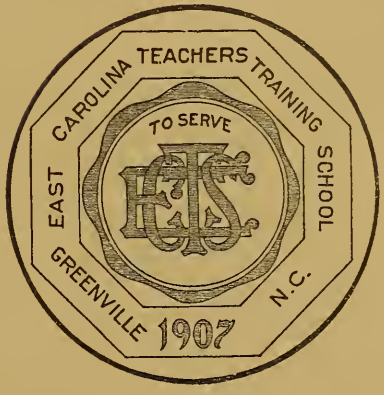
The Training School Quarterly



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The Training School Quarterly

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School Luncheons in Rural Schools

Martha Armstrong.

THE value to school children of a warm, nourishing luncheon has been recognized and provided for in many cities, but, so far, little or nothing has been done along that line for the country child, who rises earlier, takes more exercise, and keeps longer school hours than his city cousins. In many cases the contents of his lunch-basket would explain satisfactorily why he is still in the first grade when by rights he should be in the third.

The study of foods is such a new subject in rural schools that they are not bound by traditions of equipment and methods of work that so often prevent progress in town and city schools, but are, fortunately, free to work out their salvation in their own way, and a few favored ones are taking advantage of this to make the work a vital part of the school life, shared in by all, instead of setting it apart for the older girls, while the younger ones and the boys look on with envy.

In the ordinary one- or two-teacher school it is not possible to do much along this line, for the teachers are already overworked; but the new consolidated rural schools with three or four teachers and a room for this work have a wonderful opportunity to do some very practical work in foods, and at the same time to provide every day a hot luncheon, or at least one hot dish to the primary department if not to the entire school. A course in foods begun in the lowest grade and continued for eight years would give opportunity for forming valuable food habits while the child is still young enough to be readily influenced, whereas, little habit formation can be accomplished in a short course, given to half-grown girls at an age when "to be different" is desirable, and the fact that they don't like this, and nothing on earth would induce them to eat that, is a sign of superiority rather than of ignorance and narrow-mindedness.

The course should include a study of food materials, their use in the body, and how to grow, preserve, and cook them. If the gardening rather than the sewing is taught by the teacher of cookery there will be no difficulty in correlating all this work very closely. There is no real reason why the work should not be divided in this way rather than in the time-honored one of cooking and sewing. In the average home

the woman rather than the man is the gardener, and probably as large a per cent of women farmers as of men are successful.

In a course of this kind the work in foods begins in the first grade with a study of the foods of Indians, Esquimaux, or any race studied in history or geography stories, in what way their foods were different from ours and why, and continues throughout the course, including classifications of foods and foodstuffs, balanced diets and menu making, the history of grains, vegetables and cereals, the evolution of farm implements, and marketing problems. Parallel to this is a practical course in gardening emphasizing necessarily the winter and early spring gardens which are so often neglected, with many experiments to see if the number of fruits and vegetables grown locally could be enlarged; also a course in food preservation, the products of which are used to stock the school pantry and furnish materials for the cookery classes. The work in both gardening and food preservation is divided according to the age and ability of the students. Food preservation begins in the lowest class and includes fruits and vegetables dried in the sun and in the oven; vegetables, stored in dark dry places, buried in the earth, wrapped in paper, canned, and preserved in brine and in sugar; eggs, preserved by water-glass and by vaseline; butter, preserved in salt; and meats preserved in various ways.

The actual cooking begins in the sixth grade with a course in camp cookery centered around the activities of Boy Scouts and Camp-fire Girls. Boys and girls share the work alike in this grade, as in the next two. The average boy enjoys cooking as much as his sister, provided he can cook without loss of standing with "the fellows"; nor does this love of cooking die with boyhood. What man will acknowledge that any woman in the world can broil a steak or make coffee as well as he, if he has developed his talents along that line in the smallest degree? He usually overlooks such small matters as the fact that he paid forty cents a pound for his steak, whereas the housekeeping budget allows her to spend but twenty-five cents a pound on hers. It is all in the broiling, according to his idea. After a course in household accounts he might have a little broader viewpoint. These sixth-grade boys and girls are taught to plan supplies, transport them to camp, build camp-fires and ovens, plan and cook meals, serve them in a sanitary and attractive manner and care for all refuse. This is given in the open air, under camp conditions.

The work of the seventh and eighth grades consists of the planning and preparation of meals, with a careful record of the cost of supplies and of each dish served. These classes, in groups of convenient size, take charge of the cooking of the school luncheon for a week at a time, part of the class serving as cooks and the others as assistants and cleaners. The grade that is not cooking plans its menus for the next week, works out costs and quantities of supplies, and sees that all materials

are on hand at the proper time. If the equipment is bought with this work in view it will be an easy matter to prepare such luncheons as the following in large quantities, and in a short period of time:

Grits (cooked in fireless cooker).
Broiled Bacon. Baked Apples.

Cream Tomato Soup.
Toasted Bread or Cornbread.

Meat Stew (fireless cooker).
Baked Potatoes. Biscuit.

Cowpea Soup (fireless cooker).
Cornbread.

Hard-cooked Eggs.
Stewed Dried Fruit. Biscuit.

Scrambled Eggs.
Hot Rolls. Apple Sauce.

Boiled Cabbage. Fat Meat.
Baked Custard. Tea Cakes.

By careful, systematic planning any one of these luncheons could be cooked entirely, or completed within the hour before noon recess. The things that require long cooking could be partly cooked the day before, or kept in the fireless cooker over night and reheated at lunch time. A four-burner oil stove and a range, or two oil stoves with a half-dozen home-made fireless cookers would provide ample stove room, while a few hotel-size utensils would cost no more than several individual equipments. Each child might bring his own plate, cup, saucer, knife, fork, and spoon, or probably the local school improvement association would furnish them. Most of these associations die from lack of some definite work. They, too, would probably solve the question of supplies. Any mother would gladly send raw materials if by so doing she could be relieved of the task of putting up school luncheons five days a week.

Then, too, the produce of the school garden would help, and the canning clubs would contribute their share of work in putting up fruits and vegetables that could not be saved in other ways, or those that

matured during vacation. These meals could be served cafateria fashion, picnic fashion, or in any other way that best suited local conditions.

Home-made conveniences, labor-saving devices, and rapid, orderly methods of work would be vital in this course, much more so than in cooking courses as ordinarily given.

After a course of this kind a boy or girl would go to high school ready to get the most possible good out of the broader and more technical course offered there, or would establish a home with an intelligent idea on both sides of the demands and cost of a home, as well as some ideals and habits of work that would go far toward making home-life what it should be.

Four-year Garden Course for Girls

To meet the demands of thousands of Southern girls who have been successful in raising a tenth-acre of tomatoes and who want to "go on," the representatives of the Department of Agriculture and the State colleges in charge of the canning clubs in the fifteen Southern States have worked out what might be called a progressive four-year practical garden and canning course for girls. The purpose of this course is to start the girls with one crop and from year to year add new annual crops, encourage them to run winter and glass-frame gardens, and finally in the course of their work to lead them to plant perennial and small orchard fruits. It is hoped that under this system the girls will gain knowledge of how to handle a wide variety of garden vegetables and trees and that the member by the time she gets ready to go to high school or college will have a garden of perennial fruits that readily can be cared for by other members of her family.

The development of crops of perennial vegetables and fruits is insisted on at the end of the third year, and in many cases the work is begun at the end of the second year. The perennials are substituted for some of the annual vegetables and the girls are given credit for the condition of their bushes or trees which are not yet bearing and therefore do not yield a product that can be counted in the canning score.

What is Happening in One Spot in the Sand Hills

Mary Rankin.

ON Saturday, February 5, "Work Day" for Eureka Farm-Life School, in Moore County, people came from every direction in wagons and walking, bringing mattocks, shovels, spades, and rakes, to give a day's work to bring beauty and order out of the chaos around this new school. Mr. Warren Henry Manning, a landscape artist from Boston whose returns for a day's work makes that of the average man look small indeed, gave three day's of his precious time to planning, directing, laying off the grounds, in directing the work of clearing and planting, and in mapping out work for the future.

He kept boys and girls, men and women busy. During the morning the grounds were made ready for the planting and the plants were all graded and ready for planting. Then came a big, old-fashioned picnic dinner, after which shrubs and flowers that had been given to the school were planted. Mr. Manning left instructions that will keep the community busy a long time.

This is only one of the many good things that has happened at the Eureka Farm-Life School in the few months of its existence. This school, the pet of the sand hills, was established and is maintained by the Sand Hill Board of Trade and the Woman's Auxiliary to the Sand Hill Board of Trade. The people of the community have been of very great assistance in establishing the school. These people are not leaving the school to the teachers. It is theirs. They have made sacrifices of time and money for it, and they are going to see that it is a success. They talk about it, they come to see exactly what work is being done, and they work for it.

The school is the community center and the girls' dormitory is the most central spot. We have organized a Farmers' Credit Union, a Domestic Science Class for the women of the community, and have helped organize a Christian Endeavor Society. A series of lectures on agricultural subjects, and weekly demonstrations in cooking, introducing wholesome materials, are being conducted. Open house is kept Friday evenings, and grown-up people and young people meet together for an informal social time. There is usually a short talk on some live subject, a poem read, or a story told, and the rest of the evening is devoted to playing games, reading, and learning to know each other better. From time to time a party is given, and choir practices, committee meetings, and conferences are frequently held.

The girls' dormitory is the heart of the Farm-Life department of the school. The first floor is given over to a central dining-room, a central

sitting-room, and a kitchen where the dormitory cooking is done and the domestic science classes are held. The girls do the cooking and housekeeping; the boys do the outside work and some of the heavier work indoors. The girls and boys study in the dining-room four evenings a week. Friday evening is community evening; Saturday evening the dormitory girls and boys study, read, sing, play games, and have a home-like time together. On Sunday evening the young people come together for Christian Endeavor meeting.

The Farm-Life department is equipped for practical work. In the kitchen there are many simple labor-saving devices, such as conveniently arranged shelves, high stools, a set of bins, a cabinet for the work table, and a roller tray. Instead of ordering these of a furniture dealer, we had them made to show the people who come into our kitchen (and all our visitors do come there) that these labor-savers can be had in every home, for any man can make them.

Light, heat, and water have been installed in the dormitories. These modern conveniences serve two purposes. They facilitate the work of the teachers and students, and serve as an object lesson to the people of the community because their cost is not prohibitive. Electric lights and a hot-air system were put in the girls' dormitory, and the cost of running them is less than the cost of running lamps and heaters, and, besides, the danger from fire is practically eliminated. Water and a lavatory were put in the boys' as in the girls' dormitory. The cost of putting in a complete water system was $797, the heating plant cost $194, and the lights $40, making a total of $1,031; $5,000 has been spent for the school, $3,000 for equipment and $2,000 for running expenses.

It is our purpose to teach boys and men to farm successfully; to teach the girls and women to be good home-makers, to show them how to prepare food properly, and to make the home comfortable and attractive; and to help the people of the community to appreciate the opportunities that are within their reach so that they can get the most enjoyment possible out of life on the farm. We must keep them in touch with the most progressive methods of farming and housekeeping. Their attention must be attracted to the labor-saving devices for the house and farm, to the things that make for comfort and beauty, to the possibilities for profit and enjoyment in the long winter evenings by studying farm and domestic science magazines, and by reading good books and periodicals. We must bring them in touch with the world at large and help them to know their neighbors.

Plans are now being made for the summer. The Domestic Science teachers will have charge of the canning club work in the community; cooking and sewing classes will be conducted for the girls and women; a literary club, in connection with the sewing club, and a Camp-fire Girls' Club will be organized. We will have a canning school for teachers.

Our school is only a few months old, and we have accomplished only a few things, but what we are going to do would fill volumes. It is obliged to succeed because of the forces that are working together for its success, the Sand Hill Board of Trade, the Woman's Auxiliary of the Board of Trade, and the good Scotch people of the community.

One Day's Work on a Country Schoolhouse

It took just one working day of eight hours to transform a Tennessee rural schoolhouse that was in very bad condition into a building of which any community would be proud. This unique and practical demonstration was engineered by Prof. D. Riley Haworth of the East Tennessee State Normal School.

A band of teachers, school patrons, and normal school students marched out to the Neil school early in the morning to begin operations. An official photographer was taken along. The "Before" and "After" pictures made it look as if a miracle had taken place.

The building at 8 a. m. was in as disreputable a condition as it could be and still be used for school purposes. The workers were armed with shovels, hoes, axes, carpenter's tools, paint, whitewash, and soap. They nailed on new boards where they were needed, painted the building, built a chimney, cleaned up the rubbish, scrubbed the floor, renovated the entire interior, constructed a bookcase for the teacher, tinted the walls a pearl-gray color, and hung pictures. The old desks were removed and new desks, supplied by the school district, were placed in the building.

The outlay aggregated, in cash, $33. It included 12 gallons of paint, 5 gallons of linseed oil, 4 paint brushes, one-half bushel of whitewash, $2 worth of weatherboarding and lathing, 2 pounds of nails, 4 window shades, material for sash curtains, 4 pictures, a number of books to start a school library, and one American flag. When the work was completed the building presented as attractive an appearance as the best one-room country school.

One of the most delightful features of the day was the social enjoyment that resulted from the gathering together of such a large group of workers. At noon a picnic dinner was served by people in the neighborhood of the school. It is planned to repeat the demonstration in many other parts of the State.—*From U. S. Bureau of Education.*

The Work of a Consultant Housekeeper in Sampson County

Mrs. Mary H. Lamb,

Consultant Housekeeper.

SAMPSON is a big county and has all the advantages of location, of climate, and soil that it can desire; yet for years at the mention of Sampson County everybody laughed a sneering laugh, and it was generally understood that the county was famous only for huckleberries and sand; but she has stepped forth from the huckleberry pond and sand banks to the hills of progress, and is fast gaining in leadership in agriculture, in community progress, in education, in club work, and, in fact, in everything that suggests progress.

The Farmers' Union, the county superintendent and supervisor, the board of education, the board of health, the board of commissioners and the Women's Clubs, together with other forces of the county, compared country life as found with what country life ought to be, then took the problem of bringing about the desired change. The Farmers' Union set the example of coöperation and brotherly feeling among the men; the Women's Clubs did the same among the women. The county superintendent, supervisor and board of education, all aflame with educational progress, set about the task of bringing about the new type of school, that is, from the little one-teacher schools have been organized, where practicable, the two- and three-teacher schools, and systematized by introducing grades in them, also cooking, sewing, and agriculture.

The board of health has wrought a great work in the health of the county. We have a whole-time health officer continually looking after the health and sanitary conditions. The board of commissioners, being composed of hustling business men, are always ready to do the thing that means advancement to progress. We have two capable farm demonstrators, through whom many agricultural interests have been brought to the front.

In 1914 our county supervisor decided Sampson ought to take up the Tomato Club work, so, with the assistance of the State agent and appropriations made by the boards, the work was started with the county supervisor as county agent, and two subagents to carry on the work, which was very successful, though not extensive. One club of nine girls put up that year over 6,000 receptacles at a profit of $57 per girl. Then came the task of marketing. We sent out sample cans which gave entire satisfaction except that the merchants thought the price too high. What were we to do? We had the products and they must be sold.

Well, I'll tell you what we did. The supervisor and the agents arranged a selling campaign, decorated and loaded some wagons, drove to town for the purpose of making a house-to-house canvass with an agent and a crowd of pretty girls neatly dressed, each wagon loaded with canned products to sell direct to the housewives. But on reaching town we decided to inform the merchants of our campaign, and also to inform them that we were sorry to be forced to sell to their customers, but that the people were pleased with our products and could not get them through the merchants and that we had the products and could not sell to the merchants, so we had come to give them another chance, and they immediately came across and bought the lot and are still buying.

In planning the work for 1915 it was decided best to extend the work to every township in the county, also to elect two consultant housekeepers whose work is that of coöperation as well as of supervision. There are still in this State, and probably in every county, narrow visioned people who take the position that the only purpose of the school is the teaching of the "three Rs." It is probably true, I am sorry to say, that there are a few teachers who take the same position. With this class of teachers no outside force can work effectively, but a large per cent of our teachers in Sampson County are teachers of broader vision, whose interests are in the child. On visiting the schools we find them teaching the child rather than the book, and it is with these it is worth while for the consultant housekeeper to work. It is the work of the wise teacher to discover the means by which she can do the very most for every child whom she is called upon to teach. It is the work of the consultant housekeeper to discover the means by which she can do the most with every teacher, and for every teacher, with whom she has to do. To do her most effective work she must know the needs of the district in which she works, and the peculiar characteristics of the people composing this district. With a teacher whose heart is in the work, and with a consultant housekeeper to suggest to her means by which this work can be carried out to encourage her and to coöperate with her, there is no way to estimate the good that may be done in a community.

The crying need is to make our schools of practical value. It is the work of the consultant housekeeper to help bring this about. So, in addition to our Canning Club work, we have added home demonstration work, which means better homes, better health, and more efficient girls and women, and this will mean still greater progress for our county, for we all realize what it means to a home to have a woman well trained along practical lines to preside. I think it means more prosperous and happy homes for the future and fewer broken ones.

It is also the work of the consultant housekeeper to introduce and strive to get more conveniences into the homes, that will lighten the housewife's work. One of the ways we are trying to accomplish this is

by getting the boys of the homes interested, offering a prize to the school that puts in the most barrels connected with the pumps and arranged to furnish a water supply to the kitchen, at least, a prize for the best plan of putting in the barrel system, by a boy. We are expecting to have a county fair in the fall of 1916 that will be second to none in North Carolina. We have prepared for it by having community and township fairs which have been very successful and we have gone a long way toward convincing people what united efforts will do, even in a community.

The stranger that comes into the county who, by accident, has failed to hear of the organized work, finds himself bewildered at the advancement of the people and the number of things the county is doing. It is building good roads, larger and better schools, and is also fostering all manner of improvements; so today, when we speak of Sampson County, we do not hear the sneering laugh, neither do we have to explain where it is, for the eyes of North Carolina are turned to her because of her progress; and still we have just begun. When the fire of ambition has been thoroughly kindled in a county and the old folks, young folks, boys and girls, men and women, all get interested, then it is you find pride of locality (even if it is in a huckleberry pond or sand bank), more determination, more neighborly feeling and community interest, and, we are proud to say, Sampson County has arrived here and her people are determined to make her the very best rural community in the country, and she wishes to say to her neighbors, we have land and to spare; come and make your home with us and it will do thee good and us.

Proved His Case

I was holding an oral examination in my intermediate geography class one day, and asked, "What is the difference between the people of a state and those of a territory?"

Only one hand was raised; but a radiant smile illuminated the face of little Donald as he rose and said, "The people of a territory cannot sing."

This answer was puzzling to all; so I asked him to explain. Whereupon, he said:

"The geography says that the people of a territory have no voice; so how could they sing?"—*Western School Journal.*

Sewing Room, Home Economics Department, Cary High School

Kitchen of Home Economics Department, Cary High School

Home Economics in Cary Farm-Life School

Elizabeth Pryor.

TWO years ago there were added to the Cary Public High School the departments of Agriculture and Home Economics, with the equipment necessary to meet the farm-life school requirements. The academic courses remained unchanged, the Home Economics and Agricultural work being entirely elective. The object of this was to allow the pupil a free choice of the work that would best prepare him for the life he expected to live.

The studies that are common to both courses, such as English, General Science and Arithmetic, are pursued by the pupils under the academic teacher, the specialized work being taught exclusively by the farm-life teachers.

The general impression is that a Home Economics course includes only cooking and sewing, but it is a very meager course which offers only these two subjects. In the Home Economics department at the Cary Farm-Life School an effort is made to offer such work as will fit the girls to become able and efficient home-makers and housekeepers. This necessarily includes many subjects, and for the past two years has been taken up under two heads, Domestic Science, which includes cooking, food values, sanitation, household management and accounts, marketing, farm gardening and dairying; and Domestic Art, which includes sewing, costume design, a wardrobe budget, household decoration, a study of the four textiles, their manufacture and uses, and millinery. These subjects are taught in two ways, by theory in recitation and by practical application in the laboratory. Because of the nearness and convenience to Raleigh the girls are able to do some practical marketing and to make visits to the A. and M. Textile Mills, where they can see the actual processes in the manufacture of the raw cotton into cloth. They are also fortunate enough to have the privilege of visiting a model home and being entertained at a demonstration afternoon tea.

The practical dietetics and study of food values have been worked out through a balanced menu suitable for the farmer and for the indoor business man. In the laboratory it is necessary that the girls cook individually, and this necessitates cooking in small quantities. To overcome this, and make the laboratory work more practical, a series of luncheons is included in the spring work, which is sold to any guest who may wish to attend, at twenty-five cents a plate. At these luncheons each girl is hostess in turn and is responsible for the marketing, preparation and serving of the luncheon, with the help of the other members of the class. This gives an opportunity for cookery in large quantities and makes the girl self-reliant, dependable and able to meet emergencies.

The problem of the budget for the farm home is rather complicated and difficult to solve. Very few farm women know what their income really is, so the girls figure the profit on the farm crops, which really constitutes the farmer's salary, and, after taking into consideration the foods produced on the farm that are available for the kitchen, the income is divided on a percentage basis. As most of the girls taking the Home Economics course are from farm homes, this sort of a budget is practical as well as enlightening.

One of the features that has been emphasized is the correlating of the Home Economics work with the English course. It has been found here that a poor knowledge of subject-matter is more often the basis of a poorly written English theme than ignorance of English grammar, or the principles of rhetoric; so, in consequence, such topics as "The Care and Uses of Milk" and "The Plan of the Day's Work in a Home" have been assigned as subjects for English papers. These have been thoroughly studied in Home Economics classes, and the themes resulting from such work have been very successful and of a superior quality.

Invalid cookery and infant feeding are also stressed, with the idea that a working knowledge of both of these subjects will be invaluable to the home-maker.

The work of the Cary Farm-Life Home Economics department, however, is not confined just to the instruction of the girls in the school. A cooking class composed of the town ladies has been organized and considerable community interest and benefit has resulted. Also on Friday the Home Economics and Agricultural teachers hold demonstrations out in the rural communities, and the plan of work mapped out in the Home Economics department for this year has been to teach the farm women how to make better coffee, better lightbread and better biscuits. As the course grows and develops the plan is to include in a detailed way the study of every phase of work which will tend to better living both in the individual home and the community.

Making a Garden Spot of a Town

KATE K. WHEELER,

Principal Washington School, Bristol, Va.

I LOVE to talk about my school gardening, to watch the children as they busy themselves in their plots, and to see the change that has come in the school surroundings and in some of the bare spots around Bristol. I only wish I had a series of before-and-after pictures to give some idea of the change. The change is evident to more than the eye. Unfortunately, there is no way to get pictures of mind and spirit, and the change in spirit in the boys and girls, mothers and fathers, neighbors and fellow-citizens generally, is far greater than the change in appearances. I believe in the old proverb, "We are nearer God's heart in a garden than in any other place on earth." Nothing gives me more thrills than to lead my four hundred pupils out into the garden where we see miracles performed from day to day.

I began the work six years ago, when there was no sentiment for it. It has literally worked itself into the school and the community until it has become a part of life here. At first the parents would not allow the children even a small plot of ground to plant the seed we gave them. We did not have a place for a school garden and thought the work could be done in home gardens without the demonstration work at school. Finally, by going from house to house myself and requesting the parents to give the children a fair trial, I succeeded in getting enough plots to prove what we could do. Bristol is not a crowded town, and most of the people had garden space around their homes. Some people used these plots for gardens, while others used them for trash piles, and the children had no part in beautifying them or in planting them.

The first year we gave prizes at the end of the school to the best garden in each grade. The Mothers' Association gave them and made the prizes substantial ones, so that both the children and their parents would take more interest. We continued with the home gardens only, giving the prizes as we did the first year, for three years.

We then decided that we must have a school garden for demonstration purposes and to hold the interest of the children during the summer, from planting time to harvesting time. We thought we had no land, so we tried to borrow from our school neighbors a plot, but there were none for loan. It began to look as if we must give up the idea, when I cast my eye on a lot adjoining the school grounds that had been used for a basketball ground, and had become a passageway. The city council laughed when we requested the use of this plot for a garden, but said

if we could make a garden out of a piece of ground that had been trampled on for ten years, go ahead. We went ahead.

An old wire fence and a few posts were donated. With the help of the big boys and the janitor we inclosed it and made a gate. This furnished some fine industrial problems for the boys. If you have never set fence posts, just try it once and see if it does not require some skill.

The indignation of the public was ludicrous. The lot had been used as a passageway so long the people would not believe that we had the audacity to shut them out and force them to take to the street that the town had provided for them. For days we would have to put back each morning our fence after it had been torn down the night before. They were finally convinced that we meant business and let us alone.

We had a man break it up for us with a turn plow and the four hundred of us spanked those clods into the right consistency. The upper grades were given the dimensions of the lot and asked to make plans for laying it off. I drew a plan that I fully intended to use, but frankly confessed to the children that Fred Brown's was better than mine; so we used his. Here it is: Size of the lot, 96 by 30 feet; walk down the middle, 3 feet wide; eight plots 8 by 18 feet, with walks all around these flower beds the full length of the garden and across the lawn end.

