THE KALAMAZOO NORMAL RECORD

JULY, 1915
The Kalamazoo Normal Record

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The Faculty and Students of the Western State Normal School
Kalamazoo, Michigan

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Let us know how much you have to spend and we will let you know what you may obtain for the amount. For the trustworthiness of our advice we refer to any of the Michigan or Wisconsin Normal Schools.

RURAL SCHOOLS.
The annual reunion of the former students and graduates of the Department of Rural Schools was held in the home of Dr. and Mrs. Ernest Burnham late Monday afternoon, June 21. Lois Bowman of Battle Creek, chairman of the reunion committee, presided, and after a vocal solo by Grace Pennels, accompanied by Harriet Stears, remarks were made as follows: Number and records of graduates, F. M. Ayres; activities of this year, Lela McDowell; an appreciation of Miss Goodrich, Pauline Day; and suggestions by Miss Goodrich. Light refreshments were served by Theresa Randall, Mrs. Ray Haynes, and Nina Goodrich, and a general good time was enjoyed by the seventy members present. The committee for next year is: Ila Camfield, F. M. Ayres, Ruth Randall, Jane Stoddard and Lela McDowell.

The Girls' Club of the rural department had a meeting Monday evening, July 12. Plans were made for a picnic on some date during the summer term for all former, present and prospective members of the rural courses.

The rural observation school at Oakwood was in session from nine until twelve o'clock each forenoon of the first four weeks of the summer term. The enrollment was twenty-one.

The last meeting of the Rural Sociology Seminar for the spring term was held on the afternoon of June 9. Final financial reports for the year were made by the treasurer, showing a balance in the treasury, after the purchase of a fine gift for Miss Goodrich. Henry J. Ponitz was elected president for the fall term and Ernestine Campbell was made secretary and treasurer. The welfare of the organization was then made the subject of a lively discussion, which the retiring president, Irving Long, started with the suggestion that the Seminar prepare and pre-
sent in assembly a typical program of its work. More student initiative in the planning of programs was urged. In strong contrast to the somewhat discouraged tones of some of the members, who seemed to miss merely entertainment features from the programs, was the showing that more than 60 per cent of the total enrollment of the department habitually attending the seminar, an excellent record for a voluntary organization. Further encouragement came a few days later, when it was observed that the seminar furnished one-half of the total student attendance at the educational conference on the commencement program.

AN AID TO THE RURAL TEACHER.

The following may prove helpful to any rural teacher, who, like the writer, has undervalued the Michigan Pioneer Volumes. Almost the only source material in our rural schools, these are alive with interest.

The poem, "When I Was a Boy With a Head Like Tow," with two others below listed, while not exactly classics, are invaluable history. Moving pictures of pioneer life they are, presenting all its principal features.

Through them, in imagination, we help to clear the land, build the cabin with its equipments, make clothing and tools, harvest the crops, fight the Indians and wild animals, and avoid "Neighbor Ager" who invites us to shake.

Prose which is half poetry, is the "Old Log House" (illustrated) and the personal accounts of numerous men who staked their all on the wilderness and won.

A good contrast to this type of life is found in "Old French Traditions"—something of art the French carried with them even into the back woods. "Father Marquette and the Jesuits of Michigan" is a collection of hero tales. We read of the aged and gentle Father Mesnard, who, twice abandoned to die by the Indians, wanders off from friends into the wilderness to an unknown fate.
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STERNO SOLID ALCOHOL is clean, safe, convenient. Can be carried any place in perfect safety and without fear of spilling.
No picnic or camping party should be without, at least,

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The Edwards & Chamberlin Hardware Co.

“"The Account of the Boundary Dispute with Ohio” and “The Battle of Phillips Corners” should not be overlooked. The latter event, as here reported by the contestants to their respective governors, reads like a schoolboy prank, and yet these men were in deadly earnest.
The list of references with which we conclude will perhaps give the reader just a taste of the good things awaiting him in the pioneer volumes.

REFERENCES.

Poems—
When I Was a Boy with a Head Like Tow. Vol. 22, p. 225.

Prose—

Old French Traditions. Vol. 4, p. 76.
Travelling Three Hundred Miles to Mill. Vol. 5, p. 405.
Pontiac Conspiracy. Vol. 8, p. 266.

—MARY ISHAM.

Students who co-operated so beautifully in the Greek festival will be glad to know that expenses were more than cleared. It is quite ideal in a festival to have an artistic success accompanied with success financial.
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By Charles E. Chadsey, Ph. D., Superintendent of Schools, Detroit, Mich., and Hubert M. Skinner, Ph. D., author of "The Story of the Letters and Figures", "The Schoolmaster in Literature", etc.

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ALUMNI NOTES.

Carl F. Rogers, a graduate of the manual training department of the Normal, was a recent visitor at the school. He has been engaged to teach in the Lakewood, Ohio, high school for next year.

Mr. and Mrs. Clifford Ball, the former a graduate of the Normal, are spending the summer in Kalamazoo. Mr. Ball will teach in Detroit the coming year.

Miss Jennie Lane, 1914, who has been teaching in Utah the past year, is attending summer school. She expects to teach in California next year.

Miss Margaret Lillibridge of the 1914 class, will return to Benton Harbor next year.

Mrs. Mabel Thorpe Jones of the class of 1907, recently visited the Normal. She is teaching in Attica, Ind.

Miss Mary Ruthrauff, 1907, is teaching in Western Normal this summer in the absence of Miss Zimmerman of the German department.

Miss Carmeleta Barton, 1908, was married in June to Mr. Read of Comstock, where they are residing.

Miss Margaret Eldred, music, 1908, has been teaching in Mandan, North Dakota.

Alva Heaton, of the class of 1908, is in Elma, Washington.

Miss Annette Brody, 1909, visited the Normal early in July. She is teaching in Aberdeen, Washington.

Dan W. Parsons, of the class of 1908, now of Michigan City, Ind., called on old friends at the Normal in the early part of summer school.

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Park-American Hotel
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European Plan $1.00 per day and up
Cafe in Connection
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### Some of the New Books of 1915

<table>
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<tr>
<th>Title</th>
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<tr>
<td>Varney's Story Plays, Old and New, Books One, Two and Three</td>
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<td>Purcell's Stories of Old Kentucky</td>
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<td>Lucia's Peter and Polly in Spring</td>
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<td>Bakers' The Children's First Book of Poetry</td>
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<td>The Children's Second Book of Poetry</td>
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<td>The Children's Third Book of Poetry</td>
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<td>Maxwell Johnston &amp; Barnum's Speaking and Writing, Book Four</td>
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<td>Pearson &amp; Kirchwey's Essentials of English</td>
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<td>Second Book</td>
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<td>Leonard &amp; Fuess's A High School Spelling Book</td>
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<td>Cooper's The Spy (Eclectic English Classics)</td>
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<td>Harrington's The Roman Elegiac Poets</td>
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<td>Moore's A Historical Introduction to Ethics</td>
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<td>Stickel's Elements of Government</td>
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<td>Belding's Accounts and Accounting Practice</td>
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<td>Cowles &amp; Coulter's A Spring Flora for High Schools</td>
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<td>Turner's Teaching to Read</td>
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<td>Robbins's New Plane Geometry</td>
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<td>Ivins &amp; Merrill's Practical Lessons in Agriculture</td>
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<td>Williams &amp; Whitman's Laboratory Exercises in General Chemistry</td>
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<td>Whitehead The Standard Bearer</td>
<td>.52</td>
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<td>Blaich's Three Industrial Nations</td>
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<td>Write for catalogue and information concerning these and other textbooks.</td>
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### New York
- Miss Alice Thackeray, domestic art and science, 1908, was married June 30 to Mr. C. M. Field of Kalamazoo. Mr. and Mrs. Field are residing on West Lovell street.
- Mrs. Lewis Palmer of Boston, formerly Miss Nina Coleman of the class of 1909, visited the Normal during a recent visit to Kalamazoo.
- Mrs. Edith Patterson Collester of the kindergarten class, is residing in Chicago.
- Fred Middlebush, 1912 class, is teaching in the Normal summer school and will go to Knox College, Illinois, as instructor in history next fall.
- Lester Mack, 1914, has been re-engaged at Marcellus for next year.

### Chicago
- Miss Pearl Sidenius, who is teaching music in the Agricultural College at Jonesborough, Ark., attended commencement at the Normal in June.
- Miss Zora Luce, who is teaching in Montana, was back at the Normal during commencement week.
- Harold Grant, of the 1912 class, and Lynn S. Blake, of the class of 1910, were back at the Normal June 22. The former is engaged in business in Coloma, and the latter is teaching in a state agricultural school in Alabama.

### Cincinnati
- American Book Company
  330 East 22nd Street
  330 East 22nd Street

### Boston
- Miss Pearl Sidenius, who is teaching music in the Agricultural College at Jonesborough, Ark., attended commencement at the Normal in June.

### Atlanta
- Miss Zora Luce, who is teaching in Montana, was back at the Normal during commencement week.

### SMILES

**IN THE BOTANY CLASS.**

Student: Professor, if one should plant chickweed would it grow into an egg-plant?
J. R. Jones' Sons & Co.
COR. MAIN AND ROSE STS.

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All your wearing apparel wants may be satisfied here.
Sport clothing a specialty.
Books of all sorts in Annex Shops, Rose St.

Get acquainted with this: "Your Store"

A PROBLEM IN BIOLOGY.

If a cat leaped out a window,
And it killed her when she lit,
Would a jury decide that the animal
died
In a cat-a-leapt-tic fit?

WITHDRAWN.
Among the Monday morning culprits haled before a Baltimore police magistrate was a darky with no visible means of support.
"What occupation have you here in Baltimore?" asked his honor.
"Well, jedge," said the darky. "I ain't doin' much at present—jest circulatin' round, suh."
His honor turned to the clerk of the court and said:
"Please enter the fact that this gentleman has been retired from circulation for sixty days."—Green Bag.

