltyl the hat and she told him to put the hat on his head and turn the diamond.

He did, and what do you think he saw? Suddenly the whole room was changed! All the walls became golden like sunlight, the chairs had faces and were talking to each other. The table looked noble and grand.

While the children looked, they were surprised to see their dog Tylo turn into a little man with a dog's face and rush up to them; then Tylette, their old eat, became a tiny man and walked proudly toward them. Just then the lamp turned over and in its place there arose a beautiful maiden.

The children were so amazed that they did not hear a knock at the door, but Fairy Berylune heard it, and taking the children by the arms, she thrust them through the window, and Tylo, Tylette, and Light followed.

When they were outside, the fairy told Tylo and Tylette that they must go with the children to look for the Blue Bird, and that Light would help them. Then she left them together.

They all went on and on until presently they came to a big tree upon which a board was nailed. Tyltyl read the words, "The Land of Memory." Then he looked around.

A vague, milky, fog-like light seemed to pervade the great forest, and everything was so still. He and Mytyl walked under the trees and through a little gate, but Tylo and Tylette stayed outside with Light.

As they went farther they came to a lovely garden, and there in the middle stood a tiny cottage. Bee-hives stood about it and a cage with a black bird in it hung from the branch of a tree.

The children went up to the cottage, and there upon the porch sat their grandfather and grandmother, who had been dead a long time. They were both sound asleep. Mytyl and Tyltyl hesitated, but just at that moment their grandfather and grandmother wakened, and the children rushed into their arms.

"Why, Mytyl and Tyltyl," cried Grandmother. "Is it really you?" Why don't you come to see us oftener? We get so lonely without you."

Then the children told them about the fairy and the diamond.

"Oh, but you can come every time you think of us," said Grandfather. "The living come to us so seldom. We sleep until you think of us, then your thoughts waken us and we have such a good time. But come, we must have supper before you go, and then we will give you our lovely black bird to take home with you."

After supper was over the children kissed their grandparents, and taking the cage they started home. Just as they left the gate Tyltyl looked at his bird.

"Oh, Mytyl," he exclaimed, "the bird is blue. Light will be so glad."

They took hold of hands and went on until they came to the big tree again, but Light was not there. They looked at their bird once more, and to their great disappointment it was no longer blue.

For a moment they were afraid, but they walked on until suddenly they came to a great palace. All about it was black, black night, but the palace was a great hall of pure white marble, and there were wide, white steps leading up to the door.

Mytyl and Tyltyl stood perfectly still and gazed at it. Then the great door began slowly to open and a tall woman dressed in long black robes came down the steps toward them.

"Oh, it is the Palace of Night!" cried Tyltyl. "Surely we shall find the Blue Bird here."

Just at that moment Tylo came rushing up to them and sly Tylette came slipping around the palace, and the children were no longer afraid.

Tyltyl asked Night for the keys to the chambers of her palace. "Who told you to come here for the Blue Bird?" she asked.

"Light told us," answered Tyltyl.

"Light! Light! How dare she interfere with Night? You shall not have the Blue Bird!"

But she gave the keys to Tyltyl and then told him of horrors behind those great doors of which she herself was afraid. There were all the evils, all the sicknesses, all the mysteries, everything that had ever afflicted the earth.

"You have seen what happens when one of them escapes and shows itself upon earth," she said.

Mytyl was afraid and turned away. As she moved off, Tylette went sneaking after her, but Tylo ran up to Tyltyl and cried, "I will stay! I will stay!"

Tyltyl, unafraid, put the key into the first lock and the big door swung open. Lo! Ghosts, thousands of them, rushed to the door, and some came forth.

Night ran after them, and Tyltyl shut the door tight. There was no Blue Bird there.

They went on to the next door. Tyltyl again turned the key, but when he looked in he saw only small sicknesses, and Night told him that since the doctors had waged such war against them they were too discouraged to do much harm.

While they looked, one of the smallest, wearing dressing gown and slippers and a night-cap, came frisking out.

Night ran after him and called, "Cold-in-the-Head, come back here. You must wait until winter."

Tyltyl passed to the door beyond, but Night cried out, "Take care! that is the Cave of Wars, and they are more terrible than ever."

Tyltyl opened the door, peeped in, then screamed for help.

When that door was shut Tyltyl approached another. Night sprang ahead of him.

"Oh, do not open this door! You shall not open this door! It is too terrible! Go away! Go away!" she cried.

Tyltyl was not to be turned aside. He

called Tylo to him, put the key in the lock, hesitated one moment, then turned the key.

The great door swung open. Tyltyl stood spellbound. There before him lay the most beautiful, the most unexpected of gardens! A fairy dream garden, bathed in the lovely light of the moon. The dew glistened and the perfumes of night pervaded all the air. Most beautiful of all, blue birds, innumerable, fairy-like blue birds, flitted from moonbeam to moonbeam and hovered about the garden until they appeared to be a breath, the very substance of the atmosphere.

Tyltyl was bewildered; then he cried out, "We have them! Thousands of blue birds! Millions—thousands of millions! Come, come, Mytyl!"

The children darted in among the birds. In a few minutes they had their hands full and hurried from the hall to find Light.

When they saw Light they ran to her eagerly, showing the birds. Alas! Alas! When they looked, the birds were no longer the beautiful blue birds they had caught. They were all drooping and dying.