All of the spading, raking, laying off, transplanting, replanting and cultivating is done outside of school hours. Only the first planting is done during regular school hours. We raise in window boxes all the things that are transplanted, such as head lettuce, tomatoes, cabbage and cauliflower.

In gardening season the whole school hastens to the garden at recess to see what has happened since the last visit. We now have a garden plow, and the children bring from their homes the other tools we use.

In the meantime, the work is going on with the home gardens, but it is here in our school garden that the children get their strongest incentive for the home gardens. I doubt if our work would ever have been really successful without the demonstration work at school.

The home gardens are under the supervision of the teachers and the Mothers' Association. The teachers organize the clubs and give instruction in the planting and cultivating, and visit the homes to give suggestions when needed. I might add that I visit every home garden before the close of school in the early summer. The mothers divide up the territory and appoint two to keep up with the gardens in each district. These are expected to visit and advise with the children from time to time.

In September we have our fair, when the children bring their products from vegetable and flower gardens and their canned fruit. The merchants gladly donate the prizes, and some of them are very nice ones, too—a steamer trunk, a raincoat, an umbrella, shoes, gloves, hats, caps, a fifty-pound sack of flour, etc. Last fall we had over four hundred

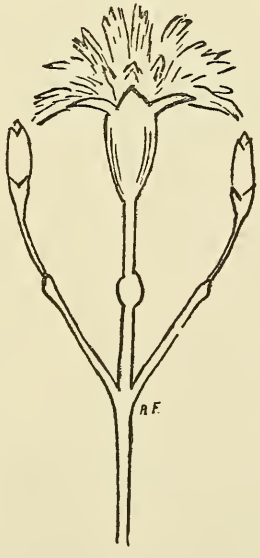
entries and fifty prizes were given. The display of canned fruit was unusually good. One twelve-year-old girl had twenty-four varieties of canned fruit, and exhibited with them the recipe for each. She had begun in strawberry time and had put up some of each kind of fruit as it came in season.

The first prizes offered were as follows: Beets, rocking chair; corn and lettuce, 50 pounds of flour; potatoes, electric iron; onions, rug; beans, camera; tomatoes, umbrella; popcorn, basket of fruit; canned tomatoes, gloves; canned beets, manicure set; asters, shoes; marigolds, raincoat; nasturtiums, gloves; mixed bouquet, shoes; gourds, cap; pumpkin, ball and bat; collection of canned fruit, steamer trunk; dahlias, $1.

Second prizes consisted of boxes of candy, baskets of fruit, boxes of stationery, caps, ties, gloves, hose, umbrellas, etc.

In addition to the above, the children have raised money for bulbs for spring blooming, and have over a thousand planted in the school yard. So far as I know, not a child has plucked a single flower without permission, and this is notwithstanding the fact that the school is in the mill district and the worst boys in town congregate near here and commit depredations.

We have not yet tried to commercialize our gardens, but we are planning to enlarge the work and make it pay in dollars and cents. Our aim thus far has been to help the children to live better lives and to win them from the lure of the street corners and picture shows back to mother Nature.



Community Arithmetic

Maria D. Graham.

THE purpose of this article is to show in a suggestive way how the teachers of Arithmetic in East Carolina Teachers Training School try to develop principles of Community Arithmetic by example as well as by precept.

Adults go about learning facts much more zealously if they need to use them right away, or in the near future; and, furthermore, when this is the case, they learn these facts much more accurately. The same thing is true of children. For these two reasons, as much as possible of that which is vital in the home and community life of the child on the quantitative side should be introduced into his study of Arithmetic, provided it is properly adjusted to the child mind. This does not mean that the average teacher has the time or means for finding as many problems as are necessary to furnish sufficient drill for the child to handle with ease and accuracy the new problems which may arise from day to day. But even a few of such problems furnish a motive for the much needed drill and make that drill far more effective. The child should be brought to a realization of the fact that he needs to be able to divide by a number of two or more digits, that he needs to add fractions, to multiply decimals, to calculate areas. In other words, a few *real* problems are necessary in the beginning of any new topic in Arithmetic to furnish a motive to the child for putting forth his best efforts in the mastery of that topic. *Real* problems are again necessary for further application of principles and processes learned; for, before leaving any topic in Arithmetic, the teacher should have the pupils apply the principles learned to the solution of many practical concrete problems. In the above connection, *real* problems are those problems that actually grow out of the home, school, or community life.

The life of the students of East Carolina Teachers Training School is very circumscribed, as is the case in any similar institution. The school is a little community in itself, shut off for the most part from the outside world. The dormitory life is practically the same from day to day, and all of the students have for the most part the same interests. The life is also different from that of the children whom they are to teach, and different from what their lives will be after leaving school. For these reasons, in the Arithmetic classes here the opportunity for Community Arithmetic, beyond that of learning principles, is very limited. But, because they can teach principles better by developing them than by handing them over to the students, the teachers are ever on the alert for the merest suggestion of Community Arithmetic. They realize

also that the students of any normal school are going to teach any subject in a manner similar to that used when that subject was taught them. Teaching by example is far more forceful than by precept.

Last fall, while reviewing the reading and writing of numbers, the newspapers and magazines were freely used, for they always furnish large numbers that mean something when read. At this particular time there were the half billion dollar loan, the war reports and the cotton and tobacco reports. In order to keep informed along all of these lines one must know how to read bigger numbers than have ever been in use before in the world's history.

Sewing problems and cooking problems, which actually arose in the domestic science classes here, furnished some good material for work in fractions. In studying bills and accounts, real orders for bulbs to be planted on the campus and orders for athletic goods were made out. Wholesale and retail prices were compared and discounts for cash payment became realities. Opening a bank account, writing and indorsing checks, and writing receipts came up in this connection. Each student made out in bill form the itemized cost of her school outfit necessary upon leaving home in the fall. Inquiry was made as to actual prices of staple groceries. The cost of the Thanksgiving dinner was calculated, the exact items being furnished from the dining-room; the cost per plate was also worked out and comparison made with the cost in the average home.

The senior class devoted four lessons to the study of tobacco as an important crop in Pitt County and in North Carolina and the handling of it as a great industry in Greenville. A big sale was visited, at which the girls saw the method of handling, weighing and placing the tobacco on the floor of the warehouse. The manner in which a sale is conducted, the duties of the various employees, the short cuts of the *lightning calculators* and the system manifest everywhere were noted and discussed later. On these visits officials are very kind in answering questions, and, either then or at a later date, furnish data for further study. One of the tobacco stemmeries was also visited, the superintendent taking the class over the plant and explaining the management and equipment. A true conception of what an important crop tobacco is in this section of the State and in the State as a whole was formed. Without such a visit one cannot have anything like a correct idea. Some knowledge of the amount of money put into circulation in a town the size of Greenville was gained, also of the number of people to whom employment is given.

The North Carolina supplement to Dodge's Comparative Geography gives excellent maps for showing the location of tobacco, cotton and corn producing counties. The United States *Agricultural Year Book* also gives accurate figures for the comparison of tobacco, cotton, corn, wheat and potatoes in North Carolina with other States as to acreage, production, average yield and price per acre.

Greenville's cotton mill is usually visited in the winter term with a similar plan for the study of cotton as that afforded by the tobacco warehouses and stemmeries visited in the fall. A visit to an up-to-date cotton gin is also sometimes made. The advance or fall in price of cotton is noted in the daily papers. Gain or loss from holding so many bales is calculated.

Valuable information is obtained from all of this kind of work, thought is provoked, interest aroused and many ideas are stowed away as a basis for further comparative work.

In studying linear measure, the students estimate the dimensions of things around them every day, such as doors, windows, books, bookcases, blackboards, board walk, etc., and then they test their own estimates by actual measurements. In studying square measure, tennis courts and basketball courts are measured by the girls, drawn to a scale, and areas of these are found; areas of certain plots of ground planted in rye, potatoes, strawberries or other crops are also calculated. The idea here is to build up proper concepts of a rod, quarter of a mile, half mile, quarter of an acre, half acre, acre, by measuring and viewing carefully things measured. In studying dry measure and liquid measure, common articles, such as corn, oats, peas, and water are measured and weighed. The fact that a bushel of corn weighs about 56 pounds, a bushel of oats about 32 pounds, a gallon of water about 8⅓ pounds, is not learned from memorizing what is contained in a book, but by actual experiment. The injustice of selling a liquid gallon measure of peas or other dry articles for a half peck is made evident. Things are handled and looked at and then talked about and comparisons made with statements in textbooks. In studying proportion, the height of the smokestack on the power house and the heights of different trees are calculated by measurements made by the girls and proportions worked out from these measurements.

In teaching percentage, the per cent of the students in school in each of the various departments, classes, and organizations is accurately found. Finding the increase in the weight of the girls and the per cent of increase, or the decrease and per cent of decrease are always interesting problems. Bargain offers in papers and catalogues, white sales and club offers of magazines, for instance, furnish problems for percentage.

The Biennial Report of the State Superintendent of Public Instruction and the Report of the State Tax Commission give interesting figures for work in taxes. Each girl can collect material for her own home county and at class interesting comparisons can be made.

A year or two ago one of the classes needed to borrow money to defray the expenses of a play which was to be presented two months later. The class borrowed fifty dollars from a bank, the class adviser signing the note with the treasurer of the class. Interest at six per cent was paid in advance. This little incident furnished a motive for further study of notes and interest.

The above examples are sufficient to show that the community life, however narrow, affords some opportunity for connecting the study of Arithmetic with real life.

The rural school teacher is most fortunate in her opportunities for making the Arithmetic work both interesting and practical. The home life of the children is so varied that they can bring much accurate and valuable information to school and really teach each other many things. They have many things to weigh and measure, they also can find real prices of farm products at the various seasons of the year. Milk, butter, eggs, and chickens are in nearly every home. At hog-killing times all the boys like to watch the weighing process and calculate the average weight of the dressed hogs. Then they can find the price of the meat when sold in bulk and when cut up and sold as lard, sausage, hams, shoulders. At harvesting time the yield of the various crops in bales, bushels, pounds, the selling price of each, and profit made per acre, can be found. The number of cords of wood needed for the winter, the stacking in cords and measuring same, the cost of cutting and hauling, the difference in the size of the load when roads are good and when roads are bad, the selling price, all furnish material for good *real* problems. The same thing is true in the comparison of the cost of fertilizer when bought already mixed and when the farmer buys the ingredients and does his own mixing. Keeping accounts for corn club boys, for tomato club girls, and for the school farm or garden is the best kind of arithmetic.

Teachers in towns and cities also have opportunities for Community Arithmetic, but of a different kind. Problems can be made concerning parcel post, freight, and express rates. Phone charges, coal, water, light and milk bills can easily be calculated. Excursions to factories, mills, banks, postoffices, pumping stations and other places of interest can be made. If an appointment is made beforehand by note or over phone, visits of this kind will be welcomed, and the utmost courtesy will be shown, and any reasonable information will be given.

Size of lots, width of streets and sidewalks, can be found; cost of paving streets and sidewalks can be calculated. Cost of refreshments for parties, and cost of tennis and basketball outfits are worth noting. The keeping of personal accounts with special reference to the amount of money spent for moving pictures, ice-cream cones, and coca-colas should be encouraged. How to start a savings bank account, and how to invest in building and loan stock should be taught.

In other words, children should be made to feel that much valuable arithmetic may be learned from the community life as well as from the text-book studied. All the concrete problem work in text-books should, so far as possible, be checked up with actual facts and figures in the community. This does not mean that much time is not still to be given to drill. Much oral and written drill, varied and snappy, must be given

to secure thoroughness in the work covered. The child likes abstract drill work provided it is of the right kind. Real Community Arithmetic reveals to him the importance of this drill. He is thus brought to a realization of the fact that he needs to handle figures accurately and skillfully in order to be able to find out facts he would like to know about things round about him, and in order to compare these things with others more remote.

It is also necessary for pupils to learn to interpret and solve problems contained in text-books; but they gain power in both of these lines if a background for this thought work is gained through handling problems from the community life.

On the next few pages will be found some of the problems solved by the students of East Carolina Teachers Training School during the present school year. These few are given merely to suggest what any teacher can do in her own school and community.

GRASS SEED FOR THE CAMPUS.

Some work has been done on the campus grading and building up the soil for the planting of grass seed, from time to time, since the beginning of the Training School. During the past fall when it was known that the campus was at last to be planted in grass, we were all interested. As we were studying areas in our arithmetic class at this time, the teacher assigned to the class the interesting problem of finding the cost of the grass seed.

Two of us were appointed to divide the campus into plots and the class of twenty-six girls into groups to find the area of these plots. After viewing and studying the campus thoroughly we decided on the position and size of the plots. We allowed a greater number of girls to the more complicated plots. As these plots were irregular in shape we drew a diagram showing how the areas might more easily be found by dividing them into different shaped figures. We took this diagram to class and made the assignments to the eight groups of girls. After this the groups went to work to find the area of the different plots. In working out these they got practice in finding the area of the square, the rectangle, and the triangle.

When each group had reported the area of its plot and had calculated the total area, it was discovered that approximately five acres had been planted.

The number of pounds of grass seed needed to the acre and the price per pound were the next things to be found. A price list from a recent catalogue called for forty pounds to the acre, at sixteen cents per pound, but since our soil was new we thought it best to allow fifty pounds to the acre. After the problem had been solved the cost of the grass seed was found to be forty dollars.

Below are the results reported by the different groups:

		Square Feet
Group 1.	Area of rectangle between East Dormitory and Administration Building	12,800
	Area of rectangle behind Postoffice	1,092
Group 2.	Area of rectangle on left side of walk to Administration Building	3,038
	Area of two triangles on left side of walk to Administration Building	160
Group 3.	Area of large triangle between Administration Building and West Dormitory	9,216
	Area of small triangle between Administration Building and West Dormitory	1,638
Group 4.	Area of square on right side of walk to Administration Building	2,025
Group 5.	Area of rectangle in front of West Dormitory	66,755
Group 6.	Area of rectangle on left side of board walk to Fifth Street	28,000
	Area of triangle on left side of board walk to Fifth Street.	2,046
Group 7.	Area of rectangle in front of East Dormitory	60,000
Group 8.	Area of rectangle on right side of East Dormitory	33,000
	Area of triangle on right side of East Dormitory	4,025
	Area of campus	223,795

$$43{,}560 = \text{number of square feet in one acre.}$$

$$\frac{223{,}795}{43{,}560} = 5 + \text{number of acres in campus.}$$

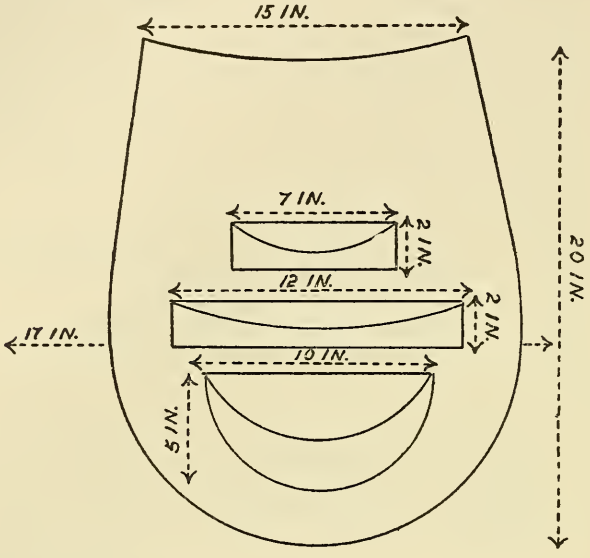
MARY SECREST, '16.
LIDA TAYLOR, '16.

APRON FOR USE ON GEOMETRY CLASS.

After we began our work in Geometry we found that we had accumulated a number of articles which it was necessary to carry on class: a protractor that we had made of cardboard, a ruler, a pair of compasses, and an eraser.

Some of them were always dropping on the floor, causing confusion and distraction. The problem of managing these was discussed by the teacher with the class. It was suggested that we make an apron with pockets for the different articles; therefore, each pupil was requested to bring to class next day a design that she thought would meet the requirements. The designs were carried and, as no one design seemed to satisfy the class exactly, suggestions were taken from several designs and one definite design was worked out by the class. We decided to make two aprons. After taking into consideration the durability and the kind of goods that would not soil easily, we agreed to get cretonne and gingham. After this, two or three girls were requested to get samples, prices, and width of material and bring to the class. This was done and the class selected a sample of cretonne with blue and pink flowers against a tan

background, and one of the blue gingham with a very small white stripe. Light blue seam binding was chosen for the cretonne apron and white for the gingham. The class worked out the exact amount, as nearly as possible, for each apron, which included two-thirds yard of cretonne, three-fourths yard of gingham, and three and one-fourth yards of seam binding, and three snaps for pockets, for each apron.



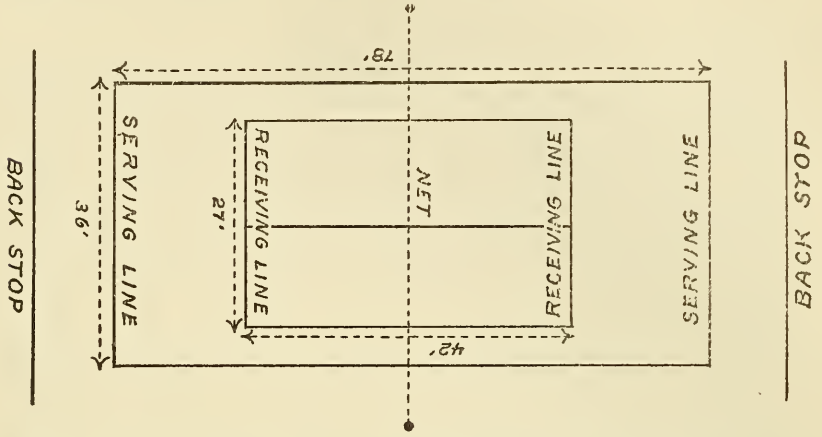
One of the girls went down town and purchased all the material needed and two girls volunteered to make the aprons. The accompanying design was the model, drawn to a scale.

CLELLIE FERRELL, '18.

DRAWING TO A SCALE.

While studying linear measure we surprised the teacher of arithmetic by not being able to tell her the dimensions of a tennis court; consequently, our problem for the next day was to measure one of the tennis courts and draw it to a scale. It was left to the class to work out different scales; as this work was in connection with methods of teaching fourth-grade children, we were asked to avoid fractions, which were not provided for on the ruler. Besides this, we had to consider the size of our drawing paper. Some used the scale 1 inch for 12 feet; others used 1 inch for 16 feet; others, 1 inch for 24 feet. The diagram of a tennis court is drawn to a scale of 1 inch for 24 feet. This makes the distance between the wire backstops $4\frac{1}{12}$ inches in the diagram, the distance being 98 feet. Therefore, while the $\frac{1}{12}$ is not provided for on the ruler, it had to be used in this case on account of fitting the drawing to a certain space, but it should not be used in the fourth grade.

Methods in square measure followed linear measure. In this connection one of the problems assigned was to find out how much land is in the tract on which our six tennis courts are laid off. The dimensions found were 138 feet by 181 feet, or approximately .57 acre.



From this measurement each member of the class should get an indelible impression of the dimensions of a tennis court, and be capable of directing the laying off of one for her school, if necessary; furthermore, some definite idea of how much land it takes to make one-half acre is gained. Susie Barnes, '16.

Ordering Bulbs.

In the fall there were several organizations and people buying flower bulbs, as all that are connected with the school are interested in beautifying the campus. The small orders were lumped and handled by one person. In this way the order was large enough to be filled at wholesale prices and the bulbs secured at a lower price, thus saving on each order.

While studying bills, the Senior Class was given the problem of finding the amount saved on this order, and also the per cent saved on the retail price. The bulbs were ordered from a wholesale catalogue. The class was given the retail catalogue from the same house, to find the retail prices. There were various varieties of freesias, narcissuses, hyacinths, sacred lilies and tulips, amounting to 850 bulbs in all. These were secured for $10.45 at wholesale. The students found that they would have cost $15.75 retail, making the amount saved $5.30, or about 33⅓ per cent on the retail price.

Growing out of this problem, the idea came up that here is another opportunity for girls to make extra spending money. Some girl in almost any community could make arrangements with a reliable wholesale bulb dealer, the latter part of September, go around among her neighbors and take orders for bulbs at regular retail prices, sending off

one big lumped order. When the bulbs are delivered the money may be collected, and the total price at wholesale sent to the merchant. The girl will realize the amount saved on the retail price.

EUNICE VAUSE, '16.

NEWSPAPER PROBLEMS.

Last fall, when we were assigned arithmetic work in newspapers, the entire class was much impressed with the fact that some of the very best problems for comparative study in arithmetic could be obtained from the current numbers. This work not only furnished the problems which required real thinking for their solution, but also led to interesting discussions of real problems that counties, states, or firms have to meet. Thus we gained in arithmetic, at the same time gaining much interesting information.

The assignment one day was in *The Progressive Farmer,* the issue of November 13. Each member of the class brought in problems suitable for seventh and eighth grades that were suggested by facts concerning North Carolina, found on page 13 of this issue. On this page Mr. Poe shows, by his article and reports from various States, that the farmers who buy on time are charged so much more than those who pay cash that they pay an interest rate equal to 70 per cent per year.

The following six problems give some idea of the variety of problems that such a report as this can furnish. These came from different members of the class and show various points of view of the same report:

1. A farmer bought the following bill at time price. What annual rate of interest did he pay?

	Cash Price.	*Time Price.*
50 bushels corn	$48.50	$58.01
10 bushels meal	10.40	12.46
1 ton hay	22.32	26.50

2. For how many years could he have paid interest on the cash price of above bill at 6 per cent before it would have amounted to the time price?

3. What would he have saved if he had borrowed money, for 9 months, to pay cash for the above, at 6 per cent per year?

4. How much did a farmer lose when he bought the following bill on time:

	Cash Price.	*Time Price.*
20 bushels corn	$0.97	$1.16
6 sacks flour	2.45	2.92
50 pounds lard	.12	.14¾
50 pounds sugar	.07⅛	.08½

5. A farmer bought a bill of goods amounting to $240.65, thereby paying 60.13 per cent interest. What was the cash price of this bill, and what would he have saved by buying at cash price?

6. The cash price of a bill was $26.93. The time price of the same bill was $34.42. The time price was what increase per cent of the cash price?

As one after another of these problems was read, we began to open our eyes to the realization of the great value of a seemingly small report, provided close study were given it, and we realized that the problems made by any one of us were by no means the only correct ones.

These problems also brought up some good questions and thoughtful discussions as to the method of finding figures for these statistics. For instance, where the cash price of corn per bushel was given as $0.9675, the time price $1.1602, and the increase per cent 19.92, the question arose: "How is the increase per cent found?" The answer to this brought us to feel a need for the statement of a principle in percentage. One of the class requested the principle, and it was made clear to all of us, when our minds were ready to grasp it. This was far better than having the principle handed over to us whether our minds were waiting openly for it or not, on the assumption that we would need it some day. In this one fact alone lies a value of such independent work on the part of the pupils.

If newspapers can furnish good problems, and at the same time bring about the study of real problems, give independent work for pupils, and open their minds to the need for the underlying principles of arithmetic so that they will ask for them, why not use them?

Martha Lancaster, '16.

Volume.

Volume is difficult for fifth-grade children to understand, simply because they are required to get the volume in figures of some difficult thing without the opportunity of visualizing, without a motive for it, and without any actual experience that would teach what volume really means. These defects can easily be remedied by giving a problem like the following, when you first introduce the subject:

If a bale of North Carolina hay measures 3 feet long, 14 inches thick, and 18 inches wide, how many bales can be packed into a barn 36 feet long, 30 feet wide, and 7 feet from the floor to the ceiling?

After stating the problem, ask questions that will make the children decide which way to lay the hay and how many bales there will be in one row. Ask them how many bales can be placed in a row if the hay is laid lengthwise and how many rows there will be. This will be a good review of square measure. Ask a question that will make them actually see the bales of hay on the floor and enable them to tell how many there will be. Then repeat the height of the room and the thickness of the hay and let them tell you how many layers there will be from the floor to the ceiling. Go back to the first layer and see the number of bales in that and then ask them how many bales in all the layers. This will make them see the hay in the barn. Then draw a diagram on the board, letting them tell how many inches shall represent a foot.

You are leading up to cubic measure; therefore, as the next step, ask

questions that will make the children see one bale of hay as a whole, the room as a whole, and a box as a whole. If they can see each of these, they can realize the meaning and importance of the three dimensions.

To make the children feel the need of knowing what a cubic foot is, ask a question like this, "If your father has a new ditch cut, how does he count the cost?" Some boy, who has heard his father estimating the cost of a ditch, will tell you, although he may not know what it means. Then show them by a blackboard illustration a foot long, a foot wide, and a foot thick, what is meant by a cubic foot. Most children can easily visualize a cubic foot of ice, so you can also use that. Ask them how many inches in the length, the width, and the thickness of the diagram on the board and from that help them to find out what is meant by a cubic foot. If problems with bales of hay, blocks of ice, and other familiar solids are used in presenting volume to children there will not then be the misconception and wrong idea that feet times feet = square feet, or that feet times feet times feet = cubic feet, but they will visualize properly and will feel and understand that the *number* of rows times the *number* in a row times the *number* of layers = the *number* of units, that is, the number of feet in length times the *number* of feet in width times the *number* of feet in height equals the *number* of cubic feet in volume.