Blink: "There won't be any corn crop next year."
Clink: "Why?"
Blink: "Because of the war."
Clink: "Oh, all the farmers will plant wheat, huh?"
Blink: "No, that's not it. You see next year there won't be any germination."—Ex.

"We are going to give up having Johnny get an education."
"For what reason?"
"Well, we can't get him sterilized every morning in time to go to school."—Southern Woman's Magazine.

Whenever a man begins to take himself very seriously everybody with a sense of humor moves up nearer, so as to miss nothing.—Puck.

Patronize Our Advertisers.
SINCERELY YOURS
ANNA BOTSFORD COMSTOCK
The teaching of nature study should be so simple that the teacher should not realize that she is teaching nor the pupils be conscious that they are learning. The only reason that this condition is not prevalent lies in the wrong conception of the subject held by the untrained teacher. To such, nature-study seems like geography, or grammar, or algebra, something to have studied and to have mastered before the teacher is fitted to teach the subject. But to master all "out-of-doors" is decidedly beyond the powers of any grade teacher or any college professor, for that matter. Thus, the seeming magnitude of nature-study has been the chief obstacle to its introduction in the grade work.

The solution of this problem lies in the teacher becoming thoroughly interested in one subject, such as birds, trees, butterflies, flowers, or stars; in fact, it does not make any particular difference in which phase of her environment the teacher becomes interested. For, if she masters one subject, she can lead her pupils direct to nature through her own enthusiasm, which naturally follows such mastery.

"But," cries the teacher, who knows simply birds, "how am I to follow a nature-study course, when I know only one subject? How can I teach nature-study when I know only birds?"

The prescribed course in nature-study is, certainly, a stumbling block in this case, although we must always remember that it is an attempt to organize the work for the teacher. As a matter of fact it is scarcely ever so hard and fast that the teacher cannot substitute her own "out-of-doors" interest for any part of it.

I find that many teachers, who know birds, do not realize the richness of this mine, when worked into a graded course. The following suggestions are made from having observed practical work with children. The chief thing for the teacher to remember is that one little fact is enough to present to small children in a single lesson. The mistake made by most teachers beginning in nature-study is in giving too
much in a lesson. Also, it should be remembered that the lessons need not follow on consecutive days, and, therefore, the work may be distributed over a greater length of time. However, the topic should be kept more or less before the children’s minds by discussions and questions in a perfectly informal way.

In the first grade, the bird work should be given with the leading thought of teaching the children how and why birds are different from other creatures; and in making them understand some of the basic facts of bird life. The chicken and the duck in themselves offer plenty material for this year’s work.

In teaching nature-study we try to introduce a subject from the point where it impinges most strongly upon the pupil’s interest; and the flight of birds is, surely, of the greatest interest to the child. Where is the youngster who has not flapped his arms in a vain attempt to lift himself into the air in imitation of the flying bird! So the first lesson should be on how birds fly. and this centers on the study of the wing with its broad overlapping feathers and its convex form; and through experiments with fans or even umbrellas a kindergarten child may understand that the bird flies by pressing down upon the air with its wings.

From the study of the wing feathers it is but a step to the study of other uses of feathers by the birds, and the child discovers for himself that outside feathers protect from the rain, that the fluffy and downy parts of the feathers beneath protect from the cold, also that the feathers upon the drake’s neck and wings and in the rooster’s tail and the gleaming gold of the oriole are for ornament; and that the inconspicuous plumage of the song sparrow and mother oriole serves to protect them from the sight of their enemies.

After the study of feathers comes the important question of the bird’s food and how it is able to get it. This leads naturally in the case of the chicken to the study of the beak and of the feet; in the case of the duck also the feet enable it to swim where it may dip its head down and seize the water plants with its broad bill. After this naturally follows the study of the eyes and the ears of “biddy” or “ducy daddles,” and especial attention should be given to their ways of talking. There are at least ten distinct vocal expressions of the barnyard fowls which children may understand.

Also during the first year the children should be taught to recognize by sight a few common birds, such as the English sparrow, the pigeon, robin, etc.

In the second grade there may be given a detailed study of a few common birds like the pigeon, canary and robin. The general questions about these birds that should be asked, are what is their food, where they find it, and how they obtain it. The pigeon may be studied in the fall, the canary or the crow in the winter and the robin in the spring. Incidentally, there should be given some lessons on the varieties of pigeons, and on the song and nesting habits of the canary and the robin. Through observation and stories they should become thoroughly familiar with the natural habits of these three birds. The pupils should also become acquainted sufficiently to recognize several more of the common birds, such as the chickadee, nuthatch, bluebird and song sparrow. They should be encouraged to recognize the notes and songs of all of these birds.

Children in the third grade should take up seriously the study of the winter birds, the chickadee, nuthatch and the downy woodpecker; and the first phase to be studied concerns the reason why these birds remain with us during the winter while other birds migrate southward. Where do these birds find their food during the cold weather? This brings us at once to the general subject of the reason for bird migration. The winter habits of common migratory birds should be dwelt upon in a manner that will give the pupils a new and entrancing reason for the study of geography; stories and descriptions of Central and South
America that can be made interesting to third-grade children should be given in connection with the migration of our commonest birds.

The fall work of the third grade may be given to the study of the turkey, for a bird with more interesting habits is not to be found. It is essentially an American bird, and despite its domestication has retained many of its interesting wild habits. As a contrast with this bird some work might be given in connection with geese, which are the most intelligent of all of our domesticated birds; and there are many most interesting stories relating to the habits of the wild geese.

By the time the pupils reach the fourth grade, they should be well versed in the habits and problems of enough of the common birds so that they may now turn their attention to the color distinctions of bird species. First of all they should be taught to observe a bird rapidly and accurately, noting the colors in a certain order: First the general color of the bird, then the breast, wings, tail, top of head, eye streak, back, under parts. A good preliminary exercise, and one that a class enjoys like a game is to hold up a picture, any of the ordinary colored pictures of the birds will do, before the class and ask each of the pupils to observe and note the colors in the order named, which for convenience, at first, may be written on the blackboard. In the beginning the picture may be held for a minute or two, then for a shorter period, until finally, only time should be given for a mere glance as if the bird were on the wing. From my own experience I know that teachers will be surprised at the accuracy and rapidity with which the pupils observe and note the colors of the birds in these pictures. As soon as this exercise is completed, the pupils are well fitted to observe the birds in the open. Encourage the children to bring in notes and colors of birds which they see on the way to school and help them to identify these birds in bird books. Very soon the class will be identifying birds in a most enthusiastic manner. Now is an opportunity for the pupils to paint outlines of birds with the colors as they have noted them. Even if they make mistakes they will learn by observation where they have put on the wrong colors.

In the fourth grade also may be begun the making of bird houses, although pupils will not have had manual training as yet. But the nature-study teacher can show the patterns and dimensions for the houses of different species of birds, and enough of the boys will respond, so that bird houses may be placed in favorable situations on the school grounds. In connection with putting up of bird houses there should be study of the bird books to ascertain the height from the ground and the best locations for the nests. A study of winter nests is also appropriate for this grade. Children should be encouraged to bring in these nests, but in taking a nest the following observations should be made: Where was the nest found? If in a tree, was it in the woods or fields, and how high up? Tell, if possible, the species of tree or shrub.

During the spring there should be a history compiled by all the pupils of the nesting habits of the robin, bluebird or some other common bird, that may be watched without being disturbed. The study should cover the method of nest-building, the material, the period of incubating, the date of the hatching of the birdlings, their food, and the care given by their parents before and after they leave the nest. All of this data may be made into an attractive bird diary in calendar form, and may be interestingly illustrated, and hung on the wall of the school room.

The pupils of the fifth grade are old enough to make bird notebooks. One of the many published notebooks giving outlines for observation may be used, or blank books may be simply filled in with the pupils' observations. The work should begin with observations on birds most readily seen, and might well be limited to those living around houses and gardens, such as the catbird, chippy, song sparrow,
English sparrow, wren, the barn and eaves swallows, swift, humming bird, oriole, phoebe, etc. To supplement the observations made by the pupils they should look up the habits of the birds in the bird books and write short English themes on the food and the migrating habits of each species. Special attention should be given to the economic value of these common birds.

While a bird calendar is helpful and appropriate in almost all of the grades, it should be seriously carried on in the sixth grade and should be begun in October, to give the dates of the last appearance of the lingering migrants. In the spring the name of the bird, the date, and the name of the observer should be put upon the calendar in each case, and the teacher should encourage competition in the seeing and recording of the birds, as they come North. A calendar managed in this way stimulates great interest in observing and identifying birds.

The seventh grade might well limit their notebooks to their observation of birds living in fields, such as the meadowlark, flicker, crow, kingbird, sparrow, bobolink, redwing, cowbird, goldfinch, etc.; or some of the class might study birds of the forest. But it is well for the sake of more careful observation to limit the notebook to one of the two environments. Perhaps some of the notebooks might be limited to those birds that live near the water, like the kingfisher, swallows, sandpiper, water thrush, etc.

In the seventh grade a serious study of the bird families and their relations may be undertaken. This will appeal to the collecting instincts in the children. For instance, pupils may know the phoebe and the kingbird and now let them study the other fly catchers of the region; or they thus may study all of the local species of the swallows, blackbirds, vireos, thrushes, sparrows, woodpeckers, etc. A large part of the preliminary work can be done profitably in the winter in the school room by consulting the bird books to find how many species of each family are found in the locality. English themes may also be written on each of these families. This will, surely, lead to field work of a careful character, when the birds return in the spring.