Tyltyl was heart-broken and Tylo jumped up to him, lapping his face and hands. Light encouraged him to try again. She told him that Fairy Berylune had said the Blue Bird might be in one of the tombs of the dead. So they set out once more upon their search.

When they reached the graveyard only Mytyl and Tyltyl were allowed to enter.

The children were now alone, and it seemed to grow darker and darker, and stiller and stiller. They could see only the great white crosses and the huge tombstones staring at them from the blackness of the night.

Mytyl clung to Tyltyl and he turned the diamond. There was a moment of terrifying silence; then slowly, very slowly crosses tottered, tombstones fell and the mounds opened up. "They are coming out! They are coming out!" whispered Mytyl, and she cowered against her brother.

Suddenly, from all the graves, there seemed to arise a frail, timid, fog-like steam. Up, up it came, then grew more misty, more tufty, until it invaded every place and transformed the grave-yard into a sort of fairyland.

In a moment a wonderful light burst through the misty fog and the whole place was illumined. Flowers opened and the breezes murmured through the leaves. The birds wakened and flooded the garden with the first rapture of their songs. Stunned and dazzled, the children stepped into the grass.

"Where are the dead?" asked Mytyl. "There are no dead," replied Tyltyl.

The birds in the garden were not blue and Mytyl and Tyltyl returned again to Light, disappointed. They must seek farther.

Light told them of the wonderful Azure Palace, where all the children wait who are to be born. Perhaps the Blue Bird was there.

Light went with the children to the doors of Azure Palace, where she left them and they went in alone.

Inside everything was blue—an intense, fairy-like blue. All about the room were children, hundreds of them, and all were dressed in long blue robes. Beautiful angels moved among them. Mytyl and Tyltyl stood still, looking at these little blue children, when suddenly a tiny boy ran up to them.

"Oh, Mytyl and Tyltyl, in a year I am coming to earth to be your little brother," he said. Other children crowded around them and they were taken off to see the work-shop of these little blue boys and girls.

There they saw the future inventions. Such flying machines, big wheels and even wonderful fruit! There were apples as big as melons. Everything was shrouded in the blue mist.

"We will make these things when we come to earth," the little blue children said.

While they looked there came a crashing noise and all the children rushed back to the hall.

Father Time had swung open the big doors to earth and all the children were eager to go.

Father Time pushed the crowding children back and called to them. "Only one at a time!"

They could see the great gold ship with white and gold sails awaiting them. The children who were to be born climbed into the ship and the ones who were left could hear them singing. Then came other songs and the little blue children knew their mothers were coming to meet them.

The great doors were closing and Mytyl and Tyltyl slipped through them, but they had found no Blue Bird.

At the door of Earth they found Light with Tylo and Tylette waiting for them, but the children were so sad and so tired that even these good friends could not make them happy.

Light led the way towards a village and they all followed. At last they came to a little cottage. Light opened the door and they went in.

The children gazed around the room, then suddenly Tyltyl ran to the window. There, perched in its cage, was his own little bird. They were at home!

"Look! Look" he cried. "Mytyl, the bird is blue. My bird is the Blue Bird! It is here, at home. It's the Blue Bird we were looking for. We have been miles and miles and he was here all the time. Oh, how wonderful!"

At that moment the door opened and Fairy Berylune entered. Tyltyl ran to her with the bird.

"You must take my bird home to your little girl and make her well and happy."

#### WORDS NEVER KNOWN TOO WELL

To, too, two. Their, there. No, know. Which, whose Chose, choose. Loss, lose, lose. Should, would. Write, right, rite, wright. Were, where. Straight, strait. Won, one. New, knew. Ate, eight. Blew, blue. Earn, urn. Bow, bough.

Ours, hours.

Dear, deer.
Sea, seen.
So, sow, sew.
Piece, peace.
Die, dye.
Sent, cent, scent.
Be, bee.
Four, fore.
Bear, bare.
Hail, hale.
Vane, vein, vain.
Told, toled, tolled.

Wrong, enough, twelfth, ninety, stitch, seissors, with, any, been, close, every, evil, friend, field, pencil, truly, wholly, said, good by, does.

#### What of That?

Tired! Well, what of that?
Didst fancy life was spent on beds of ease,
Fluttering the rose—leaves scattered by the breeze?
Come, rouse thee! Work while it is call today,
Coward, arise, go forth thy way!

Lonely! And what of that? Some must be lonely; 'tis not given to all To feel a heart responsive rise and fall To blend another life into its own. Work may be done in loneliness! Work on!

Dark! Well, what of that?
Didst fancy life one summer holiday,
With lessons none to learn, and nought but play?
Go, thee to thy task, conquer or die!
It must be learned. Learn it then patiently.

No help! Nay, 'tis not so, Though human help be far, thy God is nigh; Who feeds the ravens, hears His children cry; He's near thee wheresoe'er thy footsteps roam, And He will guide, light thee, help thee home.

## The Children's Page

#### To-Day

So here hath been dawning .
Another blue Day:
Think wilt thou let it
Slip useless away.

Out of Eternity
This new Day is born;
Into Eternity,
At night, will return.

Behold it aforetime No eye ever did: So soon it forever From all eyes is hid.

Here hath been dawning Another blue Day: Think wilt thou let it Slip useless away.

Thomas Carlyle.

