

COURSE OF STUDY
for the
ELEMENTARY SCHOOLS OF KANSAS
1926

by
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THE COURSE

The course of study is primarily for the use of the elementary teacher. It should assist her to survey the field of her immediate labor and to plan her work definitely far in advance of each daily assignment. Secondly, it is for the purpose of systematizing and coordinating the educational procedure of the elementary schools of the state. It has many suggestions which will be helpful to the teacher who studies them carefully. When the teacher finds that she can use the suggestions by all means she should use them.

Page assignments are made in each subject. This makes an approximate distribution of the texts by months. It has been suggested that the assignments may be used to block out the work by two-month periods in harmony with the prevailing system of bimonthly examinations. A slavish adherence to the order of the course of study is not expected, but unless a better organization of the material of the text can be worked out by the teacher, the course should be the guide. This does not preclude the teacher from making adjustments to meet the needs of her pupils. Much material is outlined for the very purpose of bringing the instruction of the school into direct contact with the interests and experiences of the home, the store, the farm, the bank, the government.

CORRELATIONS.

The accompanying graph shows a natural grouping of related subjects in the curriculum of the elementary schools. It shows reading as the great outstanding subject through which each of the groups and each subject in each group may be used in correlation when a problem involving two or more groups is encountered. The arrows indicate the transfer of material.

PROGRAM

Each subject in each grade of the elementary school course of study has a place on this program. Combinations of classes may be called at the same period. While one grade recites the other grade reads silently or does written work at the board.

The alternation of subjects is indicated by the initial letters of the day of the week. The program indicates the time at which each recitation period begins and the length of the recitation in minutes.

Any entire grade or combination of grades may be dropped from the program without disrupting the remainder of the schedule.

The time gained by omitting one or more grades may be divided according to the altered program or the teacher may work out a new distribution of time and rearrange the schedule.

DISTRIBUTION OF THE CHILD'S TIME.

One of the greatest problems in the preparation of the program is the distribution of time. The graph on the opposite page shows the average trend in the survey of a great many systems. Read from the graph the relative amount of time the child should give to each subject in his grade.

LENGUAGE STUDIES

READING

FIRST YEAR

Basic Books: Hinton Primer and Bobbs-Merrill First Reader

AIMS.

Among many objectives which should guide the teacher of beginning reading, the following are of especial importance:

1. To arouse a vital interest in stories and rhymes and in books and pictures, which should lead to a genuine desire to read.
2. To establish an attitude of pleasure toward all reading and reading exercises.
3. To establish a habit of reading silently to gain thought, and of reading only to express thought.
4. To build up a vocabulary of sight words essential for later reading which the child shall know thoroughly and be able to combine fluently with other words in phrases and short sentences.
5. To establish a habit of noting similarities in words, and to develop the ability to pronounce new words by comparison with familiar words belonging to the same phonic system.

PREPARATION FOR READING.

During the first weeks of school the teacher should

seek to stimulate an interest in learning to read by allowing the children frequent opportunity to look at books and pictures, to hear and tell stories, to repeat favorite rhymes and songs, and to relate experiences.

The first primer may well be a little booklet made by the child himself, containing drawings or cut-out pictures of animals, toys, children, or other subjects of everyday experience. Short sentences describing the pictures may be introduced on the blackboard and later placed on slips to be pasted with the appropriate picture in the child's reading book. Thus the child gains an idea of the meaning and value of a book, and also the relationship of sentence, word and picture. The pre-primer work usually lasts from two to six weeks.

THE PRIMER

The first lessons in reading are based on the Hinton Primer. Two major steps are significant:

READING PROCEDURE

- First. The story should be told by the teacher.
- Second. The story should be retold by the children.
- Third. The story should be illustrated by the children. (Paper cuttings and mountings; outline pictures colored with crayola; clay modeling.)
- Fourth. The story should be dramatized by the children. In this manner the content and meaning of the printed page may be brought vividly before the children and re-

lated to their experiences. The children may be led to realize the meaning of reading before they are actually taught to read. The activities make the children anxious to read, and motivate with blackboard exercises, booklets, charts, bulletins and readers. Thus reading may be naturally related to the interests of the children.

DIRECT PROCESS.

First. Under the teacher's guidance the sentence is presented as a whole. The children through their experience with the story are made familiar with the spoken words and express the sentence naturally as a unit of thought.

Second. The teacher should guide the children in the recognition of related word groups or phrases in the sentence studied. These groups are repeated many times in the same story and frequently in new stories.

Third. The teacher should drill the children in the recognition of individual words: hen, cat.

Fourth. The phonograms in selected familiar words are taught: h-en, c-at. This step completes the formal analytic process.

Fifth. Synthesis follows in the reverse order, beginning with the fourth step. From the known phonograms, "h" and "at", the new word "hat" is built up by the class under the direction of the teacher. This word is united with known groups or phrases and a new sentence is spoken and written.

For full explanation of the teaching process and de-

talled instruction relative to the presentation of each lesson, see the Winston Primer Manual.

PRESENTATION OF THE PRIMER.

The presentation of the Primer should be an occasion for joy. The child should be allowed to handle the book uncovered, to look at the pictures, to hear one story read by the teacher. If the book is his own, he may make a name plate for it, and a cover or a book bag.

PRESENTATION OF THE LESSON.

In order to provide for a natural growth of vocabulary, the stories in the basic Primer and First Reader should be read in the order printed. The first two or three stories in the Primer should be told to the children by the teacher. Each unit of the story should be presented upon the blackboard or upon a printed chart and the children helped to learn the printed form in relation to the oral form. The steps in the presentation of a beginning lesson will be these:

1. Comment on the meaning of the picture.
2. Story read for the meaning.
3. Sentences and phrases shown with the pointer.
4. Words learned by building and rebuilding the sentences with word cards.

The teacher will find the manuals which accompany the Winston primer and the Noble-Griffith first reader indispensable.

INDIVIDUAL STUDY AND ORAL READING.

The children should early acquire the ability to gain thought independently from the printed page. After the class has acquired a small vocabulary, and has learned the meaning of reading, the teacher should discontinue her oral story, telling only the circumstances of the new story or enough of the plot to rouse curiosity.

New words or unusual phrases are presented on the blackboard or upon printed cards, and then allows each child to read the story for himself, unit by unit. This individual study may be aided by questions, which aid the child in understanding what he reads and enables the teacher to judge his progress.

Oral reading should follow this individual study and should make the story live for all the class. Dialogue may be read in parts and a realistic impersonation of the characters encouraged.

STORY DRILLS AND FLASH CARDS

In the mastery of vocabulary, flash cards bearing words and phrases from the Primer and First Reader will prove a aid. Such cards properly used stimulate quick recall of words and phrases and help to lengthen the recognition span. Reading, however, involves more than the mere calling of words and phrases. Even more valuable than flash card drills are exercises in which the child meets the words of primer or first reader in new reading situa-

tions. The blackboard, the sentence building rack, and printed materials for individual use at the seats, all provide opportunities for such exercises, which may take the form of questions about the story riddles, involving characters or objects of the story, directions which the child may read silently and follow, elliptical sentences which may be completed by the insertion of correct words or phrases, picture and story puzzles, in which related pictures and sentences are placed together, and other like tests.

GROWTH OF ABILITY TO PRONOUNCE NEW WORDS.

The children should not be asked to spell or sound out the words that occur in the first reading lessons. For awhile all new words will be presented by the teacher upon the blackboard or upon printed cards. Each new word will be used in word "games" and in sentence-building exercises until it is well memorized.

From the beginning of his reading experience, however, the child should be encouraged to note similarities in words that occur in reading lessons. Lists should be made of words that begin with the same sound and words that rhyme. Gradually the child should attain the ability to pronounce new words by comparison with words previously learned. During the first year of school the child may be expected to learn the sounds of single consonants, and to become familiar with the sounds of long and short vowels, and with the sounds of all very common consonant and

and vowel combinations, like sh, ch, th, wh, ur, er, or, ow, aw, all, ay, oy, ing, etc.

SUPPLEMENTARY READING.

The basic Primer may be supplemented with reading lessons composed by teacher and pupil about home and school activities. This work may include little stories about pets, toys, excursions, constructive projects and other interests, which may be placed first upon the black-board, and later inserted in charts or in little booklets made by the children.

Beginning near the end of the basic Primer, it should be possible for the children to read readily the first easy stories of other primers. In order to develop rapid rhythmic eye movements, all supplementary books should be sufficiently simple for fluent reading. It is desirable, where several books are available, that two or three primers shall be read before supplementary first readers are introduced.

In order to develop appreciation and to set a standard for good reading, some stories each term should be told or read aloud by the teacher. Such stories should be repeated as often as the class desires.

STANDARDS OF ACHIEVEMENT.

The first evidence of success in the teaching of beginning reading will be the child's eagerness for the reading period, and his voluntary attempts to read or car-

ry on reading exercises at home and in self-directed periods at school. He should be able from the beginning to answer intelligent questions about the content of stories he has read, and to read orally all stories studied so that others will understand and enjoy them.

By the completion of first grade he should have acquired the ability read fluently and comprehend the material in any standard primer. The teacher's edition of the basic First Reader gives suggestions for simple tests, by which the teacher may determine whether or no the child is approaching normal standards in speed and comprehension.

The reading vocabulary at the end of the first year should include approximately 600 words; and the phonic knowledge should cover the material outlined in the teachers edition of the basic First Reader.

ALPHABETICAL LIST OF WORDS IN FIRST-ON PRIMER.

afraid, after, again, alive, all, along, and, angry, are, ate, away.

back, bake, baker, barn, beans, beat, bed, bee, began, big, bit, bite, blew, boo, bought, bowl, boy, bread, bright, broke, broken, bumblebee, burn, but, butcher, buy, by.

called, came, can, candle, cat, catch, caught, chairs, cheese, chicks, cluck, cold, come, could, cow, cried, crooked, cry, crying, cupboard, cut.

day, did, dinner, do, dog, door, down, drink, drive,

dram.

eat, eaten, eating, end, eyes.

farmer, fat, fatter, fine, fire, first, flew, flour,
for, found, fox, frightened, from.

gave, get, gingerbread, girl, give, gnaw, go, goat,
gous, Goldenhair, gone, good, goose, got, Grannikin, grass,
great, grew, grind, grows.

had, ha! ha!, hang, hard, hare, has, have, hay, he,
head, heard, help, hen, Henny Penny, her, here, hid, hill,
him, his, hiss, home, hot, house.

I, if, into, is, it, I've.

jump, jumped, just.

kettle, kill.

lambikin, lay, leaped, let, light, lighted, like, lit-
tle, lived, lives, London, looked, lying.

made, make, man, may, me, meat, meow, met, middle-
sized, might, mile, milk, morning, mouse, mouth, my.

name, near, never, night, nine, no, noise, nose, not,
nothing, now.

of, off, oh, old, on, once, one, opened, ow, oaf, out.
over, ox.

pan, peas-porridge, pecked, pig, plant, please, pot,
passy, put.

queen.

rabbit, ra, rap, raped, rat, red, right, roll,
rolled, rope, run.

said, same, sat, saw, see, seen, shall, see, sitting,

sixpence, sleep, sly, so, soft, some, soon, squeaky, squirrel, stairs, stick, stile, still, sting, stop, stopped.

table, tail, tased, tell, thank, that, the, then, there, they, think, this, three, thus, tight, till, time, to, together, too, took, trap, tried.

under, up, upon, upset, us.

visit, voice.

waited, waiting, wake, walk, want, wasted, was, water, way, we, went, were, what, wheat, when, where, which, who, why, will, window, with, woman, woodpecker, woods, would.

yes, you, your.

WORDS IN THE COMMON PRIMER NOT IN BOBBS-STIRRILL FIRST READER.

afraid, again, alive, angry.

bake, beat, began, bought, bowl, bright, bumblebee,

burn, butcher, buy.

called, candle, cheese, chicks, come, crooked.

drink, drive, drum.

end.

fat, fatter, flour, found.

gave, gnaw, grannikin, grew, grow, gried.

ha! ha!, hare, help, Penny Penny.

I've.

jump, jumped, just.

kettle, kill.

lambikin, leaped, light, lighted, looked, lying.

meat, meow, middle-sized, night, mile.

name, near, never, nine, noise.

off, ouf, over, ox.

pan, peas-porridge, pecked, plant.

rap, rappid, right, roll, rope.

saw, seen, sitting, sixpence, sly, squeaky, stile,
stopped.

thus, tight, time, together, trap tried.

upset.

visit.

waited, waiting, wake, wanted, wheat, which, wood-
pecker, woods.

Of the words in the *Winton Primer* but not in the *Bobbs-Merrill First Reader*, 30 words (1) are in the first 500 words of the *Thorndike's Teacher's Word Book*, which lists the 5,000 words occurring most widely in general reading matter. The 16 words (2) are found in the second 500 words of the *Thorndike* list. A large per cent of the remaining list are imitative, or fanciful words of folk lore, which require but slight attention at the time the story is taught.

WORDS IN *WINTON PRIMER* WHICH REQUIRE BUT SLIGHT ATTENTION.

alive, bake, bought, bowl, bumblebee, chicks, crooked, fatter, flour, gnaw, grannikin, grind, ha! ha!, hare, Henny Penny, I've, Kettle, lambikin, leaped, lighted, middle-sized, meow, ouf, ox, pan, peas-porridge, pecked, rap, rapped, sixpence, sly, stile, squeaky, tight, trap, tried, upset, waited, wake, wheat, woodpecker.

GRADE 1: BOBBS-MERRILL PRIMER AND FIRST READER WHICH RE- QUIRE BUT SLIGHT ATTENTION.

baa, Bluebell, boo, boo-hoo-hoo, Bo Peep, bow-wow,
bump, butt, chunk, churn, coo, d d pole, dickory, dicky,
dyvind, gingerbread, Goldenhair, haystack, hickory, Horner,
Hubbard, huff, Jack-o-lantern, Jacky, Jill, landlord,
Marit, mite, moll, molly, oof, pie-man, porridge, redbreast,
santo, swish, Thumbelina, whale.

REQUIREMENTS.

FIRST READER.

Basic Reading: The Weston Primer, which is the basic text, should be read entire and should be supplemented by at least two other approved primers, one of which should be the Bobbs-Merrill Primer. The reason for suggesting the Bobbs-Merrill is obvious. There are many words in the Bobbs-Merrill Primer that are not found in the Weston Primer, which the children should know before undertaking to read the Bobbs-Merrill First Reader. These words can be learned best in the Bobbs-Merrill primer.

Reading by the Teacher: At least six supplementary stories should be told or read by the teacher. These stories may include folk tales, classic fairy tales, fables or modern realistic stories concerning the activities of children. Stories contained in the basic Primer and First Reader should not be included in this list.

SECOND TERM.

Basic Reading: The basic First Reader should be read entire. Reading by the teacher: At least six supplementary stories should be told or read by the teacher, exclusive of the stories contained in the First Reader.

Memorization of Verse: At least four of the rhymes included in the basic First Reader should be memorized by each child.

LIBRARY REFERENCES.

- Smith: The Cottontail Primer.
- Grover: The Sunbonnet Babies Primer.
- Serl: Work-a-Day Doings on the Farm.
- LaRue: The F-U-N Book.
- LaRue: Under the Story Tree.
- Permins: Dutch Twins Primer.
- Banta-Benson: The Brownie Primer.
- Grover: The Overall Boys.
- Silvester and Peter: Happy Hour Stories.
- Smith: The Cottontail First Reader.
- Hardy: Tag and Puff

SECOND YEAR.

BASIC READER: THE BOBBS-MERRILL SECOND READER.

AIMS.

Objectives in teaching second-grade reading should include the following:

1. To rouse in the pupils such satisfaction in reading good stories and verses as shall lead to voluntary reading of similar material outside the reading class.

2. To develop the silent reading ability so that the child will be able to attack a new story independently and gain for himself the full content.

3. To develop the oral reading ability so that the child may by reading aloud give real pleasure to his classmates and to younger children at school and at home.

4. To add to the vocabulary of words and phrases which the child recognizes at sight, thereby increasing fluency in oral reading and rapid eye movement in silent reading.

5. To develop the ability to ascertain new words from the context, and also to pronounce new words by comparison with words previously learned containing like phonic elements.

ORDER OF STORIES FOR READING.

The material included in the first half of the basic reader consists of humorous animal tales, folk fairy tales, rhymes and fables, all more or less of the repetitive type. These stories form a transition from the easy repetitive tales of the first reader to the more difficult stories and verses of nature and child life found in the latter half of the second reader. Although the stories are arranged in groups according to type, there is a pleasing

contrast between each two stories, and a desirable alternation of prose and verse. As the stories are carefully graded according to vocabulary difficulties, they may be read with profit in the order printed.

PREPARATION FOR STORIES.

Before asking the child to read the story for himself, the teacher should explain any unusual facts or circumstances which might cause confusion, should introduce the characters and setting, and should rouse the child's curiosity concerning the outcome. Words or phrases which might cause the child difficulty in pronunciation or meaning should be presented upon the blackboard or upon cards before the story is read, and should be used in oral sentences related to the story.

SILENT READING.

The prose selections in the basic reader should be read silently before oral reading is attempted. The teacher should give the children always a real aim in attacking the selection. Pupils may read silently to answer questions which the teacher has written on the board to guide them in their study. They may read merely to find how the story ends, to discover the joke, or to determine how the new story is like the preceding story. After the silent reading, the pupils may answer questions about the facts of the story, or may discuss the meaning of the story. They may tell which character they like best or which part of the story is funniest or prettiest or most interesting.

ORAL READING.

Oral reading tends to make the story more vivid for young children. They should be encouraged to read so that the class will enjoy the fun, or see the pictures more clearly, or hear the characters talking. Often a single lively passage may be reread by several pupils, the class deciding whose interpretation is best.

Poetry should as a rule be read aloud by the teacher before the class reads, in order that the children may get a first impression of the combined beauty of form and content. After a careful study of each stanza for hidden meanings, several oral readings by individual children are desirable. A poem, like a song, grows more loved by repetition, and is easily memorized after several readings have made the lines familiar.

GROWTH OF VOCABULARY.

The child should acquire with each lesson new words and phrases which are memorized as wholes. His attention should be called continually to words with similar beginnings and endings, and lists should be made by the class daily of words that are similar in sound and spelling. Suitable lists for phonic practice are included in the teacher's edition of the basic Second Reader.

In the basic reader and in supplementary books the pupil should be expected to pronounce independently new words containing familiar phonic elements; but the teacher

should not hesitate to pronounce for the child an unphonetic word or a word containing a combination that the class does not know.

SUPPLEMENTARY READING.

The basic reader may be supplemented by reading lessons composed by the teacher and pupils about home and school experiences. These may take the form of a daily or weekly bulletin, containing interesting bits of news about the school or the children's home activities. Such lessons may be written upon the blackboard, and later, if desired, they may be duplicated for each child to take home.

It is well to use for supplementary books during the first term first readers new to the group rather than second readers. Abundant easy reading is needed to develop rhythmic and rapid eye movements. For the second term supplementary books may include both first and second readers. Children in second grade may be encouraged to do much silent reading in self-directed periods of selections of their own choosing, reading orally or telling their stories later to the class. It is unnecessary, therefore, to provide many complete sets of supplementary books. One or two each of several worthwhile books form a desirable library for supplementary reading in second grade.

It is desirable that during the year one or two long stories be read aloud by the teacher. Such reading increases appreciation and sets a standard for good oral

reading by the class.

STANDARDS OF ATTAINMENT.

During the second year interest in reading at home should become continually more evident as the child gains independence and appreciation. Pupils should be able to tell briefly a story studied silently, and should be able to read it orally so that others enjoy and understand it.

By the completion of the second year of reading pupils should have the power to comprehend and read fluently any story found in a standard first or second reader.

Reading ability may be measured in a second grade both by standardized tests and by informal tests based on material in the school reader. The teacher's edition of the second reader gives information concerning the formulation and use of such tests.

REQUIREMENTS.

FIRST TERM.

Basic Reading: The Bobbs-Merrill Second Reader, pages 1 to 123.

Reading by the Teacher: At least one long story, read to the pupils for appreciation. The following books are suggested: Red Feather; Peter and Polly in Winter.

Memorization of Verse: At least two rhymes selected from the first half of the basic Second Reader.

SECOND TERM.

Basic Reading: The Bobbs-Merrill Second Reader, pages 124 to 219, inclusive.

Reading by the Teacher: At least one long story, read to the children for appreciation. One of the following is suitable: Sunbonnet Babies in Holland; Eskimo Twins.

Memorization of Verse: At least one long poem and two shorter poems selected from the second half of the basic reader. If the poems selected, at least one should be from Robert Louis Stevenson.

LIBRARY REFERENCE.

Perkins: Eskimo Twins.

Lucia: Peter and Polly in Winter.

Worcomb: Red Feather.

Smythe: Heynard the Fox.

Grover: The Sunbonnet Babies in Holland.

Ashton: Story Book Tales.

Sindelar: Nixie Bunny in Work-a-Day Land.

Latue: In Animal Land.

Lucia: Peter and Polly in Spring.

Skinner: Happy Tales for Story Time.

Hardy: Surprise Stories.

THIRD READER.

BASIC READER: THE BOBBE-MERRILL THIRD READER.

AIMS.

The following objectives should be continually kept in mind by teachers of third-grade reading:

1. To promote pleasure in reading that will lead

to voluntary reading at home and in the library.

2. To develop speed and accurate interpretation in silent reading.

3. To increase fluency and charm of oral reading.

4. To make pupils more independent in solving word difficulties through use of the context and through mastery of phonics.

ORDER OF SELECTIONS.

The stories in the basic reader are of several types. They are arranged in groups according to type, but there are pleasing contrasts within each group, and an interesting mingling of verse and prose. The stories may be read with profit in the order printed, but occasional choices by the pupils of special stories for special days are desirable.

SILENT READING.

Prose selections should usually be studied silently before they are read orally. Careful preparation should be made for silent reading assignments. The teachers should introduce the characters, explain the setting, and rouse curiosity concerning the outcome of the story. Difficult words and phrases should be placed on the blackboard and pronounced or explained in connection with the presentation of the story.

The pupils should read silently with a definite aim. Often questions may be placed on the blackboard by the

teacher to guide the silent reading. If the story is short the pupils read merely to learn the outcome, to judge the wisdom of the characters, or to discover the joke.

At the conclusion of the silent reading there should be a definite check on the pupil's comprehension. He may tell a part of the story or answer factual or thought questions concerning it. Sometimes tests may be placed on the blackboard; directions for illustrating some incident of the story; questions that can be answered by yes or no; elliptical sentences which may be completed by the insertion of a single word or phrase.

ORAL READING.

The oral reading which follows silent reading may be for the purpose of making the story clearer or more vivid for the class. The pupils may plan to entertain another class or the family at home by good reading of a particular story.

Sometimes the oral reading helps to determine the suitability of a story for dramatization; or pupils read it aloud to choose the most exciting part or the funniest or prettiest part.

A beautiful bit of verse should be read orally by the teacher before the children study it. The study should be conducted under the guidance of the teacher who helps the class to discover the full meaning and to note

the pretty rhymes and repetitions. Many children may be allowed to read the poem individually, for a poem grows lovelier with repetition and is more easily memorized after the lines are familiar through frequent oral reading.

GROWTH OF INDEPENDENCE IN ATTACKING NEW WORDS.

Pupils in third grade should show considerable ability in pronouncing new words at sight by comparison with words previously met containing like phonic elements. At the beginning of the third grade pupils should be familiar with all consonant and vowel combinations that occur frequently in words of one syllable, and during the third year they should learn less usual combinations and some of the very common prefixes and suffixes which help to form words of two or more syllables. The effect of adding prefixes and suffixes upon spelling and meaning should be noted. Lists of similar words such as are given in the teacher's edition of the basic reader should be prepared by the class.

SUPPLEMENTARY READING.

Pupils should be encouraged to read silently at home and in self-directed periods at school stories of their own choosing. Afterwards these stories may be told or read to the class. Supplementary books provided for the first term may be second and third readers. Children who read very well may be encouraged to read single long stories as well as school readers. A list of suitable books

is included in approved library list.

During the year the teacher should read two or three complete long stories to the class. Such reading affords a model for good oral reading, tends to increase appreciation, and awakens an interest in longer stories than can be included in the school reader.

STANDARDS OF ATTAINMENT.

An interest in the library and an eagerness to take books home from school for reading will attend a successful reading course.

By the completion of the third year pupils should be able to read material from second and third readers fluently and report clearly what has been read. Oral reading should be fluent and without gross errors and should give pleasure to those listening.

Reading tests should be given occasionally to determine whether or not the individual pupil reaches third-grade standard in speed and power of comprehension. The teacher's edition of the basic reader gives information concerning the use of standardized tests, and also tests based on stories in the reader.

REQUIREMENTS.

FIRST TERM.

Reading by the Teacher: At least one long story, selected from the approved library list, read for appreciation.

Memorization of Verse: One long poem or two shorter poems, chosen from the first half of the basic reader.

SECOND TERM.

Reading by the Teacher: At least one long story, selected from the approved library list, read aloud for appreciation. The following are suitable: Little Bear Stories, by Fox; Merry Tales, by Skinner; Red Feather's Adventures, by Gifford and Payne.

Memorization of Verse: Two poems chosen from the second half of the basic Third Reader.

LIBRARY REFERENCES.

Andrews: Boys and Girls of Make-up Town.

Berl: In Fairyland.

Fox: Little Bear Stories.

Skinner: Merry Tales.

Terry: History Stories of Other Lands (Tales from Far and Near).

Shillig: The Four Wonders.

Lowe: Grimm's Fairy Tales.

Grover: The Sunbonnet Babies in Italy.

Stevenson: A Child's Garden of Verse.

Bigham: Stories of Mother Goose Village.

Clark: Stories of Belle River.

Richey: Stories of Animal Village.

Speed: Billy and Jane, Explorers.

Gifford and Payne: Red Feather's Adventures.

FOURTH YEAR
THE BOBBE-MERRILL FOURTH READER
AIMS.

Among many aims which guide the teacher of fourth-grade reading, the following should be included:

1. To develop an increasing delight in the reading of good literature, which will lead directly to voluntary reading of worth-while books at home and in the library.
2. To improve silent reading ability, so that pupils will be able to read books of fourth-year difficulty at an economical rate and with ready comprehension of all that is read.
3. To improve the ability in oral reading, so that pupils will be able to read selected passages suitable for reading aloud, in such a way as to give information or pleasure to those who listen.
4. To provide for the growth of the vocabulary through frequent oral discussions of what is read; and through reference as need arises to the "Little Dictionary" included in the basic reader.

THE SEQUENCE OF SELECTIONS FOR READING.

In order to aid the pupil to organize and evaluate what he reads, and also to provide systematically for the growth of the vocabulary, the selections in the basic reader should be read, for the most part, in the order

printed. Each of the six sections in the basic reader presents a somewhat different type of material. If the section introduction and the stories and poems of the section are read consecutively, the pupils acquire an excellent basis for the classification and evaluation of all similar stories. No course of study, however, should be so rigid as to preclude the occasional choice of a particular story or poem to suit a special day or a special day or a special need.

SILENT READING.

Educators have come to realize that oral reading and silent reading are very different activities, and must be given separate consideration in the course of study. The great importance of silent reading in the achievements of adult life indicates that this type of reading should be given increasingly more attention in the intermediate grades. By the time the child reaches fourth grade he should so far have mastered the mechanics of reading that his eye travels more rapidly than his speech. An overemphasis of oral reading in the fourth grade and in later grades, may seriously hinder the development of rapid rate in silent reading.

All prose selections in the fourth reader should be read silently. For children who read with difficulty or who care little about reading, it is well for the teacher in her presentation to tell enough of the story so that curiosity is aroused and the book is attacked

with eagerness. The child reads then to learn "how the story ends." In other ways the teacher may set definite aims for the silent reading. Pupils may read to determine why the story is a famous one; or in what way the new story is like the preceding story; or whether the story is a suitable one for playing at a school assembly. Sometimes the child may be told to try as he reads to "see the pictures" that the story presents, or to prepare the story for telling. Again a definite question about the leading character or the plot may serve as the motive for reading. What sort of a lad was Joni, the Goat Boy? By what devices did three rogues succeed in outwitting the vain mirror? How did his animal friend aid Doctor Dolittle in his adventure with the pirates?

Following the silent reading, there should be some form of test of the pupil's comprehension of what he has read. The pupil may be asked to tell some part of the story, to describe the "pictures" it has given him, or to engage in a discussion of some of the problems presented. Frequently pupils disagree concerning the interpretation of the story, and a oral reading of certain passages follows, in order that the class may decide together upon the meaning.

ORAL READING.

Oral reading should as a rule follow silent reading, since one cannot at the same time acquire meaning and ren-

with eagerness. The child reads then to learn "how the story ends." In other ways the teacher may set definite aims for the silent reading. Pupils may read to determine why the story is a famous one; or in what way the new story is like the preceding story; or whether the story is a suitable one for playing at a school assembly.

Sometimes the child may be told to try as he reads to "see the pictures" that the story presents, or to prepare the story for telling. Again a definite question about the leading character or the plot may serve as the motive for reading. What sort of a lad was Roni, the Goat Boy? By what device did three rogues succeed in outwitting the vain Emperor? How did his animal friend aid Doctor Dolittle in his adventure with the pirates?

Following the silent reading, there should be some form of test of the pupil's comprehension of what he has read. The pupil may be asked to tell some part of the story, to describe the "pictures" it has given him, or to engage in a discussion of some of the problems presented. Frequently pupils disagree concerning the interpretation of the story, and an oral reading of certain passages follows, in order that the class may decide together upon the meaning.

ORAL READING.

Oral reading should as a rule follow silent reading, since one cannot at the same time acquire meaning and ren-

der it well. Not all selections, however, should be read orally, nor indeed all parts of certain chosen selections. Sometimes the oral reading merely serves to throw light upon a discussion, and is limited to one or two disputed passages in the story. Again the pupils may choose a passage which they feel is especially suitable for oral reading. Numerous passages, dialogue, unusually beautiful paragraphs, may be chosen. A small amount of oral reading with a real motive yields better results than much listless droning of long stories. The teacher should bear in mind that the natural motive for oral reading is to give pleasure or information to others. When a pupil reads aloud a selection which he has prepared at home or in the library and which is new to his classmates, there is a real audience situation which is certain to stimulate effort.

For very poor oral readers, practice in easy sight reading is recommended.

THE MEMORIZATION OF VERSE.

Verse is for the ear, and is better enjoyed usually when read aloud. If appreciation is the aim in presenting a bit of verse, then an oral reading by the teacher should precede the pupil's study, in order that the first impression may be one of pleasure. Because of its inversions and omissions, verse is more difficult of comprehension than prose, and should be studied more carefully, the teacher helping the pupils to build out the phrases

and discover hidden meanings. A careful study of the meaning of the lines and several oral readings by pupils frequently results in memorization. It is desirable that memorization of verses should come spontaneously as the natural result of the child's mastery of the poem and his pleasure in it, and should not be regarded as an imposed task. Sometimes pupils may select favorite poems or stanzas for committing to memory. The lines memorized should be frequently reviewed, in order that they may become the child's permanent possession.

THE GROWTH OF VOCABULARY.

In connection with each selection in the basic reader, pupils should be asked to pronounce and explain the difficult words and phrases. "The Little Dictionary" at the back of the book should be used for learning the meaning of those words that cannot be readily understood from the context. The dictionary work should be conducted under the direction of the teacher until the pupils have learned how to find words and how to interpret the markings and the definitions. Care should be taken that the dictionary is not overused. It is more valuable always for the child to determine the meaning of a word for himself from the story, than to memorize a dictionary definition. See fourth grade spelling outline for further use of the dictionary.

STUDY OF READING.

Careful attention should be given to the literary assignments in the basic reader. Individual children may be asked to prepare and read to the class supplementary stories and poems referred to in the basic book; and to report upon complete books which have been read at home. To stimulate the pupil's desire to read longer stories, the teacher should read aloud to the pupils some complete books during the year.

STANDARDS OF ACHIEVEMENT.

The truest test of the success of any reading course lies in the voluntary reading of the pupil. The eagerness to read at home selections similar to those read in the classroom is proof both of a growing appreciation of good literature and a growing mastery of reading mechanics.

To measure progress in both oral and silent reading, standardized tests are now available. The basic reader gives the teacher instruction both in the use of standardized tests and of informal tests based on the selections of the reader. Such tests should be made the basis for grouping pupils in classes, and should also suggest what type of remedial work is needed by those who fall below the fourth-grade standard.

REQUIREMENTS.

FIRST YEAR.

Reading by the Teacher: At least one long story, read to the pupils solely for appreciation. Suggested books

are: Star, The Story of an Indian Boy, by Hooker; The Japanese Twins, by Perkins.

Poems to be Memorized: At least two, selected from the first half of basic reader.

SECOND IF.

Reading by the Teacher: At least one long story, read to the pupils for appreciation. One of these may be chosen: Little Joe Otter, by Burgess; Pinocchio, by Collodi.

Poems to be Memorized: At least two, selected from the second half of the basic reader.

LIBRARY REFERENCES.

Johnson: Adventures of a Country Boy.

Leblanc: The Blue Bird for Children.

Rayland: History Stories for Primary Grades.

Cowles: Myths from Many Lands.

Ferry: History Stories of Other Lands (Tales of Long Ago).

Perkins: Peter Pan.

Collodi: Pinocchio.

Perkins: The Japanese Twins.

Daulton: Wings and Strings.

Burgess: Little Joe Otter.

Hooker: Star, The Story of an Indian Boy.

Chamberlain: How We Are Fed.

Frazer: Anderson's Fairy Tales.

FIFTH YEAR
THE BOWEN-BERRILL FIFTH READER.
1917.

Following are some of the aims which should guide the teacher of fifth-grade reading:

1. To develop an increasing satisfaction in reading both for pleasure and for information, and in increasing ability to discriminate in the choice of reading materials, leading to the use of leisure time for voluntary reading of worth-while books of various types.
2. To develop the ability to read silently selections of fifth-grade difficulty at an economical rate, retaining from the more imaginative selections vivid mental images of the action described; and from factual selections the important events and facts set forth.
3. To develop the ability to read orally selected passages in such a way as to give added knowledge or appreciation to those who listen.
4. To improve the ability to discover meanings of strange words from the context, from word analysis, and from the glossary and the dictionary.

THE SEQUENCE OF SELECTIONS.

The selections in the Fifth Reader are arranged in seven sections, each representing a somewhat different type of material. Before assigning the stories of any section, it is advised that the teacher shall first read

to the class the brief introduction to the section, thus preparing the pupils to understand and enjoy the type of literature that follows. After the section introduction has been read, the pupils may examine the titles of the section found in the Contents on page XVII, telling anything they may know about the stories or authors. In general, the selections should be read in the order printed, but occasional choices by the pupils of selections to fit special days or special needs, are desirable.

ILLUSTRATED READING.

Illustrated reading is most likely to be profitable if the pupil reads with a live motive. Both the section introductions in the basic reader, and the story introductions should serve to rouse interest in the selections and to create a real desire to read. Often the teacher may read aloud and amplify such an introduction, and may suggest a definite aim or problem for the reading of the selection. In imaginative selections, like *The Pied Piper* and *The King of the Golden River*, the pupil tries as he reads "to see the changing pictures." Again he may read to judge or evaluate the story or compare it with others he has read: "How is *The Little Lane Prince* different from other fairy tales the class has read?" "Why is the *Nightingale* one of the most famous of all fairy tales?" "Which is the most interesting, *Robinson Crusoe* or *Gulliver's Travels*?" Or the problem may suggest the ending of

the story, and the pupils reads to discover the solution: "How did one young knight win honor above all the Knights of the Silver Shield?" "What strange adventure did a boy have inside the Porcelain Stove?" For boys and girls who show little interest in reading, it is desirable that the teacher sometimes tell or read aloud the beginning of the story, in order that curiosity shall be aroused and the book attacked with eagerness.

Suggestions for the pupils reproduction of the story are given following each selection in the basic reader. These suggestions include story-telling, description of "mind pictures," and sometimes factual questions to be used as tests of comprehension. Especially valuable are discussions of problems presented in the story. Such discussions increase the ability to judge and evaluate what is read, and provide valuable experience in speech as well.

ORAL READING.

When in the discussion that follows silent reading, some pupils show evidence of failure to comprehend, or disagreement as to the interpretation of a selection, there is a genuine motive for oral reading. A pupil may be allowed to read aloud a selected passage to prove his point in an argument, or to make clear the meaning to another child.

Other motives for oral reading may be to add to the pleasure of the class by a dramatic reading of a bit of di-

ologue, a lively rendition of a humorous passage, or an appreciative reading of a truly beautiful poem or prose selection. Oral reading is excellent preparation for the dramatization of a selection, and also for the memorization of verse.

In addition to the oral reading of selected passages from the basic reader, the pupils should be allowed to read aloud occasionally stories and poems which have been prepared at home or in the library and are new to the class. A good oral reading of an interesting chapter from a long story may inspire many classmates to wish to read the entire story, and the book may be passed from one to another.

For poor oral readers, much sight reading of very easy prose selections is desirable.

GROWTH OF VOCABULARY.

Systematic guidance should be given in the growth of vocabulary. Pupils should be encouraged to find the meaning of strange words from the context and from word analysis; and also to use the glossary in the back of the book, and, for fuller help, the dictionary. The dictionary work should be conducted under the direction of the teacher, who must aid the pupils to select from many definitions the one applicable to the context. The use of dictionary markings for pronunciation should be well mastered by the end of the fifth year.

THE USE OF THE LIBRARY.

Continual use should be made of the library, both in connection with the study of literature and of the factual subjects, such as geography, history and hygiene. Pupils should frequently assume responsibility for finding in the library books referred to in the basic text, and for preparing selected readings or reports for the class. Pupils should use with increasing ease indexes, tables of contents, bibliographies and other aids.

In order to aid the pupil to discriminate in the choice of books for voluntary reading, considerable attention should be given to the authors of selections in the basic reader. The brief note about the author included usually in the reader may often be supplemented by a fuller report from the library. Pupils may be asked to find what books by the author are available in the school library or the public library, and individuals may be encouraged to read and report to the class upon these books. The oral reading by the teacher of a few fine books is a further aid to the development of good taste. Where the library resources in the community are meager, pupils may cooperate in projects to earn money for buying worth-while books, which may be added to the library for the grade.

STANDARDS OF ACHIEVEMENT.

An increasing voluntary use of the library on the

part of pupils, and a growing eagerness to assume responsibility for the preparation of library reports and readings, is one measure of the success of the course.

For measuring speed and comprehension, and diagnosing reading difficulties, standardized tests may be used, and also informal tests based on the material at hand. Such tests are fully described in the basic reader.

REQUIREMENTS.

FIRST TERM.

Reading by the Teacher: At least one complete book read to the pupils for appreciation. The book should be selected from the Library References for this grade.

Memorization: One long poem or two shorter poems, selected from the basic reader.

SECOND TERM.

Reading by the Teacher: At least one complete book read to the pupils for appreciation. The book should be selected from the Library References for this grade.

Memorization: One long poem or two shorter poems, selected from the basic reader.

. LIBRARY REFERENCES.

Terry: History Stories of Other Lands (The Beginnings).

Chamberlain: How We Are Clothed.

Chamberlain: How We Are Sheltered.

Pitkin and Hughes: Seeing America.

Baldwin: Thirty More Famous Stories Retold.

Curtis: Why We Celebrate Our Holidays.

Perkins: The Irish Twins.

DeFoe: Robinson Crusoe.

Hawkes: The Trail to the Woods.

Bailey: Boys and Girls of Colonial Days.

Chamberlain: How We Travel.

Bachman: Great Inventors and Their Inventions.

SIXTH YEAR

THE BOBBS-MERRILL SIXTH READER.

AIMS.

Following are some of the aims which should guide the teacher of sixth-grade reading:

1. To stimulate interest in reading literature of various types, and to acquaint pupils with what constitutes worth-while reading, from the standpoint of authors, sources and subjects.
2. To stimulate increasing use of the library both for reference work and for voluntary reading for pleasure.
3. To provide for intelligent silent reading for various purposes.
4. To create situations for oral reading with genuine motives.
5. To establish habits of self-help in learning new words through word analysis, study of the context, and use of the glossary and the dictionary.

THE SEQUENCE OF SELECTIONS.

Each of the three parts in the basic reader constitutes a somewhat different type of subject matter with further classifications within the part. Any one of the three parts may be read first, but it is advised that the selections which belong to each part shall be read for the most part consecutively. Thus the boys and girls will have opportunity for the comparison and evaluation of several similar selections. It is suggested that before attacking any part of the book, the teacher shall first read aloud to the class the introduction to that part, endeavoring to rouse an enthusiastic interest in the selections which are to follow. In connection with each of these introductions the pupil should examine the table of contents on pages XVIII, in order to gain a survey of the selections to be read in that part. They will be interested to recognize the names of some authors previously met, and perhaps titles of some selections read at home. In their reading, pupils should be encouraged continually to compare similar selections and to state their preferences.

SILENT READING.

In attempting to improve ability in silent reading, the teacher should recognize that there are various types of silent reading. Among the several kinds that have been distinguished are rapid silent reading for pleasure and for general information; careful precise reading for

the purpose of gaining specific information; since textbooks in arithmetic and such content subjects as geography, hygiene and history, furnish much opportunity for careful precise reading, it is desirable that the basic literary reader should provide considerable experience in rapid reading for pleasure. Since silent reading is usually more rapid and intelligent under the stimulus of real interest, silent reading assignments should be given with care. The introduction to the selection should usually be read orally by the teacher or by a good reader from the class. Sometimes the introduction will serve to rouse interest, and the story will be attacked with zest. In other cases some further motivation may be needed. The teacher may read aloud or tell a few paragraphs of the story until curiosity is aroused, or she may set a problem for the reading: "How did Sigurd learn of his father's sword, and what use did he make of it?" "Why was Odysseus always called 'wise' or 'crafty' by the Greeks?" "Was it more interesting to live in the days of Daniel Boone or now?" In the case of imaginative selections the pupils may frequently be asked to form "mind pictures" as they read. "Thor's Wonderful Journey" is one of the most magnificent giant stories of literature. The pupils should try as they read to picture the huge city of the post-giants and the marvelous feats done there. They should try to see "Jason" in his varied and wonderful adventures.

In testing the pupils upon such silent reading, it is not well to go into too great detail. From rapid silent reading, pupils should gain the large ideas, and the striking pictures. Sometimes certain passages of the story may be reread carefully for the purpose of gaining light on some problem under discussion.

ORAL READING.

A small amount of oral reading done under the stimulus of a real motive is productive of better results than much aimless reading of long selections. The teacher should bear in mind that the natural motive for oral reading is to give pleasure or information to others. When in the discussion that follows silent reading, certain pupils show that they fail to comprehend the story or when disagreement arises as to the interpretation, then there is a genuine motive for reading aloud. The boy who says, "Listen, and see if I am not right," is likely to render a spirited interpretation of the passage. Again the motive may be to add to the appreciation of the class by giving a lively reading of a bit of humor, a dramatic rendition of a dialogue, or a sympathetic interpretation of a beautiful poem or prose passage. Poetry usually should be read aloud, though a careful study for meanings may precede the oral reading by the pupils. The pupils may frequently be allowed to choose from long prose selections the passages especially suited for reading aloud.

The reading aloud of supplementary stories and poems for the purpose of comparison, is an especially valuable exercise, since the class has not heard the selection, and there is a true audience situation.

GROWTH OF VOCABULARY.

The Sixth Reader contains many famous proper names--names of well-known historical characters, of famous literary heroes, of places and personages associated with Greek and Norse mythology. Since many of these names will be frequently met in other literature and are often referred to in conversation, it is worth while to include them in the vocabulary study. The glossary at the back of the reader gives aid in the pronunciation of such names, and when needed, adds information about the place or character. Pupils should be encouraged to use the dictionary, as well as the glossary, for learning meanings of strange words. Often the teacher must guide the dictionary study, in order that the right meaning for the context shall be chosen. The use of the dictionary, however, should not be made a substitute for other methods of self-help. More valuable than a dictionary definition is a meaning discovered by word analysis or from the context. The glossary and the dictionary should be used only when the pupil is unable to discover the meaning for himself.

THE USE OF THE LIBRARY.

Special attention should be given to information in

the study notes about authors and sources. Thus the boys and girls are learning what constitutes good reading material and how to choose wisely for their own voluntary reading. Pupils may wish to read other Norse myths concerning Thor and Loke; tales of other Greek heroes as famous as Jason; the complete story of Odysseus and the tale of Troy. Often a pupil who has done additional reading at home is glad to give the class an oral report or to present a selected reading.

The brief statement about the author included frequently in the basic reader may be supplemented by a fuller sketch gleaned from the library, and may lead to the voluntary reading of other selections by this author.

Pupils in sixth grade should be expected to use intelligently tables of contents, indexes, and other library aids. In addition to the reading of literary selections for comparison, they should use the library freely also for reference work in such content subjects as geography and history. It is desirable that they shall become acquainted also with good scientific and geographic magazines suitable for boys and girls.

STANDARDS OF ACHIEVEMENT.

The success of the course is measured to a great extent by the eagerness with which pupils in their voluntary reading seek more material from the authors and sources introduced and recommended in the basic reader. The wil-

lingness to assume responsibility for reference work and to contribute to the pleasure of the class by reports and reading is proof also of a growing pleasure and power in the use of books.

Achievements in silent and in oral reading may be measured both by standardized tests and by informal tests on the material at hand. The teacher should follow suggestions made in the basic reader both concerning the use of tests and their interpretation.

REQUIREMENTS.

FIRST TERM.

Reading by the Teacher: At least one complete book, read to the class for appreciation. The book may be selected from the Approved Library list for this grade.

Memorization: At least one long poem or two short poems, chosen from the basic reader.

SECOND TERM.

Reading by the Teacher: At least one complete book, read to the class for appreciation. The book may be chosen from the Approved Library books for this grade.

Memorization: At least one long poem or two short poems, chosen from the basic reader.

LIBRARY REFERENCES.

- Holmes: Burton Holmes Travel Stories, Japan.
 Forbes: Lindsay: Daniel Foote, Backwoodsman.
 Spyri: Heidi.

Terry: History Stories of Other Lands (Lord and Vassal).

Kipling: The Jungle Book.

Lefferts: Our Own United States.

Harvey: Robin Hood.

DeFay: Our Animal Friends and Foes.

Hawthorne: The Strange Adventures of a Pebble.

Weeks-Briggs: Ox-team Days on the Oregon Trail.

Atchison and Uttley: Across Seven Seas to Seven Continents.

Amicis: The Heart of a Boy.

Allen: David Crockett, Scout.

SEVENTH YEAR.

BASIS READING: THE BOBBY-MERILL SEVENTH READER.

ATTAINMENTS AND OBJECTIVES.

The seventh grade pupil who has responded well to the opportunities and requirements for reading in the earlier grades should bring to his reading:

1. Enjoyment of good reading of suitable grade and type, and an eager desire to read new matter of intrinsic worth and interest.

2. A reasonably broad knowledge of stories, poems and books of literary merit and of sufficient variety to cover several different types of literature.

3. An acquaintance with the names and something of the life story of a score or so of famous authors, with

a few of their more important writings.

4. Ability to read silently with good comprehension, and at a rate of approximately two hundred words a minute, matter of average difficulty suited to their grade.

5. Ability to read orally with expression and effectiveness well-written matter that is within the range of their grasp and vocabulary.

6. Interest in new words and expressions, and the habit of looking up in glossary or dictionary, to make sure of their pronunciation.

For such pupils or classes as lack any of these basic attainments, they should constitute one of the chief objectives of the present year. Following are additional objectives for the seventh year:

1. To acquaint the pupil with new writers of both prose and poetry, and to introduce new types of literature, thereby opening up fresh sources of enjoyment and inspiration.

2. Especially to develop still further the love for good reading, so that it may become one of the permanent interests of youth and a lasting source of enjoyment and profit.

3. To increase skill in silent reading, both as to its rate and the degree of comprehension and retention. A good reader is both a rapid and a thorough reader.

4. To develop the attitude of self-criticism on the

part of the pupil, not to his discouragement, but to render him alert for self-improvement. This should apply to his silent reading, his oral reading, his knowledge of vocabulary, the range and amount of his reading, and similar matters.

EQUIVALENT AND EQUIVALENT

Within the year the 810 pages of the Bobbs-Merrill Seventh Reader should be read. This consists of four parts. Approximately two of the books should be read each term. The parts may be taken in any order as preferred, though it is usually better to read all of a part in sequence in order to get the unity of appeal from selections of one general type. Exception to this rule may be made in the case of selections desired to fit any particular occasion, as some distinguished person's birthday, an important public event, a holiday, a situation in the school or community, etc. Under ordinary circumstances the requirements might be as follows:

FIRST TERM.

Basic Reading: Approximately 250 pages from part One of the Bobbs-Merrill Seventh Reader.

Collateral Reading: At least one complete book selected from the Home and Library Readings or other carefully chosen list; frequent shorter selections as suggested in the Study Notes. These may occasionally be reported on in class or selections read aloud for the interest

and information of the class.

Memorization: Each pupil should memorize from 100 to 500 words as a minimum during the term. This may be either prose or poetry taken from the selections of the reader. If proper choice of material is made and proper method employed this may be made a joy instead of a task. In addition, occasional stanzas, brief sentiments, etc., from the various selections should be memorized. The highest purpose has been attained when pupils come to want to memorize choice selections of their own accord.

Reading by the Teacher: As a standard of good reading, for the enjoyment and fellowship of it, and to interest the pupils in reading outside of the textbook, the teacher should occasionally read to the class a poem, a story, a sketch taken from some desirable book, or an article from current newspaper or magazine. Such materials should be selected for their true worth and their interest appeal, and they should be prepared with care and read with skill and charm.

SECOND TERM.

Basic Reading: Approximately 250 pages, constituting the parts not read during the first term, of the Bobbs-Merrill Seventh Reader.

Collateral Reading: One book of good length, or two shorter ones, chosen from the Home and Library Readings or other similar approved list; many shorter selections

from lists given in the Study Notes.

Memorization: Approximately as for the first term. Let memorization be motivated by interest in the selection and by the privilege of reciting to the class, the school or other audience the matter learned.

Reading by the Teacher: As for the first term. Let the teacher set a high standard both as to matter and presentation whenever she reads to the class.

SILENT READING.

The center of stress in the teaching of reading has changed. Generations ago there were few books or papers, and the one book or paper could be made to serve the entire family by being read aloud. Nor there is a hundred times more reading matter available for selecting what each most enjoys or prefers. Silent reading is twice as fast as oral reading. What one reads for himself he usually understands and remembers better than what he heard another read. Oral reading should not be neglected, especially in the reading of poetry, but silent reading is much more important to the average individual.

Constant emphasis is put on silent reading in the Study Notes. This emphasis should not be neglected in teaching the course. The teacher will also note and go over with the pupils the section on Silent Reading in the front of the text. Individual and class records should be kept. Pupils should be encouraged occasionally to test

themselves. Care must be used not to allow the testing of reading to kill its enjoyment, but there is no conflict between the two if proper method is employed.

Diagnostic Testing: Some pupils are slow readers and some are fast. Some skim with great speed but do not appropriate the thought. Some read slowly and absorb the meaning. Some read rapidly and at the same time thoroughly. Some read slowly and even then fail to grasp the thought.

By means of such silent reading tests as are suggested in the texts, or by means of the more exact tests which have been standardized for this purpose, the teacher should discover the strengths and weaknesses of each of his pupils. The rapid but careless reader may need to have the comprehension side of reading stressed to him. The slow but sure reader may be speeded up without losing his thoroughness. The slow and careless reader needs to be stimulated to greater alertness and effort.

ORAL READING.

Good oral reading requires social motivation; that is to say, the reader needs an audience. To read aloud to those who know as well as the reader himself what he is reading, and perhaps have it before them in their open books, is not very inspiring. This suggests that at least some of the oral reading should come from selections outside the text -- selections which the reader has prepared for effective reading to listeners who are hearing the story or

the poem for the first time. The longer selections of the reader should not be read orally in their entirety. Sections may be read to illustrate points in the discussion and report of the silent reading; separate facts and incidents may be read; or parts of greater interest or charm. Since poetry depends in no small degree for its charm or rhythm and rize, much of this part of the text should be read orally in order to enhance this aspect of its attractiveness. But poetry should be well read if it is to be read aloud. Pupils should be encouraged to bring in and read to the class poems from outside the text, which have first been approved by the teacher.

USE OF HELPS SUPPLIED BY THE TLXT.

This text supplies many excellent helps for teacher and pupil, and these should be used to the fullest extent.

The teachers should study with care the table of contents to get the general plan of the book. He should note very carefully the section, Suggestions for Using the Book.

With proper handling the pupils will like to read the authors' letter To the Boys and Girls Who Read this Book. Both teachers and pupils should study carefully the section on Silent and Oral Reading.

The introduction to each of the four parts should be read as that part is taken up. The introduction to the individual selections should be read and discussed before the selection is taken up. In some cases the introduction to a

selection may well be read to the class by the teacher in assigning the selection.

Especially should the Study Notes be constantly and very fully used by both teachers and pupils. They are addressed to the pupil, but teachers will find them a great help in preparing for the teaching of the lesson. They should be generously employed in making study assignments. Their points, while they should not limit freedom of discussion in the recitation, may well serve as a basis and guide for such discussions. No one who lacks a good imagination can be a good reader. Make full use of the suggestions of the Study Notes for the stimulating of mental imagery.

One of the objectives of the course in reading is the expansion of vocabulary. Definite and constant use should be made of the Word Study helps given in the Study Notes. Let the teacher and pupils not stop with these, however. Let all words new to the child come to take on meaning and their use in the content observed.

STANDARDS OF ACHIEVEMENT.

Among the standards of achievement the following will have an important place:

1. Steadily developing skill in silent reading as measured by speed and comprehension tests. The seventh-grade pupil should come to read a minimum of about 225 words in a minute of average matter for his grade, with

good comprehension of the matter.

1. Steadily developing skill in silent reading as measured by speed and comprehension tests. The seventh-grade pupil should come to read a minimum of about 235 words a minute of average matter for his grade, with good comprehension of the matter.

2. Ability to read suitable matter orally with clearness and good articulation and expression.

3. An increasing enjoyment in good reading, and some skill in choosing good instead of mediocre or poor books to read.

4. A growth of the "library habit." Our public and school libraries are rapidly becoming one of the great educational resources of our civilization. The course in reading can do nothing more valuable for the pupil than to reveal to him the treasures of the libraries and help him to form the habit of going to them for both pleasure and profit. The approved library books for the seventh grade may be read with pleasure and profit by each pupil.

LIBRARY REFERENCES.

Nicolay: Boys' Life of Abraham Lincoln.

Taber: Breaking Sod on the Prairies.

Holmes: Burton Holmes Travel Stories, Egypt.

Terry: History Stories of Other Lands (The New Liberty).

DuPuy: Our Insect Friends and Foes.

Sharp: The Spring of the Year.

Stevenson: Treasure Island.

Hoote: The Man Without a Country, and Other Patriotic Stories.

Baldwin: An American Book of Golden Deeds.

Gilman: Alaska, The American Northland.

Stefansson and Schwartz: Northward Ho.

Watkins and Raymond: Best Dog Stories.

Thomson: The Land of the Pilgrims.

Alcott: Little Women.

CLASSICS -- EIGHTH YEAR.

BASIC READER: THE BOBBE--MILL EIGHTH READER.

ATTAINMENT AND OBJECTIVES.

The eighth grade pupil should bring to his reading such attainments as the following:

1. A fixed inclination to turn to good books, magazines and the daily press for enjoyment, recreation and information.
2. A background of knowledge concerning a considerable number of good books and their authors.
3. A well-marked and growing taste for worthy materials, as against the cheap and trashy.
4. Appreciation for certain forms of poetry, and the inclination to read poetry as well as prose.
5. Ability to read silently with good comprehension at a rate of approximately two hundred fifty words a min-

ute from suitable material.

6. A good "word conscience", which insures the looking up of new words and phrases and their incorporation in the reading, and in many cases the speaking, vocabulary.

In cases where such attainments are lacking they should constitute the first objectives of the year's reading. Other objectives for the eighth year are:

1. The expansion of reading contacts to include new authors and new literary masterpieces, both of prose and poetry.

2. A still further fixing of the taste so that it will demand worthy material, whatever be the phase of the literary field concerned.

3. The making of better and more thoughtful readers; the habit of weighing two writer's statements, comparing them with facts or points of view already in hand; a growing ability to distinguish a good story or book from a poor one, and to turn from the poor to the good.

4. The opening up to the pupil of glimpses of great literature waiting to be read--books, poems, stories which may serve to inform, cultivate, enrich, while giving pleasure.

REQUIREMENTS AND SUGGESTIONS.

The basic reading for the year should include the Hobbs-Merrill eighth reader. Except for selections to fit special days or occasions it will be best to read the whole of one part consecutively rather than to skip about.

The supplementary readings, as suggested in the Study Notes and library lists, should be given their share of time and attention. The course in reading should be broader than the list of basic selections.

FIRST TERM.

Basic Reading: Parts One and Two of the Eighth Reader (286 pages), with the introductory matter found on pages IX to XVIII.

Collateral Reading: At least one volume of average length, or two shorter ones, taken from the titles given in the Study Notes or other reading lists of the text (or others of approved standard; Occasional selections as given in the Study Notes meant to supplement the basic selections; current magazine and newspaper assignments on specified topics.

Memorization: Selections to comprise a minimum of 100 to 500 words taken from choice poetic and prose selections. Motivation will be heightened if the selections are (at least in part) employed in programs, plays, etc.

Reading by the Teacher: There is perhaps not the same need for the teacher to read to the class in the upper grades that there is in the lower grades. Yet even here the teacher by reading now and then as bait an enticing section of a new book, by giving dramatic expression to a section of a play, by appreciative rendering of a poem, can make a great contribution to the course in reading.

SILENT READING.

Basic Reading: Parts Three and Four of the Eighth Reader, with the introductions to the parts and their subdivisions.

Collateral Reading: Use same standard as for the first term. Let the preference of the pupil have a large part in determining the exact matter to be read, but make sure of the quality of the books or other materials chosen if these come from outside the lists or citations of the text.

Memorization: Same standard as for first term. Remember that memorization as a task has little value. Memorizing because one loves the selection gives both the memorizing and the matter committed double value.

Reading by the Teacher: Same standard as for first term. It goes without saying that the teacher must read well what he reads before the class.

SILENT READING.

In high schools, and even in college classes, the complaint is often made that students are poor silent readers. Either they are slow, or they do not grasp, analyze and retain the thought. Often each of these weaknesses exists; the very slow reader is usually a poor reader.

Diagnostic Testing: Do not neglect oral reading in the eighth grade, but increasingly stress silent reading. Test the silent reading. Lead your pupils to test their own silent reading. Create in them the ambition to excel

in reading. Teach them how to criticize their own reading, and how to improve in both speed and comprehension. Eighth grade pupils should not be satisfied with a speed in silent reading of less than 250 words a minute, and this should be accompanied by good mastery. This is the standard for eighth-grade classes based on extensive testing in schools.

ORAL READING.

Do not attempt to have all of each of the selections read orally in the class. Shorter selections may be read entire, and probably many of the poems. Striking sections should be read from most selections. Matter brought in from collateral reading may be read orally to the class by the one responsible. Incidents from the lives of famous authors are good material for oral reading. Occasionally the characters of a production may be assigned and the parts taken by the class.

USE OF HELPS SUPPLIED BY THE TEXT.

No really good teacher depends on prepared helps alone. Nor does any good teacher neglect well-devised helps when they are available. The text is especially rich in helps for teacher and pupil. These should not be ignored in preparing or teaching the lesson. The teacher should supplement them, or even now and then substitute his own for them; but taken as a whole they will greatly enrich the course if properly used.

Make definite assignments involving the study helps.

Then refer to them in the recitation. Make use of them in discussions. Train your pupils to use them in the preparation of their lessons.

STANDARDS OF ACHIEVEMENT.

This is the last year of the elementary school--the last year of schooling for many of your pupils. What do they know of good reading? How much have they read? How well have they read it? Do they naturally turn to good reading instead of trashy reading? Is reading for them a major source of enjoyment? Is their range of reading broad enough to give the mind proper contact with a wide range of human interests? Does the library hold its own with moving pictures, automobiles and kindred interests of modern life? Can your pupils read at sight with good speed and equally good comprehension matter of reasonable difficulty for their age? Can they read orally with good expression, clear enunciation and general effectiveness?

Perhaps it is too much to expect every member of the class to rate well on all of these points. But none of them is unnecessary. All belong to good reading, and one who lacks one or more of them is in so far not a good reader.

LIBRARY REFERENCES.

Olivant: Bob, Son of Battle.

Russell-Driggs: Hidden Heroes of the Rockies.

Terry: History Stories of Other Lands (The Modern World).

Thomson: The Land of Evangeline.

Case: Tom and Peace Valley.

Humphrey: Under These Trees.

Wilson and Driggs: The White Indian Boy.

Logie: From Lincoln to Coolidge.

Nicolay: The Boys' Life of Ulysses S. Grant.

Dok: A Dutch Boy Fifty Years After.

Wiggin: Rebecca of Sunnybrook Farm.

DePuy: Our Bird Friends and Poes.

LESSON SCHEDULES IN READING.

FIRST GRADE.

(BOBBS-MERRILL SECOND READER.)

Fifth Month, pp. 6-41	Eighth Month, pp. 128-169
Sixth Month, pp. 42-87	Ninth Month. Read another
Seventh Month, pp. 88-127	first reader.

SECOND GRADE.

(BOBBS-MERRILL SECOND READER.)

First Month, pp. 8-33	Sixth Month, pp. 141-178
Second Month, pp. 34-61	Seventh Month, pp. 169-197
Third Month, pp. 62-89	Eighth Month, pp. 190-219
Fourth Month, pp. 90-115	Ninth Month. Read another
Fifth Month, pp. 116-141	second reader.

THIRD GRADE.

(BOBBS-MERRILL THIRD READER.)

First Month, pp. 1-31	Sixth Month, pp. 175-209
Second Month, pp. 32-71	Seventh Month, pp. 210-238

Third Month, pp. 72-104. Eighth Month, pp. 239-271
 Fourth Month, pp. 105-139 Ninth Month, Read another
 Fifth Month, pp. 140-174. third reader.

FOURTH GRADE.

(BOBBS-MERRILL FOURTH READER.)

First Month, pp. 1-50 Sixth Month, pp. 237-255
 Second Month, pp. 51-91 Seventh Month, pp. 286-329
 Third Month, pp. 92-136 Eighth Month, pp. 331-376
 Fourth Month, 137-190. Ninth Month. Review.
 Fifth Month, pp. 191-236.

FIFTH GRADE.

(BOBBS-MERRILL FIFTH READER.)

First Month, pp. 1-57 Sixth Month, pp. 279-313.
 Second Month, pp. 58-111. Seventh Month, pp. 314-368.
 Third Month, pp. 112-160. Eighth Month, pp. 369-443.
 Fourth Month, pp. 161-213. Ninth Month. Review.
 Fifth Month, pp. 214-278

SIXTH GRADE.

(BOBBS-MERRILL SIXTH READER.)

First Month, pp. 4-48 Sixth Month, pp. 278-332
 Second Month, pp. 49-102. Seventh Month, pp. 333-391
 Third Month, pp. 103-167. Eighth Month, pp. 391-447.
 Fourth Month, pp. 168-221. Ninth Month, Review.
 Fifth Month, pp. 222-277.

SEVENTH GRADE.

(BOBBS-MERRILL SEVENTH READER.)

First Month, pp. 3-66 Sixth Month, pp. 326-387

Second Month, pp. 67-135. Seventh month, pp. 387-457
 Third Month, pp. 136-189 Eighth month, pp. 458-510
 Fourth month, pp. 190-255. Ninth month, Review.
 Fifth Month, pp. 256-321.

EIGHTH GRADE.

(BOBBE'S ALL FIGHTS BOOK.)

First Month, pp. 1-75. Sixth month, pp. 321-394.
 Second Month, pp. 76-137. Seventh month, pp. 395-452.
 Third Month, pp. 138-202. Eighth month, pp. 453-520.
 Fourth Month, pp. 203-265. Ninth month, Review.
 Fifth Month, pp. 266-320.

SPELLING.

I. Methods.

A. In teaching the words, teachers should select those from each lesson which are most suitable for the work of the day or week, keeping a list of the words used in order that all words in the original lists may be taught before the end of the school year. The child should see the word, hear it pronounced correctly, then pronounce it. He should spell it from the printed word and then visualize and spell. Next he should write the word with the book closed and check his written spelling with the printed word. Pupils are expected to review all the words of the preceding grades.

1. Minimal spelling list. These are the words that every pupil in the class should be expected to spell and use without error, as a condition of promotion - the 100 per cent words.
2. One Hundred Demons and Words Often Misspelled are to be included in the seventh- and eighth-grade assignments.
3. Individual and class spelling lists are to be made under the direction of the teacher.

II. Common Devices for Spelling (adapted from Seattle course of study).

A. Methods of study.

1. After some discussion the children make the following outline for study:
 - a. Learn first column - five words.
 - b. Study further the word you do not know.
 - c. Spell them all three times.
 - d. Then say them and spell them without looking.
 - e. Write without looking.
 - f. Then correct.
 - g. If you missed one, learn it.
 - h. Take next column - five words.

The children get their spelling entirely by themselves now, following the outline which is on the board.

2. Each child when called upon rises and without looking at the word a second time pronounces the word, tells how many syllables it contains and where the accent is, spells the word and tells what letters are silent, if there are such letters. This gives power in visualizing the words.
3. The teacher should frequently gather a group of poor spellers about her desk and give them individual help.
4. Discuss words as to spelling and meaning, and if necessary, use them in sentences. Let one row of pupils pass to the front, face pupils at

the desks, and spell in turn the words of the lesson. Some boy or girl in the seats is named by the teacher to rise and pronounce the words for the row at the front. Only one trial is given to each pupil. The word must be pronounced first. If not, the pupil-teacher calls on the next pupil. A sentence may be given instead of a word. It must be repeated, each word must be spelled correctly, and the punctuation must be given. After each child in the line has had an opportunity to spell, all those who have spelled correctly take their seats and the others remain in line to try again with the next row. The much desired honor of pronouncing words is conferred upon a new pupil and the lesson proceeds as before until all have spelled.

5. A daily, weekly and monthly average kept on the board is an incentive to good spelling. It is a good plan, too, to keep on the board the numbers of the rows in which each child has 100 per cent for the day. Pupils receiving 100 per cent in review lessons may have their names kept on the board until the next review is given.
6. Words that have been incorrectly spelled in preceding lessons should be listed for review.

These words may be printed in bold letters on tagboard and placed along the edge of the blackboard, and a test given on them once a week. Only those pupils who have missed words need take the test. No pupil should spend time reviewing words he has not missed.

7. Children with the teacher go through the list asking questions about unfamiliar words. When possible the children explain and illustrate with sentences the meaning of any word unfamiliar to any child. The teacher assists in this when necessary.
8. Occasionally let pupils spell while sitting in seats. When a pupil misses a word the child who spells it correctly for him sees to it that he writes this word correctly in his "dictionary."
9. Give each pupil a sheet of half legal paper and tell him to fold it lengthwise. In the first column let him write a list of unstudied spelling words, dictated by the teacher. After the words are written have each child grade his own paper as the teacher writes words on the board. Each misspelled word should be checked, and it should be rewritten correctly in the second column. Any unusual or hard words may then be discussed, and attention called to peculiar-

ities these words may have. The remainder of the study period is used by the children who misspelled words in mastering their difficulties.

10. Ask a child to spell a word which has the syllable "ble"; to spell all the words in the lesson which begin with "s"; to spell a word that has the sound "ow," etc. Give drills on phonetic syllables such as "nate," "mel," "ren," etc., then let children make words from these syllables. Sometimes groups of letters found in words, such as "ould," "eigh," may be written on the board in a column and the children may be asked to add the letters which make the words.

B. Oral spelling devices. Use to train the ear and to develop power of concentration.

1. Pronounce one review word to a child; let him pronounce it and spell it. If he spells it correctly all right; if not, do not say, "Your word is wrong," but pronounce a new review word to a second child. This child should know that the first word is misspelled, and instead of spelling the new word pronounced, should pronounce and spell the first word. If correct he takes his place ahead of the child who missed the word. The third child should pronounce and

spell the second word given, though a third word was given him, and so on. Very often the children will have two or more words to keep in mind at one time. Then every child should be on his guard every moment, for sometimes he may have as many as four or five words to keep in mind until his time comes. The game goes quite rapidly and is an enjoyable one.

2. Early in the year, to stimulate interest, let the class form a circle for oral spelling. Let pupils who fail step into the middle and remain there until they can get out by spelling a word correctly when a circle member fails.
3. Let the children stand and spell once around the room. If the child spells his word incorrectly he takes his seat. The rows having all members standing after all have spelled receive stars. The pupils who have made mistakes go to the board and write correctly the words they missed.
4. Sometimes let the pupils who are strong in spelling take the weak pupils to the cloak room or the hall to help them.
5. Sometimes it is well to divide the class into several groups, and let a child in each group acting as teacher, hear the others spell the list of words. Pupils like this, as each child

in turn becomes a teacher.

6. Those who can spell the whole lesson (four or five words in second grade) may write their names on the board or may stand in the 100 row. The pupils generally volunteer, the best spellers being called on first, so that the slower ones may listen. This gives a good rapid drill.

C. Written spelling devices.

1. Several methods of correcting papers may be employed. Sometimes pupils exchange papers and the teacher pronounces and spells the words while the pupils make corrections. Again, one of the best spellers in each row corrects all papers in his row. And sometimes the teacher pronounces and spells while each child corrects his own. While spelling the words it is a good plan for the teacher to walk up and down each row and look over the papers. After the words have been corrected it is a good thing to have all pupils who have made mistakes write the correct form of each word missed and put the slip containing such corrections on a file. During the day the teacher can look these over and call upon each pupil to spell the words on his slip.

3. Give the pupils occasionally what may be called a trial spelling. Pronounce words and let the children write them as they would do after studying in the recitation period. Let them exchange papers and correct the words from the board. If any words are missed they should be studied before recitation time.
4. It is a good plan to work out a graph on the blackboard and record each day the number of words missed by rows or by divisions.

D. "Pep" games.

1. One of the games that the children love is the "blackboard relay." The hardest words of the lesson are placed on the front board. The children pronounce and study them. Then the room is divided into an equal number of rows with the same number of children in each row.

At the signal "Go," the first child of each row runs to the blackboard, writes his word, and returns to his place, passing the piece of chalk on to the next child. Each child in his turn runs to the board, writes his word under the words written by the other pupils of his row, returns to his place, and passes his crayon on to the next pupil. This continues until every child in one row has written his word, when a signal is given to stop.

The row finishing first wins, providing every word has been written carefully. Score not only on spelling, but on neatness - all i's dotted and t's crossed. If the column of words written by one row does not look well, credit goes to the next best.