For the eighth grade may be reserved the study of the hawks and owls of the region, careful attention being given in classifying these birds as injurious or beneficial. Also the study of the herons and the water birds of the region comes naturally in this grade.

English themes may cover the following subjects:

- Methods of attracting the beneficial birds.
- Bird preserves of the United States.
- Work of the Audubon Society.
- The bird laws of our state.
- It is well to encourage the seventh and eighth grade pupils in proficiency in bird photography.

If the work as outlined above is given in the several grades, who can doubt that the pupils will be well started in the best kind of nature-study? If they learn to observe the birds well they will soon be observing other things; for in nature the life relations are so interdependent that one cannot learn one thing without soon learning something else that relates to it. In studying the nesting habits of the birds, the pupils become interested in the species of trees and shrubs; where the nests are built—while the food habits lead quite as certainly to the study of berry and seed bearing plants, also to the study of insects which are injurious or beneficial. Therefore, it is my firm conviction that it makes little difference by which path pupils are introduced to nature-study so long as it keeps them always facing outwards and upwards.

CORNELL UNIVERSITY.
Scholarship in Education

HINGS educational have been much talked about during recent years; at least it seems so to those of us who are engaged in school work. To be sure we expect school men and so-called educators to talk about school matters in educational gatherings and to write about them in educational journals; but when magazines as different in their aims as the Atlantic, Harpers, Collier's, and The Ladies' Home Journal are willing to devote space to critical discussions of schools and school affairs, it is safe to assume that a critical interest in education is, to say the least, becoming widespread among a more or less representative popular audience.

This critical interest and attitude is healthy and welcome, in every way reflecting the general temper of our time, which, whatever else may be said about it, is indisputably individualistic and consequently critical. We are rapidly developing a painful self-consciousness that looks with unfriendly eye on any tendency that would differentiate us as individuals from the conventional norm. Reason is the final test of all things from our ministers' texts and the war in Europe to the patent medicine that cures our rheumatism, and demands a cause and effect relation, whose method of functioning and percentage of efficiency can be definitely calculated. We would be ourselves and go our own sweet ways, but, however widely these may differ, we would have them labeled alike at the bar of critical justice.

Criticism is always a thankless job, and, although a powerful agent in shaping the destiny of any creative effort, is seldom solicited. Criticism looks with disapproval on any novelty and rises full height, square and blunt, in the path of innovation. It compels the revolutionist and reformer to give a reason for the faith that is in them; it preserves us from fatal precipitation when unforeseen curves appear in the pathway of progress. Thus criticism becomes creative and moves us onward no less surely than the object it criticizes. What we are and what we become is the result of the fault-finding of others no less than of the ideals that inspire our impulses.

Among this heterogeneous mass of criticism aimed at things educational, scholarship has received its full share of attention. There are those who think we know too much and those who think we know too little, but by far the greater number of critics, finding no apparently remunerative use for the little or the much they know, are crying aloud in the streets that the knowledge, the scholarship that thus far has been almost synonymous with education, is not practical. This, at least, is a pertinent objection. To be sure, "practical" is a vague and indefinite term, the cantest of cant expressions, many times used but seldom defined; and yet, if the criticism is intelligent, just, and well-founded, it is high time to take note of our intellectual stock in trade, to consider carefully what we know and what we think we know in the light of their practical relation to the life we are living.

Here I think it would be well to consider the whole subject of education in general that we may be better able to define scholarship as it appears in the larger and more complex conception. Many definitions of education have been given, but, when we attempt to test them, they are unsatisfactory in that they are distinctly local and individual. One will say, "Education is preparation for complete living." This, indeed, sounds well, but it tells us nothing really definite until we know clearly what we mean by com-

* This and the next following article were presented at the Second Annual Normal School Conference during Commencement week. The timeliness of the subjects and their splendid discussion has seemed compelling reason for their inclusion in this number of the Record that they may reach a wider circle of those interested in Normal School problems.

—The Editor.
plete living. Another calls education "the harmonious development of all the faculties of man." But what are all the faculties of man? Are they constant in kind and number, or may they be varied? Still another suggests "The advancement of man toward beauty and perfection." And here again we are confronted with the same indefiniteness in the conceptions of beauty and perfection. So we might go on with more recent attempts that would make education "prepare for citizenship," or "develop efficient members of society." None of these definitions is comprehensive enough to show the general relation of education to living and the place of scholarship in the whole scheme of things as they are harmoniously related and unified.

However, there is nothing strange in this lack of satisfactory definition, in the vagueness of our conception of education. It is in harmony with the complex and perhaps indefinite nature of life itself. One of the characteristics of all our simple common concepts is that they cannot be definite. We cannot define love, nor truth, nor God, nor soul, nor death, nor even life itself; we have more or less immediate conscious experiences that we know by these terms, but the experiences have no termination; they blend without ending; they have no limits, no definitions. We have a feeling of familiarity in the presence of these words; we conjure with them; we are consoled and made happy by the glibness with which they slip in combinations from the tongue. They are our commonest tools, most frequently used, least comprehensively understood.

"All we know about luck," says a California gambler, "is that it is bound to change," and from our limited acquaintance, this seems to be about all we can assert with any degree of assurance about this mysterious something we know as life. It comes we know not whence and goes we know not whither. It has so many phases, is composed of so many factors that we can never be quite sure we are cognizant of its myriad multiplicity or that we have even the most imperfect comprehension of the magnitude of its seemingly indefinite involution. Everywhere there is movement; everywhere there is aspiration, longing, hope; everywhere there is solidity, sluggish indifference, and despair. Joy and sorrow, success and failure, gratification and disappointment are ingeniously mingled in the one grand reality. We only guess at its meaning and accept its inevitableness with joy or resignation. The teacher of all teachers spoke of life as a paradox: "He that would save his life shall lose it." "Except a corn of wheat fall into the earth and decay it cannot live." "Verily, verily, I say unto you, ye must be born again." He came that we might have life and have it more abundantly; and the way to have it more abundantly is to lose it.

Perhaps the puzzling and paradoxical nature of existence has its origin in two fundamental experiences that variously blended confront us at every stage of the game; namely, the consciousness of freedom and the consciousness of necessity. Here I believe we are coming at the heart of the whole matter, and from here we may find a way of solution more promising of results. Nothing is more real to us than our freedom to choose our course of action. Try as we will to produce logical evidence to the contrary, there ever remains the stubborn consciousness that we can do as we will. But, on the other hand, we are no less conscious of limitation. We know what we can do; we know also what we can not do; and the chief business of life is to widen our realm of choice. It was this contradictory, dual aspect of life that puzzled Faust. He felt a capacity for knowledge and comprehension opportunity for which had been denied him. In this Faust is typical of humanity; we feel we could, if we might. Browning has clearly expressed much the same notion when he says:

"There's a world of capability
For joy, spread round about us, meant for us,
Inviting us; and still the soul
  craves all
And still the flesh replies, 'Take no
  jot more
Than 'ere thou climbst the tower
to look abroad;
Nay, so much less as that fatigue has
  brought deduction to it.'
And again:
'We struggle, fain to enlarge
  Our bounded physical recipiency,
Increase our power, supply fresh oil
to life,
Repair the waste of age and sick-
  ness; no,
It skills not! Life's inadequate to joy,
  As the soul sees joy, tempting life to
take.'
Life is one grand struggle for free-
dom, a thirst that is not quenched, a
"reach that exceeds our grasp," a con-
tinuous effort to extend the circle in
which we "live more and have our
being."

Evolution has taught us to think of
all things as in process of change;
nothing is absolute but law, and the
philosophers tell us that the scientists'
laws are nothing more than conven-
tional hypotheses. Bergson would have
us believe in reality as continuous
creative effort, and more and more we
are becoming reconciled to Professor
James's notion of a pluralistic universe.
We are as children playing a grand
game of puzzle, trying to frame into
a unified, consistent whole the parts
of a picture as they fall to us mis-
cellaneously from the master hand of
the creative spirit. Perhaps, after all,
there is not one grand picture finished
and cut to amuse and perplex us, but
an infinite succession of pictures and
we ourselves a part of that creative
energy by which they are designed and
fashioned. Through Rabbi Ben Ezra,
Browning says, if I may be permitted
to quote from him again:

"Rejoice we are allied:
  To that which doth provide
And not partake, effect and not re-
  ceive!
A spark disturbs our clod;
Nearer we hold of God
Who gives, than of his tribes that
take, I must believe."

We are not the puppets of a grand
show, but inspired, creative artists,
playwright and actor in one.
Indeed, there is nothing unfriendly
or irreverent in this twentieth century
philosophy of change. The way from
Herachitus to Bergson and Poincare
is a long way, but it has led us into
pleasant places. It has in no sense
cheapened life nor made it easy. It
has kept God in the world and life; it
has taught us to think of him as a
father, differing from us only in de-
gree, a reality in whom we literally
live, move, and have our being, to
whom we may pray in secret, and by
whom we may hope to be rewarded
openly.

According to this philosophical con-
ception which I have attempted to de-
fine life is a continuous flux, a process
of creation by which we momentarily
approximate a self-conceived ideal. We
are continuously making ourselves
anew out of the imaginative reality of
past experiences. Memory, or presen-
tative imagination, is the functioning
process through which this progress
is carried on. What we know and re-
member at any particular moment de-
termines what we may do and be the
next. Ignorance is the only determi-
ning necessity that binds us; knowledge
is synonymous with freedom and the
controlling element in our destiny.
Human life may be peculiar, differ-
entiated from other forms of life we
know, in that it is self directing at
least in degree, but the degree of choice
is determined by the number and
variety of courses we may conceive
as possible at any moment of choice,
and the clearness of vision through
which we may scrutinize the way
ahead. It is a common notion that
we fashion our lives after some plan
called an ideal, and that these ideals
are constructed out of our immediate
content of mind. In other words, what
we know determines largely what we
may be and do in the future. He who
knows most, whose mind is richly
stored with facts of experience, has at hand most material from which to build ideals, can see more possibilities and farther reaching consequences. All things, then, are possible to all men only in proportion to their knowledge of all things, and we approximate true freedom, fullness of life only when we approximate complete knowledge.