"I am thinking of you today because it is New Year's and wish you happiness. And tomorrow, because it will be the day after New Year's, I shall still wish you happiness, and so on clean through the year."—Henry Van Dyke.

Strive to make each year better than the last. Let each day close with some good thought or resolution.

#### Editor's Chat

Happy New Year to you boys and girls, I think we will have a text for our little talk this month, and it will be the little memory gem above. Don't you think it is a good one to remember for 1915? What a wonderful thing it would be if every one in the world tried this receipt for living. Do you think if the Kaiser had tried this that there would be any war? Do you think if all the selfish people tried it there would be so much unhappiness and poverty? Do you think if all the cruel tried it there would be so much sickness and misery?

How soon you could overcome your bad temper, your untruthfulness, your self-ishness if you tried honestly every day to be a little better, then all the days added together would be the year, and there you would be with a whole year of trying to be better, and what a difference there would be! Suppose your mother or your teacher says to you, "Try for a week to see if you can't be a better girl or boy," and you look ahead, and you think "How long a week is!" But did you ever remember that a week is only seven days, one after the

other, that you can be good on Monday, that's easy. Then it is Tuesday; it is easy to be good on Tuesday; but the rest of the week looms ahead, but it only comes one day at a time after all. When you grow up and some sadness comes to you, how glad you will be to remember that you only have to live one day at a time.

And there is another idea, too, the one that comes in those lovely verses

beginning.

"Every day is a fresh beginning, Every day is the world made new!"

Did you ever think of that, how easy and pleasant it is to begin each day, fresh and happy, and make up for all the troubles of the day before? And here is not only a fresh day but a whole new, shiny, fresh year; a year to be happy in, a year to be good in, a year to make others happy in! What could be better for the world than thousands of girls and boys each trying to make 1915 better than 1914? Will you join the others and form a silent "Trying League?"

And once again "a Happy New Year" to you one and all.

#### Prize Story

You have been too busy this month to send in many stories we know; better luck next month. We have awarded the prize to Fanny Freedman, age 11, Grade VIII, Teulon School.

Honorable mention is made of the following:—Alma E. H. Duke, Annandale

School, Redvers; Ainsley Holloway, Balmoral School; Gordon Holloway, Balmoral School; Velma Caithness, Wellwood, Man.; Annie Kallman, Elwyn Clarke, Marjorie Green, Alex. Howryluk, Kate McKinnell, Mina Clarke, Teulon, Man.; Howard Napper, Beverley School, Man.

#### An Accident

'Twas a beautiful summer day in July. There was a quiet breeze and the sky was clear and blue. I was playing with my playmate when suddenly she said, "Let us make a playhouse. You be the mother and I'll be the little girl." So I got to work to make it. Everything was made but the bed.

The well was covered with a sack stuffed with hay. Not knowing it to be a well, I said to myself, "This will be a good bed, I think I will try it." I lay down on the sack and down I went into the well. The water was about six feet deep. Here I was floating about on the sack. At once I started to scream. My playmate heard the cry and ran to tell her mother. She soon came out with the broom stick and stuck it down the well. I crawled up catching by the roots in the well. Soon I caught hold of the stick and she pulled me up.

I was dripping with water when I got out. I went home crying. I made up my mind that I would always be careful in going near a well.

Fanny Freedman, Teulon, Manitoba, Age 11, Grade VIII.

#### THE CASTLE OF FORTUNE

One lovely summer morning, just as the sun rose, two travelers started on a journey. They were both strong young men, but one was a lazy fellow and the other was a worker.

As the first sunbeams came over the hills, they shone on a great castle standing on the heights, as far away as the eye could see. It was a wonderful and beautiful castle, all glistening towers

that gleamed like marble, and glancing windows that shone like crystal. The two young men looked at it eagerly, and longed to go nearer.

Suddenly, out of the distance, something like a great butterfly, of white and gold, swept toward them. And when it came nearer, they saw that it was a most beautiful lady, robed in floating garments as fine as cobwebs and wear-

ing on her head a crown so bright that no one could tell whether it was of diamonds or of dew. She stood, light as air, on a great, shining, golden ball, which rolled along with her, swifter than the wind. As she passed the travelers, she turned her face to them and smiled.

"Follow me!" she said.

The lazy man sat down in the grass with a discontented sigh. "She has an

easy time of it!" he said.

But the industrious man ran after the lovely lady and caught the hem of her floating robe in his grasp. "Who are you, and whither are you going?" he asked.

"I am the Fairy of Fortune," the beautiful lady said, "and that is my castle. You may reach it to-day, if you will; there is time, if you waste none. If you reach it before the last stroke of midnight, I will receive you there, and will be your friend. But if you come one second after midnight, it will be too late."

When she had said this, her robe slipped from the traveler's hand and she was gone.

The industrious man hurried back to his friend, and told him what the fairy had said

"The idea!" said the lazy man, and he laughed; "of course, if a body had a horse there might be some chance, but walk all that way? No, thank you!"

"Then good-by," said his friend, "I am off." And he set out, down the road toward the shining castle, with a good steady stride, his eyes straight ahead.

The lazy man lay down in the soft grass, and looked very wistfully at the far-away towers. "If I only had a good horse!" he sighed.

Just at that moment he felt something warm nosing about at his shoulder, and heard a little whinny. He turned round, and there stood a little horse. It was a dainty creature, gentle-looking, and finely built, and it was saddled and bridled.