ARLEY MOORE, '17.

They were holding midyear examinations in one of the public schools. The subject was geography. One of the questions was, "What is the equator?" "The equator," read the answer of a nine-year-old boy, "is a menagerie lion running around the center of the earth."—*Selected.*

Enon Country-Life Club

Carrie Manning, '14.

HOW can a rural community be complete without a Community or Country-Life Club to hold it together? A club of this nature has proved to be of invaluable aid to the people of the Enon community in Granville County.

The "Enon Country-Life Club" was organized in the spring of 1914, and has done much creditable work. Any person above ten years of age is eligible for membership. The enrollment at the present is about sixty-five.

At each of the weekly meetings, after the regular business has been transacted, a planned program is carried out. Following is the nature of some of the programs: debates by the men of the club, papers on the local and county history, declamations, recitations, musicals, lectures by enthusiastic speakers from the outside, and spelling matches between the school and club. The money-making programs have been plays and parties of different kinds.

Following are a few of the things accomplished by the club: Early in its history a traveling library was secured. In the spring of 1915 the school and club made arrangements to get a piano, which is left at the school building for the use of both school and club. The club was instrumental in adding a new room and securing a third teacher for this scholastic year.

In October, 1915, a community fair was held, and each family furnished a part of the beautiful exhibits which were brought to the school building. Judges from the outside judged the exhibits, and the best of everything was taken to Oxford and entered in the community contests at the county fair, and won the first prize, $25.

When the club learned, a few weeks before Thanksgiving, that the school was to represent Granville County in demonstration in sewing at the Teachers' Assembly at Raleigh, its members immediately agreed to pay all expenses of the two girls.

Mr. T. E. Browne, representing the Boys' Corn Clubs in North Carolina, thoroughly aroused the members by a talk at the regular meeting on the night of January 14, 1916. During the following week a Boys' and Girls' Agricultural Club was organized with twenty-three members, representing the corn, pig, poultry, and canning clubs. The Country-Life Club, with the merchants of Oxford, has offered three prizes to each of the four clubs named above, as an incentive to better work.

The members of the club are strong believers in the old adage, "All work and no play makes Jack a dull boy," so they do not forget the social side of life. Quite a number of social features have been enjoyed, such as reception by president, oyster supper by men of club, Valentine party, and reception for the teachers of 1915-'16.

Our Birds

Margery L. Herman.

HOW much do you know about our birds? Have you been in the woods and the fields this winter? Of course you have seen mockingbirds, bluejays, crows, and English sparrows. And you couldn't miss the flicker ("yellow hammer," "high hole," "golden-winged woodpecker") with his mottled brown back and his two distinct crescents —a black one at his throat and a red one on his crown—climbing industriously round and round the tree trunks in an upward spiral, and eating every grub and larva he finds in the bark. He is not nervous, but, if startled, will go flying off in a great hurry, showing the golden yellow undersides of his wings and the two conspicuous white spots at the base of his tail. Then, of course, you couldn't help seeing his cousins, the woodpeckers. There is the yellow-bellied sapsucker, with the red spot on his throat,* and the tiny dab of red on his crown, just as busy as the flicker in his search for insects. If disappointed in his prey, he will moan and complain in a petulant whine, half ludicrous and half pathetic. The sapsucker has an unsavory reputation, however, for he is blamed for killing trees by sucking their sap and eating the cambium under the bark. Action has been taken against him, and sufficient evidence has been found to condemn him. But we must take great care not to let the sapsucker's bad reputation prejudice us against the other woodpeckers, for they are among our very best friends, and if they should be destroyed, the insect pests would kill the trees faster than all the sapsuckers in the world.

One of the most valuable of all the woodpeckers is the downy woodpecker, the little drummer of the woodland, stopping his work now and then to beat a musical tattoo just to let us know he is about. He is scarcely larger than a sparrow, but conspicuous in his black and white markings. The hairy woodpecker, almost identical in color and markings, is somewhat larger, and much more shy. Then there is the big red-head, striking with resounding blows wherever he suspects some luckless insect might lurk in hiding.

I wonder if you have ever mistaken the nuthatches and the little brown creeper for woodpeckers. That would not be surprising, for they all find their food in the bark. But, if you will observe carefully, you will see a difference in their habits.

The brown creeper, striped like a sparrow, and smaller than the English sparrow, climbs upward around the trees like the woodpeckers, but, instead of flitting carelessly back and forth from tree to tree, he

*The red spot on the throat is replaced by a white one in the female.

always drops to the ground before ascending another tree. The nuthatches, on the contrary, climb in either direction, and are prone to dash recklessly down the trunk, as if defying the laws of gravitation. We have two nuthatches—the white-breasted, with its black head and dark gray back, and the little brown-headed nuthatch, gray of back and tiny as the house wren.

The tufted titmouse and the little black and white warbler also have habits similar to the woodpeckers. This little warbler may be seen creeping about on trees and fallen logs, keeping up its weak "tseep, tseep" while it inspects every crevice. It is very tame, and like the brown creeper, will almost allow itself to be caught under a hat. The tufted titmouse is all clad in sober gray, but is, nevertheless, a merry little fellow, gaily whistling all day long while he, too, peeps in every crack, eagerly devouring many unfortunates of the insect tribe. And sometimes he may surprise you by turning several somersaults around a twig by way of diversion, for being a cousin of the chickadees, he is an acrobat.

Did you know the wood thrush stays with us all winter? You have seen the shy brown bird, larger than a sparrow, with dark brown spots on its breast? It is very quiet now, but wait until the nesting season comes, then listen for its wonderful bell-like song. You may hear it at any time during the day, but it is particularly glorious from sunset until dark.

Of course you are very familiar with the Bewick wren, that tireless, exultant little songster that sometimes surprises you even before daylight comes, with his loud, clear "jaree, jaree, jaree." Neither the cold of winter nor the summer's heat can silence him.

The dainty bluebirds, too, with their blue, blue backs and their rosy tinted gray breasts,* stay with us all the year; but, sad to say, they are becoming rare in some sections. We have not treated them with kindness or consideration, for they not only show a very friendly disposition toward us, but they spend their days, from morning to night, working hard for us. We would seem to be doing little enough in return if we provided them with bird houses, or drove away their enemies, the English sparrows.

It seems strange that the bluebird should ever be confused with the bluejay, for there is all the difference in the world. The bluejay is a large bird, beautiful of form and color, but of an unreasonable, quarrelsome disposition, while the real bluebird is much smaller, and is quiet and amiable. Its song, too, unlike the harsh, cat-like cries of the bluejay, is one of the sweetest of the springtime. Moreover, the bluejay has an unsavory reputation, for it is whispered that he is an outlaw and a thief, ever ready to scream "thief" at others, but never missing a good opportunity to raid the nests of our useful birds, robbing them of their eggs or of their young.

*The female is paler blue, and there is no rose color on the breast.

The summer tanager, our smaller redbird, with his little greenish-yellow mate, leaves a few weeks before Christmas, to spend the holidays in the tropics. But the cardinal, the stately crested redbird, and his buff-colored mate, spends the winter here.

Of course you know our birds' songs, or, at least, the songs of some of our common birds. If you don't, let me suggest that you begin to watch and listen right now, until you know the songs and can identify the singers. You will marvel at the beauty and perfection of bird music, which is superior, in some respects, to the best that our greatest singers can produce. And you may notice, too, that birds, like people, have individuality, some birds singing their songs with variations in tone or melody to suit their individual fancies. But listen, and you will find many surprises in one of the most fascinating studies of nature.

By the first of February the migrations begin. Do you know which birds we can expect to come back to us, or why birds migrate at all? Well, the story is very old. We are told that many, many years ago, while the earth was young, it was always warm and pleasant where all the people and the animals and the birds lived. There was always plenty of food for all, and cold and hunger were unknown. But there came a time when a great sheet of ice crept down from the far north and covered the land, bringing storms and snow and bitter cold. Many of the poor little birds starved or froze to death, but many others fled to the far southland, where they found an abundance of food and sunshine. But at last there came the springtime, driving back the cold, cold winter, and the earth became green and beautiful once more. The animals came back, and the birds, full of joy, returned to their old homes to build their nests and rear their young. Springtime gradually became summer, and summer changed to autumn. Then again dreadful cold returned, and again the birds were driven southward, only to return in the spring, as before. And so it happened over and over again, year after year and century after century, and still they come and go, because the habit formed so long ago has now become an instinct which they cannot choose but obey, and so perfect is the instinct that it not only calls them together at the right time and place, but it guides them surely over hundreds and sometimes thousands of miles of unknown lands, o'er trackless waters, through daylight or darkness, bringing them straight to their destination at exactly the appointed time. Thus Mother Nature taught the birds that by spending half the year in one part of the world, and the other half in another, they could have an abundance of food and sunshine all the year round.

You may be on the lookout for the spring migrants from the beginning of February to May. There are always a few so eager to start that they cannot wait until the weather becomes settled, but come on during the first few weeks of warm weather, only to be caught sometimes

in later winter storms in which many perish. The largest numbers, however, usually wait until the appointed time for their species.

Early in February we can expect the robins, mad just with the joy of living, cheerfully scolding everything and everybody, but stopping now and then to merrily warble their varied song. They are on their way north, but drop in to say, "How do you do? Why, cheer-up, cheer-up; don't you know it's springtime?" while they help themselves to some of the bugs and earthworms in our sunny woodlands. The southern robin, of somewhat paler red breast, and less jovial spirits, will come later to stay; but prefers the woods to our company.

The dainty cedar waxwings, with their coquettish crests and satin plumage of soft rosy browns blending into soft yellows and grays, often come with the robins, although they may drop in at any time during the winter. They feed diligently upon weed seeds and berries until we approach, when they rise and perch upon the trees, silent and still as little statues, while they watch us. They stay but a few weeks, and then they are gone. Roving little mysteries, how we wish to keep them!

The slate-colored juncoes ("snowbirds") all dressed in sober gray, but with pink bills, may also be seen feeding on the ground with the robins. Farther on you may see a flock of white-throated sparrows, with their brown-striped backs, gray breasts, white throats and the two distinguishing black lines on the crown, scratching away among the dry leaves. If you wait a little while, perhaps one of them may be gracious enough to sing his plaintiff little Peabody song, "I— I— Peabody, Peabody, Peabody," in which he flaunts his New England pedigree.

Some time during March the swallows and their cousins, the swifts and the purple Martins, will come back to spend their lives darting up and down, in and out in wonderful curves and circles, while they clear the air of myriads of mosquitoes, gnats, and other insects, which, if left unchecked, would soon become a veritable Pharoah's plague.

The catbirds, too, will come in March, as well as the beautiful brown thrasher, large as a bluejay, but colored very much like the wood thrush. The brown thrasher, with his rollicking song, is the "merry brown thrush" of our childhood rhymes. How eagerly we watch for his return. Then, too, we must not overlook the little gray wood pewee, with his plaintiff "tru-al-ly, tru-al-ly, tru-al-ly, tru-ly." In April or May we will not have to look far for the kingbird in his clerical garb of black and white—meek looking enough, to be sure, but the very incarnation of courage, and the sworn enemy of hawks and owls. In sharp contrast to this Puritan bird is the exquisite little summer tanager that left before Christmas, but came back in February. This gay little redbird is not overfond of work; so gorgeous a livery was not designed for toil. But he will condescend to sit on a branch near by to help keep up his little wife's courage while she builds the nest and keeps the eggs warm.

Have you ever wondered why we have so many birds, or whether we couldn't get along just as well without them? We could not possibly do without them, for this reason: You know how entirely dependent we are upon the plants and animals for every bit of our food. So, if the plants were to disappear from the earth, you see what would happen; the animals would soon die, and when the food at hand is gone, the people, too, would starve to death.

But what has this to do with the birds, you say? Just this: the plants have many enemies in the form of insect pests, but, in turn, these pests have formidable enemies in the birds. It has been said, "If all the birds should die, in ten years the insects, unchecked, would eat every green thing off the earth." The birds are the natural enemies of the insect pests, but our wild birds are decreasing in the last few years at the rate of 10 per cent a year. At this rate, is it any wonder that our insect pests are spreading so rapidly, and that new pests are breaking out? Is it any wonder that we must spend our time and our money trying to save our crops, our fruits, and our forests from these pests? In nature there is a perfect balance. All injurious plants and animals have natural enemies which keep them from becoming too plentiful. But nature resents the interference of man, and if her wonderful balance is disturbed, man must suffer. The ceaseless conflict between the birds and the insects is the greatest and most important in its outcome that the world will ever witness. By the hand of man, the advantage has already been given over to the insects. The birds have been ruthlessly destroyed until there are now only one-tenth as many as there ought to be, and every time shotgun or slingshot are brought into play, the insects gain a sure and definite advantage. They are gaining, and the birds are losing so rapidly that the situation is already alarming, but still the relentless slaughter of the birds goes on. While the flickers are working away destroying thousands of ants and other insects each day—nobly holding their own in the ranks of woodpeckers, nuthatches, titmice, and creepers, in the fight to save our forests and our fruit trees, we shoot them in cold blood for the sake of a few ounces of game to please our palates; while the meadow larks and bobwhites are scouring our fields for the myriads of cotton worms, tobacco worms, cut-worms, white grubs, grasshoppers, and weevils (including the cotton boll and alfalfa weevils), and are devouring billions of weed seeds, as well, we are doing our best to banish every last one of them from the earth. The killing lust of our early ancestors is still strong within us, and we still imagine that game is essential to our bill of fare. We are paying for it, and paying heavily. Let me quote from an article written by M. Llewellyn Raney, of Johns Hopkins University:

There is something more to bobwhite than gameness and six ounces. That is news to lawmakers, but lawmakers have been taking their cue from gunners, and gunners cannot afford to know. But Dr. Silvester Judd, of the

Biological Survey, has held autopsy over bobwhite dead, and Mrs. Margaret Morse Nice, of Clark University, has played detective on bobwhite living, and bobwhite is innocent—innocent, not merely, but marvelously beneficent to humankind. Such another little combination of scourge to insects and exterminator of weed seed never left the hand of nature under feathers.

Non-migratory, he will be found twelve months in the year on the little plot of ground lucky enough to have him for tenant.

On his bill of fare are 141 species of insects and 129 of weed seed. The gunner who shoots him in the stubble imagines that grain is about all that he eats, but as a matter of fact it amounts to only one-sixth of his food for the year, and this is taken not from the standing crop or among the sheaves at harvest time, but from what escapes the reaper. When grain is sprouting and when the crop is in the milk, bobwhite has other concerns, for in late spring and summer one to two-thirds of his food consists of the field's insect foes, which make 15 per cent of the year's total in the wild, or more than a third in captivity. It is an important list, too, for birds not of his order eschew many of his favorites. Potato beetles he likes, and the cucumber beetle, squash ladybird, corn billbug, cut-worms, the tobacco worm, army worm, cotton boll worm, clover weevil, cotton boll weevil, imbricated snout beetle, May beetle, plant lice, grasshoppers, Rocky Mountain locust, and chinchbug. The chick, eating 44 per cent of his weight daily, lives for six weeks on insects, and in this time one consumes some 20,000 and increases in weight tenfold. One, a week old, ate 2,326 plant lice and 20 mealworms, but was not done for the day. Here are some single meals of adults: Forty-seven boll weevils, 101 potato bugs, 100 chinchbugs, 12 squashbugs, 12 army worms, 12 cut-worms, and 568 mosquitoes in three hours. And as samples of a day's work, in addition to seeds, grain and green food, note 1,350 flies or 1,286 rose slugs or 5,000 plant lice.

In the winter months he turns to weed seed, which forms more than half his food for the year, and here are some samples of one day's consumption by one bird: Barnyard grass, 2,500; beggar ticks, 1,400; black mustard, 2,500; burdock, 600; crab-grass, 2,000; curled dock, 4,175; dodder, 1,560; evening primrose, 10,000; lamb's quarter, 15,000; milkweed, 770; peppergrass, 2,400; pigweed, 12,000; plantain, 12,500; rabbitsfoot clover, 30,000; bush clover, 1,800; smartweed, 2,250; white vervain, 18,750; water smartweed, 2,000.

Finally, the year's consumption by one pair in captivity was 130,905 insects and 10,442,688 weed seeds.

If bobwhite were a machine, what would a farmer give for him? Common sense would have them run like chickens over field and garden and the gunner should be taboo.

The ruffed grouse, wild turkey, killdeer, woodcock, and upland plover are close seconds in this work, but they are fast disappearing. We have hunted out and shot almost the last of the few survivors, while many of our States are trying to surpass each other in giving complete protection to partridges and pheasants brought from Europe and Asia to take the ranges in which their work is far inferior to that of our native birds, which are by nature fitted to combat our insect pests. Importation of birds is always a dangerous policy, as our experience with the English sparrow and starling proves. In their native country both birds are useful, feeding upon insect pests and weed seeds. Removed from their natural environment and brought to America, they were forced to adapt

themselves to new conditions or perish. As a result, they have become outlaws and parasites, multiplying with such alarming rapidity as to threaten to banish our own useful birds.

In speaking of the justly deserved condemnation of the English sparrow, let us discriminate distinctly between these outlaws and our own native sparrows, of which there are about half a dozen species in every neighborhood. We have the shy song-sparrow with its canary-like song; the white-throated sparrow, the swamp and Savannah sparrows, the little chipping sparrow, and others. They are by nature seed eaters, and, with the juncoes, cardinals, and mourning doves are splendid allies of the bobwhites and meadow-larks. A field sparrow, for instance, eats one-fourth of an ounce of weed seed per day. Ten of these birds to each square mile for two hundred days in the year would devour 1,750,000 pounds, or 875 tons, in a single season. This is underestimating the real facts, since there are considerably more than ten native sparrows to the square mile, and they seem to find no scarcity of food; for when captured, even in the depth of winter, are veritable little balls of fat. However, when spring comes, they, too, turn their attention to the insects, destroying them in great numbers. It has been observed that when a particular insect threatens to become a pest, the little native sparrows leave their seeds and join forces against the intruder, often preventing an outbreak. What a pity their numbers are becoming so few!

While these birds are waging war upon the insects of the fields, the thrushes, thrashers, pewees, wrens, and catbirds are carrying on the work in woodland, swamp, and thicket, the breeding places of millions of injurious insects. They are also of considerable assistance to the bluebirds, house wrens, phœbes, martins, swallows and kingbirds in saving our orchards and gardens. The phœbes and kingbirds lend valuable assistance to the swallows, martins, swifts, and nighthawks in keeping the air clear of insects.

But why are these birds leaving us so rapidly? you cry. They are leaving because we have shown no desire to be friendly. We have closed our barns and our chimneys so that the swallows and swifts can find no places to build their nests; we have forgotten to put up new martin and bluebird houses; we have kept cats on our premises to frighten away the birds, or to kill those that stay;* and we have shot the brave little kingbird because we imagined he was eating our honeybees when he was really catching the robber flies that kill so many of our honeybees. What if he does occasionally destroy a few worthless drones?† The robber flies he captures would destroy several times as many worker bees. Besides, he is one of our most valuable insect destroyers, while he valiantly defends our poultry yards against the depredations of hawks and owls.

*Cats have been known to destroy as many as twenty birds a day.
†Bees are rarely found in the stomachs of these birds; but, when found, are usually drones.

The catbirds, as well as our beloved mockingbirds and robins, have been accused of stealing our cultivated fruits, and, in many cases, found guilty. We forget that we have driven them to it by the destruction of their natural food, the wild fruits. We also forget, in our indignation, that while they do take a little fruit they are paying for it many times over in other ways, for half their food is insect food, and only about one-fourth is cultivated fruit. A robin, considered by some as of use only to be eaten, is estimated to be worth ten dollars each season as an insect destroyer.

Even the blackbirds and crows help. The blackbirds often follow the plow in spring, actually stuffing themselves with the grubs and larvæ turned up by the plow. Of course the crows do pull up sprouting corn,* and rob other birds' nests, while the blackbirds steal a good deal of grain in certain sections. It seems advisable to reduce their numbers when they become troublesome, but they should not be destroyed. The bluejay, cousin of the crow, also comes under the ban.

It is a great mistake that hawks and owls are so generally persecuted, for, with the exception of the great horned owl and the blue darters,† they are our faithful friends and helpers.

The barn owl is the best rat and mouse catcher in the United States. The little screech owl and the red-shouldered hawk are valuable assistants. Even the large red-tailed hawk, generally known as the hen hawk, should not be destroyed; for, while it does occasionally visit a poultry yard, it destroys large numbers of rats, mice, moles, crayfish, rabbits, and even considerable numbers of rattlesnakes in regions where these reptiles abound.

The shrike, or butcher-bird, preys upon smaller birds. It has a beak like a hawk, but no talons with which to hold its prey, so it thrusts it upon some convenient thorn, and devours it at leisure, often killing more than it can eat.

The only birds to be wholly condemned are the English sparrow, the starling, the yellow-bellied sapsucker, the great horned owl, the shrike, and the blue darters; while the crows, blackbirds, and bluejays are condemned to the extent of having their numbers reduced, if they become troublesome. Of all these, the English sparrow, "the feathered rat of the bird tribe," is the worst, and stands second only to man and his cherished companion, the cat, in banishing our useful birds.‡

But how are we to check the alarming decrease of our native birds, and bring back the birds that have left us?

First, we must give them protection. There must be less hunting and less wanton shooting of the birds before it is too late; children must be taught the birds' place in nature, so that they will protect and encourage them; cats should be tabooed, and every possible means should

*This can be prevented by treating the seed corn with coal tar before planting.
†Cooper's hawk and the sharp shinned hawk.
‡Many of our serious insect pests have broken out where the English sparrow is most abundant.

be used to destroy the English sparrow. Trapping and poisoning are the methods most highly recommended.*

Protection alone, however, will not always bring back all the birds we want. There must be some evidence of hospitality to induce many of our long abused bird friends to return. Nesting places are becoming woefully scarce, and the birds are very grateful for orchards and groves, thickets and vines, while some will appreciate open chimneys, barns, and sheds. But bluebirds, martins, and wrens look for us to show even greater hospitality by providing ready-made dwellings in the form of bird houses. The construction and suitable location of bird houses should be taken up by every school in the country. But little knowledge of the carpenter's craft is needed for the construction of simple bird homes. Birds prefer crude, rustic dwellings made inconspicuous by coverings of bark, or of dull gray or gray green paint. The entrance hole should be cut in the side so as to exclude the rain. But since the rain will blow in sometimes, there should always be a small drainage hole in the bottom. The entrance hole should be no larger than necessary for the comfortable entrance of the desired species of bird. For instance, if a box is intended for wrens, the entrance hole need not be more than one inch in diameter, thus excluding the English sparrow. Perches are not only unnecessary but are undesirable.

Bluebirds and wrens are easily accommodated, since they will build in almost any kind of boxes, or even cans, if placed in the shade out of the reach of cats. Suitable bluebird houses can be easily constructed from soap boxes or starch boxes, while houses designed for wrens may be made of cigar boxes or tomato cans. Martins are even more easily satisfied, and need no coaxing to persuade them to build in gourds. But martins like their homes on some high pole or other elevation in the open. Flickers will build in houses made by excavating holes in portions of logs, and other birds are beginning to build where plenty of bird houses are provided.†

But after we have given them protection, and have provided every kind of nesting place that bird could wish for, if we have overlooked their need for water our efforts are in vain. Birds bathe frequently and drink often. They must have a constant supply of water, and its presence or absence in a neighborhood is a very important factor in their choice of nesting places. But even if they do decide to stay with us, they are often driven back to the woods when the summer's heat dries up many of the small springs and streams. Therefore, if we do not have a constant water supply, we must provide bird baths. A bird bath may be made by placing a shallow pan on a short post just beyond the reach of cats, and it must not be too near a thicket in which cats

*Full directions are given in Farmers' Bulletin No. 493, on "The English Sparrow as a Pest," sent on request by the U. S. Dept. of Agriculture.

†Write to the U. S. Dept. of Agriculture for Farmers' Bulletin No. 609, on "Bird Houses and How to Build Them." This gives definite plans and directions for constructing the various kinds of bird houses now in use.

fig. 1

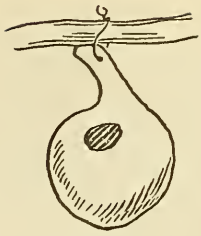


fig. 2

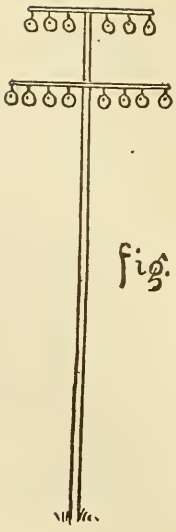


fig. 3

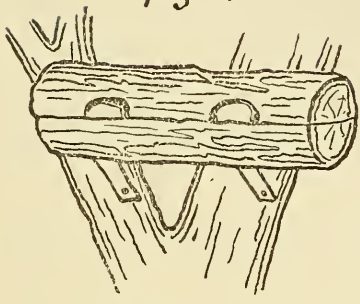


fig. 4

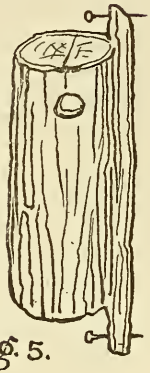


fig. 5.