Now, if I might be permitted to frame a definition of education, I should call it the accentuated approximation of an ideal. Life itself is the uninterrupted approximation of ideals, and education is only a phase of living wherein an atmosphere is provided to accentuate the soul's approximation of conventional aims. For the ancient Hebrews the ideal life was the careful observance of all the formal rules of conduct prescribed in the sacred rites of the Scribes and the Pharisees. They looked upon these laws as God-given, and their education consisted in knowing them and in organizing their behavior in accord with them. The Greek ideal was that of beauty and perfection, and their education was directed toward this end. The Puritan ideal was perfect harmony between the will of man and the will of God as revealed in the Bible. Their education was chiefly in learning the Bible and in the practical application of its precepts. Present day ideal may be citizenship, social efficiency, or what not, but, whatever it is, education will certainly be some form of its accentuated approximation.

All education is dual in nature; the conception of ideals, and the approximate organization of life in agreement with them. The first is always fundamental and as I have tried to show is concerned with knowledge and experience. In other words, scholarship is the basis of all education. The adaptation of life to an ideal is what we generally know as method. Both are essential; scholarship precedes and in a sense conditions method. The Hebrew scheme was satisfactory until some one questioned the validity of the conventional rites of the Scribes and the Pharisees. Mediaeval culture was safe until Luther disputed the authority of the church. Puritanism flourished until modern scholarship became aware of a purer truth and was able to interpret a larger revelation. Ideals have never been final, but in themselves have always been the substance out of which the creative mind fashions the new ends of hope and aspiration. The logic of scholasticism at last taught men its own futility. When we succeed in defining citizenship and social efficiency life will be no nearer perfection than it is today. A new age and a new ideal is ever before us, and the unknown eternally transcends the what we know. We conceive the future through the experiences of the present and approximate it as the moments succeed themselves. The possibility of creation is infinite, and its freedom and variety are ever determined by what we know.

The normal school is a late comer in education, as it were, a comparatively new conception and as such necessarily somewhat vague and dimly described. The chief purpose of normal schools has often been stated as the training of teachers, but it seems to me it would be more appropriate to define their mission to be the education of teachers rather than their training. With such a mission it is clearly evident that they must concern themselves with education in all its phases. They came with democracy and are essentially democratic in nature and spirit. They are concerned with all the people, are close to them, believe in them, and would bring them life and freedom more abundantly. Like any other human institution the normal school is not static; it must define its own aims and prove its own purposes. While it must always be concerned with method, helping the masses organize their lives in approximate agreement with ideals, its larger concern is with the ideals themselves; otherwise we shall have only a case of the blind leading the blind. Scholarship must ever be its soul and center of interest. Learning all that is known, testing the validity of theories and the authenticity of facts, breaking the
shackles of ignorance by research and invention is the only way by which an atmosphere truly educational can be created. To be sure in the short courses at present provided in normal schools finished scholarship cannot be expected; but all the influences necessary to make it possible should be found within their walls, and their students should be inspired with respect and admiration for it and on fire with passion for its attainment. Thus and thus only can we hope to approximate that perfect freedom which in itself is fullness of life.

—GEO. SPRAU.

Credit Relations Between the Normal School and High Schools

In Michigan at the present time it requires four years of preparation to become a lawyer or doctor; an apprenticeship of two years to secure a barber’s certificate; and after July 1, 1916, it will be necessary to devote six weeks to special preparation in order to secure a certificate to teach. Taking the 19,000 teachers of Michigan as a whole they have been obliged to acquire less technical education than that demanded of the members of almost any other recognized profession; and these teachers have likewise spent less time in securing proficiency for their peculiar work than is required in many trades. Viewed in this manner teaching does not rank high among the learned professions.

The four normal schools whose purpose, as constituted by law, is to prepare teachers for the public schools, grant over one thousand certificates each year, but even this number scarcely suffices to fill the places of those who permanently withdraw from teaching. It is plain, then, that the normal schools do not attract too many students.

The State Normal College at Ypsilanti, in connection with the catalog requirements of admission, states that it recognizes the existence of a school system in Michigan and since both the public high schools and the Normal College are part of this system, persons are admitted to the college from the high schools without examination. In view of the actual school conditions of the state the definition of the word system would need considerable radical revision before the term can be applied in such a manner as to have any direct bearing on candidates for admission.

At the Western Normal School the bulletin states that “high school graduates *** will be admitted *** without examination.” Inasmuch as these high schools had not been defined in any manner up to the time this regulation was made this apparent restriction also fades away.

If we are satisfied with conditions as they have been the topic under consideration can have no significance; but there is abundant evidence that, comfortable and complacent as the relations are, neither party is entirely contented. On the part of many high schools and some of the graded schools of the larger cities there is a disposition to chose teachers from the university where great emphasis is laid upon academic achievement. There is no such clear cut indication of the feeling of the normal schools in this case; but rather an undercurrent of opinion to the effect that the normal school of the future must be one that does not subordinate scholarship to method; but one that rather successfully correlates the learning of the scholar with the best methods of presentation.

The virile normal school of the future must be one that follows the best practice of industrial concerns in fostering a popular desire for better products. The function of a normal school is not fulfilled when it satisfies a de-
mand; but its province also includes encouraging the right kind of a demand.

In accepting students as they come, a higher school does right in that it is always the first duty of instruction to reconcile itself to dealing directly with conditions as they are found; and it is not for the sake of the normal school but rather for the benefit of the individual and society that any change in credit relations can be urged. An affiliation that enables any high school to do better work is of advantage to the higher institution to be sure; but the greatest advantage after all, accrues to the community in which the high school is situated.

There can be no question but that the University of Michigan has been a powerful factor in stimulating the school sentiment, as well as the work of the teachers, in those schools with which it has held diploma relations. Superficially the chief beneficiaries of the system have been those students who have attended the university; in reality such students are only by products of a deeper purpose which the affiliation has accomplished.

The smaller high schools—those employing less than three teachers—are, of necessity, not accredited by the university. It is from these same small schools that a large proportion of normal students come, and it is with these schools especially that there would seem to lie a field where the normal schools could wisely and appropriately extend their field of influence.

In the long run any higher institution is going to get the type of scholarship that it demands, and the elementary schools must be affected profoundly by any standards that even a small proportion of their graduates are required to reach.

The establishment of credit relations would degenerate into a mere form unless both sides can agree upon some reasonable standard to be achieved. Such an arrangement would relieve the situation of the danger of making the higher institution too exclusive. It would never do for the normal schools to attempt to impose conditions arbitrarily. A generation ago such methods were tolerated; but even those institutions which formerly were most arbitrary in their treatment of mere elementary schools have found that mutual concessions tend to further the common good of both. A decade ago the programs of our teachers' associations were taken over largely by discussions of the relation of the university to the high schools. At times considerable heat was generated on both sides, but as a result confidence has replaced suspicion, the high school courses of study have gained much in flexibility, while losing nothing in scholarship, and the university has prospered as never before.

In some respects the problem regarding credit relations as the normal schools confront it is more complicated than in the case of the university; but the experience of that institution may, nevertheless, serve to furnish valuable suggestions as to methods of procedure.

With four normal schools in the state any plan will be put into operation with greater difficulty than if there were a single school of the kind. It should be possible to secure the co-operation of all of the normal schools; but if any are unwilling to consider such a scheme it will still be possible for any of the others to act in concert or independently.

Little argument should be necessary to convince the most skeptical, if there are any such, that great benefit would follow the establishment of closer and more definite relations. To deny this would be to admit either that the normal schools are in a position to exert little influence, or else, on the other hand, that pupils now enter the normal schools with preparation commensurate with the time spent in the lower schools; such an admission as the latter has never yet been heard.

Many of the normal school students are as well prepared as any that enter the university, but it also appears that others are not so well prepared. If this is true I believe that it follows as a result of the fact that the smaller schools have not received the propor-
tionate amount of encouragement and assistance that the city schools have been given. There is no economic reason why better teachers should be found in large schools rather than small ones, although probably no one would claim that the best methods of instruction are most often found in small schools. It should be with the object of remedying some of these inequalities that the normal schools might seek a closer alliance with the public schools.

The establishment of credit relations is probably the most simple and effective method yet devised for giving each grade of school a sympathetic appreciation of what the other is attempting to do. In this sense such a relation must be looked upon as a means; not an end in itself.

Credit relations may be institutional or individual, or both at the same time. In the former case account would be taken of the school from which a pupil comes and nothing more. In the other case the standings of the pupil himself would be considered of prime importance. Probably the best results are obtained when both methods are used in conjunction. As applied to the normal such a plan would mean that certain schools would have the privilege of submitting the detailed record of a pupil's work, together with a recommendation that he be admitted. Pupils coming from schools not accredited might have their proper grade determined by examination. A careful scrutiny of every pupil's credentials would make itself felt long before that pupil presented himself at the normal school in an increased effort on the part of those in charge of the preparatory school to furnish the proper kind of instruction. Some would be deterred from entering the normal school; but in point of attendance, I suspect that the number kept away would be more than compensated for by those who might be required to spend more time in securing a certificate than is now the case. To administer the plan some additional office force would be necessary but not much.