2. As often as possible finish the spelling period with:
 - a. Rapid oral work on the day's lessons and difficult review words, or with
 - b. Blackboard relay by rows, which children enjoy greatly.
3. Children like a spelling race. Two rows of children stand, one for each of the divisions. One child is chosen to act as teacher, and another to act as scorekeeper. The "teacher" pronounces the words to the two rows alternately. If the child in one division misses, the scorekeeper writes a mark against his division. This device may be used and a record for a week kept to see which division has the most perfect score at the end of the week.
4. In oral tests sometimes divide the room into four groups, naming them respectively: Summer, Spring, Fall and Winter classes. The children shift from one class into another as they be-

come more proficient in spelling. If they become careless, they shift the other way. In the summer class, which should be the largest, place the best spellers. In the winter class, are found the children who do not spell well.

5. Children enjoy a game called baseball spelling. It is played as follows: Divide the room into two sections. Have the children appoint a catcher and a pitcher for each section or team. The teacher may act as umpire. As the children progress one of the pupils may be umpire. The Lucas team goes to bat first.

Each child spells three words pronounced by the pitcher from the Luray team. If he misses, the word is spelled correctly by the catcher of the opposing team and this counts as one out for the Lucas team. If he spells three words correctly, he makes a score for the Lucas team. The Lucas team continues to spell until there are three outs against it, when it retires and the opposing team goes to bat.

The pitcher and catcher of the Luray team now pronounce the words and spell correctly all misspelled words of the Lucas team.

One member of each team must keep the score. If a child at the bat hesitates or repeats in

spelling, the catcher may put him out by pronouncing and spelling the word. All words must be pronounced by the pupil before being spelled. A time limit must be set before beginning the game and the game should be called on the minute. (Good for Friday afternoon.)

SECOND GRADE.

Spelling as a separate exercise begins in the second grade. Part I of the Kansas Speller is used as a text. Twenty graded lessons constitute the work for each month. There are seventeen specific hints to the teacher, which the teacher should observe.

Fourteen dictation exercises are given. Simple exercises to be copied illustrate the use of capital letters. Good questions guide the child in the discovery of the rule to be learned or the pitfall to be avoided. Heavy black type draws the attention of the child to each particular difficulty. Rules for spelling are given on page 143. A rule may be stated after its meaning has been developed. Example: Lessons 139 and 140 (Rule 12).

Establish the correct choice of the proper tense in oral speech or written language, when the child uses any one of the twenty-four verbs which follow. Place a star (*) before any verb in the list not found in the Houghton Primer or Hobbs-Merrill First and Second Reader vocabularies.

Lat

ate

eaten

see	saw	seen
bring	brought	
build	built	
break	broke	broken
sing	sang	
sit	sat	
run	ran	
write	wrote	
pay	paid	
forget	forgot	
learn	learned	
teach	taught	
steal	stole	
spend	spent	
drink	drank	drunk
hang	hung	
drive	drove	
leads	led	
lose	lost	
swear	swore	
hold	held	
lie) lies)	lay	lain

THIRD GRADE.

The general details outlined for the second grade are followed in the succeeding grades. Written preparation is required every day. A correlation between spelling and

written language is established in the extended use of present, past and perfect tense forms of common verbs (L. 6, 16, 31, 66), in spelling plurals (L. 16, 17), in the use of contractions (L. 58), and of the hyphen (L. 74).

Establish the correct use of the following eighteen verb forms in the oral and written language.

give	gave	given
break	broke	broken
grow	grew	grown
begin	began	began
swim	swam	swum
knows	knew	known
ring	rang	rang
write	wrote	written
draw	drew	drawn
see	saw	seen
sink	sank	sunk
leave	left	
hang	hung	
sweep	swept	
bend	bent	
bleed	bled	
drown	drowned	
lead		

USE OF THE DICTIONARY.

Reference should be made to the dictionary when there

exists a motive such as finding the meaning, learning the correct pronunciation, or verifying the spelling of a word. The pupils should not be required to "look up in the dictionary and write out the meaning" of long lists of words. He should be trained to think out, or determine the meaning from the context whenever possible. However, he should go to the dictionary if a doubt exists as to use, spelling, meaning or pronunciation of a word. This is the dictionary habit the school should establish.

1. Drill the pupils on the relative order of the letters of the alphabet.

Part III, lessons 4 and 5, furnish a good list of words. In which part of the dictionary will you find amuse? Which comes first, amuse or angry? In which part of the S vocabulary will you find sandy? In which part of the A vocabulary will you find awhile? In which part of the dictionary do you find tangle? awhile? lightly?

2. Teach the use of the guide words at the top of the page. Look for the word angry. Explain the use of the guide words anglo-gallic and anharmonic.
3. Teach the use of the key words under the ledger line at the bottom of the page.
4. The dictionary gives information of four classes.
 - a. Pronunciation. Words are marked diacritically or are rewritten and marked. Observe the method used in the dictionaries in the hands of the pu-

pils.

- b. Classification. The part of speech to which any word belongs is indicated by the abbreviation following the word. Example: a, for adjective; v.t. verb transitive; n, for noun.
- c. Derivation. The derivation of the word is indicated in the bracket following the classification. In the upper grades pupils and teachers will find the meaning of many words enlarged and enriched by examining derivations briefly indicated in the dictionary. Example: Biscuit, eagle, dyspepsia, bad and cook.

In tracing the derivations, reference to the abbreviations used in the dictionary must be made clear. (Obster's New International DXXIX.)

- d. Meaning. Several meanings are frequently given for the same word because of the various constructions it may have. At first the child must be assisted in finding the word and tracing it to the proper classification. Then if the word admits of several constructions, the meaning which corresponds to the construction of the given word must be selected.

- 5. Pupils should be trained to open the dictionary as nearly as possible at the proper place and turn to the proper part of the vocabulary of any letter at once. If pronunciation is the purpose, when that

is found the book should be closed. If the meaning of the word is the object of the reference, the derivation may be passed over in most cases. The test of the meaning is how well it can be substituted for the word in the sentence from which the word is taken.

6. Training in the use of the dictionary should be given at a period separate from the regular reading or spelling period.

FOURTH GRADE.

Take up the division of words into syllables. Show that one syllable is spoken with more force than the other, and that this stress has a name (accent) which is indicated by the mark (') placed after the syllable receiving the stress. This information is necessary in order to use the dictionary effectively. In lessons 12 and 13 observe that each syllable must contain an elementary or a vowel sound. Usually the syllable is composed of a vowel and one or more attendant consonants. Continue the correlation between written language and spelling in the use of plurals derived from singular forms, the use of the capital letters in writing proper nouns and poetry, the use of a period after an abbreviation and the apostrophe in contractions.

ride

rode

ridden

take

took

taken

feel	felt	
fight	fought	
hear	heard	
freeze	froze	frozen
get	got	gotten
sit	sat	
set(s)	set	set
()	went	gone
()	did	done
()	ran	run
()	sang	sung
()	wrote	written
()	saw	seen
()	took	taken
()	came	come
()	rang	run
()	gave	given
	drank	drunk
lie (int)	lay	lain
lay (tr.)	laid	
()	drew	drawn
()	got	gotten
()	tore	torn
()	forgot	forgotten
()	fell	fallen
()	swelled	swollen

FIFTH GRADE.

Continue the practice of dividing words into syllables in written exercises. Mark the long and short vowel sounds, the silent letters, and indicate the accent. Continue practice in the use of the dictionary to verify pronunciation, syllabication or meaning. Accept only the written work which is done neatly in the dictation exercises. Place a premium on a good quality of written lessons. Extend the word-building exercises in the formation of the past tense and progressive forms of verbs, the plural and possessive forms of nouns, compound words. (L.87 and 88.)

Continue the study of the tense forms of verbs listed in the lower grades and add the following:

forgive	forgave	()
kneel	knelt	()
mean	meant	()
blow	blew	blown
eat	ate	eaten
creep	crept	
bind	bound	
lose	lost	
lie	lied	
mimic	mimicked	
()	went	gone
weave	wove	
fight	fought	
die	died	

lead	led	
rise	rose	risen
()	became	become
understand	understood	()
	chose	chosen

Be careful not to confuse these nouns and verbs.

Nouns.	Verbs.
record	record
loans	lend
envelope	enveloped
clime	climb
road	rode
week	weak (adj.)

On completion of the fifth grade the pupil should be able to select and use the proper word from each of the following pairs:

Which shall it be?

among	or	between	learn	or	teach
don't	or	doesn't	healthy	or	healthful
ought	or	naught	except	or	accept
desert	or	dessert	capitol	or	capital
farther	or	further	two	or	couple
each	or	every	moment	or	minute
receipt	or	recipe			

SIXTH GRADE.

Make frequent use of the dictionary in the study of

words often confused. Continue word building by the introduction of the endings by, ful, and ness. Develop the necessary rules for spelling the derivative words. (L. 22 and 23.) Introduce the terms derivative prefix, and suffix. (L. 75, 76 and 117. Analyze the derivative words. Let the pupils make a list of all the common abbreviations used in this grade. Discuss the use of abbreviations. (L. 29, 34 and 80.) Require the pupils to make lists of all the different classes of words used in Part V that begin with capital letters.

Use the dictionary in studying these words. Their meanings are often confused. Pronounce carefully.

alter(n.)	or	alter(v.)	brothers(n.)	or	brethren(n.)
birth(n.)	or	berth(n.)	persons	or	people
suit(n.)	or	suite(n.)	petition(n.)	or	partition(n.)
loans(n.)	or	lend(v.)	canvas(n.)	or	canvass(v.)
raises(v.int)	or	raise(v.t.)	miner(n.)	or	minor(n.)
accept(v.t)	or	except(v.t)	steel(n.)	or	steal(v.)
stooped(v.)	or	stayed(v.)	road(n.)	or	rode(v.)
affect	or	effect	tour(n.)	or	tower(n.)
strangest	or	funniest	their(pron.)	or	there(adv.)
between	or	among	rabbit(n.)	or	hare(n.)
advice	or	advise	eminent	or	imminent
principle	or	principal	propose(v.)	or	purpose(v.)
prophecy(n.)	or	prophecy(v.)	pair(n.)	or	pairs(n.)
produce(n.)	or	produce(v.)	less(a)	or	least(a.)
insult(n.)	or	insult(v.)	such(a.)	or	so(a.)

object (n.) or object (v.)

SIXTH GRADE.

Ask the class to read A Heart to Heart Talk with the Pupil, on page 115. Give such explanations as the class requests. Stress the importance of spelling correctly the common words used in written composition. Encourage each pupil to measure his achievement by the standards set in this section.

The rules for spelling given on page 143 should be applied whenever a rule is applicable in any of the word building exercises.

The dictionary should be used to establish clearly the meaning of the following words which are often confused:

hair	or	air	principal	or	principle
isle	or	isle	respectfully	or	respectively
devout(a.)	or	devote(s)(v)	president	or	precedent
stationary	or	stationery	elect	or	appoint
statue	or	statute	affect	or	effect
serge	or	surge	decent	or	descent

EIGHTH GRADE.

Ask the class to read A Talk with the Pupil, on page 138. If the work in the lower grades has been well done the pupils will have formed the habit of carefully examining the spelling in all written exercises. The common rules of spelling should be mastered and the dictionary habit fixed. The pupil should never forget that it is much more important to spell all the common words that are frequently mis-

spelled than to be able to spell a few or many difficult words that are seldom used.

ords often confused. Use the Dictionary.

acute	chronic
allies	alloys
course	coarse
suit	suite
minimum	maximum
capitol	capital
sometime	some time
its	it's
compliment	complement
axis	axes
stratum	strata
terminus	termini
alumna	alumnae

One Hundred Spelling Demons.

which	they	forty	laid
their	buy	hour	tear
there	none	trouble	choose
separate	whole	among	tired
don't	piece	busy	grammar
meant	read	built	minute
business	shoes	color	any
many	enough	making	much
friend	straight	dear	beginning
some	can't	half	blue

been	sure	again	though
since	loose	week	coming
used	lose	won't	early
always	wednesday	raise	instead
where	country	said	easy
women	February	to-night	through
done	know	truly	every
hear	could	guess	break
here	seems	says	very
write	Tuesday	having	often
writing	wear	just	cough
heard	answer	doctor	ache
does	two	whether	hoarse
once	too	believe	wrote
would	ready	know	sugar

The list above was collected by Professor Jones of the University of North Dakota from 75,000 compositions written by 1,050 pupils totalling 1,500,000 words. The one hundred most commonly misspelled words which he found have been called the "One Hundred Spelling Demons of the English Language." Every pupil should be able to spell every word in the list before he completes the work of the elementary school.

References for the Teacher.

- Myers: A casing scale for ability in spelling.
 Buzzalo: The Teaching of Spelling.
 Tidyman; Teaching of Spelling.

Horn-Ashbaugh: Spelling Book.

SECOND GRADE.

(Text, Speller, Part I.)

First Month. Lessons 1-20.	Sixth Month. Lessons 101-120
Second Month. Lessons 21-40.	Seventh Month. Lessons 121-140
Third Month. Lessons 41-60	Eighth Month. Lessons 141-160
Fourth Month. Lessons 61-80.	Ninth Month. Troublesome words
Fifth Month. Lessons 81-100	and words from other sub- jects.

THIRD GRADE.

(Speller, Part II.)

First Month. Lessons 1-20	Sixth Month. Lessons 101-120
Second Month. Lessons 21-40	Seventh Month. Lessons 121-140
Third Month. Lessons 41-60	Eighth Month. Lessons 141-160
Fourth Month. Lessons 61-80	Ninth Month. Troublesome
Fifth Month. Lessons 81-100	words from other subjects.

FOURTH GRADE.

(Speller, Part III.)

First Month. Lessons 1-20	Sixth Month. Lessons 101-120
Second Month. Lessons 21-40	Seventh Month. Lessons 121-140
Third Month. Lessons 41-60	Eighth Month. Lessons 141-160
Fourth Month. Lessons 61-100	Ninth Month. Troublesome
	words and words from other subjects.

FIFTH GRADE.

(Speller, Part IV.)

First Month. Lessons 1-20	Sixth Month. Lessons 101-120
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Second Month. Lessons 21-40. Seventh Month. Lessons 121-140
 Third Month. Lessons 41-60 Eighth Month. Lessons 141-160
 Fourth Month. Lessons 61-80 Ninth Month. Troublesome words
 Fifth Month. Lessons 81-100 and words from other subjects.

SIXTH GRADE.

(Speller, Part V.)

First Month. Lessons 1-20. Sixth Month. Lessons 101-120
 Second Month. Lessons 21-40. Seventh Month. Lessons 121-140
 Third Month. Lessons 41-60. Eighth Month. Lessons 141-160.
 Fourth Month. Lessons 61-80. Ninth Month. Troublesome words
 Fifth Month. Lessons 81-100 and words from other subjects.

SEVENTH GRADE.

(Speller, Part VI.)

First Month. Lessons 1-20. Sixth Month. Lessons 101-120.
 Second Month. Lessons 21-40. Seventh Month. Lessons 121-140.
 Third Month. Lessons 41-60 Eighth Month. Lessons 141-160.
 Fourth Month. Lessons 61-80 Ninth Month. Troublesome words
 Fifth Month. Lessons 81-100 and words from other subjects.

EIGHTH GRADE.

(Speller, Part VII.)

First Month. Lessons 1-20. Sixth Month. Lessons 101-120.
 Second Month. Lessons 21-40 Seventh Month. Lessons 121-140.
 Third Month. Lessons 41-60 Eighth Month. Lessons 141-160.
 Fourth Month. Lessons 61-80. Ninth Month. General Review.
 Fifth Month. Lessons 81-100

LANGUAGE AND GRAMMAR.

Read from the graph the approximate amount of time in each grade that is to be devoted to oral English and to written English exercises in every recitation.

GRAPH.

Time Distribution.

LANGUAGE.

Language study is for the purpose of acquiring skill in the ability to secure information through listening and reading, and to express ideas adequately in effective oral and written composition.

Listening is at first involuntary, but becomes voluntary as the power of attention is developed and trained. From giving voluntary attention for short periods in the first grades, pupils must be trained and grow in power to attend for longer and longer periods. Similar methods may be used throughout the grades to train the listening ability, the difference being in the amount of attention and the specific materials used for the center of attention. Children talk more than they write. Therefore more em-

phasis should be given to oral expression than to written composition. Oral expression should precede written composition. The child who uses correct oral expression will likely use correct form in written composition.

Children talk with greater freedom and pleasure when discussing subjects of immediate personal interest. Hence it is desirable that subjects selected as topics for oral discussion or written composition should be chosen from the child's experience. The child's experience may be supplemented by experience of others made familiar to the child through story and literature. The pupil should be able to see a reason for his work in oral expression. The simplest means of accomplishing this is to provide him with an audience of his classmates.

The teacher should give constant attention to errors in the language of each child. The teacher should detect the errors and teach the child how to correct them.

Sixty per cent of the errors in oral English are in the use of the verb. Eighty-five per cent of all errors in which confusion of the past tense and perfect participle occur in oral English are found in the use of the following verbs:

See, do, come, go, run, sit, lie, give, begin, ring, write, take, break, sing.

The twenty-three most frequent grammatical errors given in order of their frequency:

as for were; John, he went; it was(is, ain't) me; seen

for saw; didn't have no; why, there was; ain't; them things; didn't do nothing; can for may; join here; lay for lie; done for did; ain't got; off for from; is for are; have got; off for from; is for are; have got; went for gone; don't for doesn't; ain't got no; give for gave; this here; come for care.

I. Objectives.

- A. To use language correctly, intelligently and fluently in speaking and writing.
- B. To use language with expression, skillfully and enjoyment.

II. Aims of instruction.

- A. To stimulate pupils to think, talk and write.
- B. To train pupils to enunciate distinctly and pronounce correctly.
- C. To overcome common errors of speech.
- D. To help pupils build a vocabulary of choice words.
- E. To develop an appreciation of the beautiful in prose and poetry.
- F. To train pupils to listen attentively.
- G. To secure neatness in written composition.
- H. To master the mechanics of elementary English composition.
- I. To establish the dictionary habit.

III. Means.

- A. Picture study. At least one picture each month in

each grade.

Base oral and written composition work on these pictures. A suggested list is given in each year's work. Use the studies given in the Practical Drawing Books to recognize and present the beautiful thought in the picture. The library reference books, History stories from other lands, contain beautiful colored reproductions of many of the world-famous historical pictures. Good studies accompany each picture. Additional pictures may be secured from the Perry Picture Co., Malden, Mass., or from teachers' magazines.

- B. Poems. At least one each month. Memorizing should not be forced on the child, but the learner should be led to find pleasure in the good and beautiful in poetry and to cultivate a desire to remember it. Care should be taken not to make the work disagreeable and irritating.
- C. Reproducing stories. The teacher should know how to tell a story pleasingly and effectively. Several stories may be told each month.

Pupils may tell stories which they have read or have heard the teacher tell. Many valuable stories may be found in library books and magazines.

- D. Geography. One or more language lessons each month may be based on topics of geographic in-

terest.

F. Citizenship. One lesson each month.

Moral code: The virtues to be exalted are cleanliness, happiness, love, kindness, reverence, courtesy, helpfulness, obedience, industry, truth, honesty, courage and openmindedness.

F. Fire prevention. Plan lessons on fire prevention for the week of October 9th.

G. Thrift. Plan lessons of thrift in connection with Franklin's birthday.

H. Special days. Material found in Patriotic Manual may be read by the teacher and discussed by the class.

I. Language games. A few are given in this course; others may be found in helps for teachers and in school journals.

IV. The recitation.

The recitation affords the best opportunity for the teacher to engage the children in lively, interesting conversation. Here is the opportunity to develop the listening ability, as well as to awaken pupils to a sense of word values and to create a desire for more appropriate and choice words in expressing their thoughts. Together the teacher and pupils may read and study model prose selections and poems for the purpose of learning how skillful writers secure certain

results.

Require good English in all classes, and impress it upon the pupils that their ability to talk well will enlarge their success in life.

V. Language skills necessary for ordinary success in life:

A. In speaking requires:

1. Accurate pronunciation.
2. Distinct enunciation.
3. Good conversation.
4. Clear presentation.

B. In reading requires power to interpret:

1. Books.
2. Newspapers.
3. Magazines.
4. Plans and specifications.
5. Definite directions.
6. Letters, orders, contracts.
7. Description of goods, land.
8. Signs and advertisements.

C. In writing requires:

1. Correct spelling.
2. Good penmanship.
3. Good form in business letters, briefs and reports.
4. Naturalness in social correspondence.
5. Skill to gather, organize and interpret facts.

VI. Books that will help the teacher:

Cooley: Language Teaching in the Grades.

Deming: Language Games for all Grades.

Lyman: Story Telling.

Myra King: Language Games.

Bryant: How to tell Stories to Children.

Mahoney: Standards in English.

Carpenter: Stories Pictures Tell. Books I, II and III.

McFadden: English Series. Book I for the Third Grade.

Ginn & Co.: Learn to Study Readers.

Wohlfarth: Self Help Methods of Teaching English.
The Gateway to English.

FIRST GRADE.

1. Aims of instruction.

- A. To encourage children to talk freely about things in which they have a genuine interest.
- B. To overcome self-consciousness.
- C. To train children to acquire a natural speaking tone, with clear enunciation and correct pronunciation.
- D. To eliminate common class errors and to make the use of good English a habit.
- E. To give the child a fund of ideas through:
 1. Stimulating observation in everyday life and experience.

2. Through familiarity with best suitable literature.

F. To lead the child to use the sentence in talking.

G. To lay a foundation for written work.

II. Sources of material.

A. Conversation exercises.

1. Home activities. Daily life of child; toys, pets and animals, care of home, Saturday activities.

2. School activities. Lessons, games, friends, care of room and grounds.

3. Health program. Care of hands, face, hair, teeth, clothing; drink, fresh air, sleep and bathing.

4. Nature study. Seasons and their characteristics. Snow, ice, wind and sun. Fruits, flowers, birds and trees.

B. Stories for telling, retelling and dramatization.

Under the story-tree: LaRue.

The Runaway Bird.

The Little Roosters.

The Potberrers.

Fig-Fig and the Three Bears.

The Secret (health lesson).

Happy Hour Stories: Sylvester and Peter.

Bumbo and Bumbo.

Three Wishes.

Why Bears Sleep Winters.

Old Dunk Has Some Fun.

The Brownie Primer: Santa.

Work and Play.

It is Halloween.

Helping Santa Claus.

The F U N Book: Laue.

Dotty and Spotty.

The Sheep and the Horn.

Work-a-Day Doings on the Farm. Berl.

Buying the Farm.

Plowing and Planting.

The Little Red Cow.

Surprise Stories: Hardy.

Why Puff Had No Home.

Why Wag Had No Home.

A Night on the Farm.

A Jack-o-Lantern.

G. Poems.

Every child should love these poems. A few may be memorized. Each may be read in class and used as the bases for language exercises:

1. Bobbs-Merrill First Reader.

Hickory, Hickory Dock, p. 10.

White Sheep, White Sheep, p. 117.

2. Bobbs-Merrill Second Reader.

Twinkle, Twinkle, Little Star, p. 124.

The Wing, p. 153.

My Shadow, p. 158.

3. A Child's Garden of Verse: Stevenson.

Rain, p. 9.

Autumn Fires, p. 98.

The Wind, p. 36.

Looking Forward, p. 19.

Time to Rise, p. 48.

D. Pictures.

The First Step. (Millet.) Practical Drawing, Book I, p. 24.

Madonna of the Chair. (Raphael.) Practical Drawing, Book I, p. 25.

Can't You Talk? (Holmes.)

Feeding the Birds. (Millet.)

Helping Hand. (Benouf.)

Baby's Quirt. (Van Dyck.)

The Divine Shepherd. (Murillo.)

Madonna of the Grand Duke. (Raphael.)

Arrival of the Shepherds. (Gerolle.)

III. Type lesson in picture study (from North Carolina Course of Study).

As an illustration of how pictures which appeal to the interest of the child may be used to effect in stimulating language expression, a suggestive lesson procedure in a pic-

ture study lesson, taken from Briggs' "Our Living Language," is described as follows:

The picture used was "Can't You Talk?" by Holmes.

Teacher holds up the picture and asks, "What is this picture about?" The pupils did not know. It was brought closer and one pupil, seeing the sentence beneath it, flung his hand up excitedly and said, "It says, 'Can't You Talk?'"

"Who in the picture is saying, 'Can't you talk?'"

"The baby, of course."

"What does the dog say?"

"He does not say anything. Dogs can't talk."

"You don't think so. How many of you think dogs can talk?"

No hands up.

"Well, as I was going to a house the other day, a big dog bounded towards me and said sharply, 'Bow wow! What do you think he said?'"

"He said, 'Go 'way!'" said one pupil.

Immediately there was a waving of hands; the pupils were full of experiences to tell how dogs had talked to them.

Carolina Course of Study.

Boats sail on the rivers.

"Boats sail on the rivers,

And ships sail on the seas,

But clouds that sail across the sky

Are prettier far than these.

"There are bridges on the rivers

As pretty as you please;

But the bow that bridges heaven

And overtops the trees,

And builds a road from earth to sky,

Is prettier far than these."

Christina Rossetti.

A. Preparatory discussion.

Give this little story:

"Once a lady was down by the sea, and she saw the ships sailing by. How pretty they were! Another time she was watching the boats sail down the river. Across the river was a fine bridge. It was a pretty picture. But later on she sees two sights more beautiful than the sailing ships or the pretty bridge.

"She has told us in a poem what they are. Listen, children, and try to see the beautiful sights as I say the poem for you."

B. Presentation of the whole poem.

Recite the entire poem, with no interruption. Let the children catch its beauty and wonder of the "clouds that sail across the sky," and of "the bow that bridges heaven."

C. Analysis:

"What does she see that are prettier than the boats and snips? How did the clouds look? They were soft, white, fleecy clouds, I am sure. Some were large, some were small. What color was the sky? Tell about the beautiful clouds you have seen on a summer's day.

"What is prettier than the river bridge? Why does she call the rainbow a bridge? What makes this bridge so wonderful?

"What your eyes and try to see-

"The bow that bridges heaven,

And overtops the trees.

And builds a road from earth to sky."

"How does it bridge heaven, and overtop the trees? How does it build a road from earth to sky? Where are the ends of the rainbow?

"What else is very beautiful about the rainbow? Yes, the lovely colors. What are they?

"One day I will tell you the story of this, the rainbow Fairy, who traveled on this beautiful road."

D. Memorizing the new whole.

The teacher recites the poem through once more. She then asks the children to tell, in the words of the poem, about the boats, the ships, and the clouds. Several children repeat the words that make up this picture. Then the thoughts in the second verse are given in answer to questions.

The teacher repeats the lines herself whenever necessary, so that the pictures are always clear in the children's minds. Each child is given an opportunity to recite whole poem. Watch with the children the clouds on a beautiful spring day; then let them recite the poem. Perhaps some day across the sky will appear the bow that bridges heaven and the children, in response to its beauty, express once more the thoughts of Christian Rossetti's charming lines.

V. Type lesson for story telling.

This story "Chanticleer" suitable for second and third grade children, is found in Perry Tales, by Kinser, p. 139. The outline which follows is adapted from How to Teach Reading, by Fennell and Cusack, p. 289.

1. Preparation.

1. In reflection. What did we decide yesterday that we needed to practice. (Dramatizing.)
2. Motive. I found a story ("Chanticleer," in

erry Tales , which I would like to have you read and see if it would be a good story to dramatize.

B. Silent reading.

The children find the story in the table of contents and read silently.

C. Check-up.

What did you decide about this story? Why? What will we need to do in order to play this story? What characters will we need? What places? What properties? How many scenes will we need?

Where will the first scene take place? What characters will be in this scene. (Let a number of children read the conversations of different characters and the part taken by the book.)

Where will the next scene take place? What characters will be needed in this scene?

What lessons did the cock learn? The fox? / Reel the lessons. What means did the fox use to catch the cock? What means did the cock use to escape from the fox? (Have a number of children read the conversations of the characters and the part taken by the book.)

D. Follow-up work.

The children practice the dramatization of

the story in small groups in a study period or in another recitation period.

VI. Outline by months. Other poems, pictures, or stories may be substituted when necessary or taught in addition to those designated each month.

A. September (first month).

1. Picture study. Present the lesson, "Can't You Talk?"
2. Poem. Present the poem, "Boats Sail on the River," by Christina Rossetti.
3. Story. Tell the story, "Baby Robin's First Bath."
4. Language Correlations.
 - a. With health instruction. Keeping clean and neat.
 - b. With nature study outline. Autumn. Answer the children's questions.
 - c. With oral geography. Sources of food.
 - d. With drawing and art. Free hand cuttings of autumn fruits.
 - e. With manner and conduct. "Good morning."
5. Mechanics. Try to secure the spontaneous use of the oral sentence.

B. October (second month).

1. Picture study. Feeding the birds.
2. Poem. By "S. do".
3. Story. The Little Red Cow.

4. Language correlations.

- a. Health instruction. Eating and drinking.
- b. Nature study outline. autumn.
- c. Oral geography. Sources of food.
- d. Drawing and art. Cut and color autumn leaves and trees.
- e. Manners and conduct. Thank you; if you please.

5. Mechanics. Plan stories and exercises that will require the selective use of is, are, was and were in oral questions and answers.

C. November.

1. Picture. The First Step.
2. Poem. Autumn Fires.
3. Story. The Runaway Cled.
4. Language correlations.
 - a. Health instruction. Breathing properly.
 - b. Nature study outline. Autumn observations.
 - c. Oral geography.
 - d. Drawing and art. Cutting and coloring Thanksgiving decorations.
 - e. Manners and conduct. Thankfulness.

D. December.

1. Picture study. Arrival of the holidays.
2. Poem. Luther's Cradle Hymn.
3. Story. Helping Santa Claus.

1. Picture. Madonna of the Chair.
2. Poem. White Sheep, White Sheep.
3. Story. The Sheep and the Worm.
4. Language correlations.
 - a. Health instruction outline. Drinking cups.
 - b. Nature study outline. Winter.
 - c. Oral geography.
 - d. Drawing and art. Make valentines; a study in pose and costume.
 - e. Manners and conduct. Washington and his rules.
5. Mechanics. Give most of the time to oral expression. Put a few short sentences on the board for the children to copy.

II. March.

1. Picture study. Baby Stuart.
2. Poem. The Wind.
3. Story. Flower and Planting. (Dramatize.)
4. Language correlations.
 - a. See health instruction. Protection.
 - b. See nature study outline. Spring.
 - c. Oral geography.
 - d. See drawing and art. Make little kites and decorate them.
 - e. Manners and conduct.
5. Mechanics. Statements which the children make in short sentences may be written on

4. Language correlations.

- a. Health instruction. Care of the eyes.
- b. Nature study outline. Winter.
- c. Oral geography.
- d. Drawing and art. Cut and color the "Baby's stocking" and "The Christmas Tree."
- e. Manners and conduct. Make a Christmas present for mother.

5. Mechanics. Secure spontaneous expression in short sentences.

E. January.

1. Picture. Helping hand.
2. poem. Looking forward.
3. Story. Three wishes.
4. Language correlations.
 - a. Health instruction. Keeping hands from face.
 - b. Nature study outline. Winter.
 - c. Oral geography.
 - d. Drawing and art. Study in form. Cutting and mending.
 - e. Manners and conduct.
5. Mechanics. Dramatize some of the reproach stories for the purpose of making expression free and natural. Cultivate the selective use of is, are, has, have, do and did.

1. February.

the board by the teacher and copied by the children. The use of the capital letter to begin the sentence and of the period to end it should be observed.

8. April.

1. Picture study. The Divine Shepherd.
2. Poem. The Spring.
3. Story. Why Bears Sleep Winter.
4. Language correlations.
 - a. See health instruction.
 - b. See nature study outline. Spring.
 - c. Oral geography.
 - d. See drawing and art.
 - e. Manners and conduct.
5. Mechanics. Encourage the children to read stories in the library books and then read or tell them to the class.

LIBRARY RECOMMENDATIONS.

- Smith: The Cottontail Primer.
- Grover: The Bonnet Babies' Primer.
- Serl: or - Day Poems on the Farm.
- LaPlue: The I-U-N- Book.
- Perkins: Patch Twins Primer.
- Banta-Benson: The Brownie Primer.
- Grover: The Overall Boys.
- Sylvester and Peter: Happy Hour Stories.
- Smith: The Cottontail First Reader.

Ready: Bag and Self, a Primer.

STUDENT COPY.

I. Aims of instruction.

A. Oral.

1. To help the child acquire added ease and fluency in talking.
2. To lead the child to say what he has to say in an orderly way.
3. To overcome common class errors made by individuals.
4. to train children to listen for sentences.
5. To give the child real literature:
 - a. To develop appreciation.
 - b. To quicken thought.
 - c. To broaden experience.
 - d. To enrich the speaking vocabulary.

B. Written.

1. To develop the skill to copy sentences correctly.
2. To develop the ability to write simple sentences from dictation.
3. To develop ability to write simple original sentences.

C. Oral and Written.

Her necessary care the child to make the correct choice of the proper form of the verbs which are listed below for special attention this year.

This should be an exercise in ear training: eat, ate, eaten; see, saw, seen; bring, brought; build, built; break, broke, broken; sing, sang; sit, sat; run, ran; write, wrote; pay, paid; forget, forgot; learn, learned; teach, taught; steal, stole; spend, spent; drink, drank, drunk; hang, hung; drive, drove; lead, led; lose, lost; swear, swore; hold, held; lie or lies, lay, lain.

II. Sources of material in general.

Personal experiences of children.

Nature study.

Health program.

Reproduction and original stories.

III. Stories for retelling and dramatization.

A. Surprise stories: Hardy.

Why Puff Had No Home.

Why White Hen Likes the Farm.

Peter and Polly in Winter: Lucia.

Playing in the Leaves.

The Three Guesses.

The First Snowstorm.

Reynard the Fox: Smith.

The King's Party

The Fox and the Wolf.

Bruin Goes for Honey.

Story Book Tales: Ashton.

Peek-a-Boo. (To be dramatized.)

The Lion and the Mouse. (Dramatized.)

In Animal Land: Larue.

Billy Bang. (Read and tell.)

Rover Catches Woody Woodchuck. (Read and tell.)

Peter and Polly in Spring: Lucia.

Pussy Willows.

Tapping the Maple Tree.

What Peter's Fishhook Caught.

Happy Tales for Story Time: Skinner.

The Kitten That Forgot How to Mew.

The Little Pig That Grumbled.

B. Poems.

Every child should love these poems. A few may be memorized and others used as the basis for language exercises.

1. Bobbs-Merrill Second Reader.

When I was a Little Boy, p. 51.

Old English Riddles, pp. 59-61.

The North Wind, p. 90.

A Farmer Went Riding, p. 97.

London Bridge, p. 116.

The Fairie, p. 202.

Rossetti.

Boats Sail on the River, p. 132.

The Caterpillar, p. 139.

Trens and Robins, p. 190.

Sun-loving Stellow, p. 190.

Lullaby, p. 131.

In the Seelow, p. 132.

Stevenson.

Fed in Seelow, p. 174.

At the Seaside, p. 142.

Rain, p. 143.

Irving, p. 143.

A Good Play, p. 147.

By Seelow, p. 153.

Where Go the Boats, p. 137.

The Thing, p. 153.

Taylor.

Twinkle, Twinkle, Little Star, p. 124.

2. A Child's Garden of Verse: Stevenson.

Twelve Nights, p. 13.

The Wind, p. 33.

Land of Story Books, p. 76.

C. Pictures.

The Flowers. (Dupre.) Practical Drawing Book II, p. 24.

Woman Charming. (Millet.) Practical Drawing Book II, p. 25.

Age of Innocence. (Reynolds.)

The Knitting Lesson. (Millet.)

In the Pasture. (Dupre.)

Dignity and Impudence. (Landseer.)

Children of the Shell. (Murillo.)

In Fear and Trembling. (Knaus.)

Melon Eaters. (Murillo.)

Shoeing the Bay Mare. (Landseer.)

IV. Outline by months as in first grade.

A. September (first month).

1. Picture study. The Mowers.
2. Poem. Old English Riddles.
3. Story. Why Puff Had No Home.
4. Language correlations.
 - a. Health instruction. Keeping clean and neat.
 - b. Nature study outline. Autumn.
 - c. Oral geography. Food; clothing; shelter.
 - d. Drawing and art. A study to develop form.
5. Mechanics. Select games and stories in which children hear and use the correct forms of the verbs eat, ate, eaten; see, saw, seen. Create situations in which a choice between the use of I and me will be required.

B. October (second month).

1. Picture study. Age of Innocence.
2. Poem. Sun-loving wallows.
3. Story. The Young Rooster, from Happy Tales for Story Time.
4. Language correlations.
 - a. Health program. Eating and drinking properly.
 - b. Nature study outline. Autumn.

- c. Oral geography. Food; clothing; shelter.
- d. Drawing and art. A study in color and design.
- 5. Mechanics. Teach the use of bring, brought; build, built; break, broke, broken.

Continue story telling and dramatization to secure natural expression.

Teach the order of the first person pronoun as last in the series.

The correct word form may be worked out in a game. Suppose the teacher desires to teach the use of the pronoun "I" as coming last in the series. One pupil may cover his eyes. Two other pupils may break a piece of chalk and place it on his desk. The pupil opens his eyes and asks: John, did you and Tom break the chalk?" "No, Tom and I did not break the chalk." "Mary, did you and Nell break the chalk?" "Yes, Nell and I broke the chalk."

This guessing game may be varied to give a drill in the use of many of the verbs.

C. November (third month).

- 1. Picture study. Shoeing the Bay Mare.
- 2. Poem. My Shadow.
- 3. Story. The First Snowstorm.
- 4. Language correlations.
 - a. Health program. Breathing and sleeping.
 - b. Nature study. Autumn.

- c. Oral geography.
 - d. Drawing and art. A study in design and construction.
 - e. Mechanics. Teach the use of sing, sang; sit, sat; run, ran; copy sentences and teach use of capital letter to begin the sentence.
- D. December (fourth month).
- 1. Picture study. Children of the Shell.
 - 2. Poem. Lullaby.
 - 3. Story. Playing in the leaves.
 - 4. Language correlations.
 - a. Health program. Sitting; standing; walking.
 - b. Nature study. Winter.
 - c. Oral geography.
 - d. Drawing and art. A Christmas Gift.
 - e. Mechanics. Teach the use of write, wrote; pay, paid; forget, forgot. Teach the use of the period after an initial of the second name, Helen M. Wells.
- E. January (fifth month).
- 1. Picture study. The Knitting Lesson.
 - 2. Poem. Twinkle, Twinkle, Little Star.
 - 3. Story. The Kitten That Forgot How to Mew.
 - 4. Language correlations.
 - a. Health program. Care of eyes; use of handkerchief.
 - b. Nature study. Winter.

- c. Oral geography.
 - d. Drawing and art. A study in form: Cutting and mass.
 - 5. Mechanics. Teach the use of learn, learned; teach, taught; steal, stole; spend, spent. write and punctuate short, simple sentences.
- F. February (sixth month).
- 1. Picture study. Dignity and impudence.
 - 2. Poem. Andy Bights.
 - 3. Story. Billy Bang. Read and tell.
 - 4. Language correlations.
 - a. Health program. Keeping hands from face.
 - b. Nature study. Winter.
 - c. Oral geography.
 - d. Drawing and art. A study in pose and costume.
 - 5. Mechanics. Teach the use of drink, drank, drunk; hang, hung. Avoid the excessive use of and, then and so.
- G. March (seventh month).
- 1. Picture study. In the Pasture.
 - 2. Poem. The North Wind.
 - 3. Story. Tapping the Maple Tree.
 - 4. Language correlations.
 - a. Health program. Drinking cups, pencils and other materials.
 - b. Nature study. Spring.

- c. Oral geography.
- d. Drawing and art. The farm: A problem in construction.
- e. Mechanics. Teach use of drive, drove; leads, led; lose, lost. Drill on such phrases as have come; have done; have gone; have sat and have given.
- 8. April (eighth month).
 - 1. Picture study. Woman Churning.
 - 2. Poem. Here go the Heats.
 - 3. Story. Bruin Goes for Honey.
 - 4. Language correlations.
 - a. Spelling program. Protection.
 - b. Nature study. Spring. Western Meadow Lark. Patriotic Manual, p. 88.
 - c. Oral geography.
 - d. Drawing and art. The farmer and his friends.
 - 5. Mechanics. Teach the use of hold, held; lie or lies, lay, lain. Teach the phrases have held; have lain; have spent and have seen.

LITERARY REFERENCES.

- Perkins: Wakino Twins.
- Lucia: Peter and Polly in Winter.
- Korcomb: Red Feather.
- Smith: Reynard the Fox.
- Grover: The Sunbonnet Babies in Holland.

Ashton: Story Book Tales.

Stadelman: Nixie Bunny in "orkaday-land."

LaRue: In Animal Land.

Lucia: Peter and Polly in Spring.

Skinner: Happy Tales for Story Time.

Hardy: Surprise Stories.

THIRD GRADE.

1. Aims of instruction. Follow the general plan outlined for the first and second grade. Introduce additional specific objectives which acquaintance with the needs of the class reveal.

A. In oral speech -

1. To give the child ideas which he will desire to communicate before expression is attempted.
2. To develop the power of the child to express what he wants to say in good sentences.
3. To foster the ability of the child to express two or three good short sentences relating to the same subject.
4. To lead the child to enjoy hearing and telling good stories from literature, and to find pleasure in relating personal observations, experiences and impressions.
5. To secure well modulated speaking tones in conversation.

B. In written composition make it a habit -

1. To use a capital to begin the name of a per-

- son, a day of the week, a month of the year, a city or a state.
2. To use the period after a statement, an abbreviation or an initial.
 3. To recognize the differences between a common noun that means one, and the derived form that means more than one.
 4. To use the apostrophe (') in spelling the possessive case and in writing common contractions.
 5. To understand quotation marks in reading.
 6. To use the correct tense form of the following verbs: Give, gave, given; break, broke, broken; grow, grew, grown; begin, began, begun; swim, swam, swum; know, knew, known; ring, rang, rung; write, wrote, written; draw, drew, drawn; see, saw, seen; sink, sank, sunk; leave, left; hang, hung; sweep, swept; bend, bent; bleed, bled; drown, drowned; lead, led.

II. Sources of material.

A. Pictures.

Little Ones in Class. (Geoffroy.) Practical Drawing Book III, p. 24.

The Blessing. (Chardin.) Practical Drawing Book III, p. 25.

Distinguished Member of the Humane Society. (Lan-

seer.)

Boy and Rabbit. (Raeburn.)

The Torm Cat. (Sally.)

Girl With Apple. (Trousse.)

A Boy Selling a Boat. (Israel.)

The Aelon Waters. (Burillo.)

Supper Time. (Plumpe.)

Arrival of the Shepherds. (Berlle.)

B. Poems.

Every child should love these poems. The memory goes for language and reading in this grade may be based on these selections.

1. Bobbs-Merrill Third Reader.

Grasshopper Green, p. 15.

Day, p. 104.

Allingham: Robin Redbreast, p. 53.

Child: Thanksgiving Day, p. 72.

Field: The Fuel, p. 224.

Herford: The Elf and the Dormouse, p. 237.

Jackson: September, p. 45.

Iear: The Owl and the Puss Cat, p. 173.

Kyall: Indian Lullaby, p. 102.

Stevensen:

The Wind, p. 125.

The Lampighter, p. 126.

Foreign Lands, p. 208.

Smith: America, p. 145.

Westwood: the Last Lamb, p. 181.

C. Stories for reproduction.

Red Feather's Adventures.

The Sweat-lodge, p. 92.

The Buffalo Hunt, p. 106.

The Ice Gatherers, p. 36.

Stories of Belle River.

The Great Day of the Year (Threshing), p. 181.

Dinah, the Calf, p. 151.

Nests and Eggs, p. 121.

Stories of Animal Village.

Turkey Red, p. 5.

Johnny Coon, p. 45.

Merry Tales.

The Story of Li'l Hannibal, p. 97. Illustrates
use of the apostrophe.

The Story That Had No End, p. 54.

The Brownie of Blednock, p. 178.

Stories of Mother Goose Village.

Polly Flinkler's Apron, p. 17.

The Apple Party, p. 55.

The Sunbonnet Babies in Italy.

The Arrival in Naples, p. 9.

An Afternoon in the Park, p. 48.

Grimm's Fairy Tales.

Little Snow White, p. 14.

Hansel and Gretel, p. 28.

Little Red Riding-Hood, p. 66.
 The Story of Cinderella, p. 98.
 Adventures of Tom Thumb, p. 213.

The Four Orders.

Missy and the Little Green Men, p. 21.
 The Shepherd in the Holy Land, p. 50.
 Mr. Silkworm's New Coat, p. 94.

Tales from Far and Near.

The Story of a Wooden Horse, p. 9.
 Dan Whittington, p. 67.
 The Boy Nelson, p. 108.
 The Little Tollers of the Cross, p. 49.

Little Bear Stories.

When little Bear Bragged, p. 133.
 The Nearest Way Home, p. 56.

In Fairy Land.

Diamonds and Toads, p. 46.
 Why the Sea is Salt, p. 156.

III. Outline by months.

A. September.

1. Poem. September: Jackson.
2. Picture. Little Ones in a Class.
3. Story: The Great Day of the Year (Threshing).
4. Language correlations.

a. Health program. Keeping clean and neat.

- (1) When, why and how bathe the body.
- (2) Care of nails, hair and teeth.

(1) Care of nose and use of handkerchief.

b. Nature study outline. autumn.

(1) Feed caterpillars until they form cocoons.

(2) Learn to recognize poison ivy.

(3) Collect seed vessels and fruits.

(4) Find ant-lions at the bottom of the funnel-shaped pits in the dry dust along banks.

c. Oral geography.

(1) Foods. Kinds; sources; preservation.

d. Drawing and art.

(1) A study in plant life.

(2) Leaf forms.

(3) Trees.

e. Manners and conduct.

(1) Listen with respect to classmates who are reciting.

(2) Service; happiness; politeness.

(3) Promptness. On time every day.

5. Mechanics. Make every language lesson inter-

esting by selecting material which the children comprehend and stories they want to hear.

Work for habit in the correct use of the period and of capitals in written exercises.

Continue the drill on the forms of verbs studied in the second grade and all the following:

Give, gave, given; break, broke, broken.

B. October.

1. Poem. The Owl.
2. Picture. Boy and Rabbit.
3. Story. When Little Bear Bragged.
4. Language correlations.
 - a. Health program. Eating and drinking.
 - b. Future Study Outline. Autumn.
 - c. Oral geography. Clothing - cotton; wool; linen; silk.
 - d. Drawing and art. A study in color and design.
 - e. Manners and conduct. Love; kindness.
5. Mechanics.
 - a. Oral.
 - (1) Practice reading, telling and dramatizing stories. Give attention to the discovery and correction of common errors in speech.
 - b. Written.
 - (1) Study common nouns which form the plural by adding s or es to the singular. Drill.
 - (2) Work for neatness and orderly arrangement of all written exercises.

C. November.

1. Poem. Thanksgiving Day.
2. Picture. The Blessing.
3. Story. Turkey Red.
4. Language correlations.
 - a. Health program. Breathing and sleeping.
 - b. Nature study outline. Winter.
 - c. Oral geography. Shelter; building materials.
 - d. Drawing and art. A study in design and construction.
 - e. Manners and conduct. Reverence; gratitude.
5. Recitations.
 - a. Oral.
 - (1) Recite verses of poetry.
 - (2) Tell a story or narrate a personal experience using complete sentences.
 - b. Written.
 - (1) Develop the power of the child to write a paragraph of several short sentences on a given topic.
 - (2) Drill on the form of the verbs for this grade. Pick out those used in the stories and poems.
6. December.
 1. Poem. Indian Lullaby, or Silent Night. Patriotic Manual, p. 65.
 2. Picture. Arrival of the shepherds; Lefolle.

3. Story. Boy the Sea is Salt.

4. Language correlations.

a. Health program. Sitting; standing; walking; exercising.

b. Nature study. Winter.

c. Oral geography. Fuel - coal, wood, oil, gas.

d. Drawing and art. A Christmas Problem.

e. Manner and conduct. Obedience; industry.

5. Mechanics.

a. Oral. Plan a Christmas project in cooperation with the children. Assist them with their individual projects.

b. Written.

(1) Teach letter writing. Use a very simple heading to show where the writer was when he wrote. The salutation should be friendly, as "Dear Sister." Let the child write to a real friend. Send the letter when practicable. The body of the letter may be a single paragraph. Teach the use of the complimentary closing and the signature.

A. January.

1. Poem. America.

2. Picture. A Boy Tailing a Boat.

3. Story. Polly Plunder's Lagoon.

4. Language correlations.

- a. Health program. Care of eyes and nose.
- b. Nature study. Winter.
- c. Oral geography. Modes of travel - on land; on water; in the air.
- d. Drawing and art. A study in form; drawing and color.
- e. Manners and conduct. Truth; honesty.

5. Mechanics.

- a. Oral. Continue drill in correct pronunciation and conversation.
- b. Written. Continue writing short sentences in the form of the paragraph.

F. February.

- 1. Poem. The Owl and the Pussy Cat.
- 2. Picture. Distinguished member of the Humane Society.
- 3. Story. The Arrival in Naples.
- 4. Language correlations.
 - a. Health program. Keeping hands from face.
 - b. Nature study. Winter.
 - c. Oral geography. Study snow and ice.
 - d. Drawing and art. A study in costume and color.
 - e. Manners and conduct. Courage; helpfulness.
- 5. Mechanics.
 - a. Oral. Watch for mistakes in the use of

nouns, pronouns and adjectives.

- b. Written. Correct paragraphs in which there are errors in spelling, capitalization and pronunciation. Require the child to rewrite the paragraph, making indicated corrections.

G. March.

1. Poem. Robin Redbreast.
2. Picture. Tupper Time.
3. Story. The story of Little Hansel.
4. Language correlations.
 - a. Health program. Drinking cups, pencils and other material.
 - b. Nature study. Spring.
 - c. Oral geography. Rain-source, use and distribution.
 - d. Drawing and art. The Circus: a project.
 - e. Manners and conduct. At the table.
5. Mechanics.
 - a. Oral. Plan exercises that require several short sentences about one topic.
 - b. Written. Reduce the oral statements to the form of the paragraph.

H. April.

1. Poem. Foreign Lands.
2. Picture. The Torn Hat.
3. Story. The Little Red Boat.

4. Language correlations.

- a. Health program. Protection.
- b. Nature study. Spring.
- c. Oral geography. The garden and the farm.
- d. Drawing and art. Our friends of other lands.
- e. Manners and conduct. Respect.

5. Mechanics.

- a. Oral. Naturalness in presentation. Test the accomplishments of each child on the aims of oral speech.
- b. Written. Letter writing. Review the general aims for this grade.

LIBRARY REFERENCES.

Andrews: Boys and Girls of Make-Up-Town.

Berl: In Fairyland.

Fox: Little Bear Stories.

Skinner: Merry Tales.

Terry: History Stories of Other Lands. (Tales from Far and Near.)

Shillig: The Four Wonders.

Lowe: Grimm's Fairy Tales.

Glover: The Sunbonnet Babies in Italy.

Stevenson: A Child's Garden of Verse.

Bigham: Stories of Mother Goose Village.

Clark: Stories of Belle River.

Richey: Stories of Animal Village.

Speed: Billy and Jane Explorers.

Gifford and Payne: Red Feather's Adventures.

FOURTH GRADE.

I. Outline. Problem: How shall the lesson be planned?

A. Foundation material.

1. English Lessons: Miller-Kinhead. Book I, pp.1-135.
2. Poems in the text and in Bobbs-Merrill Fourth Reader, and in approved library books.
3. Stories in the text and in the approved library books.
4. Pictures in the text, in drawing-books, and in History Stories of Other Lands.
5. Personal experiences and reports.

B. Aims of instruction.

1. In oral English.
 - a. To promote the use of accurate and correct sentences.
 - b. To engage the children in lively conversation and discussion.
 - c. To teach the use of the dictionary and indexes. (See fourth grade spelling.)
2. In written composition.
 - a. To develop power to reproduce in writing what has been given orally.
 - b. To take up the written forms, one at a time, as they occur in the text.

- c. To make the use of a form habitual after it has been taught.

II. Sources of material.

A. Pictures.

The Fog Warning. (Homer.) Practical Drawing Book IV, p. 24.

The Knitting Lesson. (Millet.) Practical Drawing Book IV, p. 25.

The Holland Flower Girl. (Hitchcock.)

Madame LeBrun and Daughter. (LeBrun.)

Christ in the Temple. (Hoffman.)

Song of the Lark. (Breton.)

The Belated Kid. (Bunt.)

Whistling Boy. (Wichmeyer.)

A School in Brittany. (Geoffroy.) Miller-Kin-
kead, Book 1, p. 22.

A Fair Wind. (Raupp.) Miller-Kinkead, Book 1, p.
39.

A Picture Story. Miller-Kinkead, Book 1, p. 65.

A Helping Hand. (Renouf.) Miller-Kinkead, Book 1,
p. 87.

The Will Buy a Rabbit. (von Bremen.) Miller-
Kinkead, Book 1, p. 116.

B. Poems.

1. Bobbs-Merrill Fourth Reader.

Aldrich: Marjorie's Almanac, p. 135.

Allingham: Fishing, p. 308.

Bayly: O Where Do the Fairies Hide? p. 76.

Bryant: Robert of Lincoln, p. 326.

Emerson: The Mountain and the Squirrel, p. 105.

Field:

The Rock-a-by-Lady, p. 135.

The Sugar Plum Tree, p. 374.

Hogg: A Boy's Song, p. 191.

Howitt: The Fairies of Caddon Low, p. 51.

Kingsley: The Land of the Deaf, p. 241.

Lear: The Jumblies, p. 355.

Longfellow: Hiawatha's Childhood, p. 208.

Mackay: The Miller of the Dee, p. 112.

Maple: The Birds in Spring, p. 310.

Nesbit: Your Flag and My Flag, p. 254.

Rands: The Peddler's Caravan, p. 197.

Riley:

Nine Little Goblins, p. 232.

A Sea Song from the Shore, p. 34.

The Treasure of a Wise Man, p. 92.

Rosetti: The Rose: p. 285.

Setoun: Romance, p. 34.

Southey: Ladybird: p. 262.

Stevenson: The Little Land, p. 250.

Tennyson: The Dee and the Flower, p. 284.

C. Stories for reading, telling and dramatizing.

How We Are Fed.

The Fishing Industry, p. 58.

How Sugar is Made, p. 78.

On a Coffee Plantation, p. 103.

Anderson's Fairy Tales.

The Steadfast Tin Soldier, p. 6.

The Little Mermaid, p. 24.

The Ugly Duckling, p. 65.

Star, The Story of an Indian Pony. Chapters I,
II, III and V.

Little Joe Otter.

Little Joe Otter Springs a Surprise, p. 1.

The First Swimming Lesson, p. 32.

A Young Fisherman is Caught, p. 57.

The Clever Trapper, p. 130.

Wings and Stings.

The Spiders' Garden Party, p. 151.

Jolly Little Tars, p. 71.

The Japanese Twins.

The Day the Baby Came, p. 7.

Morning in the Little House, p. 43.

Pinocchio.

The Story of a Marionette, p. 11.

The Talking Cricket, p. 24.

The Fox and the Cat, p. 51.

Peter Pan.

Early Days, p. 1.

The Never-Never-Never Land, p. 22.

The Pirate Ship, p. 87.

Tales of Long Ago.

A Brave Man of Switzerland, p. 77.

The Great Armada, p. 103.

Robin Hood, p. 58.

The Story of Marcius, p. 17.

Myths from Many Lands.

Frigga's Gift (The Fairy Flax), p. 7.

Legend of the Milky Way, p. 20.

The Golden Touch, p. 57.

The City Beneath the Sea, p. 90.

History Stories for Primary Grades.

The Girl who Heard Voices, p. 6.

Squanto, the Corn Planter, p. 15.

At the First Thanksgiving, p. 100.

White Friends and Red Friends, p. 169.

The Star Spangled Banner, p. 195.

The Blue Bird for Children.

The Woodcutter's Cottage, p. 3.

The Kingdom of the Future, p. 89.

Adventures of a Country Boy.

Margaret and Frank, p. 19.

A Trip to the Woods, p. 38.

An Adventure at the Mill, p. 104.

A Wagon Ride, p. 242.

iii. Outline by months. Supplement and improve the plan whenever possible.

A. First month; pp. 1-14.

1. In oral language:

- a. Tell the story, "The Young Robin's First Bath," to the class.

First read the story in Bag and Puff, p.94.

This version of the story, together with the pictures, strengthens the element of human interest.

- b. Ask questions which the children answer in statements.
- c. Dramatize one story in addition to "The Crow and the Fox."

2. In written composition.

- a. Write and punctuate statements.
- b. Drill on the correct choice and use of these verbs: See, saw; do, did, done.
- c. Teach and require the use of the capital when the word I is used.

3. In correlations with history.

- a. Greek Heroes. Read and tell these stories:
 Leonidas and the three hundred - Thermopylae.
 Themistocles - the battle of Salamis.
 Alexander the Great.

B. Second month; pp. 14-30.

1. In oral language:

- a. Observe the order of sequence of events

when stories are told.

- b. Dramatize one story in addition to the Old Man and the Boys.
- c. Study one poem and one picture from those listed for this grade, in addition to the poem "The Squirrel" and the picture "A Happy Home," given in the text.

2. In written composition.

- a. Teach the use of capitals in writing the title.
- b. Teach the use of the margin when a child reproduces a story in writing.
- c. Teach use of question mark at the end of a question.
- d. Drill on the correct choice and use of these verbs: Come, came; give, gave; have given.
- e. Develop the meaning of plurals.

3. In correlating language with history, read and tell:

- a. Legends and myths told to Greek boys.
- b. The story of the Golden Fleece.
- c. The wanderings of Ulysses.
- d. The story of the siege of Troy.
- e. The story of Hercules.

C. Third month; pp. 31-44.

1. In oral language practice:

- a. Using these verb forms: is, are; am not, isn't.
 - b. Teach how and from what words each contraction is formed.
 - c. Teach careful observance of the order of events in story telling. Avoid interrupting the speaker while the story is being told.
 - d. Present poem, picture study and dramatizations.
2. In written composition teach:
- a. The formation and use of these contractions: Isn't, didn't, it's.
 - b. The use of the apostrophe to show the omission of a letter in a contraction.
 - c. The use of capitals in connection with the family or surname, and the given or Christian name.
 - d. The use of the initial followed by the period.
3. In correlating language with history, read and tell stories of the gods and what the Greeks thought of them.

D. Fourth month; pp. 14-15.

1. In oral language teach:
 - a. The recognition of the sequence of events.
- Note.- Make individual assignments of

stories in the library book, History Stories for Primary Grades. Let the children reproduce these stories in class.

- b. The use of has and have in the formation of the perfect tense.

Make this a drill in ear training to review the verbs listed in second and third grades.

2. In written composition teach:

- a. The formation and meaning of the possessive case.

- b. Proper indentation of the first word of the first line of the paragraph.

The use of the margin at the left was taught the first month.

- c. The abbreviated titles Mr., Mrs., Rev. and Dr., and the unabbreviated title, Miss.

- d. The use of the commas to separate the name of the person addressed from the rest of the sentence.

3. In correlating language with history, read and tell the story of the Athenian Oath and the Spartan shield. (Robbs-Merrill Eighth Reader, p. 187.)

I. Fifth month; pp. 57-72.

1. In oral language:

Stress accurate observation as prerequisite to effective narration.

b. Let each child relate some observation or personal experience.

c. Teach the "Evening Hymn," page 69, and Kingsley's "Anls of Dee."

2. In written composition teach:

- a. The use of a capital to begin the name,
 - (1) Of a state, city, town, or street.
 - (2) Of each day of the week,
 - (3) Of each month.

b. The arrangement and punctuation of the address.

c. The abbreviations for the months.

3. In correlating language with history, read and tell the stories of early Rome; Romulus and Remus; the Seven Hills of Rome; the Tiber.

f. Sixth month; pp. 72-91.

1. In oral language teach:

a. The use of and distinction between, may, and can.

b. The dramatization of "Cometoly's Mother," after the story has been told to the class.

c. The use of he and I; she and I; teach and learn.

d. The picture lesson "A Helping Hand."

2. In written composition teach:

a. The structure of the friendly letter.

(1) Heading.

(2) Salutation.

(3) Body of letter.

(4) Ending.

(5) Signature.

b. The use of the paragraph in expressing a general idea.

(Note.- In the study of "The Boy and the Wolf," try to get in short sentences or phrases. For example, the first paragraph tells about "the boy's falsehoods" or the boy's habit of lying," while the second paragraph tells of "the unbelief of the men." Pick out the central idea from the paragraph in some good story as a class exercise.)

c. The common titles used with nouns should be capitalized. Examples: Uncle, aunt, cousin, captain, judge, president, doctor, reverend, principal, professor and superintendent.

d. How to write a letter of two paragraphs.
3. In correlating language with history, read and tell the stories of Horatius, Coriola-

nia, Cincinnati, the Gaults Folks.

G. Seventh month; pp. 92-114.

1. In oral language:

- a. Continue conversation exercises. Study the cat. Find answers to questions in Lesson LXX. Recite poems about cats. Tell stories in which cats are described. Name others.
- b. Practice the selection and use of go, went and gone; sit, sat, sitting; write, wrote, written; set. Teach use of has and have with gone, sat, written and set.
- c. Find the picture "Androclus and the Lion" in Tales of Long Ago, p. 29. Use in connection with Lesson LXII.

2. In written composition:

- a. Practice writing short paragraphs in good form.
- b. Study words of opposite meaning: long, short; smooth, rough; dark, light; small, big; quick, slow; hot, cold; good, bad; high, low; wet, dry; easy, hard; etc.
- c. Practice writing short friendly letters of two or three paragraphs. Observe margin and indentation.

- d. Teach the use of the capital to begin the first word of each line of poetry.
 - e. Stress the importance of the complete legible address, which shows (1) name, (2) street, (3) city, (4) state.
3. In correlating language with history, read and tell of the struggle of the classes, (a) Patricians, (b) Plebians, (c) The Gracchi.
- H. Eighth month; pp. 114-135.

1. In oral language:

- a. Study the picture "Who Will Buy a Rabbit?" Bring other rabbit pictures to the class. Tell the stories suggested by the pictures.
- b. Continue conversation exercises based on reproduction stories.
- c. Dramatize "An Ax to Grind."
- d. Interpret the poem, "Discontent."

2. In written composition teach:

- a. How to write an invitation.
- b. How to make and use quotation marks. When the quotation begins the sentence place the comma before the second quotation mark; when it ends the sentence, place the comma before the first quotation mark. When a question is quoted, place the question mark inside the question

mark inside the quotation marks.

3. In correlating language with history, read and tell:

- a. Stories of the home life in Rome.
- b. Stories of the religious life in Rome.
- c. Stories of Roman standards of honor.

LITERARY REFERENCES.

Johnson: Adventures of a Country Boy.

Lablanc: The Blue-Bird for Children.

Mayland: History Stories for Primary Grades.

Cowles: Myths from Many Lands.

Terry: History Stories of other Lands.

(Tales of Long Ago.)

Perkins: Peter Pan.

Firman: Pinocchio.

Perkins: The Japanese Twins.

Daulton: Kings and Stings.

Burress: Little Joe Otter.

Hooker: Star; The Story of an Indian Pony.

Chamberlain: How we Are Told.

Frazee: Anderson's Fairy Tales.

FIFTH GRADE.

I. Outline.

A. Foundation material. Extend the use of the fourth grade material.

B. Aims of instruction.

1. In oral English.

- a. To secure good English in all classes.
- b. To secure complete statements.
- c. To cultivate the desire to speak well.
2. In written composition -
 - a. To insist upon neatness, good arrangement, good penmanship and correct spelling in all written work.

II. Source material.

A. Pictures.

The Return of the Gleaners. (Breton.) Practical Drawing Book, Book V, p. 24.
 Grace Before Meat. (Maes.) Practical Drawing Book, Book V, p. 25.

English lessons, Book I.

A Shower in the Parlor (Blume), p. 152.
 The first Step (Swinstead), p. 172.
 Putting on the Finishing Touches (von Bremen), p. 199.
 In Vacation (Bacon), p. 204.
 The Little Nurse (von Bremen), p. 228.
 In Disgrace (Barber), p. 250.
 The Angelus (Millet), p. 271.
 The Horse Fair (Bonheur), p. 283.

From other sources:

The Gleaners. (Millet.)
 The Song of the Lark. (Breton.)
 Boyhood of Lincoln. (Johnson.)

Spring. (Douglas.)

Indian and the Lily. (Brush).

- B. Stories for retelling and dramatization may be found in the list following the outline for the eighth month of this grade.

- C. History stories for language correlations:

The beginnings.

Rome, the Mistress of the World, p. 12.

The Greatest of the Romans, p. 25.

What the Romans did for Britain, p. 66.

The Story of Charlemagne, p. 169.

The Story of Alfred the Great, p. 181.

The Battle of Hastings, p. 205.

Lord and Vassal.

What the Crusades Were, p. 77.

Richard's Adventure and Death, p. 91.

King John and the Great Charter, p. 101.

The Battle of Hastings, p. 26.

- D. Poems.

1. Bobbs-Merrill Fifth Reader. The poems should be selected from this list according to the monthly outline for reading.

Blake: The Voices of Children, p. 209.

Browning: The Pied Piper of Hamelin, p. 46.

Bonar: He Liveth Long Who Liveth Well, p. 311.

Brooks: Our Native Land, p. 292.

Burns: My Heart's in the Highlands, p. 348.

- Gary: The Gray Swan, p. 242.
- Garryl: Robinson Crusoe's Story, p. 388.
- Gough: The Polar Bear, p. 401.
- Gunningham: A Song of the Sea, p. 212.
- Elliot: Spring Song, p. 442.
- Gyleman: The Fairies Have Never a Penny to Spend, p. 94.
- Holmes: Old Ironsides, p. 306.
- Key: The Star Spangled Banner, p. 303.
- Longfellow: The Building of the Canoe, p. 114.
- Longfellow: The Children's Hour, p. 205.
- Longfellow: Daybreak, p. 441.
- Lowell: The Fountain, p. 423.
- Martin: An Apple Orchard in the Spring, p. 415.
- Macy: The Flag, p. 312.
- Miller: Columbus, p. 281.
- MacDonald: The Wind and the Moon, p. 348.
- Oxenham: A Little Prayer, p. 325.
- Riley: Little Orphant Annie, p. 108.
- Riley: Extremes, p. 111.
- Saxe: The Blind Men and the Elephant, p. 370.
- Scott: Hie Away, p. 349.
- Shakespeare: Fairy Song, p. 95.
- Sherman: Fairy Shipwreck, p. 428.
- Southey: The Inchcape Rock, p. 246.
- Sumner: The Flag of Our Country, p. 302.

Tennyson: Dainty Little Maiden, p. 137.

Tennyson: The Brook, p. 425.

Thaxter: Wild Geese, p. 413.

Thackeray: After the Storm, p. 189.

Wordsworth: Lucy Gray, p. 186.

Wordsworth: March, p. 404.

III. Outline by months. Supplement and improve the plan wherever possible.

A. First month: pp. 135-186.

1. In oral language -

- a. Use the poem, the picture, the story, as presented in the text.
- b. Use the dictionary as directed in the fourth grade spelling outline.
- c. Teach correct pronunciation. Base the drill on the words which are often mispronounced or mispronounced by members of the class. Example: ge-og'-ra-phy; li'-bra-ry.

2. In written composition -

- a. Practice writing the paragraph about a single topic. Find well-written paragraphs in the readers and read them in class.
- b. Introduce the original story. Children like to invent situations.
- c. Reduce biographical sketches to three paragraphs.

(1) Youth or boyhood.

(2) Work as a man.

(3) Reasons for remembering him.

3. In correlating language and history-

- a. Read and tell the story of Hannibal. (Mace's Beginner's History, p. 467.)
- b. Locate Rome and Carthage, and tell why they were rival cities.

B. Second month; pp. 156-176.

1. In oral language -

- a. Teach poem; picture; story; conversation.
- b. Teach new contractions: isn't, aren't.
- c. Continue the drill in correct pronunciation.
Form the dictionary habit.
- d. Show the children how to find material in reference books.

2. Written composition.

- a. Review the rules for capitalization. Observe the names of the seasons are not capitalized.
- b. Teach children to capitalize the principal words in the title.
- c. Review the uses of quotation marks.

3. In correlating language with history -

- a. Tell stories of Rome's greatest general, Julius Caesar.
 - (1) Caesar, the boy.
 - (2) Caesar, the man.

Lib. Ref. History Stories of Other Lands.

The Beginnings, p. 25.

(3) Caesar's Conquests of England. (Mace's
Beginners' History, p. 472.)

(4) The books Caesar wrote.

C. Third month; pp. 176-194.

1. In oral language -

- a. Teach poem; picture; story; conversation.
- b. Teach the meaning of, and choice between
each pair of the following words: this,
that; these, those; principal, principle;
here, hear; among, between; don't, doesn't;
ought, naught.

2. In written composition -

- a. Teach the abbreviations of titles. When may
a title be abbreviated?
- b. Train each child to examine his manuscript
carefully with respect to margins, inden-
tation of paragraphs, capitalization and
punctuation. Establish the habit of self-
criticism.

3. In correlating with history -

- a. Show Rome's contribution to civilization:
 - (1) In language. (The Beginnings, p. 66.)
 - (2) In literature.
 - (3) In laws. (Mace's Beginner's History, pp.
473-f.)

(4) In buildings. (Show pictures.)

Lib. Ref.: History Stories from Other
Lands, The Beginnings, pp. 13, 25, 39,
68, 76.

D. Fourth month; pp. 194-209.

1. In oral language -

a. Teach the poem; picture; story; conversation.

b. Plurals.

(1) Spell the plural of many nouns and
state the rule in each case.

c. Letters. Produce the sounds,

(1) Vowels.

(2) Consonants.

d. Organs of speech,

(1) Throat. Sound g,k.

(2) Tongue. Sound l,r.

(3) Teeth. Sound d,t.

(4) Lips. Sound f,b,p.

(5) Nose. Sound n,m.

2. In written composition -

a. Require an original short story.

b. Teach plurals.

(1) Formed by adding s or es.

(2) Formed by changing f to v and adding s
or es.

(3) Formed irregularly or by use of other

words.

(4) Of words ending in y.

(a) Formed by adding s.

(b) Formed by changing y to i and adding es.

c. Teach possessives,

(1) Formed by adding an apostrophe and an s.

(2) Formed by adding an apostrophe only.

3. In correlating language with history -

a. Tell stories of Charlemagne and the empire he founded. (Mace's Beginner's History, p. 479.)

Lib. Ref.: History Stories from Other Lands, The Beginnings, p. 168.

B. Fifth month; pp. 210-232.

1. In oral language -

a. Teach poem; picture; story; conversation.

b. Teach use of the title,

(1) After the name.

(2) Before the name.

(3) Never write the title before and after the name.

c. Teach the use of bring or carry; lie, lay or lain; love or like.

2. In written composition -

a. Write and punctuate,

(1) Title before the name.

(2) Title after the name.

(3) Title used in the address.

b. Show the use of the comma to separate
yes or no from the rest of the sentence.

c. Teach use of capitals in writing.

(1) The names of holidays.

(2) The principal words in the subject of
a composition.

d. Write a friendly invitation. Address the
envelope.

3. In correlating language with history -

a. Tell stories of the lord and his vassal
and their services to each other.

F. Sixth month; pp. 232-249.

1. In oral language -

a. Teach the poem; picture; story; conversa-
tion.

b. Teach the use of than or then; between or
among; accept or except; shall or will.