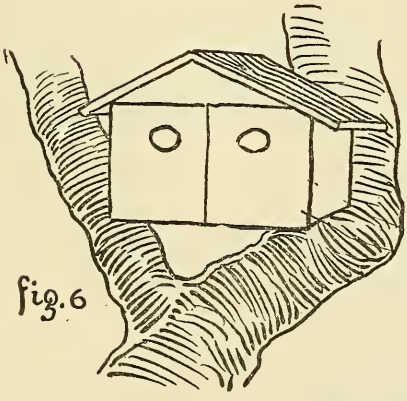


fig. 6

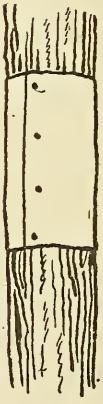


fig. 7

BIRD HOUSES.

Fig. 1. Tomato can with a circle of wood fitted in end for wren house.
Fig. 2. Gourd for martin house.
Fig. 3. Common arrangement of gourds for martin houses on high poles.
*Fig. 4. Log house for bluebirds.
Fig. 5. Log house for flicker.
*Fig. 6. Bluebird house made from a starch box.
Fig. 7. Tin guard to prevent cats from climbing trees or posts.

*By permission of Neltje Blanchan and Doubleday-Page Company.

can hide, for birds are very helpless when their wings are wet. The water should be only about one-half inch deep on one side, gradually deepening to three inches in the deepest part. This can be accomplished by partly filling the can with washed sand or gravel. The water must be changed daily, for it must be kept clean and wholesome.

And we need have little fear of the birds stealing our cultivated fruits if we will but give them back the wild fruits which they are now known to prefer. Masses of our beautiful native shrubs, appropriately planted, will soften hard outlines and add interest and beauty to our grounds, while their fruits and berries will draw fruit-eating birds away from our cultivated fruits, and will tempt many birds to stay with us in winter. Some of the wild fruits enjoyed by the birds are choke cherries, dogwood, sour gum, elder berries, green brier, spiceberries, black alder, sumac, holly, and cedar. The Russian mulberry, too, is a great favorite with birds.

When the bitter cold days come, or when snow covers the ground, even the available food is hard to get, and many birds perish with the cold. It is then that a little thoughtful assistance will save many precious little lives. A food shelf may be supplied with chopped peanuts and fresh meat or crushed beef bones, cracked grain or crumbs. A piece of fresh suet, securely fastened to a tree or post, will also give much satisfaction. If the food shelf or the suet is placed near a window we will have a splendid opportunity for observing the birds, for, at such times, they come from far and near, and even the shy forest birds will often be tempted to come, and, no matter how dark the day, it will fill our hearts with joy just to watch them and instinctively feel their mute gratitude.

A teacher was giving to her class an exercise in spelling and defining words.

"Thomas," she said, "spell *ibex*."

"I-b-e-x."

"Correct. Define it."

"An ibex," said Thomas, after a prolonged mental struggle, "is where you look in the back part of the book when you want to find anything that's printed in the front part of the book."—*Selected.*

"Father, what is a veterinary surgeon?"

"One of those fellows at the Pension Office, my son, who examines the veterans for pensions."—*Selected.*

Women of the Confederacy

A Bit of a Story About Some of the Things They Were Called On To Do.

FRED. A. OLDS,
Collector for Historical Museum.

OFTENTIMES one hears the phrase, "The backbone of the Confederacy." Some say that this was "the thin gray line" of the fighters at the front, others that it was the farmers back here, making supplies for the soldiers. Both are wrong. The backbone of the Confederacy, certainly here in North Carolina, was the woman. It was the woman who cheered on the men when the war flared out, and she never stopped cheering them on until the last gasp. She was no flincher. She looked after the farm, she managed the slaves, whether few or many, for while an act of Congress gave exemption to the owner of as many as 20 slaves, not many men had the nerve to try to keep out of the army on that ground. So then, broadly speaking, the woman of the Confederacy was the head of the household and the backbone of affairs. This is a bit of a story about some of the things she was called on to do and the way she did them. We will take a plantation on which there were, say, a dozen slaves. There was the "great house," the casa grande, from which Spanish phrase the negroes really got their name for the building in which master lived. There were the outbuildings, including the barn, stables, corn crib, and there were the houses for the negroes, the latter usually having two rooms and a little porch in front. The negroes made it a point then, as now, in the country, to keep their cabins clean and the ground swept all around them. They did not do this naturally, for it was not an African habit, but Mistress showed them how to do it, and to this day the habit remains, thus instilled.

In the South the farm was a little world. The mode of life was precisely the opposite of that in New England, where the people lived in villages, called towns, from which they went out to their farms to work, returning at night to the community, where there was sure to be a schoolhouse and church side by side. This was community life. In the South there were scattered farms, each living a life to itself. This was the patriarchal style of living. The New England town was self-reliant, and so were Master and Mistress as to their own world, which was greater or smaller according to the number of their slaves. The master had about the power of a captain of a vessel at sea; not the power over life and death, but of punishment and of general masterfulness. Upon the mistress, with the husband gone to wars, the supervision of this household machine—for that was what it was—began automatically. This quickened all of a woman's wits, and things were done which they never dreamed of before except in times of greatest stress. The mistress

was a leader as well as a director. Like a good commanding officer she did not say so much, "Go on," as she did "Come on," and this is one of the secrets of the abounding love the average slave had for the woman whom they fondly termed "Old Miss."

This statement of a fact will explain many things. The woman's heart made the slave a creature of God's making, subordinate and not equal to the white, but to be thought of, prayed for and ministered unto. So Mistress was the owner of the property, the land, and the slaves, too; the physician in all ordinary ailments; the dispenser of charity and comfort, the chaplain and at the same time the head who had to do the thinking in all seasons. The War of the Revolution had been the great training school for the American woman in all the then territory of the United States. Exactly the same rôle was played by the women of the Confederacy here in North Carolina. She had to keep her wits about her always, to know almost by instinct the best ways of doing things; upon her shoulders was borne the load of looking after the estate in every detail, of doing her part towards the maintenance of the State, and last, but by no means least, of doing everything possible for the soldier in the field. The North Carolina of 50 years ago was precisely like the Belgium of today in the point of the pluck of its men and women, though of course there were none of the horrors which have marked this greatest of all wars since time began. Yet there was plenty to tax the strongest minds and hearts alike.

The slaves, upon whom everything depended on the plantation where they were owned, had to be cared for like children, and no one could say that Mistress did not work as hard as any slave there. They were to be fed, clothed, taught trades, looked after if they were sick and generally, so far as care was concerned, were on the basis of the immediate family. This gives one of the keynotes of the life of the woman of the war-time in North Carolina. So many things were made on the farm. Nobody knew of such a thing as buying meat or any sort of provisions, for they were home-grown on the place itself, as food crops were the first consideration everywhere. The cloth had to be made at home, too, so the weaver was a valuable personage. So was the shoemaker and the women who made up the clothing for black and white folks alike, old garments being used as patterns, for but small attention was then paid by Mistress to such things as "styles."

A careful account had to be kept, for the Confederate States must have a tithe, that is a tenth, of everything produced. These tithes were gathered and were duly certified to upon regular forms. The Confederacy was sure not to miss anything in the way of taxables or tithables. It had its agents who looked after both, and the State was busy, too. Sometimes there were requisitions for negroes, to do manufacturing, to help build railroads, forts and other earthworks, and then Mistress, like an army officer, had to make a detail of the proper people to go from her

farm. Such was life on a farm where there were slaves. It must be remembered that the great majority of North Carolina landowners were not slave owners. Yet their womenkind were fully as resourceful as those on the farms cultivated by slave labor, and the former did surprising things. They cheered on their men from start to finish, and though many people have remarked that the war was a "slave owners' fight," yet the slaveless people did most of the fighting, and certainly stuck to the job, not looking for bomb-proofs or exemptions, but being in the ranks and generally at the front.

The State, acting for the Confederacy, for North Carolina was a heavy producer, owing to the very conditions above described, had great power in itself. State's rights were considered paramount, and the people resented with great bitterness any getting over the line of State's rights by the Confederacy. Out of this very thing grew at times a bitter fight between President Jefferson Davis and Governor Vance, and the latter was generally a winner. It was this which so endeared Vance to the popular heart of North Carolina. What have been termed the "common people," one of the most unjust terms of all, by the way, were the folks who appealed the most to the big-hearted Vance. He fully shared the fine sentiment expressed by President Lincoln, when some fellow going to him and speaking very slightingly of what he termed the "common people," the great-hearted President swiftly faced him and said, "My friend, God must have dearly loved what you call the common people, otherwise he would not have made so many of them." The caller left at once, for that incident was closed. Vance knew that these people were fighting the war, and that the little wife was back at home, planning and working day and night, looking after the farm and the garden and after plowing just as she made clothing and knitted socks for her own people, and for the soldiers, too. It was the spirit of 1776 all over again. The little woman of the South looked at things as she found them. She did her level best, and, as the Texas preacher remarked, once upon a time, "Angels kaint do no more." This is why when an American goes to Raleigh and to the Capitol Square and looks into the face of the North Carolina "Woman of the Confederacy" who sits there in bronze, he feels like uncovering and bowing to her, simply because she typifies the real woman of this country, all these United States; tender, loving, brave, resourceful, dependable. So if there ever comes a time of stress like that which marked the dark years of the Revolution and the War Between the States, one may be very sure the woman will rise to the full height of the occasion, and that the men folks, to use a good old word, will have no cause to be ashamed of them.

The Cooking of Proteins

GERTRUDE BONEY, '16.

PROTEINS are used mainly as building material for the body, though they may serve other purposes. Unless they are properly prepared they make an unnecessary amount of work for the digestive organs, and much of their food value is lost. Because of this, care should be taken in the cooking of proteins.

A list of foods containing a considerable amount of proteins is eggs, lean meat, fowl, fish, milk, dry beans, peas, and cheese.

Proteins should be cooked at a low temperature, below 180 degrees F., because above that temperature they begin to toughen. This can be easily shown in the cooking of an egg. When it reaches a temperature of 134 degrees F. white fibrins begin to appear within the egg. These increase until about 160 degrees F., when the whole mass is a tender, delicate, jelly-like substance, having every appearance to sight, touch, and taste of being easily digested; and this is the case.

But if it is heated to 212 degrees F., which is the boiling point of water, and kept at this temperature for a few minutes, you find the protein substances getting dry, shrinking, and becoming horny-looking, which makes them very tough and more difficult to digest. Heat has the same effect on all proteins.

The protein of meat is found in the cells of the lean meat. These cells are formed into tubes which are wrapped around with connective tissues. When the tubes are cut across the ends, the cells are exposed. A slice of any meat, having a large surface of cut fibers exposed, such as fish or beef, should be placed at first in hot, or boiling, water, not in cold water, because, if started in cold water, as the meat is heated the protein gradually dissolves and is lost in the water, as is shown by the scum of coagulated protein on top of the water. On the other hand, if the fish or flesh were plunged at once into water hot enough to immediately coagulate the protein that is on the surface of the flesh, the tubes would be sealed up and the protein and juices could not escape, hence the meat would be tender and juicy instead of tough, provided the cooking was continued at a low temperature.

In stewing of meats cook them in a small amount of hot water for a long time at a low temperature. This is one of the most economical ways of cooking tough cuts, as all the nutriment is retained. While the fibers and connective tissues are softened by the long, slow heat, the protein is not made tough, and the whole is tender and palatable.

In broiled meats ends of tubes are first sealed by high temperature. Then the heat is lowered and the meat is turned constantly to prevent,

as much as possible, the toughening of protein. In this method of cooking, the connective tissues are not softened at all, hence it can be used only with tender cuts of meats.

A very good substitute for meat is cheese, as it is composed mainly of the protein of the milk. A pound of cheese is equal in proteid to two pounds of beef. Cheese in the raw state is easily digested, but if heated to a high temperature the protein becomes tough and less digestible; this is the case with all proteins.

When possible, dry beans and peas should be cooked in soft water, as it soaks through the skin more easily. Dried beans and peas are always hard when raw and have a strong acrid flavor. To soften them and remove the strong flavor, soak them in cold water over night. In the morning pour off the water and put fresh cold water enough to cover them. Let them come to the boiling point in this water, then drain. A little soda in the water in which the beans or peas are soaked and in the water in which they are first scalded will help to soften and sweeten these vegetables.

Milk, another protein substance, should be cooked at a low temperature. It should never reach the boiling point, because if it does the protein forms a scum on the top, and if the scum is thrown away, then the building material is lost, but if, on the other hand, it is used it is very hard to digest. This is shown in making hot chocolate. The secret of good chocolate is to have all ingredients hot or cold when they are mixed, otherwise the fat will separate and float on the top. The milk should never be allowed to come to a boil. Cut chocolate in small pieces, melt over hot water, add sugar, scald milk over hot water, mix the two, beat well, and serve at once.

My Neighbor's Gowns

In spring my neighbor wears a robe
  Of pretty silken sheen,
Then, very dainty, fair and fine,
  Her gown of glistening green.

In summer she wears satin,
  Some heavier, while beneath
The smooth gray gown one can discern
  A light gray lining sheath.

A carnival is autumn,
  And so my neighbor friend
Then borrows all the colors
  The bright rainbow will lend.

In red and brown and golden,
  With mottled wine and gray,
She stands a queen of beauty
  Each lovely autumn day.

When winter's blast comes blowing,
  Within an earthen chest
She packs each season's costume,
  For Nature deems it best.

And then my charming neighbor,
  Which is Maple Tree,
Begins once more a-growing
  Another robe, you see.

—*Mrs. J. W. Meek in Progressive Teacher.*

Dramatization of Washington's Life

By a Group of One-Year Students

THE One-Year Professional Class of the East Carolina Teachers Training School celebrated Washington's birthday by presenting a dramatization of the most important events in Washington's life. The purpose was to show the possibilities of dramatization in any school, with very little time and expense.

The scenes in the life of Washington which were selected were these:

Cutting down the cherry tree.
Killing the sorrel colt.
Training his schoolmates to be soldiers.
Surveying.
Carrying the English message to the French.
Ball at Governor Dinwiddie's.
Election of Washington as commander-in-chief of the Continental Army.
Making of the flag by Betsy Ross.
Inauguration.

Plans were made some time ahead, and the class chose the leading characters for the important scenes and voted on them. These characters were chosen: little George Washington, George Washington as a man, his father, and his mother, Betsy Ross, and some of the leading men of his day.

Each one was left to get up her own costume. The ladies' costumes were made of two fancy kimonos, with the top one draped beautifully so as to represent the dresses of long ago. The men used basketball bloomers, white hose, black slippers, and coats of the winter before last suits with lace put in the neck and sleeves. These coats had the cut-away effect, as was needed.

The stage was decorated with groups of United States flags. Small flags were showered upon Washington in the final scene.

In the first scene George came out, delighted with his new hatchet, and cut down his father's favorite cherry tree. This tree was made by using a branch of a tree with cherries and leaves made of red and green crepe paper. The tree was stationed in a flower pot, surrounded with brown cloth to represent the earth. The father came out and lamented the loss of the tree, but showed pleasure when his son confessed the truth.

In the second scene the sorrel colt was represented by a hobby-horse placed on the stage. George and two of his friends came out in the pasture to see the sorrel colt; after making some remarks about the beautiful appearance of the colt they persuaded George to ride him. After some trouble George and his companions succeeded in catching

the colt. George then got on his back, the colt became frightened, reared up, and fell back dead. After excited discussion as to how they would break the news to George's mother, they went home for dinner, and found her sitting in the corner knitting. When she asked about her colts, George then confessed that he had killed the colt. Though she showed sorrow for the loss, she was pleased to know that her son would not tell a lie about it.

The last scene of his childhood was playing soldier. George and his friends were on their way home from school; they began quarreling; George settled the dispute and they decided to play soldier, electing George as captain. They got guns, flags and a drum and marched behind George.

The first scene of his later life showed Washington as a surveyor. At first Lord Fairfax was asking Washington to survey a large tract of land across the Blue Ridge Mountains. Washington accepted the offer and set forth, accompanied by several guides, all dressed in hunting suits. In the second part he arrived and found Indians, who "had taken possession of the country"; this was shown in dramatization by having some Indians dancing their war dance, and others hiding in the woods.

The next scene was Washington taking the English message to the French fort. He was shown the way by an Indian guide, who cleared the trees from his pathway. Pine bushes were thickly set on the stage, some lying across the other to represent the forest. The French refused to move the forts. Washington then took the message to Governor Dinwiddie, who then commanded Washington to train the soldiers for war. A military lesson was given on the stage.

In the next scene the bushes were removed from the stage, and the curtains opened on the ballroom at Governor Dinwiddie's, where a ball was given in honor of Washington and his bride. As they entered many curtsies were given by the guests. When the music began, four couples assembled in the right position and danced the minuet.

The next scene was the election of Washington, by Congress, to be commander-in-chief of the Continental army. The house was called to order by the president, business matters were discussed, and Washington was elected by a unanimous vote. During the discussion Washington quietly slipped out when he heard his name called. He was brought in by one of the members of Congress. Washington accepted the command, but declared himself unequal to the position he was honored with.

In the flag scene Betsy Ross was sitting by her table busily engaged in sewing. A knock was heard; she arose, brushed the strings from her apron, and received General Washington. He asked that she make a flag for his country, and explained how he wanted it made. She promised to do so, and he left. Later, when he returned the flag was completed, and he was very much pleased.

The last scene was the inauguration of the president. The chancellor and other officers were seated on the stage ready for the president. As he passed through the cheering crowd, his pathway was strewn with flowers, and flags of all nations were unfurled. Washington made his way to the chancellor, and took the oath of office.

The three departments of study, History, Pedagogy, and English, were used in the dramatization. The subject-matter was selected from the History text, was supplemented and organized by material from other histories and the students' own ideas.

In addition to this, the principal factors in study were consciously applied, particularly the "using of ideas." As for the English, it functioned in the wording of the conversations to be used in the different episodes, and also in the written compositions on the play, and afterwards in the reports for the town daily paper, QUARTERLY, and other papers.

In selecting events to dramatize, much care was taken not to get something too difficult for children to understand and play. Consideration was taken in getting up the costumes and stage decorations, using things at hand so there would be practically no expense.

The suggestions given in this historical dramatization of Washington's life can be widely used and enjoyed by children, for it meets the nature of the child as to his imitative and dramatic characteristics. The lives of Raleigh, Lee, Columbus, and many others can be used in the same way.

The Little Red Stamp.

"I'm the little red stamp with George Washington's picture;
And I go wherever I may,
To any spot in George Washington's land;
And I go by the shortest way.
And the guns of wrath would clear my path—
A thousand guns at need—
Of the hands that should dare to block my course
Or slacken my onward speed."

—*Sam Walter Foss in Exchange.*

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Making Garden Spots in a Wilderness

If instead of merely making two blades of grass grow where one grew before a person can make garden spots in waste places, he is indeed a patriot. What has been done in Bristol, told in this number of the QUARTERLY, can be done in any town or village in the South. Our villages are not noted for their beauty. If you think so, notice the towns as you see them from the train windows; look around your own town with seeing eyes. If the children are enlisted in the work of beautifying the town, the returns are not only increased beauty of the place and enhanced value of property, but a development of civic pride in the next generation, appreciation of the beautiful before children have grown callous to the ugly, and control of the gang spirit natural in boys and girls by directing it from destructive to constructive activity. The good results cannot be fully estimated.

Women as the Family Gardeners

The suggestion that the women are really the gardeners in most cases is found in one of the articles in this number. Count up the gardens you know and see if it is not true. In the towns the man often has his garden as his hobby, but in the country the woman usually has charge of the garden, if there is much of a garden. This is natural. To the farmer the garden seems a side line of the same kind of work; it seems trivial to him in comparison with his money crops, and because of the sameness he gets no recreation from it. Many a family in the country would starve

for green food if it were not for the fact that the woman keeps up the garden. She gets tired of cooking the same things over and over, and tries out new vegetables, or sees that she has a good supply of the family favorites. It is a change to her, and she finds real joy in the out-of-doors work. If this were fully realized and the gardening turned over to the woman in all country homes, all concerned would be benefited.

A Free Correspondence School

How many farmers have awakened to the fact that the Departments of Agriculture, both State and National, provide for the farmer a free correspondence school? This school not only gives efficient instruction, costing only the stamp and paper for applying for it, but has the advantage of enabling the farmer to go to school long winter evenings by his own fireside, and does not interrupt his work. Another advantage is that he can test the principles and suggestions on his own farm day by day. He used to think that he had to leave his work for some time and take a course at an agricultural college. For a long time he has realized that he can get specific information about any one thing, but it has not occurred to many that series of bulletins that really form courses are issued so that a subject can be fully studied out. The farmer's wife is not forgotten. There is a bulletin that is an index, "Publications of Interest to Women," that not only shows what to get and where to write for it, but furnishes many suggestions to the inquiring mind.

Every farmer's home and every country school should have a permanent library of Government publications. The wide-awake teacher can do much to create interest. It does not mean that she has to know the contents of every bulletin, but she can be a guide, reminding people of this means of help, and can help them to find what they want.

T. S.

The Woman on the Farm, and Drudgery

From pioneer days the average woman has led a life of loneliness and drudgery. The old adage, "Man works from sun to sun, but a woman's work is never done," must have originated on the farm. The lack of social contact reacted on her. She thought she was virtuous because she was attending to her own business and letting that of her neighbors alone; but the lack of social contact reacted on her. While the man, in his frequent trips to town and the crossroads store, exchanged ideas with his neighbors about ways and means of doing his work, his wife was at home working along according to her own lights. As a result the man has progressed. He uses labor-saving devices he heard of from others; he reads up-to-date papers, recommended by others, and puts into practice the ideas he has gained by contact with others. In the meantime

his wife is doing her work in the same old way her grandmother did hers, because she does not know that other people have found other ways of doing it. This seems unfair, and one is apt to put the blame on the wrong one at first thought. But whose fault is it? As long as the woman does not complain the man thinks everything is all right. The woman has so long considered it a virtue to sacrifice herself and make herself a martyr and a slave that she does not realize she can assert herself and have what will make her a more efficient worker in the home, if she merely presents her cause in a rational, calm way. There are very few men that would not be willing to spend what they can afford to spend to make the work of their wives easier and more attractive if the matter is only brought to their attention.

J. R.

Labor-saving Devices in the Home

Many a woman thinks that she cannot have conveniences because they are too expensive. She knows that if she has the money she can have many of the conveniences of the city, but she is wrong in thinking that she cannot have any because they are too expensive. The gasoline engine pumping water into the house, acetylene gas for lights, gas for cooking, electricity furnishing not only lights, but power for the churn and washing machine, and giving her an opportunity for using the many devices for cooking by electricity, are all wild dreams to the average woman on the average farm in North Carolina. If she will look around, however, she can find many things that cost little and save money. An oil stove and a fireless cooker are of untold help. Directions for making a fireless cooker that is not a hay-box can be found in bulletins. A drain sink can be put in the kitchen at very little cost. The arrangement of the kitchen has more to do with the ease or difficulty of the work than perhaps any one thing. The height of the working surfaces is another matter that is worthy of attention and costs little. Even little things save much needless work and exertion, as having light kitchen utensils, a gasoline or kerosene iron, a meat chopper, a Dover egg-beater, cooking spoons of different kinds and sizes, sharp knives, a bread mixer.

The State and National Governments are doing all they can to bring the farm woman into her own. Bulletins full of suggestions are issued; demonstration agents and community housekeepers are employed to help her. But it is for the woman herself to work out her own salvation. With a supply of good common sense a woman can see how much of all the aids brought to her she can adopt and judge what is not practicable for her.

J. R.

Girl Teachers and the Teaching of Agriculture

To some people the idea seems absurd that young girls can go out into the country and teach agriculture after they have had only a short course in a normal school, getting a few theories from books, a little experimenting in laboratories, a little practical experience in a doll-baby garden. Yet a great many of these girls are proving that they can use to advantage all they have.

The State of North Carolina requires the teaching of agriculture in the rural schools; the majority of these teachers are women, many of them girls just out of school. If the State, by its action, forces it upon them, what are they to do? Is it a farce? If so, it should not be allowed to continue. If it is not a farce it should be given serious consideration. The State does not mean that a teacher must be a practical farmer herself, doing the actual plowing and cultivating; but it does expect every teacher in the rural schools to know something of the basic principles of agriculture. She can certainly be better able to interest her pupils in the Girls' Tomato Club, the Boys' Corn Club, and can inspire in them a greater love for country life if she is interested herself in agricultural affairs. If a teacher can do nothing more than make the people of a community take interest in their gardens, she has done much to help them.