"Hola!" said the lazy man. "Luck often comes when one isn't looking for

it!" And in an instant he had leaped on the horse, and headed him for the eastle of fortune. The little horse started at a fine pace, and in a very few minutes they overtook the other traveler, plodding along on foot.

"How do you like shank's mare?" laughed the lazy man, as he passed his

riend.

The industrious man only nodded, and kept on with his steady stride, eyes straight ahead.

The horse kept his good pace, and by noon the towers of the castle stood out against the sky, much nearer and more beautiful. Exactly at noon, the horse turned aside from the road, into a shady grove on a hill, and stopped.

"Wise beast," said his rider; "haste makes waste,' and all things are better in moderation. I'll follow your example, and eat and rest a bit." He dismounted and sat down in the cool moss, with his back against a tree. He had a lunch in his traveler's pouch, and he ate it comfortably. Then he felt drowsy from the heat and the early ride, so he pulled his hat over his eyes, and settled himself for a nap. "It will go all the better for a little rest," he said.

That was a sleep! He slept like the seven sleepers, and he dreamed the most beautiful things you could imagine. At last, he dreamed that he had entered the castle of fortune and was being received with great festivities. Everything he wanted was brought to him, and music played while fireworks were set off in his honor. The music was so loud that he awoke. He sat up, rubbing his eyes, and behold, the fireworks were the very last rays of the setting sun, and the music was the voice of the other traveler, passing the grove on foot!

"Time to be off," said the lazy man, and looked about him for the pretty horse. No horse was to be found. The only living thing near was an old, bony, gray donkey. The man called, and whistled, and looked, but no little horse appeared. After a long while he gave it up, and, since there was nothing bet-

ter to do, he mounted the old gray donkey and set out again.

The donkey was slow, and he was hard to ride, but he was better than nothing; and gradually the lazy man saw the towers of the castle draw nearer.

Now it began to grow dark; in the castle windows the lights began to show. Then came trouble! Slower and slower, went the gray donkey; slower, and slower, till, in the very middle of a pitch-black wood, he stopped and stood still. Not a step would he budge for all the coaxing and scolding and beating his rider could give. At last the rider kicked him, as well as beat him, and at that the donkey felt that he had had enough. Up went his hind heels, and down went his head, and over it went the lazy man on to the stony ground.

There he lay groaning for many minutes, for it was not a soft place, I can assure you. How he wished he were in a soft, warm bed, with his aching bones comfortable in blankets! The very thought of it made him remember the castle of fortune, for he knew there must be fine beds there. To get to those beds he was even willing to bestir his bruised limbs, so he sat up and felt about him for the donkey.

No donkey was to be found.

The lazy man crept round and round the spot where he had fallen, scratched his hands on the stumps, tore his face in the briers, and bumped his knees on the stones. But no donkey was there. He would have lain down to sleep again, but he could hear now the howls of hungry wolves in the woods; that did not sound pleasant. Finally, his hand struck against something that felt like a saddle. He grasped it, thankfully, and started to mount his donkey.

The beast he took hold of seemed very small, and, as he mounted, he felt that its sides were moist and slimy. It gave him a shudder, and he hesitated; but at that moment he heard a distant clock strike. It was striking eleven! There was still time to reach the castle of fortune, but no more than enough; so he

mounted his new steed and rode on once more. The animal was easier to sit on than the donkey, and the saddle seemed remarkably high behind; it was good to lean against. But even the donkey was not so slow as this; the new steed was slower than he. After a while, however, he pushed his way out of the woods into the open, and there stood the castle only a little way ahead! All its windows were ablaze with lights. A ray from them fell on the lazy man's breast, and he saw what he was riding: it was a gigantic snail! a snail as large as a calf!

A cold shudder ran over the lazy man's body, and he would have got off his horrid animal then and there, but just then the clock struck once more. It was the first of the long, slow strokes that mark midnight! The man grew frantic when he heard it. He drove his heels into the snail's sides, to make him hurry. Instantly, the snail drew in his head, curled up in his shell, and left the lazy man sitting in a heap on the ground!

The clock struck twice. If the man had run for it, he could still have reached the castle, but, instead, he sat still and shouted for a horse.

"A beast, a beast!" he wailed, "any kind of a beast that will take me to the castle!"

The clock struck three times. And as it struck the third note, something came rustling and rattling out of the darkness, something that sounded like a horse with harness. The lazy man jumped on its back, a very queer, low back. As he mounted, he saw the doors of the castle open, and saw his friend standing on the threshold, waving his cap and beckoning to him.

The clock struck four times, and the new steed began to stir; as it struck five, he moved a pace forward; as it struck six, he stopped; as it struck seven, he turned himself about; as it struck eight, he began to move backward, away from

the castle!

The lazy man shouted, and beat him, but the beast went slowly backward.

And the clock struck nine. The man tried to slide off, then, but from all sides of his strange animal great arms came reaching up and held him fast. And in the next ray of moonlight that broke the dark clouds, he saw that he was mounted on a monster crab!

One by one, the lights went out, in the castle windows. The clock struck ten. Backward went the crab. Eleven! Still the crab went backward. The clock struck twelve! Then the great doors shut with a clang, and the eastle of fortune was closed forever to the lazy man.