Note.- If you were to fall out of a
boat, which should you say, "I shall drown
nobody will save me"; or "I will drown,
nobody shall save me?"

c. Teach the meaning of double negatives.

(1) Compare these statements:

(a) He is not unkind.

(b) He is kind.

(2) Compare these statements:

(a) The apple is not no good.

(b) The apple is not good.

(c) The apple is no good.

(d) What is wrong with (a)?

2. In written composition -

a. Teach abbreviations used to designate time of day - a.m., m., and p.m. They come from the Latin ante meridiem, meridiem, and post meridiem. They refer to the position of the sun.

b. Require the reproduction story from a topical outline.

c. Teach the punctuation of the divided quotation.

3. In correlating language with history -

a. Read and tell stories of the castle life of the feudal lords.

(1) Describe the castle.

(2) Life of women and children.

(3) Business of the lord.

(4) Education of the knights

(a) His armor.

(b) Tournaments.

(c) Amusements.

1. In oral language -

- a. Study poem; picture; story; conversation.
- b. Teach the use of guess and think: to, two, and too; stop and stay.
- c. Review the contractions and add isn't and aren't to the list.

2. In written language -

- a. Teach the meaning of the exclamation mark (!).
- b. Teach the use of the hyphen,
 - (1) To show that part of the word is on the next line.
 - (2) To join the parts of a compound word as, to-day, to-night, to-morrow.
- c. Require original stories - imaginative, and in good form.

3. In correlating language and history -

- a. Tell the story of Sir Galahad to illustrate the ideals of feudal society and to show the elements of true courtesy which are chivalry, bravery, truthfulness, gentleness and mercy.

H. Eighth month; pp. 267-286.

1. In oral language -

- a. Teach poem; story; picture; conversation.
- b. Teach the use of healthy or healthful;

first two or two first; have or have got;
two to or try and; heated or hot; rise
or raise; rose or raised; have risen or
have raised.

2. In written composition -

a. Teach the series,

(1) Of nouns.

(2) Of adjectives.

(3) Of verbs.

b. Teach punctuation of the series.

(1) Place a comma after each word except
the last.

c. Develop the meaning of the proper adjective. Capitalize English, German, French
American, Columbian, etc.

d. Give dictation exercises which require
the application of all the rules of capitalization and punctuation which have
been taught.

e. Teach the formation of the plural of a
number, figure, letter or character by
the addition of the apostrophe and s.

3. In correlating language with history -

a. Tell the story of the Crusades.

(1) the story of Richard the Lion-Hearted.

(2) The Children's Crusades.

LIBRARY REFERENCES.

- Terry: History Stories of Other Lands. (The Beginnings).
 Chamberlain: How We are Clothed.
 Chamberlain: How We are Sheltered.
 Pitkin and Hughes: Seeing America.
 Baldwin: Thirty More Famous Stories Retold.
 Curtis: Why We Celebrate Our Holidays.
 Perkins: The Irish Twins.
 DeFoo: Robinson Crusoe.
 Hawkes: The Trail to the Woods.
 Bailey: Boys and Girls of Colonial Days.
 Chamberlain: How We Travel.
 Bachman: Great Inventors and Their Inventions.

GRAMMAR.

English Lessons, Book Two.

SIXTH GRADE.

1. Aim of instruction.

- A. To teach the relations of the parts of the simple sentence.
- B. To analyze each new relation and illustrate by many easy sentences.
- C. To continue oral and written composition with particular attention to developing ability to treat one topic in a paragraph.
- D. To arouse a sense of responsibility on the part of the student with respect to the choice of words and the dress of thought.

II. Picture study.

Spring. (Corot.) Practical Drawing Book VI, p. 24.

Crossing the Brook. (Turner.) Practical Drawing
Book VI, p. 25.

An Indian Sculptor. (Rush.)

Sir Galahad. (Watts).

The Fog Warning. (Homer.)

Appeal to the Great Spirit. (Dallin.)

Queen Louise and Her Two Sons. (Staffeck.)

Christ and the Rich Young Ruler. (Hoffman.)

III. Poems. The poems to be studied each month should be selected from this list according to the monthly outline for reading.

A. Bobbs-Merrill Sixth Reader.

Belloc: The Yak, p. 344.

Blake: The Tiger, p. 220.

Browning: Song, p. 167.

Bryant: The Planting of an Apple Tree, p. 163.

Bryant: My Country, p. 278.

Byron: When the Moon is Low, p. 318.

Carroll: A Strange Wild Song, p. 350.

Carryl: A Nautical Ballad, p. 342.

Daly: Flag o' My Land, p. 277.

Herrick: The Hag, p. 330.

Hinkson: The Little Red Lark, p. 156.

Holmes: The Height of the Ridiculous, p. 339.

Letts: The Spires of Oxford, p. 446.

- Lieberman: I Am an American, p. 295.
 Longfello : The Challenge of Thor, p. 37.
 Longfellow: Rain in Summer, p. 177.
 Macaulay: Horatius, p. 396.
 Mackay: The Giant, p. 310.
 Masfield: Roadways, p. 210.
 Peacock: The Priest and the Mulberry Tree, p.393.
 Poe: Eldorado, p. 337.
 Riley: The Pixy People, p. 172.
 Scott: Lullaby of an Infant Chief, p. 403.
 Scott: Soldier, Rest! Thy Warfare O'er, p.418.
 Shakespeare: In Arden Forest, p. 209.
 Shorter: The Piper on the Hill, p. 149.
 Southey: After El nheim, p. 425.
 Tabb: Fern Song, p. 176.
 Taylor: A Night With a Wolf, p. 243.
 Tennison: Winter, p. 150.
 Thaxter: The Sand Piper, p. 143.
 Anonymous: Follow Truth, p. 294.

FIRST MONTH. (pp. 1-16.)

- I. Composition. Review and make frequent reference to the rules governing capitalization and punctuation. (Lesson I, p. 283.)
- II. The sentence. Develop the definition of the term.
 - A. Teach the parts of the sentence; subject, predicate, object. Drill on the recognition of -
 1. Subject: simple and complete.

2. Predicate: simple and complete.

3. Object of predicate verb.

4. Modifiers: word and phrase.

III. Diagraming. Teach diagraming as a method of brief graphic analysis. (see models 1 to 3, p. 267.)

MODEL 1. (pp. 16-17.)

I. Composition. Problem. Why is a book divided into chapters, paragraphs, sentences, etc.? (Lesson II, p. 266.)

II. The sentence. Keep up the daily drill in oral analysis and construction of written sentences.

A. Sentences.

1. Classes as to use.

a. Declarative.

b. Interrogative.

c. Imperative.

III. Diagraming. (Models, pp. 235-266.)

THIRD MONTH. (pp. 27-41.)

I. Composition. Teach the paragraph. (Lesson III, p. 287.)

Problem: What determines the part of speech of a word?

II. Parts of speech.

A. Teach pupils to recognize -

1. Nouns: noun, phrase substantive, possessive.

2. Pronouns: first, second and third persons.

3. Verbs: verb phrase, principal verb, auxiliary.

FOURTH BOOK. (pp. 41-53)

I. Composition. Teach the construction of the paragraph. (Lesson IV. p. 267.)

II. Parts of speech continued.

4. Adjectives.

a. Used to limit or describe.

b. Kinds.

(1) Articles: a, an, the.

(2) Descriptive: little, smooth.

(3) Limiting: two, many.

(4) Predicate adjective: iron is heavy.

(5) Possessive modifier.

(a) noun: John's book.

(b) pronoun: his hat.

III. Diagramming. Require neat, orderly work. Make exercise a graphic analysis of the sentence. Master the conventions of diagramming as each new element is presented.

FIFTH BOOK. (pp. 59-66.)

I. Composition - oral and written. Teach the paragraph. (Lesson V. pp. 290-294.)

II. Parts of speech continued.

5. Adverbs.

a. Used,

(1) To modify a verb.

(2) To modify an adjective.

(3) To modify another adverb.

b. Detected by asking when, how, where, how much.

6. Conjunctions:

a. Use: To connect two or more nouns, verbs, adverbs, adjectives or pronouns.

7. Preposition: Introduced as a part of the adjective or adverbial phrase. It is not taught as a separate element at this time.

III. Diagraming. Teach models on pp. 265, 266.

A. When an adverb modifies a verb, the suspended bar opens to the right.

B. When an adverb modifies another adverb or an adjective, the suspended bar opens to the left.

SIXTH MONTH. (pp. 65-77.)

I. Oral and written composition. Require the written composition. (Lesson VI. pp. 244-246.)

II. The sentence.

A. Basal parts. Provide many oral exercises in which the opportunity is given to pick out the basal parts of sentences.

1. Subject.

2. Predicate.

3. Object.

4. Predicate adjective.

5. Predicate noun.

III. Diagraming. Teach the model diagrams. (p. 268.)

1. Predicate adjective No. 5.

2. Predicate nominative. No. 6.

UNIT 10. (pp. 77-88.)

- I. Oral and written composition. Study the sentence.
(Lesson VII, p. 296.)

II. Phrases. Teach two bases of classification -

A. As to form of composition:

1. Prepositional.
2. Noun phrase.
3. Verb phrase.

B. As to use:

1. Adjective.
2. Adverbial.
3. Noun.

III. Diagraming. Teach the model diagram No. 7. (p. 268.)

UNIT 11. (pp. 89-100.)

I. Oral and written composition. Narratives. (Lesson VIII,

p. 297.) Discuss the outlines with the class. Require each pupil to select an interesting subject about which he has some information. Require the written outline. After several outlines have been written, require one amplified narrative in good form.

II. Phrases. Continue simple analysis with particular reference to adjective and adverbial phrase modifiers.

III. Practice sentence making at the blackboard according to the instructions in Lesson XII.

LIBRARY REFERENCES.

- Holmes: Burton Holmes Travel Stories, Japan.
 Forbes-Lindsay: Daniel Boone. Backwoodsman.
 Spyri: Heidi.
 Terry: History Stories of Other Lands (Lord and Vassal).
 Kipling: The Jungle Book.
 Lefferts: Our Own United States.
 Harvey: Robin Hood.
 DuPuy: Our Animal Friends and Foes.
 Hawksworth: The Strange Adventures of a Pebble.
 Meeker-Driggs: Ox-team on the Oregon Trail.
 Atchison and Uttley: Across Seven Seas to Seven Continents.
 Amicis: The Heart of a Boy.
 Allen: David Crockett, Scout.

SEVENTH GRADE.

1. Aims of instruction. Seventh and eighth grades.

A. General.

1. To develop in pupils the ability to express their views and opinions effectively and to encourage them to have views and opinions about persons, measures and events of interest in the present and in the past, in life and in books.
2. To encourage pride in the use of good English, and to develop appreciation of good writing through studies of models chosen from litera-

ture of the present and the past.

3. To establish the habit of saying what is meant and of meaning what is said.

B. Specific:

1. To give definite training on the technical side of grammar and composition to the extent needed in making practical use of both oral and written English.
2. To establish the habit of referring to accepted principles or standard authorities when a question or construction arises which involves a technicality.

11. Pictures.

The Vigil. (Pettie.) Practical Drawing Book VII.
p. 24.

Jeanne D'arc. (Hyatt.) Practical Drawing Book
VII, p. 25.

Quest for the Holy Grail. (Edwin Abbey.)

The Coming of the White Man. (Reid.)

The Statute, Altorf, Switzerland. (Kissling.)

The Spinners. (Gay.)

The Balloon. (Dupre.)

A Dash for Timber. (Remington.)

The Doctor. (Hildeos.)

Christ at Twelve. (Hoffman.)

III. Poetry.

1. Bobbs-Merrill Seventh Reader. Read for enjoyment

and appreciation.

Babcock: Be Strong, p. 90.

Bates: America the Beautiful, p. 202.

Bangs: As to Looks, p. 109.

Bennett: The Flag Goes By, p. 160.

Browning: How They Brought the Good News, p. 84.

Browning: The Little Cares That Fretted Me, p.
375.

Burns: To a Mountain Daisy, p. 368.

Channing: My Symphony, p. 457.

Drake: The American Flag, p. 164.

Eliot: You May Count That Day, p. 178.

Emerson: Let Freedom Be Your King, p. 176.

Franklin: Franklin Epigrams, p. 97.

Free: Things That Count, p. 93.

Gilder: The Dead Comrade, p. 177.

Harte: A Greyport Legend, p. 91.

Hemans: The Landing of the Pilgrim Fathers, p.
169.

Holmes: The Flower of Liberty, p. 152.

Holmes: The Deacon's Masterpiece, p. 458.

Kilmer: Trees, p. 371.

Lanier: Song of the Chattahoochee, p. 463.

Lindsay: The Son Says His Prayers, p. 392.

Longfellow: The Courtship of Miles Standish,
p. 67.

Longfellow: Paul Revere's Ride, p. 153.

- Longfellow: The Ship of State, p. 228.
- Longfellow: The Arrow and the Song, p. 478.
- Lowell: Yussouf, p. 104.
- Lowell: A Day in June, p. 372.
- Lowell: The Courtin', p. 469.
- MacKay: Tubal Cain, p. 466.
- Markham: O League of Kindness, p. 30.
- Morris: It Takes So Little, p. 109.
- McDougal: Chips of Glass, p. 251.
- Noyes: Kilmeny, p. 88.
- Psalms 23: The Shepherd's Psalm, p. 479.
- Psalms 24: The King of Glory, p. 477.
- Riley: The Man in the Moon, p. 107.
- Riley: The Name of Old Glory, p. 220.
- Riley: The First Bluebird, p. 367.
- Sandburg: The Liars, p. 266.
- Scott: Lochinvar, p. 94.
- Shelley: The Cloud, p. 376.
- Spalding: A Prayer for Our Country, p. 480.
- Van Dyke: Work, p. 135.
- Van Dyke: America for Me, p. 204.
- Van Dyke: The Maryland Yellow Throat, p. 355.
- Wattles: Good Neighbors, p. 474.
- Whittier: Maud Miller, p. 98.
- Whittier: Abraham Davenport, p. 416.
- FIRST MONTH. (pp. 100-111.)

as the work of the sixth grade but increase the number of original exercises. Require short compositions well written.

11. Parts of speech.

A. Nouns.

1. Classes.

a. Common.

(1) Collective.

b. Proper.

(1) Names of persons, places, things.

2. Properties.

a. Number.

(1) Singular.

(2) Plural.

(a) Rules for spelling.

SECOND MONTH. (pp. 112-121.)

1. Composition. Historical subjects. (Lesson X, p. 300.)

Correlate this assignment with the regular history lessons.

11. Parts of speech continued.

b. Case.

(1) Nominative.

(2) Possessive.

(3) Objective.

3. Construction: Office in sentence.

4. Parsing.

- a. Classification: common or proper.
- b. Number: singular or plural.
- c. Case: nominative, possessive or objective.
- d. Reason for the case.

THIRD MONTH. (pp. 122-129.)

I. Composition. Geographical subjects. (Lesson XI, p.303)

Correlate this assignment with the regular geography lessons. An abundance of interesting material may be found in the approved library books listed at the close of the outline under geography.

II. Pronouns.

A. Kinds:

- 1. Personal.
 - a. Simple.
 - b. Compound.
- 2. Other words (adjective pronouns).
- 3. Relative.
- 4. Interrogative.

B. Declension of personal pronoun.

- 1. Case: nominative, possessive, objective.
- 2. Person: first, second, third.
- 3. Number: singular, plural.
- 4. Gender: Masculine, feminine, common, neuter.
- 5. Style: common or solemn.

C. Antecedent.

D. Agreement with antecedent in -

- 1. Gender.

2. Person:

3. Number.

FOURTH PART. (pp.129-136.)

1. Composition. Biographical subjects. (Lesson XII, p.304.)

II. Pronouns continued.

A. Parsing.

1. Classification: simple or compound.

2. Person: first, second, third.

3. Gender: masculine, feminine, common neuter.

4. Number: singular or plural.

5. Case and reason for case.

B. Other words used as pronouns.

C. Interrogative pronouns.

1. Declension of who and which.

D. Relative pronouns.

1. Uses.

a. To connect.

b. Office in relative clause.

(1) as subject.

(2) As object of verb or preposition.

(3) As a possessive.

c. Use of as and what (that which).

d. Relative omitted.

2. Compound relatives:

a. Formed by the addition of ever and soever to simple relative.

3. Classes:

a. Restrictive.

b. Explanatory.

c. Use of comma.

FIFTH UNIT. (pp. 137-141.)

1. Composition. Story telling. (Lesson XIV, p. 308.)

II. Adjectives.

A. Kinds.

1. Descriptive: better, big.
2. Limiting: the, one.
3. Interrogative: which, what.
4. Proper; English.
5. Pronominal: this, many.
6. Articles: a, an, the.

B. Comparison:

1. Degrees:

- a. Positive.
- b. Comparative.
- c. Superlative.

2. Methods.

- a. Regular er, est.
- b. Periphrastic: more, most.
- c. Irregular.

III. Adverbs.

A. Uses.

B. Formation of (-ly).

1. Adding -ly to an adjective.

C. Comparison.

IV. Preposition.

A. Uses.

1. With a noun.
2. With a pronoun.
3. With a group of words having the construction of a noun.

V. Conjunctions.

A. Kinds:

1. Correlative.
2. Coordinate.
3. Subordinate.

B. Interjections.

SIXTH EDITION. (pp. 152-169.)

- I. Composition. A story. (Lesson XV, p. 307.)

II. Part of speech.

- A. Determined by the way a word is used in a sentence.

III. The simple sentence. Teach the meaning of -

- A. Object of predicate verb.
- B. Objective complement.
- C. Indirect object.
- d. Adverbial objective.
- E. Predicate adjective.
- F. Predicate nominative.
- G. Appositives.
- H. Nominative.

1. Of address.

2. Of exclamation.

IV. Diagraming. Show how each of the constructions in III is represented in the diagram. Models for diagraming, pp. 268-271.

REVIEW. (pp. 169-183.)

I. Composition. Use of personal pronouns. (Lesson XIX, p. 313.)

II. The sentence.

A. A simple sentence contains

1. One subject, simple or compound.
2. One predicate, simple or compound.
3. Only word or phrase modifiers.

B. A compound sentence contains

1. Two or more independent clauses.
2. A coordinate conjunction.

C. A complex sentence contains

1. An independent clause.
2. One or more dependent clauses.
3. A relative pronoun, a conjunctive adverb or a subordinate conjunction unless the clause takes the construction of a noun.

III. Relative pronoun.

A. Use as connective.

B. Construction.

1. Subject of the verb.
2. Object of verb.
3. Object of preposition.
4. Possessive modifier.

- C. Teach use of as and what (that which)
- D. Teach formation of compound relatives.
- F. Omitted relative.

NIGHT 20TH. (pp. 184-200.)

- 1. Composition. The use of flowers. (Lesson XX, p. 314.)
- II. Restrictive and explanatory clauses.
 - A. Uses: to limit or narrow the meaning of the independent clause.
 - B. Punctuation.
 - 1. Explanatory clause; set off by comma or commas.
 - 2. Restrictive clause: commas omitted.
 - C. Teach use of who, which and that in the restrictive clause.
- III. Relative pronouns.
 - A. Drill. Let each student -
 - 1. Pick out the independent and the relative clause.
 - 2. Tell whether the relative clause is explanatory or restrictive.
 - 3. Name the relative pronoun and its antecedent.
 - 4. State the office of the relative pronoun in the dependent clause
 - 5. Justify the punctuation.
- IV. Conjunctive adverb.
 - A. Uses.
 - 1. To join the dependent to the independent clause.
 - 2. To modify a part of the dependent clause.

3. To displace a phrase containing a relative pronoun. Test by substituting where for the phrase in which:

A. The place in which Columbus landed is not known.

V. Subordinate conjunction.

A. Use: to connect: (Not a modifier.)

B. Words commonly used as subordinate conjunctions;
if, although, as, because, before, since, that.

VI. Diagraming. (pp. 272-273.)

LIBRARY OF THE

Nicolay: Boy's Life of Abraham Lincoln.

Taber: Breaking Road on the Prairies.

Holmes: Burton Holmes Travel stories. (Egypt.)

Terry: History stories of Other Lands. (The New Liberty.)

Dufay: Our Insect Friends and Foes.

Sharp: The Spring of the Year.

Stevenson: Treasure Island.

Foote: The Man Without a Country, and Other Patriotic stories.

Baldwin: An American Book of Golden Deeds.

Gilman: Alaska, The American Northland.

Stefansson and Schwartz: Northward Ho.

Watkins and Raymond: Best Dog stories.

Thomson: The Land of the Pilgrims.

Alcott: Little Women.

EIGHTH GRADE.

1. Aims of instruction. (See seventh grade.)

II. Pictures.

The Shrine of the Rain Gods. (Couse.) Practical

Drawing Book VIII, p. 24.

Appeal to the Great Spirit. (Dallin.) Practical

Drawing Book VIII, p. 25.

The Indian and the Lily. (Brush.)

View on the Seine. (Homer Martin.)

Oxen Going to Labor. (Troyon.)

The Acropolis, Athens.

The Colosseum, Rome.

The Matterhorn, Switzerland.

III. Poetry.

1. Bobbs-Merrill Eighth Reader.

Anonymous: The Monkey's Wedding, p. 519.

Bible: The Ninety-first Psalm, p. 186.

Bryant: To a Water Fowl; p. 290.

Browning: Home Thoughts from Abroad, p. 313.

Burns: For a 'That and a 'That, p. 435.

Carlyle: To-day, p. 317.

Channing: My Symphony, p. 199.

Collins: How Sleep the Brave, p. 78.

Emerson: Concord Hymn, p. 138.

Galbreath: In Flanders Field (an answer), p. 21.

Garland: Plant Life, p. 277.

Hagedorn: The Troop of the Guard, p. 27.

- Kenley: Unconquered, p. 200.
- Ingalls: Opportunity, p. 188.
- Job: 28: 1, 2, 13-28: Where Shall Wisdom Be Found?
p. 444.
- Jones: What Constitutes a State, p. 118.
- Keats: Morning, p. 309.
- Kilmer: Rouge Bouquet, p. 135.
- Kipling: If, p. 211.
- Kipling: Recessional, p. 228.
- Lindsay: An Indian Summer Day on the Prairie, p.
443.
- Longfellow: When War Shall Be No More, p. 185.
- Longfellow: Evangeline, p. 321.
- Lowell: Washington, p. 140.
- Lowell: Vision of Sir Launfal, p. 213.
- Malone: Opportunity, p. 189.
- McCrae: In Flanders Field, p. 20.
- Nesbit: What Makes a Nation, p. 114.
- Nesbitt: Vitai Lampada, p. 201.
- Poe: Annabel Lee, p. 441.
- Riley: The North Wind and the Sun, p. 306.
- Riley: A Song, p. 458.
- Riley: The Lugubrious Thing-Thing, p. 516.
- Scott: Love of Country, p. 123.
- Service: Fleurette, p. 29.
- Shelley: Daybreak, p. 308.
- Shepherd: The Toll Call, p. 76.

- Silver: America, p. 125.
 Stidger: The Vessers of a Tree, p. 282.
 Southey: Night, p. 312.
 Tennyson: The Throstle, p. 288.
 Tennyson: Ring Out, Wild Bells, p. 315.
 Thackeray: A Tragic Story, p. 515.
 Unknown: The Three Jovial Welshmen, p. 517.
 Whitman: O Captain! My Captain!, p. 183.
 Whittier: Snowbound, p. 413.
 Wordsworth: My Heart Leaps Up, p. 440.
 Wordsworth: Daffodils, p. 279.

III. T. M. H. (pp. 200-210.)

I. Composition. Business letters. (pp. 320-323.)

A. Qualities to be attained.

1. Clearness.
2. Definiteness.
3. Brevity.
4. Courteousness.

B. Form.

1. Heading.
2. Salutation.
3. Body of letter.
4. Complimentary close.
5. Signature.

C. Require one business letter each week. Guide students in their efforts to attain the four standards of quality and to arrange the letter in good form.

Make the students feel proud of a well-written letter.

II. Verbs.

A. Classes.

1. Transitive.
2. Intransitive.

B. Tense.

1. Simple.
 - a. Present.
 - b. Past.
 - c. Future.
2. Relative.
 - a. Present perfect.
 - b. Past perfect.
 - c. Future perfect.

TEACHER'S H. TH. (pp. 211-221.)

I. Composition. Business letters concluded.

II. Verbs concluded.

A. Number: singular or plural to agree with the subject.

1. Troublesome constructions.

- a. Subject: collective noun.
 - (1) Individuals thought of: verb plural.
 - (2) Group thought of: verb singular.

b. The compound subject connected by and -

- (1) Usually requires a plural verb.
- (2) When both nouns refer to the same person

or being takes a singular verb.

(3) When both nouns refer to a different person or thing, the article is used before each noun - plural verb.

(4) When the nouns are preceded by each or every - singular verb.

c. When the conjunction or or nor is used -

(1) The noun following the conjunction governs the verb.

4. Nouns plural in form but singular in meaning require singular verbs.

B. Progressive form.

C. Passive form (voice.)

1. Retained object.

THIRD LESSON. (pp. 232-232.)

I. Composition. Orders. (Lesson XVII, p. 323.)

II. Verbal forms.

A. Infinitive.

1. Nature.

a. Of a verb: expresses action.

b. Of a noun: office in the sentence.

c. Does not take a subject in the nominative case.

2. Uses.

a. As a noun, an infinitive may be,

(1) Subject of verb.

(2) Predicate noun.

- (3) In apposition.
- (4) Object of preposition.
- (5) Object of a verb.

b. As an adjective.

- (1) To modify a noun.
- (2) In the predicate.

c. As an adverbial modifier.

- (1) To modify a verb.
- (2) To modify an adjective.
- (3) To modify an adverb.
- (4) To complete the meaning of a verb.

3. Tense.

- a. Present.
- b. Perfect.

4. Without to.

III. Diagramming. (pp. 274-275.)

FOURTH BOOK. H. (pp. 232-237.)

I. Composition. Formal invitations. (Lesson XVIII, p. 324.)

II. Verbal forms.

A. Participle.

1. Properties.

- a. Of a verb.
- b. Of an adjective.
- c. Of a noun.

2. Tense.

- a. Present.

b. Past.

c. Perfect.

3. Construction.

a. Of an adjective.

b. Of a noun.

c. Nominative absolute.

III. Diagraming. (p. 275.)

FIFTH MONTH. (pp. 238-244.)

I. Composition. Prefixes and suffixes. (Lesson XXX, p. 325.)

II. Verbal forms concluded.

A. Verbal nouns (gerani).

1. Definition.

2. Uses:

a. As subject of verb.

b. As object of verb.

c. As object of preposition.

d. As predicate nominative.

e. In any other construction of a noun.

f. With possessives.

III. Diagraming and analysis.

SIXTH MONTH. (pp. 244-253.)

I. Composition. Review capital letters and punctuation. Lesson I, p. 283.

II. Verbs.

A. Principal parts. Make a list of verbs which give the class trouble. Use the list as the basis

for frequent intensive oral and written drill.

B. Conjugation. Conjugate common verbs through the six tenses of the indicative mood, active and passive voice.

C. Form.

1. Regular.
2. Irregular.

D. Mood.

1. Indicative.
2. Imperative.
3. Subjunctive.
4. Potential.

UNIT FIFTH. (pp. 243-257.)

I. Composition. Let the needs of the class determine the assignments this month.

II. Verbs continued.

A. Teach the use of shall and will in asking questions.

1. Shall as used in the first person.
2. Will as used in the second person.

B. Teach the use of should or would.

1. To express doubt.
2. To express implied impossibility.

C. Troublesome verbs.

1. Transitive; set and lay.
2. Intransitive; sit and lie.
3. Intransitive use of set.

Lesson 200. (pp. 268-269.)

- I. Composition. Oral and written analysis. Let the pupils give the oral analysis of the 38 sentences that are diagrammed on pp. 265 to 276.

II. Verbs concluded.

- A. Defective verbs: may, can, must, shall, ought.
- B. Irregular verbs. Provide frequent drills in which the pupils have an opportunity to give the principal parts of the verbs listed on p. 259. Practice constructing sentences to show the correct use of the perfect participle.

LITERATURE REFERENCES.

Olivant: Bob, Tom of Battle.

Russell Driggs: Hidden Heroes of the Rockies.

Terry: History Stories of Other Lands (The Modern World.)

Thomson: The Land of Evangeline.

Case: Tom of Peace Valley.

Ramprey: Under These Trees.

Wilson and Driggs: The White Indian Boy.

Logie: From Lincoln to Coolidge.

Nicolay: The Boy's Life of Ulysses S. Grant.

Bok: A Dutch Boy Fifty Years After.

Wiggin: Rebecca of Sunnybrook Farm.

DuPay: Our Bird Friends and Foes.

GEOGRAPHY.

GENERAL SUGGESTIONS.

Abbreviated and adapted from the Publisher's Outline.

The Textbook. Get thoroughly acquainted with the textbook. Study the author's introductory statements so as to understand his views, purposes and aims, and how he endeavors to realize them. Examine the table of contents and read the subject matter. Go through the maps, pictures and questions. Look over the reference tables, diagrams and the index. The text is much more than a tool--it is the principal source of information; it is the organization of a great body of material around a comparatively few large geographic units of study.

The children should be taught to read a section quickly, to find and organize the leading facts bearing upon a question or problem, and to generalize the principal thought. They must be taught how to use the questions, maps, pictures, reference tables and the index. Definite, clear assignments in the form of questions, problems, references, map studies, and the like should precede study. In the beginning, and as occasion may require thereafter, the teacher should go over the lesson with the class for the purpose of illustrating how to study effectively.

Practical Needs. The practical needs of geography are greater to-day than ever before. A background of geographic principles and a large fund of geographic knowledge are necessary for the intelligent reading of newspapers; for

the interpretation of maps and atlases; for the understanding and solution of local, national and foreign problems; for the conduct of modern business within our own land and of foreign commerce reaching to the four corners of the earth. The practical needs are varied and wide in their application.

Cultural Value. Of equal importance is the cultural value. With the single exception of literature, no subject in the elementary curriculum makes so great a contribution to what we term a liberal education. It breaks through the barriers of prejudice, national and racial antagonisms; it measurably broadens man's conception of the world, enlarges his appreciation of nature, of other lands, and other people. When well taught, it develops initiative, reasoning power and ability to meet and solve new situations.

Local Materials. The immediate surroundings of the school, the home, and the neighboring country furnish a rich source of material with which the child should be reasonably familiar. Land and water forms, trades and industries, travel and transportation, all furnish concrete material for the understanding of similar geographic conditions as they are treated in the text. Constant comparison of the familiar with the unknown builds up accurate images and ideas. A few carefully planned field excursions will organize such local materials into geographic facts and ideas. The hill on which the school is located, the valley below, the falling rain, the growing crops, the railroad transportation--

all of these may be familiar local experiences awaiting translation into geographic ideas at the hands of the teacher. When their local significance is understood, a background is established for the interpretation of similar conditions elsewhere.

Globe and Maps. A globe is essential in teaching the shape, the relative size and the movements of the earth, and its relation to the sun and moon. No school can afford to be without one.

The use of the maps in the text and such others as may be available should become habitual. The pupils must be taught to read a map just as thoroughly as the printed page. The symbols for land and water forms, boundaries, location, distance, and the like must mean real concrete things and not merely lines and colors. Map studios should include thought-provoking questions. For example, why are there more large cities along the Great Lakes than on the Mississippi river? Why was the Erie canal built? Would you expect the Mississippi to be of greater value than the Colorado? Raise questions which require the use of more than one map; e.g., study the physical, rainfall, and population maps of the United States and account for the distribution of population. Refer frequently to the maps in solving questions and problems. The teacher will find that the text introduces the study of maps by very simple illustrations, and gradually builds up ability to do more advanced map work.

The making, tracing, and drawing of maps has received undue emphasis in the past. Spending long hours in the artistic execution of maps may constitute a good drawing lesson or be a pleasant hobby for the teacher, but when subjected to the test of real geographic value it must be classed as a minor part of the subject. There are, however, many topics or subjects where both teacher and pupil should use ready map sketching as a quick and graphic means of illustrating or imaging of a geographic condition. Simple outline maps will picture the distribution of rainfall, population, various products and other important data. Both pupils and teacher should develop skill in simple map sketching on the blackboard as well as on paper. Accuracy in small details is unnecessary.

Current News. Current newspapers and magazines are filled with live interesting geographic material related to local, national and foreign questions. Encourage the pupils to read these publications and make contributions to the class. Train them to read publications, to observe the geographic material and report to the class.

Collections. When studying a country or a large subject, the teacher should encourage the pupils to collect for class use as many specimens or articles relating to the subject as possible. Rocks, soils, minerals, woods, products, and so on may be assembled, put in boxes or bottles, or mounted on cardboard, properly labeled and made ready for teaching purposes.

Pictures. Pictures are entitled to special mention. In their several forms they are most valuable aids in teaching geography. They tell interesting stories, they assist in making ideas concrete, they give vivid impressions of distant places and people, they add a touch of reality to the printed page. Direct the attention of the child to the pictures of the text and teach him to read them as you do the printed page. They come from several sources, but most important is the text.

Advantage should be taken of the child's natural desire to collect pictures. Make special assignments to individuals or committees for the collecting of pictures on given subjects, as lumber, the New England fisheries, cotton, western irrigation, etc. Pictures from magazines, advertisements, photographs and post cards should be carefully selected, and then classified according to subjects, countries, or industries, and filed in heavy envelopes properly labeled for repeated use.

Graphs and Diagrams. Teachers and pupils should make use of graphs and diagrams for the purpose of explaining or visualizing physical features, varying production of some crops, or comparing industrial processes. By means of a simple blackboard illustration, a cross section of a river valley, a delta, a glacier, or a plateau may be vividly impressed.

THE NATURE OF GEOGRAPHY.

Geography is the study of the relation between man and

nature; the study of man's contact with the physical world; the study of the earth as the home of man.

It teaches the interdependence of men and their dependence on nature.

It is a content subject. It should give the child a rich body of information and geographic knowledge, so that he may understand his relations to nature and to society. He should also be trained to observe, to read maps, to do ready map sketching, to investigate, to organize subject matter, to appreciate and interpret or solve national and local problems, and to think clearly and straight on geographic topics.

Formal or "sailor geography," or place geography, can best be learned as essential details of the descriptive treatment of more important subjects. The story of a people, the rich, full description of a country or region will teach in an interesting way more formal geography than is possible by the antiquated bone-dry encyclopedic methods commonly used. The descriptive concrete treatment of important subjects given in Book I makes geography real and vital. It teaches abstract things concretely. The Eskimo (p.1) and The Chinese Tea Growers (p.313) are illustrations.

DIRECTIONS FOR THE TEACHER.

Effective instruction requires that the materials be organized around large subjects, units, types, basic ideas or problems. For example, coal and iron production in western Pennsylvania (see text, p. 176) is a large subject

of study involving many problems and varied facts and principles of geography. It becomes at once a basis for the interpretation of similar geographic conditions wherever found. The same is true of petroleum. (Text, p. 118)

Treat the subject or unit of study as a whole. The organizing idea may be in the background, but it should control the selection of material and the method of procedure. Important parts should stand out clearly, but must relate to the principal subject.

The units of study in the intermediate grades should be comparatively simple and easy of comprehension, but they must be thoroughly taught, so that repetition of the same material will be unnecessary in the grammar grades.

Place emphasis upon the use to be made of information. Organizing the materials around important topics or large units will accomplish this. They form the basis for contrast, comparison, and the classification of similar geographic materials.

Endeavor to teach thoroughly a few large subjects or types in each grade rather than a great number of minor unrelated ones.

The first stages of organized work should be concerned with local geography. The child's experience with nature and his information of the local region are the bases for interpreting and judging distant regions.

The field excursions from time to time to observe and study the home neighborhood will organize the pupil's store

of information and experience around graphic units. They should be planned before going. Definite assignments should be made. Observation lessons make geography real and concrete.

In the intermediate grades, especially the fourth, the topics should receive rich oral descriptive treatment. The geographic conditions or ideas should be made concrete and real through demonstrations and by oral presentation and skillful questioning. The story of the Chinese (p. 313) will become highly interesting and instructive when given in the form of rich oral discussion. Thought questions and problems tend to grow out of teaching of this kind.

Provide review lessons which focus attention on essential features and summaries of the country or subject studied. Make comparisons with and applications to similar problems or units previously taught.

While the fact materials are best learned as subordinate points of large subjects and topics, it is necessary to offer drill lessons from time to time to aid in fixing in the memory certain essentials of location, areas, generalizations, definitions, etc. As the minimum essentials have never been agreed upon, the teacher must use her own judgment in determining them.

Methods to Use. While the materials of Human Geography Book I, are organized around man in relation to the earth as his home, the variety of these relations and activities necessitates the use of more than one method for effective

teaching. The methods recommended by Book I are: The problem, type study, story, journey, excursion, project and map study. They will organize geography materials around large units or problems, arouse in children an interest in following out geographic ideas to the ends they serve, and subordinate more facts to large topics and subjects. There is necessarily wide overlapping in the use of these several methods. A type study should include problems to solve; a problem may well be solved through a field excursion, or a map study lesson, and so on. The teacher selects and applies the method best suited to the subject matter and the purposes she wishes to accomplish.

The Four Steps. As a rule, the steps in the recitation period should be assignment, study, oral or written test, recitation-review. The lessons of the text can easily be organized around these four steps. The material covered during one recitation should usually be presented in accordance with these four steps. Or an entire chapter, using several recitation periods, may be so organized and taught.

Make definite, clear assignments of problems of the text, maps and references. With books open and maps at hand show the pupils how to study a section of the text, read a map, or examine a reference in answering the assignment. As ability to do work of this kind increases, the pupils may be placed more and more on their own resources. Teaching pupils how to attack and master the materials used

in the study of geography cannot be too strongly emphasized.

After study, there should be a brief oral or written test to ascertain whether the assignment and the essential facts have been learned satisfactorily.

The recitation-review step should include a vigorous oral discussion of the assignment, the details of what has been studied, comparisons and contrasts with other subjects previously studied, and close with a summary or application of the material studied. For an illustration, see the problem Lesson on the Eskimo, page 16.

The recitation must be a learning period, not merely a time for reciting lessons. Procedure in accordance with the four steps above mentioned will accomplish this.

Questions of the Text. The questions of the text are splendid for assignment, class discussion and for written tests. They have been carefully chosen, and, to satisfy the varying needs of individual pupils, are usually grouped into three paragraphs in order of difficulty.

Develop Initiative. One of the most important functions of the school is the development of initiative and self-reliance in pupils. To develop initiative in pupils, they must exercise initiative, and the class period must supply the opportunity. To secure this result the exercises of the recitation period must be modified. The teacher must become less prominent and give the pupils the opportunity to do most of the planning, thinking and executing while she directs and stimulates. See the plan for the

Problem Lesson of the Eskimo.

The Small Rural School. The preceding suggestions for the conduct of the recitation are recommended for the small rural school as well as for the larger school of the city or town. They can be executed in the small school if the teachers realize their opportunities. There are three important conditions favoring the small school that tend to overcome some of its administrative limitations. First, several grades to the teacher with the consequent short class periods necessarily mean long study time for the pupils at their desks; second, few pupils to a class affords an opportunity for basing the teaching largely upon the individual needs of the pupils; third; limited numbers also provide the opportunity for individual initiative with the consequent growth of self-reliance.

In organizing the lessons around the four steps as above suggested, a suggestion with regard to the use of the long study time may help. Use one recitation period to assign the lesson and show the pupils how to study it. Expect them to prepare it thoroughly during the long study time spent at their seats. At first, supervise their study. They will need suggestions on how to work. Show the slower pupils better ways of doing things. Train them in good habits of using the text, etc. The next day, use the time of the second recitation period for the brief test and the oral recitation-review. Do not hesitate to extend the lesson over two recitation periods on separate days. Should

the material be long or difficult it may be extended over three or four periods and as many days. The long periods for seat study and the opportunity for individual teaching should enable the teacher to assign longer lessons, and should go far toward overcoming certain administrative conditions confronting the small school.

ILLUSTRATIVE LESSONS.

The Problem Method.

A problem is the statement of a large geographic unit of study or idea, usually in the form of a question, the working out or solution of which requires the study of a variety of facts and principles of climate, surface, products, population and industries. It becomes the center around which these facts are gathered and organized. It directs and controls the work with the text, maps and references. It gives the pupil a definite aim for which to work. It stimulates independent thinking and reflection, arouses discussion and thought-provoking questions. It is of paramount importance that assignments include one or more problems within the experience and ability of the pupils. Solving them gives that feeling of satisfaction which comes with accomplishment.

In the text the author has very properly provided numerous problems in the questions at the end of each chapter. The teacher and pupils are expected to use them.

The teacher should train the pupils to apply the following questions. They will aid in finding and solving

problems and in thoughtful reading.

- (1) What is the subject of the lesson?
- (2) List the leading topics.
- (3) What facts do you know about them?
- (4) What is not clear in this lesson?
- (5) What additional facts do you need to know?

Their purpose is to aid the pupils in developing independent habits of study. For example, these questions may be applied to the problem of How Fishing Helped Start Manufacturing in New England. (See text, p. 153.)

THE ESKIMO.

Problem. How does the Eskimo live without trading with the people of other lands?

Time Required. Three to five recitation periods or as many days will probably be required. One entire period could well be used in demonstrating to the class how to attack the text, maps and references successfully. As pupils gain ability to work independently they should be permitted to do so at their desks, or in the recitation period under the guidance of the teacher.

Assignment. We live in comfortable homes, have abundance of good food, wear beautiful clothes, travel on railroads and steamships, have fine roads, automobiles and many other luxuries. The Eskimos are a people who do not have any of these things; they live off to themselves and have very little trade or communication with the outside world. Could we live that way? Would you be interested in learning

how it is that the Eskimos can live and be happy without the many things that we civilized people have?

Study. State the problem and briefly explain its meaning. Read the text, pages 1 to 6. The teacher should locate our own land and Eskimo land on the maps on pages 20, 24, 35, 44 and 45 of the text. Do the same on the globe and on a wall map of North America. How could you travel to Eskimo land? How far is it? What kind of country would you find? Name the countries and bodies of water you can find in Eskimo land.

Again read the text, finding correct answers to questions 1 to 7 on page 6.

Test. Prepare and place on the blackboard a written test of ten or fifteen fact questions: e.g., Where is the Eskimo country? Why is it cold? What does the Eskimo eat? What does he wear? In what kind of a house does he live? How does he travel? What does he use for fuel and light?

Recitation-review. Call for a reproduction of the story. Have a vigorous discussion, using the questions in the text and those used in the written test. Have a strong pupil state the problem. Ask for a summary telling how a primitive people live without trading or communicating with the outside world. Compare and contrast Eskimo life with our own. Review and drill on the map studies.

Special Exercises. Write a story of the whale that Shoo-e-ging-wa found. Make a chart or booklet on Eskimo life.

Library References. How We Are Sheltered (Chamberlain, p. 8); How We Are Clothed (Chamberlain, pp. 10 and 175); Alaska, the American Northland (Gilman p. 221).

THE TYPE STUDY METHOD.

The type study is the detailed treatment of a basic geographic idea or unit around which important extensive groupings of facts and principles can take place. It has two clearly marked stages. First, the idea is given rich concrete descriptive study. The second stage is that of expansion and enlargement. Such a large unit of study centers in some important practical enterprise like the operation of a railroad, or in a physical feature as a glacier, a river basin, and the like. As the basic idea is developed it gathers to itself an instructive and valuable body of knowledge. It becomes the key that unlocks the door to a large number of similar undertakings, or geographic features. The lesson plan for the study of the wheat farm that follows illustrates the method and its two stages.

Large Lesson Planning Demanded. The type study demands that the fragmentary planning of daily lessons must be supplanted by a large simple plan requiring a whole series of lessons, all organized around the central topic. In the same degree that miscellaneous day by day planning is wasteful of time and scattered in organization, to that degree does the large unit of study economize time and increase coherence and organization. A topic such as Chicago as a trade center will furnish the child with more information,

more facts of geography and history, give a deeper insight into their meanings, and build up a sounder background for the interpretation of other cities over the entire country than is possible through the day to day procedure commonly prevailing.

The Test. Fortunately for the teacher and the pupils, Human Geography deals with large units of study. Big ideas are concretely described or told in story form. Around them are organized the subordinate geography materials. It lends itself freely to larger lesson planning based on well-organized big topics.

Note.--For a complete treatment of teaching by type studies the reader is referred to the writings of Dr. C. A. McMurray, of George Peabody College for Teachers, Nashville. He has published a large number of carefully prepared geography type studies adapted for use in the elementary grades. Type Studies and Lesson Plans, volume III, No. 1, presents in detail "Method of Handling Types as Large Units of Study".

A WHEAT FARM.

Materials. (1) Text, pages 59 to 65. (2) Maps and pictures, pages 58 to 65. Physical and political map, page 69. (3) Type Studies and Lesson Plans, volume II, No. 6, "A Wheat Farm in North Dakota," by Dr. C. A. McMurray, Nashville.

Lesson Topics or Units. The following series of lessons is organized around a wheat farm. The first stage--the rich concrete description is given in the first lesson. In

the succeeding lessons the idea is expanded and grows to include milling, marketing and wheat-producing regions of this and foreign lands. This is the second stage. The principal lesson units and brief comments thereon are here given. While the text gives a comparatively full and rich treatment of wheat it should be supplemented by the type study above mentioned. Both are necessary in teaching the series of lessons.

1. Present a vivid concrete description and study of a wheat farm in the valley of the Red River of the North. Type Study, pages 9 to 11; text, section 78. Note details of location--maps, pages 62, 68, 69.

2. Problems of operating a wheat farm; Soil, climate, plantings, enemies; examine pictures of the text, pages 60 and 61.

3. Harvesting: Text, section 76; Type Study, pages 16 to 18. Cutting, stacking, threshing, labor difficulties and other problems.

4. Marketing: Text, section 77; Type Study, pages 19, 21, 32, and 33. Transportation, elevators, storage, prices, selling, etc.

5. The manufacture of flour and other wheat products: Text, section 80; Type Study, pages 24, 25, and 26. Emphasize Minneapolis as a great milling center.

6. The use of machinery in the production and manufacture of wheat; Text, sections 75, 76, 80 and 81; Type Study, pages 16 and 30. Examine pictures in the text.

Exportation of machinery.

7. Compare and contrast with other wheat-producing areas in the United States and in foreign lands; Text, sections 78, 79, 81, 82, 105, 148, 173, 263, 295, 327, 370, 399, 403, 431; Type Studies, pages 26 to 39. Wheat exports, see Reference Table No. X.

8. Compare wheat with other grain crops of the United States--corn, rice, barley, oats. Lay emphasis on quantity, value, area of production, and uses. Text, sections 60-74, 84, 173; figures, 79, 80, 87, 90, and 100; Type Study, pages 40-43.

9. Review and generalize by calling for a brief reproduction of the description of the wheat farm and its activities. Summarize the essential points developed under cultivating, harvesting, marketing, manufacturing, machinery, other producing areas, and comparison with other grain crops.

10. Offer a review drill lesson on the place geography used in teaching the series of lessons.

Special Exercises. Write the story of "A Grain of Wheat." Prepare written statement telling why this region, the North Central States, is called "the bread basket of the world." Order samples of wheat products from one of the large mills at Minneapolis, Topeka, Wichita, Kansas City, or elsewhere. Assemble wheat specimens and pictures. Have the class prepare a wheat booklet or chart. An observation lesson to view the harvesting of wheat, or a trip to a flour mill would be very valuable.

Comments. It is expected that the teaching of this type study will require from ten to fifteen class recitations. The procedure will necessarily vary with the different lessons and the purpose of the teacher; however, she will find that the materials outlined lend themselves easily to the four steps of assignments, study, text, recitation-review, as illustrated in the problem lesson above.

Library References. Lefferts: Our Own United States, page 210. Pitkin and Hughes: Seeing America, page 273.

FOURTH GRADE

I. The Eskimo.

A. Problem: How does the Eskimo live without trading with the people of other lands?

B. Materials.

1. Text, secs. 1-5.
2. Pictures.
 - a. In the text.
 - b. Brought to the class.
3. Maps, pp. 20, 24, 26, 34, 35.
4. Globe.
5. Library references.

Chamberlain: How We Are Clothed, p. 10.

Chamberlain: How We Are Sheltered, p. 8.

Chamberlain: How We Travel, p. 72.

Atchison and Uttley: Across Seven Seas to Seven Continents, p. 231.

Stefansson and Schwartz: Northward Ho, p. 35, 61.

C. Teaching process.

1. Assignment: Recount the conveniences in the homes of the children as a background for the scant conveniences of the Eskimo home.
2. Study. State the problem and briefly explain its meaning.
3. Test. Prepare and place on the blackboard several questions of fact.
4. Recitation-review. Call for reproduction of the story, etc.
5. Supplementary reading. Let children report additional information gleaned from reading the library reference books.

II. The Indian of the Great North Woods.

- A. Problem: How does the Indian make a living for his family?

B. Materials.

1. Text, secs. 6-11.
2. Pictures.
3. Maps, pp. 24, 26, 34, 37.
4. Library references.
 Chamberlain: How We Are Sheltered, p. 25.
 Chamberlain: How We Are Clothed, p. 100.

C. Teaching process.

1. Assignment.
2. Study.
3. Test.

4. Recitation.

5. Report on library references.

III. The cod fisherman.

A. Problem: Why must the inhabitant of Labrador fish for a living?

B. Materials.

1. Text, secs. 12-15; maps, pp. 20, 24, 25, 26, 34, 35; pictures.

2. Library references.

Chamberlain: How We Are Fed, p. 58.

C. Teaching process: assignment, study, test, recitation, reports.

IV. The earth and maps.

A. Problem: What conventions must be understood in order to read a map?

B. Materials, Text, secs. 16-23; pictures and maps, pp. 14-31; a globe; a small compass.

Note.--The compass may be made by magnetizing a needle and suspending it in a horizontal position in a loop of fine thread or of a hair

C. Teaching process.

V. The globe, the continents, the ocean, the hemispheres.

A. Problem: The same as in IV.

B. Materials: Text, secs. 24-29; maps, pictures and diagrams, pp. 19-28; globe, baseball and light.

C. Teaching process.

1. Take secs. 24 and 25 first. Use all pictures that

illustrate the facts stated. Show by illustration that the earth is round.

2. Secs. 26 and 27. Demonstrate the daily rotation of the earth on its axis. Show what causes night and day, reproducing the illustration of 35.
3. Secs. 28 to 30. Illustrate the hemisphere by using apples or spheres that may be easily divided. Use figs. 31 and 36-39. Repeat the lamp experiment in Fig. 35 to show that one hemisphere is always turned toward the sun.

D. Special exercises.

1. Prove that the earth is round.
2. How did Peary know when he reached the North Pole?

VI. Latitude, longitude and zones.

- A. Problem: How do explorers locate a place on the earth or sailors a ship at sea?
- B. Material. Text, secs. 70-74; maps, pp. 29-31; globe.
- C. Teaching process. Illustrate latitude, longitude, and zones by using a large orange or a basket ball. Insert pins in the orange for the poles or mark them clearly in the ball. Draw the equator at points equidistant from the poles. Add the parallels of latitude and the meridians of longitude. Compare with the globe. Mark the zones on the basket ball with different colors. Make the idea of the zones clear by contrasting and comparing the way the people live in the different zones and the varied climatic conditions.

- D. Class project. Draw a county map on the blackboard, showing the physical features and political subdivisions.

NORTH AMERICA.

VII. The continent.

- A. Problem: What advantage does North America offer to the people?
- B. Materials. Text, secs. 35-46; maps, pictures.
- C. Teaching outline.
1. Aim. To give the child a general notion of the continent, its physical features, political subdivisions, people, products, activities, natural wonders, etc.
 2. Have the pupils take the imagined journey east and west and north and south by reading and reproducing the interesting story as planned by the author.
 3. Be sure to conduct a class exercise in which figs. 31, 47, 48, 49 and 66 are all used.
 - a. Visualize mountains by figs. 23, 59, 53, 55, 117, 122, 123.
 - b. Visualize plateau by figs. 52, 132, 150.
 - c. Visualize a plain by figs. 66, 95.

VIII. Countries and climate.

- A. Problem: How does it happen that there are several countries in North America?
- B. Material. Text, secs. 47-51; pictures, maps, pp. 37, 48.
- C. Teaching outline. Continue the journey lesson.

Beginning with the land of the Dakotas, continue the travel to Panama, and tell what climatic conditions would be found.

D. Library references.

IX. Trade and government.

A. Problem: Show that our country is a much better place in which to live because of superior trade facilities and a good government.

B. Materials. Text, secs. 52-55; maps, pp. 44-46.

C. Teaching outline. Assign the chapter and the questions for study.

D. Library references.

X. The United States.

A. Problem: How do the people of one section help those of another?

B. Materials. Text, secs. 56-59; maps and pictures, pp. 46-52.

C. Teaching outline. Have each pupil make a simple map sketching physical features and locating principal places.

THE NORTH CENTRAL STATES.

(Note.--The references in parenthesis refer to the sections in the supplement, Geography of Kansas.)

XI. Corn and soil.

A. Problem: Why is this section of the North Central States the best place in the world to raise corn?

B. Material. Text, secs. 60-74; maps and pictures, pp. 47-

59. (C. 25, 36.). Samples of corn and corn products; specimens of soil including rock and stone. Assign the whole chapter and the questions for study. Compare with corn production of other state groups and other countries. See secs. 34, 112, 172, 173, 203, and 490.

C. Library references. (Corn.)

Lefferts: Our Own United States, p. 130.

Pitkin and Hughes: Seeing America, p. 264.

XII. Wheat.

A. Problems: Why is this one of the best regions in the world for growing wheat? What part does machinery play in the production and manufacture of wheat? Compare wheat and corn as the two greatest grain crops. Which is more useful to man? Use the index for wheat and find what is said on each page reference.

B. Materials. Text, secs. 75-82; pictures and maps, pp. 58-65. (S. 36; figures 3. 4, 16, 22.)

C. Library references.

Chamberlain: How We Are Fed, p. 7.

XIII. Cattle and hogs.

A. Problem: How does the farmer market his corn?

B. Materials. Secs. 83-90; maps and pictures, pp. 65-70. (S. 38, 65, 47.)

C. Library references.

Chamberlain: How We Are Fed, p. 19.

D. Teaching outline. Draw a simple illustration of a grain of corn on the blackboard. With the crayon

quickly add an eye and ear, a tail and four feet and you have a fat hog ready for market. Why does the farmer market most of his corn by feeding hogs? Why not market wheat in the same way? Compare with the production of cattle and hogs in other countries. Show the pupils how to do this by finding the page references to cattle and hogs in the index.

XIV. Lumber.

- A. Problem: What was the source of the lumber used in building and furnishing this schoolhouse?
- B. Materials. Text, secs. 91-98; maps and pictures, pp. 71-75.
- C. Library references:
 Pitkin and Hughes: Seeing America, p. 29.
 Chamberlain: How We Are Sheltered, p. 72.
 Jefferts: Our Own United States, p. 314.

XV. A general view of the North Central states.

A. Problems:

1. What four factors have caused so many people to come into this section?
2. Why are the North Central states called "the bread basket" of the world?
3. Why is one-third of the manufacturing of the United States done here?

- B. Materials. Text, secs. 99-105; maps and pictures, pp. 52-60.

- C. The question of the text should be assigned and

thoroughly prepared.

THE PLATEAU STATES.

XVI. Sheep and wool.

- A. Problem: Where does the wool come from that is used to make our clothes?
- B. Material. Text, secs. 107-116; maps and pictures, pp. 82-85; figs. 52, 88, 117.
- C. Library references.
 Chamberlain: How We Are Clothed, p. 41.
 Lefferts: Our Own United States, p. 252.

XVII. Mining.

- A. Problem: What is a copper mine like?
- B. Materials. Text, secs. 117-123; maps and pictures, pp. 82-89.
- C. Library references.
 Pitkin and Hughes: Seeing America, p. 250.

XVIII. General View.

- A. Problems: Assign these topics to different members of the class: "Pony Express"; Frontier Life; Yellowstone Park; The Mormons.
- B. Material.
- C. Library references.
 Pitkin and Hughes: Seeing America, p. 215.

THE PACIFIC STATES AND ALASKA.

XIX. Oranges and dried fruit.

- A. Problem: Why is so much California fruit on the Kansas market?

B. Material. Text, secs. 133-136; maps and pictures, pp. 97-99.

C. Library references.

Chamberlain: How We Are Fed, p. 144.

Lefferts: Our Own United States, p. 293.

XX. The Pacific Salmon.

A. Problem: Where are all the salmon fishing grounds and the salmon canneries located?

B. Material. Text, secs. 137-141; maps and pictures, pp. 97-103.

C. Library references.

Bobbs-Merrill Seventh Reader, p. 289.

XXI. General View of the Pacific States and Alaska.

A. Problem: With the help of the class formulate the problem for this assignment.

B. Material. Text, secs. 142-155; maps and pictures, pp. 96-110.

C. Teaching outline. Use the text and assign the questions as in other lessons, giving a general view of a section.

THE SOUTH CENTRAL STATES

XXII. Cotton and deltas.

A. Problem: Why is this group and the South Atlantic group of states so well adapted to the growing of cotton?

B. Materials. Text, secs. 156-162; maps and pictures, pp. 111-117.

C. Library references.

Chamberlain: How We Are Clothed, p. 29.

Lefferts: Our Own United States, p. 97.

XXIII. Petroleum.

A. Problem: Where is oil produced in this group of states?

B. Material. Text, secs. 163-168; map and pictures, pp. 118, 119.

C. Library references.

Lefferts: Our Own United States, pp. 49, 179.

Book II, Kansas Supplement, pp. 10.

XXIV. General view of the South Central States.

A. Problem: To be assigned by the teacher.

B. Material. Text, secs. 169-178; maps and pictures, pp. 111-124.

C. Teaching outline. Refer to the outline previously given for similar lessons on state groups.

THE SOUTH ATLANTIC STATES.

XXV. Vegetables, peanuts and naval stores.

A. Problem: What does this section supply to the northern market in winter?

B. Materials. Text, secs. 179-182; maps and pictures, pp. 125-128.

C. Library reference.

Lefferts: Our Own United States, pp. 81, 106.

XXVI. Cotton cloth.

A. Problem: Why has New England taken cotton from the South for so many years and manufactured it into cloth?

B. Materials. Text, secs. 183-185; pictures, pp. 129-130.

C. Library reference.

Chamberlain: How We Are Clothed, pp. 58, 117.

XXVII. General view of the South Atlantic States.

A. Problem: Why have the South Atlantic States more industries and manufactures than those of the South Central group?

B. Materials. Text, secs. 186-190; maps and pictures, pp. 125-235.

C. Teaching outline. Follow the previous outlines of similar lessons. This is the time to unify the treatment of this group of states. Make a report on Washington as the seat of the national government. Locate the seaports and list ten things that are exported and ten that are imported.

D. Library reference.

Lefferts: Our Own United States, p. 24.

MIDDLE ATLANTIC STATES.

XXVIII. Coal and Iron.

A. Problems.

1. Who are the workers in the coal and iron industries?
2. What is the new way of making iron?
3. How is coal made and mined?

B. Materials. Text, secs. 191-198; maps and pictures, pp. 136-142.

C. Library references.

Chamberlain: How we are Sheltered, p. 128.

Lefferts: Our Own United States, p. 174.

- D. Teaching outline. Assign the questions at the close of this section. List and locate all of the large cities in these states that are important because of the coal and iron industries.

XXIX. A great trading city and a great trade route.

- A. Problem: Why has New York grown to be the largest city in the world and the greatest trading city in America?
- B. Materials. Text, secs. 199-203; maps and pictures, pp. 138-147.
- C. Library reference.

Lefferts: Our Own United States, p. 1.

XXX. General view of the Middle Atlantic States.

- A. Problem: How can this small area support so large a population?
- B. Material. Text, secs. 206-213; maps and pictures, pp. 136-153. Reference tables and index.

THE NEW ENGLAND STATES.

XXXI. How fishing helped start manufacturing.

- A. Problem: How does such a large part of the population now live in cities and work in factories?
- B. Materials. Text, secs. 214-219; maps and pictures, pp. 154-157.

C. Library references.

Chamberlain: How We Are Clothed, pp. 48-58.

Chamberlain: How We Are Fed, p. 58.

XXXII. The manufactures.

A. Problem: What do you use or wear in the home or on the farm that is made in New England?

B. Materials. Text, secs. 220-230; maps and pictures, pp. 154-156.

C. Library references:

Chamberlain: How We Are Clothed, pp. 48-63.

Lefferts: Our Own United States, pp. 10-21.

XXXIII. General view of the New England States.

A. Problems.

B. Materials. Text, secs. 223-230; maps and pictures, pp. 154-164.

C. Library references.

Chamberlain: How We Are Clothed, pp. 128, 143.

Chamberlain: How We Are Sheltered, pp. 1, 101.

Lefferts: Our Own United States, pp. 1-43.

XXXIV. General review of the United States.

A. Materials. Text, secs. 56-230; maps and pictures pp. 46-164.

B. Teaching outline. A general review of the United States may be approached in many different ways. One is here suggested. The teacher is at liberty to use any other. The purpose is to review certain minimum essentials and to aid in fixing them in memory. The teacher should sketch on the blackboard at different lesson periods three or four outline maps on which the pupils will draw or write responses to questions. Use the first map for physical features; the second for

political subdivisions, cities, and transportation lines; the third for products; and the fourth for manufactures. As soon as the pupils understand what is expected, require them to prepare individual maps of the same kind.

THE NORTHERN COUNTRIES OF NORTH AMERICA.

XXXV. General view.

- A. Materials. Text, secs. 231-243; maps and pictures, pp. 165-171.
- B. Teaching outline. Recall the stories of the Eskimo and the Indian of the Great North Woods. Compare Canada with the United States with respect to size, population and industrial development. What are some of the many good reasons for the difference? What are some of the many points of similarity between the two countries? What is said of trade and transportation routes? Fisheries? Newfoundland? Labrador? Danish America? Why should we feel friendly and neighborly toward Canada? Write a simple story telling why you would or wouldn't like to live in Canada.

OUR ISLAND POSSESSIONS.

XXXVI. The cocoanut grower.

- A. Problem: What does the Filipino get in trade for his copra?
- B. Materials. Text, secs. 244-247; maps and pictures, pp. 26, 172, 173, 174, 175.
- C. Library reference.

Chamberlain: How We Are Fed, p. 126.

XXXVII. The sugar islands.

- A. Problem: How "Uncle Sam fills his sugar bowl."
- B. Materials. Text, secs. 248-255; maps and pictures, pp. 176-180; Fig. 51.
- C. Library references.

Chamberlain: How We Are Fed, pp. 78, 84, 88.

Lefferts: Our Own United States, p. 106.

XXXVIII. General view of the island possessions of the United States.

- A. Materials. Text, secs. 256-261; maps and pictures, pp. 172-183; 26.
- B. Teaching outline. In teaching this chapter use the same plan of procedure outlined for similar lessons on the state groups. Discuss the topics presented in the text. Expect the questions to be answered. Use the maps on pp. 26, 37, 173, 180.

THE SOUTHERN COUNTRIES OF NORTH AMERICA.

XXXIX. General view.

- A. Problem: How is the wheat farm in Kansas dependent on Enrique, the Indian boy of Yucatan?
- B. Materials. Text, secs. 262-267; maps and pictures, pp. 184-191.
- C. Teaching outline: Suggestions for "general review" lessons previously given will apply here. Study the questions carefully.

FIFTH GRADE.
SOUTH AMERICA.

- I. Introductory suggestions: There are many interesting ways in which South America may be taught. Consider the following:
 - A. The text may be followed, using the questions and problems as given, with such supplementary questions and special exercises as the teacher may find time to introduce.
 - B. The lessons could be arranged as a tour of South America.
 - C. The material could be developed around the problem:
How does South America contribute to our needs and pleasure, and help to make the United States a greater country, and how in turn do we contribute to the welfare and prosperity of the countries of South America?
As plan A is more likely to be used, the outlines that follow will conform to it quite closely. It is well to note at this point that the use of the text questions, maps and pictures, the problems, special exercises and auxiliary activities have been frequently and clearly illustrated in the preceding lessons on the various state groups of the United States and the other countries of North America. It is thought that the repetition of so much detailed lesson planning is now unnecessary. In the outlines for the succeeding lessons it will be assumed that the teacher is

adequately prepared to do much of the detailed organizing of the material to be presented. The outline will therefore be in more general terms.

THE NORTHERN CONTINENT.

II. The Rubber Gatherers. (Secs. 268-274.)

A. Suggestions: Make a list of the ways in which rubber is used. We use more than all the rest of the world. What is this important material? From whence does it come? How is it produced? Assign the text and questions.

B. Library references.

Chamberlain: How We Are Clothed, p. 89.

Lefferts: Our Own United States, p. 103.

III. Climbing to the Coffee Plantation. (Secs. 275-281)

A. Suggestions: What is the most common breakfast drink in our land? Trace your breakfast coffee back to the point of production in Brazil or Columbia. Describe in detail your imaginary journey up the Magdalena river to and from the coffee plantation.

B. Library reference.

Chamberlain: How We Are Fed, p. 103.

IV. General View of South America. (Secs. 282-288)

A. Suggestions: Make a comparison of North and South America as stated in question 1. Though South America was discovered and settled by Europeans before North America, yet it has not progressed so rapidly. Why? Help the pupils find a solution. Compare the two continents

with respect to population, cities, railroads, factories, etc.

THE EASTERN COUNTRIES.

V. General View. (Secs. 291-296.)

A. Suggestions: Why has Brazil so few people when it is such a large country? Why is Brazil becoming such a great cattle country? Compare Argentina and Kansas. Why is Argentina sometimes called the United States of South America?

B. Library reference.

Chamberlain: How We Are Read, p. 103.

VI. General View of the Northern Countries of South America. (Secs. 289-290.)

A. Suggestions: Why do most of the people of this region live back in the mountains away from the coast? Why is cattle raising the only industry? What do figs. 279, 280, 284, 291, 293 and 295 tell you about this region?

THE WESTERN COUNTRY.

VII. The Nitrate Workers.

A. Suggestions: Tell the story of the Indian boy whose father works in the nitrate plant at Salar, Chile. Of what service is nitrate to the farmer? to our factories? How has the Panama Canal helped the nitrate business?

VIII. The Andean Countries.

A. Suggestions: Recall that a little Philippine man,

Billo, gave us coconut. To-day we will learn that an Ecuador makes it possible for us to have chocolate candy and many other things made partly of chocolate. List all the things you can think of that are made from the cacao beans.

B. Library reference.

Chamberlain: How We Are Fed, p. 114.

EUROPE.

- I. Introductory suggestions: Europe is a complex continent. It is not possible to teach all the interesting geographic materials of Europe in the grades, even in the elementary school. It is, therefore, far better, as most courses of study do, to place emphasis on a less number of countries and subjects and teach them well than to attempt the brief study of numerous topics. England and France should be fully taught because of their relation to America, their foreign trade and prominence in world affairs. Appoint individuals or committees to collect pictures, specimens, books, newspapers and other printed matter relating to Europe. Assist the pupils in classifying the newspaper clippings. Make frequent use of the Hobbs-Merrill readers, histories, the art museum and the approved library books.

Library references.

Chamberlain: How We Are Clothed, p. 64.

Chamberlain: How We Are Fed, p. 157.

Chamberlain: How We Are Sheltered, p. 101.

Chamberlain: How We Travel, p. 131.

II. Assignments.

A. Relations of Europe to North America.

1. Suggestions: How are we related to the people of Europe? The pupils should refer to the histories and world map and tell what European peoples first settled our Atlantic coast, Mexico, Louisiana, Canada, and New York.

B. Ships and Shipbuilders of Europe.

1. Suggestions: Where do we build ships in the United States? Read and tell the story of Mary McGregor, whose father is a shipbuilder in Glasgow.
2. Library reference.

Chamberlain: How We Travel, p. 111.

C. The United Kingdom.

1. Problem: "What natural advantages have helped to make Great Britain a great nation? The topics in the text solve the question.

D. Growing Sugar Beets and Rabbits in France.

1. Suggestions: Read and tell the story of Joan Ribot, the farm, the rabbits, village life and the sugar harvest. What great historical events have made us very close friends of France?

E. France and Belgium.

1. Suggestions.

- a. What does France buy from other countries and what does she sell in return?

b. How does Belgium support such a dense population?

F. Holland and Germany.

1. Suggestions.

a. Why is Holland called the "dairy farm" of Great Britain?

b. What conditions and influences have made Germany a great commercial and manufacturing country?

G. The Scandinavian Countries.

1. Suggestions: Why are the people of Norway, Sweden and Denmark so much alike? Why is it necessary to go to the sea for a living? Compare the Lapps and the Eskimos. Of what service is the reindeer? Why has our government introduced the reindeer into Alaska?

H. The Swiss Mountain People.

1. Problem: Why is Switzerland called "The Playground" of Europe? How is it that this little country has always maintained her independence?

2. Library reference.

Bobbs-Merrill Sixth Reader, p. 404.

I. Switzerland and Austria.

1. Suggestion: What tells you that there is a good government? Why do you suppose the League of Nations was located at Geneva?

J. The Italian Mountain People.

1. Suggestions: Read and tell the story of Toni, the

village, the mountain gardens, and the chestnut harvest.

2. Library reference.

Chamberlain: How We Live, p. 107.

K. Italy.

1. Suggestions: Why have so many Italians come to this country?

L. Spain and Portugal.

1. Suggestions: Why are Spain and Portugal such poor countries? What should they do to become prosperous and wealthy?

M. The Balkan Countries.

1. Suggestions: Why is there so little trade and travel? Why are there so many different peoples and languages? What conditions and circumstances keep the people poor?

N. The New Countries of Central Europe.

1. Suggestions: Why was Poland made a free and independent state after the World War? What kind of people are Czechs and Slovaks, and where is their land?

O. European Russia.

1. Suggestions: Compare and contrast Russia with the United States. Name the crops grown. Locate the large cities. Trace each of the large rivers from source to mouth. Why is Russia not as progressive and prosperous as the other countries of northern

Europe?

P. General Review of Europe.

1. Suggestions: Refer to what has been previously said on the teaching of general and review lessons.

2. Problems.

a. Why has Europe made such a good home for so many powerful nations?

b. Why is there so much wealth?

c. Why are there so many peoples and languages?

d. Why is it the greatest country for shipping and trade?

e. To what extent have the ocean trade routes influenced the development of Europe?

f. Why have Europeans explored and settled many parts of the world?

AFRICA

1. Introductory statement: Lead again the recommendations made at the beginning of the study of Europe and South America. They apply to Africa and need not be repeated here. Africa is a continent which fascinates children. The study may begin with the problem: "Why did Africa remain an almost unknown land for so long?" Or you may take the life of Livingstone or Stanley, and as the story is read to the class trace the routes of their journeys. Some attention should be given to the study of the wild animals of Africa. The class may make a list of them and

and then each pupil may select one for special study and report.

Library reference.

Chamberlain: How We Travel, pp. 87, 93.

II. Assignments.

A. The Continent of Africa.

1. Suggestions: This chapter may be developed around the problem, Why did Africa remain an almost unknown land for so long? In solving the problem, consider climate, deserts of the north and south, rivers, the plateau, the narrow unhealthy coastal plain, the jungles, the animals and insects and the hostile natives.