J. R.

Popular Magazines Featuring Educational Articles

It is significant that the popular magazines are featuring articles on various phases of education that were once considered school problems. There was a time when subjects that seemed patently educational were left almost entirely to school people, those who made teaching a profession. To the people in general their children's education was something in which they had no active part. Did they not pay teachers to develop this side of their children's lives? Here their responsibility ended. When things were forced upon their notice their attitude was critical; they found fault without suggesting remedies. The magazines published only fault-finding articles, because that was what the people wanted. Then they began to publish an occasional article, but with apparent hesitation and doubt, as was shown by the inconspicuous placing of the articles. Today, in looking through the magazines of the month, even the casual observer cannot fail to notice the number of articles along educational lines. These articles are not only featured prominently, but are made as attractive as possible by illustrations. This shows that people are now interested in the subject. These articles are no longer buried in bulletins and in professional literature for the teacher alone. This is a sure sign that education is now a part of everyday life. This shows that modern education is for use, and the effect on both schools and the public is wholesome.

A. H.

Two Recent Popular Articles

To cite two instances only in recent magazines, the February numbers of the *Ladies' Home Journal* and of the *American* each devoted several pages to matters of educational importance. The former had several pages of very striking pictures contrasting schoolhouses of our grandmothers' day with the schools in the same places today. Another page is devoted to attractive pictures of outdoor schools. The *American* has an illustrated article showing how pictures may be used in the development of the morals of the child. A. H.

Women of the Past Workers

When women of this day congratulate themselves on their opportunities to work and to express themselves, it is well to take a peep back into the lives of our grandmothers. While few of them worked in the schoolroom or away from their homes, they were not parasites and idlers. Neither did they spend their lives in mere passive endurance. They worked. It would be well for the women of today to remember that they are the daughters and granddaughters of these women and inherited their working and thinking powers from them as much as from their fathers and grandfathers. Colonel Olds, in this number of the QUARTERLY, reminds us of the part the women of the South played in the war. If the women of today handle their problems of peace as well as those women handled their problems in war, they will have just cause to congratulate themselves.

The Tercentenary of Shakespeare

North Carolina is doing her part in the celebration of the Tercentenary of Shakespeare. Schools, towns, and counties by the production of plays and pageants will do honor this spring to the great bard. It is fitting that we people who claim that we come nearer speaking the language of Shakespeare than those of other sections should take a peculiar pride that is almost personal in the Tercentenary. The State Department of Education has set aside March 24 as Shakespeare Day in the public schools of the State, and programs for exercises have been scattered broadcast. Many other schools, separately and in combinations, are planning special celebrations. The Training School will present an elaborate performance of "Midsummer Night's Dream" as its part in the Tercentenary.

The Drama League of America has done admirable work in getting the public interested and by having in available form suggestions for celebrations from the simplest to the most difficult. While they have furnished rich material, it is so well organized that there is no danger of confusing those in search of help.

Suggestions

History in the Primary Grades

The first great value of history in the primary grades is a social value. It shows the child the interdependence of life. They see there must be a working together or coöperation of many people. This is shown in all primary history; but especially in home life, because they see how many people contribute to their comfort and convenience in their own homes. Before the connecting of the home and the school, the child comes to school feeling as though he is entering into something new and vague; it is hard for him to adjust himself. This study of his own home and the study of other homes will give him a feeling of connection, and thus be an aid toward getting new knowledge.

Another great value is, this history which the child gets in the primary grades forms a background or foundation upon which his real history may be built. It will prove a gradual study working itself out step by step, instead of an abrupt beginning of a new subject in the fourth grade.

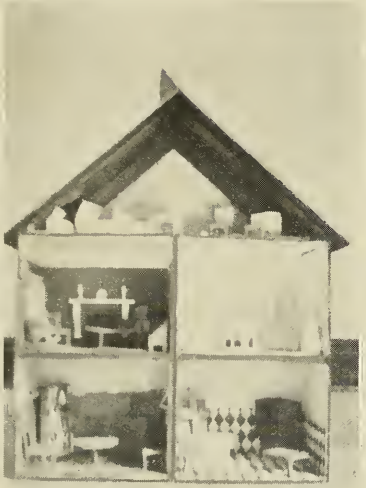
For other very evident values see the following types, which have been worked out. LOUISE SMAW, '16.

THE HOME.

The study of history should begin in the first grade with the study of home life, for this is the only material upon which we have to build the later work of history. It gives a basis of comparison for this work, but one of the best results is that it brings the school into closer touch with the home life of the child, and causes him to observe more closely what is going on right about him.

Since all life groups itself around food, shelter and clothing, it is best to center the study of home life around these, using always the homes of the children.

I am giving a few main points which may be useful in working this out. Make each of the children eager to tell of his home, and then, with the vivid pictures which come to them, we are better able to begin the next question: "Who made it?" The children will bring out the carpenter and the mason. The next questions will be: "What work does each do?" and "What tools are used?" Lead the children to work out all the questions for themselves. If a building is being erected near the school the teacher may make the study of shelter much more real to the children by taking them to see the carpenters and the masons at work. The question that naturally follows is, "What materials are



PLAYHOUSES IN PRIMARY HISTORY

American

Japanese

American

Eskimo

used in the building?" The children enjoy tracing these back to where they came from; for example, the lumber to the forests and the bricks to the brick-yard.

This study of shelter is made much more interesting by carrying out the playhouse idea in connection with it.

The study of food will be more vital to the children if the preparation of their food at home is taken as a basis. The question might be asked: "What did you have for breakfast?" Then trace back where the different foods came from. Take biscuit, for instance. Ask what mother uses to make biscuit. They will reply, "Flour"; follow this up with the question: "Where did she get this flour?" Thus you will trace back to the store, to the mill, and finally to the wheat fields. Meat, milk, and fruit are easily traced back.

In the study of clothing call attention to the dresses the children have on. Have them feel them and tell what they are made of. The children may easily trace back to the cotton fields if they are in a cotton-growing region. In practically the same way as cotton is traced back to the plant, wool may be traced to the sheep. If the study of clothing comes in the fall when the children are putting on their warmer clothes, contrast of material is easily gained. Have them feel their coats and they will at once bring out the difference in material.

Stress throughout the study of home life the great part that others have in adding to the pleasure and comfort of each child. For instance, the number of people that help in the making of children's houses, in the preparation of their food, and in the making of their clothes. Through this the child will gain a deeper appreciation of what others do for him and a greater regard for the different occupations.

The study of home life affords good opportunity for correlations with other subjects. Throughout the whole study the best kind of language training is given. Lessons in hygiene, as to the care of the foods both at home and at the market, and in sanitation, as to the kind of clothing to be worn, come in naturally. Seatwork, through the drawing and cut-work of the different tools, for example, can be based upon this.

References: "How we are Sheltered," "How we are Fed," and "How we are Clothed," Chamberlain; "Primary Handwork," Dobbs; "Industries in the Elementary Schools," Dopp.

Mary Secrest, '16.

Construction of Playhouse.

The building of the playhouse comes along with the study of home life, as it is the natural expression of what the children are thinking about and talking about every day, both in their real life and in their play. It is at the time they are making playhouses and playing like they are grown-ups. To make a beautiful, complete playhouse at school brings school and home, work and play, very close together. For our

playhouse we took ordinary cracker boxes which had one side knocked out. Stiff cardboard was put on top to form a gable roof. Four rooms, sitting-room, bedroom, dining-room, and kitchen, were divided off. The attic was used as a nursery, and the bathroom was a small box tacked into the back of the bedroom. Nearly all the furniture was made from the sixteen fold of heavy paper, but this should not be given the children until they ask for it. They should be led to experiment with the folding and they will soon discover that no less fold than this will stand alone. Remember that the original idea must come from them. The bathroom equipment was moulded from clay, and the wallpaper and carpets were made from ordinary wrapping paper decorated with simple designs. BETTIE SPENCER, '15.

ESKIMO LAND.

Make, in teaching Eskimo life, the description of the country as vivid and real as possible by comparing to our fields when it snows, and by describing it as a frozen country where nothing is to be seen but snow, ice and icebergs everywhere; as a place where no plants or trees can live and only a few animals, such as the polar bear, the seal, the whale, the walrus, and a few birds and fish; and as a land of darkness for half the year.

With this background let them work out for themselves what the houses are made of and what kind of clothes they wear. Do not do for them any of the work that they can do for themselves. Give them time to think out this strange land. Of course they cannot picture how the house or child would look, but they can work out what the house is made of and of what the child's clothes are made. Then show them pictures of the round, white, one-windowed house and little fur-dressed boy to help them form their mental pictures. Also have them draw pictures as they go. Better than either of these would be to have real work in the snow. If possible, take up the work while there is a snow on the ground, and have the class go out and really build the Eskimo house. Nothing except a real visit could give a better feeling for this country and the homes there.

The study of the food and clothing will grow directly from a study of the little boy. Trace the source from which his little coat, cap, mittens, leggings, trousers, and shoes came. This brings out the occupations of the father, fishing and hunting to get the furs, skins and feathers; and their ways of travel, in sleds drawn by dogs and in boats. The children can draw their own conclusions as to what the sleds and weapons used on the hunt are made from. They only need pictures to show the shape of bows, arrows, spears and knives. The use of these weapons in killing their food is especially interesting to the children; also the way in which the animals are prepared by the father and mother for food, clothing, and weapons. This preparation, the skin-

ning, cleaning, sewing, and cooking, leads naturally to the study of the funny little stove and general interior of the bare, dark house.

A careful development of the above will furnish, in addition to the values in history and geography, the following values to the teacher and children: (1) free language periods; (2) motivated seatwork; (3) motivated drawing lessons; (4) free expression through clay modelling; (5) sand-table work; (6) correlated songs. Stories and supplementary material may be found in Snowland Folks, by Peary; in Around the World, Book I, Clarence Carrol; in Eskimo Stories, by Mary Smith; in Big and Little People of Other Lands; or in Seven Little Sisters, by Jane Andrews. The sand-table idea may be worked out by the plan suggested in an article below. Martha Lancaster, '16.

Indian Life.

In response to that dramatic instinct that we find creeping out on every side in the nature of a second grade child, we worked up Indian Life in the second grade in such a manner that the development of the work led to the dramatization of the story by the children. It produced the most gratifying results.

The teacher developed with the children a story of Indian life. To make this as vivid as possible to the children, a certain Indian family was chosen for study, and one little Indian boy was named by the class. All the interests of the story centered around this Indian family. Next came the study of this country as the home of this Indian family. Through pictures shown by the teacher and through comparisons of their own wood with what they thought the forests then were, the children got a clear idea of the country when Indians lived here. The next step of development included how this family were clothed, fed, and the kind of home they lived in. The class having already learned of the nature of the country and the many animals that lived in the forests, it was comparatively easy for them to find the sources from which the Indians obtained food. Right here came the hunt, and how the little Indian's father, with his necessary weapons, such as the bow, arrow and tomahawk, would go out searching for game; after the game had been brought home, how his mother would prepare the meat for food, and how she made him clothes from the skins, how his wigwam was also made from the skins. They further developed the duties of the little Indian's mother, learning how she would pound out the meal from corn. Here the teacher told the class of the beautiful rugs and blankets woven by Indians and the wonderful colored beads they made, and of their use for ornamental purposes. Pictures were shown to class and all Indian relics that could be obtained were brought to school to show the children. The next part of the story was about a feast that was held at this family's home. The class worked out the things that would probably be done on that day, such as serving foods and playing games; the children

were intensely interested in the kinds of foods served and the kinds of games played. The peace pipe was used at the feast; the children had the Indian boy's father to pass around the pipe, which was smoked by the visiting Indians. The story closed with the feast scene.

The children were so interested that at once came the suggestion that their story of the little Indian boy be dramatized. The teacher readily accepted the suggestion, for she knew this served as one of the best summaries of her work that could be found.

The success of this dramatization depended on the amount of action on the part of the children, and the preparation made for it by the teacher, by helping them to so enjoy the study of Indian life that they threw their whole little souls in the dramatization of the story. The following plan was carried out in the dramatization:

SCENE I. THE HUNT.

PLACE: Thick woods—use woods near your school building; if impossible to do so, use stage in schoolroom, making wood by standing bushes over stage. If you haven't a stage, curtain off one corner of the schoolroom.

One or more wigwams on the stage. Most significant looking one, home of Indian boy.

ACTION ON STAGE: Little Indians are scouting over woods, with their necessary weapons, hunting.

They go to wigwam and throw down game killed in hunt.

Indian women rush out from the wigwam to meet the men and to observe the game killed.

Some Indian women are sitting around wigwams preparing the meat for food, while others are weaving and pounding meal from corn. [An Indian stove is seen on left of wigwam.]

SCENE II. THE FEAST.

PLACE: Same as for Scene I.

ACTION ON STAGE: Visiting Indians, father and son are sitting around camp-fire. [Camp-fire near center of stage.]

Peace pipe passed around and smoked by all Indians.

One Indian tells a typical Indian story to the others, as they nod and bow to each other.

Indians are served with foods passed around in bowls.

Indians sing, "Come, let's be fierce Indians," and rush off the stage.

The following are some ways to overcome possible difficulties in working out the dramatization:

Costumes. Children can use their own Indian suits if they have them, if not, costumes can be made from plain brown cambric, with fringe cut from the cambric sewed down the sides of the suits. If this is not available, children may cut fringe from any kind of cloth and sew to the sides of their "everyday costumes." Children will delight in gathering together all sorts of beads for ornamental purposes.

Wigwams. Wigwams are made from just any kind of sacks or cotton bagging that the children can bring from home. Decorate them with the stars and moons cut in seatwork and drawing.

Camp-fires may be made from piling up sticks on stage, and placing a red lantern or red paper in sticks to represent fire.

Weapons. The older boys of your school will be glad to make the bows, arrows, and tomahawks used, if you will give them a chance.

Some suggestions for correlation:

Drawing. Stars, moons, bows, arrows, and Indian canoes were cut out and colored.

Seatwork. The same things were done as in drawing. Posters were made, using these things that had been cut out in drawing.

Singing. The songs, "Into the Saddle, Up, Up" (the words of the third line were changed, and these, "with tomahawk, arrow, and bow," were used instead; also "Indian men" was used instead of "Cavalry men" in fifth line), and "Come, let's play we're Indians," were learned. The words "Come, let's be fierce Indians" were substituted for the above in the first line of this song.

[For reference for songs see "The Song Series," Book I.]

Gladys Warren, '16.

The Japanese Child.

the story.

In teaching Japanese life in the third grade we have decided, in order to make it as vivid and picturesque as possible, to work it out in the form of a visit to Japan. To have them get the feeling of distance we talk of first going to San Francisco and taking a boat and traveling for days and days until we reach Japan. As the story is developed all the pictures and supplementing possible will be used.

The following is a brief outline of the story, as told by the teacher:

I. Landing in Japan.
   1. Japanese child, Matsu, meets us.
   2. Ride up in jinrikisha.
   3. Approach to home, description of outside.

II. Matsu's home.
   1. Welcome by mother.
   2. Removal of shoes.
   3. Serving tea.
   4. A Japanese story hour.
   5. Preparing for sleep.

III. Matsu's housekeeping.
   1. Sweeping the floor.
   2. Making beds.
   3. Gathering flowers.

IV. Matsu's school.
   1. Preparation for school.
      a. Queer rain hat, coat, umbrella and overshoes.
      b. Manner of carrying books in sleeves.
   2. Matsu studying.
      a. Reading.
      b. Writing.
      c. Arithmetic.

V. Festival days.
   1. New Year's Day.
   2. Feast of Dolls.
   3. The flag day.
VI. A ride to see the country.
   1. Rice fields.
   2. Tea fields.
   3. Temples.
   4. Shops.
   5. Silk worms.
VII. Return home.

SOPHIA MANN, '16.

A PAGEANT.

After the above story was worked out with the third grade children, we decided that the best possible test as to whether or not they really had a true conception of Japanese life was to take this story and work it out in the form of a pageant. Accordingly the following typical scenes, which were selected almost entirely by the children, were used in this pageant:

I. THE ARRIVAL AND GREETING.

STAGE SETTING: Interior of a Japanese home. Thick matting on floor, small boxes for tables, two screens, a vase of flowers, but very few ornaments.

CHARACTERS: Japanese mother; two little boys; a baby, which is strapped on his mother's back; Matsu, the little Japanese girl; and Gertrude, the little American girl.

SCENE: As the curtain rises we see the mother and all the children, except Matsu, sitting on the floor. The mother is embroidering, one little boy is writing with his brush, and the other little boy is pretending to read, although he runs to the door every few minutes, as if he is looking for some one. Presently he is rewarded, for Matsu and Gertrude come in. Gertrude holds out her hand, but the Japanese, instead of shaking hands, rise and bow low several times. Then the Japs all rise and sing "In the Island of Japan."

Curtain.

II. SUPPER IN A JAPANESE HOME.

STAGE SETTING: Same as in Scene I.

CHARACTERS: Same as in Scene I, also Japanese father.

SCENE: The mother and children, including the little American, are seated on the floor around a low table, playing a card game. In a few minutes the father enters. He smiles and bows low to the little guest. A servant now enters, puts the teapot on the stove, and sets the tiny little table, which is really a waiter on legs. He then sounds the gong, the father leads the way to the supper table, and they are served with fish, rice, tea and soup. Although their guest has trouble with her chop sticks, they are far too polite to show their amusement.

After supper Gertrude gets out some toys she has brought from America, and the children are soon happily playing with and exclaiming over them, while the father and mother look on smilingly.

Curtain.

III. A DAY AT SCHOOL.

STAGE SETTING: A Japanese schoolroom, matting on floor, in one corner a low box fixed as the teacher's desk.

CHARACTERS: Teacher; any number of Japanese boys and girls; Matsu and Gertrude.

SCENE: The teacher is sitting at his desk, busily writing. Matsu and Gertrude are first to arrive at school this morning. As they enter they bow low to the teacher, who, in turn, rises and bows to them. Gertrude is very awkward in this bowing. They then seat themselves near the teacher's desk and watch the other children come in. Each child pauses at the door, removes his shoes, and places them on a stand. As he enters, he bows to the teacher, then runs to his place. In a few minutes all the children are in place. They get their books and study aloud. Then one child after another goes up to the teacher, turns his back and recites his lesson. (Have only three or four of these recitations.) Then, in honor of their guest, three little girls go to the front and sing "Three Little Maids from School," from the Mikado.

Curtain.

IV. THE FEAST OF DOLLS. (*March 3.*)

STAGE SETTING: Matsu's home again. Two of the rooms have been made into one large room by simply removing a screen.

CHARACTERS: Matsu; Gertrude; Matsu's mother; any number of little boys and girls.

SCENE: Matsu and Gertrude are sitting in one large room of Matsu's home. They are entirely surrounded by dolls, which they are busily dressing. In the midst of this, a crowd of little girls come in, doing the short, shuffling step. Some of them are carrying dolls; others have fans and parasols, with dolls strapped to their backs. The girls dance around, dressing dolls, whispering behind fans, laughing and talking among themselves. The boys run up and wave paper fish over the heads of the girls. Then the girls form a semicircle and have a song and drill.

Curtain.

While there are difficulties to be met in a thing of this kind, the value of it to the children, as well as the pleasure, fully repays the teacher for any trouble. After all, it is very little trouble when it is worked out in a simple way, as we did it. One corner of the schoolroom can be made into a stage by stretching a piece of wire across the corner, and hanging over it a sheet, which will serve for the curtain. The furnishing of the house is very simple: a few pieces of matting, a small box or two, a cheap tin waiter, a tea set and one or two screens; all these can easily be obtained. The costumes are simply long kimonos with the wide cheese-cloth sashes, and bedroom slippers for the sandals. If the children do not have kimonos, and do not want to get them, they can use the kimonos of their mothers and older sisters. Just before each scene, we had a little girl, in costume, come out and tell the audience what this particular scene was to represent. She had on a real Japanese kimono with the wide sleeves, also the real little sandals.

If you wish to order Japanese fans, parasols, etc., you can get them for almost nothing from B. Shackman & Co., 906-908 Broadway, N. Y. They will send an illustrated catalogue free of charge.

The books we used most for a description of Japanese life and customs were "Little Journeys to China and Japan," by Marian M. George; "Little Folks of Many Lands," by Chance; and "Little People of Japan," by Muller. Stoddard's lecture on Japan is excellent for the teacher to

read, and the pictures are splendid to show to the children. The *Geographic Magazine* is also excellent, because of its beautiful pictures.

LOUISE STALVEY, '16.

A JAPANESE SAND-TABLE.

In order that the children of the third grade may have a more vivid picture of the country of Japan, we let them follow their natural instinct for construction by working out a sand-table.

The sand-table was entirely covered with green moss and grass. On the front part of the sand-table, which was turned so the front was the narrow side, the Japanese home was placed. A little road, bordered on each side by flowers, passed in front of the house. From the back of this house a tiny path, beneath the boughs of cherry trees, led to a tea-house. Just before we got to the tea-house we passed over a rounding bridge, over which a jinrikisha was passing. Inside the tea-house, which was decorated with flowers and screens, a Japanese maiden was sitting on a mat. The garden, surrounding the tea-house, was gayly dressed with a green carpet, bright colored flowers, cherry trees, lanterns, parasols, and mats. Here and there in this garden the Japanese dolls were placed. Some were sitting on mats playing their queer little stringed instruments; others were standing holding parasols over themselves.

Most of the material used on this sand-table was made by the pupils during seatwork periods. The lanterns, the mats, which were cut from matting and stiff paper and then decorated with Japanese figures, the fans, the parasols and the flowers, such as the cherry blossoms, wisteria, and chrysanthemums, were easily made by all the class, and some of the boys who were specially fond of constructing things made the house and tea-house out of pasteboard and straw. The queer little stringed instruments and jinrikisha were also made out of pasteboard and straw. The girls in the class dressed the dolls.

The drawing lessons were easily correlated with this Japanese work. For instance, the pupils drew typical Japanese scenes, as festoons of wisteria and lanterns. Hectographed figures of Japanese people were given to the pupils to color. This gave practice in blending the different colors.

LIDA TAYLOR, '16.

THE SAND-TABLE IN PRIMARY HISTORY.

To have successful construction work in your school, an expensive, zinc-lined sand-table is not necessary. It may be that the older boys can make you one that will do; perhaps some one in the community may give you the materials for one. If you have to fix it yourself, you can make one that will do good service if you take a goods box, turn it upside down, and tack around the edges stiff cardboard, or wood, about four or five inches wide. If the table is covered with oilcloth water can be used with the sand.

Now that you have your table, the next thing to consider is where your material is to come from. A good supply of nice, white sand is the first thing, of course. Colored paper, such as comes around dress patterns, the merchants will give you. The children, once interested, will bring you material from their homes. Scraps of colored paper can be bought for a very small sum from the printing office in the nearest town. If you keep your eyes open you will see material all around you. Remember that the power to use what you can find at hand is a pretty good test of your ability as a teacher.

Why does one want the sand-table and how can it be used, is what some people will ask. In studying the life of the people of various lands you can make the children realize little unless you can make them see something. This is where the sand-table comes in. The suggestions above show clearly some of the things it can be used for. Below are given some other suggestions that may help the teacher who is looking for ideas to interest the children. These things have been worked out with little trouble to the teacher and with much pleasure and profit to both pupils and teacher.

To show the Eskimo life the whole table was covered with cotton, with just a small part left for the frozen water, which was made by covering the blue paper with glass. Cardboard cut zigzag at the top, covered with cotton and fastened to the back of the table, make realistic icebergs. We happened to have some artificial snow which we sprinkled over the whole. We used an oval-shaped basket for the large part of the igloo, but a cone-shaped pile of sand, like a frog-house, will do just as well. A piece of cardboard, bent into shape, was used for the long entrance. The Eskimo boats and sleds, made of pasteboard and covered with old kid gloves, were placed attractively on the table. These, together with the dogs and other animals moulded from clay, and small dolls dressed in fur, helped to make a more vivid picture of the lands and customs of the Eskimos. A drawing representing an Eskimo village was put on the board. A poster of drawings and cut work was made by the children; the Northern Lights were shown by the use of colored crayons.

An attractive Dutch village was made when the children were studying Dutch life. A canal was made across the table by making a trench in the sand, and a bridge of paper was placed over the canal. Dutch houses, with the red roofs, were dotted about to form the village. Two dogs, cut free-hand, were harnessed to a milk cart made of paper. Perhaps the most attractive feature of the scene were the windmills placed on each side of the canal and giving the idea of windmills everywhere. Tulips cut from colored paper added a characteristic touch to the scene and gave another bit of attractive color.

The third and fourth grades in the Grimesland school very much enjoyed making, under the direction of the teacher, Luella Lancaster, the story of the Pilgrims. The table was covered with cotton with the

exception of one corner, which was made to represent the ocean. Small branches were arranged to represent the forest. The first day the Pilgrims landed on a rocky shore. The doll Pilgrims were made from clothes-pins and were dressed by the girls. The next the Pilgrims built their home, which was a log cabin made from twigs gathered and cut into the desired length by the boys. A church made in the same way was placed in the opposite corner. Indians could be seen peeping from behind the trees; animals, cut free-hand, placed in the forest gave life to the scene; these touches made the scene more characteristic of the land to which the Pilgrims came, and made the children realize the difference in the time.

Construction work has value not only in the aid it gives the teacher in conveying ideas by building up pictures, thus making her work more interesting, but it affords an ample opportunity for interesting busy work. Language and story-telling have an important place in the work. Number and reading can be easily correlated, also. Drawing, paper-cutting, and clay-modeling help to answer the question, "What shall I do for busy work?"