What became of him and his crab no one knows to this day, and no one cares. But the industrious man was received by the Fairy of Fortune, and made happy in the castle as long as he wanted to stay. And ever afterward she was his friend, helping him not only to happiness for himself, but also showing him how to help others, wherever he went.

## General Articles

#### THE MAGIC SQUARE

The magic square has interested and diverted mathematicians for centuries, and the interest in it is not lessened by the contributions made to its literature. For a long time it was thought to be a haphazard arrangement of figures, but it has been shown that there is a "method in it"; and, while the making of the square is always interesting, the plan of it is clear and simple.

4	9	2
3	5	7
8	1	6

Squares of figures, which, counted upward, across, or from corner to corner, will always give the same result, are called Magic Squares. The simplest form of the square is formed by arranging the first 9 numbers where the sum of any row of three figures, whether horizontal, vertical, or diagonal, is equal to 15.

The next is a square formed from the first 16 numbers, and this can be formed by several different arrangements of the figures.

In these squares the sum is always 34, and, as these figures may be arranged in several ways differing from the above, it may be worth while to attempt some of them.

To form a magic square of an odd number of terms in geometrical pro-

-	116	4	1	13		
	5	7	10	12	OR	
	11	9	8	6	,	
	2	14	15	િ		

	10	15	l	3
R	8	1	12	13
,	11	14	7	2
	S	4	9	16

gression is an easy task if one knows the rule. Here is a square of 49 numbers, arranged in 7 rows up and down.

In this square the sum is 175.

Directions for constructing the magic square are as follows:

Rule a square and divide it into the required number of cells. Begin by placing the figure 1 in the middle cell in the top row; then put 2 at the bottom of the next row to the right, and then oblique upward to the right with the next figures until the cell in the last perpendicular row is filled, when the next figure is carried to the lefthand cell on

the horizontal row next above it; again in diagonal direction upward to the right until the top, or a filled cell, is

30	39	48	1	10	19	28
38	47.	7	9	18	27	<b>Ž</b> 9
46	6	8	17	26	<b>ვ</b> ნ	37
<u>ر</u>	14	16	25	34	36	45
13	15	24	33	42	44	4
21	23	32	41	43	3	12
22	31	40	49	2	11	20

reached-if to the top, place the next figure at the foot of the next row to the right, and oblique upward as before to the right; if to a filled cell, put the next figure directly under the last one made, and oblique upward to the right as before until the top is reached, or a filled cell, or the last row on the rightif the latter, go to the left cell on the horizontal row next above—and so on to the end, when the highest and last number will be found at the foot of the row containing number 1. When the top cell on the right-hand column reached, there being no row at the bottom at the right, the next figure is placed under the last one made, and the next to the top of the left-hand column.

The second secon

With these directions, and a little study of the figure given, any magic square of an odd number of cells may be constructed. Magic squares of 5, 7, 9, etc., may be readily formed, and much amusement and instruction derived therefrom.

A simple rule has been made to find what any square should contain: "Multiply the number of places in the square by half the number of places, and to the product add the other half; and, to show what each column of the square should contain, divide the sum

of its square by one of its parallel sides;" e.g.,

 $3\times3=9 (9+4\frac{1}{2})+4\frac{1}{2}=45. \ 45\div3=15. \ 7\times7=49 (49\times24\frac{1}{2})+24\frac{1}{2}=1225. \ 1225\div7=175.$ 

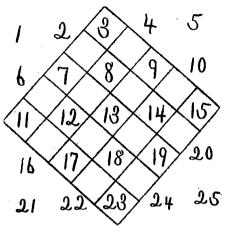
Poignard, a canon of Brussels, published, in 1703, a curious work, in which he showed how these squares may be made by combining two squares which are in themselves "magic."

10	5	B	4	2		ó	0,	20	১	10
ઉ	4	2	1	5	L	5	10	15	0	20
2	1	S	ვ	4	L	0_	20	5	10	15
5	ვ	4	2	1	1	0	15	٥	20	ح
4	ચ	1	5	3	2	٥,	Մ	10	15	٥
						6	s	23	9	12
						8	14	17	1	25
						2	21	10	113	19
					1	5	18	4	2.1.	6
					2	4	7	11	20	ც

Take a square of 25, for example. Fill the upper row with the figures 1, 2, 3, 4, 5, arranged in any order; e.g., 1, 5, 3, 4, 2. Then fill the second row of the square with the same figures, beginning with the third; thus, 3, 4, 2, 1, 5, and repeat this process until the square A is filled. To construct square B, with in like manner the multiples of 5-0, 5, 10, 15, 20—in any order, taking care, however, to begin the second row with the fourth number of the series. Complete the magic square C by adding the numbers in one square to those in corresponding positions in the second; thus,  $10\times2=12$ ; then,  $20\times5=25$ , etc., etc., the sum being written in corresponding places in square C. This process gives squares totally unlike those made by the rule given above. By this method any number can be made to fall in any desired place.

In the Mathematical Dictionary there is given a simple method for forming a magic square, as follows: Set down the

numbers in the form of a natural square, as shown in the diagram. Then draw straight lines, cutting off three numbers at each corner, viz., 1, 2, and 6,



at the upper left-hand corner; 4, 5, and 10 at the upper right-hand corner, etc.; these four lines form a square; then draw inner lines parallel to these dividing the square into 25 cells; 13 of these cells will be occupied by numbers. Fill the empty cells as follows: Each number in the corners is to be carried obliquely up or down along the row where it is found, to the most remote vacant cell and then written. The upper right-hand column would then contain these numbers: 3, 16, 9, 22, 15; the middle column, 7, 25, 13, 1, 19, etc.