B. The People of the Desert's Edge.

1. Suggestions: This is a splendid story lesson and should be so taught. The teacher may read one or two sections to arouse interest and then ask the pupils if they would enjoy reading the entire story so as to learn how Hakim and his family live on the edge of the great Sahara Desert in Africa.

C. The Countries of Northern Africa.

1. Suggestions: Why is Egypt called the gift of the Nile? This problem will show how the Nile made Egypt, and how dependent the people are upon the great river. It will organize many geographic facts.

2. Library reference.

Holmes: Travel Stories--Egypt.

D. Central Africa and Its People.

1. Suggestions: The story of Bong and Rita, the black boy and girl, should be read by the pupils as a story and reproduced in the class. This story and the questions of the text should result in an excellent lesson.

E. South Africa and the African Islands.

1. Suggestions: Why is South America called "White Man's Africa"? Why is it like the Dominion of Canada?

F. General View.

1. Suggestions: The teacher would do well to follow the same plan for summarizing and reviewing that has been previously given for the United States, South America and Europe.

ASIA

- I. Introductory suggestions: The study of this great continent may be introduced through the following problems: What parts of Asia are favorable for people to live in and to prosper? Why? Find the solution through the study of figs. 440, 441, 454, 456 and 460. Helpful questions are: Locate regions where surface and climatic conditions are favorable and unfavorable. Is the Indian ocean more or less valuable than the Arctic? the Pacific? Is the valley of the Ganges more favorable than that of the Yenisei?

Library references:

Holmes: Travel Stories--Japan.

A. The Silk Growers.

1. Suggestions: Of what materials do we make our clothes? Would you now like to find out where silk is produced and where it is made? Let the children read and reproduce the story of Shunzo Ito and his family.

2. Library references.

Chamberlain: How We Are Clothed, p. 71.

. Lefferts: Our Own United States, pp. 63, 331.

B. Japan.

1. Suggestions: Tell the class about Commodore Perry's visit to Japan. What evidence can you cite to show that the Japanese are a civilized, progressive and cultured people? Compare the location with that of England.

2. Library reference:

Burton Holmes Travel Stories--Japan.

C. The Chinese Tea Grower.

1. Suggestions: Do you drink tea? We can find out where our tea is grown and learn a great deal about Li Yu and his family from the story as it is given in our text.

2. Library reference:

Chamberlain: How We Are Fed, p. 109.

D. China.

1. Suggestions: China is the oldest civilized nation, yet to-day we must consider it backward and unprogressive. Why? Compare the Chinese Republic and the United States with respect to size and population.

2. Library references:

Chamberlain: How We Are Clothed, pp. 71-83.

How We Are Fed, p. 71.

How We Are Housed, p. 47.

E. Asiatic Russia.

1. Suggestions: Why has Asiatic Russia been the last of the great plains regions to be developed? Compare the region with the northern part of North America.

F. Southwestern Asia.

1. Suggestions: Why are we so deeply interested in this region? Recall the Bible stories which tell of the power and glory of these ancient lands. Will the British cause the valleys of the Tigris and the Euphrates to become green again with crops, and be the home of many people?

G. India.

1. Suggestions: Why is Ceylon a valuable possession of Great Britain? What do the products tell you of its climate? What climatic and surface conditions make it possible to support so many millions of people?

H. Over the Roof of the World.

1. Suggestion: A very satisfactory treatment of this chapter is to assign it for study and have it re-produced as a descriptive journey.

I. General View of Asia.

1. Suggestion. It is suggested that the teacher use the same general plan for reviewing the continents that has been clearly outlined in previous lessons.

J. Australia and the Pacific Islands.

1. Suggestions: Examine figs. 488, 490, 494, 496 and 497. Why do most of the people live on the eastern and southeastern coasts of Australia? What is said of the history and government? Compare with the history and government of the United States, Canada and South Africa.

Library references.

Chamberlain: How We Are Fed.

Chamberlain: How We Are Clothed.

Chamberlain: How We Are Housed.

Chamberlain: How We Travel.

Löfferts: Our Own United States.

Pitkin and Hughes: Seeing America.

Russell-Driggs: Hidden Heroes of the Rockies.

Perkins: The Eskimo Twins.

Holmes: Travel Stories--Japan.

Holmes: Travel Stories--Egypt.

Clark: Europe. (Geographical Reader.)

Clark: Unit Studies in Geography.

SIXTH GRADE

I. The Aims of Modern Geography Instruction.

- A. The teacher should strive to develop in the pupil a real interest in and sympathetic understanding of the people of his own and other communities. Through the study of geography he should be led to realize the dependence of man upon the natural conditions of the land in which he lives, as well as upon his fellow men; the complex web of interrelationship which has been spun; and the consequent interdependence of man. He should sense the obligation of individuals to the larger group.
- B. The teacher should aim to have the pupil develop such a mastery of geographical facts and principles as will enable him to understand these facts and principles whenever he meets them.
- C. The teacher should so plan the method of instruction as to insure the development of an adequate skill in the use and interpretation of maps, graphs, charts, and other tools of geographical knowledge.
- D. The teacher should see to it that the pupil becomes acquainted with the essential vocabulary of the subject, and that geographical terms are enriched by wider associations.
- E. The teacher should strive to develop in the pupil habits of careful observation, interpretation, reasoning

and study.

II. The Meaning of Regional Human Geography.

- A. Man is the center. A careful consideration of these aims will indicate clearly that man is the center of this study of geography, and that the real value of geographic facts consists in their usefulness in enabling us better to understand man in his relation to his environment. Hence our new geography is a study of human relationships. Surface, climate, natural resources, and so forth, the natural factors of the physical environment, are to be interpreted in the light of their effect on the life and activities of man.
- B. Regional Geography Defined. "The study of the world by divisions that have unity with regard to the conditions affecting human life is regional geography. It treats of the natural regions, mountains, valleys, costal plains, and so forth, each as a geographic unit, a natural region. Man living on the earth lives in relation to a corn belt, a wheat belt, a trade or manufacturing region; to semiarid pastures or to some other natural region. The natural region in which a modern man lives is the fact that often decides his occupation, and perhaps his future prosperity." The teacher should read carefully the section, "To Teachers," pages iv, v, vi, of Human Geography, Book II.
- C. It Simplifies Study. The study of geography by natural regions is a much simpler method than that which

used political region as the unit. Since the center of the new geography is man at work, it greatly simplifies our study if we are concerned at any one time only with those people who are doing the same thing. So far as the geographical controls which determine why men live as they do are concerned, we find that they are alike for similar regions. It matters not whether the coal miner is at work in the mountains of Pennsylvania, of West Virginia, or of Europe, his work is the same. The study and understanding of a region makes easy the understanding of other similar regions. The method of raising cotton or of mining coal once understood makes unnecessary the repetition of a detailed teaching when this subject comes up in connection with other regions.

- D. Political Units Are Treated. The regional method of teaching geography does not mean that political units are neglected. Natural regions will always be seen as covering certain states and countries. The association center, however, will be the industry, the product of man's effort, as he attempts to make use of the natural conditions about him to supply his needs for food, clothing, shelter, and so forth.

III. General Method.

- A. Approach. In the study of practically every natural region there is a point of contact between the life of the people in the region being studied and the child-

ren who are studying. Often this is rather a direct contact, in that the children are using some of the things which are the results of the labor of the people of the region. One of the surest ways of finding an interesting approach to the study of a region is to see if in the satisfaction of the six needs of mankind there is not at least some one thing contributed to the pupils in the class by the people living in the region being studied. The grocery store, the produce store, the dry-goods store, the drug store, will be found to contain many things brought from all corners of the earth. Even where such direct contacts cannot be discovered, there are indirect contacts which will serve almost as well. Sometimes it will be an historical incident, an element of travel, a news item in the morning paper, an article in a magazine. The children are fond of motion pictures. They will enjoy discovering why southern California is especially suited to the development of the film industry. They are fond of dancing. Illustrations such as the Rain Dance or Corn Dance of the Indians of southwestern United States may be used to develop the effect of environment on the culture of the people. In other words, approach the lesson through the human interest of the child. There is a danger at the present time that the educational pendulum has swung too far, and that more emphasis has been placed on arousing interest

than in giving content. Facts are tools that the pupil must have at his command if he hopes to acquire skill in interpreting human conditions. Geography at last is recognized as a science, and the teacher in the elementary school must aim to establish fundamental principles of interpreting surface, climate, soil, etc., that the child can use in the business or educational world.

- B. Content. The content of the text is arranged in a pedagogical manner, so that it would be quite possible to organize a course of study around it following very largely the arrangement of the author.
- C. Map Study. The teacher should aim to establish the map habit by seeing to it that maps are made use of at every opportunity. Printed outline maps of the continents, of the more important countries, and of sections of the United States, may be purchased from publishers, or at school supply houses. Another method is to have the pupils cut out maps in light cardboard from patterns which either they or the teacher may have prepared. Such outlines will last for a long time, the pupils placing the cardboard map on paper and tracing a pencil line around it whenever a map of that particular country or section is required.
- D. Locations. Sailer geography formerly played too important a part in the study of geography. There is no virtue in being able to point out and name the capes

and peninsulas on the east coast of North America, but neither is one to be commended for being ignorant of the location of countries such as Poland or Armenia; cities such as Buenos Aires, Seattle, New Orleans; rivers such as the Thames, the Columbia, or the Volga.

E. Pictures. The pictures with which the text is so fully illustrated have been selected with the greatest care. In every instance they possess a rich instructional value. They should not be passed by with a glance and a remark, but should be made the subject of close observation.

F. Diagrams. Diagrams such as those given in figures 29, 89, 112, 147, should be studied as a part of the text. Pupils should be taught how to read such diagrams and to interpret their meaning.

G. Questions. The teacher will find in the text at the close of the treatment of each region a list of questions. These questions have been prepared with the greatest care. They are not mere questions on the text, but rather, questions requiring interpretation of the text. In some instances they take the form of instructions as to certain things to be done, such as the preparing of maps or the filling in of outlines. In every case they represent real teaching value.

H. Appendix. As a part of the method of teaching children how to use a geography, the teacher should see to it that the statistics which are presented in the

Appendix are referred to frequently.

I. Index. It would be well for the teacher to spend one lesson period on "How to Use the Index." Test ability to use it by asking what "alfalfa, 66" means; "Argentina, 397"; Algeria (286 P2), (351 02)." Have the pupils check up in order to see if their decision is right. After they are sufficiently familiar with the book, a lesson could be conducted on a product or a country by the use of the index, e.g., "What can I learn about the regions of Brazil from the Index?" On discovery that there are five regions--Amazon Valley, S. E. Trade Wind, Grassland, Subtropical, Agricultural, East Temperate Agricultural--the class could be divided into five groups, each with a chairman to investigate and report on one of these regions. A similar lesson might be conducted on a product such as petroleum. This gives ample opportunity for motivating lessons.

J. Results: During all of the instruction in geography the teacher should keep constantly in mind the aims of modern geography instruction. In the accomplishment of those larger aims, certain specific realizations and abilities should be developed. When the child completes his study of regional geography he should realize:

1. That every region has some physical factors that control the activities of the group of people

living in it.

2. That these factors influence not only the present, but that the future development of the region is dependent on them.
3. That human agencies play an important part in developing the resources of a region and conquering the natural obstacles to progress.
4. That the pupil himself is dependent on other regions for at least one of the six needs of all mankind.
5. That he must be prepared when the time arrives to make his contribution, and that it must be the best that he can give.
6. He should be able--
 - a. To read and interpret simple maps, graphs, charts and other tools of geographic knowledge, and gain information from them.
 - b. To conduct a simple investigation and arrive at a satisfactory conclusion.
 - c. To use a geography book, including the index and statistical tables.
 - d. To understand and interpret geographic terms.

"The mission of geography is to give the broadest possible knowledge of peoples and countries, their cities, industries, achievements, and all that goes to make them strong or weak, the leaders of followers among the nations of the earth,

and the principal reasons why these things are as they are."--Whitbeck; "Ideals and Aims in Elementary Geography," *Journal of Geography*, 1915, vol. 14.

IV. Lesson Plans and Suggestions for Teaching.

The essential feature for all teaching is that there should be definiteness of aim not only in the particular lesson of the day or the work of the term, but in the study of geography as a whole. As teachers of all degrees of experience and skill will be making use of these helps, they have been planned as far as possible to meet the needs of all types, from the beginning teacher who is facing her class for the first time to the special teacher of geography. In order to meet all these requirements, certain lessons have been planned entirely on the textbook method, in which the directions are simple and explicit. From this type of lesson, the degree of complexity runs up to those lessons which are planned along the line of the most advanced modern method.

- V. The Six Needs of Mankind and Our New World. (pp. 1-11)
- These first lessons (secs. 1-15) must be regarded simply as introductory to the book, and are not to be taught as formal geography lessons. They are written for the purpose of drawing a contrast. Secs. 1 to 7 picture the simple life; sections 8 to 15 the complex life of to-day which geography must explain. By means of silent read-

ing, stimulating questions on the part of the teacher, and class discussion, the children should be led to realize the following facts: (1) All people have similar wants. (2) Recently there has been a great change in the manner of supplying these wants. (3) This change, through trade, has made each neighborhood produce fewer kinds of things but much more of a few things. These are sold to pay for many things that come from distant parts of the world. Thus, increasing trade brings about a kind of division of labor among different parts of the earth, each one of which produces the things that best fit its trade opportunity. This is called a regional division of labor. To develop the idea of the complex life of to-day, use questions 5 and 6, page 4, to show the contrast with the simple life of the Eskimo, the black man, the Indian of to-day, and of our early settlers. Use question 8 to show our dependence on transportation. The story of Robinson Crusoe might be of use in connection with question 8. These two lessons have a genuinely social character and make a "significant contribution to the child's awareness of what it means to live together in organized society, appreciation of how we do live together, and an understanding of the conditions precedent of living together well." These two lessons may be correlated with history by the use of questions 4 to 12 on page 11, and figs. 7, 8, 11 and 12.

The third lesson, while covering but two sections of the text (15, and 16), is important because it is practically the approach or introductory lesson to all the regions which are to follow. Have the pupils read section 15. Raise question, "Why does the book say that all people are neighbors to one another?" Refer to section 14. Have pupils turn to map of United States (pp. 198, 199) and find the state in which they live. (See the Geography of Kansas, fig. S. 3) "What are the boundaries of this state?" Notice that some states have the ocean as a boundary; others a river or a lake; still others have what seems to be just a line drawn on the map. Have pupils see that where there is no natural boundary it would be possible to pass over from one state into another and never know we had crossed the boundary. Develop the idea of natural boundaries. Examine a physical and political map such as that on pages 26 and 27. Study this map with reference to the height of land. Have the children indicate the states that are entirely in the lowest level and so forth. Develop the idea of surface as a factor in determining a natural region. Read carefully the last paragraph of section 15. Lead up to the questions, "How are the boundaries of natural regions determined?" and "What do we mean by a natural region?" Next read section 16. Have pupils discover the answer to the question, "What is it that decides how men make their living?" Develop on the blackboard some such outline as follows:

A. Boundaries of natural regions are determined by:

1. Climate.
2. Soil.
3. Surface.

B. Natural regions determine how men make their living.

In a natural region:

1. People do the same things.
2. People sell the same things.
3. People buy the same things.

Have pupils examine figure 14. Locate the region in which they are living. Explain how to use the key at the bottom of the map. Have pupils find the name of the region in which they live. Practice naming the natural regions in which several cities and states are located. Have pupils prepare in their notebooks a chart as indicated in question 5 on page 14. Have them fill it out for the region in which they live.

VII. Florida Peninsula. (pp. 16-22)

As this lesson is the first in which the study of a definite natural geographical region is to be made, it would probably be well to use it largely as a means of illustrating what is meant by a natural region, and to show how such a region may be studied. This will enable us to determine the aim of our lesson and suggest the method of approach. The aim of the lesson will be to have the pupils understand that the peninsula of Florida constitutes a natural geographic region. In the accomplishment of

this major aim certain other objectives should be in the mind of the teacher. For example, to have the pupils understand something of the conditions which make for the life of the people in his region; to impress the pupils with the importance of this region to the rest of the country; to acquaint the pupils with certain geographic terms; to develop certain habits of thought and study which will assist in the understanding of other natural regions.

As all these lessons on accomplishing aims would require many more plans than we have space for, they will be treated as part of the fundamental work in all subsequent lessons. The method of treatment will depend largely upon the amount of time the teacher is able to give to the group working on this subject. Even where the teacher is responsible for but one class, it is highly desirable that the work be so planned as to require that the pupils do most of the work unassisted. The interesting narrative of the text, together with the pictures, diagrams, maps and questions, make the study of "Human Geography" exceedingly easy. The approach to the lesson might be made through a discussion of some of the things which Florida sends to us. Mention might be made of oranges, grapefruit and winter vegetables. The question should then be raised, "Do we produce these things in our part of the country?" Reference might be made to the raising of vegetables in hothouses during the colder

winter of the North. Have pupils realize that in Florida such vegetables are grown out of doors in the winter months. Develop the idea that this is due to certain conditions which exist there. Examine figure 14 and see that this Florida peninsula is indicated as a natural region. Raise the question, "What are the conditions which make us consider the Florida Peninsula as a natural region?"

The answer to the last question will make mention of the three conditions--climate, surface, soil--as determining the boundaries of a natural region. Have section 19 read. Examine figures 20, 22, 23, and discuss the kind of climate necessary to produce such vegetation. Introduce the word "tropical." Read section 20. Have questions 3 and 8, page 22, answered. Have sections 18, 21, 22, 24 read and discussed. What does figure 21 tell us about the height of the land? Describe the surface as shown in figures 23 and 25. Have pupils prepare a brief statement of the surface and soil of the Florida Peninsula. At the conclusion of the lesson have a summary statement prepared as to the way in which these three factors determine the boundary of this natural region.

The second lesson on this region might be spent profitably in considering how the climate, surface and soil of this region have determined the products of the region and the industries of its people. Ask the question, "Why is not cotton raised in the Florida peninsula?" See sec.

20.) "In what industries are the people of Florida engaged?" (See secs. 18, 23, 25, 26, 27, 28, 29, 30.) Have each of these sections, which have not been read previously, read over carefully. See that the questions included in the text are answered. Examine the several figures illustrating the industries of the region. The questions on page 22 should be studied with care and answered. It will probably not be possible to have all the pupils attempt to answer all the questions there listed. It is suggested that they be assigned to different members of the class, and that these pupils be required to report to the class on the questions so assigned. It is not intended that all the material suggested in the paragraph above be covered in one lesson. The number of lessons used will depend upon the amount of time available.

Results. The teacher should see to it that the facts which have been brought out in the answering of the several questions and in other class discussion are seen in their relation to the aim of the lesson. It should not be expected that all the facts brought out in the lessons be retained, nor that verbal locations and descriptions be given. It will be sufficient if the pupils realize that because of climate, soil, and surface conditions the people in this section of our country do the same things, sell the same things, buy the same things. In other words that the natural conditions of the region determine the life of the people, and that such a section, regardless

of its size or the states or countries which it contains, constitutes a natural geographic region.

New geographic terms will have been acquired which will be reviewed from time to time as they arise in connection with other regions. Locations will be fixed by the repetition which will come when the people of one region are seen selling to and buying from the people of another region. From the beginning the pupils should be expected to make use of maps, diagrams, charts. The habit of looking up references in other sections of the book should be encouraged. At the conclusion of the study of the region the following facts should be definitely known by the pupils:

1. The Florida peninsula constitutes a definite natural region because its climate, surface and soil are such as to make its people largely dependent upon products peculiar to that region.
2. The natural conditions of this region are:
 - a. Climate: Warm throughout the year, with much rain.
 - b. Surface: Low and level.
 - c. Soil: swampy lands which have been drained; rich sandy lands, good for vegetables and water-melons.
 - d. Natural resources: Fish, lumber, phosphate rock.
3. The industries of the people are:
 - a. Farming; inter vegetables.

- b. Fruit growing: Oranges and grapefruit.
- c. Manufacturing: Cigars.
- d. Lumbering: Naval stores.
- e. Mining: Digging phosphate rock for fertilizers.
- f. Tourist industry.

VIII. Florida Peninsula. (pp. 16-22.)

Study of this region makes a good approach to regional geography, as it is a simple type.

A. Dominant factors.

- 1. Climate: Subtropical; a region of warm winters with little possibility of frost; abundant rainfall.
 - a. Latitude.
 - b. The effect of Atlantic Ocean and Gulf of Mexico.
 - c. Gulf Stream.
- 2. Surface: Flat; swamps, everglades; few rivers; limestone sinks.
- 3. Soil: Sandy.
- 4. Nearness to markets: Directly connected by rail and water with densely populated cities of the North.

B. Resultant activities.

- 1. Agriculture. Chief products: Winter vegetables, oranges, grapefruit.
- 2. Tourist industry.
 - a. Winter playgrounds.
 - (1) Tampa.
 - (2) Miami.
 - (3) Palm Beach.

3. Lumbering. Chief products: Lumber, rosin, turpentine.
4. Manufacturing: Cigars.
5. Mining: Phosphate rock.

IX. Lesson Plan.

A. Approach: Pictures similar to figs. 23 to 25, or railroad advertisements, etc., to focus the attention of the class on the fact that Florida has a warm climate; or read secs. 17 and 18. As this is the first region to be studied, it will be necessary to interpret the legend and the meaning of letters and figures on margin. (Fig. 21.)

1. Map study: Study fig. 21 to locate the region. Mark boundaries on wall maps or on individual map. Emphasize as boundaries the Cotton Belt, Atlantic Ocean, Gulf of Mexico. Point out the Bahama Island Florida Keys (explain Keys), the Everglades.

2. Physical features.

a. Climate. Use figs. 14, 21, and 26 to emphasize latitude. Study secs. 19 and 20 to develop the fact that Florida is warmer in winter. Use question 3. Get children to give such key phrases or words as: "Key West is the southernmost town in the United States where frost has never been recorded; far south; warm in winter; green in January; palm trees; alligators; winter vegetables; oranges." Use fig. 327 and sec. 20

to show the effect of the Gulf Stream. Answer question 8.

- b. Rainfall. Use fig. 158 to show that the rainfall is abundant for agriculture, and p. 26 to show why this region is not in the Cotton Belt. Have class explain the apparent contradiction of "large rainfall, few rivers" by study of fig. 19 and secs. 20 and 24. Use questions 5, 6, 7, and fig. 22.
- c. Surface. Use fig. 26 to develop idea of height. Read the first sentence of sec. 31. Use secs. 21 and 22, figs. 19 and 20 to show the effect of this flatness. Children list in notebooks such descriptive phrases or words as: "Flattest part of the United States; swamps; everglades; few rivers; limestone sinks." Use sec. 31 to show what man might do to overcome these disadvantages. Answer questions 5 and 6.
- d. Soil. Develop the idea that the soil is good for winter vegetables, fruits such as watermelons, but not for cotton, corn or grass. Why not? Develop by use of sec. 24. When swamps are drained, will this make good or poor soil?
- e. Nearness to markets. Use fig. 309 to show advantage of Florida in being near regions with cold winters. Trace some of the railroad lines from Key West, Tampa, St. Augustine. What does

"Seaboard Air Line" on freight cars mean?

B. Resultant Activities.

1. Agriculture. Bring out dependence of cities of North on this region for winter vegetables, oranges and grapefruit, by study of figs. 23, 24, 25. Fig. 24 is a typical product map. Teach them to interpret its lesson. Study secs. 25 and 26 to show effect of frost. Emphasize climate as chief control and this type of agriculture most favorable for region.
2. Winter resort. Use railroad folders, advertisements etc. to emphasize Tampa, Miami, Palm Beach, as winter playgrounds. This is another illustration of how the climate of a region may be a source of wealth.
3. Lumbering. Fig. 314 shows why much of the land is still in forests. Figs. 20 and 22 and sec. 28 show kinds of trees. Study fig. 21 to bring out dependence of Europe, West Indies, and South America on this region for lumber and rosin. Place lumber ports on map.
4. Manufacturing. (Sec. 29) Put Key West on map. Find its latitude; compare with other cities of the United States. Point out the advantage of Key West being near Cuba. See how many times you read Key West on cigar boxes.
5. Mining. What is phosphate rock? Of what use is it

to us? Sec. 30 and fig. 21 will tell you what countries need it. Place St. Marks and Tampa on map.

C. How human agencies have overcome natural disadvantages.

1. Climate. Government sends out frost warnings 24 hours in advance to protect orange growers. Bulletins are issued showing them how to fight frost. Railroads use refrigerator cars and fast trains to bring perishable goods to the North in good condition.

D. Application. Answer question 1. Use questions 6 and page 31 to show the possibilities of this region. What do the names Florida and St. Augustine suggest about the early history of this region? What effect has it had on the type of architecture of the hotels?

Note.--Use this region in comparison with the valleys of southern and central California, as they are subtropical, but emphasize differences due to location, population and possibility of development. In the study of the Mediterranean region of Europe, show that Miami, Tampa and Palm Beach are counterparts of the Riviera and similar winter resorts. Whenever climate and scenery are factors in development of a region and hence a source of income to the people, stress them. Children are too apt to look upon agriculture, manufacturing, lumbering, fishing and trading as the only occupations of

economic importance. Find out what part of China resembles this region in climate.

X. Cotton Belt. (pp. 22-36.)

A region with a long, moist summer, and great resources for agriculture, forestry and manufacturing.

Note.--This region is represented in much detail that it may serve the following purposes:

1. As a type for other regions agriculturally important, such as the great wheat region of the United States, the rice region of Asia, the sugar region of the West Indies, etc. The great point to stress in studying each region is to discover what factors make it a region, which are the controlling factors, and what other regions are dependent on it.
2. It illustrates the evolution of a region from a purely agricultural to a manufacturing.
3. The child will find other cotton regions in the world, viz., India, the Mediterranean region, the subtropical agricultural region of South America, Australia, and the facts studied here will enable him to interpret those regions.
4. It will assist him in solving problems that affect the future of the cotton regions of the world, as: Why India is increasing her cotton area. Why England is planting American cotton seed in Africa.

5. It will also focus his attention on the fact that the people of the United Kingdom, France, Germany and the new Japan are dependent on this region for raw material that must be made into cloth that can be used to buy food. It is the geographic translation of "This is the House that Jack Build."

A. Dominant factors in the region.

1. Physical.

- a. Climate. Two hundred frost-free days. Warm, moist summer for growing. Dry, sunshiny weather for ripening. Rainfall at least 40 inches; seasonal; thundershower type; rain coming every few days. (Cotton can be grown in irrigated lands as in Salt River valley of Arizona.)
- b. Soil. Variety.
 - (1) Limestone. Rich, black (Texas, central Alabama).
 - (2) Silt. Delta of Mississippi best for cotton.
 - (3) Sandy. Not suited to cotton; better for peas, peanuts, sweet potatoes, watermelons, early vegetables, pine forests.
 - (4) Clay loams. In many parts.
- c. Surface. Flat plains. Easy to cultivate; no mountains; small hilly area.
- d. Area. Large. Count states, and figure total area from Appendix.
- e. Transportation possibilities.

- (1) Waterways afford cheap transportation.
- (2) Ocean. Borders on Atlantic and Gulf of Mexico
- (3) Rivers. Many short navigable rivers.
- (4) Railroads. Developing rapidly.
- (5) Roads. Smooth, level ground gives this region a decided advantage over hilly and mountainous regions.

2. Human.

- a. Labor. Large number of Negroes. South is encouraging immigration.
- b. Activities of government: National, state, municipal, shown in the development of this region by:
 - (1) Increased use of agricultural machinery and of scientific farming taught in the Agricultural College.
 - (2) Development of manufacturing.
 - (3) Building levees.
 - (4) Conquest of boll weevil.
 - (5) Eradication of cattle tick.
 - (6) Making this a healthier region for man by eradication of mosquito.
 - (7) Farm demonstration.
 - (8) Home demonstration by agents.

B. Resultant activities.

1. Agriculture.

- a. Most important cotton region of world.

- b. Mills of North and of Europe dependent on this region for bulk of raw cotton.
- c. Furnishes:
 - (1) Valuable food products for man: Sugar, rice, corn, early vegetables, peaches, pecans, peanuts, meat and dairy products.
 - (2) Soy beans, cowpeas, vetch, clover.
 - (3) Fertilizer--other food regions.
- 2. Lumbering. Louisiana, second state (1920) in value of lumber output, furnishes pine, oak, cypress; other states.
- 3. Manufacturing. Although raw materials are still the most important contribution of this region to other parts of the United States and to Europe, manufacturing is developing rapidly, the most important manufactures being:
 - a. Cotton cloth.
 - b. Iron and steel. (See also b below.)
 - c. Byproducts of cotton seed.
 - d. Lumber.
- 4. Mining.
 - a. One of the most important petroleum regions of the United States. Has the world's greatest sulphur mines.
 - b. Iron ore, together with coal and limestone, making the Birmingham iron and steel district.

A. Approach.

1. Use figs. 22 and 23 to develop the fact that the United States in 1919-20 produced about three-fifths of world's cotton.

Note.--These figures may form the basis for practical problems in fractions and percentage.

2. Place problem: "Why does the United States produce about 60 per cent of the world's cotton supply?" in your notebook. Children suggest factors that might control this production. Make list. Postpone decision until investigation is made. Use index for map reference. Read sec. 32.

B. Map study.

1. To locate belt, name political divisions. Discuss factors that determine boundaries. (Be sure that class understands that these boundaries simply mark the region where cotton is the chief crop--that this line is not to be regarded as a fence.)
2. To study surface. (Fig. 33.)
3. To study rivers. (Figs. 33, 30, 21.)
4. To study coastline. (Fig. 33.) Text adds facts that map cannot show.

Note.--Children should mark the boundaries of every region; mark names of states (insist on correct abbreviations of states), important rivers, cities, in their outline maps. These should be pasted in notebook. Facts should be added as

developed. This should be done with every region.

XII. Second Lesson.

A. Aim. To focus attention on climate as the controlling factor of the human activities.

B. Approach.

1. Restate the problem.
2. What facts may we learn about climate that help to solve the problem?

C. Climate.

1. Figs. 27 and 14 to develop latitude as chief reason for frostless days.
2. Fig. 30 and text to develop reason for western boundary. Use all references to emphasize the reason why western Texas does not raise cotton.
3. Study fig. 31 to develop that the reasonable distribution of rain is more important factor than amount of rain.

D. Application.

1. Answer question 2.
2. Put facts about climate in notebook.

XIII. Third Lesson.

Note.--Each lesson is intended to help develop the general aim.

A. Aim. To develop the effect of the other factors that are not so important as climate in the development of this region.

1. Surface. Use secs. 37, 38, fig. 36, and facts learned in map study to develop advantages and disadvantages of this region for farming.
2. Soils.
 - a. Study of soil. (Sec. 36.)
 - b. What three kinds of soil are discussed?
 - c. Which is the best? Mark areas in map.
 - d. Which poorest? Its use? Study sec. 46.
3. Area. Calculate from fig. 37 about what part of the United States lies in the Cotton Belt.
4. Transportation possibilities. Use figs. 21, 33, and sec. 48 to develop facts outlined under transportation. Develop the value of many rivers for cheap transportation. Look at railroad map, and suggest reason why railroads have been developed to a greater extent in the northeast and central regions. What have states done to develop good roads? (Our Government, pp. 218-222).
5. Human factors.
 - a. Fig. 35, stereographs, etc., to show Negroes at work.
 - b. Government activities.
- B. Application. Answer problem, using question 10.

XIV. Fourth Lesson.

A. Aim. To understand term, "King Cotton."

B. Approach.

1. Study figs. 24 and 35, to explain ginning and

baling.

2. Look into history for the name of the man and date of invention of cotton gin.
 3. What were the results of his invention?
 4. Study figs. 21 and 9 to tell where this cotton goes.
 5. Does the South use any? What advantage has the South? (See sec. 47.)
 6. Look at fig. 314 and see if it tells you a disadvantage.
 7. Put in your map the cities named, after you have carefully studied their location. Note the factors that made these cities manufacturing centers.
 8. Columbia, S.C., has the largest cotton mill in the world under one roof.
 9. It is the first cotton mill in the world to be run by electricity brought from a distance.
- C. Further study.
1. Study fig. 38 and sec. 41 to bring out destruction by weevil. If possible in Science Lesson, study history of weevil.
 2. Study sec. 42, figs. 37 and 42 to explain diversified farming.
 3. Show the advantages of the South over the North for cattle raising. What is the cattle tick?
 4. Sec. 45 and fig. 39 will show how science adds to the health and wealth of a region. Read sec. 50.

1. Suggest question: "Has the boll weevil proved more of a blessing than a curse to the South?"
2. Reference: Yearbook of the Department of Agriculture, 1917, "How the Milky Cow Brought Prosperity in the Wake of the Boll Weevil."

XV. Fifth Lesson.

A. Lumbering.

1. Use Index under forest to locate the great forest regions of the United States.
2. What effect has the growing of cotton had upon the forest regions of the United States?
3. What two trees are of most value for lumber?
4. What advantage has the South over the East and West for transportation of lumber?
5. Find lumber ports on fig. 21. Print them in your outline map. For uses of cypress, write Southern Cypress Co., New Orleans, La.

XVI. Sixth Lesson.

A. Aim. To emphasize other contributions this region makes to the food supply for man and beast.

1. Sugar. (Sec. 39) Although sugar cane grows here, why do we not emphasize it? Print in product map.
2. Rice. Use figs. 48 and 50 and sec. 51 to show effect of machinery on rice production.
 - a. That southeast Asia, not the United States, is the great rice region of the world.
 - b. That California comes second to Louisiana in the

United States.

3. Nuts:

- a. Pecan. Explain grafting, a very old industry practiced in Persia 2,400 years ago. (Library reference.) Use fig. 51 and sec. 51 to show what man can do with wild plants to produce food. Investigate a food chart and find the value of nuts as food. Have you ever tasted New Orleans pralines?
- b. Peanuts. Find text and figure references.

4. Minerals.

- a. Petroleum. What is meant by the words "That good Gulf gasoline"? Add this to your list.
- b. Other minerals.
 - (1) What three other minerals add to the wealth of this region?
 - (2) What manufacturing district have they produced?

- 5. Fruit. Georgia peaches. (sec. 40). How does climate affect the supply of peaches for northern cities?

XVII. Seventh Lesson

A. Cities:

- 1. New Orleans. Study figs. 47 and 21 to emphasize the location of the city as a factor in its commercial importance. Emphasize its connection by the Mississippi river with the great food regions to the north. Figs. 35, 48 and 49 suggest why it is the

distributing center for cotton, sugar and rice, and its importance as an importer of coffee, sisal, fruit and crude oil. Find its rank among United States seaports. Tell why New Orleans needs great grain elevators.

2. Galveston. The greatest cotton exporting port of the United States. Why? Use figs. 43 and 21. Show the effect of the Panama Canal on the development of New Orleans and Galveston.
3. Birmingham: "The Pittsburgh of the South." Explain. Why does the bulk of the trade of this region go to the Gulf?
4. Locate Savannah, Charleston and Wilmington. From fig. 21 name their exports and imports.

SUMMARY OF ALL LESSONS.

1. Excellent suggestions are to be found in the questions on page 36.
2. Under sec. 47, a Muscle Shoals problem could be developed. Muscle Shoals is a fifty-mile stretch of river and rapids between Florence and Decatur, Alabama., so named because of the great number of shellfish called mussels, but misspelled by an early explorer. It will make 150,000 horsepower at lowest water, and over 500,000 horsepower for a month or two at a time. Use for development of future.
3. Explain the phrase "The New South."

4. Library Reference. Clark: Unit Studies in Geography, pp. 81-99.

CENTRAL FARMING REGION.

PA IRE, CORN AND SMALL GRAIN BELT. (Pages 30-50)

XVIII. First Lesson.

A. Approach. Study figs. 2, 5, and 15, to develop the type of farming in Indiana, Iowa and Illinois. Locate the states on fig. 54 and figs. 21 and 52. (2.3) Use figs. 68 and 69 to develop problems:

1. Why is this the greatest corn-producing region of the United States? (C. 11, 38, 39, 45, 47.)
2. Why is this the greatest corn-producing region of the world?

B. Map Study: Use fig. 21 to determine location of this region.

1. Mark on your outline map the states included. (C. 1 and 2.)
2. Study fig. 153 and question 5, p. 50.
3. What river valley marks the southeast boundary?
4. What great lakes border on this region?

C. Physical Features.

1. Climate. (C. 26, 27, 28, 29 and 30.)
 - a. Topographic division between eastern and western sections of states.
 - b. Use rainfall map of the United States; refer to "dry line" as western boundary of Cotton Belt also. Why does it mark the limit of growth of

both corn and cotton? (Fig. S. 29)

- a. Read description of climate, sec. 58, to develop facts of climate as shown in outline. (S. 26-30)
- c. Compare with climate of Cotton Belt.

2. Soil. (S. 17, 18, 19, 20, 21, 22, 23, 24, 25; Fig. S. 22.)

- a. What words describe soil? Compare with deep clay. (S. 43)
- b. Why are roads poor? (Fig. S. 19; Fig. S. 27.)
- c. What has improved all roads in the United States? (S. 11, 12, 13, 14, 15, 16; Fig. S. S.)

3. Surface.

- a. Fig. 21 to review idea of plain. (S. 23, 24, 25.)
- b. Fig. 53 to recall distribution of glacier.
- c. Read simple explanation of glacier in sec. 52. (S. 25.)
- d. Find expressions in text that describe the surface of this region.

4. Rivers.

- a. Figs. 54 and 80 to locate navigable rivers.
- b. Compare with Cotton Belt to show advantage of Cotton Belt for trade because of its maritime location. (Figs. S. 20, 54, 56.)
- c. Discuss development of railroads in this region with that of south.
- d. Trace three routes by which products of this region get to sea.

e. Bring out nearness to Great Lakes as an advantage of this region.

5. Area. (In relation to Population.) Use tables on page 270 to compare with central Corn Belts.

D. Application. Use question 1, p. 50, to summarize.

Read sec. 74. Make a calendar for farmer. If study of New England precedes the study of this region in your course of study, here is an excellent opportunity to have children solve these problems:

1. Why New England developed manufacturing instead of agriculture when both regions were in the area covered by the glacier?
2. Why has New England developed the truck farming type of agriculture and this region the grain type?

XIX. Second and Third Lessons. Restate problem.

A. Aim. To lead children to see what man has done to develop and increase the natural resources of a region.

B. Approach. Give briefly the dominant physical factors as developed in the first lesson.

C. Presentation,

1. Show a picture of a forest. Compare with fig. 55 to show what man has done in this region. How? (Fig. 17)

2. Use figs. 73, 74, and fig. S. 16, and pictures of farm machinery, especially tractor, to emphasize the part agricultural machinery has played. (S. 34) What is meant by the phrase "abandoned farms"?

3. Study fig. 71 to develop--
 - a. Seventy-five per cent of world's hogs raised in United States.
 - b. Iowa the leading hog state. Why?
 - c. Iowa the leading corn state. Why?
4. Use questions 2 and 3 with sec. 75. (Figs. 75, 76, 78, 79.)
5. Study location of and place in map; Chicago, Cincinnati, St. Louis, Kansas City, Omaha. Emphasize their location in Corn Belt and their facilities for transportation. (Fig. C. 54.)
6. Study fig. 314. Compare with northeastern United States.
 - a. Question: Why is St. Louis the largest city in the region?
 - b. Question: Compare with New Orleans, to develop the latter's advantage for trade.
7. Use silo in fig. 2 and sec. 77 to show what man does to push the Corn Belt westward. (C. 46.)
8. Connect high price of land as shown in sec. 78 with increasing needs of world. (S. 31)
 - a. Use p. 11 of Appendix to compare the population of Massachusetts and Iowa. (S. 5.)
 - b. Use fig. 210 to show that these products go to Europe and West Indies.
- D. Application. Summarize in your notebook all the facts you have gathered to show why--

1. The United States raises 75 per cent of hogs of the world. (S. 47.)
2. Why so many great meat packing centers have developed in this region. (C. 44-48.)
3. Why Europe is dependent on this region for food. (S. 56, 57, 58, 59, 60, 61.)

XX. Third Lesson.

A. Manufacturing.

1. What is the chief industry? Agriculture. Why?
2. That industry is secondary? Why is it not so important an industry as in the northeastern United States? (C. 56, 57 and 61.)
3. What kinds of manufacturing developed because of great natural advantages? (Sec. 79 and fig. 44 develop this idea.)
4. Chief products. Meats, cereals, machinery, farm supplies. (C. 56 to 61.)
5. What others? Automobiles; tires. Where does the rubber come from?

XI. Fourth Lesson.

A. Review of region:

1. Prove by maps and text that the last paragraph in sec. 79 is true.
2. As this is the Corn Belt, and the great meat-packing region of the world, use facts developed as interpretative of European Corn Belt, showing why such a small area of Europe is devoted to corn, and

hence her dependence on us and South America for meat, and for food for hogs and cattle.

3. In comparing with the east temperate agricultural region of South America, develop the idea that although a great grazing region, it is dependent upon us for capital and machinery to develop the meat packing industry.

The outlines of the Cotton Belt and of the Prairie, Corn and Small Grain Belt in detail should serve as guides to the teacher in the preparation of lesson plans where other regions are taken up. Every reference to paragraph, figure or page should be carefully examined and citations for similar purposes should be designated by the teacher when new lessons are planned. The following general outline should be well in mind:

REGIONAL GEOGRAPHY

I. Dominant factors in region. (Controls.)

A. Physical.

1. Soil.
2. Climate.
3. Surface.
4. Area.
5. Transportation.

B. Human.

1. Labor.
2. Activities of the government.

II. Resultant Activities. (Responses.)

- A. Agriculture.
- B. Lumbering.
- C. Manufacturing.
- D. Mining.

The following tabular statement shows definitely how two human agencies utilize six natural factors to establish human activities to supply six human needs, thus producing something of value to use or sell to other regions:

Human agencies.	Natural factors.	Human needs.
1. Citizenship.	1. Relative position.	1. Food.
Cooperation.	2. Elevation.	2. Fuel.
Intelligence.	3. Growing season.	3. Clothing.
Government.	4. Moisture.	4. Shelter.
	5. Soil.	5. Tools.
	6. Natural resources.	6. Luxuries.
2. Communication.	Above surface.	Pleasures.
Trade.	Grass, timber.	Refinements.
Transportation.	Rivers, lakes.	
Good neighbors.	Below surface.	
	Coal, iron, oil, etc.	

Name of Type in North America.	Similar types in other continents.						Total
	N. America:	Europe:	Asia:	Africa:	Australia:	Antarctica:	
Arctic Regions and Antarctic	191	249	308				3
Great Northern Forests	179	247	308				3
Northern Wheat Regions	55	237	312-334, 352				5
Columbia Basin	78				421		1
Central Farming Region	26	268	337	294			4
Cotton Belt Region	22		273	368			3
California-Mediterranean Region	103-108	271	334	415			7
High Mountain Region	72-90	250	314	424			5
Great Basin	78		369	424			4
Southwestern Plateau	86	400	428	422			4
Great Plains	64	394	354	360			2
Puget Sound-Villamotte	114	214	392				2
Florida Peninsula	16		381				2
Tropical Forests			386				2
Tropical Grasslands							2
Lower Colorado Region	100	284	341		430		3
West Indies	193		316				2
High Plateau		401					2
Ozark-Ouachita Region	157	263					2
Green Northlands	90	210					2
Newfoundland-Labrador	135	210					2

The above regions are the raw-product regions of the world.

LIBRARY REFERENCES--GEOGRAPHY

- Perkins: Dutch Twins Primer.
- Sindelar: Nixie Bunny in Workaday Land.
- Grover: The Sunbonnet Babies in Italy.
- Gifford and Payne: Rod Geather's Adventures.
- Perkins: The Japanese Twins.
- Chamberlain: How We are Fed.
- Hooker: Star: The Story of an Indian Pony.
- Perkins: The Irish Twins.
- De Foe: Robinson Crusoe.
- Chamberlain: How We Travel.
- Buchanan: Great Inventors and Their Inventions.
- DuPuy: Our Animal Friends and Foes.
- Hawkesworth: The Strange Adventures of a Pebble.
- Meeker-Driggs: Ox-Team Days on the Oregon Trail.
- Atchison-Uttley: Across Seven Seas to Seven Continents.
- Amicis: The Heart of a Boy.
- Allen: David Crockett, Scout.
- Gilman: Alaska, the American Northland.
- Stefansson and Schwartz: Northward, Ho.
- Thomson: The Land of the Pilgrims.
- Wilson and Driggs: The White Indian Boy.
- Perkins: Eskimo Twins.
- Shillig: The Four Wonders.
- Chamberlain: How We are Clothed.
- Chamberlain: How We are Sheltered.
- Pitkin and Hughes: Seeing America.

Holmes: Travel Stories--Japan.

Lefferts: Our Own United States.

Taber: Breaking Sod on the Prairies.

Holmes: Travel Stories--Egypt.

Thomson: The Land of Evangeline.

ASSIGNMENTS FOR STUDY IN GEOGRAPHY.

FOURTH GRADE.

Smith's Human Geography Book I.

First Month, pp. 1-18.	Sixth Month, pp. 111-136.
Second Month, pp. 18-31.	Seventh Month, pp. 136-153.
Third Month, pp. 32-53.	Eighth Month, pp. 153-172.
Fourth Month, pp. 53-86.	Ninth Month, Review.
Fifth Month, pp. 86-111.	

FIFTH GRADE.

First Month, pp. 172-191.	Sixth Month, pp. 280-304.
Second Month, pp. 192-218.	Seventh Month, pp. 305-326.
Third Month, pp. 219-242.	Eighth Month, pp. 326-354.
Fourth Month, pp. 242-263.	Ninth Month, Review.
Fifth Month, pp. 264-279.	

SIXTH GRADE.

Smith's Human Geography, Book II.

First Month, pp. 1-22.

Six Human Needs; Our New World; Studying the World by Regions; The Florida Peninsula.

Second Month, pp. 22-49.

Cotton Belt; Prairie Corn and Small Grain Belt. The Geography of Kansas, Supplement. (S. 1 to S. 62.)

Third Month, pp. 50-84.

Ohio Valley; Northern Wheat Region; Great Plains and Lower Rio Grande Valley; Southern Rocky Mountains; Columbia Basin and Great Basin.

Fourth Month, pp. 85-108.

Southwestern Plateaus and Mountains; Pacific Mountains and North Pacific Coast; The Lower Colorado Region; Valley of Southern California.

Fifth Month, pp. 108-135.

Valley of Central California; Willamette-Puget Sound Valley; North Atlantic Coast Plain; New England-Canadian Maritime District.

Sixth Month, pp. 135-160.

Northern Piedmont; Appalachian Region, Parts I to IV; Ozark and Ouchita Highlands.

Seventh Month, pp. 160-186.

Northeastern Highlands; Basin of the St. Lawrence and the Great Lakes; Erie Canal Belt; Great Northern Forest; Arctic Pastures, Polar Seas and Polar Ice Caps.

Eighth Month, pp. 187-202.

Low Plains and Uplands of Mexico and Central America; West Indies; Trade of North America.

Ninth Month, Review. Geography of Kansas (S. 1 to 63.)

SEVENTH GRADE.

First Month, pp. 203-232.

Continent of Europe; Green Northlands; United Kingdom; Lower Countries and the Lower Rhine Valley.

Second Month, pp. 232-298.

Atlantic Plain of France; Great Plain of Central and Eastern Europe; Great Northern Forests of Europe; Arctic Pastures; High Mountains of Europe.

Third Month, pp. 299-383.

Central European Uplands; Balkan Mountain Region; European Corn Belt and the Vienna Basin; Mediterranean Region.

Fourth Month, pp. 384-512.

The Great Hot Desert and Its Oases; Plateaus of Asia Minor and Iran; Trade of Europe and the Mediterranean World; Asia--the Continent; Asiatic Tundra; Taiga, or Great Evergreen Forest of Siberia.

Fifth Month, pp. 512-640.

Siberian Wheat Belt; Eurasian Steppes and Deserts; High Dry Plateaus and Mountains of Central Asia; Japanese Rice Region; Chinese Region; Manchurian Region; India.

Sixth Month, pp. 640-768.

Farther India and Indo-China; Malay Peninsula, East Indies, and the Philippines; Trade of Asia and the East Indies; Africa--the Continent, People and History; Tropic Forest Regions; Tropic Grass lands.

Seventh Month, pp. 768-894.

White Man's South Africa; Kalahari Desert and Its Edges; Trade of Africa South of the Sahara; South America--the Continent; Tropic Forest Regions; Tropic Grasslands; Sub-tropic Agricultural Region.

Eighth Month, pp. 394-404.

East Temperate Agricultural Region; Argentine Semiarid
Region; Andean Regions; Pacific Coast District; Trade of
South America; Australia and the Pacific Isles.

Ninth Month, Review.

UNITED STATES HISTORY.

SIXTH GRADE.

(Text: Mace's Beginner's History.)

I. Aim.

A. To enrich the experience of children through -

1. Appealing to their natural interests and activities and directing these toward purposes comparable with the larger life purposes.
2. Connecting their school experiences with the experiences of life in the present by helping them to see how ideals and standards and customs come to be; why they are as they are, etc.
3. Leading them to an inquiring interest into the experiences of people in other places and other times and an appreciation of the character shown by these men and women.
4. Teaching them how to use books to satisfy different interests -to get information, to find recreation.

II. Period of Exploration.

It would be easy to spend so much time on the period of exploration that interest would be dulled. There are only a few expeditions that should be studied at length and only a few men whose lives should be studied by the entire class - men who represent different nationalities and different achievements.

4. Men to be studied:

1. Columbus. (pp. 2-16.) Study of explorers, logically, begins with the story of Columbus and his expeditions. The holiday set apart in his honor may be taken as a point of contact between the present and the past in some such way as the following: Why celebrate the day? Why name it Columbus Day? When did Columbus live? Where? Why did he set out on his first voyage?

2. Magellan. (pp. 28-31.)

Note.- The story of Magellan's voyage involves close correlation with the geography course as planned for this grade: (1) oceans, (2) continents, (3) zones, (4) people, (5) natural resources, etc.

3. Raleigh. The stories of Raleigh's successes and failures always interest children. These stories lend themselves to pageantry and drama and thus afford good material for the language period. The stories of the failure of his attempts to plant a colony in the New World may be presented so as to give a strong human interest to the geography period by leading pupils to see the relation between man and his environment; the influence of environment on man; the influence of man on his environment.

(History Stories of Other Lands, The New Liberty, pp. 160-170.)

4. Champlain. Relations with the Indians. Explorations. Men who followed him.

Note.-The opportunities for individual work of the following nature are many - reporting on explorers contemporary with the men studied, description of an event, the drawing of a map to show route taken, the construction of a ship of the old type, the making of a trapper's outfit or camp, etc. All such work will have value according to the independence shown by the pupils and should be done out of school hours or in spare time after assignments have been completed.

- B. A study of explorations made by the four nations-Spain, France, Holland, England. The study of the men named may include studies of their time and contemporaries directed by the following questions:
- Why were the countries so slow to follow up the discovery of America? Why did the nation that came last finally gain control of the greater part of North America? What purpose motivated each nation in following up the voyages of Columbus?

1. The Spanish - in search of mineral wealth. Where did they go? What did they find? Were their attempts at colonization good and successful? What

kind of men were the Spanish heroes?

2. The French - in search of fish and furs. How long after the time of Columbus did the French wait to send an expedition? Where did they go? What did they go after? How did they live? What colonies did they plant? What men followed the trappers and hunters? How did they get along with the Indians? What kind of men were the French heroes?
3. The Dutch - in search of spices and precious stones. How long after Columbus' voyage until the Dutch sent out expeditions? Where did they go? Why did they gain so little of North America? What kind of men were the Dutch heroes?
4. The English - in search of a place for homes. Why? When did the English send out the first expedition? Why? The second? Where did they settle? How did they get along with the Indians? How did they find food and shelter? What kind of men were the English heroes?

III. Period of Colonization.

A. Men to be studied.

1. Cortez.
2. Carter.
3. John Smith. Study John Smith because of the appeal which his story makes to children. They will be interested in thinking out answers to

the question, "Why do we not have a holiday to honor John Smith?"

4. Calvert. His plans for equality and freedom in Maryland.
5. Intthrop and the Pilgrims. A story of how men developed a poor region and in so doing developed themselves in such way that we talk of Yankee ingenuity, New England thrift, New England conscience, etc.
6. Stuyvosant.
7. William Penn. His dealings with Indians. His ideas of what government should be. Obedience without liberty is tyranny; liberty without obedience is license." The reforms he established.
8. Oglothorpe. His altruistic purposes.
- B. Life in the New World. In the studies of colonial leaders a great deal of information relative to conditions and problems of life in the New World will be gained. It will be well to organize this knowledge about such topics as-
 1. The conquest of Mexico and Peru.
 2. The trading stations on the Mississippi and St. Lawrence.
 3. The plantation life of the South.
 4. The trading stations of the Middle Atlantic region.
 5. The barren shores of New England:

IV. Rivalry of European Nations.

The stories of men whose influence was felt in America during the struggle between European nations with rival claims in the New World will not be understood by the pupils without a summing up of the knowledge already gained about the early history of America. This summary may be supplemented by the teacher in order to give the children a background from European history.

A. The rival claims.

1. Let pupils locate the parts of North America owned in 1700 by (a) England, (b) France, (c), Spain and (d) Holland.
2. What were the achievements of each nation up to that time?
3. Why did the colonists of the different nations not trust one another?
4. What parts were owned by each nation in 1760?
5. Why did the nation that came last own most of North America?

B. Men to be studied.

1. Marquette and La Salle.
2. Washington. Journey to Ohio river; service with Braddock.
3. Franklin. Effort to unite the colonists.
4. Wolfe.
5. Montcalm.

I. American leaders and heroes of the early national period.

A. Heroes of the sea.

1. John Paul Jones, pp. 194-198.
2. John Barry, pp. 199-202.

B. Heroes of the frontier.

1. Daniel Boone, Kentucky pioneer, pp. 202-210.
2. John Sevier, famous Indian fighter, pp. 210-216.
3. George Rogers Clark, the hero of "Old Vincennes" pp. 216-224.

C. The hero of invention.

1. Eli Whitney, inventor of the cotton-gin, pp. 226-229.

Library reference: Bachman: Great Inventors
and their inventions, pp. 105-120.

D. The hero of statesmanship.

1. Thomas Jefferson, the champion of democracy, pp. 229-238.

E. The heroes of exploration.

1. Lewis and Clark exploration of the Louisiana and Oregon territory, pp. 238-244

F. The hero of Lake Erie.

1. Oliver Hazard Perry, the victor of Lake Erie.

G. The hero of the soldiers.

1. Andrew Jackson, the hero of New Orleans, pp. 248-254.

H. The heroes of invention.

1. Robert Fulton, inventor of the steamboat, pp. 257-264.

Library reference: Bachman: Great Inventors and their Inventions. pp. 25-49.

2. Samuel F. B. Morse, inventor of the magnetic telegraph, pp. 264-269.
3. Cyrus W. Field, layer of the Atlantic cable, pp. 268-272.

11. Heroes of war and peace in the middle period.

- A. Sam Houston, the hero of San Jacinto, pp. 279-284.
- B. David Crockett, the hero of the Alamo, pp. 284-285.
- C. John C. Fremont, "The Pathfinder," pp. 285-294.
- D. Henry Clay, the great pacificator, pp. 296-302.
- E. Daniel Webster, the defender of the constitution, pp. 302-308.
- F. John C. Calhoun, the champion of nullification, pp. 308-313.
- G. Abraham Lincoln, the liberator of the slaves, pp. 318-330.
- H. Ulysses S. Grant, the conquering general of the Union army, pp. 331-337.
- I. Robert E. Lee, the vanquished general of the Confederate army, pp. 337-341.

III. Leaders in war and peace since the Civil War.

- A. William McKinley, the Spanish-American War president, pp. 352-359.
- B. Theodore Roosevelt, the strenuous patriot, pp. 360-

372.

- C. William Howard Taft, the first governor general of the Philippine Islands, later president of the United States and at present chief justice of the supreme court, p.369.
- D. George W. Goethals, builder of the Panama Canal, pp. 376-378.
- E. Thomas A. Edison, the wizard of electricity, pp. 380-386.
- F. Elizabeth Cady Stanton, the champion of women's rights, p. 401.
- G. Susan B. Anthony, the heroine of woman suffrage, p. 403.
- H. Julia Ward Howe, patriotic poet, p. 404.
- I. Harriet Beecher Stowe, author of Uncle Tom's Cabin, p. 407.
- J. Frances W. Willard, the great temperance crusader. p. 409.
- K. Clara Barton, the founder of the American Red Cross. p. 410.
- L. Jane Addams, the friend of the poor, pp. 412-414.
- IV. Resources and industries.
 - A. The new west, pp. 372-376.
 - B. Farm and factory, pp. 416-421.
 - C. Mines, mining and manufactures, pp. 421-423.
- V. America and the world war.
 - A. Woodrow Wilson, the world-war President, pp. 444-

444.

VI. Other recent leaders in the life of the nation.

- A. Robert Edwin Peary, the discoverer of the North Pole, p.-
- B. Roald Amundsen, the explorer of the Northwest Passage, p.-
- C. Robert Scott, the explorer of the Antarctic, p.-
- D. Alexander Graham Bell, the inventor of the telephone, p. 268.
- E. Guglielmo Marconi, the inventor of wireless telegraphy, p. 268.
- F. James B. Eads, the bridge builder, Lib. Ref. Lef-
fert's Our Own United States, p. 120.
- G. The Wright Brothers and Curtiss, the inventors of the aeroplane, pp. 392-393.
- H. Pierre and Mme. Curie, the discoverers of radium, p.-
- I. Luther Burbank, the plant wizard, pp.-
- J. John Muir and John Burroughs, the great naturalists, p.-
- K. John J. Pershing, the American Commander in the
world war, pp. 435-437.

UNITED STATES HISTORY.

United States History, Including History of Kansas.

Text: Foster.

1. Period of discovery.

- a. Traditional history.

1. The Norsemen.
 - a. Time
 - b. Leaders.
 - c. Character.
 - d. Settlement.
2. The Island Builders.
3. Cliff Dwellers.

B. Recorded history.

1. Problem: How did the events in Europe hasten exploration and discovery?
2. European preparatory events.
 - a. The Crusades.
 - b. The Hundred Years' War.
 - c. The War of the Roses.
 - d. Educational awakening.
 - e. Printing stimulates adventure.
 - f. Inventions.
 - (1) The compass.
 - (2) The astrolabe.
 - g. Trade with oriental countries.
 - h. Portuguese activities.
 - (1) Trade routes.
 - (2) Established school for navigators.
 - i. Arguments of Sir John Mandeville.
3. Explorers.
 - a. Problem: To find a shorter trade route to the Indies.

(1) Columbus. (1491.)

(a) Boyhood.

(b) Ail.

(c) Voyages.

1. First, second, third.

2. Effect of discovery.

(2) John Cabot.

(a) Purpose of expedition.

(b) Result.

II. Period of exploration.

A. Spanish. Brief accounts. Colonial policy. Indian and Negro slavery.

1. Ponce de Leon and Florida.

2. Balboa and Pacific Ocean.

3. Cortez and Mexico.

4. Magellan and circumnavigation of the globe.

5. De Soto and the Mississippi.

6. Menéndez and the Huguenots.

7. Coronado, the Southwest and Kansas.

B. French. Brief accounts.

1. Verrazano and the Northwest Passage.

2. Cartier and the St. Lawrence.

3. The Huguenots.

a. John Ribault.

b. Laudonniere.

4. Champlain.

C. English. England's attitude toward Spain.

1. Francis Drake and the circumnavigation of the globe.
2. Sir Walter Raleigh and settlement at Roanoke Island.
3. Show effect of the defeat of the Spanish Armada on English colonization.
4. Conflicting claims.

III. Indians.

- . Problem: What has become of the Indians?
 1. Personal appearances.
 - . Home life and habits. Culture of southern and of northern Indians.
 2. Weapons, dress and property.
 - a. Projects.
 - (1) Let the boys make a bow, feather an arrow and decorate a quiver.
 - (2) Let the girls make an Indian basket and decorate it with beads and natural dyes.
 - (3) Make a neighborhood collection of Indian relics.
 3. Characteristics.
 4. Religion.
 5. Number and distribution. Reservations for Indians.

IV. Topic: The period of settlement.

Problem: Why was England active in the colonization

of America?

1. Virginia. (1607).

1. London Company. Jamestown.

- a. Charters promise the rights of residents of England.
- b. John Smith.
- c. Starving time.
- d. First representative assembly.
- e. Labor by indentured servants.
- f. Indian wars.

2. A Royal Province.

3. Influence of Puritan Revolution and Restoration.

- a. Charles I taxed the colonists without their consent.
- b. Oliver Cromwell made Lord Protector of the commonwealth.

(1) Emigration of the cavaliers to Jamestown.

c. Charles II.

(1) William Berkley's oppression.

(a) Bacon's Rebellion.

(b) The fur trade.

4. Navigation acts.

- a. Purpose.
- b. Provisions.
- c. Effects on the colonies.

B. Massachusetts.

1. The Pilgrims.

- a. In Holland. Reason for coming to America.
- b. at Plymouth Rock.
- c. The Mayflower agreement.
- d. Hardships.
- e. The Indians as friends and foes.

2. The Puritans found Massachusetts Bay Colony.

- a. English oppression caused the settlement.
- b. Representative self government.
 - (1) The township.
 - (2) The town meeting.
 - (3) religious qualification for voting.
- c. Occupations of the settlers.
- d. King Philip's War.

3. The Salem witchcraft.

4. Massachusetts loses charter.

- a. The unwise rule of Andros.

5. Religious differences among the colonists.

- a. Roger Williams. Ideals of democracy and religious toleration.
- b. Anne Hutchinson.
- c. The Quakers - persecuted.

C. Maryland.

1. Lord Baltimore.

- a. Founded refuge for persecuted Catholics.
- b. Secured liberal charter.

(1) Proprietary government.

c. Mason and Dixon's line.

d. Toleration Act.

D. Connecticut.

1. Fundamental orders of government.

2. The Pequot War.

3. The United Colonies of New England.

4. The Royal Charter.

E. Rhode Island.

1. Roger Williams and the government.

2. The charter of 1663.

F. New Hampshire.

1. United with Massachusetts for protection
from the Indians.

G. New York.

1. Exploration by Hudson.

2. The Dutch fur traders.

3. The Dutch West India Company.

4. Rival claims of territory.

5. The Dutch governors.

6. Trouble.

a. With the Indians.

b. With the Swedes.

c. With the English.

7. Demand of the people for a voice in the
government.

8. Social customs and education.

H. Pennsylvania.

1. William Penn.

- a. His purpose.
- b. His grant.
- c. Philadelphia founded.
- d. Treaty with the Indians.
- e. "The Great Law."
 - (1) Freedom of conscience granted.
 - (2) Every child taught a trade.
 - (3) Trial by jury granted.
 - (4) Taxes levied by the assembly.
- f. Mason and Dixon line established.

1. The Carolinas.

- 1. The first settlers.
- 2. The Grand Model and its failure.
- 3. Products.
- 4. Division into North and South Carolina.

J. Georgia.

- 1. Treatment of debtors in the eighteenth century.
- 2. Oglethorpe.
 - a. His aims.
 - b. His plan and its failure.
 - c. Hostility of the Spaniards.

K. Map work. On an outline map of North America, show in colors the important permanent

settlements.

V. The growth of French power and the struggle with the English for supremacy in North America.

A. Territory in North America.

1. French claims.
2. English claims.

B. Explorations and settlements.

1. The French.
 - a. Iroquois hostility.

C. Trade rivalry.

1. Through Montreal.
2. Through Albany.

D. Resources.

1. Louisburg and its importance.
2. The Champlain valley and its importance.
3. Fortifications.
 - a. French.
 - b. English.
4. The Albany Congress.

E. Early engagements of the French and Indian War.

1. Braddock's defeat and the battle of Lake George.
2. Montcalm's successes at.
 - a. Oswego.
 - b. Fort Mifflin Henry.
 - c. Ticonderoga.

F. Close of the struggle.

1. Louisburg.

2. Crown Point.

3. Niagara.

4. Quebec.

G. Treaty of Paris. How was the territory of Kansas affected by the terms of this treaty?

H. Effects on the colonists of the French and Indian Wars.

1. Taught self-confidence.

2. Created a spirit of unity.

3. Trained soldiers for the Revolution.

I. Life in the Colonies.

1. Travel and communication.

2. Manufactures.

3. Commerce.

4. Colonial governments. Representative type. English laws.

5. Amusements.

6. Intercolonial jealousies.

7. Contrasts.

a. New England town. Education. Various industries. Puritan virtues and weakness.

b. Southern plantation. Public education impossible. Wealthy land owners. Slavery.

VI. The Revolution.

A. Causes.

1. England's colonial policy.

a. Laws regulating trade and commerce.

- b. Trials of assistance.
 - c. Taxation without representation.
 - d. The stamp act, etc.
- B. The first Continental Congress, 1774.
 - 1. Lexington and Concord.
- C. The second Continental Congress, 1775 to 1781.
 - 1. Weakness of the Congress.
- D. The Revolution directed by second Continental Congress.
 - 1. Bunker Hill.
 - 2. Declaration of Independence.
 - 3. Washington drives British out of Boston.
 - 4. Battle of Long Island.
 - 5. Washington's retreat.
 - 6. Lafayette and Tebber.
 - 7. Capture of Philadelphia by Howe.
 - 8. Burgoyne's campaign.
 - 9. Valley Forge.
 - 10. Arnold's treason.
 - 11. Greene's campaigns in the south.
 - 12. Yorktown.
 - 13. Treaty of peace.
- VII. The Confederation.
 - A. The thirteen original states.
 - 1. Problems.
 - a. Points of similarity and difference.
 - b. United action forced by war.

c. Disputes between the states.

(1) Boundaries.

(2) Trade.

d. Difficulties of the congress.

(1) In enforcing treaties.

(2) In collecting money from the states.

(3) Different kinds of money in circulation.

(4) The real weakness of congress.

e. The ordinance of 1787.

VIII. The constitution.

A. The supreme written law of the United States.

1. Departments of government.

a. Provided in constitution.

(1) Legislative.

(2) Executive.

(3) Judicial.

b. Illustrated.

(1) In village.

(2) In city.

(3) In county.

c. Principal duties of each department.

2. Important powers denied the United States.

3. Important powers denied the states.

4. Why changes in the constitution are sometimes necessary.

5. Why the first ten amendments were added.
6. How the constitution may be amended.
7. The great compromises of the constitution.

10. Important dates.

A. A few important dates are to be fixed in mind by definite study and frequent review. They aid in the association and proper relation of events.

1. Discovery and exploration, 1492, 1497, 1534, 1588.
2. Settlement, 1607, 1608, 1609, 1614, 1620, 1664, 1689, 1754, 1763.
3. Revolution, 1765, 1774, 1775, 1776, 1777, 1781.

EIGHTH GRADE.

United States History, Including Kansas.

1. Establishing the government.

Problem: How was the change made from the articles of confederation to the constitution of the United States?

A. The inauguration of Washington.

1. The cabinet members and their duties.
 - a. Jefferson, Secretary of State.
 - b. Hamilton, Secretary of the Treasury.
 - c. Knox, Secretary of War.
 - d. Randolph, Attorney-general.

2. Debts and revenues.

3. The organization of political parties.
4. The United States bank.
5. The mint and free coinage of gold and silver.
6. The retirement of Washington.

II. Growth under the constitution.

A. The purchase of Louisiana.

1. Lewis and Clark expedition.

B. War of 1812.

1. Causes.
2. Winning Lake Erie.
3. Defending New York.
4. The burning of Washington.
5. The defense of New Orleans.
6. Effects.
 - a. On settlement of the West.
 - b. On increasing manufactures in the East.

C. The purchase of Florida.

D. Opposing forces.

1. In the South.
 - a. Increase in cotton growing.
 - b. Demand for more slave territory.
2. In the North.
 - a. Increase in manufactures.
 - b. Demand for protective tariff.
3. In congress.
 - a. Balancing of free and slave states.
 - (1) Maine and Missouri.

(2) The Missouri Compromise.

E. Transportation and travel.

1. The steamboat.
2. The Cumberland road.
3. The Erie Canal.
4. Railroads.
5. Project. Make a map showing the main lines of travel from the Atlantic to the Mississippi (1800-1850).

F. Statesmen.

1. Jackson and the "spoils" system.
2. Clay and the compromises.
3. Webster and the constitution.
4. Calhoun and nullification.

G. The telegraph.

H. War with Mexico.

- I. The discovery of gold in California.
 1. Effect on the extension of slavery.
 2. The compromise of 1850.

III. The Civil war.

A. Causes.

1. The Dred Scott decision.
2. Enforcing the fugitive slave law of 1850.
3. The border war in Kansas.
4. "Uncle Tom's Cabin."
5. John Brown's raid.
6. Election of Lincoln.

B. Events of the war.

1. Secession of states.
2. Firing on Fort Sumpter.
3. Equipping the armies.
 - a. In the North.
 - b. In the South.
4. The first battle of Bull Run.
 - a. Effects.
 - (1) On the North.
 - (2) On the South.
5. The blockade of southern ports.
6. Attempts to take Richmond.
7. The work of the navy.
8. Lee's invasion of the North.
9. The final campaign.

C. Great leaders.

1. Lincoln.
2. Grant.
3. Lee.
4. Sherman.
5. Sheridan.
6. Stonewall Jackson.

D. Results.

1. Maximilian overthrown.
2. The Alabama claims.
3. The emancipation proclamation (war measure).
4. The thirteenth, fourteenth and fifteenth

amendments.

5. Reconstruction.
 - a. Lincoln's plan.
 - b. Johnson's plan.
 - c. The plan of congress.
6. Carpetbaggers.
7. The Ku Klux Klan.
8. The Negro and his vote.

IV. From Grant to Roosevelt.

- A. The purchase of Alaska.
 1. Original cost and present value.
 2. Products.
 3. Education and government.

Lib. Ref.: From Lincoln to Coolidge, pp.
112-119.
- B. Progress of the nation.
 1. The Atlantic cable laid.
 2. The transcontinental railway completed.
 3. Growth of the west.
 - a. The homestead act.
 - b. Cattle and sheep ranches.
 - c. Irrigation and reclamation projects.
 4. Manufacturing in the south.
 5. Education of the Negro.
 6. Growth of cities.
 7. The telephone.
 8. Electric traction.

C. The assassination of Garfield.

D. Civil service reform.

E. The war with Spain.

1. Dewey at Manila.

2. Sampson and Schley at Santiago.

3. Roosevelt and the Rough Riders.

4. The Treaty of peace.

5. Territorial additions.

F. Great men.

1. In literature.

a. Irving, Cooper, Hawthorne, Longfellow,
Lowell, Whittier, Bryant, Greeley.

2. In science.

a. Morse, Fulton, McCormick, Howe, Ricc-
son, Field, Hads, Bell, Edison, Milbur
right, John P. Holland.

3. In philanthropy.

a. Peter Cooper, Ellis, Carnegie, Booker
Washington.

V. The United States in the twentieth century.

A. The United States a world power.

1. Results of the Spanish-American War.

a. Colonial possessions.

b. New foreign policy.