These are only suggestions; any resourceful teacher can find things she can develop by means of the sand-table. Other countries can be worked out in the same way. The seasons of the year and the stories that the children love furnish rich material. BETTIE SPENCER, '15.

Teaching the Multiplication Tables

We begin the multiplication tables in the second grade, here teaching the first five tables, and the others in the third grade. Before the children begin learning the tables they have probably been counting by 2's, 4's, and 5's. In teaching these tables, the first thing we want to think about is how we are to make the children feel a need for learning them.

When beginning with the table of 2's it is a good way to get the children to feel this need by playing postoffice. Let them make their envelopes, write their letters, and then ask one child how much it will cost to get stamps for one row. After the child answers "12 cents," then ask how many 2-cent stamps that will get; the answer is 6; then $2 \times ? = 12$. Then ask another child how much the stamps will cost for 2 rows, and he answers 24 cents. "That will buy how many 2-cent stamps?" "12." "$2 \times 12 = ?$" Continue this until they find the amount it will cost to get enough stamps for all the children, and the number of stamps they will have.

The teacher may also take advantage of the opportunity, when the children are lined up for marching, and ask them how many 2's in the line. Too, she may ask, "How many shoes have the first four children in the first row?" After they answer 8, then ask how many pairs that makes? They will say "two 4's are 8." By making up problems from objects in the room the teacher can very easily and quickly teach the

table of 2's. For drill on this table the teacher can use games, as the circle game. A circle is drawn on the board and the figures 2, 4, 6, 8, 10, 7, 5, 3, are placed around it, while a 2 is placed in the center for this table. One child comes up to the board and answers 8 when the teacher's pointer is on 4; this is continued until the child has been around the circle. If he answers correctly each time, his name is placed on the board and a star by it. Different children are given a chance to see if they know the table in this way.

Fruit-basket is another good drill game. A ring is drawn on the floor and like numbers are placed opposite each other, as 6 on one side and another 6 opposite. Different numbers are placed like this around the circle. A child is standing on each number, and the child in the center, standing on 2, says, "2×4"; then the children on the numbers 8 and 8 change places. The one in the center tries to get one of these places, and, if any child misses, he succeeds; the child whose place he has taken goes to the center and continues the game.

Next we will take up the table of 4's. This can be taught in connection with the construction of a box, but the teacher has some motive for making this box. This box is made from a square of paper. First bring the bottom edge to the top edge and crease in the center. Open flat and bring the bottom edge to the center and crease; then bring the top edge to the center and crease. Next bring the right-hand edge over to the left-hand edge and crease in the center. Then fold the left-hand edge to the center and crease, and, likewise, the right-hand edge. When the square has been folded by the directions above there will be 16 small squares. Then hold the box up and ask the children the questions: "How many squares are in the box?" "How many in the first row?" "In the second?" "How many 4's in the entire box?" They will answer $4 \times 4 = ?$, $2 \times 4 = ?$, $3 \times 4 = ?$. Then cut the square so as to make the box and paste it together.

If the teacher has the "model store," let her use this in motivating these tables. As John goes and buys four apples at 2 cents each, get them to calculate how much he pays for them, as $4 \times 2 = ?$. Then other combinations and transactions may be used for drill, as $2 \times 4 = ?$, $3 \times 4 = ?$, $6 \times ? = 24$.

In learning the table of 5's we can base it on the rhythm of the table as 5, 10, 15, 20, 25, 30, etc., in telling the time, or in connection with the store. "Mary goes to the store and buys 8 cakes of soap at 5 cents per cake. What does she pay for them?" $5 \times 8 = ?$, $8 \times 5 = ?$. For drill on this we can use perception cards, which are cards made having the numbers 6×5, 7×5, 5×5, etc., on them. These cards are flashed before the children and they give the product.

In learning the third table we can base it to a large degree on measuring the length and width of a sand-table they wish to make, using the yard as the unit and finding how many times three feet is needed.

Another excellent way for developing this table by using the measuring idea is to let them guess how many times the length of their yardstick, which is 3 feet, is contained in the length of the room; then let them measure and find how many yards, then how many feet. Then again use the idea, as, "Mary bought 5 yards of ribbon at 3 cents per yard. How much did she pay for it?" $5 \times 3 = ?$; $3 \times 5 = ?$

"Buzz" is another game that can be used for drill. The game "Buzz" is played by the children of the whole class. The child at one end says "3," the next one "4," and so on, and every time they come to a number that is divisible by 3, as 9, the child says "Buzz"; if he fails to say it he is out of the game.

In the third grade we complete the multiplication tables, and I would like to suggest taking them up in the following order, 10, 8, 6, 11, 9, 7. The table of 10's will be easy for them to get, then call their attention to how the 8th table comes down 2 each time on the right-hand side, until 0; then begins again, as 8, 16, 24, 32, 40, 48, 56, 64, etc., and how the 9th comes down 1 each time, as 9, 18, 27, 36, 45, etc. The 11th will also be easy, because it goes up 1 each time: 22, 33, 44, 55, etc. By the time they have learned all these they will not have any trouble finishing up the 7th table. Good drill can be given on this by dividing the class into two sections; the teacher stands at the front and calls out 3×7, 6×8, 7×4, and the child she hears answer first stands. This is continued until all in one section are standing; then this section is given a score.

All the games mentioned can be used for drill on each table by changing the numbers for that particular table.

Remember, in teaching the multiplication tables always motivate them, thereby making the children feel a real need for learning these tables.

BLOOMER VAUGHAN, '16.

Reviews

Shelter and Clothing. By Helen Kinney and Anna M. Cooley. New York: The Macmillan Company, 1915, pp. 377, figs. 154, $1.10.

This book, which is a text for high school classes, embodies the experience of its authors, both of whom have taught high school classes, and are therefore familiar with their needs.

The first part of the book deals with the planning, furnishing and care of a home, with emphasis on efficiency. The second part of the book opens with a rather full discussion of the four textiles, written in an unusually clear and interesting style.

The rest of this section is devoted to dressmaking and millinery, presented in a very simple, practical way. This is one of the best of the recent books of this kind. M. A.

Foods and Household Management. By Helen Kinney and Anna M. Cooley. New York: The Macmillan Company, 1915, pp. 401, figs. 82. $1.10.

This is a companion book to "Shelter and Clothing," and will prove as valuable to high school teachers as the other volume. It is based on the latest scientific knowledge, made simple enough for the average student and illustrated by practical work. Both principles and practical work are developed along correct pedagogical lines.

The volume is attractive in appearance, with excellent type and many useful illustration. This book would be useful for high school or normal classes or as a reference book for the student or housekeeper.

M. A.

"Wake County Association for the Betterment of Public Schools" is published by the Board of Education of Wake County. The bulletin, prepared by Miss Edith Royster, who resigned as Assistant County Superintendent of Wake County in December, is a comprehensive handbook on "Betterment Work," which, as Miss Royster says, has become a household word in Wake, and has a psychic effect. Miss Royster has been at the head of this work since its organization in 1902 and has served as its guide and inspiration during all these years. An introductory letter to the people of Wake County contains a brief sketch of the organization and of the growth of volunteer work for schools from the most insignificant beginnings, when no permanent records were kept, then from 1904-'05, when $79.95 reported, through 1914-'15, when the amount was $8,294.86. But the money thus raised has been but one manifestation of the work done, for community spirit and coöperative effort often manifest themselves in other ways. It is safe, however, to assume that they have increased in the same proportion.

Following Miss Royster's letter, the bulletin, which, as has been said, is really a hand-book for Betterment Workers, contains a copy of the constitution of the County Association, and a suggested constitution for local associations. The purpose of the County Association, as set forth, is:

1. To stimulate interest in the educational conditions, problems, and work in Wake County.
2. To interest and aid the people of the county in the improvement of their schools and of all conditions affecting the schools.
3. To establish a local association in every school district in the county.

The purpose of the local association, more in detail, is:

1. To arouse interest in education, especially in the importance of every child's being in school every day of the school term.
2. To unite all the people of this community for the improvement of their public school (1) by placing in the school facilities for health, comfort, and education, together with objects of beauty; (2) by lengthening the school term through volunteer effort; (3) by making efforts to secure prompt and regular attendance; (4) by endorsing and supporting all efforts to improve sanitary and hygienic conditions of schools and homes; (5) by encouraging the establishment and circulation of a public library; (6) by making the school the center of wholesome and instructive interests and amusements; to improve the moral, intellectual and physical environments and opportunities of our future citizens; to work for the betterment of home, health, and school.

Following the constitutions are suggestions as to method of organization, possibilities for work, programs, meetings; and other detailed suggestions to committees in regard to their duties include subjects for programs, sources of material for such programs, plans for increasing membership, school sanitation, school farm, library, public health, home economics, visiting, and coöperation with men's work. Directions follow as to conduct of meetings, order of business and activities of individual associations, to be determined by local conditions. Under Aids a short bibliography of such bulletins and books as will prove most useful in carrying on the work is added, together with suggestions as to whom to consult for ways and means, for information in regard to Pine Needle Booklets, Community Handicraft, Canning Clubs and School Farm.

In leaving the work Miss Royster has crystallized in this bulletin the result of her valuable experience in organizing the women of rural communities for constructive public service, and has made it easy for her successors to follow her lead. D. B. W.

Some of the Farmers' Bulletins issued by the Department of Agriculture of the United States Government will be of great help to the teachers of Domestic Science, particularly if she has not had a great deal of training for her work. The eight bulletins referred to below cover the principal foods and form an excellent cookbook for any

housekeeper. Not only is every imaginable recipe given, but the scientific side of cooking is given, and to one who has not had an opportunity to know anything but the practical side these bulletins are a pleasant revelation.

In No. 34, *Meats: Composition and Cooking,* illustrations and analyses of cuts of meats are given, and, in addition, general principles of cooking meats.

In No. 391, *Economical Use of Meat in the Home,* the value of meat as a food, the different cuts and their relative prices, general methods of preparing meat for the table and reducing the expense of meat in the diet are given.

In Bulletin No. 526, *Mutton and its Value in the Diet,* the composition and nutritive value, the digestibility, and the relative economy in the use of mutton and the care of mutton in the home are discussed.

Bulletin No. 256, *Preparation of Vegetables for the Table,* deals with the structure and composition of vegetables, their classification, the waste in preparing, and the change that takes place in the cooking of vegetables.

Bulletin No. 359, *Canning Vegetables in the Home,* is of particular interest to any one who has a home garden, for by following the directions given the vegetables that would go to waste in the summer may be saved for winter use. The science of sterilization and the exclusion of air is emphasized, and the so-called "preserving powders" are condemned. The kind of jars to use in canning is discussed. The selection and preparation of the vegetables are explained.

Bulletin No. 389, *Bread and Bread-making,* deals with grains and flours, yeast and other leavening agents, general methods of preparing and baking raised bread, character of the bread as related to the gluten in the flour, nutritive value and the cost of bread.

Bulletin No. 565, *Corn Meal as a Food, and Ways of Using It,* discusses the origin of Indian corn, its composition, uses in relation to the balanced ration, and the cooking of corn meal.

Bulletin No. 487, *Cheese and its Economical Use in the Diet.* Cheese is becoming more and more important in the diet of Americans, and this bulletin gives valuable information in regard to cheese-making, the kinds of cheese used in American homes, the care of cheese in the home, the composition of cheese and other foods compared, home-made cheese, cheese dishes and their preparation.

These bulletins may be had for the asking by writing to your Representative or Senator, or to the Department of Agriculture, District of Columbia.

J. R.

The *Journal of Home Economics,* a monthly magazine for "those interested in home-making, institute management, and educational work in Home Economics," published by the American Home Economics Association, Baltimore, Maryland, is one of the leading periodicals on

this subject. The February number, which is a typical number, contains special articles on "Costumes in the Cooking Laboratory," Isabel Ely Lord; "Home Economics in Social Work," Winfred S. Gibbs; "A New Departure in the Teaching of Sewing," Edna Irene Avery; and "For the Home-maker." Besides these articles, home economic problems of general interest are discussed and reports from the various home economics associations are given, as well as editorial comments and reviews.

While this magazine has few devices that can be used in elementary work, it is valuable to the teacher who works to get principles and a broad outlook. J. R.

"The Rural School System of Minnesota," H. W. Foght, United States Bureau of Education, Bulletin No. 20, 1915, sets forth clearly the working out of this school system. Minnesota is making rapid progress in solving her rural school problems, and is so successful that she is in the lead in this phase of educational work. In the first place, the people of Minnesota are vitally interested in the subject of rural education. Realizing that the one-teacher school is unable to meet the needs of the rural communities, they work for consolidated districts and employ for these consolidated schools efficient teachers, and offer such courses as will fill the need of the communities. Agriculture, carpentry, and the use of machinery, cooking, sewing, textiles and home-making are prominent in the courses studied. The people above school age are not neglected; short courses and night schools enable them to get the training they need. In some places the country districts and the village or town work together and build an Associate School, which is on the general plan of the rural consolidated school. This has proved very successful.

Three things that the Minnesota school system insists upon are: well-trained teachers, well-paid teachers, and long school terms. Liberal State aid makes this possible. It all resolves itself into this: the people of Minnesota are willing to go down in their pockets and pay for what they want; therefore they get it. J. R.

The Bureau of Education has sent out the two reports below:

PRACTICE COTTAGES IN HOME ECONOMICS TEACHING.

Housekeeping cottages, in which the students obtain actual practice in household work, are a prominent feature of current progress in home economics, according to a report issued by the Department of the Interior through the Bureau of Education.

"The practice house is as distinctly a legitimate part of the equipment for teaching home economics as the sewing machine, ironing board, or individual desk with its cooking utensils," declares the report.

"Home economics departments in schools and colleges are not all so fortunate as to have residences in which to instruct in home management and in housewifery. There has been some hesitancy among school officers because of the initial expense of a practice house. But as it is recognized that these

houses are quite as necessary as are good laboratories and that the maintenance costs are not excessive, more departments are being thus supplied. These houses offer opportunities for experimental studies in household administration, make practice in home furnishing possible, and afford excellent places for studies in nutrition."

The report shows that home economics is now a recognized course of study in all agricultural colleges to which women are admitted. Thirty-one State universities offer regular courses in home economics, and most of the private and denominational colleges and universities now offer similar instruction. So important has the subject become in State public-school systems during the past two or three years that now practically every State normal school has a course in home economics for prospective school teachers.

Summer schools are coming to play an especially important part in home economics teaching. The Bureau of Education received announcements from 192 schools that were offering courses during the summer of 1914; in 1915 the number reporting had increased to 230, and a still further increase is already assured for 1916.

Twenty-three States report an outline of lessons in home economics for State-wide use. A State manual of study for the public elementary schools of Alabama contains an outline for lessons in cooking and suggestions for the teaching of sewing in the grades, with lists of equipment and references for domestic science teachers in the grades. In California each county or city board of education prescribes its own course of study in home economics. An outline for a course of lessons in home economics has been prepared for the common schools of Illinois. This is made use of particularly in the rural schools. The domestic science section of the high-school conference of Illinois has recently completed a comprehensive outline for lessons in the fifth, sixth, seventh, and eighth grades, thus taking an important step in helping to unify the courses offered in home economics below the high school.

GOVERNMENT AGENCIES IN HOME-MAKING.

Numerous Government agencies are at work in behalf of home-making, according to a recent report on home education prepared by Miss Ellen C. Lombard, of the Bureau of Education, Department of the Interior. Besides the Bureau of Education—which maintains divisions of home education—the Bureau of Mines, the Reclamation Service, and the Office of Indian Affairs, all of the Interior Department, are doing direct work in education for the home. The Treasury Department, through its Public Health Service, and the Departments of Agriculture, Labor, and Commerce, are also promoting home-making through one or more bureaus or offices.

The Reclamation Service of the Interior Department is reaching the women on the projects; it is working for improved conditions in the homes, and it has taken active steps in inaugurating clubs for study purposes. More than two hundred clubs have been formed among the project women, every one of the sixteen States where the Government has reclamation projects being represented. The *Reclamation Record*, the organ of the Reclamation Service, has become an important factor in reaching the women on the projects; one entire section of this periodical is given over to project women and their interests.

Then follows a report of what is being done among the Indians, and in the Territories and dependencies of the United States Government, Alaska, Porto Rico, and the Philippines.

Education Exhibits at the Panama-Pacific International Exposition, a bulletin recently published by the Bureau of Education, by W. Carson

Ryan, gives a brief statement of the nature, purpose, and most striking features of the educational exhibits at the Exposition. The exhibits described are educational in the narrower sense of the word, having to do with only schools or methods, processes and systems of education. A unified display, rather than numerous exhibits, was the aim of the Department of Education of the Exposition, and this was carried out consistently. The policy of the department is thus set forth by its chief, Mr. Alvin E. Pope:

> Domestic exhibits were secured by invitation, the policy of the department being to request each exhibitor to confine his exhibit to one distinct system or process in which he excelled; to some definite lesson which he was capable of teaching the world; to present complete information on his particular subject which would be of interest and benefit to the visitors to an international exposition. These invitations were restricted in order to avoid duplication, and the special exhibits were so assembled as to portray the salient features of modern American education. We have outgrown the old-style educational display, consisting of comprehensive, duplicate exhibits, composed chiefly of pupils' work; therefore it has been the aim and endeavor of the department to have each exhibitor deal with the fundamental principles of education, illustrating the means used to develop a child into the highest type of citizenship. Foreign countries and insular possessions have followed the general policy of the department in regard to the arrangement of exhibits.

Modern types of rural schools and processes of education were shown in the exhibit by a series of models and devices. These illustrated, respectively, the rural school in connection with the State Normal School at Kirksville, Mo.; the Cache La Poudre School of Colorado; the model rural school at the State Normal School, Maysville, N. Dak.; the Farragut School, Tennessee; the rural consolidated school at Alberta, Minn.; a practical ideal for a consolidated school district; and a device showing the progress of school children through the grades.

A number of the States were requested to exhibit certain features of their educational work. In this way practically all of the significant things that are being done in education were on exhibit, and yet needless repetition was avoided. It gave a far clearer idea of educational systems.

The report of Mr. Ryan is clear, concise, and comprehensive. Another report covering the exhibits in agricultural education and rural schools, by Harold W. Foght, the Bureau's specialist in rural school practice, will be issued soon.

The report of the Canning Clubs in North Carolina for the past year, by Mrs. Jane S. McKimmon, State Agent in Home Demonstration Work, gives many interesting facts and figures. It is well to let the report speak for itself:

> In the past year in North Carolina there were 37 counties doing organized Canning Club work, with a total enrollment of 2,914. This makes an increase over last year of 5 counties and 1,414 members. These club girls are enrolled in 200 clubs, with 173 supervisors. Each county has a chief agent; and where

the work has been widely organized, subagents are employed to supervise canning during the season and see that the required standard is maintained. In Sampson County there is a club in each of its 18 townships, and every club has a supervisor.

During the first two years of our organization almost our sole output was tomatoes, as these were easily sterilized and in great demand. Today we are putting upon the market not only tomatoes, but string beans of extra standard quality, soup mixture, peaches, berries, and a fine quality of preserves and jams of all kinds. The sale of a limited number of these products last year seemed to warrant a larger output this season, and the venture has been justified in the excellent market we have already obtained. Even at this early date there is scarcely a can of soup mixture to be had, and string beans and preserves are going rapidly at good prices.

Moore County clubs made arrangements last spring to sell everything they produced to the county grocers, these grocers and the Sand Hill Board of Trade standing behind the girls' organization and making them feel that they had an assured market. In this county 22 girls are going to school in part or wholly their profits in canning.

Anson is the banner county of the State this year.

At the State Fair 29 counties sent exhibits. These shipments were required of each county and consisted of 40 glass containers. The 1,000 tin cans displayed were supplied by Wake County. The exhibits were most satisfactory, every county showing its training in commercial packing. One of the four-year girls from Granville County made a beautiful exhibit of one hundred 12-ounce glass jars commercially packed with fruits, jams, jellies, and pickles. These will be used as samples to be sent to grocers for next year's orders. We are using the State Fair exhibit as a school of instruction for agents and their girls, as we think there could be found no better way of comparing and noting differences in packs. Thirty-two agents chaperoning 79 girls came to Raleigh in October and spent from one to two days at the Fair, studying packs and standards.

To judge the women's exhibits and to explain reasons for giving awards, we have sent out our trained women to 18 county and 8 community fairs held in the State.

We are not finding it difficult to secure funds from the counties to match appropriations made from this office, and in 24 of the 45 counties organized for 1916 work sufficient funds have been appropriated not only to employ the number of subagents needed, but to secure a whole-time agent to supervise home demonstration work the year around.

Each agent is forming home demonstration clubs for the women of the county, in which cooking, the preparation of foods, sanitation, coöperative marketing of farm products, and winter gardening are all eagerly studied.

Miss Minnie L. Jamison, Director of the Home Economics Department of the State Normal College at Greensboro, has been appointed assistant in home demonstration work. Taking up her work the first part of October, she has been busily planning courses for the preparation and cooking of foods in the home. Miss Jamison has visited seven counties, observing conditions and arranging programs of winter work.

We are working out definite outlines for home demonstration work as reports come in from counties as to the efficacy of plans already set in motion. Guilford, Alamance, Sampson, and Anson have many fine home-betterment plans which they have operated satisfactorily in the past year.

Practically $26,000 has been appropriated by the counties in addition to appropriations from State and Federal sources to promote home demonstration work in North Carolina.

The twenty-ninth annual report of the Department of Labor and Printing in North Carolina is a veritable storehouse of information about the State. It is well organized, with a general introduction giving a comprehensive idea of the whole report. The chapters cover these subjects: Farms and farm lands, trades, miscellaneous factories, cotton, woolen, and silk mills, knitting mills, furniture factories, newspapers, and railroads and employees. Under each division are tables of statistics. The appendix gives a classification of North Carolina industries. Every teacher who wishes to keep up with her State's progress should have a copy of this report on her desk. They are furnished free as long as the supply lasts.

The State and National Governments have generously given their aid in supplying material on the subject of agriculture. Any one by writing to the United States Bureau of Education or to the United States Department of Agriculture may receive bulletins on any phase of this subject. Below are reviewed a few of the many valuable bulletins that may be of particular interest to teachers or to extension workers. All are from the United States Bureau of Education unless otherwise stated.

Bulletin No. 601, *Agricultural Teaching,* is a collection of papers presented at the fourth annual meeting of the American Association for the Advancement of Agricultural Teaching, as follows:

"Aims and policies of the American Association for the Advancement of Agricultural Teaching."

"Home project work vs. laboratory and school garden-plat work for high school students."

These questions are asked:

"In preparing teachers of agriculture, should the agricultural college give a special four-year course by special instructors, or add an elective of one year of pedagogics and practice teaching to the regular agricultural courses?"

"How shall the agricultural college prepare extension and field men?"

"The scope and purpose of agriculture in secondary schools."

"Report of the committee on the use of land in connection with agricultural teaching."

Bulletin No. 469, *A Course of Study for the Preparation of Rural Teachers,* in nature-study, elementary agriculture, sanitary science, and applied chemistry will prove helpful.

Bulletin No. 380, *The Training of Persons to Teach Agriculture in the Public Schools,* sets forth the ways used to supply the demand for more teachers of agriculture. Part I takes up the nature of the problem; elementary schools, high schools, and special schools. Part II, the means of training teachers, (1) aids to teachers already in service, (2) the training of new teachers. Part III, the general outlook; the significance of normal work in the colleges of agriculture.

Bulletin No. 368, *Agricultural Education,* takes up nature-study, school gardens, elementary agricultural education, agricultural colleges, practical advantages of agricultural education, and a bibliography.

Bulletin No. 447, *Opportunities for Graduate Study in Agriculture in the United States.* This explains the work that is being done for the higher training in agriculture, given by the Bureau of Education in co-operation with the committee on graduate study of the Association of American Agricultural Colleges and Experiment Stations.

Bulletin No. 644, *Statistics of Certain Manual Training, Agricultural and Industrial Schools, 1913-1914,* gives statistical report of 479 schools for the year 1914. There were more than 100 schools that did not report.

Bulletin No. 513, *Agricultural Instruction in High Schools,* gives a brief historical sketch of agriculture in the high and secondary schools, and problems that present themselves in carrying out the work in these schools are discussed.

Bulletin No. 474, *Agricultural Education in Secondary Schools,* gives papers read at the second annual meeting of the American Association for the Advancement of Agricultural Teaching, Columbus, Ohio, November 14, 1911. The papers are:

"Essentials in a State system of agricultural education."

"The need for reliable scientific data regarding social and economic conditions in rural communities."

"The proper equipment of an agricultural high school."

"The Smith's Agricultural School and agricultural education in Massachusetts."

"The unprepared teachers of agriculture in high schools and colleges of education."

Bulletin No. 522, *Agricultural Instruction in Secondary Schools,* contains papers read at the third annual meeting of the American Association for the Advancement of Agricultural Teaching, Atlanta, Georgia, November 12, 1912. The subjects of the papers are:

"The opportunity and responsibility for the preparation of teachers of agriculture."

"The first year's work in agriculture in the high school."

"What relation should exist between the experiment stations and the secondary schools of agriculture?"

"The use of land in connection with agricultural teaching."

Bulletin No. 481, *Bibliography of Education in Agriculture and Home Economics,* as the subject indicates, is a list of the subjects and authors of bulletins that can be obtained on Agriculture and Home Economics.