There is the great Magic Square of Magic Squares, which is a magic square of 256 cells, filled up by the numbers from 1 to 256. The construction of this

great square, which has a number of interesting and curious properties, depends upon that of a magic square of 16 cells, having the sum of the four numbers in any square of four cells always the same.

In the "Scientific American," of the date of 1870, I think, there appeared a curious arrangement. It was a magic square, containing a lesser magic square, and this lesser composed of four magic squares, the heavy lines indicating the several distinctions. The sum

90	14	12	100	84	98	4	96	10	2
}	_				_		81		85
92	39	61	60	42	75	25	24	78	.9
7	59	41	40	62	ઢઉ	77	76	26	94
88	38	64	65	<b>3</b> 5	82	20	21	79	18
18	55	50	54	43	27	78	72	30	83
88	45	52	48	57	70'	32	33	67	15
3	44	5.8	49	56	34	88	69	31	98
6	હ	47	51	46	71	29	28	74	95
99	87	89	1	17	8	97	5	91	11

of the numbers in the largest square, whether counting upward, across, or diagonally, is 565; omitting the outside numbers, the sum is 404; in each of the four small squares the sum is 202. It is certainly an ingenious arrangement, but no rule for its construction is apparent.

#### WONDERFUL SPIDERS', WEBS

The roads of Paraguay are about five yards wide throughout, and the trees meet overhead at a height of some eighteen feet, thus forming a tunnel of very uniform dimensions. In the clear parts of this tunnel—that is, where it is not choked up with the giant nettle—it is full, from roof to ground, of enormous spiders' webs stretching clear across the road, the big trees usually being chosen as anchorages and the total

clear span being thus more like eight vards than five.

The main cables or framework of the nets are composed of five or six strands of thick yellow web, and are almost as strong as cotton thread. The rest of the net is made up of single and double strands of the same stout material, which is as sticky as it is strong. Every yard or so one of these nets extends across one's path, making it necessary

to hold a cutlass or a fairly stout stick at arm's length in front as one walks.

The makers of these troublesome but picturesque obstructions are large, highly colored, gaudy-looking spiders with bodies that look as if they were about to explode, they are so blown out and glossy.

At intervals, in some more open space where the sky is visible, one will notice a different kind of web, far more irregular in shape, but far larger than the others. Not content with the space available in the tunnel, these webs are stretched in complicated mazes from the ground to the very tops of the surrounding trees, with clear spans frequently twenty or thirty yards from one tree to another. From these main cables smaller ones extend to the ground—a drop of fifteen or twenty yards—and the spaces in between are filled up with a mass of webs spun in all directions.—Wide World Magazine.

#### PRACTICAL APPLICATIONS IN PRIMARY NUMBER WORK

By FANNY COMSTOCK

Two things the teacher of primary arithmetic is especially concerned to find: means of connecting the advancing knowledge of the children with the everyday world in which they live, or will soon live, and new methods of using these applications so as to keep attention and interest alert. The following class exercises are based on the use of money.

Playing Store. This excellent device so long recommended in the arithmetics may be new in practice to some teachers. One way to conduct it is to use the number table or some front desks for the counter, on which are arranged the articles to be sold. supply stores furnish a convenient bit of apparatus for playing store, the names of articles printed on strips of cardboard, sums of money printed on other strips, and numerous counters of cardboard, to be used for articles or for money, as the teacher may decide. Children find real oranges, apples, pencils, paper and books more interesting merchandise, and such articles can be conveniently used with a little planning. A somewhat more advanced form of the game is to conduct the business of the grocery store or the dry goods store. If the grocery business is chosen, have the pupils find, by questioning

parents and by using their eyes and ears in stores, the current prices of common groceries. By assigning certain articles to certain pupils, the amount of home questioning can be made not too burdensome. Much useful information can be found in advertisements.

If the dry goods store is to be carried on, a cloth chart may be found useful. On a piece of cardboard, perhaps twenty by thirty inches, paste in rows carefully cut samples of cotton, woolen, linen, silk, velvet, ribbon, etc., with the name of material and price per yard written beneath each. courage children to bring bits of cloth for this purpose, and to find out how much cloth their mothers use in making their dresses, coats and aprons. This sort of business is, of course, particularly appropriate for a girls' school.

2. Restaurant. It will readily be seen how the restaurant can be introduced as another application of the use of money. The bill of fare might be written on the board, with accompanying prices, one day, and pupils make individual copies. Cashier, waiters and customers play their parts, paying the penalty of loss of position or loss of a

dinner for a mistake. (See Milne's Arithmetic for suggestions on this

point.)

Earning Money. For some days 3. the number work may be based on the different ways in which children may earn money. Make a table or chart showing the price paid for the various kinds of work by which children of ten earn money. mowing lawn, weeding garden, picking berries, selling papers, doing errands, washing dishes, sewing, tending baby, etc. The data given on the chart will be used in problems. Sometimes these problems should be given orally. The necessary information concerning prices of labor being posted where all can see, time and voice are saved, the questions being simply, How much did Tom earn in two weeks if he weeded the garden an hour every day? Edna picked a bushel of blueberries in five days. How much did she earn? At that rate, how long will it take her to earn a hat costing \$2?