B. Our relations with the Far East.

1. The Boxer uprising.

- 2. The "open door" policy.
- 3. The assassination of McKinley.
- 4. Roosevelt as president.

1. Policies.

- a. Laws regulating trusts.
- b. Conservation of natural resources.
- c. Reclamation of land.
- d. Preservation of forests.
- e. Irrigation projects.
- f. Waterways projects.
- 2. Relations with Central and South America.
- 3. Growth of political equality.
- 4. Improvement of labor conditions.

2. The Taft administration.

- 1. Public service projects.
- 2. Postal savings banks established.
- 3. Parcel post established.

3. Foreign policy.

3. The Wilson administration.

- 1. Financial legislation.
 - a. Federal reserve act.
 - b. Tariff revision.
 - c. Income tax legislation.
- 2. Political reforms.
- 3. Social reforms.
 - a. Conservation of human life.
 - b. Pure food laws.

4. Foreign policy.

a. The Mexican problem.

b. The Pan-American policy.

c. Early attitude toward the World War.

VI. The United States and the World War.

A. Underlying causes of the war.

1. Aims of Germany.

2. The struggle between autocracy and democracy.

3. Economic causes.

B. Effort of the United States to preserve neutrality.

1. Immediate cause for our entry into the war.

2. Problems which our entry into the war presented.

a. Raising an army.

b. Mobilizing industries.

c. Regulating transportation.

d. Control of food.

C. The part of the United States in the allied victories of 1918.

D. The armistice.

E. Peace negotiations

1. Problems of peace.

Famous men and women, whose achievements should be known, grouped by suggestive periods:

Bible characters: Joseph, David, Moses (Exodus, ch. II), Abraham, Daniel (Book of Daniel), Ruth (Book of Ruth).

Greeks: Alexander (455), Ulysses (453), Leonidas (462), Socrates (453-454), Hercules (legendary) (442).

Romans: Julius Caesar (471-473), Hannibal (477-469), Romulus (legendary) (474), Cincinnatus (465), Horatius (464-465), Constantine (475).

Northern Europe: William Tell, Siegfried (legendary), William of Orange, King Canute, Luther.

Southern Europe: Marco Polo, King Philip, Queen Isabella (6, 8, 15).

French: Napoleon (236), Joan of Arc, William the Conqueror (498-499), Charlemagne (479-482), the Jesuits.

British: Raleigh (42-47), Alfred the Great (494-488), King Arthur, Queen Elizabeth (40-44), Robert Bruce, William Pitt (126, 154, 162), Richard the Lion Hearted, Cromwell, King John, Robin Hood.

Early people in America: Hiawatha (legendary), Amoset (73) and Squanto (73-35), Pocahontas (66-68), Iroquois (51, 86), Cliff and Cave Dwellers, Algonquins (49-52), Round Builders, Eskimos.

Finding the New World: Columbus (2-16), La Salle (106-113), Magellan (25-31), Leoto (24-28), The Northmen (1-2, 483-486), Cortez (13-32), Drake (37-42), Champlain (49-53), John Cabot (34-37), Marquette (53, 106, 112), Joliet (53, 106, 112), Hudson (54-56), Ponce de Leon (17, 124), Balboa, Cartier (42), John Sebastian (34-37), Cab

ot, Vespuclus (16), Da Gama (28).

Making homes in the New World: Miles Standish (75-80), the Quakers (92-100), Pilgrim Fathers (73-81), William Penn (92-98), John Smith (61-66), the Puritans (68, 70, 81-83), Roger Williams, Lord Baltimore (69-70), John Winthrop, Oglethorpe, Peter Stuyvesant, the patroons, the Cavaliers, the Muscogues.

Conflict and struggle for supremacy: Washington, Franklin, Daniel Boone, George Rogers Clark, Burgoyne, Lafayette, Patrick Henry, Benedict Arnold, Montcalm and Wolfe, Nathan Hale, Samuel Adams, General Greene, Cornwallis, General Marion, General Braddock, Paul Revere, George III, Robert Morris, John Hancock.

Forty years, 1789-1829: Paul Jones, Lewis and Clark, Jefferson, Webster, Hamilton, Clay, Robert Fulton, John Jay, John Adams, Calhoun, Madison, Eli Whitney, Commodore Perry, Monroe, Sevier.

Thirty-two years, 1829-1861: Jackson, Fremont, W.F.B. Fiske, John Quincy Adams, Zachary Taylor, Buchanan, William H. Harrison, Sam Houston, Kit Carson, David Crockett, Horace Greeley, McCormick, Longfellow, General Scott.

Four years, 1861-1865: Lincoln, Lee, Grant, John Brown, Farragut, Sherman, Douglas, Jefferson Davis.

Fifty-five years, 1865-1920: Andrew Johnson, Garfield, Roosevelt, McKinley, Cleveland, Harrison, Dewey, Edison, Taft, Wilson.

Inventions and Discoveries: approximate dates, important changes, chief benefits to man from each: Telegraph, railroads, printing, telephone, cotton gin, steamboat, harvester, canals, sewing machine, cables, electric light, locomotive, battleships, mariner's compass, wireless, threshing machines, gunpowder, electric car, automobile.

LIBRARY REFLECTS.

- Gifford and Payne: Red Heather's Adventures.
 Hooker: Star: The Story of an Indian Pony.
 Bailey: Boys and Girls of Colonial Days.
 Bachman: Great Inventors and Their Inventions.
 Meeker-Driggs: Ox-Team Days on the Oregon Trail.
 Allen: David Crockett, Scout.
 Foote: The Man Without a Country and Other Patriotic Stories.
 Baldwin: An American Book of Golden Seeds.
 Gilman: Alaska, the American Northland.
 Stefansson and Schwartz: Northward Ho.
 Thompson: The Land of the Pilgrims.
 Wilson and Driggs: The White Indian Boy.
 Logie: From Lincoln to Coolidge.
 Nicolay: The Boys' Life of Ulysses S. Grant.
 Bok: A Dutch Boy Fifty Years After.
 Terry: History Stories of Other Lands.
 I. Tales from Far and Near.
 II. Tales of Long Ago.
 III. The Beginnings.

IV. Lord and Vassal.

V. The New Liberty.

VI. The Modern World.

Mayland: History Stories for Primary Grades.

Cartis: Why We Celebrate our Holidays.

Forbes-Lindsay: Daniel Boone, Backwoodsman.

Nicolay: Boys' Life of Abraham Lincoln.

Russell-Driggs: Hidden Heroes of the Rockies.

Thomson: The Land of Evangeline.

Humphrey: Under These Trees.

UNITED STATES STUDY IN HISTORY.

Text: Mace's Beginners' History.

FOURTH GRADE.

First Month, pp. 1-72. Sixth Month, pp. 331-400.

Second Month, pp. 73-146. Seventh Month, pp. 401-444.

Third Month, pp. 147-210. Eighth Month, pp. 445-494.

Fourth Month, pp. 211-276. Ninth Month, Review.

Fifth Month, pp. 277-331.

UNITED STATES STUDY, HISTORY, IN THE 11th GRADE.

Text: Foster.

FIFTH GRADE.

First Month, pp. 13-48.

In Kansas: Cabeza de Vaca; Coronado; Cuivera.

Second Month, pp. 49-78.

Third Month, pp. 80-113.

In Kansas: La Salle and Louisiana.

Fourth Month, pp. 115-150.

Fifth Month, pp. 151-189.

Sixth Month, pp. 191-216.

Seventh Month, pp. 217-242.

In Kansas: Louisiana Purchase; Lewis and Clark Expedition, 1804-1806; Pike's Expedition, 1806.

Eighth Month, pp. 243-268.

Ninth Month, Review.

EIGHTH GRADE

Text: Foster

First Month, Review, pp. 217-278.

In Kansas: Missouri Compromise, 1820.

Second Month, pp. 279-313.

In Kansas: Scout Kit Carson; The Oregon Trail; Journeys of Gregg.

Third Month, pp. 314-349.

In Kansas: Removal of Indians from Kansas, 1854; Missionaries; Forts; The Kansas-Nebraska Bill, 1854; Settlers; Towns, Governor Reeder; First Legislature; State Constitutions; Sacking of Lawrence, May 21, 1856; John Brown; Schools.

Fourth Month, pp. 350-390.

In Kansas: Kansas admitted to the Union, January 29, 1861; Kansas in the Civil War; Quantrill's Raid; The Pony Express.

Fifth Month, pp. 391-423.

Travels with Indians, 1868; Homestead Law:

Buffalo; The "Exodusters," 1878-'80; "Oklahoma or Bust," 1889; Prohibition in Kansas.

Sixth Month, pp. 424-450.

In Kansas: Kansas in the Spanish-American War.

Seventh Month, pp. 451-485.

In Kansas: Woman Suffrage; Pawnee Rock; Pike Memorial; Marking Santa Fe Trail; Pawnee Capital.

Eighth Month, pp. 486-519.

In Kansas: Kansas in the World War; Camp Funston; education; Memorial Hall.

Ninth Month, Review.

In Kansas: Missions: Presbyterian, Methodist, Catholic, Baptist, Friends, Prominent Kansans: Preston B. Plumb, William A. Harris, Mrs. Mary (Mother) A. Bickerdyke, Eugeno F. Ware, John J. Ingalls, and others.

GOVERNMENT.

TEXT: OUR GOVERNMENT.

EIGHTH GRADE.

AIMS.

- A. To implant love of country and its ideals and to develop pride in our heritage.
- B. To develop a spirit of cooperation and respect for authority by tracing the steps by means of which our institutions of government have been evolved.
- C. "To help the pupil understand the functions of local, state and national governments, and to give him definite information of the machinery through which these functions are performed."--From Seattle course of study.

The teachers should make use of the project problems at the end of each chapter and of one or more of the questions for debate.

The expressions in parenthesis - (.7), for example - which follow some of the topics in the outline, refer to the restricted treatment of the topic in the Kansas Government, which is a supplement to the principal text. The topics in the supplement are to be studied in connection with the topics in the general text.

FIFTH MONTH. (pp. 1-40.)

1. Government: Guidance.

Problem: Why do we see such signs as "No

Trespassing," "Danger," "No Fishing or Hunting," "No

tour"?

A. Purpose.

1. regulate conduct.
2. Protect rights.
 - a. Individual.
 - b. Groups or classes.

B. Origin and kinds.

1. Family.
 - a. Obedience.
 - b. Protection.
 - c. Types of homes.
 - (1) Cave dwellers.
 - (2) Roman family.
 - (3) Pioneer family. United States of America.
 - (4) Modern family.

2. Tribe.

- a. Advantages over family.
- b. Kinds.
 - (1) Hebrew.
 - (2) Indian.
- c. Tie-blood relationship.

Question: Of the four types of families, which is most likely to obey the laws they themselves have made? Let each member of the class choose and affirm the superiority of one type.

II. Cities.

A. Factors of growth.

1. Ancient.
 - a. War.
2. Modern.
 - a. Protection.
 - b. Trade.
 - c. Industry.
- B. Medieval cities.
 1. Sanitation.
 - a. Filth.
 - b. Disease. Black death, 1347.
Library reference: Lord and Vassal, p.207.
 - c. Modern problems unrecognized.
 2. Unfair laws.
 - a. Trade was restricted.
 - b. Justice was lacking.
 - c. Guilds were established.
- C. Colonial Cities in America.
 1. Outgrowth of tribal government.
 2. Subject to kingdom or empire.
 3. Guilds and trade-unions.
 4. The church and its work.
 5. The school and its support.
- D. Industrial Changes
 1. Steam power for hand power.
 2. Factory for the shop.
- III. Rural community life

A. Modern conveniences.

1. Newspapers. Name those in this community.
2. Churches. Name and locate local churches.
3. Rural high schools. Locate one. (S. 83.)
4. Lodges. Who belong? Where do they meet?
5. Radio. Kansas State Agricultural College broadcasts opening exercises to rural schools each day, besides numerous lectures of interest to farmers. Kansas University conducts lecture courses by radio.
6. Telephones.
7. Rural mail service daily.
8. Automobiles.
9. Electric light and power.

B. Growth.

1. Protection ceases to be important factor.
2. Trade controls and responses.
 - a. Rivers and lakes.
 - b. Railroad intersections vs. river junctions.
 - c. Soil and moisture.
 - d. Transportation. (S. 50.)
3. Industry.
 - a. Agriculture of first importance.
 - b. Interdependence of small town and rural community.

C. European influence.

1. English.

1. New England town government.

- (1) Relation to English village.
- (2) Spirit of independence.
- (3) Pure democracy.
- (4) Suffrage qualifications.
 - (a) Church membership.
 - (b) Property.
- (5) Selectmen.
 - (a) Clerk.
 - (b) Constable.
 - (c) Justice.
- (6) Minor officers.
- (7) Town Meeting.

2. French village government.

- a. All people lived in village.
- b. Little or no self-government.
- c. Elected no officers.
- d. Local officials appointed by chief colonial officer.

Problem: How did the English town government prepare the colonists for participation in the establishment of a constitutional government?

D. Pioneer Life in Mississippi Valley.

1. Farms larger than European farms.
2. Farmer produced his own food, shelter and clothing.
3. Farmers established schools and churches.

4. Settlements along valleys and streams.
5. Settler owned his farm.
- E. Modern rural life in Mississippi Valley.
 1. Tenant farmers increasing in numbers.
 2. Improved machinery.
 3. Capital and ownership.
 4. Crop rotation necessary.

(Agriculture, Call and Kent, pp. 192-203.)
 5. Cooperative marketing.
 6. Good roads. (\$.50.) See last topic in outline for Agriculture.
 - a. Federal highways designated ^{U S} -75, etc.
 - b. State highways designated by numbers only.
 - c. County roads.
7. Schools.
 - a. District. (S. 81.)
 - b. Consolidated. (S. 83.)
 - c. Rural high school. (S. 83.)
 - d. Community high schools. (Kansas.)

(School Laws of Kansas, 1923, sec. 479.)
 - e. City high schools. (S. 83.)
- F. City Attractions.
 1. Church.
 2. Theaters.
 3. Art galleries.
 4. Libraries.
 5. Movies.

6. Electric lights.
7. Paved streets.
8. Better schools. (1960-83.)
9. Employment - wages.
10. Street railways.
- c. Small city problems. (1977.)
 1. Retired farmers.
 2. City building.
 3. Parks and paving.
 4. City water.
 5. Power plants.
 6. Law enforcement.
 7. Public health. (1988.)

IV. Cities.

Growth.

1. Trade - commerce.

Example: New York, Chicago, St. Louis, Kansas City, Minneapolis, St. Paul, Denver.

2. Centralized wealth and labor.

a. In factories.

(1) Specialization of labor.

(2) Related industries.

b. In mines.

c. In commerce.

d. In caring for the laborers.

B. Problems.

1. Supervised charity necessary.
2. Vice and crime easily perpetrated.
3. Policemen - their service.
4. Transportation (.30).

- a. Surface cars.
- b. Elevated lines.
- c. Subways.
- d. Municipal ownership.

(1) Objectional features.

- e. Motor bus.
- f. Water supply.
 - a. Must be abundant and pure.
6. Street cleaning department.
 - a. Must be efficient.
 - b. Work of boys and girls.

7. Industrial nuisances.

- a. Kinds. Gases, fumes, acids, salt, smoke.
- b. Relief.

C. City planning. (.79.)

1. Objects.

- a. Take care of increased traffic.
- b. Separate business section from resident district.
- c. Control kind of buildings erected.
- d. Reserve and create scenic attractions.
- e. Remove shacks, bill boards, rubbish.
- f. Make city beautiful.

2. Example: Washington, D.C.

a. Plan.

(1) By Pierre Charles L'Infant and George Washington. (Human Geography, p. 144; The New International, vol. 23, p. 423.)

b. Features.

- (1) Avenues converge at centers such as Capitol and the President's house.
- (2) Streets from 30 to 160 feet wide.
- (3) Intersections of avenues and streets from 302 squares and circles and reservations.
- (4) Dignified neoclassic buildings.

SECOND MONTH. (pp. 41-66.)

V. Units of government.

A. Family.

B. School district. (Kansas).

1. Purpose. (S. 81.)

2. Organization.

3. Annual meeting.

a. Date - second Friday in April.

b. Powers.

(1) Seven general powers. (School laws 1923, sec. 303.)

4. Officers. (S. 82.)

a. Election or appointment.

b. Duties.

c. Term.

C. Townships (Kansas).

1. Kinds.

a. Congressional (United States land survey).

(1) Description.

(2) Location and numbering.

b. Political.

(1) Officers - duties of each. (S. 61-63)

(a) Clerk.

(b) Treasurer.

(c) Trustee.

(d) Constable.

(e) Justice of the peace.

2. Elections. (S. 58.)

D. County (Kansas). (S. 64.)

1. Purposes.

a. Administer justice.

b. Levy, collect and distribute taxes.

2. Officials and their duties. (S. 38-42)

a. Commissioners. (S. 65.)

b. Sheriff. (S. 68.)

c. County Attorney. (S. 67.)

d. Probate judge. (S. 68.)

e. Treasurer. (S. 66.)

f. County clerk. (S. 66.)

g. Register of deeds. (S. 69.)

h. Superintendent of public instruction. (S. 69.)

i. County auditor. (S. 67.)

J. District judge (several counties). (S. 38.)

E. Cities.

1. Meaning very inclusive.

2. Classes (Kansas). (S. 72.)

a. First class - 11 cities. (S. 77.)

(1) Population.

(2) Advantages or privileges. (S. 78.)

(3) Officials - duties. (S. 74.)

(4) Departments.

(5) Government by,

(a) Commission. (S. 75.)

(b) Mayor and council. (S. 74.)

(c) City manager. (S. 76.)

b. Second class (72 cities). Topics (1) to (5) for first-class cities.

F. State.

1. History of state government. (S. 7.)

a. Developed during colonial period.

b. Revolutionary War made colonies states.

c. Articles of confederation bound states loosely together.

d. Under the constitution the states surrendered certain functions to the federal government. (See art. 1, sec. VIII, constitution.)

e. The people retained all powers not expressly given to the federal government or reserved to the states. (art. X, constitution.)

2. In cooperation with

a. Federal government.

- (1) Provides vocational education.
- (2) Builds roads. (\$ 100.)
- (3) Checks diseases of man (\$ 98) and beasts (\$ 90).

b. County.

- (1) Regulates pure food.
- (2) Supervises road building. (\$ 100.)
- (3) Subsidizes vocational education.
- (4) Supervises teacher training. (\$ 80.)

G. The United States.

1. Powers granted congress. (Art. 1, sec. VIII, Const.)

2. Problems before congress, 1926.

a. Railroad rates.

b. Labor.

c. Cooperative marketing.

d. Education bill - Curtis-Reed.

e. Marriage and divorce. (Objected to on the ground of further extension of federal authority.)

H. The League of Nations and the World Court.

1. "The peace of the world is in the hands of the teachers of the world."

VI. Representative government. Origin and development.

A. Anglo-Saxon units.

1. Tuns - tun-moot, or town meeting.
 - a. Elected a reeve.
 - b. Elected four representatives.
2. Hundred-moot.
 - a. Made up of reeves and four representatives from the tuns.
3. Shire-moots (later).
 - a. Made up of reeves and four representatives from each township.

Question: How does the Anglo-Saxon method of choosing representatives compare with the method of the caucus, county and district convention common in Kansas thirty years ago?

B. Charters.

1. William the Conqueror, 1086, guaranteed Saxon rule of Edward the Confessor (first charter).
2. Henry I promised to restore the laws of Edward the Confessor (parent of all later charters).
3. Henry II ordered council to redraft laws of Edward the Confessor.
4. Richard the Lion-Hearted sold charters to cities. Why?
5. King John and Magna Charta. (1215 A.D.)
 - a. Modeled after charter of Henry I.
 - b. Guaranteed trial by jury.
 - c. American liberties originate with Magna Charter. Why?

C. Parliament.

1. Origin.

a. Henry III's weak rule.

- (1) Breaks charter.
- (2) Calls for two knights from each shire to sit in Great Council.
- (3) Shifts rule from the king to committee of Great Council.
- (4) King forced to call representative parliament, 1295.
 - (a) House of lords.
 - (b) House of commons.

2. Petition of rights granted by Charles I, 1628.

- a. No English subject compelled to pay tax without consent of parliament.
- b. No one imprisoned without cause shown (trial)
- c. No one compelled to receive soldiers or sailors into house.
- d. No one could be tried by martial law in time of peace.

3. Bill of Rights, the third great charter-

a. Prohibited -

- (1) Levying money without consent of parliament.
- (2) Suspending laws passed by parliament.
- (3) Interfering with election of members of parliament.

b. Declared for freedom from arrest on account of

speech or debate in parliament.

4. First representative assembly, 1619.

a. Place: Virginia.

b. Members elected from the various counties.

c. Territorial, not class representation.

D. The constitution of the United States.

1. General provisions.

a. Organization of a government.

b. Election of a President from the citizens.

c. A congress composed of two houses.

(1) Senators represent states.

(2) Congressmen represent congressional districts.

d. A supreme court and inferior courts.

(1) Courts represent the people judicially.

2. Each division of the government represents the people.

E. The ballot an element of representative government.

1. In England.

a. Benefits of Magna Charta extended to freemen, one-fifth population.

b. Less than one-fifth of one per cent of population elected House of Commons as late as the year 1800.

c. The industrial revolution.

(1) Meaning.

(2) Time, 1800-1850.

(3) Results.

(a) Better living conditions.

(b) Education of workman's children.

(c) Universal manhood suffrage in England.

2. In the United States.

a. Compared with England in 1800.

b. Result - Manhood suffrage. (S. 10.)

c. Nineteenth amendment. (Art. XIX, U.S. Const.)

(1) Gave women the ballot. (C. 42, 55.)

F. Values of history of representative government.

1. Objectives.

a. Appreciate struggle for freedom.

b. Appreciate slow growth, value and privileges.

c. Revere and support its fundamental principles.

G. State constitutions modeled after United States constitution.

1. All officers represent the people.

2. President represents all the people.

3. Dual responsibility of legislators.

a. In congress.

b. In state legislatures.

H. Class representation (lobbyists).

1. For good roads.

2. For child labor amendment.

3. For repeal of Kansas cigarette law.

I. Elections.

1. Most elections are fair.
2. Fraud is possible, for-
 - a. Political dictators are common.
 - b. Bribes may be offered and accepted.

J. Systems compared.

1. English:

- a. Member house of commons only elective officer-term five years.
- b. House of lords hereditary.
- c. House of commons appoints all minor officers.
- d. Member of house of commons responsible to nation.

2. United States.

- a. Elect executives.
- b. Senators correspond to lords.
- c. Representatives correspond to commons.
- d. Responsibility to state and nation or to district, state and nation.

3. Election, term and recall compared. (§ 38.)

4. Platforms.

- a. One issue in England.
- b. Several issues (planks) in United States.

5. Leadership.

- a. More important in house of commons than in congress.
- b. Ordinary member votes as directed in house of

- c. In congress any member debates, votes and introduces bills.

THIRD PART. (pp. 67-93.)

VII. National and state constitutions. (P. 19, 22.)

A. Liberty and union, cardinal idea of the constitution.

1. Conditions favoring a union of colonies.

- a. English was generally spoken.
- b. English laws and customs were common.
- c. Protection was an immediate need.
- d. Trade was a common problem.

2. Obstacles in the way of a union.

- a. Religious differences.
- b. Class distinctions.

3. Measures leading to a permanent union.

a. New England confederation, 1643.

- (1) Purpose - protection from Indians.

b. The Albany congress.

- (1) Purpose - protection from French and Indians.

c. The Stamp Act congress.

- (1) Purpose - to resist taxation by England.
- (2) Sons of Liberty organized.

d. Committees of correspondence.

- (1) Purpose - to offer further resistance to taxes.

e. First continental congress, 1774.

- (1) Petitioned for repeal of unjust laws.

f. Second continental congress, 1775.

- (1) Colonists united in common cause - war.
- (2) Congress provided an army, issued money, made treaties.
- (3) Rules the country six years.

g. Articles of confederation, 1781.

- (1) Franklin's plan.
- (2) Maryland last of states to ratify.
- (3) Congress.

(a) One house.

(b) Each state one vote.

(4) No national citizenship.

(5) Defects.

(a) Could not levy taxes.

(b) Could not enlist soldiers.

(c) Had no control over individual citizens.

(d) Could ask, but not compel, states to furnish -

1. Money.

2. Soldiers.

3. Ships.

4. Supplies.

(e) Could make, but not enforce treaties.

h. Annapolis convention.

- (1) Called convention to meet at Philadelphia, 1787.

1. Constitutional convention -

- (1) Composed of 55 delegates.
- (2) Rhode Island not represented. Why?
- (3) Problems.
 - (a) Revise articles of confederation.
 - (b) Write a new constitution.
- (4) The Virginia plan.
 - (a) Provided three departments of government.
 - (b) Dissatisfied delegates withdrew.
 - (c) Constitution signed by 39 delegates.
 - (d) The constitution includes the amendments.
 - (e) Places authority in the people.
 - (f) Divides powers between United States and states.
 - (g) Provides individual liberty.
 - (h) Departments of government.
 1. legislative.
 2. executive.
 3. judicial.

j. Early state constitutions and charters.

k. Steps in the adoption of a state constitution.

- (1) Legislative resolution.
- (2) Submitted to people at general election.
- (3) Special election of delegates.

- (4) Convention drafts constitution. (S. 15, 19-22.)

1. Recent state constitutions.

- (1) Very long.
- (2) Unstable.
- (3) Easily amended.
- (4) Less respected.

m. Amendments.

(1) United States constitution.

- (a) Amendment passed by two-thirds each house.

- (b) Ratified by legislatures of three-fourths the states.

(2) State constitutions. (S. 53)

- (a) Usually two-thirds vote of each house required.
- (b) Submitted to vote of people.

n. Interpretation.

- (1) United States supreme court interprets United States constitution.

- (2) State supreme court interprets state constitution. (S. 29.)

o. Unwritten constitution.

- (1) In England.
- (2) In United States. (S. 60.)

VIII. Political parties.

- A. Purpose to select leaders to do necessary things.

B. Contemporary with the adoption of the constitution.

1. Federalist - for central government.

a. Liberal construction.

b. lacked present day political organization
for strong state governments.

2. Anti-federalist.

a. strict construction.

b. lacked political organization.

C. Electoral college plan - avoid popular election.

D. Nomination.

1. By caucus.

a. announcement or nomination by friends.

b. Congress finally nominated president and
vice president.

c. state legislatures nominated state officials.

2. By conventions.

a. Nominated state and county officials.

b. Party newspapers responsible.

c. Use in 1840.

(1) By Whigs.

(2) By Democrats.

d. Results.

(1) Permanent political organization.

(2) legal recognition.

(3) Corruption of system.

(4) The direct primary. (S. 124.)

- B. Organization of convention system.
 1. People elect precinct committeemen.
 2. Committeemen form city or county organization.
 - a. Officers.
 - (1) Chairman.
 - (2) Secretary.
 - b. Duty to call conventions.
 - (1) To nominate county candidates.
 - (2) To elect convention delegates.
 3. Municipal convention (primary in Kansas).
 - a. Elects permanent chairman.
 4. Judicial convention.
 - a. Elects permanent chairman.
 5. Congressional district convention.
 - a. Elects permanent chairman.
 - b. Nominates two delegates to national convention.
 6. State convention.
 - a. Elects permanent chairman.
 - b. Nominates four delegates at large to national convention.
 7. National convention.
 - a. Delegates from each state select their national committeemen.
 - (1) These men constitute the permanent national committee.
 - (2) Each committeeman is a permanent official.
 - b. Power of party leader based on idea of repre-

selection.

F. Operation of convention system.

1. Meeting of national committeemen.

a. Decide time and place of national convention.

b. Fix basis of representation.

(1) At present two delegates for each member of congress.

c. National chairman issues call for convention.

d. Chairmen of state, congressional and county committee can call meetings.

(1) Fix time and place of nominating convention.

e. Precinct mass meetings.

f. Variations of procedure.

2. Abuses.

a. The spoils system.

b. Bribe voters.

c. stuffing ballot boxes.

d. Contesting delegations.

e. Invisible government.

(1) Elements.

(a) Government controlled by party.

(b) Party controlled by boss.

3. Reforms.

a. The direct primary in which (§. 124) -

(1) Electors vote directly for candidate.

(2) Electors vote for precinct committeemen.

(3) Falls to bring out the vote.

(4) Is expensive to candidates.

(5) Electors cannot know all candidates.

(6) Time to vote is limited.

b Australian ballot.

c. Secret voting booths.

d. Election boards regulated by statutes.

(1) Selected from leading political parties.

(2) Assistance for certain electors.

e. Registration of electors required in cities.

(S. 124).

f. Registration not required in rural districts.

Why?

g. Qualifications of voters.

(1) Constitutional.

(a) Fifteenth amendment.

(b) Nineteenth amendment.

(2) State laws. (S. 39.)

(a) Age 21.

(b) Residence.

4. Platforms.

a. Announce principles of party.

(1) Each declaration a plank.

b. Written to include popular ideas of government.

c. Adopted by the convention.

d. Discredited by repudiation of promises.

e. Presidential speech of acceptance.

g. Not as checks.

1. Make officials recognize will of the people.

FOURTH MOUTH. (pp. 94-114.)

IX. Law making.

A. Congress. (Art. 1, sec. 1, U. S. Const.)

1. Senate -

a. Members - two from each state.

(1) Term, six years.

(2) Salary, \$10,000.

(3) Election.

(4) Represent the people and state.

b. Officers.

(1) Vice President presides.

(2) Other officers elected by party vote.

c. Rules.

(1) Questions debated thoroughly.

(2) Any senator may speak.

(3) Filibustering.

(4) Cloture, 1926.

d. Committee.

(1) Elected by senate.

(2) Study all bills referred to committee.

(3) Majority party controls each committee.

(4) Chairman is majority member of longest service on committee.

2. House of representatives.

a. Members chosen from district.

- (1) Term, two years.
- (2) Salary, \$10,000.
- (3) Elected by popular vote.
- (4) Represent the people, district and state.

b. Officers.

- (1) Speaker elected.
- (2) Floor leader of majority party is chair.
man of ways and means committee.

c. Rules.

- (1) Debate limited.
- (2) Speaker need's rule of "present."
- (3) Speaker may refuse to recognize motion
designed to delay business.

3. "Congresses" numbered consecutively.

a. Regular sessions.

- (1) Long term begins December, odd year.
- (2) Short term begins December, even year.

b. Special sessions.

- (1) Houses may be called separately.
- (2) Senate frequently called to ratify
treaties.
- (3) House has never been called.

c. Quorum, a majority of either house.

d. Each house keeps and publishes journal.

- e. On demand of one-fifth, take ye and nay vote.
- f. Restrictions on adjournment.
 - (1) Place.
 - (2) Consent of other required.
- B. Process in enacting a law in the house.
 - 1. Introduction of a bill.
 - 2. Referred to committee.
 - a. Numbered.
 - b. Printed.
 - 3. The bill in committee.
 - a. Report for passage.
 - b. Passage with amendment.
 - c. Report without recommendation.
 - d. Suggest indefinite postponement.
 - e. No report at all.
 - f. Power of committee.
 - (1) To hold public hearings.
 - (2) To compel attendance of witnesses.
 - 4. Bill on calendar.
 - a. Taken up in turn.
 - b. Read according to house rules.
 - c. Third reading by title only.
 - d. Bill put to vote by speaker.
 - e. If a majority favors bill it has passed house.
 - f. The bill is sent to the senate.

- g. If senate vote is favorable, bill goes to President.
- h. If the President signs it, the bill becomes a law.
- 5. A bill that fails to pass the other house.
 - a. Ordinarily lost.
 - b. May be amended and pass both houses.
 - c. If the President signs bill, it becomes a law.
- 6. Vetoed bill.
 - a. Returned with objections to house where it originated.
 - b. By two-thirds vote of both houses it becomes a law.
- C. Powers of congress.
 - 1. Legislative.
 - a. Limited by tenth amendment. (p. 262).)
 - b. Listed by clauses. (Art. I, sec. VII, pp. 254-256.)
 - (1) To lay and collect taxes.
 - (2) To borrow money.
 - (3) To regulate commerce.
 - (4) To establish uniform rule of naturalization.
 - (5) To coin money. To regulate value of foreign coin. To fix the standard of weights and measures.

- (6) To provide for the punishment of counterfeiting.
- (7) To establish post offices.
- (8) To issue copyrights. To issue patents.
- (9) To establish tribunals inferior to the supreme court.
- (10) To define and punish offenses against the law of nations.
- (11) To declare war.
- (12) To raise and support armies.
- (13) To provide and maintain a navy.
- (14) To make rules governing land and naval forces.
- (15) To provide for calling forth the militia.
- (16) To provide for organizing, arming and disciplining the militia.
- (17) To exercise exclusive legislation over District of Columbia.
To exercise exclusive authority over forts, magazines, arsenals and dock yards.
- (18) To make all laws which shall be necessary and proper for carrying into execution the foregoing powers.

2. Executive.

- a. Confirm presidential appointments.

b. Ratify treaties.

c. In appropriations.

3. Judicial.

a. Impeachment of United States officer.

(1) Charges by house.

(2) Trial by senate.

4. Cooperative.

a. Legislative powers of President.

(1) Signs bills.

(2) Makes treaties with consent of senate.

(3) Recommends passage of laws.

b. Legislative power of supreme court.

(1) Interprets laws.

(2) Declares laws unconstitutional.

(3) Interprets the constitutions.

(a) The "elastic clause." (Art. I. sec. 8, cl. 18.)

5. Problems of congress.

1. Representatives elected too long in advance of taking office.

a. Result. A changed public opinion may discredit their program.

b. Relief. The Norris-White amendment before congress January, 1926, provides for an early meeting of newly elected congressmen and installation of the President.

2. Playing politics in congress.

a. Results.

- (1) Enraged public opinion.
- (2) Election of men who place nation above party.

3. Too many measures introduced.

- a. Twenty-five thousand bills.
- b. Thousands of reports and resolutions.
- c. A few amendments to the constitution.

d. Results.

- (1) Measures poorly analyzed.
- (2) Poor laws enacted.
- (3) Some good laws lost.

e. Drafting commission needed.

B. State legislatures compared to congress.

1. States are sovereign, i.e., supreme.

a. State legislatures give power -

- (1) to counties.
- (2) To cities.
- (3) To towns.
- (4) To school districts.
- (5) To other corporations.

2. State legislatures are similar to congress.

a. In organization. (p. 21.)

- (1) Two houses.
- (2) Sessions.
- (3) Qualifications of members.

b. In method of work. (p. 28.)

- (1) Governor and President. (S. 23.)
- (2) Lieutenant Governor and Vice President.
(S. 25.)
- (3) The speaker of the house.
- (4) Committees. (Name some.)
- (5) Caucuses.
- (6) Special sessions.

- c. In too much law making.
- d. In aggregation of representative men.
- e. In needing a drafting commission.
- f. In lowering respect for law by passing too many impossible laws.

FIFTH POINT. (pp. 115-152.)

A. Law enforcing.

1. The President.

1. The real head of our government.
 - a. Responsible to the people.
 - b. Comes from the people.
 - c. Returns to the people.

2. Choice of President.

- a. Original plan.
 - (1) First choice of electoral college was President.
 - (2) Second choice was Vice President.
 - (3) Objectional features.
- b. Twelfth amendment plan.
 - (1) State chooses as many electors as rep-

representatives and senators combined.

(2) Electors vote for party candidate.

(3) "Doubtful states" attract political strategists.

(4) Minority president possible under electoral college plan.

3. Election.

a. First Tuesday after first Monday of November every fourth year.

b. Unofficial results soon known.

c. Presidential electors meet in February to cast their ballots.

(1) Returns made to president of senate.

(a) List mailed.

(b) List by messenger.

(c) List filed with federal district court.

(2) Elected by house of representatives.

(Art. XII, sec. 1.)

d. President inaugurated March 4.

(1) Oath administered by chief justice.

(Art. II, sec. 8.)

(a) To execute the office of president.

(b) To preserve, protect and defend the constitution.

e. Presidential succession law.

(1) Order of succession.

- (a) Secretary of State.
- (b) Secretary of Treasury.
- (c) Secretary of War.
- (d) Secretary of the Navy.
- (e) Attorney General.
- (f) Postmaster General.
- (g) Secretary of the Interior.
- (h) Secretary of Agriculture.

4. Qualifications.

a. Imposed by the constitution.

- (1) Age, at least thirty-five years.
- (2) Natural-born citizen of the United States.
- (3) A resident of country not less than fourteen years.

b. Imposed by political custom.

- (1) Resident of doubtful state.
- (2) Able, honest, intellectual man.

5. Term.

a. Elected for four years.

- (1) May be reelected.
- (2) Custom has prevented third term.
- (3) Arguments for and against a longer term.

6. Powers.

a. Military powers. (Art. II, sec. 2.)

- (1) Commander in chief of army and navy.
- (2) Commander of militia in service of United States.

b. Appointive power.

(1) Unrestricted.

- (a) Cabinet officers.
- (b) Inferior officials.
- (c) e. "Civil Service Reform."

(2) "By and with the consent of the senate."

- (a) Ambassadors, other public ministers and consuls.
- (b) Judges of the supreme court.
- (c) Other officers of the United States whose appointments are not provided for by the constitution.
- (d) Inferior officers whose appointments are not by law vested in the president alone, courts of justice, or heads of departments.

(3) Recess appointments.

- (a) May fill vacancies during a recess of the senate, (Art. II, sec. 2.)

(4) Other duties.

- (a) Commission all the officers of the United States. (Art. sec. 3.)
- (b) Shall from time to time give congress information of the state of the union and recommend measures. (Art. II, sec. 3.)

(c) Call congress or either house in extraordinary session. (Art. II, sec. 5.)

(d) May grant pardons.

1. For violation of military orders.
2. For violations of the United States laws.

(e) Power in foreign affairs.

1. To recognize new governments.
2. To recognize ambassadors from other countries.
3. To appoint our foreign representatives.

(f) Legislative.

1. Messages to congress.
2. Make treaties that become laws.
3. Veto power.

7. Salary. \$75,000 annually. (Art. II, sec. 1.)

- a. Not increased during term.
- b. May not receive any other emolument from United States or from any state.

8. His cabinet.

- a. Responsible to the President.
- b. Not permitted to speak in either house.
- c. Qualifications.

(1) Personal fitness.

(2) Past party service.

d. Meetings each week.

e. Duties.

- (1) Transact the business of the President.
- (2) Enforce federal laws.
- (3) Carry on the work of the government.

f. Organization.

- (1) Departments in charge of cabinet members.
 - (a) Bureaus in charge of commissioners.
 - (b) Divisions in charge of directors.
 - (c) Minor subdivisions.

g. Departments.

(1) State.

- (a) Has charge of foreign relations.
- (b) Sends ambassadors to leading countries.
- (c) Sends ministers to small countries.
- (d) Sends consuls to important cities.
- (e) Issues passports.
- (f) Uses the great seal of the United States.

(2) Treasury.

- (a) Collects tariff duties.
- (b) Collects income taxes.
- (c) Prevents smuggling.
- (d) Maintains life-saving service.
- (e) Issues bonds and thrift stamps.
- (f) Takes up money and stamps.

(g) Makes coins at mints in -

1. Philadelphia.

2. Denver.

3. San Francisco.

(h) Directs national, farm loan, and federal reserve banks.

(i) Looks after soldiers' insurance.

(3) War.

(a) Cares for details of military forces.

(b) Trains officers in times of peace.

1. At the West Point Military Academy.

2. At army training camps.

(4) Justice.

(a) Directs the work of the United States district attorneys.

(b) Gives legal advice to the President.

(c) Renders opinions.

(5) Post-office.

(a) Supplies stamps, postcards, wrappers.

(b) Sells money orders.

(c) Handles parcel post.

(d) Manages rural free delivery.

(e) Directs air mail service.

(6) Navy.

(a) Care for the details of naval forces.

, (b) Trains officers at Annapolis.

(7) Interior.

(a) Controls conservation of resources.

1. Through forestry service.
2. Through irrigation and reclamation projects.
3. Through the Bureau of Mines.
4. Through Bureau of Education.
5. Through Bureau of Pensions.
6. Through Bureau of Indian Affairs.

(8) Agriculture.

(a) Promotes the work of the farmer.

1. The Bureau of Plant Industry.
 - a. Seeks new varieties of useful plants.
 - b. Fights plant disease.
 - c. Prevents sale of poor seed.
2. The Bureau of Soils.-
 - a. Investigates soils and fertilizers.
3. The Bureau of Crop Estimates.
 - a. Issues monthly crop report.
4. The Weather Bureau.
 - a. Issues daily reports and forecasts.
5. The Bureau of Chemistry.
 - a. Helps enforce pure food and

drug act.

6. The Bureau of Entomology.

- a. Gives directions for destroying insects.

7. By directing boys' and girls' club work.

(9) Commerce.

(a) Promotes the general welfare.

- 1. The Census Bureau determines the population of the United States every tenth year.
- 2. The Bureau of Standards determines our weights and measures.

(10) Labor.

(a) Collects information relative to labor.

- 1. The Bureau of Immigration helps the unemployed.
- 2. The Bureau of Naturalization assists aliens to become citizens.
- 3. The Women and Children's Bureaus investigate home and working conditions.

(11) State executive departments compared.

(a) Comparable executive branch of Na-

tional Government.

1. In parallel functions.
2. In method of administration.
3. In need of economic reorganization.

(b) Differ from national government.

1. In manner of choosing executive officers.

XI. Law interpreting.

A. Introduction to government by courts.

1. Playground law.

- a. "It isn't fair," Johnny never touched the base.
- b. "Johnny is out," says the umpire.
- c. Umpires and referees correspond to courts or judges.

2. Need of judges.

- a. To tell what laws mean.
- b. To decide the punishment when a law is broken.
- c. Ordeals of the past.
 - (1) Trial by water.
 - (2) Trial by fire.

3. Written laws and courts.

- a. Of ancient origin.
- b. Have developed with the race.

4. Our legacy from England.

- a. Statutory laws.
 - b. Common law, precedent. (Ch. 60.)
 - c. Trial by jury. (Art. III, sec. 2, cl. 2.)
 - (1) Petit jury defined.
 - (2) Grand jury defined.
 - d. The Bill of Rights (Amendments I to X).
 - (Ch. 20 to 22.)
- B. Court procedure (Amendments V to VIII).
- 1. Legal terms.
 - a. Criminal cases.
 - (1) Grave wrongdoing.
 - (2) Punishable by heavy fine, imprisonment or death.
 - (3) The state is the prosecutor.
 - b. Felonies.
 - (1) Counterfeiting, forgery, murder.
 - c. Civil cases.
 - (1) The right to property is in question.
 - (2) Plaintiff brings suit to recover property.
 - (3) Defendant resists plaintiff.
 - 2. The supreme court. (Art. III, const.)
 - a. Judges.
 - (1) Term, appointed for life.
 - (2) Salary, \$17,000; chief justice, \$17,500.
 - (3) Number.
 - (a) Originally six judges.
 - (b) Now nine judges.

- (4) Nominated by the President, confirmed by the senate.

b. Duties.

- (1) Hear appeal cases from lower courts.
- (2) Reviews evidence.
- (3) Does not examine witnesses.

c. Jurisdiction.

(1) Original.

- (a) In cases affecting ambassadors, other public ministers and consuls.

- (b) In cases in which a state shall be a party.

- (2) Appellate in other cases under such regulations as congress shall make.

3. Circuit court of appeals.

a. Purpose.

- (1) Created to relieve the supreme court.

b. Distribution.

- (1) One judge of the supreme court.
- (2) Three circuit court of appeals judges.
- (3) A United States marshal.

c. Jurisdiction.

4. Federal district courts.

a. Distribution.

- (1) There are eighty courts and each state has at least one.

b. Officers.

(1) A resident district judge.

(2) A United States attorney.

(3) A United States marshal.

c. Jurisdiction.

5. Other federal courts.

a. Court of claims.

b. Court of customs appeals.

c. Court of the District of Columbia.

6. State courts (Kansas).

a. Classification.

(1) Supreme court. (S. 33.)

(2) District court. (S. 35.)

(3) Justice court. (S. 36.)

(4) Police court.

(5) Probate court. (S. 38.)

b. Jurisdiction.

(1) Original and final, usually in

(a) rights of persons.

(b) Property rights.

(c) Criminal cases.

c. Choice of officers.

(1) General election.

7. Problems of all courts.

a. To secure speedier justice.

b. To reduce the number of injunctions.

SIXTH MONTH. (pp. 183-186.)

XII. Recent political experiments.

A. Causes.

1. New problems incapable of solution by old methods.

(1) Increased transportation facilities.

(2) The telegraph.

(3) The telephone.

(4) Corporations, trusts, syndicates.

(5) Applications of electricity.

(6) Franchises.

(7) Radio.

b. Bribery and corruption.

(1) Credit Mobilier.

(2) Whiskey ring, 1875.

(3) Boss control - Tweed ring.

(a) The spoils system.

B. Caution.

1. Weigh and consider issues raised by-

a. Progressive.

b. Conservative.

c. Radicals.

d. Old forces.

XIII. Problems of our government and how they are met.

A. Money.

1. Origin.

a. Among the ancients.

b. Invisibil metal.

c. Stamped metal traced to Lydians.

2. Value.

- a. Intrinsic.
- b. Gold is the best medium.
 - (1) World standard.

3. Uses.

- a. As a medium of exchange.
- b. As a standard of deferred payments.
 - (1) Credit.
- c. as a standard of comparison.

4. Kinds.

- a. Gold coins.
- b. Standard silver dollars.
- c. Minor coins.
- d. Gold certificates.
- e. Silver certificates.
- f. Treasury notes.
- g. United States notes.
- h. National bank notes.
- i. Federal reserve bank notes.

5. Standard - gold.

B. Banking system.

1. Classes of banks. (S. 48.)

- a. State banks. (S. 51.)
 - (1) Receive deposits and lend money.
 - (2) State bank commissioner. (L. 88.)
- b. National banks.
 - (1) Issue currency.

c. Federal reserve banks.

(1) Deal with member banks only.

2. Clearing house institutions.

a. Keep accounts with banks.

b. Balance all accounts daily.

c. Pay balances in cash.

3. Sound currency system.

C. Public expenditure. (§. 49.)

1. Classes.

a. Those which confer a common benefit on all citizens.

(1) Administrative expenditure.

(2) Legislative expenses.

(3) For public building.

(4) For defense.

(5) For roads.

(6) For education. (§. 14; 45-48.)

b. Those which confer a special benefit upon a person or class of people as well as a common benefit to all.

(1) For pensions.

(2) For workmen's compensation.

(3) For care of insane.

(4) For care of deaf and dumb.

(5) For criminal classes.

(6) For hospitals.

(7) For homes for the poor.

c. Those in which the government shares the cost with the individual benefited.

(1) The post-office department.

(2) The state, 16 per cent.

(3) The counties, 16 per cent.

(4) Cities, villages and towns, 48 per cent.

d. Where the Kansas tax dollar goes. (Topeka Capital, June 13, 1926.)

(1) State government, 8.5 per cent.

(2) County, 20.25 per cent.

(3) City general, 14.9 per cent.

(4) Township, 7.4 per cent.

(5) Special levies, 7.1 per cent.

(6) Soldiers' compensation, 2.5 per cent.

(7) Schools, 59.25 per cent.

D. The budget system.

1. Causes.

a. Great opportunities for waste.

b. Local appropriations. "Pork barrels."

2. Plan.

a. A survey of the needs of the department or institution is made.

b. An exhibit of the receipts and expenditures of the preceding period is made.

c. The needs and expenditures are compared.

d. Necessary changes are recommended.

3. Kansas state budget and accounting system. (L.

1925, ch. 260.)

E. How the government raises money.

1. Methods.

- a. By sale of property.
- b. By gifts, fines, penalties.
- c. By borrowing.

(1) Bond issues.

d. By taxation. (Ch. 48-50.)

(1) Property tax.

(2) Income tax.

(3) Inheritance tax.

(4) Corporation tax.

(5) Poll tax.

e. Federal taxes.

(1) Import duties.

(2) Excise taxes.

(3) Income tax.

F. Why this government raises money.

- (1) To pay the running expenses of the government.
- (2) To pay the national debt.

SIXTH MONTH. (pp. 187-217.)

XIV. Education.

A. Aim of the federal government.

- 1. To develop more intelligent citizens.
- 2. To provide universal education.
- 3. To establish political freedom.

4. To abolish illiteracy.
5. To create a common respect for authority.
- B. Work of the federal government.
 1. Trains military and naval officers.
 2. Controls the schools of Alaska, the Philippines and other territories.
 3. Educates the Indians.
 4. Promotes and assists agricultural colleges.
 5. Promotes vocational courses in high schools.
 6. Provides Americanization schools for adult foreigners.
 7. Supports the library of congress.
 8. Supports the Bureau of Education.
 - a. Collects statistics relative to education.
 - b. See Senate Bill No. 291-Curtis." Introduced December 8, 1925.
- C. Work of the states.
 1. All states require local communities to maintain free public schools.
 - a. Minimum term of eight months (Kansas.) (§. 82.)
 - b. Compulsory attendance law.
 2. State regulation is increasing.
 - a. Uniform textbooks. (§. 81.)
 - b. Uniform course of study. (§. 83.)
 - c. Standard rural schools. (§. 81.)
 - d. Accredited high schools. (§. 81.)

3. State support is increasing. (Not true of Kansas.)
 - a. About one dollar per child per year.
4. Local school administration.
 - a. Revenue from district, city and county tax.
 - b. The district boards.
 - (1) Employ teachers. (\$.81.)
 - (2) Manage the school.
 - (3) Execute the orders of the annual meeting.
5. Problems claiming careful study.
 - a. Consolidation projects. (\$.83.)
 - b. Rural high school projects. (\$.83.)
 - c. The county unit.
 - d. The junior high school.
 - e. The curriculum(course of study). (\$.80.)
 - f. The junior college.

XIV. Communication.

- A. The postal system.
 1. Distribution of mail.
 - a. By rail.
 - b. By aeroplane.
 - c. By stage.
 - d. By rural carriers.
 2. Postage rates reasonable.
 3. Regulations.
 - a. Indecent language barred from mail.

- b. Fraudulent advertising prohibited.
- c. Illegal schemes are barred from mail.
- 4. Periodicals contain.
 - a. Radical doctrines.
 - b. Un-American propaganda.
 - c. Worthwhile news and discussion.
 - t. Problems for the reader.
 - a. Determine whose opinions are being read.
 - b. Determine what to read.
 - c. Determine how much to believe.
 - d. Find out what called forth the article.

XV. Health and recreation.

A. Causes of disease. (S. 98.)

- 1. Impure food.
- 2. Impure water.
- 3. Wrong living conditions.

B. Contagious disease.

- 1. Quarantine regulations.
 - a. The health officer puts up a sign.
 - b. Other people stay away.
 - c. Severe penalty for breaking quarantine.

C. Prevention of disease.

- 1. By habits of personal and public hygiene.
- 2. By destroying flies and mosquitoes.
- 3. By removal of waste.

D. Public health organizations.

- 1. United States Health Service.

- a. Sanitation regulations between states and seaports.
- b. Cooperate with state and local boards of health.
- c. Publishes health bulletins for general distribution.
- d. Bureau of United States engaged in public health work.
 - (1) Children's Bureau.
 - (2) Bureau of Education.
 - (3) Bureau of Public Health.

2. State boards of health. (C. 98.)

- a. Campaign for prevention of tuberculosis.
- b. Deal with water supply and sewage.
- c. Keep a record of births and deaths.
- d. Cooperate with county health officers.
- e. Pure food regulations.

3. City boards of health. (C. 77, 99.)

- a. Deal with health problems in crowded centers - strict rules.

4. County health officers. (C. 99).

- a. Rural communities.

E. Child welfare.

1. Object.

- a. To decrease the high death rate of babies.
 - (1) By supplying clean, pure milk.

- (2) By sending visiting nurses into the homes.
- (3) By providing free medical attention.
- (4) By publishing booklets on the care of infants.

b. To promote child's general welfare.

- (1) By providing schools that are well lighted and ventilated.
- (2) By providing drinking fountains.
- (3) By providing hot lunches.
- (4) By the child labor laws.

F. Voluntary health organizations.

- 1. Red Cross.
- 2. Tuberculosis societies. (For literature address Kansas State Tuberculosis Association 210 Crawford Building, Topeka.)

G. Recreation is provided in.

- 1. City parks.
- 2. Public playgrounds.
- 3. Swimming pools.
- 4. Gymnasiums.

XVI. Lawlessness and crime.

A. Law-breaking.

- 1. Of minor importance is a misdemeanor.
- 2. Of major importance is a crime.

B. Crime.

- 1. Cost.

- a. About equal in money to cost of education.
- b. In anguish, sorrow and humiliation.
- c. What can each of us do to lessen serious law-breaking?

2. Protection against crime.

- a. Fear of punishment most potent.
 - (1) Courageous policemen and sheriffs.
 - (2) Stern laws.
 - (3) A just court.
 - (4) Strong jails and penitentiaries.

3. Causes.

- a. Carelessness.
- b. Idleness.
- c. Ignorance.
- d. Crime environment.
- e. Heredity.

4. Prevention.

- a. Determine the cause which suggests the remedy.
- b. Juvenile courts take children away from their evil companions.
- c. First offenders among grown-up criminals are paroled if possible.

5. Boys and girls may help.

- a. By obeying the laws.
 - (1) Of the school.
 - (2) Of the home.

(3) Of the playground.

b. By preventing minor types of law-breaking like -

(1) stealing a street-car ride.

(2) stealing a few apples.

(3) stealing a small sum of money.

(4) Cheating in basket ball.

c. As future lawmakers.

(1) Pass laws which are clear in meaning.

Unwise laws should be unmade but not disobeyed.

EIGHTH BOOK. (pp. 218-249.)

XVII. Transportation.

A. Steps in development of transportation.

1. Indian routes were followed.

2. Wagon roads were constructed.

3. River and canal routes established.

4. Steamboats took the place of flatboats.

5. Railroads took the place of inland river transportation.

6. The automobile-truck.

a. Takes the place of the wagon.

b. Competes with the railroad.

7. The three factors.

a. Good roads.

b. Good railroads.

c. Good water ways.

B. Lagoon Roads.

1. Early roads were temporary makeshifts. Tell about the old Santa Fe Trail.
2. Permanent roads before the Civil War.
 - a. The Cumberland Road.
 - (1) Commenced 1806.
 - (2) Completed 1840.
 - (3) From Cumberland, Md. to St. Louis, Mo.
 - (4) Cost \$6,824,919.33.
 - (5) Established by act of congress, 1820.

C. Railroads.

1. Transportation act of 1890 (Esch-Cummings law).
 - a. Provisions.

- (1) The Interstate Commerce Commission is the agent of the government in dealing with railroads.
- (2) The Commission determines rates -
 - (a) That will yield $5\frac{1}{2}$ per cent net income.
 - (b) May require 6 per cent, the extra $\frac{1}{2}$ per cent to be used to improve railroad.
- (3) For a railroad labor Board.
 - (a) Appointed by the President.
 - (b) Confirmed by the senate.
 - (c) Nominations.

1. Three by railroad employees.

2. Three by railroad companies.

3. Three of President's choice.

(d) Organized April 16, 1920.

(e) Has settled some difficult disputes.

b. Problems.

(1) How much shall railroads earn?

(2) Labor.

(a) Length of day?

(b) Wages per hour?

(c) Overtime charges?

(3) Freight and passenger rates.

(a) Should rates be proportional to distance alone?

(b) Should railroad rates be lowered to compete with water transportation rates between favored cities?

(4) General schedules.

(a) Should railroads make schedules to accommodate the public or to keep business away from competing lines?

(5) Government control.

(a) Since the larger railroads cross several states -

1. State which problems should be regulated by the United

1. Which by the States.

D. Modern water transportation.

1. Resources.

a. Navigable rivers in United States, 26,000 miles.

b. Mississippi river project.

(1) The Government operates.

(a) Forty 2,000-ton steel barges.

(b) Six 1,800-horsepower steam tow-boats.

Problem: Could these six tow-boats transport Barton county's bumper wheat crop from St. Louis to New Orleans in one trip?

(c) One towboat has carried 7,000 tons from New Orleans to St. Louis in twelve days.

(d) Make return trip in six days with 12,000 tons.

(2) Cost \$6,000,000.

(3) Rates.

(a) Average 50 per cent, maximum 80 per cent of competing railroads.

(4) Purpose of the government.

(a) To demonstrate the practicalness of modern river transportation.

(5) Results.

- (a) The barge line is operating at a good net profit.

(6) Conclusion.

- (a) The wise use of our waterways may greatly increase our prosperity.

K. Coordination of motor, waterway and railroad transportation.

1. By acts of congress.

- a. Railroads have received extensive land grants.
- b. liberal appropriations have been made for rivers and harbors.
- c. appropriations are made for the construction of roads.

2. In operation.

- a. Motor trucks continue.
 - (1) To take most short haul freight from railroads.
 - (2) To act as feeders for the railroads.
- b. water lines of transportation continue-
 - (1) To take freight such as coal, cotton and lumber from railroads.
 - (2) To become feeders for the railroads.
- c. where speed is required, railroads will continue.

- (1) To carry perishable freight.
- (2) To carry high-priced merchandise.
- (3) Long distance hauls.

3. Conclusion.

- a. all three methods of transportation are necessary.

XVIII. Cooperation in government means working together.

A. Application.

1. Obedience to those who have a right to lead -

- a. In government.
- b. In industry.
- c. In business.
- d. In play and work.

2. Protection -

- a. Against foreign powers.
- b. Within the United States.

3. In useful service.

- a. Roads, schools, playgrounds, etc.

4. In conservation -

- a. Of natural resources.

5. In research.

6. In problems of government.

XIX. The heritage of an American citizen.

A. American citizenship.

B. Education.

C. Religious freedom.

D. The natural resources of the United States.

E. National kinship.

LIBRARY REFERENCES.

Perkins: Sakimo Twins.

Perkins: Dutch Twins Primer.

Perkins: The Japanese Twins.

Perkins: The Irish Twins.

Grover: The Sunbonnet Babies in Italy.

Chamberlain: How We Travel.

Amicis: The Heart of a Boy.

Foots: The Man Without a Country, and Other Patriotic Stories.

Gilman: Alaska, The American North land.

Logie: From Lincoln to Coolidge.

Nicolay: The Boys' Life of Ulysses S. Grant.

Bok: A Dutch Boy Fifty Years After.

Mumphrey: Under These Trees.

Andrews: Boys and Girls of Make-up Town.

Wayland: History Stories for Primary Grades.

Terry: History Stories of Other Lands -

Book I. Tales of Long Ago.

Book II. Tales from Far and Near.

Book III. The Beginnings.

Book IV. Lord and Vassal.

Book V. The New Liberty.

Book VI. The Modern World.

Curtis: My e Celebrate Our Holidays.

Nicolay: Boys' Life of Abraham Lincoln.

AGRICULTURE

HIGH SCHOOL

ROY GLOVER.

TEXT: CALL AND KIST'S AGRICULTURE.

AIMS.

1. Interest the school in the community and the community in the school.
2. Teach more efficient methods.
3. Provide educational development of boys and girls through agricultural activities.
4. Provide prevocational experience in agriculture as a vocation.

The outstanding purpose of teaching agriculture in the elementary schools is to develop in the boys and girls an intelligent interest in the life and problems of the farm. The teacher may be able to arouse much of the same interest in the community. Since agriculture is the leading industry in Kansas, the boys and girls should be taught to recognize and appreciate its importance as such, and promote its development in the most efficient manner.

An attempt has been made not to cover too much ground in the limited time available, yet touch briefly upon every subject in the state text. An effort has been made to stimulate a desire upon the part of the teacher and pupils to investigate by use of bulletins and references.

The work in this assignment may be greatly aided if the teacher will make use of the many publications furnish-

ed by the United States Department of Agriculture, Washington, D. C., the Kansas State Agricultural College Experiment Station, Manhattan, Kan., and the State Board of Agriculture, Topeka, Kan.

A complete list, containing a large number of free publications available to teachers on the following subjects, may be secured free of charge upon application to the office of Publications of the United States Department of Agriculture, Washington, D. C.

Farm Management and Rural Economics.

Agricultural Education.

Agronomy.

Horticulture.

Rural Engineering.

Birds and Other Animals.

Draining Publications.

Home Economics.

Animal Husbandry.

The following bulletins and circulars are available to teachers and may be secured free by addressing Agricultural Experiment Station, Kansas State Agricultural College, Manhattan, Kansas.

Bulletin No.

218. Growing Sorghum in Kansas.

220. Soil Fertility.

227. Varieties of Corn in Kansas.

Circular No.

- 84. Principal Toxicous Foods in Kansas.
- 93. Dairy Farming.
- 100. House Plants and Their Care.
- 101. The Eradication of Pinewood.
- 106. The Prevention and Control of Poultry Diseases.
- 120. Control of Animals Injurious to Agriculture in Kansas.
- 121. Seasonal Fluctuations of Wheat Prices.
- 122. Poultry Management on the Farm.

The following publications are usually available upon request:

- Growing Corn in Kansas.
- Growing Wheat in Kansas.
- Growing Alfalfa in Kansas.

Address J. C. Mohler, Secretary, State Board of Agriculture, Topeka, Kan., for the following publications:

- Dogs in Kansas.
- Fairing in Kansas.
- Farm Poultry.
- Biennial Reports.

Much valuable illustrative material and literature may be obtained by teachers free of charge by writing to any of the addresses listed below.

American Abord en-Angus Breeders Association, 617 Exchange Avenue, Chicago.- Literature.

American Association of Importers and Dealers of

Belgian Draft Horse, Tabasco, Ind.-Booklets, pictures, registry blanks.

American Guernsey Cattle Club, Peterboro, N. H.-Pictures and literature.

American Hereford Cattle Breeders Association, Kansas City, Mo. - Pictures and literature.

American Jersey Cattle Club, 324 E. Twenty-third street, New York City.-Literature; pictures - free films and slides (express or postage one way).

American Poland-China Record, Chicago, Ill.-Literature and pictures.

American Short-Horn Breeders Association, 13 Dexter Park avenue, Chicago.-Literature; pictures, slides(express or postage one way).

American Southdown Breeders Association, State College, Pa.-Booklets.

Armour Livestock Bureau, Chicago.-Booklets, such as "Progressive Poultry Raising, etc.

Atlas Portland Cement Co., Independence, Kan.-Booklets on manufacture and use. Exhibit.

Ayrshire Breeders Association, Brandon, Vt.-Literature and pictures.

Barton Salt Co., Hutchinson, Kan.-Booklet, "Curing Meat."

Brown Swiss Cattle Breeders Association, Beloit, Wis.-Literature.

Chester White Swine Record Association, Rochester, Ind.-

Pictures and literature.

Church & Dwight Co., 27 Cedar street, New York, N.Y.-
Bird chart and literature

Copiers Incubator Co., Buffalo, N. Y.-Booklets and literature.

Columbia Topo Co., Auburn, N. Y.-Literature, educational display.

Flexible Shaft Co., 5203 Roosevelt road, Chicago.-
Booklet, "Get More Cool."

Moorman Mfg. Co., Quincy, Ill.-Map Book.

National Fertilizer Association, Peanoke Building,
Chicago, Ill.-Literature, charts.

National Purec Association, Peoria, Ill.-Literature,
pictures; moving pictures (express one way).

Percheron Society of American Union Stock Yards, Chicago-literature, pictures.

Quaker Oats Co., 80 E. Jackson street, Chicago-literature.

Southern Pine Association, New Orleans, La.-Booklets.

Wilson & Co., Packers and Provisioners, Chicago-charts,
literature.

PLANT.

I. Importance.

II. Classes.

III. Parts of a plant.

A. Roots.

1. Kinds.

- a. Tap roots. (Illustrate with alfalfa plant brought to school.)
- b. Fibrous roots. (Provided by plants grown in window box.)
- c. Brace roots. (Illustrate with cornstalk, including roots, brought to school by pupils.)

2. Uses.

- a. Gather moisture and plant food.
- b. Help dissolve mineral plant food.
- c. Brace plant. Anchorage.
- d. Storehouse for food.

3. Habits of growth.

B. Stems.

1. Uses.

- a. Support.
- b. Storehouse for such foods as starch and sugar.
- c. Act as arteries of circulation for sap.
- d. Transfer plant food from roots to leaves and vice versa.
- e. Protection.

2. Structure.

- a. Pith (cross-section of cornstalk and twig compared.)
- b. Woody portion.
- c. Cortex.

d. Bark.

(These may be illustrated with twig of a tree.)

3. Underground stems.

a. Storehouse for food.

b. Propagation. Example: Rhubarb.

C. Leaves.

1. Uses.

a. To manufacture starch.

(1) Materials.

(a) Carbondioxide from air.

(b) Water from the soil.

(2) Active agent - chlorophyll.

(3) Energy-sunlight.

(4) Waste product-oxygen.

b. To transpire excess water.

c. To propagate plants. (Rare. Try starting begonias from leaf cuttings.)

D. Buds.

1. Leaf-bearing stems.

2. May produce flowers.

E. Flowers.

1. Purpose.

a. Start and develop the seed.

2. Parts: Calyx, Corolla, stamen, pistil.

3. Pollination.

a. Cross-pollination.

- b. Necessity of pollination and various ways by which blossoms of plants are pollinated.

IV. Germination of seeds.

- A. Moisture.
- B. Temperature.
- C. Oxygen.
- D. Seed bed.

Problem: Plant seed under varying conditions to demonstrate importance of each of above factors.

1. Testing seeds. (inter season.)

- 1. Methods.
- 2. Purpose.
- 3. Record of results.

Problem: How does the young plant get out of the seed?

Material: Plant beans, peas, squash seed, corn and castor beans between blotters in saucers. Keep them moist and warm.

Results: Examine the seed at regular intervals. Note changes and make drawings to show any significant observations.

CORN.

Library reference: Leffert's Our Own United States, p. 193; Pitkin and Hughes' Seeing America, p. 264.

- I. Native of America.
- II. Rank in United States and Kansas. (Reference: Human Geography, Book II, p. 45.

III. Importance. (Reference: Human Geography, Book 11, p. 40.)

A. Feed for livestock.

B. Food for people.

C. Products manufactured.

1. Sugar. (Reference: Twenty-fourth Biennial Report, State Board of Agriculture, p. 219.)

2. Sirap.

3. Cereal foods.

4. Corn oil.

5. Glucose.

6. Starch.

7. Paper.

D. By-products.

IV. Corn states. (Reference: Human Geography, Book 11, p. 43.)

V. Types.

A. Most important type in Kansas. Why?

B. Distinguish between Dent and Flint corn.

C. Sweet corn. (Library reference: Pitkin and Hughes' Seeing America, p. 33.)

VI. Seed selection.

Note: If possible get a number of specimens of good type ears from county agent or successful corn grower and keep before pupils to fix in their minds the proper type for seed selection.

A. Home-grown seed.

1. Advantages.

2. Disadvantages.

B. Foreign-grown seed.

1. Advantages.

2. Disadvantages.

Note. Home-grown seed will yield more bushels per acre. Problem: How could new seed be introduced into a community economically.

C. Selecting seed from crib.

1. Common custom. Why?

2. Disadvantages.

D. Field selection.

1. Advantages.

2. Time.

E. Points in selecting seed.

F. Storing.

G. Testing.

1. Importance.

2. Germination box.

3. Rag-doll germinator.

Project: Have pupils test seed for farmers or local seed dealers.

Note.- Butt and tip kernels will grow and produce fairly well. However, they are smaller, and planters cannot be adjusted to plant different sizes of corn evenly. It is advisable to remove the small kernels from butt and tip before shelling seed.

VII. Preparation of land for corn.

A. Primary purpose.

1. To maintain productivity of fertile soil.
 - a. Prevent soil erosion.
 - b. Cover crops.
 - c. Rotate crops.
2. To restore production to a corn-sick field.
 - a. Stop soil erosion.
 - (1) Contour cultivation.
 - b. Add humus.
 - c. Grow legumes.
 - d. Hogging corn.

B. Secondary, or preparation just preceding planting.

1. How dispose of stalks in field to be planted to corn.
2. Plowing. (aim to liberate plant food.)
 - a. Relation between depth and time of plowing.
 - b. Effect of continued shallow plowing.
 - c. Place in crop rotation.

VIII. Planting.

A. Time.

B. Method.

1. Listing.
2. Surface planting.
3. Furrow openers.

C. Conditions governing rate of planting and depth to cover.

IX. Tillage.

A. Evolution of tillage tools.

1. One-horse mould-board plow, "single shovel" and "double shovel".

One-horse cultivator and lister cultivators.

2. Tendency for smaller shovels and more of them.

B. Reasons for intertillage.

1. To conserve moisture.

a. Compare water loss in a cornfield and a fallow field.

2. Destroy weeds.

C. Conditions governing depth and frequency of cultivation.

X. Enemies of corn.

A. Chinch bug.

1. Method of control.

a. Barriers.

b. Burning their quarters.

B. Corn-ear worm.

1. Method of control.

a. Fall plowing.

b. Early planting.

SUGGESTIVE PLAN FOR CORN PROJECT.

(FROM PENNSYLVANIA COURSE OF STUDY.)

In each of the projects outlined in this assignment, the activity steps (A. B. C. D. etc.) are the actual jobs

the boy or girl must do in the execution of the practical work. Under "Knowledge required" is listed the information needed by the pupil to take successfully the activity steps.

Activity steps and knowledge required:

A. Select variety.

1. Knowledge required.

- a. Varieties of corn.
- b. Adaptation to community.

B. Select land for planting ,

1. Knowledge required.

- a. Soils best for corn.
- b. Fertility.
- c. Location.

C. Secure the seed.

1. Knowledge required.

- a. Best time to select seed.
- b. Advantage of local or foreign seed.
- c. Advantages of pure bred seed.
- d. Amount.
- e. Cost.

D. Test seed corn for germination.

1. Knowledge required.

- a. Preparation for test.
- b. Methods of making test.
- c. Germination requirements.
- d. Reading the test.

1. Prepare soil for planting.

1. Knowledge required.
 - a. Implements needed.
 - b. Time of year.
 - c. Operations.
 - d. Requirements of good seed bed.

2. Plant seed.

1. Knowledge required.
 - a. Time to plant corn.
 - b. Depth of planting.
 - c. Distance in row and between rows.
 - d. Rate.

3. Cultivate the crop.

1. Knowledge required.
 - a. Time.
 - b. Frequency.
 - c. Depth.
 - d. Nearness to stalks.

4. Cut and shock the corn.

1. Knowledge required.
 - a. Indications of maturity.
 - b. Time of year.
 - c. Methods and material used and needed.

5. Husk the corn.

1. Knowledge required.
 - a. Proper time to husk.
 - b. Storage.

J. Sell the corn.

1. Knowledge required.

a. Time of year to sell corn.

b. Price.

c. Markets.

Library reference: Tom of Peace Valley, by Case.

SORGHUMS.

I. Tropical origin.

II. Introduction into United States; into Kansas.

III. Present importance.

IV. Purpose for growing.

A. Grain.

1. Feeding value of grain sorghums.

B. Forage.

1. Value for forage.

2. Danger in pasturing. Why?

C. Syrup.

D. Broom brush.

Note.- Kansas has the largest broom-corn market in the world, and is one of the three largest broom-corn producing states in the union.