As forming a basis from which the classifier might draw his conclusions respecting the value of the credentials submitted, the normal might send official visitors to schools that should desire such attention. This would involve some expense, but it would seem to have commensurate advantages. I know from personal experience that such visits in years past, when the Normal College followed that plan, did much to tone up some of the schools from one visitation period to the next. A substitute for visitation is found in an examination of the records of students who have pursued work in the normal; but this is likely never to prove quite satisfactory by reason of the limited number coming from any one school. However, this undoubtedly is efficacious, especially if the records of all pupils are carefully kept, say for the first quarter, and submitted to the schools from which the pupils come. This might be the first step in establishing credit relations. It's effectiveness would be greatly enhanced by requiring a definite certificate of achievement for each student as prerequisite to admission to the normal. Such reports undoubtedly encourage better scholarship on the part of the individual and better instruction on the part of schools.

Any higher institution should be interested in at least three aspects of the academic preparation of candidates: the first of these has to do with the kind of work; i.e., the particular branches studied. Michigan was one of the last states of the middle west to agree that communities should have the privilege of teaching any subjects that seemed useful and that all of these branches should receive recognition from a credit standpoint on the part of higher institutions; but that principle is now well established. We no longer debate over the relative value of instruction in the traditional and the more recent studies. It is conceded on the one hand that instruction in foreign languages, mathematics and kindred subjects represents a development of a higher type of pedagogic art than does instruction in such subjects.
as commercial branches and the manual and domestic arts; but on the other hand no scheme of general education is adequate or defensible which omit these newer elements of the curriculum. It is safe to say that the normal school can well afford to accept as qualification for admission any subject regularly taught in any public school.

A second aspect of the academic preparation of candidates for admission to the normal schools that might properly be taken into consideration has to do with the character of work done. This would include the course of study, efficiency of the instructors and the standing of the pupil himself. Here, I suspect, is the point of chief difficulty in the entire proposition. As the case stands at present one large factor in judging the efficiency of instruction consists in giving consideration to the training which the teacher himself has received. Of course, this is very absurd in some of its aspects; but after all no satisfactory substitute seems available at present. What could normal schools and high schools agree upon as a minimum educational qualification for high school teachers? The North Central Association sets four years of college training as the minimum; but finds itself unable to maintain this standard in practice. Some of the principals of the best high schools in Michigan have had less than four years of college training. If we are sufficiently courageous to care to discriminate between conditions in the real and the ideal, a working basis should be discoverable. If we lack moral courage a proper basis should be available, which will not utterly lack value, because it may serve to point the way to an ideal status.

Courses of study are largely traditional and text books reflect these traditions with great faithfulness. I doubt if there is any immediate prospect of influencing the courses themselves, but there is abundant opportunity to affect the quality of instruction.

Standings of pupils are somewhat elusive, but in the main they are valuable as reflecting the standards of the teachers and the relative work of the pupils.

The third requisite which the establishment of definite credit relations might be expected to standardize is the amount of work that shall be done before entering the normal. Statistics are not available on the point, but the experience of instructors would appear to demonstrate that considerable disparity is found in the amount, as well as the character, of elementary instruction that normal students have received. To say that such a condition affects adversely the work of the normal school is merely to state a truism. The degree to which the normal school is able to fit an individual for teaching must be reckoned from the grade of attainment that the student possesses when he is first admitted to the normal school. If reasonable uniformity and good scholarship can be ensured to entering classes, the commonwealth benefits directly in the increased efficiency of these classes upon graduation from the normal schools.

The establishment of definite school relations between the normal and high schools calls for the exercise of courage, tact, patience, and possibly temporarily, would involve some sacrifice of numbers. In the venture—for it is something of a venture—the initiative must be taken by the normal school. If reasonable uniformity and good scholarship can be ensured to entering classes, the commonwealth benefits directly in the increased efficiency of these classes upon graduation from the normal schools.

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John P. Everett.
Elementary Science in the High School

In the recent widespread attacks upon secondary education, science has come in for her proportional criticism. This reaction against present methods and materials in our high school instruction is sourced in the feeling that the "people's college" has failed to equip its graduates for life. The dominance of commercialism, the public cry for the practical, the widespread introduction of vocational training and guidance, the dictation of college and university in regard to the course of study has resulted in placing secondary education under fire. The Natural Educational Association has recognized the significance of this public demand by the appointment in 1911 of a commission on the reorganization of secondary education, which in 1912-1913 appointed twelve sub-committees to investigate the various subjects of the high school curriculum and present recommendations as a result of their investigations. The committee on natural science, with William Orr, deputy state commissioner of Massachusetts, as chairman, was divided into five sub-committees, viz: (1) introductory first year or general science, (2) physics, (3) chemistry, (4) geography, (5) biology.

The discussion which follows is of the report of the biology sub-committee, of which James E. Peabody of the Morrish High school of New York city is chairman. Early in the deliberations of this committee it became more and more apparent that we were dealing with a general problem which centered in the ninth and tenth grades and not with the special sciences coming under the heading of biology. It appears that the entire question of secondary science hangs in the balance with the solution of the problem of science work in the first two years of the high school.

**General Science.**

The sub-committee on first-year introductory science, of which Prof. John F. W. Woodhull of Columbia University is chairman, has formulated "Some Fundamental Principles," ten in number, which they contend for the organization of the first year's science as a series of separate projects whose organization "depends on the skill of the teacher and the enthusiasm of the class," such a course is typified by the several recent general or first year science books.

General science is designed as a one-year course whose content is based upon the student's interest. "Any question that any one asks concerning the phenomena of nature and life is a legitimate basis for a project." It is essentially the nature-study method. It is the Mark Hopkins method, but fails to recognize that there is not one but twenty-four other students at the other end of the log. It places the "evanescent interest and momentary fascination" of the student above the judgment of his instructor. Dr. Bagley says "Interest in education must always be looked upon as a means to an end, the moment it is permitted to become an end in itself the work of education becomes formless and its materials chaotic."

Such a principle of organization disregards any natural unit of classification and selects its material without restraint—"a little child shall lead them." Admitting such a contention it would be logical to argue segregation of adolescent youth for its science instruction—certainly no one would contend identity of interests. Also it would appear to be quite unjust to force the special interests of any child upon the group as a whole. It is evident that the project method if logically carried out will result in absolute incoherent heterogeneity of materials.
The only escape is that the instructor forces upon the class the majority of the projects studied—in the books presented they are thus all superimposed—and the initial interest is thus sourced in the teacher, a rejection of their fundamental contention.

We contend that the project method of teaching science as outlined by the chairman of the general science committee at the recent N. E. A. meeting at Cincinnati is indefensible as a basis of organization:

1. Because it neglects the psychology of early adolescence and fails to utilize what Dr. Dewey calls the requirement of "psychological organization" and which Dr. Hall terms "genetic organization," that is, it fails to appreciate and utilize the dominant fact of early puberty, viz., the impulse of ideas. The child is now ready and seeks to organize the knowledge he acquires.

2. Because this type of course furnishes the student with discreet portions of knowledge which may satisfy his evanescent curiosity, but fails through its lack of unity to leave any underlying principles in the child's mind. It relegates the organization of science and so discards our best social heritage, our knowledge of underlying fundamental truths. But for such our relations to nature would continue scarcely more effective than that in savagery. Man's classification of nature is not only an index of his knowledge, but the fundamental principles back of this classification serve as his guide in thinking and conduct. We contend that we should transmit this social heritage of scientific knowledge in its most understandable and useful form, viz: as underlying principles, or at least use them as the basis of our organization of content at the earliest possible period, and psychologists tell us that early adolescence is the appointed time.

3. Because such a course is essentially encyclopaedic. Its emphasis is first and last on facts rather than upon a comprehensive grasp of subject matter and an effective attitude of mind toward problems, an attitude which persists when unrelated facts are forgotten. It is in essence the nature study method whose economical utilization as an educational motive appears to cease with adolescence.

THE BIOLOGY REPORT RECOGNIZES:

1. That in the past there has been failure to articulate vitally with the student's environment, that the relation to human welfare has not occupied a sufficiently prominent place in our science courses.

2. That elementary science should be taught in the interest of the child, the future citizen, and not for the welfare of the science.

3. That the inculcation of the scientific attitude of mind is equally if not even more important than the accumulation of certain facts and the explanation of certain phenomena.

4. That the psychological age of the child must play a determining influence in the organization of any course of study.

5. That the use of projects in teaching is not only pedagogically sound, but highly efficient.

6. That the experience of the last twenty-five years in science teaching has shown much of worth, and strives to preserve this while meeting the demands of the present.

ELEMENTARY SCIENCE.

In presenting a plan of organization the biology committee finds itself in fair agreement with the general science committee in the matter of the aims of science, in the materials of its content and even partially in method of presentation. As to the basis of organization it departs radically. The biology committee "maintains that unity of subject matter in any course of science is of first importance, by which is meant that the subject matter should be so organized that appreciation of underlying principles should form the foundation of the student's knowledge, thus giving him a scientific basis for the organization of his knowledge. Dr. John M. Coulter says, "A division of the ma-
Materials of science seem necessary not only to secure competent teaching, which is a practical reason, but also to secure a point of view that represents the permanent possession, which is the essential feature of education. This does not mean organization for the sake of the subject, but for the sake of a pupil; an organization which means a structure which abides, and not incoherent building material.

“The committee unanimously agree that a course in elementary science should include a study of the physical environment of living things; and a consideration of plants, animals, and man as living organisms; and that throughout the course constant reference should be made to the application of science to human welfare and convenience.”

**PLAN OF COURSE.**

The biology committee unanimously agrees that two years of work in elementary science should be the basis for more advanced courses in science. These first two years would serve as a stem course from which the more specialized elective courses of the upper two years would naturally diverge. Such a course would retain the natural divisions of science, holding them to the effective educational units in the interest of the child and in the interest of highest efficiency in teaching.

The committee recommended the organization of the stem-course in four semester units as follows: (1) Physical environment, (2) Plants, (3) Animals and (4) Man.