All of these applications can of course be also used for seat work in such questions as the following:

a. What did I pay for a gallon of kerosene, 6 lbs. of meal and a package of baking powder?

b. I gave a two-dollar bill for a 3-lb. pail of lard. What is the amount of change?

c. What is the cost of 4 yds. ging-

ham and 2 spools thread?

d. What did my dinner cost, if I had roast beef and potatoes, macaroni, and apple pie?

e. Make out the check for two sandwiches, a cup of cocoa, and ice cream.

f. How much change should the waiter bring to an order of tomato soup, roast lamb, potatoes, lettuce and tapioca pudding if I gave him one dollar?

#### HOW TO INTEREST PUPILS

"It is not by doing things for the mere purpose of interesting pupils that interest is secured. It is rather by so presenting the subjects of study that they will enter the minds of the children and stimulate thought and mental activity. Picture-books, stories, games, sports, and all sorts of amusementsthese for the purpose of occasional variety or relief from too much strain may be useful; but their influence is short-lived; they soon become irksome; the novelty disappears; and when it dawns upon upon a child that he is being entertained merely, he loses interest in the very employments which attracted him when they were new. These things, like condiments, should be used sparingly. On the other hand, real solid work, hard study, and the real business of the school will most interest and attract pupils, if only the subjects of study are adapted to the age and capacity of the child, presented in the right way, and given in suitable amount. It is not interesting to

a child, and it is not profitable, to sit with little to do, and to look on, while the teacher does all the work for him—or attempts to do it all, for he cannot really do it."

Mr. Marble cites an example in point, in which a boy, by dint of mental toil, learned to demonstrate the proposition, "The square of the hypotenuse of a right angled triangle is equal to the sum of the squares of the two sides." Later he discovered a method of proof quite different from the first, which so surprised and delighted him that he sought other proofs. The surprise to which his teacher had led him gave a charm to the study of geometry that it had never had for him before. is not in the study of geometry alone that such a revelation occurs under the stimulus of good teaching; in 'geography, in English grammar, in arithmetic, in history, and even in elementary reading, the same thing is happening.

## Poetry

#### The King's Ring

Once in Persia reigned a king Who upon his signet ring Graved a maxim true and wise Which, if held before his eyes, Gave him counsel at a glance Fit for every change and chance. Solemn words; and these are they: "Even this shall pass away."

Trains of camels through the sand Brought him gems from Samarcand, Fleets of galleys through the seas Brought him pearls to match with these; But he counted not his gain—
Treasures of the mine and main, "What is wealth?" the king would say; "Even this shall pass away."

In the revels of his court At the zenith of the sport. When the palms of all his guests Burned with clapping at his jests, He, amid his figs and wine, Cried: "O loving friends of mine! Pleasure comes, but not to stay, "Even this shall pass away."

Fighting on a furious field Once a javelin pierced his shield; Soldiers with loud lament, Bore him bleeding to his tent, Groaning with his tortured side. "Pain is hard to bear," he cried; "But with patience day by day, "Even this shall pass away."

Struck with palsy, sere and old, Waiting at the gates of gold, Spake he with his dying breath. "Life is done, but what is death?" Then, in answer to the king, Fell a sunbeam on his ring, Showing by a heavenly ray: "Even this shall pass away."

Theodore Tilton.

#### The Mother of a Hero

A crash, a flash, a momentary triumph,
The blaze of sun from out a sky of blue;
And some one lies, a heap of huddled garments,
With heart now still that once sang brave and true.
A blur of smoke against the mountains rugged,
A buzzard winging slowly through the sky,
And miles away a little mother—waiting—
And praying to the gracious God on high.

A moan, a stream of life-blood ebbing swiftly,
A pair of eyes that close in endless sleep;
A bullet, sharp and sudden in its coming,
That leaves a wound so horrible and deep.
A paper, printed large in glowing headlines,
That says, "He left a mother, next of kin;"
A country's loud approval of a hero—
And one small woman sobbing through the din!

A fear, a tear, a pair of hands clasped tightly,
A mind that sees a sturdy little boy,
A tiny baby face, with roguish dimples,
A sound of laughter filled with childish joy.

A nation's hero dying first—with glory!

A man in spirit, though a boy in years,

A soldier shot in battle, fighting bravely—

A little mother smiling through the tears!

#### The Beautiful World

Here's a song of praise for a beautiful world, For the banner of blue that's above it unfurled, For the streams that sparkle and sing to the sea, For the bloom in the glade and the leaf on the tree; Here's a song of praise for a beautiful world.

Here's a song of praise for the mountain peak, Where the wind and the lightning meet and speak, For the golden star on the soft night's breast, And the silvery moonlight's path to rest; Here's a song of praise for a beautiful world.

Here's a song of praise for the rippling notes That come from a thousand sweet bird throats, For the ocean wave and the sunset glow, And the waving fields where the reapers go; Here's a song of praise for a beautiful world. Here's a song of praise for the ones so true, And the kindly deeds they have done for you; For the great earth's heart, when it's understood, Is struggling still toward the pure and good; Here's a song of praise for a beautiful world.