V. Characteristics.

A. Resist drouth.

B. Require warm soil in which to germinate.

VI. Classification.

A. Saccharine. (Reference: Human Geography Book II, p.

7. Nonsaccharine. (Pupils should bring head samples of various sorghums grown on home farms.)

1. Kaffir: Heads compact, erect. (Reference: Human Geography, Book II, p. 66.)
2. Durra: Heads compact, pendent.
3. Broom corn type: Heads loose, spreading.
Prob em: "How might sorghums be improved by seed selection?"

III.

1. Origin and importance to world. (Reference: Human Geography, Book II, pp. 63, 18.)

- A. Improvement of methods of growing, harvesting and preparing for food much greater than the development of the grain itself.

II. Classes.

A. Inter.

1. Acreage. (Reference: Human Geography, Book II, pp. 46, 57.)
2. Conditions favorable.
3. Advantages.
 - a. Yield. Estimate average yield in local communities.
 - b. Labor better distributed.
 - c. Ripens earlier.
 - d. Nurse crop for timothy.

4. Classes.

- a. Hard winter wheats. (Reference: Human Geogra-

phy, Book II, p. 46.)

(1) Kanred. (Library reference: Pitkin and Hughes' Seeing America, Farm and Field, p. 280.)

(2) Turkey.

(3) Kharkof.

b. Soft winter wheats.

(1) Fultz.

(2) Harvest Queen.

(3) Fulcaster.

B. Spring. (Reference: Human Geography, Book II, p. 58.)

1. Where grown successfully.

2. Advantages.

III. Preparation of ground for wheat.

A. Early plowing best.

1. Reason.

2. Result of tests.

B. Depth to plow.

1. How to prevent formation of hardpan.

C. Work after plowing.

1. Importance.

a. Preserve moisture.

b. Kill weeds.

c. Disk harrow important at this time.

D. Listing ground for wheat.

1. Where practiced and reason.

2. Advantages.

E. Summer fallowing for wheat.

1. Purpose.

2. Objection.

IV. Seeding.

A. Kind of seed to sow.

B. Methods.

1. Broadcast.

2. Drill.

C. Time.

1. Governed somewhat by appearance of Hessian fly.

Why?

D. Rate.

E. Depth.

V. Tillering of wheat.

A. Relation of soil and quality of seed to tillering.

VI. Pasturing of wheat.

VII. Harvesting.- (Human Geography, Book II, p. 63.)

A. Machinery used. (library reference: Pitkin and
Hughes' Seeing America, p. 277.)

B. Time.

1. With binder.

2. With combine.

Problem: How does the time of harvesting vary
with the use of the binder or combine?

C. Methods.

1. Shock threshing.
2. Stack threshing.
3. Combine threshing.
4. Effect on quality of grain.

SMALL SPRING GRAIN.

I. Importance.

- A. Feed.
- B. Place in crop rotation.

II. Oats. (Fourth crop of importance in world; exceeded by potatoes, corn and wheat. (Reference: Human Geography, Book II, pp. 18, 55.)

- A. Profit.
- B. Climatic requirements.
- C. Best feed for horses.
- D. May be sown after corn and followed by wheat.
- E. Types.
 1. Winter.
 2. Spring.
 3. Comparative value.

F. Varieties.

1. Kanota.
 - a. Early growth in spring. Early maturity, ability to survive late spring frosts.
2. Red Texas.
 - a. Later maturing. Sometimes cut short by dry weather.
3. Kherson.

G. Preparation of ground.

1. Disking corn ground.

a. Advantages.

2. Fall plowing.

a. Advantages.

H. Time of seeding.

I. Rate.

1. Governed somewhat by variety and soil conditions.

J. Methods.

111. Barley. (Reference: Human Geography, Book 11, p. 18.)

A. Feed for livestock.

B. Susceptibility to injury by chinch bugs.

C. Types.

1. Winter.

2. Spring.

a. Six-row.

b. Two-row.

c. Beardless.

d. Hull-less.

D. Time of seeding.

LEGUMES.

I. Description.

A. Taproots.

II. Importance.

A. Forage.

B. Pasture.

C. Add nitrogen to soil.

1. Aid of bacteria which live in nodules.

Note: Show nodules on roots by digging up a young plant together with a lump of dirt, and carefully removing dirt.

III. Inoculation.

A. Wind.

B. Flow.

C. Manure.

D. Seed.

E. Mixing earth.

IV. Alfalfa. (Reference: Human Geography, Book II, p. 66.)

A. Perenn'ial.

B. Oldest cultivated forage crop.

1. Originated in Persia and Asia Minor.

2. Introduced into southern California from South America.

C. Climatic requirements.

1. Hot and dry climate.

D. Conditions of growth.

1. Well-drained soil. What do we mean by the saying "alfalfa will not stand wet feet"?

2. Fertile soil. (Land that will not produce a good crop of wheat or corn is not suitable for growing alfalfa until it has been manured or fertilized.)

3. Soil must contain sufficient lime.

4. alfalfa responds better than any of the other
crops on forage crops to the application of barn-
yard manure.

B. Seed bed.

1. Fall seeding.

- a. Shallow plowing stubble immediately after
harvest.
- b. Work the ground often to prepare seed bed, kill
weeds, and conserve moisture.
- c. Top of seed bed thoroughly pulverized just
before a seeding.

2. Spring seeding.

- a. Plow ground fall preceding.
- b. Work it in condition with disk and harrow.

F. Time, manner and rate of seeding.

G. Harvesting.

1. Time.

- a. Effect of cutting too early.
- b. Full bloom for horses.
- c. One-tenth to one-quarter for other live
stock.
- d. Development of new shoots.

2. Manner.

- a. Value of side rake and tender.
- b. Food material in leaves.
- c. Relation of color to food value; market
value.

- d. Average yield of state.
- e. Effects of late fall cutting.
- h. Seed production.
 - 1. Second crop generally best.
 - 2. Light forage growth best for seed production.
- i. Pasturing alfalfa.
 - 1. Good pasture for hogs.
 - 2. Dangerous for ruminants (cud-chewing animals).
 - 3. Will not stand close grazing.

V. Clovers.

A. Value.

- 1. Hay, rich in protein.
- 2. Pasture.
- 3. Soil builder.
- 4. Clover crop.

B. Varieties.

- 1. Red clover.
 - a. Biennial.
 - b. Hay.
 - c. Pasture.

Problem: What would be the effect on the clover crop should all theumblebees be killed?

2. Crimson.

- a. Annual.
- b. Pasture.
- c. Adaptability to Kansas conditions.

3. Alsiko.

a. Adaptability.

b. Pasture.

4. Sweet clover.

a. Importance. The most available plant for green manuring on all kinds of land in all parts of the state.

(1) Soil improvement.

(2) Pasture.

(3) Hay.

b. Seeding.

(1) Time.

(2) Seed bed.

(3) Scarified seed.

(4) Unscarified seed.

(5) Relation of scarified seed to rate of seeding.

VI. Soy beans and cow peas.

A. Value.

B. Growth.

C. Seeding.

D. Cultivation.

E. Harvesting.

F. Green manuring.

GOSSLES.

1. Tame grasses.

A. Introduced to America from Europe.

B. Where found in America.

C. Importance.

D. Kinds.

1. Pasture.

2. Hay.

3. Seeding.

II. Native grasses.

A. Importance.

B. Classes.

1. Tall.

2. Short.

C. Bluegrass replacing native grasses. (Reference:
Ruman Geography, Book II, p. 52.)

III. Pastures.

A. Native grass.

B. Tame grass.

C. Care.

D. Effect of burning.

HOW PLANTS AND ANIMALS ARE IMPROVED.

I. Plants.

A. Variation.

B. Selection.

C. Hybridization.

II. Animals.

A. Selection.

B. Record associations.

C. Pure-bred sires.

Question: Distinguish between thoroughbred and pure bred.

ANS.

1. Classes.

A. Annuals.

1. Pigweed.
2. Jimson weed.
3. Cocklebur.

B. Biennial.

1. Wild carrot.
2. Chicory.

C. Perennial.

1. Johnson grass.
2. Field bindweed.
 - a. Most troublesome weed in Kansas.
3. Methods of eradication.

D. Pasture weeds.

1. Principal cause.
2. Kinds.
 - a. Wild verbena.
 - b. Ironweed.
 - c. Bull thistle.
3. Control.

Exercise: List 25 other harmful weeds.

SOILS.

1. Composition.

A. Mineral matter.

B. Organic matter.

II. Formation.

A. Formed from plants.

1. Humulose.

2. Where found.

B. Weathering of sandstone and shale.

1. Residual.

2. Characteristics.

3. Where found.

C. Formed by water.

1. Alluvial.

2. Fertility.

3. Where found.

Problem: Hunt for examples of alluvial soil and learn to recognize it as such. In most regions alluvial deposits can be found in the beds of streams.

D. Formed by wind.

1. Loessial.

2. Fertility.

3. Where found.

E. Formed by ice.

1. Glacial. (Reference: Human Geography, Book II, p. 37.)

2. Fertility.

3. Where found.

IV. Clay soils.

V. Loam soils.

Problem: What kinds of soils in your community are considered the most valuable?

VI. Subsoil.

A. Nature and importance.

VII. Soil water.

A. Use of soil.

B. Free water.

C. Film water.

Problem: Test water-holding capacity of soils.

Material: Take three cans of equal size; make a number of fine holes in the bottom of each for drainage. Spread out and dry on papers. sand, clay and loam; fill a can with soil of each kind. Weigh the cans and their contents, record the weights, and then set the cans in water nearly to the top and let them stand over night. The next morning take the cans out of the water, and after they have drained thoroughly, reweigh them. Which can has gained most in weight?

VIII. Conserving moisture.

A. Rough plowing.

B. Kill weeds.

C. Mulch s.

IX. Dry farming.

- A. How conserve moisture.
- B. Summer fallowing.
- C. Frequent shallow cultivation.
- X. Drainage.
 - A. Surface.
 - B. Underdrainage.
 - C. Tile drainage.
 - D. Benefits.

SOIL IMPROVEMENT.

- 1. Define soil fertility,
 - A. Crops indicate fertility.
 - B. Factors determining fertility.
 - 1. Essential plant foods.
 - a. Phosphorus.
 - b. Potassium.
 - c. Nitrogen.
 - d. Lime.
 - 2. Humus. (Reference: Human Geography, Book 11, p. 31.)

Problem: How do you account for the fact that the soil is usually more moist in forests than in adjacent fields?

- a. Lost by continuous cultivation and erosion.
- b. How it may be supplied.
- C. Effect of leguminous crops on soil. (Reference: Human Geography, Book 11, p. 31.)

1. Fertilizers.

1. Commercial.
2. Farmyard manure.
3. Relative value.

II. Soil erosion.

- A. Soil deficient in humus.
- B. Effect.
- C. Prevention.

1. Addition of organic matter.
2. Proper cultivation.

Question: Why are hillside farms sometimes terraced?

COMPARISON.

- I. Object.
- II. Crops to include in rotation.
- III. Length of time for different crops.
- IV. Arrangement.

IRRIGATION.

Reference: Human Geography, Book II, pp. 76, 77.

- I. Define.
 - A. Introduction into United States.
- II. Need.
- III. Advantages.
- IV. Disadvantages.
- V. Systems.
 - A. Gravity.
 - B. Mechanical.

1. Indmill.

C. Subirrigation.

VI. Crops to irrigate.

FEEDING FARM ANIMALS.

I. Source of animal food.

A. Uses.

1. Maintenance.

2. Growth and fattening.

3. Work.

B. Kinds.

1. Concentrates.

a. Corn.

b. Oats.

2. Roughages.

a. Hay.

b. Straw.

3. Relative feeding value.

C. Digestion in -

1. Mouth.

2. Stomach.

3. Intestines.

4. Digestive tracts of animals.

D. Vitamins.

II. Ration.

A. Balanced.

B. Effect of different rations.

1. Preparation of feeds.

HORSE PRODUCTION.

- I. Kansas suitable.
- II. Value of horses and mules in Kansas.
- III. Development due to -

- A. Climate.
- B. Selection.
- C. Feed.
- D. Shelter.

IV. Classification.

A. Draft horses.

1. Description.
2. Popularity in Kansas.
3. Profitable kind to produce.
4. Breeds.

- a. Percherons. (Reference: Ruman Geography, Book II, p. 225.)
- b. Belgians.
- c. Shires.
- d. Clydesdales.

Consider the following points for each of the principal breeds of draft horses.

- (1) Native home.
- (2) Strong points.
- (3) Popular colors.
- (4) Faults.

B. Coach horses.

1. Heavy harness horses.

2. Style.
3. Action.
4. Weight.
5. English breeds.
 - a. Hackney.
 - b. Cleveland Bay.
 - c. Yorkshire.
6. German Coach.
7. French coach.
3. Light horses. (Reference : Human Geography, Book II, p. 140.)
 1. Description.
 2. Popularity.
 3. Economic value.
 4. Standard breed.
 - a. American product.
 - b. Description.
 - c. Use.
 5. Thoroughbreds.
 - a. Origin.
 - b. Description.
 - c. Strong points.
 - d. Uses.
 - e. Effect on other breeds.
 6. American saddle horses.
 - a. Description.
 - b. Reason for development.

c. Gaining in popularity.

d. Strong points.

7. Orloff.

8. Arabian.

a. Origin.

b. Quality.

c. Endurance.

d. Beauty and intelligence.

e. Effect on other breeds.

9. Ponies.

V. Soundness of the horse.

A. Sound.

B. Serviceably sound.

C. Unsound.

1. Temporary.

2. Permanent.

D. Effect on market value.

VI. Feeding horses.

A. Regularity.

B. Frequency.

C. Amount.

D. Quality of feed.

E. Grain ration.

1. Timothy.

2. Clover.

3. Prairie.

4. Alfalfa.

D. Winter grass.

BEEF CATTLE.

I. Importance of beef production. (Reference: Human Geography, Book II, pp. 47-68.)

A. Use of by-products from farm.

1. Stover.

2. Straw.

3. Unmarketable hay and grain.

B. Increases soil fertility.

C. Tenant farming detrimental to beef production.

II. Kansas as beef cattle state.

A. Variety of suitable feeds.

B. Climate.

C. Markets.

III. Ideal beef animal.

A. Fat cattle.

B. Breeding cattle.

(Refer to score card in Farmer's Bulletin No.

1068. for free distribution by United States Department of Agriculture.)

IV. Breeds. (Reference: Farmer's Bulletin No. 612, United States Department of Agriculture.)

A. Shorthorn.

1. More extensively grown than any other of the beef breeds.

2. Produces more milk than any other beef breed.

3. Conformation.

4. Horned.

5. Polled.

a. Formerly polled Durham.

6. Milking strain.

7. Color.

8. Weight.

B. Hereford.

1. First importation in 1817 by Henry Clay.

2. Because of their "rustling" ability they are adapted to range conditions.

3. Color.

4. Horned.

5. Conformation.

6. Weight.

Note.- Polled Herefords are now being produced and are gaining in popularity.

C. Aberdeen Angus.

1. First importation into United States by Geo.

Grant of Victoria, Kan., in 1873.

2. Color.

3. Polled, always.

4. Good rustlers.

5. Mature early.

6. Hardy.

7. Quality of meat.

8. Comparative size.

D. Galloway.

1. Color.
2. Hardy nature.
3. Poll.
4. Conformation.
5. Adapted to range conditions.
6. Comparative size.

V. Divisions of beef-cattle industry.

A. Producing pure-bred cattle.

1. Investment.
2. Careful methods.
3. Careful selection of breeding stock.
4. Keep animals properly recorded.

B. Producing stockers and feeders.

1. Pasture.
2. Roughage.
3. Type.

C. Grazing cattle.

1. In grazing regions.
2. Cattle produced elsewhere and shipped in.

D. Fatening cattle.

1. In corn belt.
2. Most profitable type to feed.
3. Station.

HOGS.

(Reference: *Human Geography*, Book II, p. 41.)

- I. Kansas as hog-producing state. (Reference: *Human Geography*, Book II, p. 41.)

II. Types.

A. Bacon.

1. Where developed.
2. Principal feeds. (Library reference: Pitkin and Hughes, *Feedstuffs for Swine*, p. 271.)
3. Feeds available in Kansas.
4. Why so few raised in Kansas.
5. Breeds.
 - a. Large Yorkshire.
 - (1) Description.
 - (2) Size.
 - (3) Quality of bacon.
 - b. Tamworth.
 - (1) Description.
 - (2) Size.
 - (3) Quality of bacon.

B. Lard.

1. Where developed.
2. Principal feeds.
3. Breeds.
 - a. Poland China.
 - (1) American origin.
 - (2) Early maturity.
 - (3) Description.
 - b. Duroc-Jersey.
 - (1) Description.
 - (2) Early and prolific.

c. Berkshire.

(1) Description.

(2) Type depends somewhat on local conditions.

d. Chester Whites.

(1) American origin.

(2) Skin trouble when exposed to unfavorable weather.

e. Hampshire.

(1) Origin.

(2) Hardy.

(3) Prolific.

(4) Originally a bacon type, but has been gradually changed to lard type since coming to this country. Question: What might cause this change?

III. Feeding hogs. (Reference: Human Geography, Book II, p. 30.)

A. Drinking water.

B. Use of self-feeder.

C. Kinds of feed.

1. Corn. (Library reference: Leffert's Our Own United States, p. 193.)

2. Barley.

3. Kafir.

4. Tankage.

5. Oil meal.

6. Skim milk.

7. Alfalfa.

D. Feed for brood sows or growing pigs.

IV. Sanitation.

A. Cleanliness important.

B. Shelter. (Reference: Hogs in Kansas, p. 93, issued by State Board of Agriculture.)

V. Market types.

A. Prime.

B. Butcher.

C. Packing.

D. Light.

E. Miscellaneous.

FARM BUTCHERING.

(Reference: Hogs in Kansas, p. 207, issued by State Board of Agriculture.)

I. Economical.

II. Condition of animal to be slaughtered.

III. Bleeding.

IV. Scalding.

V. Cutting.

VI. Curing.

A. Dry cure.

B. Brine cure.

C. Plain salt.

VII. Smoking meats. (Reference: Hogs in Kansas, p. 218, issued by State Board of Agriculture.)

A. Smoke house.

B. Fuels used.

C. Time.

VIII. Keeping smoked meats.

PIG PROJECT.

(From Pennsylvania Course of Study.)

Activity steps and knowledge required.

A. Select the breed.

1. Knowledge required.

a. Different breeds of pigs and advantages and disadvantages.

B. Secure the pig.

1. Knowledge required.

a. Where particular breeds can be secured.

b. Probable cost.

c. Advantages of pure bred.

d. Individual points to be considered in selecting pig.

e. Desirable age for fattening.

C. Provide shelter.

1. Knowledge required.

a. Type of pen needed.

b. Size.

c. Location.

D. Provide range.

1. Knowledge required.

a. Area per pig.

- b. Location.
- c. Fencing requirements.
- d. Crops to be grown in range.
- E. Keep pig growing.
 - 1. Knowledge required.
 - a. Proper food requirements.
 - b. Proper water requirements.
 - c. Proper exercise needed.
 - d. Proper health requirements.
- F. Fatten the pig.
 - 1. Knowledge required.
 - a. Station for finishing pig for market.
- G. Sell the pig.
 - 1. Knowledge required.
 - a. Age to sell.
 - b. Price required for profit.

SHEEP.

Reference: Human Geography, Book II, p. 70.

Library reference: Pitkin and Hughes, Seeing America,
Farm and Field, p. 242.

- I. Value to man.
 - A. Food.
 - B. Clothing.
- II. Sheep production in Kansas increasing.
 - A. Adaptability to Kansas conditions.
- III. Breeds.
 - A. Fine-wooled breeds. Reference: Human Geography,

Book 11, p. 424.

1. Kept primarily for wool production.

2. Description.

3. Merino.

a. Imported from Spain.

b. Wool.

c. Mutton.

4. Rambouillet.

a. Imported from France.

b. Wool.

c. Mutton.

B. Medium-wooled breeds.

1. Dual purpose breed.

2. Description.

3. Wethershire.

4. Hampshire.

5. Oxford.

6. Southdown.

7. Dorset.

8. Shetland.

C. Long-wooled breeds.

1. Kept primarily for mutton-production.

2. Description.

3. Leicester.

4. Cotswold.

5. Lincoln.

IV. Handling sheep.

- A. Timid and sensitive.
- B. Flesh easily bruised.
- C. How to catch a sheep.

V. Feeding sheep.

- A. Protein.
 - 1. Grain.
 - 2. Roughage.
- B. Pasture.
 - 1. Sheep will eat more weeds than any other farm animal.
- C. Feeding lambs for market increasing in Kansas.

DAIRYING.

1. Importance in Kansas. (Reference: Human Geography, Book II, p. 169.)

A. Natural adaptations of soil and climate.

II. Selection of dairy cows.

Note.- The opinion of many dairy farmers is, "The common 'red Cow' which so many farmers have tied to, has retarded dairy development more than any other one thing." "For most farmers the first step toward better dairying is better cows."

Reference: Dairying in Kansas, pp. 69-108. Issued by State Board of Agriculture.

- A. Type.
- B. Record.
- C. Ideal dairy type.

1. Improvement due chiefly to the process of selection.
2. General description of ideal dairy cow.
Visit dairy herd, study characteristics of a dairy cow.
3. Four principal breeds.
 - a. In order of quantity of milk production.
 - (1) Holstein.
 - (2) Ayrshire.
 - (3) Guernsey.
 - (4) Jersey.
 - b. In order of richness of milk.
 - (1) Jersey.
 - (2) Guernsey.
 - (3) Ayrshire.
 - (4) Holstein.
 - c. Characteristics of each breed. (Reference: Dairying in Kansas, pp. 33-68. Issued by Kansas State Board of Agriculture.)
- D. Keeping records.
 1. Purpose.
 2. Methods.
 3. Result.
- E. Feeding.
- F. Stabling.
- G. Milk. (Library Reference: Pitkin and Hughes' Seeing America, pp. 54-74.)

H. Separating milk.

1. Butter making.

2. Skim milk.

a. Value.

3. Buttermilk.

a. Value.

I. Pasteurizing.

1. Method.

2. Purpose.

J. Milking machine.

1. Advantages.

2. When practical.

DAIRY CATTLE PROJECT.

From Pennsylvania Course of Study.

Activity steps and knowledge required.

A. Select breed.

1. Knowledge required.

a. Different breeds of dairy cattle.

b. Adaptation of breeds for particular purposes and conditions.

B. Buy calf.

1. Knowledge required.

a. Where calf can be secured.

b. Probable cost.

c. Individual points to be considered.

d. Advantage of pure breeds vs. grades.

C. Rean calf.

1. Knowledge required.

a. What age.

b. Teaching calves to drink from pail.

D. Feed calf.

1. Knowledge required.

a. Necessary foods - concentrates, roughages.

b. Frequency of feeding.

c. Amount at different ages.

E. Care of calf.

1. Knowledge required.

a. Importance of abundant good food and water.

b. Importance of shelter.

c. Importance of grooming and care.

SILOS.

Reference: Dairying in Kansas, pp. 392-400.

State Board of Agriculture, Topeka, Kans.

I. Use.

II. Kinds. (Library Reference: Pitkin and Hughes' Dairying America, p. 54.)

A. Pit silo.

1. Where practical.

2. Advantages.

III. Crops for silo.

A. Corn.

B. Kafir.

C. Milo.

D. Alfalfa.

E. Rye.

IV. Feeding.

A. Advantages.

B. Value.

C. Suitable for what animals.

POULTRY.

I. Value of poultry in Kansas. (Library reference: Du Puy's
Our Bird Friends and Foes, p. 127.)

II. Kinds.

III. How names.

A. Species.

B. Class.

C. Breed.

D. Variety.

IV. Improving the farm flock. (Library reference: Du Puy's
Our Bird Friends and Foes, p. 123.)

A. Cockerels from high producing flocks.

B. Trap-nesting.

C. Culling.

1. When to cull.

2. How to cull. Take class to a culling demonstration given by county farm agent, where pupils may get a general idea of culling.

3. Result.

V. Houses for poultry.

- A. Location.
- B. Type.
- C. Construction and materials.
- D. Size.
- E. Interior fixtures.
- F. Visit a good poultry farm if possible.
- VI. Eggs for hatching.
 - A. Selection.
 - B. Care.
- VII. Running an incubator.
 - A. Brooding.
 - B. Brooder.
- VIII. Feeding chickens.
 - A. Scratching feed.
 - B. Mash.
 - C. Supplements.
 - D. Ration for laying hens.
 - E. Ration for young chicks.
- IX. Disease.
 - A. Economical method of controlling disease is by prevention.
 - B. Value of county farm agent in controlling disease.
 - C. Common cause for failure in poultry industry.

Reference: Circular No. 106, Prevention and Control of Poultry Diseases, issued by Kansas State Agricultural College.

POULTRY PROJECT.

(From Pennsylvania Course of Study.)

Activity steps and knowledge required.

A. Select the breed.

1. Knowledge required.

- a. Kinds of breeds - advantages and disadvantages.
- b. Adaption of particular breeds to particular needs.
- c. Personal fancy.

B. Secure the birds.

1. Knowledge required.

- a. Where particular breed can be secured.
- b. Approximate cost.
- c. Best age for laying.
- d. Purity of stock.

C. Prepare house.

1. Knowledge required.

- a. Size house necessary.
- b. Desirable location.
- c. Standards for interior fixtures.

D. Feed the hens.

1. Knowledge required.

- a. Best food for egg production.
- b. Amount of feed at a feeding.
- c. Methods of feeding.

E. Care and management of the flock.

1. Knowledge required.

- a. Methods of disease prevention and control
- b. Adjuncts to feeding for egg production.
- c. Food, water cleanliness, and regularity as essentials in management.
- d. Cost of food and management.

F. Collection and care of eggs.

1. Knowledge required.

- a. Time to collect.
- b. Method of collection.
- c. Storage of eggs.

G. Sell the eggs.

1. Knowledge required.

- a. Frequency of selling for good quality.
- b. Where are good markets.

H. Sell surplus stock.

1. Knowledge required.

- a. Time to sell.
- b. Market.

DISPATCH OF LIVE STOCK.

I. Causes of disease.

II. How diseases spread.

III. Disinfection.

- A. Nature's best disinfectant.
- B. Use of carbolic acid.
- C. Disinfect premises spring and fall.

IV. Kinds of diseases.

A. Noninfectious.

1. Rheumatism, colic and paralysis.

B. Infectious.

1. Tuberculosis. (affects most domestic animals.

- a. Symptoms.
- b. Prevention.
- c. Accredited list.
- d. May be carried to children through milk of cattle.

2. Abortion disease of cattle.

- a. Infectious.
- b. Prevention.

3. Blackleg.

- a. Common cause.
- b. Care.
- c. Symptoms.
- d. Prevention.

4. Hog cholera.

- a. Infectious.
- b. Carriers.
- c. Prevention.

5. Worms in hogs.

- a. Young pigs most susceptible.
- b. How produce worm-free pigs.
- c. Treatment for infested animals.

I. Two main groups.

A. Conifers.

1. Pines, spruces, firs, hemlocks, larches, cypresses and cedars.
2. Grown from seed.

B. Broadleaf.

1. Common method of propagation.

II. Sizes of trees for planting.

III. Steps in planting a tree.

IV. Time.

V. Suitable for Kansas.

VI. Uses.

A. Lumber.

B. Fuel.

C. Shade and ornamental purposes.

D. Windbreak.

E. Posts.

PLANT DISEASES.

I. Causes.

A. Parasitic plant.

1. Flowering plant parasites.

a. Dodder.

b. Mistletoe.

2. Bacteria and fungi.

a. Useful.

- (1) Live in roots of clover and alfalfa;
rather plant food.

b. Harmful.

(1) Diseases such as pear blight.

II. Control.

- A. Pruning.
- B. Spraying.
- C. Crop rotation.
- D. Seed treatment.

III. Resistant varieties.

- A. Obtained by selection (Example: Kanrod wheat.)

Problem: List six common plant diseases and discuss methods of control of each.

LECTURE ON PARS.

I. Loss caused by insects.

II. Structure and growth.

III. Harmful insects.

- A. Chinch bug, corn-eat worm, Hessian fly, grasshopper, Colorado potato beetle, melon louse, cabbage butterfly, San Jose scale, codling moth.

- B. Extent of harm done by each. (Library reference: Seeing America, p. 273.)

- C. Life history.

- D. Method of control.

- 1. Clean farming.
- 2. Fall plowing and disking.
- 3. Time of planting.
- 4. Crop rotation.
- 5. Condition of soil.
- 6. Poultry and birds.

IV. Useful Insects.

A. Predaceous.

1. Ground beetles, roach flies, lacewings.

B. Parasitic.

1. Braconids, chalcids flies, bee flies.

C. Supply food and carry pollen.

1. Honey bee and wild bee. (Library reference: Dugway's Our Insect Friends and Foes.)

ORCHARDING.

I. Distinguish between insecticide and fungicide.

II. Prays.

A. Advantages.

B. For picking insect. Reason.

C. For sucking insect. Reason.

D. Bordeaux mixture.

1. How prepared.

E. Equipment.

ORCHARDING.

I. Importance in Kansas.

II. Factors to be considered.

A. Climate.

B. Soil.

C. Site.

III. Varieties.

- A. Methods of securing trees of a variety. (Reference: Human Geography, Book II, p. 54.)

1. Grafting.

2. Budding.

B. Adaptability of varieties.

C. Factors for consideration in choice of varieties.

D. Consider varieties of following fruits suitable to Kansas:

1. Apples.

2. Cherries.

3. Plums.

4. Peaches.

IV. Establishing an orchard.

A. Age of trees for planting.

1. One-year old trees.

a. Cost.

b. May be headed at any desired height.

c. Labor.

d. Will stand transplanting better.

2. Two-year old trees.

a. Withstand strong winds better.

b. Easily obtained.

c. Withstand poor soil conditions better.

B. Preparation of ground.

C. Heeling in and planting.

1. Time to plant.

2. Dig holes large enough.

3. Set trees deeper than they stood in nursery.

4. Distance between trees.

D. Care of young trees.

1. Good cultivation of soil.

2. Careful pruning.

a. Reason for pruning.

b. Time to prune.

I. Cropping and cultivating the young orchard.

1. Cultivating crops such as corn, strawberries, melons, potatoes, best for young orchard.

2. Cover crop or clean cultivation and manuring best for older orchards.

3. Purpose of cultivation.

a. Conserve soil moisture.

b. Renders soil fertility more available.

c. Permits use of leguminous cover crops to furnish nitrogen.

d. Helps control insects and mice.

e. Increases yield and improves quality of fruit.

V. Care of orchard.

A. Destroy infected plants, or parts.

B. Spraying.

VI. Grape.

A. Soil.

B. Habits of growth.

C. Varieties in Kansas.

VII. Strawberry.

A. Soil.

- B. Method of setting out plants.
- C. Care of plants after fruit is picked.
- D. Varieties in Kansas.

VIII. Bush fruits.

- A. Blackberries.
- B. Raspberries.
 - 1. Red.
 - 2. Black.
- C. Gooseberries.

VEGETABLE GARDEN.

I. Site.

II. Soil.

III. Care of garden.

- A. Preparation of soil.
 - 1. Manure and plow in fall.
 - a. Advantage of fall plowing.

IV. Plan.

- A. Rectangular.
- B. Avoid small beds.
- C. Arrangement of crops.

V. Hotbeds.

- A. Purpose.
- B. Location.
- C. How to build.

VI. Cold frames.

- A. Purpose.
- B. Construction.

VII. Transplanting.

- A. Purpose.
- B. Kind of plants to transplant.
- C. Condition of soil.
- D. Time.

Explain: Plants should be hardened off before being transplanted.

VIII. Potatoes.

- A. Importance and value.
- B. Preparation of soil and crop rotation.
- C. Selecting seed.
 - 1. Variety characteristics.
 - a. Early varieties; Early Ohio, Irish Cobbler.
 - b. Later varieties; Burbank and Carmen.
 - 2. Treating seed.
 - a. Method.
 - b. Purpose.
 - c. When to treat.
- D. Planting.
 - 1. Rate.
 - 2. Time.
 - 3. Manner.
 - a. Depends on local conditions.
- E. Cultivation.
 - 1. Purpose.
 - a. Prevent weed growth.
 - b. Conserve moisture.

2. Manner.

3. Mulching.

a. Object.

b. Method.

F. Digging.

1. Time.

2. Methods.

G. Storing.

BEAUTIFYING THE HOME GROUNDS.

I. Value.

II. Purpose.

III. Factors in beautifying home grounds.

A. Shrubs.

1. Adaptability.

2. Arrangement.

3. Care.

B. Vines.

1. Where most suitable.

2. Varieties.

C. Grasses.

1. Purpose.

D. Trees.

1. Arrangement.

2. Deciduous.

3. Evergreens.

E. Flowers.

1. Flower garden.

- a. Purpose.
- b. Location.
- c. Size.

2. Flower beds.

- a. Preparation of soil.
- b. Arrangement.

BIRDS.

I. State bird; how selected. (Reference: Patriotic Manual, p. 89.)

II. How birds are most helpful.

- A. Winter sojourners.
- B. Residents.
- C. Migrants.

III. Protectors.

- A. Orchard.
 - 1. How they protect.
 - 2. Chickadee and titmouse.
- B. Field and garden.
 - 1. How they protect.
 - 2. Quail, meadow lark.
- C. List other bird friends.

IV. How birds may be protected and encouraged.

Library Reference: Dupuy's Our Bird Friends and
Foes.)

FARM ORGANIZATIONS.

I. Purpose.

- A. Protection.

B. Educational.

11. Beneficial Agencies.

A. Agricultural College.

1. How supported.
2. Rank with other state agricultural colleges.
3. Purpose.

B. Extension service of Agricultural College.

1. How supported.
2. Purpose.

C. Experiment Stations.

1. Purpose.
2. Value.
3. Different sections of state.

D. State Board of Agriculture.

1. Membership.
2. Present secretary.
3. Work.

E. Agricultural associations.

1. Consider work and purpose of each of the following organizations:
 - a. Kansas Live Stock Association.
 - b. Kansas Horticultural Society.
 - c. Kansas Crop Improvement Association.
 - d. Kansas Dairy Association.
 - e. Breeders' Association.
- F. Regulatory work.
 1. Live Stock Registry Board.

2. State Entomological Commission.
3. Live-stock Sanitary Commission.
4. State Grain Inspector.

G. Grange.

1. When organized.
2. Purpose.
3. Accomplishments.
4. Local.
5. How recommended observance of an agricultural day.

H. Farmer's Union.

1. Origin.
2. Purpose.
3. Membership.
4. Accomplishments.

I. Farm Bureau.

1. How supported.
2. Purpose.
3. Work of county agent.

a. Educational.

b. How is he paid and how is he chosen?

Does your county have a county agent?

In what way may your school cooperate with the county agent?

GOOD ROADS.

1. Importance.

A. Marketing of produce.

2. Saving of time.
3. Saving of perishable products.
4. Hauling independent of weather conditions.
5. Greater opportunity for diversified farming.

II. Modern advantages made possible.

1. Extension and improvement of rural-mail and parcel-post service.
2. Social advantages.
3. Tourist travel.

III. Preliminary work necessary in road location.

A. Laying out of the road.

1. Things to be avoided.

- a. Meandering course.
- b. Sharp curves.
- c. Heavy grades.
- d. Lowlands.
- e. Railway crossings.
- f. Ineffective drainage.

2. Consideration of scenic effects.

3. Value of roadway trees.

Problem: Compare our method of locating roads with that of European countries.

D. Right of eminent domain.

III. Materials used in the building of hard-surfaced roads.

A. Concrete.

1. What is Portland cement?
 2. How are concrete roads built?
 3. Cost compared with other types.
- B. Asphalt.
1. Preparation necessary before paving.
 2. Steps in asphalt paving.
- C. Brick.
1. Advantages.
 2. Disadvantages.
- D. Macadam.
- K. Stone.

Problem: What is the most common method of road improvement in Kansas?

IV. Control of roads. (Reference: Kansas road and bridge laws, issued by Kansas Highway Commission.)

- A. Bureau of Public Roads.
1. Apportionment to states of federal aid.
 2. Controls federal aid road funds.
 3. Points considered in selecting highways to receive federal aid
 - a. Factors favorable to connecting large centers rather than consideration of local communities.
- B. State Highway Commission.
1. Apportion federal aid to counties.
 2. Officers.
 3. Appointed by governor.

C. County commissioners. (Reference: Our Government and Government of Kansas, S. p. 65.)

1. Appoint county engineer.

2. Jurisdiction.

D. Township highway system.

1. Officers.

2. Jurisdiction.

V. Classification of roads.

a. State highway system.

1. Includes federal system.

a. Primary road (interstate) must not exceed 3 per cent total road mileage.

b. Secondary (intercounty) must not exceed 4 per cent total mileage in county.

Thus: Not more than a total of 7 per cent of total mileage of roads may receive federal aid.

2. County roads.

3. Township roads.

VI. Expenditure for roads. (See latest issue of Kansas Road and Bridge Laws issued by Highway Commission.)

Problem: Estimate amount of money spent for roads and bridges in your local township or county each year. How is the money raised for maintenance and improvement of roads?

A. Economy of permanent road and bridge work.

B. Federal aid.

1. Purpose.
 2. Plan of distribution.
 3. State aid.
 1. Plan.
- VII. Drainage.
- A. Advantage
 1. Surface.
 2. Under drainage.
- VIII. Road construction and maintenance.
- A. Earth.
 - B. Gravel.
 - C. Hard surface.
- IX. Bridges and culverts.
- A. Relation to a good road system.
 - B. Width.
 - C. Design.
- X. System of road signs.

ASSIGNMENTS OF STUDY IN AGRICULTURE.

LIGHTHOUSE.

(Text, Call and Kent.)

- | | |
|----------------------------|-----------------------------|
| First Month, pp. 1-53. | Sixth Month, pp. 336-347. |
| Second Month, pp. 59-113. | Seventh Month, pp. 348-406. |
| Third Month, pp. 114-161. | Eighth Month, pp. 407-458. |
| Fourth Month, pp. 166-218. | Ninth Month, Review. |
| Fifth Month, pp. 229-285. | |

ARITHMETIC.

ARITHMETIC.

Virginia Jenkins.

The chief purpose of arithmetic in the elementary school is to enable the pupils to make such computations as are called for in the everyday life of the school, home and the community.

There will be no text books in the hands of the pupils of the first and second grades. The kind of arithmetic in these grades is determined by the needs of the children and these needs will grow out of their immediate interest and activities. Arithmetic texts and manuals, suggesting plans and methods, should be available for the teacher's reference.

Two ends must be kept in mind by the teacher:

1. To develop -

- a. Speed and accuracy in fundamental processes as applied to integers.
- b. The ability to manipulate simple fractions and decimals.
- c. Some knowledge of denominate numbers.
- d. Familiarity with simple mensuration.
- e. The fundamental principles of percentage and their application.

2. The ability to use these processes in solving the everyday problems of life.

The teacher will need to base much of her instruction on the experience of her pupils in their daily home life, their play activities, and their other school work.

TIPS IN TEACHING.

Thorndike in his *Psychology of Arithmetic* gives the following "seven simple but Golden Rules":

1. Consider the situation the pupil faces.
2. Consider the response you wish to connect with it.
3. Form the bond; do not expect it to come by a miracle.
4. Other things being equal, form no bond that will have to be broken.
5. Other things being equal, do not form two or three bonds when one will serve.
6. Other things being equal, form bonds in the way that they are required later to act.
7. Favor, therefore, the situations which life itself will offer, and the responses which life itself will demand."

FIRST GRADE.

1. Aims.
 - A. To read and write numbers to 100.
 - B. To count by 1's, 2's, 5's and 10's to 100.
 - C. To know the meaning of such common measures as inch, foot, yard, pint, quart, gallon, dozen, pound, ounce.

- D. To read to an hour glass to tell on the clock face.
- E. To know the meaning of the coins: penny, nickel, dime, quarter, half-dollar and dollar.
- F. To know the names and number of the days of the week and the names and the number of the months in the year.

11. General statement.

The young child has relatively little need of arithmetic in his own activities, yet these activities must be made the basis for the number work in the school. The little child is interested in counting persons and things with which he comes in contact. He is interested in knowing the number of the page on which he is reading. He feels real interest in knowing that $2 + 3 = 5$, when he makes 2 points in one turn of the game and 3 points in another turn. The school should create situations in which number is needed. Games and projects in which counting and measuring are combined furnish such situations. The work should be largely oral and large use should be made of objects.

The following list of activities may be suggestive and helpful:

1. Count the number in the class.
2. Count the number present, absent or tardy.
3. Count objects in the room.

4. Count the desks in a row.
5. Count the windows.
6. Find pages in a book.
7. Keep the score in a game.
8. Find the number of pencils, books, crayons,
etc. needed when materials are distributed.
9. Play store.
10. Count the trees in the school yard.
11. Read the Roman numerals on the clock face.
12. Read the calendar.
13. Make easy comparisons, as-
Longer and shorter.
Higher and lower.
Nearer and farther.
Larger and smaller.
Older and younger.

111. First half-year.

- A. Count to 10. Counting is one of the chief uses
a first grade child makes of number. Count ob-
jects in the room, desks in a row, pupils in a
row, the windows, etc. At first it is a good plan
to have the pupil touch the objects as he counts
them.
- B. Read numbers to 100. Read date on the calendar.
Read numbers on pages of reading books. Call at-
tention to automobile and telephone numbers.
- C. Write numbers to 100. At first the children will

write numbers just for the pleasure in the activity later they will wish to record the date or keep the score. When the need arises the teacher will teach them how to write numbers correctly.

0	10	20	30	40	50	60	70	80	90	100
1	11	21								
2	12	22								
3	13	23								
4	14	24								
5	15	25								
6	16	26								
7	17	27								
8	18	28								
9	19	29								

D. Count by 2's, 5's, 10's to 100.

1. Count 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.

2. Count 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.

Write these two lines on the board. The even numbers may be written in colored chalk. Have the children read the second line, thus 1 (soft), 2 (loud), 3 (soft), 4 (loud), etc. Repeat a number of times; then erase the odd numbers. Counting by 5's and 10's may be presented in the same way.

IV. Second half year.

Continue counting, reading and writing numbers. By this time the children should be able to write the figures with a fair degree of legibility and have

some knowledge of value. The addition and subtraction of numbers through 10 should be presented. These combinations are:

1 2 3 4 5 6 7 8 9	and reverse	1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1		1 2 3 4 5 6 7 8 9
<u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u>		<u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u> <u>1</u>
2 3 4 5 6 7 8 9 10		2 3 4 5 6 7 8 9 10
1 2 3 4 5 6 7 8	and reverse	2 2 2 2 2 2 2 2
2 2 2 2 2 2 2 2		1 2 3 4 5 6 7 8
<u>2</u> <u>2</u> <u>2</u> <u>2</u> <u>2</u> <u>2</u> <u>2</u> <u>2</u>		<u>2</u> <u>2</u> <u>2</u> <u>2</u> <u>2</u> <u>2</u> <u>2</u> <u>2</u>
3 4 5 6 7 8 9 10		3 4 5 6 7 8 9 10
1 2 3 4 5 6 7	and reverse	3 3 3 3 3 3 3
3 3 3 3 3 3 3		1 2 3 4 5 6 7
<u>3</u> <u>3</u> <u>3</u> <u>3</u> <u>3</u> <u>3</u> <u>3</u>		<u>3</u> <u>3</u> <u>3</u> <u>3</u> <u>3</u> <u>3</u> <u>3</u>
4 5 6 7 8 9 10		4 5 6 7 8 9 10
1 2 3 4 5 6	and reverse	4 4 4 4 4 4
4 4 4 4 4 4		1 2 3 4 5 6
<u>4</u> <u>4</u> <u>4</u> <u>4</u> <u>4</u> <u>4</u>		<u>4</u> <u>4</u> <u>4</u> <u>4</u> <u>4</u> <u>4</u>
5 6 7 8 9 10		5 6 7 8 9 10
1 2 3 4 5	and reverse	5 5 5 5 5
5 5 5 5 5		1 2 3 4 5
<u>5</u> <u>5</u> <u>5</u> <u>5</u> <u>5</u>		<u>5</u> <u>5</u> <u>5</u> <u>5</u> <u>5</u>
6 7 8 9 10		6 7 8 9 10
1 2 3 4	and reverse	6 6 6 6
6 6 6 6		1 2 3 4
<u>6</u> <u>6</u> <u>6</u> <u>6</u>		<u>6</u> <u>6</u> <u>6</u> <u>6</u>
7 8 9 10		7 8 9 10
1 2 3	and reverse	7 7 7
7 7 7		1 2 3
<u>7</u> <u>7</u> <u>7</u>		<u>7</u> <u>7</u> <u>7</u>
8 9 10		8 9 10
1 2	and reverse	8 8
8 8		1 2
<u>8</u> <u>8</u>		<u>8</u> <u>8</u>
9 10		9 10

1	and reverse	9
9		1
<u>10</u>		<u>10</u>

In developing each of these combinations make use of objects.

Example: Teaching the combination $2+2=4$. Give pupil 4 objects (erasers or pieces of chalk). If we put two of the erasers in one hand and 2 in the other hand, how many erasers will we have in both hands. Do this. How many erasers in one hand? How many in the other? Put them together in one hand and count them. How many are 2 erasers and two erasers? Do this with various objects - books, pencils, etc. When a fact is learned in addition the corresponding subtraction fact should be taught.

Example: $2+2=4$ should carry with it the question, "2 + what equals 4?"

Problems of play and the simplest home purchases and measures involving addition and subtraction facts that have been taught should be given.

Check up at the end of the year to see if you have accomplished the aims for the year's work.

SECOND GRADE.

1. Aims.

A. To be able to read and write numbers to 1,000.

- B. To know the 36 facts of addition and subtraction and be able to make application of this knowledge in simple practical problems.
- C. To add columns of two-figured numbers of not more than four addends not involving carrying.
- D. To subtract two or three-figured numbers not involving borrowing.
- E. To read and write the Roman numerals necessary in telling time by the clock.
- F. To read and write dollars and cents.
- G. To know the meaning of the words add, subtract, sum, difference, and remainder.
- H. To break up quantities into halves, thirds and fourths.
- I. To know the symbols $+$, $-$, $=$, and also $\$$ and $\pounds$, and the meaning of the terms minute, hour, day, week and month.

II. Method of procedure.

- A. First month. Review carefully all the work of the first grade before any new work is presented. This review will include:
 - 1. Reading and writing numbers to 100.
 - 2. Roman numerals on the clock face.
 - 3. The combination of numbers from 1 to 10 and the corresponding subtraction facts.
- B. Second month. By this time the children should be able to do more formal work. Con-

time counting, extending the work to include numbers beyond 20. Give the class opportunity to observe, count, compare, measure, make things. Writing numbers beyond 20 may be assigned as seat work. Teach the symbols $+$, $-$, $=$, $<$ and $>$.

3. Third month. Present the addition and subtraction combinations, making use of objects in all initial work, but continuing only so long as necessary. Drill on these combinations until they are mastered. These combinations are:

2 2 2 2 2 2 2 2	reverse	2 4 6 8 3 5 7 9
2 4 6 8 3 5 7 9		2 2 2 2 2 2 2 2
4 6 8 10 5 7 9 11		4 6 8 10 5 7 9 11
3 3 3 3 3 3 3 3	reverse	3 5 7 9 4 6 8
3 5 7 9 4 6 8		3 3 3 3 3 3 3 3
6 8 10 12 7 9 11		6 8 10 12 7 9 11
4 4 4 4 4 4	reverse	4 6 8 5 7 9
4 6 8 5 7 9		4 4 4 4 4 4
8 10 12 9 11 13		8 10 12 9 11 13
5 5 5 5 5	reverse	5 7 9 6 8
5 7 9 6 8		5 5 5 5 5
10 12 14 11 13		10 12 14 11 13
6 6 6 6	reverse	6 8 7 9
6 8 7 9		6 6 6 6
12 14 13 15		12 14 13 15

7	7	7	reverse	9	8	7
9	8	7		7	7	7
$\overline{2}$	$\overline{15}$	$\overline{14}$		$\overline{16}$	$\overline{15}$	$\overline{14}$
8	8			8	9	
8	9			8	8	
$\overline{16}$	$\overline{17}$			$\overline{16}$	$\overline{17}$	
9				9		
9						
$\overline{18}$						

Present the inverse forms to teach subtraction. Example:

$$3 + 2 = 5 \quad 2 + 3 = 5, \quad 1 + 4 = 5$$

$$4 + 1 = 5 \quad 3 + 2 = 5$$

In teaching a combination be certain that the child has "number conception," and number value for the integer involved. Then present and develop every possible combination of figures whose sum equals that integer.

Example: Take the integer 4. Make sure that the child is able to recognize four objects at sight. Then be sure he gets the conception or vision of four objects when he sees the written four. See that he is able to write the figure from dictation. Now present all the combinations that equal four.

1	3	2	and later	1			
-3	$+1$	$+2$		1	2	1	1
$\overline{4}$	$\overline{4}$	$\overline{4}$		1	1	1	2
				$+1$	1	2	1
				$\overline{4}$	$\overline{4}$	$\overline{4}$	$\overline{4}$

Inverse forms: 4 4 4

-1 -3 -2

3 1 2

D. Third month. Continue work on the combinations until all are presented. After all are presented with objects, it remains to fix them in mind. Provide frequent reviews and drills with objects. Use flash cards with varied forms as -

(1)	1	3	2	(2)	$1 + 3 = ?$	(3)	$1 + ? = 4$
	$+ 3$	$+ 1$	$+ 2$		$3 + 1 = ?$		$3 + ? = 4$
	<u>4</u>	<u>4</u>	<u>4</u>		<u>2 + 2 = ?</u>		<u>2 + ? = 4</u>

Use games and occupations in which number relations are repeatedly expressed.

E. Fourth month. Keep up the drill on the combinations. Teach the children to tell time. Study the clock face. Discuss it. How many hands? What difference in them? Why? Find 12. Find 3. Find 5. Find 6. On a clock face constructed from cardboard, show the time school begins, the time we have recess. For seat work the class might make clock faces showing the time school closes. Oral and written review in addition and subtraction should be given, the class copying written work from the board.

F. Fifth month. Teach the meaning of the words add, subtract, sum, difference and remainder. Teach the class how to write dollars and cents.

Playing store will appeal to the child's imagination and will furnish opportunity for teaching the relative value of penny, nickel, dime, quarter, half dollar and dollar, etc.

- G. Sixth month. Teach the written addition of two-figured numbers with four addends. No carrying.

Example: - 12

10

11

21
54

Teach the written subtraction of two-or three-figured numbers. No borrowing.

Example: 325

-124
201

With objects find halves, thirds and fourths. Teach the meaning of the terms minute, hour, day, week and month.

- H. Seventh month. Introduce practice problems, involving school activities, scores in games, cost of materials, etc. These problems should be an application of the knowledge gained during the preceding months. Continue the drill on the addition and subtraction facts until they become automatic.

- I. Eighth month. Review the year's work carefully and thoroughly. Keep a record of each child's errors. Drill on difficulty and individual cases. Test the

children to see that they are up to standard on the year's work.

Helpful books for the teacher:

First Journeys in Cumberland: Harris-Waldo.

Work and Play with Numbers: Wentworth-Smith.

The Teaching of Arithmetic: Smith.

THIRD GRADE.

Text: Morey's Elementary Arithmetic.

I. Aims.

- A. To master the multiplication and division tables.
- B. To read and write numbers to five places.
- C. To be able to do short division with one-figure divisor.
- D. To be able to subtract three-or four-place numbers involving borrowing.
- E. To be able to multiply four-or five-place numbers with one-figure multiplier.
- F. To be able to find fractional parts of numbers: $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$.
- G. To be able to use the tables of liquid, dry and linear measures, weight, time and United States money in simple problems relating to life situations of third-grade children.
- H. To be able to add with speed and accuracy four-place numbers with five addends.

II. Order of procedure.

- A. First month, pp. 1-12. This is a review of the

work done in the previous grades and should be done thoroughly.

B. Second month, pp. 13-26.

1. New material.

a. Multiplication table of 2's.

b. Division table of 2's.

Give sufficient drill to thoroughly fix the facts of these tables.

C. Third month, pp. 27-45.

1. New material.

a. Multiplication table of 3's.

b. Division table of 3's.

c. Multiplication table of 4's.

d. Division table of 4's.

e. Liquid measure.

Do a great deal of measuring with actual measures. Play store.

2. Review or related material.

a. United States money.

b. Reading and writing numbers to 1,000.

c. Addition.

d. Subtraction.

D. Fourth month, pp. 46-59.

1. New material.

a. Multiplication table of 5's.

b. Division table of 5's.

c. Multiplication table of 6's.

- d. Division table of 6's.
- e. Teach carrying in addition. (See page 64 in text.)
- 2. Review of related material.
 - a. Addition.
 - b. Subtraction.
 - c. Reading and writing numbers.
 - d. Count by 2's, 3's, 4's, 5's and 6's to 100.
- F. Fifth month, pp. 60-74.
 - 1. New material.
 - a. Linear measure. Do a great deal of measuring with foot rules and yard sticks. Use this table in connection with money table in playing store.
 - b. Find fractional parts of a foot, a yard, a dollar, a pint, a quart and a gallon.
 - c. Present table of 7's in multiplication.
 - d. Present table of 7's in division.
 - e. Teach borrowing in subtraction. (See note to teacher on page 72.)
 - f. Present table of 8's in multiplication.
 - g. Present table of 8's in division.
 - 2. Review of related material.
 - a. Continue drill on addition. Test work by adding each column twice, once up and once down.
- F. Sixth month, pp. 75-90.

1. New material.

- a. Learn table of dry measure. Use actual measures to fix relations. If possible visit a nearby store, farmer's house or field where grain is being threshed and do actual measuring.
- b. Present multiplication table of 9's.
- c. Present division table of 9's.
- d. Present table of weights. If school is not provided with scales, borrow from patrons and do actual weighing.

2. Review or related material.

- a. Drill on multiplication, division, addition and subtraction. Check and prove all problems.

G. Seventh month, pp. 91-102.

1. New material.

- a. Multiplication and division tables of 10's.
- b. Multiplication and division tables of 11's.
- c. Read and write numbers to 100,000.

2. Review or related material.

- a. Continue drill for quick recognition of all primary combinations and differences.
- b. Use drill exercises on pp. 99, 100, 101.

H. Eighth month, pp. 103-116.

1. New material.

- a. Multiplication and division tables of 12's.

b. Table of time.

2. Review or related material.

a. Reading and writing numbers.

b. Addition, subtraction, multiplication and division.

1. Ninth month. Use the entire month for a thorough review, placing special emphasis on the most difficult processes. Test individual pupils to see if they are up to standard on the year's work.

FOURTH GRADE.

Text: Morey's Elementary Arithmetic.

I. Aims.

- A. To read and write numbers to 100,000.
- B. A complete mastery of the multiplication tables through 12.
- C. To give a thorough knowledge of long division.
- D. To be able to add a column of five-place numbers of six addends with a reasonable degree of speed and accuracy.
- E. To be able to use simple fractions in finding fractional parts of numbers.
- F. To be able to use the tables of linear measure and square measure as they are needed in his daily life.

II. Order of procedure.

- A. First month, pp. 117-134. Review carefully the

work of the third grade with special emphasis on the multiplication tables. A complete mastery of the tables is necessary before long division, the main work of the year is presented.

B. Second month, pp. 135-146.

1. New material.
 - a. Short division.
 - b. Long division.
2. Review or related material.
 - a. Problems.
 - b. United States money.

C. Third month, pp. 147-163.

1. New material.
 - a. Long division continued.
 - b. Fractional parts: $\frac{1}{4}$, $\frac{1}{8}$.
2. Review or related material.
 - a. Miscellaneous problems in text.

D. Fourth month, pp. 164-179.

1. No new material is presented.
2. Review or related material.
 - a. Reading and writing numbers.
 - b. Addition, subtraction, multiplication and division.
 - c. Fractions: $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$.

E. Fifth month, pp. 180-193.

1. Review or related material.

- a. A thorough review of liquid measure, dry measure and avoirdupois. Problems involving a practical application of these tables.
 - b. Fractions: $\frac{1}{2}$ $\frac{1}{5}$ $\frac{1}{10}$
 - c. Reading and writing numbers to nine places.
 - d. Addition of six-place numbers with six addends.
 - e. Subtraction of six-place numbers.
 - f. Multiplication of five-place numbers with three-figure multiplier.
- F. Sixth month, pp. 194-204.
- 1. New material.
 - a. Table of time measure.
 - b. Linear or long measure.
 - c. Square or surface measure.
 - 2. Review or related material.
 - a. Oral and written problems.
 - b. Fractions: $\frac{1}{7}$ $\frac{1}{12}$
- G. Seventh month, pp. 205-216.
- 1. New material.
 - a. Decimal fractions.

Use child's knowledge of United States money in presenting decimal fractions.
 - b. Volume or cubic measure. This may be omitted and time spent on long division.

2. Review or related material.
 - a. Drill in multiplication and division.
 - b. Fractional parts of 100.
- II. Eighth month, pp. 217-224.
 1. New material.
 - a. Bills and receipts.
 2. Review or related material.
 - a. Review all tables learned this year by drills and purposeful activities, such as laying store, etc.
 - b. Miscellaneous problems.
- I. Ninth month. Thorough review of year's work. Test pupils to see if they are up to standard.

FIFTH GRADE.

Text: Morey's Elementary Arithmetic.

I. Aims.

- A. To develop speed and accuracy in the fundamental processes of integers.
- B. To present the fundamental operations with common fractions.
- C. To read and write decimals of not more than three places.
- D. To give a working knowledge of denominate numbers used in the daily life of a fifth-grade pupil.
- E. To be able to draw, cut and compare parallelograms and triangles of different dimensions.

II. Order of procedure.

A. First month, pp. 235-242.

Review thoroughly the work of the fourth grade before any new work is presented. The multiplication tables and long division should receive special emphasis. Take up the new work slowly. Emphasize the quality of work done rather than quantity. Use every opportunity to relate the work to the life of the community. It is important that results be checked and proved.

B. Second month, pp. 243-257.

1. New material.

a. Factoring. Use only numbers that may be factored by inspection.

b. Greatest common divisor and least common multiple.

2. c. Cancellation.

2. Review or related material.

a. Review of common fractions. Teach the meaning of numerator and denominator, proper and improper fractions.

C. Third month, pp. 257-271.

1. New material.

a. Addition of mixed numbers.

b. Subtraction of mixed numbers.

c. Multiplication of fractions.

2. Review or related material.

a. Short quick drills on fundamental opera-

tions of whole numbers.

D. Fourth month, pp. 271-281.

1. New material.

- a. Multiplying whole numbers by mixed numbers.
- b. Division of fractions.

2. Review or related material.

- a. Proper and improper fractions.
- b. Whole and mixed numbers.
- c. Similar fractions.

E. Fifth month, pp. 282-294.

1. New material.

- a. Relation of one number to another.

2. Review or related material.

- a. Miscellaneous problems involving addition, subtraction, multiplication and division of fractions.
- b. Drill in fractions.
- c. Drill in addition and subtraction of whole numbers.

F. Sixth month, pp. 295-303.

1. New material.

- a. Measuring surfaces. Do actual measuring with rulers. Memorize table.
- b. Measuring distances. Measure distance from home to school.
- c. Drawing to scale. Draw the schoolroom to scale.

2. Review of related material.

- a. Short, quick drills on four fundamentals in whole numbers.

G. Seventh month, pp. 344-349.

1. New materials.

- a. Geometrical figures - parallelograms and triangles.

- b. Wood measure.

2. Review of related material.

- a. Reading and writing decimals.

- b. Addition, subtraction, multiplication and division of decimals.

- c. Exercise in measures.

H. Eighth month, pp. 349-354.

1. New material.

- a. Bills and receipts.

2. Review of related material.

- a. Miscellaneous problems involving an application of the knowledge gained during the year.

I. Ninth month. Review. Spend the entire month in a comprehensive review of the year's work. Test the pupils to see that they are up to standard.

SIXTH GRADE.

Text: Morey's Advanced Arithmetic.

1. Aims.

- a. To acquire a reasonable degree of speed and accuracy

in the fundamental processes with integers.

- B. To acquire a thorough understanding of common and decimal fractions.
- C. To acquire increased ability in solving problems relating to everyday life at home and school.
- D. To recognize certain forms as quadrilaterals, triangles, circles, rectangles, etc.

II. Method of procedure.

A. First month, pp. 1-21. A thorough review with emphasis on speed and accuracy.

- 1. Notation and numeration.
- 2. Roman notation and numeration.
- 3. Addition, subtraction, multiplication and division.

B. Second month, pp. 22-40.

- 1. New material.
 - a. Ratio.
- 2. Review or related material.
 - a. Bills and receipts.
 - b. Factoring.
 - c. Greatest common divisor and least common multiple.
 - d. Cancellation.
 - e. Fractions.

C. Third month, pp. 41-63.

- 1. Review or related material.
 - a. Addition, subtraction, multiplication and di-

vision of common fractions and their application to community problems. The pupils should show advanced ability in skill and accuracy.

D. Fourth month, pp. 63-79.

1. Review or related material.

- a. Addition, subtraction, multiplication and division of decimals. The purpose of all the review work in this grade is to establish a strong foundation for future mathematical work.

E. Fifth month, pp. 79-99.

1. New material.

- a. Linear measure.
- b. Square measure.
- c. Geometric figures.

2. Review or related material.

- a. Problems involving an application of the tables of linear and square measure.

F. Sixth month, pp. 10-114.

1. New material.

- a. Cubic or volume measure.

2. Review or related material.

- a. Denominate numbers.

G. Seventh month.

1. New material.

- a. Percentage. Percentage involves no new pro-

cess, but new terms are introduced. The terms percentage and base are not often used in business. The terms interest, profit, loss, commission, premium, taxes, etc., are used instead of the term percentage. Principal, selling price, cost, capital, etc., are all used instead of base.

2. Review or related material.

- a. In the work in percentage there is an opportunity to apply the knowledge already gained in common and decimal fractions.

B. Eighth month, pp. 129-140.

1. New material.

- a. Continue a study of percentage.
- b. Difference in time between dates.

2. Review or related material.

- a. Review the work in percentage covered during seventh month.

1. Ninth month. Review thoroughly the year's work.

SEVENTH GRADE.

Text: Morey's Advanced Arithmetic.

1. General statement.

The principal aim of the seventh and eighth grades is to train the pupil in the application of arithmetic to the business life of the community. Much of the work in these grades is of an informational

character. Very few new processes and principles are presented. A large part of the work is a review of what has been presented in the preceding grades. The Kansas Agricultural Supplement in the back of the text will furnish valuable source material.

II. Aims.

- A. To increase skill in speed and accuracy in the fundamental operations.
- B. To use common and decimal fractions rapidly and accurately in all the processes.
- C. To master the principles and processes of mensuration.
- D. To increase the power of analyzing and solving problems.
- E. To be able to apply arithmetic to life situations.
- F. To acquire some knowledge of business usages and relations.

III. Order of procedure.

- A. First month, pp. 141-158.
 1. A thorough review of notation and nomenclature.
 2. Review of Roman numerals.
 3. Review of fundamental processes involving integers.
 4. United States money.
 5. Postal problems.
 6. Cash accounts.

A. Second month, pp. 169-174.

1. Review of common fractions.
2. Miscellaneous problems.

C. Third month, pp. 175-188.

1. Review decimal fractions.
2. Counting.
3. Linear measure.

D. Fourth month, pp. 189-206.

1. Square or surface measure.
2. Quadrilaterals.
3. Triangles.
4. Plastering.
5. Carpeting.

E. Fifth month, pp. 207-228.

1. Cubic or volume measure.
2. Wood measure.
3. Masonry.
4. Board measure.
5. Avoirdupois.
6. Liquid measure.
7. Dry measure.
8. Time measure.

F. Sixth month, pp. 229-244.

1. Circles.
2. Cylinder.
3. Percentage.
4. Written problems in percentage.

G. Seventh month, pp. 247-261.

1. Percentage continued.
2. Oral and written problems.
3. Miscellaneous problems.
4. Discount.

H. Eighth month, pp. 261-280.

1. Commission.
2. School problems.
3. Difference in time between dates.
4. Simple interest.
 - a. The one-dollar method.
 - b. The banker's method.
 - c. Miscellaneous problems.

I. Ninth month. Review.

FIG. H GRADE.

Text: Morey's Advanced Arithmetic.

1. Aims.

- A. To be able to perform the fundamental operations in whole numbers, common and decimal fractions with increased speed and accuracy and to apply them to business relations.
- B. To acquire a reasonable understanding of -
 1. Private business, such as -
 - a. Keeping a bank account.
 - b. Borrowing money.
 - c. Commission.
 - d. Insurance.

e. Discount.

2. Public business, such as -

a. Taxes.

b. Assessment.

c. Assessment valuation.

d. Public finance.

3. To be able to interpret, analyze and solve problems relating to home, farm and community life.

11. Order of procedure.

A. First month, 281-297.

1. A thorough review of -

a. Notation and numeration.

b. Roman numerals - underlying principles of notation.

c. Fundamental processes of whole numbers.

2. Money orders.

During this review the emphasis should be placed on speed and accuracy.

B. Second month, pp. 297-316.

1. Review of fundamental processes of decimals.

2. Review of measurements.

3. Troy weight.

C. Third month, pp. 317-338.

1. Percentage.

2. Commission. Commission is money paid or received for transacting business for another. Real estate, insurance business and newspa-

per selling is carried on on a commission basis.

3. Commercial or trade discount. A discount is given for cash payment, for buying large quantities, for paying within a certain date. Emphasize that discount is based on list price.

D. Fourth month, pp. 335-344.

1. Insurance. Invite a well-informed insurance agent to talk to the class about the different kinds of insurance and its place in our economic life. See that the pupils understand the terms, policy, premium, and rewriters. The kinds of insurance are life, health, accident, fire, burglary, rain, etc. Any good insurance company will gladly furnish you with much interesting material with which to supplement the text.
2. Taxes. This is a subject in which the homes are interested. See reference to taxation in Our Government. Compare the taxes which a man pays with the benefits he receives. Study the tax rate from a tax receipt. Much valuable information of this subject may be secured from the county clerk. In relating the work to the community the following problem may be suggestive:

Problem: What is the valuation of your

school district? What is the current mill levy? What amount of money will be available for school purposes? What amount of school tax does your father pay in this district?

7. Fifth month, pp. 349-367.

1. Banking.

- a. Opening an account.
- b. Cashing a check.
- c. Interest.
- d. Promissory note.
- e. Bank discount.

If possible visit a bank. Invite a banker to talk to the class and explain the functions of a bank and its benefits to the community. Organize a school bank and keep it going until the study of interest and bank discount has been completed.

8. Sixth month, pp. 367-383.

1. Banking continued.

- a. Notes discounted after date.
- b. Discounting interest-bearing notes.

2. Stocks. Secure a stock certificate if possible and show it to the class. Find market reports of stocks and bonds in daily papers and bring to class. Find bond advertisements in magazines and bring to class. Pass

all calculations on these data.

3. Buying and selling.

4. Common and preferred stock. Preferred stock has first chance at dividends, but they are limited.

G. Seventh month, pp. 385-400.

1. Bonds. The subject may be introduced through the pupils' interest and knowledge of Liberty bonds. Take one to class.

2. Partitive proportion.

3. Partnership.

4. Ratio and proportion.

H. Eighth month, pp. 401-420.

1. Right-angled triangles.

2. Review of mensuration.

a. Triangles.

b. Quadrilaterals.

c. Circles.

I. Ninth month. A thorough and complete review of the year's work.

RECOMMENDED READING.

Brown and Coffman: The Teaching of Arithmetic.

Smith, D. T.: The Teaching of Arithmetic.

Thorndike, E. L.: New Methods of Arithmetic.

Stone, J. C.: How to Teach Primary Numbers.

Harris andaldo: Number Games for Primary Grades.

Lockhart, Aldredge: ...

THE ARTS.

MUSIC.

The following course of study is the standard course prepared by the Educational Council of the Music Supervisors' National Conference and unanimously adopted by the conference at St. Joseph, Mo., in April, 1911.

EDUCATIONAL COUNCIL OF THE MUSIC SUPERVISORS'

NATIONAL CONFERENCE.

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FIRST GRADE

I. Aims.

- To give every child the use of his singing voice and pleasure in song as a means of expression.
- To cultivate the power of careful, sensitive aural attention.

- C. To provide the pupils, through accompaniments to some of their songs and the hearing of such good music, an experience richer than that afforded by their own singing.
- D. To give every child enjoyment of music as something heard as well as something expressed. (Appreciation of music.)

II. Material.

- A. Note-song material in the hands of the teacher.
- B. A keyboard instrument for playing accompaniments, whenever possible.
- C. A pitch pipe; also a staff liner if the teacher so wishes.
- D. A phonograph, with records of good music.

Note.—Classified list of records may be procured from Kansas State Teachers College, Topeka.

III. Procedure.

- A. Singing songs by rote, using light head tones, ordinarily not exceeding the range of the treble staff.
- B. Imitative exercises for curing so-called monotones.
- C. Singing songs entire, or phrase by phrase, individually. (To include all members of the class.)
- D. Occasional use of accompaniments when singing well learned rote songs.
- 1. Directing aural attention to beauty of tone in singing and to similar aspects of music as observed

in rote songs and in music heard.

F. The teaching of syllables as desired.

IV. Attainments.

- A. Ability to sing pleasingly a repertory of thirty to forty rote songs appropriate to the grade, including one stanza of "America."
- B. The reduction of the number of "monotones" to ten per cent or less of the total number of pupils.
- C. Ability of ninety per cent of the pupils to sing individually, freely, correctly, and without harmful vocal habits, some five of the songs sung by the class as a whole.
- D. Preference on the part of the children for good tones rather than bad, and the disposition to love the best of the music they have sung or heard.

SECOND GRADE.

1. Aims.

- A. The aims of the first grade again, namely, continued caring of "monotones" (to give every child the use of his singing voice); development of song singing; enrichment and extension of song repertory; further development of appreciation, including pleasurable attention to the expressive features of song and the beauties of musical structure.
- B. To continue the development of the power to recognize aurally simple phrase groups of tones and the feeling for simplest rhythms. The introduction

tion of the staff may occur as early as the middle of the first year or as late as the beginning of the third year, depending upon the order of procedure.

II. Material.

- A. Not-song material in the hands of the teacher.
- B. Books containing easy rote songs (some of which may be in minor keys) and the simplest melodies in the usual nine major keys to be used in the development of sight singing if begun; the latter group, at least, to be printed in large type and open distribution on the page; and both groups to be in books that are placed in the hands of the children.
- C. Some large display form of material that is to be studied, either in some chart form or on black-board.
- D. A pitch pipe and a staff liner.
- E. A keyboard instrument for playing accompaniments whenever possible.
- F. A photograph and records of good music.

III. Procedure.

- A. Singing rote songs for pleasurable musical experience.
- B. Imitative exercises for carrying so-called monotones.
- C. The use of the staff in practicing or preparing for

sight singing.

- D. Frequent practicing in individual singing.
- E. Ear training for the development of tonal and rhythmic thinking.
- F. Occasional use of accompaniments to songs previously learned.
- G. Learning to listen to good compositions for the sheer joy and charm of their beauty. Also to listen to the salient features of the imitative or descriptive phrases involved; and to the simple arrangement of recurring phrases or "tunes" and rhythmic patterns.