**FIRST HALF YEAR.**

“Physical environment basics. The physical controls of life. Physicists and physiographers have a joint interest in the content of this unit, which has been described as “general science with the biological part omitted.” This first half-year unit, constitutes a sort of ‘setting of the stage’ for the basic studies of life which are to follow. The relations of physical phenomena life are used as illustrative, or as vitalizing material, but this does not lead into the study of vital phenomena as basic.

“Success in this and in the following units depends very much upon good judgment as to restraint of treatment, and such judgment depends upon appreciation of the use of a topic as basic as compared with its use as illustrative. The illustrative material may reasonably occupy the major share of attention as measured by time, but the basic material always has primacy when it comes to emphasis and iteration. Thus, for example, attention is called in this unit to the facts that light and water and oxygen and the soil have fundamental relationships to plant and animal life, but these relationships are not analyzed in any detail, such as is involved in the study of microscopic structures. Such analysis is reserved for later units.

“Water and soil, air, light and heat, and the great laws and phenomena which are related to them, form the basic topics. The earth in its relation to other heavenly bodies should also be considered.

“As illustrative, there is abundant citation of the relations of the basic materials to human welfare and convenience. This means the inclusion of much now put into general science courses under the head of ‘explanations of familiar things.’

**SECOND HALF YEAR.**

“Plants. A study of plant life in general and of the uses of plants to man, with abundant illustrative use of economic plants, and of practices in plant culture. Three distinct advantages appear in thus directly following the physical environment unit by the plant unit.

(1) “The genetic advantage. In the first unit we consider matter and forces which are prehistoric to plants. To these phenomena life had to adjust itself; within them life found its limits as well as the essentials of its being. From the genetic standpoint, then, our first unit obviously should be first. Likewise from this standpoint, the plant unit obviously comes second, for plants are prehistoric to animals, and
are themselves one of the controlling conditions of animal life.

(2) "The seasonal advantage. In all cases of regular or yearly promotions this arrangement brings the plant studies into the half-year which begins in the winter and ends when school is out. If plant studies are to be limited to a half-year, as obviously they must be in a general course, the reasons for placing them in the fall, and similarly, the advantages of having animal studies in the fall rather than in the spring, are quite obvious to all students of zoology. (Availability of material is a principal point, but not the only point, in determining the arrangement indicated.)

(3) "The pedagogical advantages. Plants are far more directly and obviously controlled by the physical factors of environment than are animals. Study of air and light, of water and soil, and of changes in the earth's surface lead directly to the study of plants, which are themselves such large factors in determining changes in the earth's surface. The study of topography cannot be disassociated from the study of the plant-covering of the earth.

"Plants, better than animals, lend themselves to the first teachings of life processes, and strongly illuminate the study of animals which follows."

"In case of mid-year promotions, a complication arises. There is no question but that the physical environment unit should come first, in whichever term it falls. But, if the second half-year of the pupil be a fall term, the seasonal advantage should probably take precedence. Thus in such cases, the animal and plant units change places in the individual program, so that the plant unit always comes in the Spring and the animal unit always in the Fall.

THIRD HALF-YEAR.

"Animals. Much that has been said under second half-year applies here. The number of types studied will be much fewer than in year courses in zoology, and the course will have a distinctly 'practical' aspect. Yet it will

be soundly organized as zoology, and will not be merely superficial study of various zoological topics out of their proper setting. It will lead up to the study of man from the biological aspect.

FOURTH HALF-YEAR.

"Man. A course in which hygiene and sanitation are emphasized. A course which deals with essentially modern conditions, thus preserving the genetic sequence. Applications of science to human welfare and convenience are now eligible for consideration as basic as well as illustrative. The pupil is now in a position to understand the precepts of modern hygiene and sanitation in their individual and social aspects as essential adjustments to great facts of nature of which he has real grasp. This is quite another and a better thing than the teaching of this subject through mere insistence on certain facts and rules whose relationships are perceived but vaguely, if at all, a method which is requisite if this unit comes without such introductory work as has been indicated.

"Finally. To be valid any plan for the reorganization of the science courses must rest on more than pedagogical theory or the interpretations of a random referendum. It must take into consideration what may be called 'factors of limitation,' cold rather than warm facts which confront us when it comes to putting any educational scheme into general operation. And the value of our plan will not rest upon its excellence with respect to one or with respect to several of these facts. It will rest upon the extent to which it takes them all into consideration and meets their aggregate demands. Leading factors in the problem may be tabulated as follows:

(1) The Psychological Factor. The pupil wants organization and is ready for inductions if he has sufficient basic data.

(2) The Social Factor. Democratic society requires a common stock of knowledge and calls urgently for scientific methods in thought as well as in action.
(3) The administrative factors:
   a. Quality of the teachers.
   b. Schedule of the teachers.
   c. Size of classes.
   d. Materials available.
   e. Time available with respect to claims of other studies.

If the plan which has been presented is acceptable, as the present status of opinion regarding it strongly indicates, it is acceptable because it is based on careful consideration of these "cold" facts which limit the application of our theories, facts of practice and of opinion which have been collected with care and considered with patience and without previous bias."

LE ROY H. HARVEY,
Member of Biology Sub-Committee.
Man as all other animals presents a duality of manifestation. On the one hand he is esthetic and emotional, on the other he is cognitive and rational. Neither feeling or intellect appears to be sourced in the other. Neither is primal as they are found side by side even from amoeba to man. However, the former appears to dominate in the lower realms of animal life, in primitive man, in the normal childhood of civilized man, and in the adult mentally deficient or untrained. Whence it appears that feeling is a lower manifestation of that primary characteristic of protoplasm, irritability, which later manifests itself largely through the functioning of the cerebro-spinal system.

Any curriculum of study, since it reflects the social level of the group constructing it, contributes more or less to the training of these two components. Hence it is possible to analyze any curriculum upon this basis. Upon the one hand are the humanities, music, literature, art, history, etc., whose essential contribution to education is found in the training of appreciation, a function of the emotional component. On the other hand stand the sciences whose educational contribution is a method for the attainment of truth, a method whose essential feature is self-effacement, impersonal consideration, and hence stands in diametric distinction to the humanities which lead always to self-injection in all considerations. It is only necessary now to point out that in just so far as self-injection enters into the solution of a problem to exactly the
same degree is the result vitiated. The method of science offers the only secure and trustworthy procedure in the search for truth and the elimination of the dross. Racial progress rests securely upon the facts of science—not upon appreciation. Appreciation is mutable and transient: truth is eternal. Appreciation is personal reaction; truth is extra-personal.

Now education should train in appreciation as well as in mental attitude toward problems. Both phases of educational effort have their place in any well planned scheme of education. So the crux of the problem evidently centers in the question of proportion. The point may well be taken that too few are trained in appreciation but it is perhaps even more true that a very small proportion of society are possessed, as a part of their mental equipment, of any adequate means of discerning truth from trash or fully recognize that feeling neither makes or mars a fact, that truth is impersonal.

It is submitted that any educational institution which gives an undue prominence to and diverts in disproportionate part its energies to activities predominately involving the emotional component and this at the expense of training in fact and method stands in very unstable educational equilibrium and will sooner or later inevitably suffer the effects of its lability. The further progress of the race, just as in the past, hinges primarily upon the rational component of the human mind and its effective direction at the hand of educational institutions.

Education is not preparation; it is life itself. The days and possibly years that one spends in an educational institution are lost in just that degree in which they are looked upon wholly as days of preparation. This idea savors of monasticism and is as equally valuable as the religious dogma which preaches life as a preparation for death.

Just because an individual is for a few hesitating years involved in a prescribed occupation of his time and effort does not furnish any justifiable reason for neglect of his obligation as a member of society. Nor do the Halls of Learning offer him any license or protection not equally possessed by the less fortunate who are unable to avail themselves of educational opportunities.

In a very true sense each day's activities add to the experiences of the past and so to the equipment of tomorrow. School days are days of participation. Thus they may be considered as a period when additions to personal equipment may be unusually rich, but these days differ from the pre and post school days only in degree, surely in no essential category. It is also debatable whether they are richest in their contribution to an effective social unit.

A conscientious utilization of the rich opportunities which an educational institution presents may lead to an enhanced personal power and the formulation of ideals and future lines of activity, and in just such a degree are school days days of production. The student who throws himself into the life of his school contributing to its activities and ideals surely is not dissipating his energies on a social desert. Such participation is production and production of the highest social value.

Education is more than preparation; education is production; education is life itself.

In Governor Ferris' dedicatory address of the Science Building a very strong plea was made for the every day use of the method of science in the handling of every day problems. The fundamental place of science in the business of life was developed and the necessity of a more extended study not only of the facts and principles, but of the method of science in the elementary and secondary schools was forcibly presented. This splendid address was a very fitting inauguration of the work under the increased facilities for which Governor Ferris was in no small degree personally respon-
possible. The Normal School wishes to express its appreciation of the splendid service rendered not only in the interest of the Western State Normal but in the interest of educational progress within the entire commonwealth. The administration of Woodbridge N. Ferris will surely pass into history characterized by its remarkable contribution to the educational efficiency of the state.

It is to be regretted that the full address is not available. Elsewhere in this issue will be found a few extracts from this memorable dedicatory address.

OUR CLASS HISTORY.

KINDERGARTEN.

Turn your minds back nine long years and look into the Normal kindergarten in the basement of the Vine street school and you will see some little tots working very hard. Six of our eighth grade class started in kindergarten and have come through the grades together. The Normal grades were all located there at that time because the Normal Training School had not yet been built. Our teacher was Miss Manthy.

When we came in the morning we would line up and then march around a circle in the middle of the room. We sang the songs we knew and played many games.

We were very much interested in the work that was set before us and we had fine times together. We made castles and scenes with small, white beans, and other pictures drawn on the board. This we thought a very hard task, but we worked at it steadily and tried to follow our model.