Here's a song of praise for the One who guides, For He holds the ships and He holds the tides, And underneath and around and above The world is lapped in the light of His love; Here's a song of praise for a beautiful world.

. W. L. Childress.

## School News

## Saskatchewan Provincial Musical Association.

In spite of the financial stringency and the general depression, of which we have been hearing so much, the Sixth Annual Festival of the Saskatchewan Provincial Musical Association was the largest and most successful in its history. The entries in 1913 numbered two hundred and thirty-five, while this year they reached a total of two hundred and thirty-five. Thev would in all probability have been much larger than this except that a large number of the selections chosen by the syllabus committee were of great dif-One of the difficulties which ficulty. the Association has to contend with is the fact that many of its best singers are highly trained persons holding diplomas either from Eastern Canada or the Old Country, who are really capable of handling almost any selection written, and there is a tendency, in order to give the best of these something to do, to choose work which is somewhatbeyond the ordinary run of performer's. In spite of this, however, the increase in entries occurred, and the difficule works were handled very satisfactorily. The adjudicators, Dr. A. S. Vogt, of the Mendelssohn Choir of Toronto, Mr. H. W. Hewlett, of the Conservatory of Music, Hamilton, and Mr. Rhys Thomas, of Winnipeg, expressed themselves as highly pleased and also surprised at the

THE REPORT OF THE PARTY OF THE

wealth of talent which is to be found on the prairies, and in the prairie towns, and also they were not slow in expressing astonishment at the immensity of the Festival and the excellent business arrangements which characterized every department.

An interesting and important feature this year was the development of the work among children's choirs, no fewer than six hundred children taking part, of whom three hundred travelled a dis! tance of from one hundred to two hundred and fifty miles. When it is remembered that one hundred and fifty children from Moose Jaw started at 11 p.m. on Sunday night, travelled all night and sang on Monday and started home again at 11.50 on Monday night to reach Moose Jaw at 7 o'clock Tuesday morning, the magnitude of the task will be readily understood. Albert also sent one hundred twenty-five children besides a strong choral society, and a church choir of several soloists. Regina sent four church choirs, a male chorus, numerous quartettes and soloists. Yorkton, Indian Head, Weyburn, Humboldt and many other points were represented and the Festival is attaining more than ever a cosmopolitan character. The Choral Society Shield and the Grand Challenge Shield, which have both remained in Moose Jaw for two years, were this year captured by the Orpheus Choral Society

of Saskatoon, of whose achievement Dr. Vogt spoke in unmeasured terms.

The Class A shield for church choirs with over twenty-eight members, was this year captured by the First Baptist Church Choir of Regina. The class B choir shield for choirs of nineteen to twenty-eight members inclusive again goes to the holders, St. Albans Anglican Church of Prince Albert. The shield for church choirs, class C, with eighteen members or less goes to All Saints Anglican Church at Weyburn. The vocal solo Grand Award for the best vocal solo irrespective of class, was carried away by Mr. B. W. Wallace, of Prince Albert, and the gold medal for the best. instrumental solo, irrespective of class, was won by Miss Palmer, of Moose Jaw.

Next year's Festival is to be held at Moose Jaw, and it is anticipated that with a better outlook and the continued success of the Festival, a large increase in entries will be seen.

#### The Boy Scouts

It is wonderful what a change will take place in some boys after they have been Scouts for a little while. I heard something very interesting about one boy and I am sure it will interest you, too. Last winter the parents of a certain lad were almost in despair because of his bad habits. He was always in some mischief-not the mischief that can be excused as fun either—and his companions were the worst boys in the community. At home he was insolent to his mother and indifferent to the annoyance which he caused. He was full of life and energy, which seemed always to flow in wrong channels. But he became a Boy Scout, and in a remarkably short time the influence of the society made a wonderful change in him.—S.M.

#### BOOK REVIEW

In view of the present difficulty in obtaining military text books, the book entitled "How Armies Fight" is of unusual interest to officers and men of the

Canadian forces. Written as it is by an officer of the Royal Engineers, the commendations given by Earl Roberts, V.C., and by Marshall Oyama are not surprising. The former wrote: "It conveys a great deal of practical instruction in a very pleasant way, and at the same time, in such a graphic way as to impress it upon the memory. The maps and diagrams illustrating the text are excellent. I expect to hear that the book is widely read, and I believe it has a special value for officers and men of the Auxiliary Forces."

A singular coincidence in the book has been a subject of general comment. In the imaginary campaign in which the author describes the operations of modern warfare, he assumes (though writing in 1903) that England and France are fighting Germany in Belgium! More than that, he puts the imaginary British Army under the command of Generals French and Kitchener. Of course there is nothing prophetic in this circumstance, but it may be quoted as a tribute to the author's knowledge of the inherent probabilities of the military situation.



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# Department of Education

The Department of Education has secured from the Secretary of State 2,500 copies of the Dominion Blue Book, containing the diplomatic correspondence which took place between Great Britain and the other nations prior to the war. These have been obtained in order that a copy may be placed in every public school in the Province of Manitoba.

The Department desires that all teachers will use this book, and give instruction to the pupils in the school regarding the facts leading up to the war, in order that the children may fully understand why the Empire is at war, the principles which are at stake, and the efforts which our Empire made to maintain peace.

These books will be ready for distribution early in January.

The Department is also arranging for a supply of literature dealing with the war and its causes. This will be distributed at an early date.

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