Bulletin No. 626, *Cooking in the Vocational School as Training for Home-making,* takes up the science of cooking in various ways: home-making as a vocation for girls, regular school methods and "trade" training in cooking, market for the products, part-time classes for housekeepers, taking instruction to the pupil, the kitchen and its equipment.

Bulletin No. 490, *Teaching Language Through Agriculture and Do-*

mestic Science, will be of great help to the teacher who has a crowded schedule and no equipment for the teaching of either Agriculture or Domestic Science. It suggests that these subjects be correlated with the language work, and it gives lesson plans for this study.

Bulletin No. 553, *Agriculture and Rural-Life Day,* gives material for the observance of this day. Agricultural education has come to form so important a part in rural life that in some States "Agriculture and Rural-Life Day" is observed in the schools. This bulletin suggests a large collection of reading matter, poems, songs, and other things that will be helpful in observing this day.

United States Department of Agriculture, (Rev.) Circular 106, *The American System of Agricultural Education,* gives the American system of agriculture as including all grades "from the doctor's degree to the nature-study courses in the kindergarten and the primary schools"; the department of original research and graduate study in agriculture, agricultural colleges, college extension in agriculture, secondary agricultural schools, elementary schools and schools for negroes and Indians.

United States Department of Agriculture, Bulletin No. 213, *The Use of Land in Teaching Agriculture in the Secondary Schools,* discusses the size and use of school farms, advantages and disadvantages, home projects, extension work of agricultural instruction, efficiency in agricultural productions.

United States Department of Agriculture, Bulletin No. 252, *Some Types of Children's Garden Work,* tells what has been done in the way of school gardens in nearly all of the large cities west of Pittsburg, Pennsylvania. The results have been most gratifying, and with this bulletin for reference, almost any teacher of elementary children can do good work in home gardening. J. R.

THE OUTLOOK. One of the September numbers of the *Outlook* has an illustrated article, "A Peep Into the Educational Future," which gives a good idea of one of the schools that has as the basis of its work "learning to do things for yourself." One school is taken as a prophecy of future schools. It appears rather unique when contrasted with the prevailing notion of the ideal school with its expensive equipment. The buildings of this school cost little, is inexpensive in equipment; the children live close to nature, do the work themselves, making what they need as the need is felt. Although many of the pupils are children of wealthy parents, they live a simple, wholesome life. The school is their home; they feel and know that it belongs to them. What would be the result if we had many such schools we do not know, but the author says that she would not be afraid to leave the future of our country and of education in the hands of citizens brought up under such a system.

A. H.

Alumnae News

Lena White, '13, is doing departmental work in the sixth grade in the Graded School, Greenville. She is enjoying the work very much, especially the playground work, and suggests to all intermediate teachers the following games:

1. Arch Goal Ball.
2. Under Arch Ball.
3. Dodge Ball.
4. Boundary Ball.

Directions for playing these games may be had upon request. Lena is coaching a play for "Baby Week."

Listen at this: Misses Bettie Pearl Fleming and Mary Lucy Dupree, '13, Duke, were guests of honor at a "Turkey Supper" on Thanksgiving Day at the Duke Hotel. The dining-room was suitably decorated for the affair. A delicious menu was served, and red carnations used as place cards. These two girls did their Christmas shopping in Raleigh.

Blanche Lancaster, '14, is completing her second year as fifth-grade teacher in the Smithfield Graded School. Her superintendent, Mr. A. Vermont, is a very loyal Belgian. As Smithfield is about thirty miles from Raleigh, many opportunities for visiting the Capital City are offered. Blanche attended the State Fair and the Teachers' Assembly, Thomas Dixon's Photoplay, "Birth of a Nation," Walter Browne's "Every Woman," and the Geraldine Farrar Concert. The Smithfield school is greatly interested in athletics and is working hard to keep the Johnston County Loving Cup, which was won last Field Day. We expect them to be successful.

Mary Weston, '14, Macon, is finishing her second year in the Macon Graded Schools. She says her work is done among kind and appreciative people. Plans are being made for a new $10,000 brick building, which is expected to be ready for use in September, 1916. Mary is teaching third and fourth grades, and says she knows there is no more interesting work or children in the whole realm of education. On January 24 she heard Geraldine Farrar sing in the Raleigh Auditorium. The following week she visited the North Henderson Graded School, where Julia Thomas holds a position.

Alice Pegram, '14, has the first grade, Alice Medlin, '13, the second grade, and Annie Smaw, '14, eighth and ninth grades in the Franklinton

Graded Schools. Agnes and Alice gave a Hallowe'en play for chapel exercises, using the Brownie costumes, and a Thanksgiving festival, using Pilgrim costumes. Annie entertained the school with a Southern program, all Southern selections, including an "Uncle Remus" story. At a meeting of all the county teachers the visitors were entertained at luncheon by these girls. Agnes has organized a club for the children of the primary department, and Annie is coaching a basketball team among the larger girls. They also got up a Colonial pageant for Washington's birthday, in which they had a Martha Washington tea, the Declaration of Independence, and the minuet. The smaller children played the role of little black pickaninnies and chorus singers of old Southern songs. The high school boys and girls, coached by the faculty, gave a play in the fall and raised a neat sum of money for the Athletic Association. They expect to present another one soon for the same purpose. A Christmas program, each grade contributing one or two numbers, was given, to which the parents were invited. For commencement a play, in which all of the grades will take part, will be given.

Mary Newby White, '13, who is doing advanced work in a two-teacher school, Tyner, R. F. D. No. 2, spent two weeks in St. Elizabeth Hospital in Richmond, where she underwent an operation for appendicitis. She is teaching a successful moonlight school.

Kate Watkins, '14, Graham, has the same little school of four pupils that she had last year. There can scarcely be found a more interesting schoolroom, she says: "Four little desks all in a row, a blackboard, and white walls artistically decorated in 'works of art' done by the pupils." Efforts are being made to secure a music-making machine of some kind, as neither teacher nor children can carry a tune. But there are many problems beside this that must be met in a school of this type, and Kate has a good opportunity to study child nature. "Cry baby," "I can't" and "timidity," however, we hope never cross her path. Kate would be glad to have you suggest a play or story to be dramatized by four characters. Can you help her?

Eunice Albritton, '15, is principal of a two-teacher school in Lenoir County, near Kinston. Two good clubs, "The Pine Needle Basket-making Club" and the "Fancy Work Club," have been organized. Eunice taught a good moonlight school. She is now preparing an exhibit for the County Commencement in April.

Carrie Manning, '14, Granville County, near Oxford, is principal of the same school she had last year. Anna Stanfield, '14, is teaching the primary work, and a third teacher has been added this year for intermediate grade work. She took two eighth grade girls to Raleigh to represent Granville County in the sewing demonstration at the Teachers' Assembly. Last summer Carrie spent four weeks at the Summer School at Chapel Hill, and from there she went to Asheville and other points of interest in the "Land of the Sky"; but at present she is working in general agricultural club work, having organized recently a Boys' and Girls' Club with 25 members enrolled. She reports efficient work in Pig, Corn, Poultry, and Canning Clubs. She has an article in this issue of the QUARTERLY.

Mary E. Chauncey, '14, is doing splendid work in a rural school near Belhaven. For the past two years she has been doing nobly the type of work that really counts for much in supplying the needs of her community. As a leader she is getting results. The new building is the first to be owned by the district in many years. There are seven grades and twenty pupils in the school. Great preparations are being made for the annual County Commencement in April. Mary has organized a live Sunday School in the community, the first ever held there, and the people seem to be aroused to activity and interest in the welfare of the community generally.

Mamie Ruth Tunstall, '13, spent last winter and spring in Washington City studying violin and piano, and the greater part of the summer was spent in the mountains of North Carolina and West Virginia. But now an occasional trip to Norfolk is about all the time that can be spared from school work. On Mondays and Thursdays there is a class of hopefuls in Greenville demanding instruction in music, and Tuesdays, Wednesdays, Fridays, and Saturdays are given over to the same type of work in Grimesland.

We are grieved for the sorrow that has fallen upon Minnie Best Dail, '12, Snow Hill, in the death of her much-beloved father. Best is at home this winter, having been granted a year's leave of absence by the Trustees of the Mooresville Graded School. What a comfort it must be to the mother to have her daughter with her.

Emma Cobb, '14, in a two-teacher school near Clinton, is thoroughly enjoying her work, and says she has the best position of any of the alumnæ. Her work covers the first, second, and third grades, with an enrollment of 59. These children can easily dramatize a song or story

of any kind. Every child's home is visited several times each year. The visits are outlined into districts, and one district is visited each week. Aside from regular school work an Athletic Association has been organized with jumping, running, and basketball as chief features. The first match game in basketball was played on February 19.

Mattie Cox, '14, Woodland, is doing primary work in a two-teacher school. She is one of the three teachers in Wayne County who has been granted the privilege of using the Aldine system of reading. Fifty-five dollars has been raised by entertainments of various kinds given by the school. The girls are enthusiastic over the basketball games played on the grounds.

Estelle Greene, '12, Grifton, R. F. D. No. 1, is principal of what she terms an "almost ideal school" at Gardner's Cross Roads, with an enrollment in her room of "16 of the best children that ever lived." Investigations during the campaign for moonlight school proved that there were no illiterates in her district. One of Estelle's stars startled her recently by announcing that the European countries were about the size of Arizona. Upon seeing the blank expression upon the face of one of another class, this question was asked, "Have you not heard of Arizona?" and the reply came promptly and without hesitation, "Yes, ma'm; it is the air." Evidently "Arizona" and "atmosphere" had been considered by the pupil to be one and the same. Still, as this is a special-tax district, there will be a term of six months this year. Thirty-nine dollars and ninety cents was raised at a basket party in December to pay off a debt on the school piano. Estelle was one of the attendants at the Hines-Greene wedding in Kinston, December 5th.

Bettie Spencer, '15, and Louella Lancaster, '14, Grimesland, assisted Mrs. C. M. Jones in entertaining at a linen shower in January. One of the group teachers' meetings was recently held at the Grimesland school. Both of these girls had an opportunity to teach while the visiting teachers observed their work. The Domestic Science work was inspected and praised.

Nora Mason, '12, is teaching primary work in Tyner, and says she has the "dearest bunch in the world of all sorts of characters." But Nora is not satisfied. She is now wishing to go back to old E. C. T. T. S. for the purpose of gaining new inspiration and knowledge. The moonlight school at Tyner was such a success that it is being continued as a subscription school three nights weekly. All of the students are

men who seem eager to grasp new knowledge. The day students are visited regularly in their homes. Right now they are preparing to give a play for the benefit of the school.

"Every alumna a subscriber to The Training School Quarterly." A very good slogan for us to adopt right away.

Helen Daniel, '14, Henderson, R. F. D. No. 1, is now completing her second year in the primary department in Epsom High School, Vance and Franklin counties. This is a very thickly settled community and naturally a fine school. Helen has enrolled 69 pupils with 40 beginners. A local tax in Vance runs their side six months, but the Franklin patrons have not yet seen the necessity for such a tax. This causes nearly half of the pupils enrolled to stop at the end of five months. The members of the Bird clubs are preparing an exhibit for County Commencement. The aim of the Betterment Society for Men and Women, of which Helen is president, is twofold: (1) To provide a wholesome social life for the community, and (2) to raise money for the school. The two basketball teams, one for the boys and one for the girls, have frequent match games with other county schools. While tennis is played, it is not so much in favor as basketball.

Viola Dixon, '13, is teaching second grade in the Elm City Graded School, with an enrollment of 31. She is also coach for a girls' basketball team. Viola attended the Teachers' Assembly.

Emma J. Brown, '15, who has a one-teacher school, Pleasant Hill, has been trying to beautify her school building inside, particularly by getting up plays and entertainments, and charging a small admission fee. Already she has bought maps, placed $15 worth of books in the library, and has bought pictures, blackboards, and, what is more, she painted the inside of the schoolroom herself. On January 30 one girl, 17 years of age, counted her fingers for the first time in her life. Emma has organized and is president of a Betterment Association. "Jumbo Jim" is to be presented soon, and it is hoped that enough money will be realized to buy desks for the room. Emma has the right attitude toward her work and we believe she will fully live our motto, "To Serve."

Willie Ragsdale, '12, Smithfield, fourth grade in the Smithfield Graded School, is enjoying a very pleasant year's work. Willie boards with her uncle and has been guest of honor at many parties. She attended the State Fair and the Teachers' Assembly, "Everywoman," and the Geraldine Farrar Concert, all in Raleigh.

Marguerite Davis, '12, Tarboro, is now working in the sheriff's office. Marguerite has planned to attend commencement, and declares that nothing short of illness or death shall ever keep her away.

Lillie Tucker, '11, organized the first moonlight school in Pitt County.

Vada Highsmith, '11, Keener, near Clinton, is principal of a three-teacher school. A Glee Club, Sewing clubs, and Domestic Science clubs have been organized and are in good running order. Vada was a member of the Bass-Weeks bridal party in January.

Willie Greene Day, '13, 43 E. Front Street, New Bern, is teaching Drawing in the city schools. She has over one thousand pupils in the schools to be taught or made to appreciate and love the beautiful. Out of school hours there are many places to go, musical comedies, good plays, and many social affairs. The water views and the joy of being on the Neuse River are more than pleasing. At this point the river is over a mile wide and it is not an infrequent sight to see boats passing to and fro. As the lady in question has a window overlooking the river we may expect to have a splendid poetic effusion in our next issue of the magazine on "Sunrise on the Water" or some such subject. The moonlight schools have been inaugurated under the auspices of the women's clubs. One hundred students have enrolled.

Ruth Moore, '13, Warsaw, directed a play which was given by the high school students in December for the benefit of the piano fund.

Bessie Doub, '13, second grade, Wendell Graded School, is planning a play festival for commencement. She has been coach for the high school basketball teams this year. She spent six weeks at the University of North Carolina last summer, and attended the sessions of the Teachers' Assembly in Raleigh in November.

Lula Fountain, '13, is still doing primary work in Bethel. This young lady gave a Hallowe'en party and cleared $26 to be used for the benefit of the school. On February 18 the "Tom Thumb Wedding" was given under her direction. She is now working out a playground festival. Lula is another one of those fortunate girls who heard Farrar sing in Raleigh.

Blanche Everett, '14, is at the State Normal College, Greensboro, again this year.

The Class of '13 has recently issued its annual class register, an attractive sheet, giving the address and work of each member of the class:

Ruth Davis, teaching a rural school at Rosemary; Willie Greene Day, teaching Drawing in the New Bern Graded School, New Bern; Viola Dixon, teacher of second grade at Elm City; Mary Lucy Dupree, grammar grade work, Duke; Eloise Ellington, at home this winter in Greenville; Mary Emma Clark Forbes, living in Goldsboro this winter; Bettie Pearl Fleming, teaching special subjects in the sixth, seventh and eighth grades, Duke; Lillie Freeman Hope, living in Washington; Annie Mae Hudson, teaching the primary grades at the Children's Home in Winston-Salem; Josephine Little, at home this winter, Greenville; Mabel Lucas, teaching a rural school near Plymouth; Brownie Martin, principal of a three-teacher school near Hester; Alice Medlin, teaching second grade at Franklinton; Mary Moore, primary work, Speed; Ruth Moore, assistant high school teacher in Warsaw; Ethel Perry, first and second grades at Old Ford, near Washington, R. F. D. No. 1; Louie Dell Pittman, primary work at Selma; Inez Pittman, grammar grade work, Oriental; Lalla Pritchard, living in Swansboro this winter; Lula Quinn, teaching first grade in a four-teacher school at Beulaville; Elizabeth Shell, teacher of fourth grade in Fayetteville; Willie Lee Smith, first grade in Monaghan Graded School, Greenville, S. C.; Hattie S. Taylor, primary work, Rocky Mount; Josephine Tillery, teaching fourth grade at Roanoke Rapids; Mamie Ruth Tunstall, teaching music at Grimesland; Lena White, teacher of sixth grade in Greenville Graded School, Greenville; Mary Newby White, principal of a two-teacher school, Tyner, Route 2; Mary Weeks, Graham, teacher of advanced first grade; Hattie Weeks, Winston-Salem, 708 S. Main Street, teacher of third grade in one of the city schools; Hattie Whitehurst Winslow, living in Scotland Neck.

At the close of the register is the following announcement, marked "Important":

This is our Triennial. Every member of the class is expected to attend commencement this year. The Loan Fund will be returned to the class in the spring and this will have to be disposed of. There will also be other matters

of importance that will need our attention. President Wright has promised to provide room and board at the Training School at $1 per day. We shall not be satisfied with twenty-nine members of the class present. We want thirty. Come!

Mrs. Robert Peel Dew (Grace Bishop, '11), Wilson, was entertained recently at a party given by Miss Lula Whitehurst. On the morning of November 24, 1915, at the home of her parents on North Tarboro Street, Grace joined the steadily increasing army of Deserters. The ceremony was performed by Rev. M. Bradshaw, then pastor of the Methodist church. Mr. and Mrs. Dew spent their honeymoon in Washington, D. C. They received many pretty and valuable gifts.

On January 19, Mrs. Ben Joyner, of Farmville, entertained in honor of Connie Bishop, '15, of Wilson, N. C.

On Tuesday afternoon, November 23, at 4:30 o'clock, in the Jarvis Memorial Methodist Church, Greenville, a lovely wedding was solemnized when Lillian Carr, '11, became the bride of Mr. Hunter Fleming, of Kinston. The church was beautifully but simply decorated in white and green. Among the bridal party was Alice Estelle Greene, '12, bridesmaid, and Mrs. Louis W. Gaylord (Mattie Moye King, '12) as dame of honor. The bride wore a suit of midnight blue broadcloth with brown beaver trimmings and brown shoes, hat and gloves to match. She carried a shower bouquet of bride's roses and valley lilies. The ceremony was performed by Rev. J. M. Daniel of the Methodist church, the ring service being used. The groom is engaged in the tobacco business with his father in Kinston, where Mr. and Mrs. Fleming will live. On Monday evening the bridal party was entertained by Mrs. Louis Gaylord, of Plymouth, at the home of her mother, Mrs. R. W. King, on Dickinson Avenue. Mrs. C. S. Carr charmingly entertained at a bridge party for the bride-elect on Friday evening preceding the marriage.

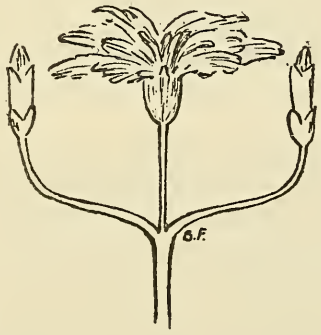
Mrs. Louis M. Gaylord, '12, of Plymouth, and Mrs. Hunter Fleming, 11, of Kinston, were guests of honor at a card club given in Greenville, February 8, by Miss Mary Smith.

Eula Proctor, '12, on December 24, 1915, in the Presbyterian manse, Rocky Mount, was married by Dr. W. D. Morton to Mr. Frank L. Grayhouse. They are at home in Rocky Mount, where the groom holds a position with Swift & Company.

Mrs. William Robert Rhodes (Lela Deans, '14) has joined the "Deserters." Deans has no fear of the number 13. While visiting friends in Washington, D. C., last fall she was married in the Calvary Baptist Church by Dr. Cousins, the ceremony taking place at 4:30 p. m., October 13, 1915. Later she attended the State Farmers' Convention at A. and M. College, Raleigh, and was present at the organization of the North Carolina Rural Woman's Club. Later she attended the Virginia State Fair in Richmond for a week. Her present hobby is flowers. The home is gaily decorated in ferns, calla lilies, and freesias.

Gladys M. Fleming, '13, 1901 Adelicia Street, Nashville, Tenn., sends greetings from George Peabody College for Teachers, where she is taking a course of study.

Pearle Brown, '15, Farmville, has enrolled almost 100 per cent of the school census, and nearly 100 per cent attend regularly. The election for the consolidation of the entire school district into one central school was defeated, but the people have become interested in the movement, and a new election is expected to be carried soon. Maximum interest is being shown in the literary societies. A colonial pageant is to be given by the societies on February 22. Forty-five dollars has already been raised to lengthen the school term, and the proceeds from "The Noble Outcast" will be used for the same purpose. Drawing and music have become a part of the regular school course. The classes in Agriculture have planted flowers on the school grounds, and beautified them in every other way possible. A Reading Circle has also been introduced into the school, in which teacher and pupils discuss the relative values of books read.



School Activities

THE YWCA

The Young Women's Christian Association of America is celebrating its fiftieth anniversary by a great jubilee from February 3d until March 3d. The association was organized in Boston on March 3, 1866, for the welfare of the working class of girls. Since that time its scope of work has broadened until it has come to be of service not only to working girls but to all women, and it has opened to them opportunities for many kinds of training.

The purpose of this great nation-wide jubilee is to give publicity to the work that the associations are actually doing in schools, cities, in the country, and in many lands.

Pageants which reveal the history, work and growth of the association are being given in many cities and schools all over the United States.

The Y. W. C. A. of this school has given over all its weekly services, Sunday evening and Friday evening services, during the entire month to special programs which bring out the jubilee idea. That is, the whole association is coming in closer touch with the Y. W. C. A. work by taking active parts in the work.

The climax of the association celebration was reached when the pageant, "Girls of Yesterday and Today," was given on the evening of February 19.

The announcement was made by the girls of the Poster Committee, who, using colors of light blue and blue, the Y. W. C. A. colors, and

holding letters spelling "Y. W. C. A. Pageant," came out and sang a song setting forth the growth of the association.

Miss Juanita Weedon, dressed quaintly as the girl of 1866, appeared on the stage and showed the need of a Y. W. C. A. by giving the conditions of the working class of girls at that time. As she gave these, working girls seeking a home, tired office workers, school teachers, governesses and mill workers passed in pantomime.

She told in quaint old-fashioned language what a Y. W. C. A. would mean to these girls and to the girls of fifty years hence. She then welcomed the girl of 1916, Miss Alice Herring, dressed in modern costume, and showed her in tableau and pantomime the beginning of the Y. W. C. A. In this was shown a parlor in a New England home where several women met and drew up the agreement to support such work as is done by the Y. W. C. A. The growth and present work of the Y. W. C. A. were featured in the second act. Here the girl of 1866 saw in the future the realization of the things she had dreamed of. The girl of 1816 interpreted to her the scenes given in pantomime.

The first scene pictured was in the city Y. W. C. A. reading and study room. There girls of all types, of all walks of life, were gathered together in friendly relationship.

Tennis and basketball players skipped merrily into the room and paused long enough to give account of the games.

Then the members of the Eight Weeks Club for country girls came in and seated themselves in a circle on the floor. Here the group of country girls came in friendly contact with the city girls.

Girls of different occupations passed through. Those represented were: The teacher, the milliner, the shopgirl, and the stenographer.

Girls from the Cooking Class came in with food to be tested. At this point the house-mother entered and was heartily welcomed by all the girls.

A drill of girls representing various foreign nations came at the close. And the girl of 1916 gave as her final remark the following statement: "The work of the Y. W. C. A. must not go backward but forward from this day on."

Miss Mabel Stone, Secretary of the Student Associations of the South Atlantic Field, visited the Y. W. C. A. of the Training School from January 22 to 24, 1916.

On Saturday evening she gave a short talk to the students in which she took up some of the friends of Y. W. C. A. She gave the story of what the Y. W. C. A. has done for the factory girl, for the oriental student, and for the city girl and what these girls are now doing for the Y. W. C. A. At the last she took up the founder and greatest friend of the Y. W. C. A., Miss Grace E. Dodge, late President of the National Board. She paid a beautiful tribute to Miss Dodge and closed by saying, "The association stands for friendliness to all girls." All the girls

enjoyed meeting Miss Stone at an enjoyable sociable which was given her in the Y. W. C. A. hall after the talk.

Miss Stone met the members of the cabinet Sunday afternoon and talked over the work of the association. She led the Sunday evening service and took as her subject the two greatest commandments, "Thou shalt love the Lord thy God with all thy heart, and with all thy mind and with all thy strength," and "Thou shalt love thy neighbor as thyself." She revised the first thus: "Thou shalt love the Lord thy God with all thy allegiance, and with all thy mind and with all thy will," and showed that these three must all be pledged to Him.

After the service she met the members of all committees and talked with them of the great work in their charge.

The visit of Miss Stone has meant much to the students, and they are brought into a realization that they are indeed a part of a great body of workers.

She reported to one of the advisory members that she found the association in good condition and that the work is being well conducted according to modern methods.

The first of a series of services celebrating the Y. W. C. A. Jubilee month was held at the Training School Sunday evening, February 6.

The president, Allen Gardner, read the scripture lesson from Mark 4 and explained the purpose of the Jubilee month. Then she gave a short sketch of the life of Grace H. Dodge, the founder of the National Y. W. C. A.

After this Sallie Lassiter gave the history of the Y. W. C. A. at the Training School, beginning with its organization on November 19, 1909, and giving the name of each president and the main things that were done each year until the present year.

The first president, Pattie Dowell, had been invited to conduct this meeting and tell of the beginnings, but she found it impossible to be here.