Our teachers drew simple pictures on paste board and we sewed through the holes they had punched, with different colored yarn. In one corner of the room we had a sand table at which we spent a great deal of our time. We made what we called hills, valleys and barns. We then would take a trip out of doors and we would pick up pine cones and branches. We brought them back and put them on the table, calling them trees.

Quite often we asked the Vine street kindergarten over for an hour or two to play games. We were asked to visit them also. They showed us the work they had done. It was in the winter time when we went over and I remember they had all made small red sleds. We sang our songs for them and they sang theirs for us.

For weeks before Christmas of the second year in kindergarten we had been planning and making things for a Christmas party we were going to have. A week before Christmas the large tree that almost touched the ceiling, was brought down. The children trimmed the lower branches while the teachers put the things on the upper ones. We hung the presents we had made for our parents on the tree just before the day of the party. The exciting day for which we had been waiting so long came at last. We felt big because we were giving such a large party. We played our games, sang our songs and showed them the work we had done, for we were very proud of it. Just before our bags of

*This composite history was written by members of the Eighth Grade, class of 1915, and read at their graduation exercises. Our readers will find this of great value as a study of children's interests.

—The Editor
popcorn and candy were passed out we scrambled to find the presents we made for our mothers and fathers. We presented them with great pleasure.

The rest of the year flew by and the end of June had come. We were all very happy to think that the next year we would be in the first grade on the first floor of the building.

HELEN WELLS.

FIRST GRADE.

In the fall of the year nineteen hundred and seven we were all anxious to return to school as we had been promised new chairs and tables, because we were to have a room and begin on our tour of grades. Here Paul and Christel joined the kindergarten survivors.

In the first grade we had Miss Russell for our teacher. This grade was on the first floor and we thought we had grown considerably.

Our first Thanksgiving celebration was in this grade and we invited the Vine street first grade to come to our party, of popcorn and cranberry sauce, which we ourselves made. At this party we played tag, pussy-wants-a-corner and the like.

On Christmas of that year we had a Christmas tree which we decorated ourselves.

In this grade we began to learn to count on an abacus, a loom-shaped thing with wires, on which there were beads of different colors, each color meaning a number. Our tables were marked into one inch squares and the one who could count all the squares correctly would receive a prize, so much interest was taken in this.

In geography we studied about the Eskimos and the snow huts they made. One winter's day we went outdoors and made one of the simple kinds of huts which the Eskimos use.

In this grade we studied about the Philippine Islands and we also made the kind of lamps they use. They were made of cocoanut. Miss Russell dug the meat out and gave us each a taste. This we thought a wonderful treat. After the meat had been scooped out we then filled the cocoanut with oil and lighted it. This gave a very good light.

In this grade we had for the first time gymnasium and we all looked forward to the Fridays on which this treat occurred.

We also had gardens and they just began to bloom as school closed.

CHRISTEL VANDER HORST.

THE SECOND GRADE.

Our first year of schooling, now completed, we passed on to the second grade. We shall never fail to remember this grade for it was our last in the Vine street school.

We were very proud and I dare say lorded it a bit over the others, these being the first grade children. Our teacher was Miss Anderson, whom we liked very much. I can remember the first day when she gave us some little red letters to put together and make words, sometimes sentences.

We were instructed in the study of shepherds, sheep, and shepherd dogs. Procuring little hand looms we made rugs, such as we might use to make the shepherd's tents out of, on the sand table. We next constructed a dasher which we inserted in a fruit can, and churned some butter. We also made cottage cheese. You may well believe we ate both with relish. One small boy persisted in licking the butter from his bread.

The week before Thanksgiving we were taken upon the hill, where there was but one building. With great effort on the part of Miss Anderson we were landed right side up with care in the cooking room, where we made cranberry sauce.

The Christmas exercises were held in "our new gym," as we called it. One of our class was chosen to tell our Christmas story. The tale was of the mouse who nibbled a hole in the stocking, and won the wager Santa Claus had made.

After the holidays our school weeks passed quickly indeed. Before we realized it we were full-fledged third-graders, ready to occupy our new building and feel very grand indeed.

C. ELIZABETH NICHOLSON.
THIRD GRADE.

It was upon finishing the second grade that we were informed by Miss Anderson, our teacher, that the New Normal Training School was completed and if we wished to attend we would have to put in our application at once. The greater share of the pupils did this.

On September the fifteenth, nineteen hundred and nine, a number of bright, smiling children scrambled to their seats as the nine o'clock bell rang. Miss Goodrich was the critic teacher and she was much loved by all her pupils.

The year was indeed a very interesting one as the new school was yet a novelty and the lessons absorbing. It was that year that we had our first experience in dramatization. We had been studying the Phoenicians and the children with the assistance of the teachers wrote a little playlet of the Phoenicians' trading life called "Hiram, King of Tyre." We considered this play quite wonderful and were especially pleased with our gorgeous costumes of purple and white cheesecloth.

Then we also took many excursions which we were much delighted with, among them one to Williams' flour mill and another to the smelting works. Miss Goodrich usually took pictures on these trips and we printed them and put them in our nature-study books along with our specimens of the pine-tree family. We had our gardens over on Oakland Drive and grew quite a variety of vegetables and flowers. Altogether it was a delightful year and most of the children look back on it as one of the happiest.

MARIORIE LOVELAND.
ELIZABETH McQUIGG.

GRADE FOUR.

In the year 1910, we passed from the third grade into the fourth, at which desk Miss Mulry presided.

We studied many interesting things. In the southeast corner of our room stood a large aquarium. It was used to contain snails, polly-woggs, water bugs, minnows and the like. One fine day when the sun was shining brightly, and the birds were singing heartily, Miss Mulry escorted us over to Wattle's Glen. There by the dam we (cooked) collected water bugs and all the aforesaid aquatic specimens in a large pail we did not fail to bring. We also took sand pebbles and some shells we found on the banks.

The Pilgrims we were also interested in. I well remember the girls and boys all sewed carpet rags for rugs.

In reading, Alice in Wonderland we enjoyed. After we read it through we dramatized it in assembly. The two Alices were Elizabeth McQuigg and Virginia Mason. Marjorie Loveland took the part of the Duchess, while Fanny Van Urk impersonated the ever famous Cheshire cat. Paul took the part of the white rabbit. Charles Monroe made an excellent dor-mouse (used as a door mat). Richard Light played Hatter in his father's best silk hat, and Christel took the part of the Queen of Hearts. This play was considered the best ever given in the training school.

MILLARD NEWTON,
ELIZABETH NICHOLSON.

GRADE FIVE.

In this grade we had many interesting studies with Miss Seekell, whom we have now for a teacher. The one we all liked best was history. We studied the ancient Greeks, their art, cities, stories, wars and also their gods and heroes. In our art class we made pictures of the pillars the Greeks used on their buildings and found that we had one type, the Ionic, on our own building. When it was our turn to entertain in assembly we gave a Greek play showing the costumes and home and school life of the ancient Greeks. We made up the conversation in our composition class. Another study that we liked was nature study. We went to Wattle's Glenn with our bird-books and found out all we could about the songs and habits of the different birds we saw there. Then we came back to the building and were shown pic-
tures of common birds. The pictures were then turned so that we could not see them and we were asked to describe them. Later in the year we studied the galls on oak and willow leaves and found that they were caused by insects.

In arithmetic at the first of the year we were thoroughly drilled on the multiplication tables. Later we were taught division, both long and short.

In hygiene we studied emergencies and learned how to handle many kinds of wounds. We also learned how to carry a wounded person, practicing on our classmates.

The boys studied camp-cooking. They built fires in the woods and cooked bacon and griddle cakes, also many other simple things. The girls used the kitchen and had Miss Pray for the teacher.

At the end of the year we had a picnic in Mr. Kleinstueck's woods, the boys furnishing refreshments. Many of us touched our hands to nettles and learned of a small plant, the snapdragon that will stop the burning sensation caused by the nettles. We also saw for the first time a peat-bog and learned how the peat was taken from the bog and dried. With the peat there were white marl deposits caused by the decayed shells of shellfish. Once we saw an indigo bunting and listened breathlessly for his song. Coming to Mr. Kleinstueck's house, we saw a pony. Mr. Kleinstueck said it was an Indian pony named "Jerusalem" and would stand on its hind legs.

Then we saw an Indian painting fence posts. He was a full-blooded Pottawotomie and we thought him a great curiosity as many of us had never seen a real Indian before.

On the barn was the skull of a horse nailed up near the peak of the roof. It was very white and looked like a strange device from a distance. There were many barn-swallows around and one could see birds everywhere. Beside the house was a log cabin with many curios in it and we were shown some arrow heads. We started for home about four-thirty and all thought that we had had a wonderful trip.

June soon came and we were all glad of the vacation and the prospect of being in the sixth grade in the fall.

DOROTHY WESTNEDGE.

SIXTH GRADE.

We entered the sixth grade in the fall of 1912, with Miss Mulry for our teacher.

We designed pillow covers and painted them with oil paints. In history we studied the Europeans of the middle ages and learned of the feudal system, wars, kings and palaces and home life, also we learned about the way the monks made books by patiently writing them word for word, which, of course, took a long time.

The school dramatized the "Birds of Killingsworth," and we printed and bound it into books of our own make.

In geography we studied South America and learned about the light-colored houses with flat roofs.

In arithmetic we studied decimals.

We gave a fairy dance for the May festival, which was in charge of the physical training department. Our cooking-class entertained several teachers at a luncheon one noon.

One day late in spring we had a picnic at which Miss Seekell, the teacher we now have, told our fortunes. The mother of one of the boys made and brought up ice cream, which was a fine treat, you may be sure.