IV. Attainments.

- A. Ability to sing correctly and pleasingly forty to sixty new songs, twenty of which are to be memorized and which shall include two stanzas of "America." It is also suggested that some of the songs of the first year be kept in repertory.
- B. Ability of ninety per cent of the pupils to sing individually, freely, correctly, and without harmful vocal habits, six or eight of the songs sung by the class as a whole.
- C. Not more than five per cent of the entire class to be "monotones" at end of year. The other pupils to sing without bad vocal habits, with musical enjoyment, and with good musical effect.
- D. Ability by end of year (or by the middle of the

following year, according to procedure, to sing at sight, with syllables, easy melodies in the usual nine major keys, containing notes and rests, one, two, three and four beats in length, and employing diatonic tones in stepwise progressions and with simple skips.

F. Ability to recognize some five or six good compositions on hearing them; to follow and recognize a recurrent theme in a new song or new piece of very simple structure; and a tendency to prefer compositions that have real musical merit and charm to those that are weak or common.

THIRD GRADE.

I. Aims.

- A. Continued correction of "monotones"; development of free and beautiful singing of songs; development of the song repertory along lines appropriate to the taste and expanding powers of the children; development of aural power and extension of it to new features; further development of appreciation, particularly in the direction of pleasurable attention to the expressive and structural beauties of music.
- B. Development of an elementary degree of power and skill in independent sight singing.

II. Material.

A. Books of music in the hands of the pupils; these books to contain three types of musical material, namely:

1. Note songs of appropriate interest and elaborateness.
2. Songs that may be taught partially by reading.
3. Easy material for sight singing.

All of this material, with the possible exception of the first group, should be printed in large type and open distribution on the page.

- B. Blank music paper or music writing books ruled with a wide staff, in the hands of the pupils.
- C. A keyboard instrument whenever possible.
- D. A pitch pipe and staff liner.
- E. A phonograph and good records.

III. Procedure.

- A. Singing note songs for pleasurable musical experience.
- B. Systematic practice in sight singing.
- C. Ear training for the development of tonal and rhythmic thinking.
- D. Individual song singing and sight singing; each child to sing individually at least once a week.
- E. Liberal use of keyboard instrument for illustrative purpose and accompaniments, but not for leading.
- F. Listening to good musical compositions as largely

unanalyzed musical experience; observation or analysis to be largely in connection with the songs sung, but also in some degree with the larger compositions heard; and to consist of features of structure or design, such as observing recurrences of themes, sequences, and variations on them, etc.; and to be pursued in the spirit of recognizing the beauty and charm of such features of musical design

IV. Attainments.

- A. Ability to sing correctly and pleasingly forty to sixty new songs, at least ten of which shall be memorized, and which shall include the four stanzas of "America." It is also suggested that some of the songs of the preceding years be kept in repertory.
- B. Ability of ninety per cent of the pupils to sing individually, freely, correctly and without harmful vocal habits, eight or ten of the songs sung by the class as a whole.
- C. The "Monotones" to be practically eliminated. Individual attention should be given to special cases.
- D. Ability by end of year to sing at sight, with syllables, easy melodies in any of the usual nine major keys; these melodies containing stepwise progressions and skips of thirds, fourths, fifths, sixths and eighths, and employing at least notes and rests.

one, two, three or four beats in length, and two notes to the beat; also knowledge of some twelve of the more familiar signs and terms used in connection with staff notation.

- H. Ability of at least twenty-five per cent of the pupils to sing as well individually, at sight, as the class can sing as a whole.
- I. Power that enables the pupils to recognize by sound that which they know by sight, and vice versa; i.e., "see with the ears and hear with the eyes." (Luther Hitting Mason.)
- G. Increased power to attend to, and give account of, the salient points of design in the music introduced and increased sympathy for, and pleasure in, those factors that make for charm of musical design and expressive quality; also, ability to recognize and identify some eight or ten standard musical compositions when heard.

FOURTH GRADE.

I. Aims.

A. General Aims. Almost all the general aims appropriate and desirable in both early and later years in a system of instruction in music in public schools have now been assembled. Once more they may be summarized.

1. To develop pleasure in song as a means of expression.

2. To secure free and correct use of the voice in singing.
3. To develop musical qualities of performance of songs.
4. To develop a conception of music as something to be heard as well as something to be expressed.
5. Progressive development of power to use the printed language of music.
6. Progressive extension of musical experience beyond that provided by the singing of the children.
7. Continuous development of power of appreciation by development of aural power, guided in the direction of attention to the elements of the beautiful in music.

H. Specific aims of the fourth grade.

1. Introductory steps in two-part singing.
2. Extension of knowledge of the total and rhythmic material of music appropriate to fourth grade.

II. Material.

- A. Books of music in the hands of the pupils, these books to contain a very large number of songs of high musical merit, a few of the more elaborate of which may be learned by rote.
- B. Blank music paper, or music writing books, in the

hands of the pupils.

- C. A keyboard instrument whenever possible.
- D. Pitch pipe and staff liner.
- E. Phonograph and library of records of good music.

III. Procedure.

- A. Singing of songs for pleasurable musical expression, some of which should be retained in the permanent repertory.
- B. Individual singing to be employed as a means of confirming and establishing individual capability.
- C. Ear training for the further development of tonal and rhythmic thinking involving both old and new problems.
- D. In two-part singing, the pupils to be divided indiscriminately as to sex, both girls' and boys' voices being treated as equal. (An occasional irregular voice may need to be treated as an exception.) Assignments of vocal parts to groups to be reversed from song to song or from week to week, to give proper practice to the full vocal range of each pupil, and to develop in each individual independence in singing the lower part; the alto to be taken up first on new songs that require practice on the parts separately; and to be sung with the lightness of voice and movement characteristic of soprano. Systematic effort to

be made to develop sight singing of two parts simultaneously.

L. Systematic attention to be given to singing words at sight, when the song contains nothing but familiar technical features.

F. Liberal use of a keyboard instrument whenever possible for accompaniments and many purposes of illustration and explanation.

O. Observation of salient features of design in music sung and in standard musical compositions heard; such as persistent reiteration of a motive, recurrence of themes, sequential treatment and imaginative changes (as in "Morning Mood" or "Asa's Death" from Grieg's Peer Gynt music), or the divisions of the song forms in songs sung, or as in Pilgrim's Chorus from Tannhauser.

IV. Attainments.

A. Continued development of song singing and extension of repertory; this to include the remaining stanzas of "The Star Spangled Banner."

B. Ability of ninety per cent of the pupils to sing individually, freely, correctly and without harmful vocal habits not less than ten of the songs sung by the class as a whole.

C. Power and skill to sing at sight music appropriate to this year.

- D. Ability of at least thirty per cent of the class to sing individually at sight the material which the class can sing as a whole.
- E. Power that enables the pupils to know by sound that which they know by sight, and vice versa.
- F. Increased capacity to observe the characteristic features of songs sung and music heard, such as recurrences of themes, salient features of interest, and expressive quality; these characteristics to be mentioned in so far as they strike the attention because of the pleasure they give the hearer. Also, ability to recognize and name some standard compositions when heard.

SIXTH GRADE.

I. Aims.

- A. General. Same as for fifth grade.
- B. Special.

- 1. The special aim of the fifth grade continued and extended.
- 2. To begin the development of three-part treble-voice singing.
- 3. To develop ability to deal practically with the minor mode.

II. Material.

- A. Books of music in the hands of the pupils; these to contain unison and two-part treble-voice material; and also some material for three parts, treble

voice, and some more elaborate unison songs.

B. Blank music paper or music writing books in the hands of the pupils.

C. A keyboard instrument whenever possible.

D. A pitch pipe and staff liner.

E. A phonograph and library of records of good music.

111. Procedure.

A. Singing of songs for pleasurable musical expression, some of which should be retained in the permanent repertory.

B. Individual singing to be employed as a means of confirming and establishing individual capability.

C. Ear training for the further development of total and rhythmic thinking involving both old and new problems.

D. Division into two-or three voice parts to be without regard to sex, each part containing some boys and some girls. Assignments of children to vocal parts to be shifted from song to song or from week to week as voices permit.

E. Practice in the use of the accidentals and in building scales.

F. Three-part singing introduced through the development of the harmonic sense, using triads if desired.

G. Systematic attention to be given to singing words

at sight when the songs contain nothing but quite familiar technical features.

2. Two-part and three-part songs with all parts sung simultaneously at the outset, when practicable.

3. Literal use of a keyboard instrument whenever possible for accompaniments and many purposes of illustration and explanation.

4. Observation of the elements of interest and charm of singing and hearing, as manifested in unity and contrast of part with part.

IV. Attainments.

A. Ability to sing well, with enjoyment, at least thirty unison two-part and three-part songs, some of which shall be memorized.

B. Ability of ninety per cent of the pupils to sing individually, freely, correctly, and without harmful vocal habits, not less than ten of the songs sung by the class as a whole.

C. Ability to sing at sight, using words, a unison song of hymn-tune grade; or using syllables, a two-part song of hymn tune grade, and the easiest three-part songs; these to be in any key; to include any of the measures and rhythms in ordinary use; to contain accidental signs and tones easily introduced; and in general to be of the grade of folk songs such as "The Minstrel

boy'; also knowledge of the major and minor keys and their signatures.

D. Ability of at least thirty per cent of the pupils to sing individually at sight music sung by the class as a whole.

E. Ability to appreciate the elements of design in songs sung and music heard.

SEVENTH AND EIGHTH GRADES.

I. Aims.

A. General. The general aims of earlier years continued.

B. Specific.

1. To develop concerted singing in the direction of mass chorus practice, as well as to continue the usual classroom sight singing and part singing.
2. To recognize the birth of new affective (emotional) states in the pupils, due to their awakening sense of the relationships of human life and the emotional aspects of these relationships; and to utilize the best of these qualities of feeling as agencies toward the reinforcement and upbuilding of fine and strong elements of character.
3. To articulate more closely for the pupils, individually and collectively, the musical

interests and activities of the school with those of their homes and community.

4. To recognize and encourage the special interest that pupils of this age have in the mechanism, technique and use of musical instruments.
5. To recognize and encourage special individual musical capabilities, as a feature of an avocational as well as a vocational stage of development.
6. To pay special attention to the differing needs of the voices of the pupils.
7. To strengthen and extend technical knowledge and capability with reference to tonal and rhythmic elements and features of staff notation and sight singing.
8. To add to the appreciation of the formal elements in music an appreciation of the moods characteristic of romantic and modern music.

II. Material.

- A. Ample material suitable for the various needs of the pupil.
- B. Blank music writing paper or music writing books in the hands of the pupils.
- C. A keyboard instrument whenever possible.

1. Comment and discussion on the aspects of beauty and expression that awakened interest in the compositions sung or listened to, including also attention to their origin, textual meaning, and style, for the purpose of developing an intelligent musical taste and judgment.

J. Some time to be given to recitals by pupils and artists, and to the development of vocal and orchestral ensemble practice under school auspices.

IV. Attainments.

A. Ability to sing well, with enjoyment, a repertory of twenty-five to thirty-five songs of musical, literary, community, national or other worthy interest.

B. Ability to sing at sight part songs of the grade of a very simple hymn.

C. Knowledge of all essential facts of elementary theory sufficient to enable seventy-five per cent of the students to give a correct explanation of any national features contained in the pieces of average difficulty in the standard books of music for the seventh and eighth grades.

D. Further progress in recognition of the relations, agreements, dependencies of tones and

- D. A phonograph and an adequate library of good music.

III. Procedure.

- A. Singing of repertory songs, as before, for the sake of musical enjoyment.
- B. Occasional assembling of large groups of seventh or eighth or seventh and eighth grade pupils for common practice in social singing.
- C. Continued practice in sight singing.
- D. Individual singing to be retained as a means of developing greater individual capacity and independence.
- E. Close attention to individual vocal ranges and characteristics, involving frequent examinations of all voices individually; acquisition of exact knowledge of the capabilities of each individual's voice; careful treatment of changing voices, and careful part assignment of all voices.
- F. Much use of a keyboard instrument for accompaniments and purposes of illustration, explanation and for recitals.
- G. In easy part songs, all parts to be sung simultaneously whenever possible. Separate parts to be practiced only when necessary.
- H. Singing words at sight. Syllables to be used when necessary.

1. Comment and discussion on the aspects of beauty and expression that awakened interest in the compositions sung or listened to, including also attention to their origin, textual meaning, and style, for the purpose of developing an intelligent musical taste and judgment.
2. Some time to be given to recitals by pupils and artists, and to the development of vocal and orchestral ensemble practice under school auspices.

IV. Attainments.

- A. Ability to sing well, with enjoyment, a repertoire of twenty-five to thirty-five songs of musical, literary, community, national or other worthy interest.
- B. Ability to sing at sight part songs of the grade of a very simple hymn.
- C. Knowledge of all essential facts of elementary theory sufficient to enable seventy-five per cent of the students to give a correct explanation of any notational features contained in the pieces of average difficulty in the standard books of music for the seventh and eighth grades.
- D. Further progress in recognition of the relations, agreements, dependencies of tones and tonal groups, that give to music its strength

and interest; pleasure in good music.

ASSIGNMENTS OF STUDY IN MUSIC.

FIRST GRADE.

This course is based on the Progressive Music Series, Book I, and Teachers Manual, Volume I. All songs are to be taught by rote. Full instructions for presentation are found in the Manual. Every teacher should have a desk copy of the Manual.

("B" refers to Book; "M" refers to Manual.)

First Month.

Teach the following songs by rote:

- a. Good Morning. B. I, p. 5; M., p. 187.
- b. A Good-by Song. B. I, p. 6; M., p. 188.
- c. Fido and His Master. B. I, p. 7; M., p. 188.
- d. Polly's Bonnet. B. I, p. 7; M., p. 189.
- e. When Mother Sings. M., p. 129.
- f. How Many Days Has My Baby to Play. M., p. 130.

Steps in teaching rote songs:

1. Presentation so as to arouse interest and create atmosphere.
2. Teacher sings entire song.
3. Teacher sings first phrase; children imitate.
4. Teacher sings second phrase; children imitate.
5. Teacher joins the two phrases; children imitate.
6. Remaining phrases learned in the same manner.
7. Teacher sings entire stanza, to give new idea of the whole with its combined parts.

8. Children sing entire stanza.

9. Words of remaining stanzas taught.

10. Accompaniment added, if an instrument is available.

Second Month.

I. Rote Songs. Teach by rote the following songs:

- a. The Postman. B. I, p. 8; M., p. 190.
- b. Bubbles. B. I, p. 9; M., p. 199.
- c. Cherries. B. I, p. 10; M., p. 191.
- d. Twinkling Fireflies. B. I, p. 11; M., p. 192.
- e. The Man in the Moon. M., p. 131.
- f. Choo-choo-choo. M., p. 132.

Third Month.

I. Rote Songs. Teach by rote the following songs:

- a. Ring a Ring o' Roses. B. I, p. 12; M., p. 193.
- b. Little Brook. M. I, p. 12; M., p. 193.
- c. A Little Lady. B. I, p. 13; M., p. 194.
- d. The Parade. B. I, p. 14; M., p. 195.
- e. The Little Seeds. M., p. 133.
- f. Afternoon Tea. M., p. 139.

Fourth Month.

I. Rote Songs. Teach by rote the following songs:

- a. The Holiday. B. I, p. 15; M., p. 195.
- b. Wippoorwill. B. I, p. 16; M., p. 196.
- c. Dolly's Lullaby. B. I, p. 17; M., p. 197.
- d. Lady Bug. B. I, p. 18; M., p. 198.
- e. The Wall Clock. M., p. 134.
- f. A Telephone Message. M., p. 136.

Fifth Month.

1. Rote Songs. Teach by rote the following songs:

- a. The Song Sparrow's Toilet. B. 1, p. 19; M., p. 197.
- b. The Gypsy Peddler. B. 1, p. 20; M., p. 199.
- c. The Mulberry Bush. B. 1, p. 21; M., p. 199.
- d. Soldier Boys. B. 1, p. 22; M., p. 201.
- e. Indian Song. M., p. 136.
- f. Frosting. M., p. 137.

Sixth Month.

1. Rote Songs. Teach by rote the following songs:

- a. A Surprise. B. 1, p. 24; M., p. 200.
- b. Upon a Morning Sunny, B. 1, p. 25; M., p. 202.
- c. Betty and Billy. B. 1, p. 26; M., p. 203.
- d. The Kipping Rope. B. 1, p. 27; M., p. 204.
- e. Oh, what a Sweet Little White House. B. 1, p. 28; M., p. 204.
- f. My Beautiful Doll. M., p. 138.
- g. A February Song. M., p. 140.

II. Singing with Neutral Syllable.

III. Recognition of Phrase Repetition.

IV. Application of Syllables.

Seventh Month.

1. Rote Songs. Teach by rote the following songs:

- a. The Swallows. B. 1, p. 29; M., p. 206.
- b. The Clown. B. 1, p. 30; M., p. 206.
- c. Little Sister's Lullaby. B. 1, p. 31; M., p. 206.

d. Evening Light. B. I, p. 32; M., p. 207.

e. The Circus. B. I, p. 32; M., p. 209.

f. Prince Finikin. M., p. 141.

g. Ride a Cock Horse. M., p. 142.

II. Singing with Neutral Syllables.

III. Recognition of Phrase Repetition.

IV. Application of Syllables.

Eighth Month.

I. Rote Songs. Teach by rote the following songs:

a. Dandelion: B. I, p. 34; M., p. 208.

b. Kind Old Winter. B. I, p. 35; M., p. 209.

c. Playing Soldier. B. I, p. 37; M., p. 209.

d. Lady Moon. B. I, p. 37; M., p. 210.

e. Garden Song. M., p. 143.

f. The Wild Geese. M., p. 144.

II. Singing with Neutral Syllables.

III. Recognition of Phrase Repetition.

IV. Application of Syllables. Teach syllables to these songs: The Postman; Bubbles.

Ninth Month.

I. Rote Songs. Teach by rote the following songs:

a. The Little Huntsman. B. I, p. 38; M., p. 210.

b. Kittens. B. I, p. 39; M., p. 211.

c. False Alarm. B. I, p. 40; M., p. 211.

d. Snowflakes. B. I, p. 41; M., p. 212.

e. Sleep, Little Treasure. B. I, p. 42; M., p. 213.

f. Dandelion, Yellow as Gold. M., p. 147.

g. Little Miss Patty and Master Paul. M., p. 145.

II. Singing with Neutral Syllables.

III. Recognition of Phrase Repetition.

I. Application of Syllables.

SECOND GRADE.

First Month.

I. Rote Songs. Teach the following songs by rote:

a. Three Little Bears. M. p. 150.

b. The Grasshoppers' Ball. M., p. 152.

c. Swing Song. M., p. 153.

II. Review study. B. I, ch. 1.

III. Study of Motives and Figures. B. I, ch. 1.

Second Month.

I. Rote Songs. Teach the following songs by rote:

a. One Misty, Moisty Morning. M., p. 154.

b. Chrys Anthemum. M., p. 155.

c. Windy Nights. M., p. 156.

II. Application of Syllables. B. I, ch. II.

III. Study of motives and figures. B. I, ch. II.

Third Month.

I. Rote Songs. Teach the following songs by rote:

a. Rock-a-bye, Hush-a-bye, Little Papoose. M., p. 157.

b. Batings. M., p. 161.

c. Bedtime. M., p. 158.

II. Application of Syllables. B. I, c. III.

III. Study of motives and figures. B. I, ch. III.

Fourth Month.

- I. Rote Songs. Teach the following songs by rote:
 - a. Kris Kringle's Song. M., p. 160.
 - b. Sing a Song of Sixpence. M., p. 164.
 - c. The Jolly Holly Farm. M., p. 166.
- II. Application of Syllables. B. I, ch. IV.
- III. Study of Motives and Figures. B. I, c. IV.

Fifth Month.

- I. Rote Songs. Teach the following by rote:
 - a. Icicles and Bicycles. M., p. 165.
 - b. The Song of the Wind. M., p. 163.
 - c. If. M., p. 168.
- II. Application of syllables. B. I, c. V.
- III. Study of Motives and Figures. B. I, c. V.

Sixth Month.

- I. Rote Songs. Teach the following songs by rote:
 - a. Winter Jewels. M., p. 167.
 - b. Miss Rainy Day. M., p. 172.
 - c. The Goblin. M., p. 169.
- II. Presentation of Notation. B. I, ch. 1; M., p. 16.
- III. Work in Eye Training; Visualization Drills. M., p. 17.

Seventh Month.

- I. Rote Songs. Teach the following by rote:
 - a. The Umbrella Man. M., p. 170.
 - b. The Windflower. M., p. 173.
 - c. The Cats of Kilkenny. M., p. 179.
- II. Development of Notation. B. I, chs. IV and V.

III. Work in Eye Training. M., pp. 57-60.

Eighth Month.

I. Rote Songs. Teach the following by rote:

- a. The Naughty Tulip. M., p. 178.
- b. The class's Grinder. M., p. 174.
- c. Little Robin Redbreast. M., p. 176.

II. Development of notation. B. I, chs. IV and V.

III. Work in Eye Training. M., pp. 60-66.

Ninth Month.

I. Rote Songs. Teach the following by rote:

- a. The Five Toes. B. I, p. 120; M., p. 260.
- b. Little Miss Tulip. M., p. 184.
- c. Daisy Nurses. M., p. 180.

II. First Reading of New Songs. M., p. 66.

TENING GRADE.

First Month.

I. Rote Songs. Teach the following songs by rote:

- a. The Firefly. B. I, p. 136; M., p. 279.
- b. Baby Land. B. I, p. 116; M., p. 252.
- c. Our Friends the Shadows. B. I, p. 130; M., p. 270.
- d. See Willieinkle. B. I, p. 131; M., p. 272.

II. Sight Reading. M., p. 66.

Second Month.

I. Rote Songs. Teach the following songs by rote:

- a. The Lonely Wind. B. I, p. 136; M., p. 278.
- b. The Elves and the Shoemaker. B. I, p. 116; M., p. 252.
- c. Last Night. B. I, p. 115; M., p. 250.

d. Benediction. B.I, p. 132; M., p. 272.

II. Sight Reading. B., p. 66.

Third Month.

I. Rote Songs. Teach the following songs by rote:

a. Thanksgiving Day, B.I, p. 141; M., p. 84.

b. The Girl and the Old Man. B.I, p. 113; M., p. 24.

c. The Recipe. B.I, p. 124; M., pp. 264, 266.

d. The Quirrel in the Snow. B.I, p. 129; M., p. 26.

II. Sight Reading.

Fourth Month.

I. Rote Songs. Teach the following songs by rote:

a. The Clock. B.I, p. 118; M., p. 22.

b. A Carriage to Hire. B.I, p. 123; M., p. 23.

c. O Christmas Tree. B. I, p. 126; M., p. 24.

d. Strange Lands. B.I, p. 124; M., p. 25.

II. Sight Reading and Song Analysis. M., p. 9.

Fifth Month.

I. Rote Songs. Teach the following songs by rote:

a. Happy New Year. B.I, p. 129; M., p. 27.

b. The Birds' Breakfast. B. I, p. 115; M., p. 25.

c. Winter Costs. B. I, p. 133; M. p. 27.

d. A Frown and a Smile. B. I, p. 134; M., p. 276.

II. Sight Reading. Review B. I.

Sixth Month.

I.

Rote Songs. Teach the following songs by rote:

a. Saint Valentine's Day. B.I, p. 114; M., p. 249.

b. The New Soldiers. B.I, p. 117; M., p. 254.

c. Hidden Treasure. B. I, p. 137; M., p. 269.

d. America. B. I, p. 142; M. p. 280.

11. Sight Reading. B. I, pp. 81-86.

Seventh Month.

1. Note songs. Teach the following songs by note:

a. The Tussy Illness. B. I, p. 126; M., p. 261.

b. See, Saw, Sacra Town. B. I, p. 121; M., p. 261.

c. Dance, Dance, Baby. B. I, p. 130; M., p. 271.

d. Aiddle. B. I, p. 135; M., p. 277.

11. Sight Reading. B. I, pp. 87-93

Eighth Month.

1. Note songs. Teach the following songs by note:

a. The Robin. B. I, p. 138; M., p. 261.

b. I'll tell you a story. B. I, p. 114; M., p. 249.

c. Creep, House, Creep. B. I, p. 134; M., p. 264.

d. Lullaby. B. I, p. 122; M., p. 262.

11. Sight Reading. B. I, pp. 94-100.

Ninth Month.

1. Note songs. Teach the following songs by note:

a. Old Chung, the Sea. B. I, p. 127; M., p. 268.

b. A Baby Sermon. B. I, p. 113; M., p. 254.

c. The Caterpillar and the Bee. B. I, p. 134; M., p. 275.

d. Parmary Song. B. I, p. 140; M., p. 283.

11. Sight Reading. B. I, pp. 101-107.

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(Reference in fourth and fifth grades are to Book 11 and
and Book 11, Volume II.)

First Month.

I. Note Songs.

- a. America (Review). B. II, p. 174; M.II, p. 310.
- b. Children's Hymn. B. II, p. 168; M. II, p. 304.
- c. Sandman. B. II, p. 167; M. II, p. 302.

II. Drill.:

- a. Tone: Tone relations in the diatonic major scale.
- b. Time: The quarter-note beat; quarter, half, dotted half and whole notes, and the corresponding rests.
- c. Theory: The characters of notation found in the songs of this assignment. (M.II, p. 58.)
The place of do in all keys with flat signatures.

III. Sight Reading. B. II, ch. I, pp. 8-12.

Second Month.

I. Note Songs:

- a. Come, Thou Almighty King. B. II, p. 170; M.II, p. 305.
- b. October Party. B. II, p. 156; M.II, p. 284.

II. Drill: Tone, Time, Theory.

III. Sight Reading. B.II, ch. I, pp. 13-21.

Third Month.

I. Note Songs:

- a. All that's Good and Great. B.II, p. 170; M.II, p. 307.

b. Frost Fairies. B.II, p.140; B.II, p.150.

II. Drill: Tone; Time; Theory.

III. Sight Reading. B. II, pp.22-27.

Fourth Month.

I. Rote songs:

a. Gather around the Christmas Tree. B.II, p.150;

B.II, p.277.

b. From the Starry Heavens High. B.II, p.146.

II. Drill; Tone; Time; Theory. B., p.66.

III. Sight Reading. B.II, ch.II, pp. 28-33.

Fifth Month.

I. Rote Songs.

a. Algerian Lullaby. B. II, p. 143; B.II, p.266.

b. A Trip to the Moon. B.II, p. 156; B.II, p.264.

II. Drill: Tone; Time; Theory. B., p. 72.

III. Sight Reading. B.II, ch.III, pp. 34-39.

Sixth Month.

I. Rote songs:

a. What Professor Owl Knows. B.II, p.157; B.II, p.

286.

b. A Penny to Spend. B.II, p.157; B.II, p.286.

II. Drill: Tone; Time; Theory. B.II, p.76.

III. Sight Reading. B.II, ch.IV, pp.40-45.

Seventh Month.

I. Rote songs:

a. Easter Rabbit. B.II, p. 154; B.II, p.281.

b. A Spring Guest. B. II, p. 159; B.II, p.282.

II. Drill; Tone; Time; Theory. M.II, p. 76.

III. Sight Reading. B.II, ch.IV, pp.46-51.

Eighth Month.

I. Rote Songs.

a. An Arbor Day Song. B.II, p.132; M.II, p.247.

b. The Kite. B.II, p.139; M.II, p.258.

II. Drill; Tone; Time; Theory.

III. Sight Reading. B.II, ch.VIII, pp. 65-71.

Ninth Month.

I. Rote Songs:

a. The Train. M.II, p.180; M.II, p.276.

b. Devotion. B.II, p. 184; M.II, p. 281.

II. Drill; Tone; Time; Theory.

III. Sight Reading. B.II, ch. VI, pp. 56-60.

FIFTH GRADE.

First Month.

I. Rote Songs:

a. Portuguese Hymn. M.II, p. 186; M.II, p.306.

b. In the Cornfield. M.II, p.185; M.II, p. 253.

c. After Vacation. B.II, p. 149; M.II, p. 274.

II. Drill: Tone; Time; Theory.

III. Sight Reading. B.II, ch. VIII, pp.68-71.

Second Month.

I. Rote Songs:

a. Oh, Worship the King. B.II, p.169; M.II, p.304.

b. Two Kinds of People. M.II, p.182; M.II, p.278.

c. The Blacksmith. B.II, p.163; M.II, p. 296.

II. Drill; Time; Theory. B., p. 93.

III. Sight Reading. B.II, ch.IA, pp. 72-79.

Third Month.

I. Rote Songs.

a. The Joy of Harvest. B. II, p. 171; M. . p.333.

b. Fairyland. B.II, p.144; M.II, p. 269.

c. Auld Daddy Drkness. B.II, p.14 ; M.II,p.274

II. Drill; Tone; Time; Theory. A.II, p.93.

III. Sight Reading. B.II, c.X, pp.80-82.

Fourth Month.

I. Rote Songs:

a. The Three Kings. B.II, p.160; M.II,p.251.

b. Christmas Carol. B.II,p.148; M.II, p.273.

c. Noel. B.II,p.141;M.II,p.263.

II. Drill; Tone; Time; Theory.

III. Sight Reading. B.II, ch.XI, pp. 85-87.

Fifth Month.

I. Rote Songs:

a. A Snowy Day, B.II, p.146; M.II, p.272.

b. In Story Land. B.II, p.133; M.II, p.282.

c. Fishing. B.II, p. 131; M.II, p.246.

II. Drill; Tone; Time; Theory.

III. Sight Reading. B.II, ch.XII, pp.88-90;ch.XIII,pp.91-

95.

Sixth Month.

I. Rote Songs:

a. The Star-spangled Banner. B.II,p.172;M.II,

308.

b. Boy Scout. B.II,p.158; M.II,p.288.

c. A Little Philosopher. B.II,p.129; M.II,p.242

d. Hoof Beats.B.II,p.132; M.II,p.248.

II. Drill; Tone; Time; Theory.

III. Sight Reading. B.II, c. XIV.pp.96-102.

Seventh Month.

I. Rote Songs:

a. The Month of March. B.II,p.146; M.II,p.267.

b. The Orchestra. B.II,p.164;M.II,p.298.

c. Rhyme of the Rail.B.II,p.133; M.II,p.298.

d. This Little Fat Goblin. B.II,p.134; M.II,p.

250.

II. Drill; Tone; Time; Theory.

III. Sight Reading. B.II, ch.XV, pp.103-108.

Eighth Month.

I. Rote Songs.

a. The Blackbird. B.II,p.138; M.II,p.257.

b. Rock-a-bye Lullaby, B.II,p.162; M.II,p.294.

c. Foreign Children. B.II,p.130; M.II,p.243.

d. The Mill Fairy. B.II,p.136; M.II,p.254.

II. Drill; Tone; Time; Theory.

III. Sight Reading. Book II, ch.XVI.pp.109-114.

Ninth Month.

I. Rote Songs:

a. The Brass Band. B.II, p.142;M.II,p.264.

b. Little Birdie. B.II, p.151;M.II,p. 280.

c. The Little Big Woman and the Big Little Girl.

Book II, p. 166; B.II, p. 301.

d. That Becomes of the Moon. B.II, p. 147; B.II,
p. 270.

II. Drill; Tone; Time; Theory. B., p. 117.

III. Sight Reading: B.II, ch. XVII, pp. 115-122.

SIXTH, SEVENTH AND EIGHTH GRADES.

The outlines for sixth and seventh grades are arranged according to the plan in which Book III is used throughout grades six and seven, Book IV being introduced at the beginning of grade eight. B.II, p. 43; B.III, p. 35.

A One-book Course and Teacher's Manual for One-book Course briefly cover the work of grades one to eight inclusive.

DRAWING

THE PURPOSE OF SCHOOL DRAWING.

There are those who think that the purpose of a public-school drawing course is to make artists or near artists of the pupils. While such a purpose would indeed be highly praiseworthy, it is not within the scope of school drawing. Ability as an artist, in the sense of paint, brushes and canvas, is to a large extent a gift of nature, which, to produce a master, must be given years of uninterrupted, intensive cultivation under unusual conditions. School drawing may, of course, discover the exceptionally gifted individual. Yet its real object is far broader, in that it applies to the average pupil under average conditions, and gives him skill which may be practically applied in many fields, apart from "art" in its restricted sense. Comparatively few of us, indeed a very small per cent, ever touch an artist's palette, but most of us have used almost daily of the application of those principles which are included in the usual school drawing course.

Drawing as a subject of study in school falls far short of its real value if it is made an end rather than a means. Taught as an end, it functions in the develop-

ment of artists. Taken as a whole, it functions in the development of art. If artists are relatively few, as has been stated. On the other hand, there are artisans without number, and the demand for intelligent, skilled artisans is unlimited.

Indeed, there is not a teacher, a silversmith, a painter, a miller, a brewer, a tailor, a carpenter, a cabinet-maker, a machinist, a plumber, a cooper, a hatter, a builder, an engineer, a saleswoman, an electrician, a ship's clerk, an electrician, a real-estate salesman, a contractor, that could not find skill in making of surpassing value an increasing life; truly in his vocation.

CHARTERING A SUBJECT.

The subject in the public-school course will take itself, however valuable or how a fascinating it may be. Any subject that goes on the teacher's schedule must be given its due proportion of time and attention, if the pupils are to succeed with it. All the scanty lesson outlines, all the teacher's manuals and all the correspondence courses that we may give out free of charge, or otherwise, will not teach the subject of drawing unless the school principal and the class teacher take an interest in it and see that it has a fair chance.

On the other hand, if teachers will provide children with drawing books, have a regular time for the drawing lesson, and, although she may not herself be able to draw, if she will encourage the pupils for the efforts they make and offer kindly suggestive criticisms here and there, the children themselves will be delighted and will do surprisingly well.

Indeed, if drawing is given only a fair chance it will go a long way toward relieving the monotony of the dull routine of school work, and at the same time enrich the lives of the children, contribute to the beauty and the orderliness of the home and to the civic betterment of the community. Some one may doubt the potential value and importance of the subject as indicated in the statement just made. Let him examine any good series of drawing books. He will find that much attention is given in such books to aesthetic culture and refinement, to suggestions for the orderly arrangement of furniture in the home, to the improvement in the designs of furnishings and hangings, to good harmony of colors in costumes. It contributes to civic attractiveness and civic pride. Through striking pictures, it is used to bring forcibly before the people important questions of public welfare, such

as "fire prevention", "correct eating," "safety devices," and other matters involving community activities.

Again, drawing produces the pleasing effects in wall paper and in painted china; in the plainest rugs or in the most gorgeous tapestry. It sketches the outlines of the daintiest lace, whether intended for baby's cap or the most elaborate costume; whether to be used to enrich a simple scarf or the most sumptuous drapery. It is employed in designing a lady's brooch or in planning a battleship; in giving the grace of outline to a simple bungalow or harmonious proportions to an imposing mansion. It details the specifications of every contract, whether to build a sleeping porch or to construct a stone bridge; whether to lay a water main or to dig a Panama canal.

All these things, and many more, drawing does, when properly taught, without making artists or near artists. Can we be fair to the school children without giving them a chance to acquire at least some of such benefits? If teachers will apply the same thought and effort, the same pedagogical principles, to teaching drawing and art that they do to other subjects results will be greatly improved.

OBJECTIVES.

Whether we study or teach a subject, the first thing to be determined is the purpose, the function, the goal to

be reached on the part of the student through the study of the subject. The larger objective in the study of drawing is the development of "art education" on the part of the student. The objective in grades 1 and 2, and largely so in grades 3 and 4, is the development of ability to visualize form; i. e., to see a thing when it is not, to see with the mind's eye -- to draw. The objective in the middle and upper grades is the development of skill, originality and appreciation through the study and application of the principles of drawing and art.

THE PSYCHOLOGY OF DRAWING.

This question is often asked by teachers, "Why is it that some children do almost nothing with drawing and all sorts of hand work, while others do so well?" The ability of an individual to do graphic or other industrial or hand work varies directly as his ability to visualize the forms he sees, remembers, or of which he may conceive. Research and the applications of tests have shown that children vary in this ability to visualize from almost nil to almost perfection. Visualization as here used means the consciousness of a more or less perfect image of the form to be produced on the paper, in the clay or other material. If the pupil is conscious of a clear-cut image of the silhouette of an elephant that the teacher places before him to cut

free-hand from a sheet of paper, his will probably grade as high as 80%. However, if the pupil has only a blurred image, or sees nothing in the sheet, he will make a cutting that would grade only 10%, 20%, or 30%. Approximately the same results would come from the same pupils if asked to make a model in clay, a mass drawing, or a sketch.

From the above discussion it is evident that the teacher's problem is the development of the pupil's ability to "visualize." This is best done by exercises in modeling, free-hand cutting and mass drawing. For methods in developing visualization, see discussion under the titles mentioned. For a graphic representation of this variation in the ability of individuals to visualize, see the accompanying scale (Plate I).

Hand lettering. Every pupil should learn to letter his own name, the name of his teacher, his grade, his school, the subject of his paper, or other exercises, in plain Gothic lettering. This should be done throughout all of his exercises. To do this will contribute to neatness, to accuracy, to legibility and to a valuable accomplishment.

A DRAWING SCALE.

A drawing scale is similar to a penman'ship scale, both

in plan and purpose. It is a standard test. It furnishes the material on which to base a test of the pupil's ability to be graphic and other hand work. It is also a scale by which the progress of the pupil may be measured.

A scale either to measure the ability of a pupil to draw (to visualize) or to judge his progress must be based on free-hand cutting if it is to meet the requirements of a standard test. A test shows what the pupil knows now, not what he thinks after contemplation or criticism. A free-hand cutting shows just what the pupil was able to see in the blank sheet as compared with the silhouette taken as the standard.

The accompanying illustration is just a part of a drawing scale. For the use of a drawing scale see "Free-hand Cutting".

CLAY MODELING.

The great value of clay or other modeling is in its use as a means for developing the pupil's notion of form -- "a means of perfecting the pupil's visual concepts." The substance being plastic allows the pupil to make corrections without incurring any waste.

To use modeling for the purpose here stated have the pupil look at the model and study it carefully, handling

as well as looking at it. Then give the pupil a portion of the clay and ask him to make the lemon, for example. When the pupil quits working with the clay it is indicated that he can see no more form. Ask the pupil to compare his clay model with the lemon and discover a difference. Then ask him to make the clay like the lemon at this point. Again compare, discover and correct form until there is a sign of appreciation for symmetry. After the pupil has made the lemon as he sees it in the clay, he grows in ability to visualize each time he is led to discover an error and make the correction.

There are many other valuable uses of modeling as illustrated in Books 1 and 2, page 44, and Book 3, pages 30 and 38; Book 4, page 22.

FROM HAND CUTTING TO CUTTING TO LINE.

Much misunderstanding exists among teachers as to the purpose and value of these two exercises.

Cutting to line has for its chief purpose the mastery of the use of the scissors.

Cut -- A scale

It may help to correct some errors of coordination. Most children of school age learn with a few lessons to cut to

line, and many do this well before entering school. The teacher should know that the pupil can cut to line quite well before asking him to cut free-hand. To test the pupil's ability to cut to line, prepare sheets of paper half the size of a post card, and with a medium pencil and a definite line, draw an irregular shape of nothing at all. Give these to pupils telling them that these shapes if cut right on the line will look like something and will tell the teacher what he has cut out. The teacher should note the few who do not cut to line and work definitely with them for results.

Free-hand cutting, like modeling, has for its chief purpose the developing of the power to visualize form accurately. Its value in this regard arises from the fact that the pupil is forced to make an effort to see the form in the paper as it is, since he is not allowed to make corrections as is done in modeling.

To use free-hand cutting for the purpose here stated have the pupil look at a silhouette or at a cutting placed on a highly contrasting background and make a careful study of its form. Now give the pupil a piece of paper the size desired for the finished cutting and in the proportion of the form to be cut. In cutting, the pupil should look at

the silhouette model, attempt to shape it in the sheet, cut in a continuous way from the beginning until the shape drops from the sheet, leaving the remains of the sheet all in one piece; no corrections by trimming the cutting is allowed. Now have the pupil compare his cutting with the original and discover differences. These differences in shape are errors in visualization. Have the pupil point out the errors and show how he will cut if allowed to try again. In this way have the pupil try - for not more than three times, each time making a definite attempt to improve the first in the place or places where he discovered errors. In as far as the pupil has discovered, pointed out and corrected errors by cutting again and again, he has grown in power to visualize.

The accompanying illustration, I believe, shows examples of cutting made as above described. It is quite possible for a pupil to make the growth shown in any three consecutive cuttings in a year, and sometimes in a few weeks, or even days.

Practically all the silhouettes given in Books 1, 2, 3, 4 are meant to be used as standards from which free-hand cutting is to be done. These same silhouettes, in their placing, help in visualization and teach design. Paper cutting has many other valuable uses, as is illustrated in the

eight books.

Mass Drawing.

Mass drawing, like modeling and free-hand cutting, has as its most important purpose, in the lower grades, the development of ability to visualize. Mass drawing is similar to modeling, in that there is endless opportunity to correct error without erasing. Mass drawing as here used means the making of a spot and the developing of this spot to the desired form or shape from within to the outer finish, no matter what the medium.

To use mass drawing for the purpose here stated, have the pupil look at the model in mass as shown on page 30 in books 1-4 and study the form carefully. With large pencil or crayon, rubbed until it has a broad, flat surface and held under the hand as a crayon is used at the blackboard, have the pupil lay on a flat tone where the form is to appear. Take, for example, the lemon used in the modeling. The pupil makes a spot to show where the lemon is to be and spreads this spot until it is as near lemon shape as he can make it. Now the teacher leads him to discover errors in shape and has him show where the correction is to be made. The pupil makes this change for the better, and again finds and corrects faults in form. Just to the extent that the pupil has discovered and corrected error in form he has grown

in power to visualize. (See illustration, Mass Drawing.)

Mass Drawing has many other valuable uses. It is sometimes spoken of as the "direct method," and means the producing of form without first making a sketch or outline. For examples see page 4, Books 2-5.

TEACHING.

Doctor Judd, of Chicago University, in one of his books for teachers, writes to this effect: "If the teacher is to expect any results when she assigns a pupil a task she must give the pupil the order of procedure in attacking that task." Much effort is lost and failure comes often in the teaching of drawing and art work because of violation of this truth.

Doctor Hargray, of Columbia, makes this statement very early in one of his books: "One of the greatest faults in teaching is mistaking the means for the end." For example of the latter statement: The work done in schools in illustrative and hand work, preceding the holidays and for its end the learning to apply the principles of drawing and art, and the interest the pupil has in the holiday is simply the means the teacher uses to good effect. A project

is not an end in itself, but an elaborate means that the teacher uses, by which she involves many principles and exercises that the pupil needs to learn, in the one object which the pupil wishes to accomplish. The real end is the mastery of the principles of drawing, design, color harmony, initiative, etc., and not the constructed article or gift.

Plan the Work. The teacher should carefully plan the work before beginning with the class. Success, more often than is generally known, depends on having the proper materials and upon understanding the necessary steps to be developed. Confusion, waste of time or energy and failure in the results of the lesson can be avoided through careful planning and systematic preparation on the part of the teacher before the drawing class is called.

The Function of the Book in Presenting a Drawing Lesson.

1. The teacher looks in her course of study to see what is to be taught in the month, we will say, of September. She finds that it is "a study in form," and that plants, fruits, trees, and landscapes are the means to be used and she is referred to the specific pages in the book which the pupil uses as a text. She makes a study of the suggestions and cross references offered in the course, and turns to the pages in the text on which she is to base these lessons. She makes a study of these illustrations and suggestions offered by the author. She determines the materials and

methods, the order of procedure to be used.

2. The teacher now proceeds to arouse interest in the class with reference to flowers and trees in nature. Not until the pupils desire to express themselves with reference to nature does she take the next step.

3. When the pupils want to make flowers and trees she helps them by asking them to look in their books for good examples of the making of these things, and to learn how they are made. Here is where the teacher gives or develops "the order of procedure": What part of the plant shall we draw first, what second, and third? It is said that there is a "sleight" in every type of work. There are ways and better ways of doing things. The teacher and pupils discuss these examples (standards) and the teacher may illustrate how the drawing or cutting is done.

4. The pupils now having formed high standards, knowing how to proceed, and having the confidence engendered by the teacher's work, proceed to make flowers or trees; first, using their book samples as a standard to work towards; and, second, trying to go work from nature up to the standard set in the text. The teacher in all this process helps pupils to see and correct errors, encourages effort and keeps up the interest.

5. Now that the pupils have shown that they can make flowers and trees well, that they have some mastery of form, an attempt is made to make a particular tree, we will say, one that is beautiful in form or color, and is near the

school, which we want to keep the year round in its present beauty. The only way to do this is to make a picture of it. This is the problem. When this drawing or painting is finished it should be mounted in the color harmony for the year (see color chart, page 47) and placed properly on the blank space in the book designated for it. In case there has been a principle worked out that can be shown graphically, have it recorded on the blank before the finished piece is placed.

Let it be understood that the purpose of the blank page in the book is: (1) To hold the final practice of the lesson on the opposite page, or a record of a principle that the teacher has worked out on the board. This is the notebook feature of the work. (2) To hold the original, finished and artistically mounted drawing resulting from a study of the opposite page. This is the use of the book as a portfolio and trains the pupil in the art of mounting, spacing and placing. (In mounting and placing use little paste, and at the two upper corners only.)

The function, then, of the book as a text is to furnish source material, to set a standard of excellence in execution, to give devices and principles needed by the pupil in attaining a high standard, to organize the facts of representation, illustration, design, etc., into art, and make it available for educational purposes, and to give sequence and consistency to the work of the class.

COLOR THEORY AND COLOR HARMONY.

That color is one of the most fundamental facts in both nature and art goes without challenge. It is because objects have color that we are able to see them. In art it is color that first attracts our attention, and if this is pleasing we say it is good, but if it is not pleasing we say it is bad.

In the study of art we have both color theory and color harmony. The theory deals with the more or less scientific facts of color -- the underlying principles on which a theory is based. For instance, when a ray of light is separated by a prism into its component parts, the several colors appear in the order, red, orange, yellow, green, blue, violet. It is therefore in this order that they are placed in color charts. When these colors are arranged, in the order named, in a circle, the colors opposite each other, red and green, blue and orange, etc., are called complements, because one of these colors contains what the other lacks to make all the colors. A value scale is a matter of theory. The fact that a color can be reduced to one-half intensity by adding a certain portion to its complement is also theory.

It is color harmony with which we are especially concerned in school art work. A color harmony is an arrangement of two or more colors, or values, which produce a feel-

ing of agreement rather than of disagreement -- an arrangement in which each color seems to enhance the beauty of the other. However, we cannot always trust our own judgment, much less that of others, as to what colors do or do not produce agreement or harmony. We therefore resort to color theory, and by process of analysis fix what we call fundamental harmonies.

Each drawing book in this series gives a color chart on page 47, with a discussion of some phase of color theory. The following paragraphs name and discuss the color harmony to be derived from each of these charts.

Do not teach more than one harmony a year, as this is all that the pupil can learn and appreciate. Watch for every opportunity to apply this harmony in the coloring of pictures, in the selecting of colors in paper cutting, and in the mounting of finished work.

BOOK 1. It is very important at the beginning to see that the pupil does really know the spectrum colors. Some children are slow in learning color and others have defective vision with reference to color. Teach the primary and secondary colors. The harmony in this grade is the use of a primary with one or two secondary colors.

BOOK 2. Teach pupils how colors are produced through mixing. Teach recognition of the intermediate colors. The harmony to be taught from this chart is that of related colors. Deal with these colors thus: The big square is

mother Blue; the little one below is her girl, Violet Blue; and the one above is her boy, Green Blue. This is a family, a color harmony. Can you find another family? Yes, there is mother Yellow at the top of the chart with Orange and Green Yellow, another harmony. If a picture has blue and a little green, it will mount in blue, blue violet, and blue green.

BOOK 3. Teach pupils to distinguish the three values of color or hue. See that the pupils really know what a value scale is and can make one of each color with poster paper. (Poster paper can be had in all these colors.) The three values of any one of these colors constitute a harmony of values. Mount the finished drawings made for book 3 in the harmony of values. Color the landscape on page 46 in three values of one color.

BOOK 4. This is the harmony of the several values of two or more colors. In Book 3 we learned that the three values of red formed a harmony, that the same was true with green or blue. Now we must see that dark red and light green form a harmony, and that the same is true with dark blue and light orange, and also in the reverse order, dark green and light red, etc. This harmony is not confined to light and dark values of complements, but applies to green and orange, green and purple, etc. It is a striking harmony and well adapted to poster work, etc.

BOOK 5. The harmony to be derived from this chart

is that of the complements in full intensity and in their grayed or weaker hues. Red and green are complements; so are grayed red and grayed green; also the four colors just named will form a harmony in the complements. Use these colors in the landscape at top of page 46. Any highly grayed color will harmonize fairly well with any other grayed color, sometimes called the harmony of the grayed colors.

BOOK 6. The harmony to be derived from this chart and used in this year's work is that of the analogous colors. Note the definition given of analogous hues on page 47. Any group of three or more analogous colors will harmonize, as they all contain a noticeable portion of one standard color. In like manner the group of analogous colors opposite in the chart will harmonize with the one selected, as these colors are complementary.

BOOK 7. The harmony to receive special attention in this study of color is that of the intensities of the complements. This variation of intensities is shown in a scale below the color circles on page 47. Make a similar scale of red and green, blue and orange. Use these colors in design and in mounting throughout this book. Study to know the relative value of hues.

BOOK 8. If this color chart were worked out for every color as it is for red it would cover the whole of color theory and therefore would form the basis for every color harmony. In this year's work use every color harmony that

has been taught; using the three values of one color, the various values of two or more colors, the complements in full and half intensity, and the analogous colors, each where it is best adapted to the purpose or color problem involved.

THE HOLIDAY ACTIVITIES.

In the past much time has been lost to drawing and art by the common use of the drawing time for two or more weeks preceding each holiday in coloring hectographed pictures, making decorative or illustrative work by dictation, etc., without giving any conscious attention to the application of the principles of drawing and art. The only reason for using the art period for Halloween illustration is the fact that it offers an opportunity to the teacher to motivate some phase of art work so that the pupils will really learn to do this phase of the work. In the lessons or problems planned in this course and involving holiday activities each has the developing or application of some art principle as its objective.

The following suggestions are offered to help the teacher correlate drawing and art with the special days we celebrate:

Labor Day: Occupation poster. See page 30, Book 4.

Frances Willard Day: Flowers or trees in memory. See pages 4 and 8.

Fire Prevention: Poster in color harmony. See page 36, Book 4.

Colours Day: Illustration. See page 14, any book;
page 33, Book 4.

Indian Day: See pages 16 and 17, 35 and 46, Book 3;
pages 14 and 24, Book 8.

Halloween: Free expression. See page 12, Book 4.

Armistice Day: Peace, safety. Posters. See page 36,
Book 4.

Education Week: Book cover for school work. See pages
20 and 22.

Thanksgiving: Historic illustrations. See page 14,
any book.

Forefather's Day: Poster. See page 32, Book 4.

Christmas: The December project. See page 12, Books
5, 6, 7 and 8.

New Year: Calendar or poster with object drawing.
See pages 28-30.

Kansas Day: Poster to show achievements. See page 35,
Book 4.

Lincoln's Birthday: Historic illustration. See
page 14.

Valentine's Day: Construction with costume. See
pages 16 and 40.

Washington's Birthday: Historic costumes. See pages
16 to 18.

Arbor Day: Draw trees and mount in color harmony.
See page 8.

Easter Sunday: Cutting, painting and mounting flowers.

May Day: May baskets. Costume for May Day fetes.

See page 16.

Mother's Day: Book cover with floral design. See

page 2, Book 2; page 16, Book 3; page 10,

Book 6; pages 2 and 20, Book 7.

COSTUME DESIGN.

This subject in its various forms has been growing rapidly in popularity the past few years as a phase of school art work. Among its chief values are the opportunities it offers for creative design, for application of color harmony, for discrimination in choice of colors, kinds of cloth, and adaptation of dress to purpose intended. It has practical values in that it prepares the student for the subject of dress-making and develops judgment in the selection of clothes both as to taste and quality.

If the teacher approaches this subject from the viewpoint of the boy she will find him as much interested as his sister. Books 1 to 5 deal with the boy as well as the girl, and this type of work should be continued through the course.

The costume design work is so fully treated and illustrated in the drawing books that it would seem unnecessary to make further explanations. However, there are so many methods used in doing this work that some discussion of

these various plans may be apt.

(1) The Paper Doll Method is fully described and worked out in Books 1-5 of this series. Consult these books, pages 16-19 in each.

(2) The Magazine Figure and Pattern Method consist in selecting and cutting out a figure, laying the figure on a sheet of white paper and drawing about it the new costume of different style, but to fit the figure. Cut this out as a pattern, divide this pattern into the various garments with lead pencil lines, and cut these outlined garments into separate patterns. From these patterns cut poster-paper garments and paste them on the figure. (This method has several variations.)

(3) The Magazine Figure with Drawn and Painted Costume. This method is fully described and worked out in Books 6, 7 and 8 of this series.

(4) The Magazine Figure with Representation of Costume in Cloth. This is a very pleasing and practical method for upper grades. It consists in first selecting a figure from a magazine, cutting off head, hands and feet, pasting these parts on a white sheet of paper in their relative positions, drawing the new costume between these parts, cutting out the form of this costume, leaving the shape as a hole in the paper, selecting scraps of cloth and pasting on the reverse side of the sheet so as to cover the hole and show the form of the garments on the right side.

A little practice will perfect the process.

(3) The Pressed Coil Method consists in using the ordinary coil, or in the making of a doll for the purpose if industrial work is desired. Make patterns for a costume and then make the garment of cloth as is done in elementary dressmaking. (Crepe paper is sometimes substituted for both paper, paper and cloth in above methods.)

PICTURE STUDY.

Picture study (see pages 24 and 25 of each book) is planned as a part of this drawing and art course. One of the eight pictures listed on page 24 should be studied each month, either in connection with the drawing or with language, history, etc. These pictures can be secured for the pupils or for the school for a very small sum.

As a review of the picture study for the year, these eight pictures, with the central idea which they contain, are made the subject of a problem or project for the month of April in the outline for the teaching of each book. It is intended in every case that these eight pictures shall be mounted and preserved by the pupils, if owned by them. (See month of April outline for the study of each book.)

The teacher's attention is called to the fact that these pictures are listed in the order that they should be taken up for study. They are arranged according to sequence as is plainly seen in a study of the pictures for

Book 5, "The Gift of Grain." This series begins with the Greek myth of Demeter, the goddess of Agriculture, and carries through the life of a seed, from planting to harvest and its use in our lives. All the others are arranged in a similar way and therefore lend themselves to use in the April project.

In this study of the pictures given on pages 24 and 25, and in the leaflet that comes with each set of eight pictures, no attempt is made to moralize on the meaning or lesson to be learned from the picture. The picture is studied as a poem is studied -- for its beauty and what it means to the student. The suggestions offered are simply those that will lead the pupil to see more in the picture and to appreciate the artistic skill used in the expression of the idea or thought which gave rise to the picture.

General Suggestions to Teachers on the Handling of Picture Study. The problem of picture study is to learn a language which is necessary for the expression of certain kinds of ideas. This language was once very much used. It seemed much easier and more natural to get ideas through pictures than through words. Then came the printing press and changed all. For many years almost all ideas were expressed in words, and the picture as a means of expressing thought was largely lost to the world.

But now the tide has turned and the picture again comes into its own. The printing press has learned to

print pictures as well as words. Our books, magazines and newspapers are more and more being filled with pictures. It is now believed that with the development of photography, color photography and engraving that pictures will play an important part in the language of the future.

It is therefore indispensable that people should be educated in the language of pictures. Curiously enough, we have everywhere begun to teach children to write this language; that is, to draw and paint. Only rarely do we teach them to read it, though we see a thousand pictures to every attempt we make to draw one. Reading pictures is really a difficult task and should receive all the time here planned under picture study.

One result of our word reading is that we learn to skim rapidly along, recognizing just enough letters to identify the word. We never look closely. But pictures cannot be read in this way. We must look long and carefully, much as in natural science when we study a plant or an insect. Observation, comparison and inference are the essence of all fruitful study of pictures.

In teaching pictures, don't carry your leaflet into the class, or memorize the questions or the information for class use.

Don't ask any question of which you do not see the point, or give information which is meaningless or uninteresting to you.

Don't tell the pupil anything which he can learn from the picture. Question him and make him hunt, even though you have to tell him the answer in the end.

Don't try to interest the pupil by diverting his attention to irrelevant matters. The biography of the artist, the conditions under which the picture was painted and like matters usually throw no light on the picture. You can never teach pictures by studying unrelated things.

Don't point out defects in a picture. If comparison reveals defects, emphasize the superiority of the one rather than the inferiority of the other. The more the pupil respects and loves his picture, the more easily he will get its message.

Study the picture yourself until you are interested in it. Ask yourself the questions in the leaflet and note the suggestions. Carry the study farther along the line that appeals to you. Then when you have made the picture yours, take it before the class and make it theirs in the same way.

Develop other lines of questions and suggestions than those indicated in the leaflet, or carry some of them farther.

Respect the pupil's independent suggestions. They will always be valuable to him and sometimes to you.

Link up the picture study with other studies, English, history, language, etc., as you have opportunity. The April project is based on the picture study and calls for

the making of a booklet and the mounting the pictures as is shown on page 40, book 7. Original cover designs may be utilized in the same connection if in keeping with the topic of the grade.

ARTISTIC MOUNTING.

Examples of artistic mounting of drawing exercises are given. Appropriate mounting of a well-rendered exercise adds to that exercise what good framing adds to a picture. It brings out its beauty, enhances and enriches the general effect, gives a "finish" to the picture, and is exceedingly valuable training in color harmony, proportion, good taste, and discrimination.

For samples of the general effect of mounting, see book 1, page 6; book 2, page 33; book 3, page 33; book 4, page 2; book 5, page 16; book 6, page 36.

The simplest rule in mounting a picture is: Select the dominant color in the picture and mount in a darker value of that color. If two or more colors are used, these colors must harmonize with each other as well as with the colors used in the picture. A picture may be mounted in the complement of its dominant color.

The color charts and the harmonies derived from them should be the guide in the mounting for each book. Two or more colors that harmonize with the picture and with each other may be used. Perhaps half the value of the study and exercises done on each page in the drawing book is in

the matter of mounting and placing the finished work on the blank page. This is applied art.

PREPARATION OF EXHIBITS.

Drawing and other art work that have been done as a part of the regular school exercises during the year are the ones to be exhibited at school and sent to the county or state fair. Selecting the best drawings from this number is the first step in making up the exhibit. The second step is the artistic mounting of these drawings, unless this has already been done. (A picture is well mounted when it is placed on a sheet of paper of an appropriate size, proportion and color, so that it is made more attractive and artistic. When the drawing is placed on the colored sheet the margins should be about the same except that at the bottom, which should be wider.) The third step

Cut -- Showing the Effect of Artistic Mounting.

is the placing of the mounted drawings on the cardboards; this is another art exercise. This artistic placing involves: (1) correct margins, which means equal space all around the card, and that this space shall be such that the card does not appear to be crowded; (2) the mounts must be placed on the card so as to show balance; a small picture will not balance a large one, neither a light picture a dark one; (3) there should be a close relation of subjects

and color mediums used on a single card; do not place together object drawing and costume, nor water color and pencil drawings; (4) the arrangement of the cards on the wall space is next to be considered, but what has just been said with reference to placing the drawings on the cards applies with equal force in placing the cards on the wall space.

DESIGN IN THE HOME AND THE SCHOOL.

This course will be found strong in the important subject of design. Design in its restricted use means the arrangement of units (shapes) in borders or surface patterns for the purpose of decoration. In its broader application it includes the whole matter of arranging and placing of things -- rugs and furniture on the floor, window hangings and pictures on the walls, the bric-a-brac on table and mantel, the flowers in a vase.

Design and its applications are taught from pages 20 and 22 in each of the eight books, and is further applied in all industrial work.

Design in the home is taught and illustrated in Books 1 and 2, pages 2 and 33; Books 4 and 5, pages 32 and 33; Book 6, pages 36 and 38; Book 7, pages 2, 32-35; Book 8, pages 2, 10, 29, 32, 33.

Design in the schoolroom and yard is treated and illustrated in Book 5, pages 2 and 33. When we realize that almost half of the pupil's waking hours are spent in the

schoolroom and the play round it is not difficult to comprehend the influence that this environment has on the child's life. It is said that "actions speak louder than words," so example is stronger than precept. Unless the teacher sees that the schoolroom and yard are kept in good order (design), as illustrated in Book 5, she cannot expect her teaching of home decoration to function in the lives of her pupils.

From the illustration of the two schoolrooms on page 4 the teacher should see that two or three good pictures well framed and properly placed are better than a score of cheap ones cluttering the walls. (See Book 7, page 32.)

As the teacher presents this schoolroom to her pupils as a model of design she should see herself as the central figure, the touch that adds complete harmony. She can only meet this requirement by being at all times neatly and tastily costumed. The teacher should not be expensively, much less gaudily dressed, but a little color, an attempt at harmony, is just as necessary and effective in her make-up as it is in the arrangement of her desk or the decoration of the walls of the room.

OBJECT DRAWING.

In the first and second grades of school a large part of the object work should be done in paper cutting and mass drawing. As the pupil advances, these mediums should be gradually diminished and replaced by sketches and more

detail, until in the seventh and eighth grades such drawings largely predominate. Even if the work is finished in mass or in paper cutting, some of the following exercises may aid the pupil in getting a clearer conception of the means of showing object forms.

Thousands of the natural and constructed forms by which we are surrounded may be classified under the following three type forms and their modifications: The sphere, the cube and the cylinder. These objects have three dimensions -- length, breadth and thickness -- yet in representing them by a drawing we are limited to a surface which, of course, has but two dimensions. It is necessary, therefore, that a drawing be so made as to stimulate the imagination of the observer and to give the proper impression of the third dimension. This is accomplished by the use of shades and shadows, by perspective, and by the employment of plane or surface figures, which carry to the mind of the observer the idea of "distance" or "depth" in the picture.

There are, of course, many plane or surface figures, such as the circle, the ellipse, the rectangle, the triangle. It is important that the pupil have a proper comprehension of these figures and their use in combination in the representation of objects or solids.

In Sketching Round Objects, begin at the top and sketch lightly the left side first. Then, beginning at the

top again, sketch the right side. Study the sketch for irregularities. Make corrections and strengthen the drawing (fig. 1-A).

The figure just drawn may represent either a circle, or a sphere, or the end view of a cylinder; it is impossible to tell which. But by the addition of a round line and a

Out -- Method of Sketching Round Objects.

stem, the plane figure takes on depth and distance, and other characteristics of a special solid or object, the apple (fig. 1-B).

The Ellipse is a plane figure which may be said to represent another plane figure, the circle, when viewed at an angle. This will be clearly illustrated if a circle is drawn on paper and then the paper is tilted or turned at an angle to the line of vision.

Out -- A Method of Drawing the Ellipse

The ellipse may be sketched by first drawing the long diameter. This fixes the length of the ellipse and its place on the paper. Second, draw curves at each end of this line, narrow or broad, depending on whether the ellipse is to be narrow or broad (this, of course, depends on the angle at which the circle is viewed). Third, with a swinging motion of the hand, connect these ends with a

graceful curve (Fig. 2).

Some teachers find that they can draw the ellipse more readily and easily by a method similar to that given above for sketching "round objects." Others even make the ellipse with a single stroke of the pencil, usually beginning at the middle of the top curve and swinging to the left. All these methods may be tried and decision made in favor of the one by which the most accurate results are obtained.

Cut -- Development of the Hemisphere.

In the lower grades the ellipse is frequently an oval. When considered as a circle viewed at an angle, it is called a foreshortened circle (see page 23, Books 6 and 8).

The Hemisphere is of course a modification of the sphere, and consequently is a solid, yet Figure 3-A does not definitely indicate this. This drawing might represent

Cut -- Drawing a Square
or a Rectangle.

Cut -- Representing a
Box, Only One Side
of which is Seen.

a half-circle or a plane figure, but by giving the half-sphere a slight tilt so that the top or flat surface is seen, distance in the picture is immediately perceived and one gets the impression of a solid form instead of a plane

figure (Fig. 3-B). It will be noted that this drawing is a combination of two plane figures which have been previously studied -- the circle and the ellipse -- yet the illustration gives the undoubted impression of a solid. Figure 3-C shows hemispherical objects viewed from still a different angle. The construction lines (circle and ellipses) are shown very faintly.

The hemisphere is most easily drawn in the following order: First, draw the circle. Second, divide the circle by a diameter. Third, place the ellipse on the diameter as explained in Figure 3. Then modify the drawing to show the characteristics of the particular hemispherical object pictured (Figs. 3-B and C).

The Square is a plane figure having four sides of equal length, any two adjacent sides including a right angle, or an angle of 90 degrees.

It is easily drawn as follows: First, draw the upper horizontal side of the length desired. Second, sketch the left vertical side of an indefinite length and at right angles to the first line drawn. Third, draw the right vertical side in the same way. Fourth, sketch the lower horizontal side, experimenting somewhat before drawing it finally, in order to place it where it will give the two verticals the same length as the upper horizontal (Fig. 4-A). It should be borne in mind that the accuracy of the drawing

But -- Development of the cylinder.

is determined largely by the placing of the lower horizontal line.

Some teachers may prefer drawing the two horizontal sides first, then the left vertical side and finally the right vertical side.

The Rectangle is a plane figure having four sides, any two adjacent sides including a right angle. It differs from the square in that one pair of opposite sides may differ in length from the other pair. The opposite sides must themselves be of equal length, however. The rectangle may be drawn by a method very similar to that given for drawing the square. Care should be taken in placing the last line or side of the rectangle so that it gives the figure the desired proportion of height to width.

As has been stated, the square and the rectangle are both plane figures, yet they may represent solids, such as a box, if the box is held directly in front of the eye, so that only one of its faces can be seen (see Fig. 4-B). It is necessary, however, to rely entirely upon the imagination to conceive of the five invisible faces which complete the object. Later drawings will be made representing a

box in which some of these other faces are seen.

The Cylinder. A cylinder, technically speaking, is that solid which is generated by a square or other rectangle revolving about one of its sides as an axis. Such a definition is rather difficult of comprehension by the child in the grades, however. It will be clearer to him if we speak of the cylinder as a solid having a form similar to that of a tomato can, or a piece of stove pipe or gas pipe. These objects, of course, have parallel circular ends, connected by a uniformly curved surface, which is at all points equally distant from a line connecting the center of the two ends.

The cylinder may be easily drawn by a combination of the rectangle, just described, and the ellipse. The rectangle is used to fix the proportions of the cylinder. This is done because most persons are better judges of the proportions of rectangles than they are of the proportions of cylinders. Suppose a cylinder is to be drawn that is twice as tall as its diameter, and in a position below the level of the eye. First, draw a rectangle that is twice as tall as it is wide. Figure 5-A. Second, draw the ellipse

Out -- One-Point Perspective, Showing
Cube Form in Different Positions.

or foreshortened circle at the top, or the end nearer the

eye, using the upper horizontal of the rectangle as the diameter of the ellipse. Third, draw the lower ellipse on the lower horizontal of the rectangle, taking care to make it broader than the upper one, because it is further below the level of the eye, and consequently seen at a larger angle (see page 28, Book 5).

It will be noted that in drawing a cylinder, plane figures (the rectangle and the ellipse) were used in combination to represent a solid. It is the ellipses that give distance to the picture and make the cylinder appear to "stand out" or have depth. The effect will be improved by the use of a ground line and shadows (Fig. 5-5).

Drawing Rectangular Solids, so that more than one of their faces show, involves the subject of perspective and is generally considered difficult, but a careful study of page 28, Books 6 and 7, as well as the diagrams herewith, will cause many of the supposed difficulties to disappear.

Study carefully the distinction between one-point or parallel and two-point or angular perspective. Note that one-point perspective applies where the observer stands directly in front of the object and sees neither of the side faces. The two-point method applies when one edge of the object is toward the observer and he sees the front and one side face and perhaps the top or bottom face.

One-point perspective. First, draw the face of the object (the side nearest the observer). Second, locate the

eye level by drawing a horizontal line above, below or through the drawing according to the view desired to be shown. Third, locate the vanishing point on the line which represents the eye level. Fourth, draw lines to the vanishing point from the two corners of the front face which are nearest the eye line. Fifth, sketch in a line repre-

Out -- Angular or Two-Point Perspective --

Cube in Different Positions.

senting the back edge which is visible. This is a top or bottom edge of the object, depending on whether the object is above or below the level of the eye. (Fig. 6-A.)

In Angular or Two-point Perspective proceed in the following manner: First, draw that edge of the object which is nearest the observer. Second, draw a horizontal line representing the level of the eye. Third, locate the two vanishing points on the line representing the eye level. Fourth, connect the ends of the line representing the object's edge with the vanishing points. Fifth, draw vertical lines to fix the length and width of the object or "box". Sixth, draw the back edges to the vanishing points (Fig. 6-B).

Notice that the edges and faces seen depend upon the position of the object with reference both to the level of the eye and the direction of sight (Fig. 6-C).

Again, it is seen that the representation of a solid is accomplished by a combination of plane figures -- rectangles, or rectangles in perspective. If any face of the object is considered separately, it is a plane figure; but in combination, it gives the impression of a solid.

The foregoing discussion and explanation have been limited to a few type forms of solids and a few plane figures. Of course, there are many others, but with a

Cut -- Showing Effects of Light and Shade

clear understanding of what has been shown, one should be able to apply the principles learned to the representation of other solids. Try, for instance, developing a cone within a cylinder, a pyramid within a cube, in both parallel and angular perspective. Show a sphere with one quarter removed; a cube with a smaller cube removed from one corner; a cylinder turned on its curved surface, lying at an angle

Cut -- Using Desk Corners as Vanishing Points

(inscribe in a rectangular solid in angular perspective). Remove a quarter section of the cylinder thus drawn.

Figure 6-D shows some applications of angular per-

spective.

Figure 7 shows a suggested method of drawing on the school desk top, using the corners as vanishing points. This admits of placing the vanishing points farther apart and of making the picture larger. In this method the paper must remain in exactly the same position until the drawing is completed. This method can be employed only when the object is pictured below the eye level.

Light and Shade. As has already been shown, the use of light and shade in a drawing greatly aids in bringing out the shape of the objects pictured. As a general rule, the light is assumed to come from a direction above, to the right, and slightly in front of the object, or, in other words, it is assumed to come over the left shoulder of the person making the drawing. With this in mind, it is easy to conceive which parts of the objects are strongly lighted and which parts are in shadow. The strongly light-

Cut -- Interior Angular Perspective

ed parts are white, of course, while the shadows are indicated by shading. Some shading is usually placed to the right of the object to indicate the shadow cast on the surface upon which it rests. Pages 2, 8 and 30 of Book 6, give good examples of light and shade, and should be carefully studied.