Then June came and with it came vacation. The next fall would bring us into the seventh grade and one notch nearer the finishing point.

HELEN McMANIS.

SEVENTH GRADE.

In the seventh grade we studied in reading "The Taming of the Shrew." After studying it we gave it at assembly. The other selections that we studied were "Snow Bound," "Evangeline," and "The Charge of the Light Brigade." Miss Townsend was our teacher.

In history we studied about the discovery of America and the early set-
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After that we took up the study of the Revolutionary war. We liked it very much. We gave a play at assembly about the Puritans. The scene was laid in an old house. Marjorie Loveland and Mary Faught told the story of how the Puritans landed at New England. The fourth grade acted out some of the parts.

In art we made waste paper baskets and leather pen wipers, and we made many drawings besides.

We thought we were important when we studied in arithmetic about interest, but it was very easy compared to the arithmetic we have had since. We also studied about plastering.

In spelling we had contests between divisions one and two. We also kept the average and at the end of every month we would see which class had the highest average.

This was the grade in which we began the study of grammar. We thought it would be fun to call words “nouns” and so on, but when we came to study it, it was not so much fun. We had contests in analyzing sentences.

At the end of school the girls had a picnic and, contrary to girls’ nature, they would not let the boys come. So we spent our time in playing baseball.

—HAROLD STOLL.

EIGHTH GRADE.

There is much to tell of this grade which we have enjoyed very much.

Last fall brought seven new classmates and many studies which we all liked.

In our reading class we read “Ivanhoe” and selections from our Elson Reader. Some of us followed up Scott, reading “Kenilworth” and other novels.

Then, too, our history was exceedingly interesting. Miss Seekell made it doubly so by placing in our reach many good reference books.

In arithmetic we reviewed, and also in grammar.

Our composition is universally liked. Patrick Henry figured an important part. Likewise Colonel Goethals, Sir Thomas Lipton and Florence Nightingale.

We have a few slightly shop worn or second hand cameras all as good as new which we will sell at about cost.

A full line of New Model Kodaks and Premo cameras and all photographic accessories.

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Ask Briggs

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Opp. Kresge 5c and 10c Store
The winter term ushered in the class election. Yellow and white are the chosen colors. Leland Hall became our president. Elizabeth Nicholson our vice president, Mary Cutting our secretary and Dorothy Westnedge our treasurer.

We entertained the school one Thursday with "Living Cartoons." Although some of the younger children did not fully appreciate the work, they were delighted with the bright costuming, guns, boats, flags, and large printed signs which denoted the characters.

We had the Kaiser in his shining helmet. France was gracefully draped and festooned in a sheet. The British Lion was present, in full array, successfully created from brown pajamas and a lion's head which has a history and perhaps a lengthy future. Johnny Bull was very fine in a swallow-tailed coat, hand-turned high silk hat, and his world-wide-known banner suspended across a pillowed and padded front. Uncle Sam and Turkey featured a grand success, along with many others.

The amateur cooks of the eighth grade entertained at dinner a short time ago, the decorations being carried out in the class colors. Covers were laid for eight.

We have had a very interesting year. 'Tis here we find ourselves today, ready to pass to a higher grade with new fields that await our conquering.

ELIZABETH NICHOLSON.

NEWS NOTES.
The Training School opened June 28 for a term of six weeks, an increase of two weeks over that of preceding summers. The following grades are in session each day from nine to eleven: The first in charge of Mrs. Campbell; second, Miss Ballou; third, Miss McConnell; fourth, Miss Ferree; combined fifth and sixth, Miss Seekell. Each room is limited to twenty pupils, but the enrollment has varied, in one case reaching thirty.

Classes in manual training, sewing, cooking, music, art and physical training as well as the regular acad-
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Salted Nuts
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Fine Chocolates and Bon Bons

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emic subjects are open to observation.
About two hundred students under the direction of Miss Goodrich and Miss Ellett are availing themselves of this opportunity.

ART.
Miss Emelia Goldsworthy, who is having her summer off, writes most enthusiastically of her visit to the San Francisco exposition and of her work and surroundings at Berkeley, Cal.

Miss Margaret Spencer is spending July at her home in River Falls, Wis., and is taking advantage of the picturesque country to do some outdoor sketching.

At the Training School, the little first graders in connection with their study of occupations and interests enjoyed at the lake are making little hammocks. The second grade children are making reins, crocheting with their fingers. The third graders are interested in making pencil cases in cross-stitch, the designs for which they worked out in previous lessons. The combined fifth and sixth grades are constructing a kodak book.

GOVERNOR FERRIS' SPEECH.
Some extracts from Governor Ferris' address given at the dedication of the Science Building, June 21, 1915:
I always like to come to the Western Normal because of the life that I find. I do not like dead things.
I said to the legislature: If you do what you should do in ten years the Western State Normal will be the largest institution in the state.
In my judgment you cannot very well dedicate your Science Building. There is no one here capable of doing it. It will be dedicated in the future by the young men and women who will work in it.
Science is fundamental in our lives. There is no escape from it.
Young people do not be afraid to read Charles Darwin. It will not hurt your religion. If it does, the sooner you lose it the better.
What are you going to do with what you learn?
I am so thankful that this scientific method of thought is something that the scientists and grown-ups do not have a monopoly of.

If I had my way no child would ever enroll in a kindergarten without a certificate that he has as good teeth, as good eyes, as good ears, as good a throat as modern science could give him. This is the safest economy for the state.

If I can enthrone any young man or woman to do something with his love for science I would feel I had done the state, yes, the United States, some little service.

Get the habit of Charles Darwin.
The laws of science are just as definite as the ten commandments.

BROWN AND GOLD.

Few students who left school on June 22 knew that the "Brown and Gold" was a success financially. Even those who were responsible for it did not know how large was its success until the last moment. And it should be with pride and satisfaction that the class look upon its record.

However, the success as a good year book was of more importance. And in the words of a great Detroit firm of leather dealers: "It is the best year book, without exception, that we have seen put out by any small college or normal school in the United States."

An approximate statement of the finances are as follows:

<table>
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<th>Description</th>
<th>Amount</th>
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</thead>
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<tr>
<td>Total fund collected</td>
<td>$926</td>
</tr>
<tr>
<td>Total to collect</td>
<td>25</td>
</tr>
<tr>
<td>Total cost</td>
<td>$817</td>
</tr>
<tr>
<td>Total surplus</td>
<td>134</td>
</tr>
<tr>
<td>Total number of books</td>
<td>350</td>
</tr>
<tr>
<td>Total sold</td>
<td>338</td>
</tr>
</tbody>
</table>

This surplus, with about $100 of senior dues, will be turned over to the Student Loan Fund, which brings the total to $1,856.

This was a vast undertaking in a two-year school, and I think that the students, the faculty, the board of editors and the contractors can look
with pride upon the success of their year book without showing any egotism. I am sure that we have gained yet a greater thing than the success of the year book, and that is we have come in contact with every student, and I am sure we are the better for it. It has left upon our memories many pleasant experiences and a feeling that we have made many friends whose friendships are lasting. To my fellow students and co-workers through the board of editors I extend my heartiest wishes for your success.

—FRED W. STUCK,
Manager.

MUSIC.

Mr. Maybee returned Monday, July 9, from Kenosha, Wis., where he served on the music faculty of the American Institute of Methods, conducted by the American Book Company.

The Summer School orchestra and chorus are working upon the cantata "Lorely," Mendelssohn, which will be rendered the last week in the term.

Miss Edna VanBrook gave a song recital at the First Methodist church, Wednesday, June 30. She was assisted by Miss Louise Worden, who rendered several violin selections.

During the last month of the spring term two concerts were given by the Glee clubs. The Men's Club gave their second annual home concert, which made a splendid impression. That given by the Senior Girls' Club was their first home concert and was enthusiastically received.

The music department contributed the music for the various commencement exercises. Selections were rendered by the Men's Glee Club, Senior Girls' Glee Club, Junior Girls' Glee Club, Mrs. Davis and Mr. Maybee.

Charles A. Wise, D. D. S.
703 Kal. Nat. Bank Bldg.
SUMMER DOINGS OF THE FACULTY.

Mr. Allan Petrie will visit the West this summer, making a study of the agriculture and horticulture of the Pacific coast regions. Later he will visit the fair.

President Waldo and Dr. Burnham will attend the National Educational Association which meets in San Francisco. Mr. Waldo is chairman of the Normal School section and Dr. Burnham presents a paper before this section on "The Development in Training of Rural School Teachers in the Last Ten Years."

Miss Forncrook says she is going to return to the simple life on her farm near Harrisburg, Pa.

Mr. Sprau starts on his sabbatical in August. He will go directly to Cambridge, Mass., where he will spend the year in work at Harvard. He will be joined by his family early in October.

Dr. Harvey will go to New York to attend the Twentieth Anniversary of the New York Botanical Gardens, September 6-11.

Dr. McCracken will rusticate at his summer home at Wickateswah on Lake Portage.

Mr. Wood is enjoying his summer off at his fruit farm in the Traverse Bay region.

Mrs. Minnie Campbell and Miss Nellie McConnell are planning a trip to New York city. They will stop en route at Atlantic City, N. J.

Miss Iva Ferree is planning on spending her vacation at her home near Jonesboro, Indiana.

Mr. H. P. Greenwall is planning a trip through New York and Pennsylvania.

Miss Blanche Pepple will spend a few weeks at one of the delightful resorts in the Grand Traverse region.

Miss Eleanor Judson and Miss Margaret Spencer will leave on the 7th of August for Glacier Park. Miss Judson will go on to Seattle, Washington, where she will be joined by Miss Mary Judson.
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Fall term begins September 28, 1915.

Spring term begins April 5, 1915.

For catalog address Secretary,

WESTERN STATE NORMAL SCHOOL,
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