Interior Angular Perspective is the reverse of the perspective just studied, in that it represents the inside rather than the outside of a cubical form, and the receding lines are drawn away from rather than towards the vanishing points. A study of Figure 8 will show that the procedure is the same as in angular perspective. First, draw the far vertical edge of the room. Second, the eye level. Third, to draw the upper edges place ruler on vanishing point and top of vertical edge and extend line from latter point to desired length, change to other vanishing point and repeat; the lower edges are drawn in like manner. Note how the ruler was placed to draw mouldings, the baseboard on the left, the upper edge of the door, the lines of the fireplace, hearth, and rug. How were the others drawn?

Cut -- Handles, Spouts and Bails

HANDLES, SPOUTS AND BAILS.

The three illustrations show the methods of drawing handles, spouts and bails in foreshortened position. In the drawing of the cup, the diameter of the ellipse drawn from any point will determine the slant or direction of lines for the top of the handle; the outside ellipse governs the foreshortening.

The drawing of the frying pan or skillet is a good example for study in finding the direction of lines from any point around the ellipse or top of the skillet. The handle drawn with dotted lines is represented in a tilted position instead of being in the plane with the top of the skillet.

The diameter of the ellipse drawn from any point desired will locate the point of contact for each side of a ball. This principle can be easily understood by making a careful study of the two balls shown on the tea-kettle. The foreshortening of spouts is governed by the use of ellipses.

ASSIGNMENTS OF STUDY IN DRAWING.

FIRST GRADE--BOOK I.

First Month: A Study to Develop Form.

1. Cutting to Line.
2. Plant Study, p. 4.
3. Fruits, pp. 6 and 44.
4. Trees, p. 8.

Second Month: A Study in Color and Design.

1. Color, p. 47.
2. Design, p. 20.
3. Paper Folding, pp. 10 and 20.
4. Illustration, pp. 12 and 13.

Third Month: A Study in Design and Construction.

1. Design, p. 20.
2. Lettering, p. 27.
3. Applied Design, p. 22.
4. Story Illustration, p. 14.

Fourth Month: A Christmas Gift.

1. Plans, pp. 22, 30, 40.
2. Construction, pp. 22 and 30.
3. Design and Color, pp. 22 and 30.

Fifth Month: A Study in Form; Cutting and Mass.

1. Mass Drawing, p. 28.
2. Free-hand Cutting and Mass, p. 30.
3. Animals in Cut Paper: B-e-a-r-s, p. 38.
4. Poster in Cut Paper: B-e-a-r-s, p. 38.

Sixth Month: A Study in Pose and Costume.

1. Pose, pp. 12 and 16.
2. Folding and Cutting, p. 22.
3. Paper Dolls, pp. 18 and 19.
4. Special Costume, Dolls, pp. 18 and 19.

Seventh Month: The Home: A Problem in Construction.

1. The Family, p. 18 or p. 38.
2. Construction, pp. 32 and 33.
3. Decoration, pp. 2 and 33.
4. Furniture, pp. 35 and 37.

Eighth Month: Children and Their Friends.

1. The Child, pp. 24 and 25.
2. The Story, p. 14.
3. Animal Drawing and Modeling, pp. 42 and 44.
4. Posters, pp. 14, 30, 38, 40, 42.

Ninth Month: Design in Mounting and Placing.

1. Spring Flowers, p. 4.
2. Artistic Mounting, pp. 6 and 46.
3. Preparation and Display of Exhibits. See Manual.

SECOND GRADE--BOOK 2.

First Month: A Study to Develop Form.

1. Free-hand Cutting.
2. Plant Study, pp. 2 and 4.
3. Vegetables, pp. 6 and 44.
4. Trees, pp. 8 and 33.

Second Month: A Study in Color and Design.

1. Color, p. 47.
2. Design, p. 20.

3. Construction, p. 10.

4. Illustration, pp. 12 and 13.

Third Month: A Study in Design and Construction.

1. Design, p. 20.

2. Lettering, pp. 25 and 27.

3. Applied Design, p. 22.

4. Story Illustration, p. 14.

Fourth Month: A Christmas Gift.

1. Plans, pp. 20, 22 and 40.

2. Construction, pp. 22 and 40.

3. Design and Color, pp. 20, 26, 47.

Fifth Month: A Study in Form: Cutting and Mass.

1. Mass Drawing, pp. 28 and 30.

2. Cutting and Mass, pp. 30 and 36.

3. Animals in Line and Mass, p. 36.

4. A Poster, p. 36.

Sixth Month: A Study in Pose and Costume.

1. Pose, pp. 12 and 13.

2. Folding and Cutting, pp. 20 and 22.

3. Paper Dolls, pp. 16, 18, 19.

4. Special Costume, pp. 16 and 19.

Seventh Month: The Farm: A Problem in Construction.

1. The Family, pp. 16 and 19.

2. Construction, pp. 32 and 33.

3. Decoration, pp. 32 and 33.

4. Cutting, pp. 36 and 42.

Eighth Month: The Farmer and His Friends.

1. Farm Life, pp. 24 and 25.
2. The Story, p. 14.
3. Farm Animals, pp. 14, 36, 42, 44.
4. A Poster, pp. 14 and 42.

Ninth Month: Design in Mounting and Placing.

1. Spring Flowers, pp. 2 and 4.
2. Artistic Mounting, pp. 2, 33, 46.
3. Preparation and Display of Exhibits. See Manual.

THIRD GRADE--BOOK 3.

First Month: A Study in Plant Life.

1. Instruction, p. 2.
2. Nature Drawing, p. 4.
3. Leaf Forms, p. 6.
4. Trees, p. 8.

Second Month: A Study in Color and Design.

1. Color, p. 47.
2. Design, p. 20.
3. Landscape in Design, p. 10.
4. Illustration, p. 12.

Third Month: A Study in Design and Construction.

1. Design, p. 20.
2. Lettering, p. 26.
3. Applied Design, p. 22.
4. Story Illustration, p. 14.

Fourth Month: A Christmas Problem.

1. Plans, pp. 32 and 40.
2. Construction, pp. 32 and 40.

3. Design and Color, pp. 20 and 47.

Fifth Month: A Study in Form: Drawing and Color.

1. Drawing with Color, pp. 2 and 28.
2. Object Drawing, pp. 2 and 28.
3. Object in Poster, pp. 12, 22, 28, 32.
4. A Winter Landscape, pp. 10 or 35.

Sixth Month: A Study in Costume and Color.

1. Costumes of Other Lands, pp. 16 and 19.
2. Folding and Cutting, pp. 16 and 19.
3. Costume Design, pp. 16-19.
4. Patriotic Costume, pp. 16-19.

Seventh Month: The Circus: A Project.

1. The Showman, pp. 19, 32, 33.
2. Construction, pp. 32 and 33.
3. Decoration, pp. 32 and 33.
4. The Tent, pp. 32, 33, 36, manual.

Eighth Month: Our Friends of Other Lands.

1. Children of Many Lands, pp. 24 and 25.
2. The Story, p. 14.
3. Animals of Other Lands, pp. 33 and 42.
4. A Poster, pp. 35 and 36.

Ninth Month: Design in Mounting and Placing.

1. Spring Flowers, pp. 10, 35, 46.
2. Artistic Mounting, pp. 10 and 16.
3. Exhibits, pp. 10, 35 and 44.

FOURTH GRADE--BOOK 4.

First Month: A Study in Plant Life.

1. Instruction, p. 4
2. Nature Drawing, p. 4.
3. Foliage, p. 6.
4. Trees, p. 8.

Second Month: A Study in Color and Design.

1. Color, p. 47.
2. Design, p. 20.
3. Landscape in Design, pp. 10 and 32.
4. Illustration, p. 12.

Third Month: A Study in Design and Construction.

1. Design, p. 20.
2. Lettering, pp. 26 and 27.
3. Applied Design, p. 22.
4. Story Illustration, p. 14.

Fourth Month: A Christmas Problem.

1. Plans, pp. 2, 20, 32, 40.
2. Construction, pp. 2, 20, 32, 40.
3. Design and Color, pp. 2, 20, 47.

Fifth Month: A Study in Form: Drawing and Color.

1. Drawing, pp. 2 and 28.
2. Object. Drawing, pp. 2 and 28.
3. Object in Poster, pp. 2, 28, 30, 35.
4. A Winter Landscape, pp. 10, 32 or 35.

Sixth Month: A Study in Costume and Color.

1. Costumes of Colonial Days, pp. 16 and 19.
2. Construction, pp. 16, 20, 33, 44, 47.
3. Costume Design, pp. 18 and 19.

4. Patriotic Costume, pp. 16 and 19.

Seventh Month: Colonial Days: A Project.

1. The Costume, p. 16.
2. The Home, pp. 32 and 33.
3. The Work, pp. 32 and 35.
4. The Display, pp. 2 and 40.

Eighth Month: Men and Their Work.

1. Occupations, Picture Study, pp. 24 and 25.
2. The Story, p. 14.
3. Tools and Devices, pp. 23 and 30.
4. A Poster, pp. 30, 35, 36.

Ninth Month: Design in Mounting and Placing.

1. Spring Flowers and Birds, pp. 2, 36, 42, 46.
2. Artistic Mounting, pp. 35 and 47.
3. Exhibits, pp. 16, 30, 33, 35, 36.

FIFTH GRADE--BOOK 5.

First Month: A Study in Flowers and Fruit Sprays.

1. Instruction, pp. 4 and 5.
2. Nature Drawing, pp. 4 and 5.
3. Fruit Spray, p. 6.
4. Trees, p. 8.

Second Month: A Study in Color and Design.

1. Color Harmony, p. 47.
2. Design, p. 20.
3. Landscape in Design, p. 10.
4. Illustration, p. 12.

Third Month: A Study in Design and Construction.

1. Design, pp. 20 and 22.
2. Lettering, pp. 26 and 27.
3. Applied Design, pp. 20 and 22.
4. Story Illustration, p. 14.

Fourth Month: A Christmas Problem.

1. Plans, pp. 12, 22, 40.
2. Construction.
3. Applied Design, p. 22.

Fifth Month: A Study in Form: Devices and Principles.

1. Drawing, p. 28.
2. Object Drawing, p. 29.
3. Object in Poster, pp. 29 and 32.
4. A Winter Landscape, pp. 10, 33, 46.

Sixth Month: A Study in Costume and Color.

1. Costumes of 1800 and 1830, p. 16.
2. Construction, pp. 12, 16, 22, 40, 44, 46.
3. Costume Design, pp. 16 and 19.
4. Costume Drawing, pp. 12 and 16.

Seventh Month: American Children of 1800: A Project.

1. The Costumes, p. 16.
2. The Home, p. 38.
3. The Furnishings, pp. 36 and 38.
4. The Display, p. 32.

Eighth Month: Men and Their Food.

1. Gift of Grain, p. 24.
2. The Story, p. 14.
3. Wholesome Food, pp. 6, 29, 30.

4. A Poster, pp. 32, 33, 38.

Ninth Month: Design in Mounting and Placing.

1. Decorative Plant and Landscape, pp. 5, 10, 46.
2. Artistic Mounting, p. 47.
3. Exhibits, pp. 2, 29, 33, 42.

SIXTH GRADE--BOOK 6.

First Month: A Study in Flower and Fruit Sprays.

1. Instruction, p. 4.
2. Plant in Design, pp. 4 and 5.
3. Fruit Spray, p. 6.
4. Trees, p. 8.

Second Month: A Study in Color and Design.

1. Color Harmony, p. 47.
2. Design, p. 20.
3. Landscape in Design, p. 10.
4. Illustration and Design, p. 12.

Third Month: A Study in Design and Construction.

1. Design, pp. 12 and 20.
2. Lettering, pp. 26 and 27.
3. Applied Design, p. 22.
4. Story Illustration, p. 14.

Fourth Month: Christmas Problem.

1. Plans, pp. 12, 20, 40.
2. Construction, pp. 5, 10, 40.
3. Applied Design, pp. 20, 22, 47.

Fifth Month: A Study in Form: Devices and Principles.

1. Drawing, pp. 28 and 29.

2. Object Drawing, pp. 2, 28, 29.
3. Object in Poster, pp. 2, 29, 38.
4. A Winter Landscape, pp. 8, 10, 38, 46.

Sixth Month: A Study in Costume and Color.

1. Costumes for Occasions, pp. 18 and 19.
2. Construction, p. 12.
3. Costume Design, pp. 18 and 19.
4. Costume Drawing, p. 16.

Seventh Month: Clothing and Costume: a Project.

1. Cloth, p. 35.
2. Cloth Costume, Manual.
3. Art of Dress, pp. 18, 19, 36.
4. A Wardrobe, pp. 12, 16, 40.

Eighth Month: Men and Nature.

1. Landscape, pp. 24 and 25.
2. The Story, pp. 14, 38, 46.
3. Travel, pp. 10 and 38.
4. The Home and Nature, p. 33.

Ninth Month: Design in Mounting and Placing.

1. Decorative Plant and Landscape, pp. 10, 36, 46.
2. Artistic Mounting, pp. 2, 16, 47.
3. Exhibits, pp. 30, 36, 38.

SEVENTH GRADE--BOOK 7.

First Month: A Study in Plant and Animal Life--Convention.

1. Instruction, pp. 4 and 5.
2. The Plant in Design, p. 5.
3. Insect Motives, pp. 6 and 7.

4. Trees, p. 8

Second Month: A Study in Color and Design.

1. Color Harmony, p. 47.
2. Design, pp. 20 and 21.
3. Landscape in Design, p. 10.
4. Illustration, p. 12.

Third Month: A Study in Design and Construction.

1. Design, pp. 20 and 22.
2. Lettering, pp. 26 and 27.
3. Applied Design, pp. 7 and 22.
4. Story Illustration, p. 14.

Fourth Month: A Christmas Problem.

1. Plans, pp. 7, 12, 22, 40, 46.
2. Construction, pp. 7, 12, 22, 40, 46.
3. Applied Design, pp. 6 and 22.

Fifth Month: A Study in Form: Devices and Principles.

1. Drawing, pp. 23 and 29.
2. Object Drawing, pp. 23 and 29.
3. Object in Poster, p. 30.
4. A Winter Landscape, pp. 8, 10, 36, 42.

Sixth Month: A Study in Costume and Color.

1. Costume and the Figure, pp. 18 and 19.
2. Construction, pp. 16 and 19.
3. Costume Design, pp. 16 and 17.
4. Costume Drawing, pp. 16 and 17.

Seventh Month: Design in the Home: A Project.

1. The Floor and Walls, pp. 32 and 33.

2. Design in Furniture, pp. 32 and 35.

3. The Art of Decoration.

4. The Display, See Manual.

Eighth Month: The Attitude of Man to Man.

1. Chivalry, pp. 24 and 25.

2. The Story, p. 14.

3. Consideration, p. 36.

4. A Poster, pp. 36 and 38.

Ninth Month: Design in Mounting and Placing.

1. The Flower, pp. 2 and 20.

2. Artistic Mounting, p. 47.

3. Exhibits.

EIGHTH GRADE--BOOK 8.

First Month: A Study in Plant and Animal Life--Convention.

1. Instruction, pp. 4 and 20.

2. The Animal in Design, pp. 6 and 7.

3. Fish Motives, p. 7.

4. Trees, p. 8.

Second Month: A Study in Color and Design.

1. Color, p. 47.

2. Design, Adaptation, p. 20.

3. Landscape in Design, pp. 20, 35, 46.

4. Illustration, p. 12.

Third Month: A Study in Design and Construction.

1. Design, pp. 7, 20, 22.

2. Lettering, pp. 26 and 27.

3. Applied Design, pp. 20, 22, 7.

4. Story Illustration, p. 14.

Fourth Month: A Christmas Problem.

1. Plans, pp. 12, 20, 22, 40.
2. Construction, pp. 20 and 40.
3. Applied Design, p. 47.

Fifth Month: A Study in Form: Principles and Design.

1. Drawing p. 28, also Manual.
2. Perspective, p. 29, also Manual.
3. Object pp. 28, 38, 36.
4. A. Winter Landscape, pp. 2, 8, 10, 22, 46.

Sixth Month: A Study in Costume and Color.

1. Historic Costume, p. 16.
2. Construction, p. 16.
3. Costume Design, pp. 16 and 18.
4. Costume Drawing, pp. 16 and 18.

Seventh Month: Civic Pride: The Home and Community--A Project.

1. House plans, pp. 33, 42, 43.
2. The Interior, pp. 2 and 29.
3. Exterior Decoration, pp. 32 and 33.
4. The Display, pp. 2, 10, 33, 36.

Eighth Month: The American Indian.

1. The Indian, pp. 24 and 25.
2. The Story, p. 14.
3. Illustration.
4. A Poster.

Ninth Month: Design in Mounting and Placing.

1. The Flower, pp. 4 and 26.
2. Artistic Mounting, p. 47.
3. Exhibits, p. 2.

(From the North Carolina Course of Study.)

The best results in writing will be secured when the teacher is familiar with the complete course. It is practically impossible to isolate the work of one grade from what has gone before and from that which follows it. The teacher must be familiar with the work of each grade and must recognize the difficulties which the child encounters in gaining coordination of muscular activities in every grade. The actual problems of the child must be recognized from grade to grade. He must be taught to observe standards of form carefully and to compare his product with the standards which he strives to attain in each exercise.

In teaching writing, stress these objectives in the order given:

1. Ease of execution, which includes muscular relaxation, correct writing position and movement.
2. Speed which should increase from grade to grade.
3. Legibility, practice under clear ideals of good form.
 1. USE OF BLACKBOARD.

To make a good beginning in writing and to insure progress, it is essential that all written work placed upon the blackboard should present correct ideals of form, arrangement and balance. It should be as nearly perfect as possible, according to The Hausam System of Plain Penmanship. All hastily written work by the teacher and all imperfect work of pupils should be erased as quickly as possible.

Children should be required to read only clear, legible script.

Place the alphabet, both capital and small letters upon the blackboard as a guide and reference when needed by the class. However, in teaching a lesson, use the board as a medium for showing, and make the forms as the children watch you make them.

- (a) Blackboard Practice. The writing of the beginner should be large, and it should be done with the arm as a whole rather than with the fingers. To meet these two requirements of size and movement, blackboard writing is most successful and is the best form with which to begin.
- (b) Chalk. Any length except a whole piece; about one-half stick is best. The chalk should rest between the thumb and the four fingers, hold so the fingers rest on top of chalk and the thumb underneath as a support. Turn chalk frequently in the fingers.
- (c) Position. Pupils should stand facing the board and nearly arm's length from the board.

C. POSITION AT THE DESK.

See that pupils are seated at desk the right height. In teaching position always consider health and efficiency. An upright, healthful position in writing usually leads to efficient work. All through the year pupils should be trained in the essentials of correct posture; such training is far more important than apparent immediate results. The

aim in each lesson in which children do any writing should be the establishing of a good position habit. Hygienic position is secured only by constant watchfulness during writing periods and other study periods. Right kind of training for hygienic position will lead to a good quality of work.

- (a) Feet. Flat on the floor and separated a little. In the upper grades pupils find it comfortable sometimes to advance one foot.
- (b) Body. Square front position, body inclined slightly forward from the hips, allowing the space of one or two inches between it and the table or desk. The distance of the eyes from the paper should be twelve or more inches, according to the size of the pupil. Backs should be straight.
- (c) Arms. The arms must be well up on the desk. They should be placed about evenly on the desk, so that they almost form a right angle. The elbows may or may not be on the desk.
- (d) Paper. As a rule the paper should be directly in front of the writer, but always placed where the hand can do the best writing. The paper should be tilted to the left until the lower edge makes an angle of about 30 degrees with the edge of the desk, and the writing should slope to the right from the vertical by the same amount. The forearm should form a right angle with the base line of the letters. The left hand holds and adjusts the paper so that the right

arm may keep in proper position.

- (e) Pencil or Penholder. The hand should be placed with the palm down so that the wrist does not slope more than forty-five degrees from the horizontal. The wrist should not touch the desk. The pencil or penholder should be held loosely between the thumb, forefinger, and second finger. Thumb is back of forefinger. Distance between forefinger and point of pen, one inch. The other end of pen points to the right shoulder. The hand should rest on the third and fourth fingers. The nails of the third and fourth finger glide freely over paper, making the same form as the pen.

When the children are taught the meaning of the directions to secure good position, the following counts may be given and the teacher should see that each direction is followed as the count is given. All directions should be given cheerfully: (1) feet flat; (2) back straight; (3) head up; (4) arms on desk; (5) paper tipped; (6) pen held lightly, and penholder pointing over shoulder. As the habit becomes fixed, at a given signal pupils should quickly assume correct posture.

Careful attention should be given to the needs of left-handed children in regard to position. Give attention to the back and eyes in judging position. It is best to train them to use the right hand, as

experience proves that this can be done easily and with far better results than by training the left; however, the left-handed child should be allowed to use the left hand if he shows a strong preference for using it and finds it difficult to use the right hand.

3. MOVEMENT DRILLS.

- (a) For Relaxation, Freedom and Position. To relieve tenseness of muscles, relaxation exercises, such as the following, are necessary and may be given several times during each lesson until the habit of "resting" or relaxing is fixed. Class stand, raise arms overhead, relax fingers, relax wrists, elbows and shoulders, drop as if lifeless to side. Repeat, relax fingers and wrists with arms at sides. Counting from one to ten in the above exercises helps the work. Class seated at desks, make a fist, placing the thumb over the first finger. The wrist and fingers do not touch paper or desk; the muscle of the forearm is the one point of contact. Practice the sideward swing movement, the push-and-pull movement, and direct and indirect ovals. With the hand opened out flat, the arm resting on the muscle of the forearm, practice the same four movements. When the hand is in writing position, the thumb is bent at first joint and the end of thumb is against the first joint of the first finger, the third and fourth fingers glide freely

on the paper. The upper part of the wrist is nearly flat. Practice the same four movements, as stated above. Practice the same four movements with the penholder in hand, no ink; pen touches the paper very lightly. Practice at the rate of 200 swings across the page and at the same rate for downward or circular motions a minute. Counting in good time is essential. In push-and-pull movement, pull toward center of body. In the sideward movement, swing the hand to the right, then to the left, making the over curve and then the straight line. This insures a free, continuous movement across the page.

(b) Exercise with Pencil or Pens. Practice sideward movement, push-and-pull movement, direct compact or a spiral oval and the indirect tracing oval. Two-space practice, then one-space. Practice m, u, l, j and o exercises; m and u and inverted l--first one space, and as freedom and control are gained, reduce in size till m, n, u and o are reduced to half space.

At the beginning and during the early stages, the writing movement should be divided into a series of units of movements, separated by brief stops. This is indicated by the counts given. The writing movement is not continuous and uniform in speed. The units should correspond to natural divisions in the form of the letters.

The downward strokes of the letters should be toward the body or nearly perpendicular to the edge of the desk. This produces a forward slant.

(c) Form and Movement. Form and movement must be practiced together if legibility and freedom are both to be obtained. Some lessons would necessarily emphasize movements, others form.

4. MOTIVATION OF HANDWRITING.

The work should be planned and directed as the needs of the child dictate; that is, as the child feels the need for the exercise to be given and a desire to accomplish something. There should be a felt need on the part of the child for learning to write the word suggested or to practice on letter form. This approach to the teaching of writing should be regarded carefully by the teacher. Create a situation in which the child in finding himself involved will turn every effort to mastery of whatever phase of writing is presented at the time. In the classroom work there arises daily certain situations out of which the need for writing comes. There are materials and products of class work which need labeling, words in explanation of illustrations or drawings, title of booklets, cuttings or games to be played by a group. Writing letters or invitations and making records of interesting events or projects in school work, etc., are other suggestions for motivating the writing in school.

5. THE WRITING PERIOD ON DAILY PROGRAMS.

The writing period should not come immediately after recess or after the physical exercise period. If possible, place the writing period after the music lesson, for the reason that the pupils are then more thoroughly relaxed.

ILLUSTRATIONS TO BE USED IN TEACHING WRITING.

POSITION.

These illustrations show the correct position of the arms on the desk; the correct placement of the paper on the desk and in relation to the position of the arms; the correct position of the hands, and the correct position of the pencil or penholder in the fingers.

C U T

HEADING.

This illustration shows the correct form of heading which should be written on the top line of each page of penmanship practice, except that in grades I and II it should be simplified by omitting all but the grade, date and name (perhaps using only the pupil's first name). Each pupil should write his or her grade and the actual date. Pupils in town schools should write the name of the town instead of the district. All pupils should write their names in their customary form; that is, first and last name, etc. The letters used should be the correct forms and pupils should be required to find these in their books and always use them. The heading should be considered as part of the lesson and should be written with great care. Neatness and order are two important virtues to be cultivated in the writing course.

C U T

CAPITAL LETTERS.

These capitals are arranged in the order of their pedagogic simplicity, and according to the principles involved in their construction.

C U T

O C E A K X H K Q Z X V U Y T F D P B R L S G I J

SMALL LETTERS, FIGURES AND SIGNS.

Few persons are trained to see script forms accurately from the writing standpoint. Most persons think of them only from the reading point of view. Success in penmanship teaching requires that pupils be taught to use the perfect letter at all times. It is the duty of teachers to perfect their own writing, that they may explain and set proper examples for pupils.

C U T

abeddd efghijklmnopqrstt uvwxys

1 2 3 4 5 6 7 8 9 0 \$ ¢

MERE-MOVEMENT DRILLS

Penmanship drills that are used for the purpose of movement training merely, as a means of establishing the arm-movement habit, are called "mere-movement drills." The first lessons in books IV, V, VI, and VII are of this nature. These lessons should be practiced rapidly, with very light lines, regularly and continuously, until the end in view has been attained. The first five lessons in books IV and V, the first six lessons in book VI, and the first three lessons

in book VII should be made two ruled spaces of the writing paper in height and four lines of work should be written on the page, leaving the first line under the heading blank and with blank spaces between the lines of work.

C U T

The above exercise should be practiced in both directions. It is called the compact, continuous oval drill. Light lines, uniformity and compactness are the chief objects to keep in mind.

C U T

This is called the compact straight-line drill. It should be practiced rapidly and continuously until the slant becomes uniform and established as a habit with the pupil. No particular slant is required. If the pupil uses a relaxed, free, rapid movement the slant will be physiologically determined and be correct for the pupil.

C U T

This is called the retraced link drill. It should be practiced in both directions, and each oval should be retraced from ten to twenty times. An expert penman can retrace the ovals one hundred or more times without producing a blurred or smeared effect.

The three drills given herewith, requiring that the two oval drills be made in both directions, comprise the mere-movement drills of the adopted writing books. In book VI the compact continuous oval is modified into a tapering exercise, and book VII the compact continuous oval and the

compact straight-line drills are to be made three spaces in height, but they constitute all the mere-movement drills given in the four movement books of the adopted series. Upon them hinges success in teaching arm-movement penmanship.

C U T S

- STANDARDS FOR GRADING SPECIMENS OF WRITING IN GRADE I.
- STANDARDS FOR GRADING SPECIMENS OF WRITING IN GRADE II.
- STANDARDS FOR GRADING SPECIMENS OF WRITING IN GRADE III.
- STANDARDS FOR GRADING SPECIMENS OF WRITING IN GRADE IV.
- STANDARDS FOR GRADING SPECIMENS OF WRITING IN GRADE V.
- STANDARDS FOR GRADING SPECIMENS OF WRITING IN GRADE VI.
- STANDARDS FOR GRADING SPECIMENS OF WRITING IN GRADE VII.
- STANDARDS FOR GRADING SPECIMENS OF WRITING IN GRADE VII.

REFERENCES FOR THE TEACHER.

Freeman: The Teaching of Handwriting.

Thorndike: Hand Writing.

ASSIGNMENTS OF STUDY IN PENMANSHIP.

SECOND GRADE--BOOK I.

The school district should provide a desk copy of "The Hausam System of Plain Penmanship, Complete," in order that the instruction in penmanship may be given in a systematic manner and good results secured.

Standard Scale for Grade, K., p. 92.

First Month.

Lessons 1-3. K., pp. 108-113.

Second Month.

Lessons 4-6. K., pp. 113-115.

Third Month.

Lessons 7-9. W., pp. 116-117.

Fourth Month.

Lessons 10-12. W., pp. 117-119.

Fifth Month.

Lessons 13-15. W., pp. 119-120.

Sixth Month.

Lessons 16-18. W., pp. 120-122.

Seventh Month.

Lessons 19-21. W., pp. 122-124.

Eighth Month.

Lessons 22-24. W., pp. 124-125.

Ninth Month.

Lessons 25-27. W., pp. 126-127.

THIRD GRADE--BOOK II

Standard Scale, W., p. 91.

First Month.

Lessons 1-3. W., pp. 128-131.

Second Month.

Lessons 4-6. W., pp. 131-132.

Third Month.

Lessons 7-9. W., pp. 132-134.

Fourth Month.

Lessons 10-12. W., pp. 134-136.

Fifth Month.

Lessons 13-15. W., pp. 136-138.

Sixth Month.

Lessons 10-19. P., pp. 138-140.

Seventh Month.

Lessons 19-21. P., pp. 140-141.

Eighth Month.

Lessons 22-24. P., pp. 141-142.

Ninth Month.

Review.

LESSON UNIT -- BOOK VII.

Standard Scale, P., p. 90.

First Month.

Lessons 1-3. P., pp. 143-144.

Second Month.

Lessons 4-6. P., pp. 144-145.

Third Month.

Lessons 7-9. P., pp. 145-146.

Fourth Month.

Lessons 10-12. P., pp. 146-147.

Fifth Month.

Lessons 13-15. P., pp. 147-148.

Sixth Month.

Lessons 16-18. P., pp. 148-149.

Seventh Month.

Lessons 19-21. P., pp. 149-150.

Eighth Month.

Lessons 22-24. P., pp. 150-151.

Ninth Month.

Review.

FIFTH GRADE—BOOK IV.

Standard Scale, N., p. 98.

First Month.

Lessons 1-2. N., pp. 157-159.

Second Month.

Lessons 3-4. N., pp. 159-160.

Third Month.

Lessons 5-6. N., pp. 160-161

Fourth Month.

Lessons 7-10. N., pp. 161-163.

Fifth Month.

Lessons 11-14. N., pp. 163-165.

Sixth Month.

Lessons 15-18. N., pp. 165-167.

Seventh Month.

Lessons 19-22. N., pp. 167-170.

Eighth Month.

Lessons 23-26. N., pp. 170-172.

Ninth Month.

Lessons 27-30. N., pp. 172-174.

SIXTH GRADE—BOOK V.

Standard Scale, N., p. 100.

First Month.

Lessons 1-2. N., pp. 174-177.

Second Month.

Lessons 3-4. N., pp. 177-178.

Third Month.

Lessons 5-6. M., pp. 178-179.

Fourth Month.

Lessons 7-10. M., pp. 179-181.

Fifth Month.

Lessons 11-14. M., pp. 181-183.

Sixth Month.

Lessons 15-18. M., pp. 183-185.

Seventh Month.

Lessons 19-22. M., pp. 185-187.

Eighth Month.

Lessons 23-26. M., pp. 188-190.

Ninth Month.

Lessons 27-30. M., pp. 190-192.

SEVENTH GRADE—BOOK VI.

Standard Scale, M., p. 102.

First Month.

Lessons 1-2. M., pp. 192-194.

Second Month.

Lessons 3-4. M., pp. 194-195.

Third Month.

Lessons 5-6. M., pp. 196-197.

Fourth Month.

Lessons 7-10. M., pp. 197-199.

Fifth Month.

Lessons 11-14. M., pp. 199-201.

Sixth Month.

Lessons 15-18. M., pp. 201-203.

Seventh Month.

Lessons 19-22. M., pp. 203-206.

Eighth Month.

Lessons 23-26. M., pp. 206-208.

Ninth Month.

Lessons 27-30. M., pp. 208-210.

EIGHTH GRADE--BOOK VII.

Standard Scale, M., p. 104.

First Month.

Lessons 1-2. M., pp. 210-212.

Second Month.

Lessons 3-4. M., pp. 213-214.

Third Month.

Lessons 5-6. M., pp. 214-215.

Fourth Month.

Lessons 7-10. M., pp. 215-217.

Fifth Month.

Lessons 11-14. M., pp. 218-220.

Sixth Month.

Lessons 15-18. M., pp. 220-222.

Seventh Month.

Lessons 19-22. M., pp. 222-224.

Eighth Month.

Lessons 23-26. M., pp. 224-227.

Ninth Month.

Lessons 27-30. M., pp. 227-229.

HYGIENE AND HEALTH

The topics outlined in this course may be adapted to any grade. The lessons may be presented at the opening exercise period or at a general period set apart for education in healthful living. The teacher may secure material from any source and present the lessons as informal talks. Older pupils may be given assignments on which to report after making suitable preparation. All children should be encouraged to take part in the general discussions at the proper time. The fifth and seventh grades have definite assignments.

Health habits must be formed if healthful living is to be realized. Use every opportunity to present the laws and principles of health so that children will understand and appreciate them.

The teacher must check the results of instruction from time to time in order to know that proper habits are being formed. By the pupils, to correct errors, to give helpful suggestions and to commend work well done.

Because people know more about the laws of health and the cause and prevention of disease, health conditions are better now than they ever have been in the past.

More than one hundred public-health nurses are employed in the city schools of Kansas, and over one-third of the counties employ one or more public-health nurses.

Clean, strong, happy, healthy children should be the product of the home and the school.

AIMS

(Adapted from the course of study for the elementary schools of North Carolina.)

I. To assure healthful living by

- A. The formation and practice of habits essential to health.
- B. The development of health conduct and care in the home, the school and the community.
- C. The acquisition of knowledge necessary to health.
- D. The development of right attitudes and ideals with regard to the value of health to society as well as to self, with a sense of responsibility for personal health and welfare as well as for the health of others.

APPROACH

I. Survey of the health conditions of the children and the school building.

A. Children.

- 1. Physical defects.
- 2. Condition of teeth, eyes, ears, nose, throat.
- 3. General physical condition.
- 4. Measuring and weighing.

B. School building and grounds.

- 1. Construction and equipment of school building.
- 2. Heating, ventilating, lighting, furniture, walls, etc., cleaning and care. (See Kansas Bulletin on standard schools.)

3. water supply and drinking facilities.
 4. Toilet facilities.
 5. Playgrounds.
11. Follow-up work in cooperation with the parents and the home.

A. Children.

1. Remedial treatment of physical defects.
2. Attention to ears, teeth, eyes , nose , throat.
3. Improving general physical condition.
4. Measuring and weighing regularly.

B. School building and grounds.

1. Making school building and equipment healthful.
2. providing
 - a. Pure drinking water and sanitary drinking facilities.
 - b. Adequate and sanitary toilet facilities, equipment and cleansing.
 - c. Clean and attractive school grounds.

111. School lunches.

- A. For nutrition and educational purposes. (Community projects. Not required by statute.)

IV. Health training and instruction.

- A. Health ideals, health habits, daily inspection.
- B. Health knowledge and instruction in healthful living in the home, the school, and the community.

V. Physical training.

- A. Systematic course in physical education throughout the school

- VI. Observation of the rules of hygiene in the school including the hygiene of instruction.
- VII. Making health teaching important by a place on the program and by including the results on the monthly report card.

First Month

1. Keeping clean and neat.

A. Instruction.

1. Why bathe the body.
2. How bathe the body. Importance of warm soap bath; clean individual wash cloth and clean towel; ears and neck, outside and inside creases, back of ears and neck.
3. When to bathe. A cool sponge or shower each morning before breakfast, rubbing the body to a glow with a rough towel in a warm room.
4. Hands. Washing thoroughly, using soap and warm water when needed. Do not use public towel. Time to wash hands.
5. Demonstrate proper care of nails.
6. Hair. Why keep clean. How to wash-- how often. Daily brushing and combing. Neatly arranged.
7. Teeth. Why keep clean. Neglect of first teeth may cause decay of second. Six year molars. Good teeth needed for chewing food and for speaking distinctly. How to clean. Use brush, paste and water. Food be-

Demonstrate "toothbrush drill". Children bring own toothbrushes. When to clean.

8. Nose. Care. Danger of soiled handkerchief. Blow nose gently. Avoid picking nose and sniffing. How to use handkerchief in sneezing and coughing. Inhaling washes not a good practice.
9. Elimination of waste. Importance of daily habit.
10. Clean clothes. Need of clean clothes. Care of clothing.

B. Habits.

1. Washing face ears and neck thoroughly daily.
2. A warm bath atleast twice a week.
3. Washing the hands.
 - a. Always before eating.
 - b. Always after going to the toilet.
 - c. Whenever dirty.
4. Keeping the finger nails clean and properly cared for.
5. Keeping the hair clean and well brushed and combed. Neatly arranged.
6. Brushing the teeth every night and every morning.
7. Care of the nose-- morning and night. Using a clean handkerchief during the day.
8. Daily movement of the bowels. Going to the toilet at definite times.
9. Wearing clean clothes, under and outer. Shoes free from dirt and well brushed, strings neatly tied.

Wipe muddy shoes before entering the house.

Note.- The teaching of health habits is greatly simplified by making use of the Modern Health Crusade, all supplies and materials for which are furnished free of charge to every Kansas teacher who writes to the Kansas State Tuberculosis Association, 210 Crawford Building, Topeka, Kansas.

Second Month

1. Eating and drinking properly.

A. Instruction.

1. What to eat. Arrange lists of suitable breakfasts, dinners, suppers, lunches. Candy best at end of meal. Investigate home conditions--food of individual children, especially as to tea and coffee. Provision made for helping undernourished children. Note food eaten by undernourished children. Find out what is done for undernourished children in other schools.
2. How to eat. Importance of cleanliness. Danger of exchanging partly eaten food.
3. What to drink. Importance of milk; amount. Tell how to make cocoa and "kettle tea" (HOT water with milk and sugar). Demonstrate and serve. Let second grade pupils write directions to carry home.
4. Water- when to drink. Never from public cup.
5. Demonstration. Table laid for meal; table manners; cheerfulness at table. Why?

B. Habits.

1. Proper food. Milk, cocoa, bread, cereals, eggs, green vegetables and fruit. No tea, no coffee.
2. Eating slowly and chewing well.
3. Washing hands before every meal.
4. Washing all fruits before eating.
5. Drinking plenty of water; before school; at recess; between meals; in the evening.
6. Using own drinking cup, pencils and other material.

Third Month

1. Breathing.

A. Instruction.

1. Deep breathing and breathing through nose. Give exercises daily.

B. Habits.

1. Breathe with lips closed. Take several full deep breaths of fresh air before going to bed and on rising in the morning.

11. Sleeping.

A. Instruction.

1. Amount of sleep needed. "Early to bed and early to rise, makes a man healthy, wealthy and wise."

Age	Hours of sleep.	Bedtime
4.....	12	7:30
7.....	11	7:30
9.....	10½	8:00
10-12.....	10	8:00
12-14.....	9	8:00
14-16.....		9:00
16-18.....		9:00

B. Habits.

1. Sleep in a room with windows open.
2. Sleep the number of hours required for your age.

Fourth Month

1. Sitting, standing, walking?

A. Instruction.

1. How to sit stand and walk well.
2. When. Importance of habit.
3. Demonstrate. Show posture pictures.

B. Habits.

1. Sitting, standing and walking erect.

11. Exercising.

A. Instruction.

1. Work. Children's activities.
2. Play. Open air. Daily games and exercises for school and home.

Lib. Ref. Boys and Girls of Wake-up Town.

B. Habits.

1. Doing chores and running errands at home.
2. Play and exercise in the open air,
 - a. Every day at recess.
 - b. After school atleast one hour.

Fifth Month

1. Eyes.

A. Instruction.

1. Correct position in reading.
2. Light. Care of eyes.

(Chart for testing vision may be procured free of charge
 Kansas State Tubercular Association, 210 Crawford building,
 Topeka, Kansas.)

B. Habits.

1. Right use of eyes.

11. Handkerchief.

A. Instruction.

1. Why carry it every day and use it all day.
2. Daily inspection. Teacher should have on hand hem-
 med pieces of lawn to supply children who fail to
 bring handkerchiefs.
3. Paper handkerchiefs may be purchased by the board
 and destroyed after use.

B. Habits.

1. Use of handkerchief in care of the nose.
2. Use when coughing or sneezing.

Sixth Month

1. Keeping hands from face.

A. Instruction.

1. Why. Effect of putting things in mouth.
2. Daily inspection.

B. Habits.

1. To prevent nail biting.
2. To prevent thumb sucking.
3. To prevent putting pencils and other unclean things
 in mouth.
4. To prevent scratching face or picking pimples.

Seventh Month

1. Drinking cups, pencils and other materials.

A. Instruction.

1. Importance of using individual cups, pencils, combs and materials.
2. Provision made and plan carried on for use of individual drinking cups (when no drinking fountains) and pencils throughout the school. Fold cup out of paper.

B. Habits.

1. Abhor and avoid the public cup.
2. Use your own cup, pencil and material.

Eighth Month

1. Protection.

A. Instruction.

1. Importance of extra clothing when out of doors.
2. Removing wet clothing. Wearing Rubbers.
3. Teacher responsible for children putting on wraps when going out of doors and removal in schoolroom.

B. Habits.

1. Wearing extra clothing out of doors.
2. Removing rubbers and outer wraps in schoolroom and home.
3. Removing wet shoes and stockings.

Physiology.
Seventh Grade.
Foods and Drinks

1. Food.

A. Kinds.

1. As to source.

- a. Vegetables
- b. Animals
- c. Minerals

2. As to composition.

- a. Proteids: source and function.
- b. Carbohydrates: source and function.
- c. Fats: source and function.
- d. Vitamines: A, B, and C: source and function.

B. Digestion.

1. Mechanical processes.

- a. Mouth: mastication, insalivation, deglutition.
- b. Stomach: peristalsis.
- c. Intestines: peristalsis.

2. Chemical.

- a. Mouth: saliva, ptyalin.
- b. Stomach: gastric juice, pepsin, hydrochloric acid.
- c. Intestines: Bile, pancreatic and intestinal juices; properties and function of each.

3. Time required to digest foods. pp. 35-36.

C. Cooking-- purposes.

1. Meats: boiling, roasting.
2. Vegetables.
3. Bread.
4. Pastry.

D. Adulteration of foods.

1. Sugar, sirup, candy.
2. Dyes.
3. Milk.
4. Butter from lard, tallow and cotton-seed oil.
5. Cocoa, coffee, flour.
6. Bread.

E. Diseased foods. Harmful foods. Partial Starvation.

F. Definition of food.

11. Drinks.

A. Water.

1. Uses.

- a. To quench thirst.
- b. To cleanse tissues.
- c. To keep body temperature normal.

2. Contamination by

- a. Location of well.
- b. Germs: Note size, shape, growth, destruction.
- c. Other organisms.
- d. Minerals: lime, soda, lithium, iron, potash, sulphur.

3. Poisoning by lead and zinc.

4. Purification. Problem : How may a city like Topeka get good drinking water?

B. Adulterated beverages.

C. Tea and Coffee.

1. Use of each.
2. Stimulant in each.
3. Adulteration.

D. Alcoholic beverages.

1. Beer, ale, wine, cider, gin, brandy, whisky, "hooch"
2. Home-brew and distillates.
3. Denaturation.

III. Temperance. (Exercise of moderation in all appetites.)

A. In eating

1. Cake, pudding etc.
2. Between meals.
3. Provide rest for the stomach.

B. Alcohol.

1. Habit.
2. Effect Of alcohol
 - a. On temperature of body.
 - b. On tissues.
 - c. on nerves.
 - d. On physical training.
 - e. On mental growth.
3. Poison
4. Stimulant.
5. Use unnecessary.

6. Not a food. Why?

6. Tobacco?

1. Injurious to youth. Effects on

- a. Growth.
- b. Nerves.
- c. Appetite.
- d. Eyes.
- e. Heart.

2. Habit.

- a. Loathsome.
- b. Expensive.

3. Statistics. 4.

4. Cigarettes.

- a. Drugged with opium (?)
- b. Paper poisonous (?)
- c. Testimony of Chicago principal.

The Body.

1. Skin. Definition.

A. Structure.

1. Epidermis: cuticle, scarf skin. Discuss,

- a. Nerve relations.
- b. Function.
- c. Pigment.
- d. Area: $17\frac{1}{2}$ square feet.
- e. Pores.
- f. Blister.

2. Dermis.

a. Nerves and blood vessels.

b. Use.

c. Muscles.

d. Glands.

(1) Sweat.

(2) Oil.

B. Modifications.

1. Hair

a. Structure.

b. Number.

c. Color.

d. Baldness.

e. Care.

f. Use.

2. Nails.

a. Structure.

b. Use .

c. Care.

d. Hangnails.

3. Warts.

4. Corns.

C. Uses.

1. Protection.

2. Elimination.

3. Breathing.

4. Temperature.

5. Prevent colds.

D. Bathing.

1. Frequency.
2. Purpose.
3. Effects.
 - a. On lungs.
 - b. On kidneys.
 - c. on self-respect.

E. Clothing.

1. Amount.
2. Kind.
3. Tight-fitting garments; shoes.

KIDNEYS

I. Kidneys

A. Structure.

1. Size.
2. Shape.
3. Number.

B. Use

1. To eliminate poisons.
2. To assist skin in elimination.

C. Diseases.

OSSEOUS SYSTEM

I. Bones

A. Skeleton.

1. Skull.
2. Trunk.
3. Arms.

4. Legs.

B. Structure and shape.

1. Long.
2. Flat.
3. Irregular.

C. Uses.

1. Protection of delicate organs.
2. Levers for muscles.
3. Give shape to the body.

D. Growth and nourishment. Discuss

1. Periosteum.
2. Milk for children.

E. Composition.

1. Animal matter.
2. Mineral matter.

F. Care.

1. Protection of the body.
2. Adjustable seats.
3. Broken bones.
4. Sprains.

MUSCLES

I. Definition.

II. Kinds

A. As to form

1. Spindle-shaped.
2. Fan-shaped.
3. Feather-shaped.

4. Biceps, triceps.

5. Orbicular.

B. As to structure.

1. Striped.

2. Nonstriped.

C. As to control

1. Voluntary.

2. Involuntary.

D. As to attachment

1. Skeletal.

2. Visceral.

III. Attachment.

A. To bones directly.

B. To other muscles.

C. By tendons to bones.

IV. Use to produce motion.

V. Care.

A. Exercises.

B. Rest.

C. Inactivity.

D. Nourishment.

VI. Alcohol and muscular activity.

BLOOD

I. Definition.

II. Composition.

A. Corpuscles.

1. Red; size, shape, number, use.

2. White; size shape number, use.

B. Plasma.

C. Serum.

III. Circulation.

A. Organs.

1. Heart.

a. Structure.

b. Circulation through heart.

c. Beats, rests, sounds.

d. Alcohol and heart.

e. Tobacco and heart.

2. Arteries.

3. Veins.

4. Capillaries.

5. Valves; structure, use, location.

B. Purpose.

1. To distribute food.

2. To remove waste.

3. To regulate temperature.

C. Systems.

1. Pulmonary.

2. Systemic.

3. Portal.

D. Bleeding: First aid.

1. From artery, p. 244.

2. From vein, p. 244.

3. From nose, p. 243.

E. Pulse

1.

1. Fever.

2. Fainting.

Lymphatic System.

I. Parts

A. Lymph spaces.

1. Size.

2. Distribution.

B. Lymph tubes.

1. Location

2. Valves

3. Thoracic duct.

C. Lymph glands.

1. Location.

2. Function.

D. Lymph.

1. Source.

2. Composition.

3. Circulation.

II. Function.

A. To distribute food.

B. To take up waste.

III. Disease.

A. Dropsy.

B. Alcohol.

IV. Care.

A. Exercise.

B. Massage.

Spleen

- I. Definition. Size, shape, location, color, variations, texture, gland, function.

Breathing.

I. Purpose.

- A. To supply oxygen.
- B. To remove waste.
- C. To aid oxidation.

II. Organs.

A. Lungs.

1. Location.

2. Parts.

- a. Bronchi.
- b. Bronchial tubes.
- c. Air cells.
- d. Cilia.

3. Inhaling.

- a. Action of intercostal muscles and ribs.
- b. Action of diaphragm.

4. Exhaling.

5. Pleura.

B. Trachea: structure.

C. Voice-box: structure; vocal cords.

D. Nostrils: pharynx; soft palate.

E. Epiglottis: function.

IV. Care.

- A. Loose clothing.
- B. Fresh and foul air compared.
- C. Deep breaths.
- D. Nose and mouth-breathing compared.
- E. Ventilation.
- F. Adenoids.
- G. Dust.
- H. Cleanliness of room.
- I. Effects of alcohol.

Nervous System

I. Parts.

A. Brain.

1. Cerebrum.

- a. White and gray matter.
- b. Fissures and convolutions.
- c. Blood supply.
- d. Coverings, size, weight.
- e. Functions.
 - (a) To receive sensory messages.
 - (2) To send motor messages.

2. Cerebellum.

- a. White and gray matter.
- b. Fissures, arbor vitae.
- c. Size.
- d. Functions.
 - 1. To preserve equilibrium.

(2) To coordinate muscular activity.

3. Medulla oblongata.

a. Location and description.

b. Functions.

(1) To convey messages.

(2) To control involuntary muscles.

(a) Breathing.

(b) Sneezing.

(c) Swallowing.

B. Spinal cord.

1. Location, size, length, position.

2. White and gray matter.

3. Parts.

a. Nerve cells.

b. Nerve fibers.

4. Functions.

a. To carry sensory messages to the brain,.

b. To carry motor messages from the brain.

c. To originate motor messages (reflex).

C. Nerves.

1. Kinds.

a. Sensory.

b. Motor.

2. Structures.

a. Cell.

b. Fiber.

c. Ganglion.

3. Messages.

a. Of sound, 250 feet per second.

b. Of pain, 26 feet per second.

II. Headaches.

A. Causes.

1. Poor blood.

2. Indigestion.

3. Ear diseases.

4. Eye strain.

5. Fatigue poison.

B. Relief.

III. Rest, sleep, dreams.

IV. Habit.

A. Nature and definition.

B. Use and formation of habits.

C. Habit as basis of character formation?

EYES

I. Eye, definition.

A. Parts. Draw ideal section.

1. Sclerotic coat.

2. Choroid coat.

3. Cornea.

4. Iris.

5. Pupil.

6. Lens.

7. Vitreous humor.

8. Aqueous humor.

9. Conjunctiva.

10. Blind spot.

B. Movements.

C. Tears.

1. Use.

2. Discharges.

D. Defects.

1. Crosseyed.

2. Nearsightedness.

3. Farsightedness.

4. Cataract.

5. Pterygium.

E. Care.

1. In school.

2. Out of school.

3. Print. (Long Primer*).

* The name of the type that is best for all reading purposes set in the parenthesis.

4. Testing the eyes.

The Ear.

I. Ear. Definition.

A. Parts.

1. External.

a. Concha.

b. Use.

c. Earwax.

d. Auditory canal.

e. Eardrum.

2. Middle ear.

a. Bones: hammer, anvil, stirup.

b. Eustachian tube.

(1) Adenoid obstruction.

c. Use.

3. Inner ear.

a. Vestibule.

b. Semicircular canals.

(1) Position.

(2) Contents.

c. Cochlea.

(1) Use.

(2) Auditory nerve.

B. Care.

1. Removal of wax etc.

2. Temporary deafness .

3. Hearing tested.

The Teeth

I. Structure.

A. Parts.

1. Crown.

2. Neck.

3. Fang.

B. Composition.

1. Enamel.

2. Dentine.

3. Cement.

4. Pulp.

II. Kinds.

A. As to appearance

1. Temporary.

2. Permanent.

B. As to use

1. Incisors.

2. Canines.

3. Bicuspids.

4. Molars.

a. Wisdom teeth.

C. False teeth.

III. Care.

A. Cleanliness.

1. Brush regularly.

2. Use wood picks.

3. Teeth examined by dentist.

4. Cavities filled.

DISEASE GERMS

I. Bacteria. Definition.

A. Size, number.

B. Form.

1. Rod-shaped.

2. Coccus.

3. Spiraliform.

D. Relation to disease.

D. Where found.

1. In air.
2. In water.
3. In milk.
4. In food.
5. In filth.

E. Diseases.

1. Consumption. Tuberculosis.
2. Typhoid fever.
 - a. Water supply.
3. Grippe.
4. Diphtheria.
5. Cholera.
6. Erysipelas.
7. Pneumonia.
8. Bubonic plague.
9. Lockjaw.
10. Leprosy.

F. Conditions favoring disease germs.

1. Impure air.
2. Uncleanliness.

G. Disease germs transmitted.

1. Chicken pox.
2. Measles.
3. Whooping cough.
4. Scarlet fever.

5. Influenza.

6. Diphtheria.

H. Period of incubation.

I. Destruction of bacteria.

1. Chemical nature of plasm.

2. White corpuscles.

3. Sanitation.

4. Antitoxin.

5. Vaccination.

6. Disinfectants.

a. By fire.

b. By dry heat.

c. Chemical poisons.

Diseases of Modern Life.

I. Occupational diseases.

A. Chronic lead poisoning.

B. Chronic arsenic poisoning.

C. Chronic mercury poisoning.

D. Nicotine tabes.

E. Caisson disease.

F. Bronchitis.

G. Empyema.

II. Alcoholism.

A. General results.

1. Weakens resistance to disease.

2. Weakens will power.

3. A cause of insanity.

4. A cause of paralysis.
5. Causes dipsomania.
6. Causes delirium tremens.
7. Causes chronic catarrh of stomach.
8. Causes liver to harden. (cirrhosis).

B. Specific effects.

1. On heart.
2. On blood vessels.
3. On the blood.
4. On the kidneys.
5. On the skin.
6. In the lungs.
7. On the muscles.
8. On the sense organs.

III. Narcotics.

A. Morphine.

1. Preparations.
 - a. Gum opium.
 - b. Laudanum.
 - c. Sulphate of morphia.
 - d. Paregoric.
 - e. Heroin.

B. Cocaine.

C. Tobacco.

1. Cigarette habit.
 - a. Effect on young.
 - b. Purpose of cigarette law.

IV. Patent medicine.

- A. Habit.
- B. Cost.
- C. Opiates.
- D. Alcohol.

Physical exercise.

I. Results of proper exercise.

- A. Stimulates symmetrical growth.
- B. Develops skill.
- C. Incites normal activity of organs.
- D. Develops poise of body.
- E. Stimulates mental activity.

II. First period, 6 to 9 years.

- A. Aims.
 - 1. To stimulate growth.
 - 2. To form blood.

B. Place.

- 1. In open air.

C. Kind.

- 1. Enjoyable plays and games.

III. Second period, 9 to 14 years.

A. Aims.

- 1. To form blood.
- 2. To establish easy carriage of body.
- 3. To establish graceful walking.

B. Kinds.

- 1. Dancing, marching, military drill.

2. Place.

- a. In open air.
- b. In gymnasium.

3. Games.

- a. Race-tag.
- b. Prisoner's base.
- c. Baseball.

IV. Third period, 14 to 20 years.

A. Aims.

- 1. To incite heart and lungs to strong activity.
- 2. To develop skill and alertness.

B. Kinds.

- 1. Short races, running, jumping, rowing.
- 2. Games.
 - a. Baseball, football, basket ball, tennis,

V. Fourth period, 20 to 30 years.

A. Aims.

- 1. To develop endurance.
- 2. To develop strength.

B. Kinds.

- 1. Military drill.
- 2. Football.
- 3. Boxing.
- 4. Wrestling.
- 5. Hockey.
- 6. Swimming.

VI. Gymnastics and games compared.

VII. General suggestions, pp. 236-241.

- A. "Adivision of physical education is now included in the state department of education of Alabama, California, Connecticut, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Misspuri, New Jersey, New York, Pennsylvania, Virginia, Washington, and West Virginia. These sixteen states contain half the population of the country." - Clip sheet Department of Interior, November, 1925.

First Aid

I. Fainting

A. Cause.

B. Treatment.

II. Suffocation.

A. Cause.

B. Treatment.

III. Bleeding.

A. From nose.

1. Cause.

2. Treatment.

B. From artery.

1. Detection.

2. Treatment.

C. From veins.

1. Detection.

2. Treatment.

IV. Foreign bodies.

- A. In ear.
- B. In nostrils.
- C. In eye.

V. Burns.VI.

VI. Bee stings.

VII. Burning clothing.

VIII. Sunstroke.

IX. Broken bones.

X. Frostbite

XI. Drowning.

A. Treatment.

- 1. Rule 1.
- 2. Rule 2.
- 3. Rule 3.

PRIVATE AND PUBLIC SANITATION.

I. Boards of Health.

A. Classes.

- 1. City.
- 2. County.
- 3. State.

B. Duties.

- 1. Isolate patients.
- 2. Quarantine patients.
- 3. Disinfect.
- 4. To promote health publicity.
- 5. Health education.

II. Disease.

A. Carriers.

1. Fly.

- a. Life history.
- b. Habits.
- c. Enemies.
- d. Infection of food.
- e. Prevention.

- (1) Screens.
- (2) Flytraps.
- (3) Swatters.
- (4) Flypaper.
- (5) Epigrams.
- (6) Destroy hatcheries.

Library references: DuPuy: Our Insect Friends and Foes, pp. 177-190.

2. Mosquito.

- a. Life history.
- b. Kinds.

- (1) Anopheles (malaria).
- (2) Stegomyia fasciata (yellow fever).

Library references: DuPuy: Our Insect Friends and Foes, pp. 190-203.

B. Garbage.

Library references: The Black Death, 1349; History Stories of Other Lands, vol. IV, p. 207.

III. Food inspection.

A. Purpose.

B. Laws.

C. Results.

1. Clean milk.

2. Less adulterated food.

3. Epidemic checked.

IV. Water supply.

A. Source.

B. Purification.

C. Epidemics.

D. Common drinking cup.

E. Common towel prohibited.

1. In schools.

2. In hotels.

3. In railroad trains in Kansas.

V. Air contamination.

VI. Colds.

A. Cause.

B. Prevention.

VII. Plumbing and sewage.

FARM SANITATION.

I. Sanitary conditions.

A. Location of house.

B. Water supply.

C. Outside toilet.

D. Barn.

II. Care of milk.

COMMUNICABLE DISEASES.

I. Tuberculosis.

A. Statistics.

B. Nature of disease.

C. Prevention.

1. Care of sputum.
2. Isolate patient.
3. Abundant fresh air.
4. Cleanliness.
5. Sunlight.
6. Even temperature.

D. Consumption (tuberculosis) curable.

II. Diphtheria and membranous croup.

A. Symptoms.

B. Cause.

C. Prevention.

D. Treatment.

E. Disinfection. (p. 299)

1. Disinfectants. (p. 321)

III. Typhoid fever.

A. Cause.

B. Spread of the disease by--

1. Polluted water.
2. Infected milk.
3. Ice for polluted water.
4. House flies.
5. Personal contact.

6. By mild cases, etc.

C. Period of incubation, 10 to 14 days.

D. Care of patient.

E. Not contagious in general sense.

IV. Scarlet fever.

A. Symptoms.

B. Prevention.

1. Complete isolation.

2. Destroy everything that comes from patient.

C. Sick room.

1. Attendants.

2. Cautionary measures.

V. Smallpox.

A. Symptoms.

B. Eruption, drying and peeling.

C. Vaccination.

D. Isolation.

1. Suspects.

2. Cases.

E. Fumigate.

VI. Measles.

A. Nature.

B. Cause.

C. Period of incubation.

D. Eruption.

E. Complications.

F. Treatment.

1. Call a physician.

G. Prevention.

VII. Whooping cough.

- A. Dangerous to early childhood.

- B. Nature and cause.

- C. Spread of disease.

- D. Stages of disease.

- E. Treatment.

1. Call a physician.

2. Parent should protect young child from exposure to disease.

VIII. Disinfectants.

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ASSIGNMENTS OF STUDY IN PHYSIOLOGY.

(Primary Physiology: Hygiene and Sanitation.)

First Month, pp. 1-32.	Sixth Month, pp. 147-171.
Second Month, pp. 33-65.	Seventh Month, pp. 172-188.
Third Month, pp. 66-92.	Eighth Month, pp. 189-214.
Fourth Month, pp. 93-120.	Ninth Month, Review.
Fifth Month, pp. 121-146.	

SEVENTH GRADE.

(Graded Lessons in Physiology and Hygiene.)

First Month, pp. 9-45.	Sixth Month, pp. 175-227.
Second Month, pp. 46-53.	Seventh Month, pp. 228-278.
Third Month, pp. 64-93.	Eighth Month, pp. 279-320.
Fourth Month, pp. 94-124.	Ninth Month, Review.
Fifth Month, pp. 125-174.	

NATURE STUDY

By Lyman D. Wooster.

Lead your child out into Nature,
Tutor him on the hilltop and in the valley,
There will he listen better, and the sense of freedom
will give him strength to overcome difficulties.

Pestalozzi.

NATURE STUDY IS NEEDED IN OUR SCHOOLS.

The desire to know the world about us is instinctive. And an instinct is something which has been found by Nature to be so important and valuable to the race that it has been made a part of the very warp and woof of us, so to speak. It gives us the desire to be and do things which we need to be and do, but which we alone might not have sense enough to see. These instincts give the initial impetus; it is up to us to develop them and make the most of them.

It is evident to any observer that Nature has found it tremendously important that we learn as much as possible about the facts and laws of the universe in which we live, for Nature has given us an instinctive and intense desire to learn all we can about such things. When one stops to think of it, it is probably one of the most fundamental things which we need to know.

To live most efficiently nowadays, a man needs to know reading, writing, arithmetic, etc.; but to be able to live at all he must know something of the facts and laws of his life and force of his surroundings.

Man has established schools in order that he may learn what he needs to know more effectively than he would alone. And this knowledge of his surroundings, with which he must live and deal all his days in a most vital way, is perhaps the most fundamental thing which the school can help him to learn. And so it is that eminent educators agree that such study should be in all elementary schools.

G. Stanley Hall, the late great child psychologist, even went so far as to say that "Nature study is the fundamental subject matter of education; and elementary education which does not include nature study is not true elementary education."

Nature study is not required by law, and in many respects we hope that it never will be, because it would thus lose much of its spirit of freedom and natural interest and spontaneity. And this spirit is characteristic and desirable.

But we do hope that more and more the teachers of the state will catch the idea and the spirit of nature study and use it, for we know that once they have caught the spirit of it and used it they will never be without it.

WHAT IS NATURE STUDY?

Nature study, as far as the pupil is concerned, is just his natural interest in and study of nature. There are a "thousand and one" things about him every day about which he wants to know. And he wants to know them when he wants to know. That's part of the instinct of the thing. He does

not know why he wants to know; he just wants to know; and that is reason enough.

Nature study, as far as the teacher is concerned is sympathetic attention to these nature interests of children. Attention by watching for the natural interests of children, and encouraging them; by calling attention to a new bird, or an eclipse of the moon about to occur, or a snowflake, or a flower, or a fossil, etc.; by asking a question which requires observation for an answer; in other words, by keeping the thing in mind and watching for opportunities, but letting the children apparently initiate as much of it as possible.

WHEN CAN WE HAVE NATURE STUDY?

Nature study, even of the most desirable sort, does not necessarily need to have time on the school program. Nature study is a study of nature and goes on all the time. If a child comes to the teacher before school and reports seeing a badger in a field near the road, that is nature study. If the children look at the snowflakes which fall on their coat sleeves and count the points to see if all snowflakes have the same number of points, that is nature study. If a boy reports that he has found evidence that a barn owl is eating the rats and mice around the grain elevator, that is nature study. If these observations lead to further observations and questions, that is still better nature study. And it may not take up a moment of the regular school hours.

Sometimes teachers find that there can be no accident.

opening exercise period for pupils to report and discuss what they have observed. Sometimes a teacher finds that he can use fifteen minutes in the school program two or three times a week for such things. And then the teacher and pupils find that many of the nature items which they discover and discuss fit naturally and effectively into geography, or reading, or drawing, or language. And so the subject grows and develops in its stimulating effects, and the teacher finds that instead of using up valuable time, it actually makes the use of time more effective.

SHALL WE GIVE ASSIGNMENTS IN NATURE STUDY?

The children largely do their own assigning. When a question is asked by a child which he really wants to know, he not only has made himself a real assignment, but he has unconsciously made an assignment for many or all of the other children in the school, and perhaps for the teacher, too. Assigned lessons in the usual sense of the term are out of keeping with the spirit of nature study. In fact they are not necessary. The same may be said of credits and grades. The thrill of it all is reward enough for the children. Would that all school work might be run on that basis.

WHAT IS THE EFFECT OF NATURE STUDY ON A SCHOOL?

The effect of real nature study on a school is so helpful that very few teachers who have tried it would be without it. It furnishes a natural interest which permeates all the school work and makes it more vital and stimulating. It therefore removes much of the reason for the stress and

Strain which is so wearing on the teacher and pupils.

Nature study often furnishes a point of contact between the teacher and the boys, for instance, who cause trouble. Most of the trouble in a schoolroom arises from a lack of mutual understanding. When a boy finds that his teacher is interested in real live things, as well as in books, he feels better toward the teacher, and the teacher finds that the boy isn't so bad after all.

HOW SHALL WE START NATURE STUDY?

Nature study starts in just the simple, natural ways of the boy or girl in his own yard. Something is discovered; a question arises; new things are learned, and they lead to other questions and problems, and so it grows. We suggest a few sources of opportunity:

1. Watch for the natural interests of boys and girls, and then pay some attention to them. Show your interest in their interests. Watch particularly for their questions, and make the most of them.
2. Encourage the children to report the interesting things which they observe around the home yard, and in going to and from school.
3. Encourage them to bring in specimens. Have a place for the specimens, a museum corner, a table, a "nature corner." The mere fact that a place is arranged to place these things will start many a valuable study.
4. Bring in something of interest yourself. Keep your own eyes open for things of interest in nature, and report

them.

5. Ask a question which has occurred to you--perhaps something which you really have wondered about and want to know.

6. Start a nature diary in the schoolroom, either as a room, or as individuals. This alone may be the starting point for excellent nature study.

7. It is easy to find obstacles in the way of starting nature study, just as it is in anything else. But it is the person who finds obstacles who never does anything. Anyone can find obstacles. Also, anyone can start nature study.

ARE THERE OUTLINES OF NATURE STUDY?

There are two outlines of nature study: (1) nature, (2) children. Watch nature, and watch children. There is no other outline as good as these. In fact there is no other outline for real nature study.

The following outline is to be used as a suggestive help and not as a fixed form to be followed verbatim. It is concise rather than complete. It is a convenience--a thing to be used rather than followed.

OUTLINE FOR NATURE STUDY.

I. Approximate characteristics of child development of grades I and II. Keen senses. Great curiosity. Perpetual questioning. Collecting odds and ends. A wide range of transitory observational interests. Broad interests in activities of animals, plants and physical phenomena.

A. First grade.

1. Autumn. It is important here as elsewhere to answer children's many questions and to call attention to things of interest in nature; as birds, flowers, insects, weather. Collect autumn leaves (avoid poison ivy).
2. Winter. Keep in the schoolroom, in all grades, things of interest; an aquarium, house plants, collections, etc. Connect stories with nature. Observe snowflakes.
3. Spring. Encourage children to report things of interest in nature as seen or heard (this applies to all grades). Watch for return of robins, early flowers, tree buds and leaves.

B. Second grade.

1. Autumn. What birds can the children name? flowers? trees? Make a collection of crop seeds. Study autumn fruits and lead up to Thanksgiving. Keep snails in a jar of water.
2. Winter. Where do the birds go in winter? Other animals? Find North Star and the Big Dipper and Little Dipper. Keep a magnet in the schoolroom, for the children to play with.
3. Spring. Watch for the coming birds. Learn to recognize several birds, also wild flowers. Study apple blossoms. Observe butterflies.

II. Approximate characteristics of child development of

Grades III and IV. Observational interests a little more in detail. Collecting for a purpose. Rational questioning. Interest in pets, exploring, stories of wonder. Testing of senses by handling, measuring and comparing. "What is it for?" stage.

A. Third grade.

1. Autumn. Feed some caterpillars until they form chrysalises or cocoons. Keep over winter. Learn to recognize poison ivy. Collect interesting seed vessels and fruits. Make a special study of an apple. Observe insects.
2. Winter. Study house fly and mosquito. Why harmful? Study evergreens, holly and mistletoe before Christmas. Find Orion. Tell the story. Germinate some seeds late in the winter.
3. Spring. Make wren houses. Observe Arbor and Bird Day. Watch for butterflies and moths to come out of chrysalises and cocoons. Keep a record of the return of the birds.

B. Fourth Grade.

1. Autumn. Find mushrooms and tree and plant diseases. Collect insect work. Make a shadow stick. Begin observations. Kinds of clouds. Phases of moon.
2. Winter. Continue shadow-stick observations. Learn to recognize kinds of wood. Study grain of wood. Keep a magnifying glass in the schoolroom.

names of parts of flowers. Study tulips, violets, etc. Record the nesting of the birds.

III. Approximate characteristics of child development of grades V and VI. Period of keen observation. Curiosity deeper. Interest in woods, adventure, nature, homes for pets, houses for birds, homemade aquariums, collection cases, etc. Economic values begin to interest. The "Why" and "How" stage.

A. Fifth grade.

1. Autumn. What do the birds eat? What ones do the most good? Start an ant hill in a jar. Observe turtles, frogs, etc. Keep a weather record. Collect weed seeds.
2. Winter. Continue weather record. Study coal and collect minerals. Study a snowflake. Number of points? Winter buds of trees. Morning and evening stars. (See an almanac.)
3. Spring. Watch winter bud development. Which are leaf and which are flower buds? Find stamens and pistils of elm, ash, box elder, mulberry, cottonwood. Find frog's eggs and hatch in a jar of creek water.

B. Sixth grade.

1. Autumn. Life cycles of insects. Structure of insects; number of legs, wings, etc. Eight or ten chief groups (orders) of insects. Find insect galls and other insect work. Harmful and helpful

insects?

2. Winter. Learn to recognize a few constellations. Study planets, size, distance, motions. Watch almanac for eclipses. Make a bird nest census. Test crop seeds for vitality.
3. Spring. Grow vegetable gardens. Start tomatoes in the schoolroom. Hatch chickens. Relation of insects to gardens and fruit. Relation of birds to gardens and fruit.

IV. Approximate characteristics of child development of grades VII and VIII. Keen observation continued and more systematic. More interest in experiment, classification, and principles of science. More constructive skill. Sense of beauty. Nature has new interests. "General Science" interest more pronounced. How things work.

A. Seventh grade.

1. Autumn. Learn to recognize plants by families and by common names. Gather weed seeds and name them. What weeds are particularly harmful? Why? Make cases for seed collections.
2. Winter. Gather samples of soil, and display in bottles. Study kinds of stones and minerals. Magnetism and electricity. Lightning and thunder. Cause of rain and snow and hail?
3. Spring. Pollination and fertilization of flowers. Grafting and budding. How fruits are produced.

Tree diseases and other examples. How to...

Machinery.

B. Eighth grade.

1. Autumn. Classify animals. Classes of vertebrates; of invertebrates. Social animals; bees, ants, wasps. Survival of the fittest. Plant and animal history. Mechanical interests.
2. Winter. Bacteria, yeast and molds. Health, hygiene and sanitation. Evergreens. Make aquariums. Study fishes and other animals in aquarium. Light, sound, heat, etc.
3. Spring. Encourage the raising of pigs and chickens. Observe and study habits of wild animals. Relation of rats, mice, gophers, ground squirrels, and snakes to crops and poultry.

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