President Wright led in the Y. W. C. A. of the Training School on Sunday evening, February 13. A portion of his scripture reading was Philippians 2:2-15, the same scripture upon which the Sunday school lesson of the day was based. The other portion was St. John 7:3-14.

The theme of the evening was that of world building and the part of scripture most quoted was, "Work out your own salvation with fear and trembling." Also, the fact was called to the minds of the student body that the association is now observing Jubilee week.

Mr. Wright stated in the beginning that true religion is not easily caught from being exposed to it as contagious diseases are. He said that the reason the Y. W. C. A. originated and has grown is that there was a felt need by humanity for such an organization; that some one conceived, organized, then the young women went to work.

It was made clear that religion cannot be given to a person and that the organization is to help one who helps himself build up his individual

world just as the school puts education in the way of students, yet has no power of educating unless the student takes hold and builds his own world. This illustration was given:

"One person may watch another run an automobile and wish very much to run it himself, yet he will never learn to run it unless he takes hold, tries, practices; and so it is in building up the life one lives, for he must be active using what he gets, so as to get power to get useful things. Religion," he said, "is one of the most useful of all things to be gained, and religious work should not be postponed, for school life is real life and not complete unless it is a full Christian life." He closed by saying that "Life is a fearful responsibility and is going to be exactly what a person makes of himself; and the world is big enough, beautiful enough, and sweet enough for one to live the true life if he will only exert effort."

Mrs. Beckwith led in the Y. W. C. A. Sunday evening services at the Training School on February 20. She read the scripture lesson from John 14. She reviewed the scene where the disciples gathered together after the crucifixion, the darkest hour of the disciples' life, and contrasted this with the resurrection scene. She then proceeded to show the work that is done in the name of the Christian religion and under the guidance of the Holy Ghost. She illustrated this point by telling the story of how the Berry School in Georgia was founded. She drew from the story practical and helpful everyday lessons that could be used in school life. Miss Mary Smith sang a solo.

The Y. W. C. A. of the Training School was exceedingly fortunate in having Dr. Vann to lead in their services on Sunday evening, January 9. He read the scripture lesson from Romans 16. He took as a subject "Woman's Place." He reviewed the woman of the Bible and proved that women play a great part in the biblical story. The subject was especially appropriate because of the widening influence of woman today. He began by enumerating the five bad women of the Bible, but proved that each of these had good traits and fitted into the divine plan. He dwelt upon the greatness and self-reliance of Rebecca, who shaped the life of Israel. He said, "Isaac was a hyphen which connected Abraham and Jacob." After commenting briefly upon the women in the Old Testament, he then took up woman in the New Testament. He showed that the greatest things in men are those that have the most of women's qualities in them. He brought out the traits in Christ's life that are generally called womanly, such as gentleness, sympathy and pity, and that Christ, the great ruler of all, ruled through these traits. In applying the subject to the present day he said that it was no wonder women were entering into every great work; in purifying slums, in cleansing politics, and in all great movements. "A woman led man from the first garden, so now she is leading him back to the great garden," was the closing statement.

Miss Graham led in the Y. W. C. A. services on Sunday, January 16. She read the scripture lesson from St. Luke 6:27 to 38. She selected the subject of Systematic Giving, which was particularly appropriate, since this was the time that the girls had been given the Systematic Giving Cards to fill out. Miss Graham also showed that there must be systematic living as well as systematic giving. That is, one phase of life should not absorb phases of equal worth, but that the right amount of time should be apportioned to each.

Rev. J. M. Daniel, pastor of the Greenville Methodist Church, led the Y. W. C. A. Sunday evening service on January 30. He read the scripture lesson from St. John 15. Then he took his subject from Exodus 4:2, "What is That in Thy Hand?" which referred to the rod Moses had in his hand.

Mr. Daniel showed how Moses used the talents that he had for the service of his people and for God; because of the fact that Moses was the sort of man that God comes to, always a thinker.

Then he called attention to the fact that life is beyond the confine of one generation and that the wealth of this age is the tools placed in hands that enable all to meet life better. "What are you holding in your hand today; and, are you using the talent you have, even though it be small, and are you using it to the best advantage?" were the questions directed to the student body.

He told how God impressed upon Moses the fact that responsibilities cannot be escaped, and how when Moses made excuses to God that God unfolded to him the history of his people, thus revealing to Moses his own inherited talents.

As Moses was then, so men of today are heirs of the ages, using or misusing their talents. To bring the lesson close home to the students he touched upon woman's mission in life. He spoke of the added responsibilities which women have taken on. His plea was that these added responsibilities may not change the best in women; that womanhood may be upheld so as to save the generation. And then he suggested that to uphold womanhood, or to become great, it is necessary to use what seems a small advantage to the best possible advantage.

The Y. W. C. A. of the Training School held a very impressive Thanksgiving service in the auditorium at 8:30 Thursday morning. This service was attended by the whole school and faculty, who enjoyed the following program:

Instrumental Solo.

Scripture Lesson, the 100th Psalm.

Readings: What the World, the Nation, the State, the School and the Y. W. C. A. has to be thankful for.

Each of the topics was taken up separately, and the reader showed

that the world has God, the Bible and recent inventions which have brought us in closer touch with the world, to be thankful for; the nation has Christianity, peace and liberty; the State has campaigns against ill health, chautauquas, libraries, establishment of schools, moving pictures and clubs which are working for the improvement of the people; the school has good health and a successful year's work to be thankful for, and the Y. W. C. A. has its world-wide services and Miss Dodge, who spent her life working for the Y. W. C. A., to be especially thankful for.

Mr. S. B. Underwood led in the Sunday evening services at the Training School on December 5. He read as the scripture lesson Isaiah 6, from which he drew practical, everyday lessons. He showed that one can worship God anywhere and the worship should not be formal; and that one can carry Him with him wherever he goes. He said that the call to service cannot be heard and cannot be answered unless the religion is more to one than form, but the call will come to each one if they are anxious to hear, although it may not come in just the same way that it came to Isaiah.

The choir gave special numbers and Mr. Austin sang a solo.

Rev. Mr. Harris, pastor of the Presbyterian Church, led in the Sunday evening service at the Training School on November 21, 1915. He took his subject from St. Peter, chapter 12, "Growth in Graces of Christ." The subject was developed by showing that the graces of Christ have normal growth just as a person grows. He grows in grace by feeding on the word of God and prayer to God. Mr. Harris compared the wholesome effect of pure air to the effect of well guarded associates. And, as the body grows by exercise, so by use of graces do we grow in Christian virtues.

Miss Georgia Fres, a native Egyptian, who was the guest of the Presbyterian people of Greenville, visited the Training School and conducted the services of Sunday evening, November 28, 1915. She is in this country studying medicine. She has been attending Columbia University and later will go to the University of Michigan at Ann Arbor.

Her talk to the association was one of intense interest. She told how she came under the influence of the Presbyterian missionaries in Egypt. She gave as her reason for coming to America that she wished to become physician to the women of her land. She stated that she was the first woman of her land to study medicine within nine hundred years, and that the reason she came to America was because a woman could get better training here than anywhere else.

Miss Fres's account of Egyptian customs was exceedingly interesting,

particularly what she said about the conditions of the poor and of the marriage customs in her land. She said, also, that the effect that conversion of her people by missionaries had upon the Egyptians was wonderful.

Miss Fres gave many details about Egypt that threw new light on the history of that land. Her whole talk seemed one plea for more and better missionary work.

After the service girls followed Miss Fres into the parlor, where she talked freely on interesting subjects.

The music of the association has been exceedingly good all through the quarter. The Music Committee, with Gladys Warren acting as chairman, has prepared special music for almost every service; then the association songs have been wisely selected.

The special music has been as follows: "Calvary," by Lucile O'Brian; "O Love That Would Not Let Me Go," by Helen Paschall; "Be Thou With Me," by Martha Lancaster; "Rest for the Weary, Rest," by Lucile O'Brian; "Jerusalem," by Helen Belle; "Hymn of Peace," by choir; "Stilly Night," by association; "O Little Town of Bethlehem," by association; "Sleep, Holy Bairn," by choir; "I Heard the Voice of Jesus Calling," by Mary Smith; "The Shepherd True," by Marguerite Wallace; "The Kingdom of Love," by Marguerite Wallace; "He Who Gavest Me Life," by Helen Paschall.

Classes

Lincoln's birthday was celebrated at the Training School with appropriate exercises by the Senior Class. These were perhaps the best assembly exercises yet held by a class. The class marched in to a medley of national airs. Those who took a special part in the program marched up on the stage while the others took the front seats.

Miss Louise Smaw, president of the class, conducted the religious services, in which the 46th Psalm was read, and the songs "Onward, Christian Soldiers" and "My Country, 'Tis of Thee" were sung.

The program, which consisted of expressions of appreciation of the various phases of Lincoln and of the singing of patriotic songs, was as follows:

Song—Battle Hymn of the Republic.....Senior Class
A Sketch of Lincoln's Life.....Nellie Dunn
Lincoln's Part in a Wartime Romance.....Susie Barnes
Piano Duet—March Miltaire.....Gladys Warren and Janet Matthews
Anecdotes of Lincoln's and About Lincoln.....Bloomer Vaughan
Song—"Star-Spangled Banner".....School
Walt Whitman's Poem—"My Captain, O My Captain".....Alice Herring
Synopsis of Some of Lincoln's Great Speeches.....Georgia Keene

The entire school joined in repeating the famous passage beginning "With malice toward none." At the close the class song was sung.

"Cranford," a dramatization of Mrs. Gaskell's famous novel, was presented by the B Class on February 14. The program gave the following:

Place: Cranford, the quietest, quaintest village in all England.
Time: A little girl named Victoria is living at Windsor Castle.
Persons in the Play: The Ladies of Cranford, who are, as you know, widows and spinsters, their guests, and servants:

Miss Matilda Jenkins ("Miss Matty")	Agnes Hunt
Mary Gaskell	Maydee Evans
Martha	Helen Lyon
Miss Pole	Olive Lang
Mrs. Forrester	Mattie Boseman
Mrs. Fitz-Adam	Bess Tillitt
Miss Betty Barker	Cora Lancaster
The Honorable Mrs. Jamieson	Bertie Daniel
Lady Glenmire	Willie Wilson
Peter Marmaduke Arley Jenkyns	Camille Robinson
Mulliner	Flora Barnes
Jem Hearn	Ethel Stanfield

"Auld Lang Syne" was sung before the curtain went up. "Comin' Through the Rye" and "Old English Gentleman" were sung between the acts.

The dramatization was exceedingly good, and the cast threw themselves into the mood of the story and made the audience feel as though they really were living in that age and in that village. They interpreted remarkably well the quaint customs and habits. They did remarkably good acting.

The costumes were not made to order, but were dresses actually worn by people some years back, and many of them were fair samples of the styles of fifty years ago.

Miss Jenkins, class adviser, coached the play.

The "F," or One-Year Class, entertained their sister classes, the Seniors and "B's," or first-year acadamic class, in the Recreation Hall of the Main Building on the evening of January 15, 1916.

The hall was simply but pleasingly arranged for the occasion. Pennants served to make cheerful the walls, while lack of any sort of furniture gave space for the guests.

The Seniors and "B's" were welcomed into the hall by the "F" president, who seated them on the floor opposite the "F's."

Pretty soon it was announced that a program would be given, that the characters of well-known advertisements and books would be represented and that the guests were to guess what they were.

The familiar figures of the following advertisements were represented:

1. Gold Dust Twins.
2. Cream of Wheat.
3. Baker's Chocolate.
4. Old Dutch Cleanser.
5. Fairy Soap.
6. Ivory Soap.
7. Uneeda Biscuit.

The following books were represented by bits of dramatization:

1. Freckles.
2. Little Shepherd of Kingdom Come.
3. Trail of the Lonesome Pine.
4. Rebecca of Sunnybrook Farm.
5. Pollyanna.
6. Harvester.
7. Lavender and Old Lace.
8. St. Elmo.
9. Mrs. Wiggs of the Cabbage Patch.
10. Little Women.
11. Mary Carey.
12. Merchant of Venice.

East Carolina Teachers Training School text-books dramatized:

1. Hygiene and Sanitation.
2. Home Nursing.
3. How to Study.

Costumes were well selected and characters well chosen, showing that thought and time had been spent in preparation.

While Helen Paschall sang two songs, bags of candy tied with blue ribbon, "F" Class color, were passed. The evening ended with an old-timey dance in which the majority took part.

All through the evening a kind of ease and freedom existed which afforded each and every one a good share of pleasure.

The "F" Class, or One-Year Professional, had the honor of having charge of Washington's Birthday exercises. They took advantage of the opportunity and made it their annual assembly exercises. The dramatization of Washington's life, which they presented, is given in full elsewhere in the QUARTERLY. Everybody in the class had a part in it. The cast of characters was as follows:

Little George Washington.....Myrtle Woods
George Washington, the Man.....Olive Kittrell
George's Father.....Kathleen Venters
George's Mother.....Lillian Reeves
Martha Washington.....Helen Paschall

George's Schoolmates—

Helen Paschal, Lillie Sanderlin, Valeria Jones, Pauline Minshew.

Lord Fairfax.....Sallie Marshall
Indian Guide.....Dearie Simmons

Indians—

Ione Redict, Ina Carr, Helen Council, Neva Willis, Kate Powell, Nora Lewis.

Frenchmen.....Wessie Evans, Viva Forehand, Bessie Futrell
Governor.....Nannie Newman
Englishmen.....Blanche Bullock, Lila Taylor, Irene Brite, Dixie Mattocks

Guests at Ball—

Louise Baggett, Annie Mae Daughtridge, Jennie Best, Ethel Sutton, Madeline Pollard, Clara Jones, Alberta Twine, Mary Asbell, Annie Pitt, Mamie Simpson, Mae Riley, Annie Harper, Marie Floyd, Pattie Smith, Ethral Eborn, Ruth Austin, Rena Jones.

Members of Congress—

Kathleen Venters ("John Adams"), Pearl Jennings ("Thomas Jefferson"), Lena Thomas, Ethel Jackson, Pattie Smith.

Chief Justice.....Rosa Yopp
Clerk.....Sallie Marshall
Betsy Ross.....Sadie Sellars
Chancellor.....Lena Thomas

The president, Rebecca Pegues, and Velina Robinson and Mamie Sellars were the managers. Connie Woodward was pianist.

Miss Helen Strong, the efficient class adviser, directed the work.

Societies

The query for the annual debate between the two societies is: *"Resolved,* That we should uphold President Wilson in his plans for preparedness." As the Laniers were the challengers, the Poes had their choice between the negative or affirmative, and after due reflection the negative was decided upon. The preliminary debate was held on February 26, and the final is scheduled for the middle of March.

The debaters chosen were:

Laniers.	*Poes.*
Ophelia O'Brian.	Nannie Mac. Brown.
Blanche Satterthwaite.	Flora Hutchins.
Ruth Spivey.	Lizzie Stewart.

Lanier Society.

The Sidney Lanier Literary Society gave a very attractive Scotch program at their January meeting. The program consisted of Scotch songs and reading of selections from the poets of Scotland. Many

scenes of castles and landscapes of Scotland, shown by the lantern, added much to the enjoyment of the evening. These were explained by Miss Nell White.

POE SOCIETY.

"In the Absence of Susan," a rich comedy in three acts, was presented by the Poe Society to the Laniers and faculty and was considered the most charming program gotten up and given by the girls alone in quite a while.

From the time the curtain went up to the end of the play the audience was captivated by the most interesting plot worked out by the excellent players.

The stage setting of the first two acts was the living-room of the Campbell home. The third act was a veranda scene bordering the rose garden.

Alice Herring acted the part of Maida, the leading character, with charming spontaneity and joyous buoyancy; she was the young, pretty, fun-loving girl who had been suppressed by her domineering older sister Susan. One of the enjoyable surprises of the play was a bit of graceful dancing rendered by Miss Herring.

The part of Susan, the tall, thin almost old-maid sister, which was a star character, was consistently and splendidly acted by Lalla Wynne.

Mrs. Campbell, the weak and easily managed mother, was enacted by Fannie Lee Spier. Fannie Lee was very matronly and took her part with stately dignity.

Gertrude Cook could not have been surpassed in her interpretation and acting of the sharp-chinned village gossip and unmitigated flirt. The only regret of the audience was that her part was only too short.

Ruby Vann, as Harriet Miller, Maida's best friend, being rather reserved and dignified, was a pleasing contrast to her chum.

The part of the college brother, Dick, was exceedingly well taken by Martha Lancaster. With her witty side remarks and love of teasing she kept the audience in an uproar. She was unmistakably one of the hits of the evening.

Geoffrey Hastings was the college friend of Dick and lover of Maida. This part was taken by Marguerite Wallace, and, verily, if she had been a boy, "some girl's heart would be broken," for she was as handsome as a Greek god.

Mary Smith as Samuel Larkey, the Petruchio-like lover of Susan, was a joy to behold. Of course he was attracted to his Kate by her contrariness, and he it was who made it possible for the play to end happily.

Jane, the maid, Elizabeth Mercer, and John, Jane's beau, Gene Hickerson, though they were minor parts, were characters enjoyed by the girls.

The last scene closed with the announcement of the following engagements: Maida to Geoffrey, Harriet to Dick, Susan to Samuel, and Jane to John.

The play was remarkably good and the chairman of the Program Committee, Elizabeth Southerland, deserves much credit for her excellent coaching.

Athletics

The basketball tournament, one of the most interesting athletic events of the year and the climax of the basketball season, was played during the last week of January.

A handsome silver loving cup, contributed by the faculty, is awarded to the class winning the championship. The year of the winners is engraved upon the cup and the cup is exhibited in the library.

Before each tournament there are try-out games in which all class teams have a chance to work to be in the tournament. This year the Seniors and Juniors won in the trial games and thus were the contestants in the tournament. Two hard games were played, the Juniors winning both, but by a narrow margin. The last game was a tie, but was played off before leaving the court.

While the Juniors won the games by their excellent goal throwing, the Seniors did remarkably good playing in the center.

Immediately after the game President Wright presented the cup in his usual happy manner, dulling the edge of the defeat and making the victorious team feel the significance of their victory.

The enthusiasm of the school was manifested in the fact that almost the entire body was present at both games and took sides with their sister classes, rooting and yelling with a vengeance.

School Notes

Henry Oldys' Address on Birds

The address on "Birds and Bird Music," by Mr. Henry Oldys, at the Training School on the evening of February 7, was one of the most enjoyable ever delivered at the school. Mr. Oldys showed that he knew birds intimately at first hand, and reproduced their songs so accurately that the birds themselves would have been deceived. That he is a musician he proved by giving the musical analysis of the melodies and notes of the birds he imitated. During the evening he told story after story giving his experiences with birds, throwing in touches that humanized them. Flashes of wit and humorous interpretations added charm to the lecture.

President Wright in introducing him reminded the audience of the fact that Mr. Oldys did more than any other one man to bring about legislation preventing the killing and importation of birds for millinery purposes.

Mr. Oldys gave examples illustrating what bird protection means. He pictured an island in the Pacific Ocean which was noted for the albatross and described the set dance of these birds. The Japanese had planned an expedition for the purpose of getting the plumage of these birds for the Paris millinery trade and had begun the slaughter that would have resulted in their complete extermination, when the United States Government interfered and set the island aside as a bird reservation. This Government, he said, has sixty-nine of these bird reservations, "bird sanctuaries," the Australians call them. Mr. Oldys made the suggestion that it might be well if, in these days of the alleged emancipation of woman from the alleged domination of man, women would stop allowing a dozen men in London and Paris to dictate what they shall wear, and encourage American fashions for American people.

Mr. Oldys gave the characteristics and songs of a number of birds, most of which are common to this section. He began with the robin, which is not a robin at all, but a variety of thrush, but the Pilgrim fathers named it "robin" because it reminded them of their own little robin red-breast, and the name had become justified and sanctified by usage. He told the story of a man who experimented with feeding a robin and found that it ate fourteen feet of earthworms in twelve hours. He showed that not only robins, but other birds as well, had marked individuality and varied songs. He described other birds that have cheerful songs, the "chewink," or ground robin, the Baltimore oriole, "golden robin," the Carolina and the house wren. The titmouse, which seems to have lost something, the field lark, the wood pewee, with its "sad, gay, worn spirit," came into the next grouping. Then the screech owl with his weird note and the persistent whippoorwill were imitated.

"As if going from the profane to the sacred," he passed to the finest singers of all the birds when it comes to pure melody, the wood-thrush and the hermit thrush. These birds have a sequence of melody such as the great musicians use, and in comparison the song of the nightingale seems incoherent. The family of sparrows, which is not to be judged by that pest, the English sparrow, was next described. The last bird that claimed the attention of the audience was the yellow-breasted catbird, and a most amusing description of his antics and calls was given.

In closing Mr. Oldys said that his lecture was only a suggestion. Each one must study and know the birds for himself, and each one that heard Mr. Oldys probably left the hall determined to watch birds more closely henceforth.

A great many people from the town were in the audience, and it was noticeable that there were many children among them.

Before the lecture there were several musical numbers. Misses Fahnestock and Sherman played the "Midsummer Night's Dream" music from Mendelssohn. Miss Alice Herring sang a solo, and Misses Gladys Warren, Marguerite Wallace, and Alice Herring sang a trio.

The school was delighted to have Rev. Claudius F. Smith give a talk during assembly period recently. Rev. Smith, though at present living in Lynchburg, Va., is a native of Pitt County and was in Greenville holding a mission at the Episcopal Church. Many Pitt County girls were delighted with his reminiscences of old times and mentioning friends of their fathers and mothers, and often their parents themselves. He comes from a family of teachers and his mother was a celebrated teacher of Pitt County, which again made him exceedingly interesting to the students.

Rev. B. F. Huske, of New Bern, visited the Training School during February and talked to the students during the morning assembly. During the first years of the life of this school Rev. Huske lived in Greenville and the students are always delighted for him to visit them, looking on him as an old friend, as indeed they well may, for he has always been a friend of the institution.

The students were fortunate in having a visit from Dr. S. B. Turrentine, president of the Greensboro College for Women, one morning during the term. In his talk he contrasted the past ornamentality of education with its present usefulness, and closed with the thought: Obedience is the author of inspiration, and in order to learn one must obey or submit to authority.

Col. Fred A. Olds, collector for the North Carolina Historical Museum, was a visitor to the school off and on for a week early in January while he was the guest of the Carolina Club of Greenville and was doing some work on the side for the Museum. He made interesting talks at the morning assembly exercises at the school, telling stories that charmed the students. His talks to the various classes in History on historical subjects were to the students delightful reports of real life. The children of the Model School came in for their share of stories. All connected with the school will give Colonel Olds the glad hand whenever he comes.

Mr. Jacques Busbee, of Raleigh, will have charge of planting the grounds of the Training School. At the request of the literary societies, Mr. Busbee revised the plans that were accepted when the school was established, substituting plants and shrubs that are peculiarly adapted to the South for those that are not, and making other changes as he desired. He viewed the grounds with the eye of the artist. He will soon come down and explain the plans and arrange for the planting. The next issue of the QUARTERLY will have a full account of this.

The Board of Trustees met on January 7. Mr. F. C. Harding, of Greenville, and Mr. S. M. Brinson, of New Bern, the two new members, were present. Mr. Harding takes the place of the late Governor Jarvis, and Mr. Brinson succeeds Mr. J. C. Parker. The report on the new kitchen was accepted, and the contract for screening the kitchen was let. The necessary appropriation for the summer term was made and Mr. C. W. Wilson was elected director. The plans for the campus by Mr. Busbee were accepted.

A very enjoyable occasion for the school, during the month of February, was a play, "In the Absence of Susan," given by girls of the Poe Society to the Laniers and faculty. Details of this play may be found in another part of the QUARTERLY.

Mr. S. B. Underwood has called in members of the faculty to assist him in conducting Pitt County group teachers' meetings which he is holding throughout the county. Miss Barrett, teacher of Primary Methods, and Miss Morris, teacher of the second grade of the Model School, helped him at these meetings during the month of February.

An important meeting of the teachers of the four graded schools of Pitt County, Farmville, Grifton, Ayden and Bethel, was held at the Training School on January 22. Mr. Charles Coon, Superintendent of the Wilson Schools, gave an interesting talk on "Teaching Children How to Study." He illustrated his talk by giving several model lessons. His plans for teaching Hiawatha will be distributed among the teachers of Pitt County.

Miss Miriam McFadyen, teacher of the first grade and principal of the Model School, who has had a leave of absence because of illness, has returned and resumed her work. During her absence Miss Morris took charge as principal of the Model School.

The Seniors conducted chapel exercises on Saturday, February 12, Lincoln's birthday. As this is the fiftieth anniversary of his death, the program was devoted to Lincoln.

The school was deeply disappointed at not having, as is the custom, a celebration of Lee's birthday. A prominent speaker was expected, but, owing to some unforeseen conflict, it was impossible for him to get here.

A production of Mrs. Gaskell's delightful novel, "Cranford," was presented to the school by the B Class. This play was charmingly staged and acted and was thoroughly enjoyed by the audience.

During the month of their jubilee, February, the Y. W. C. A. girls gave a pageant, showing how the work began and how it is being carried on at the present. Further details are given in another part of the Quarterly.

Washington's birthday was very fittingly celebrated by the "F" Class. The program consisted of a dramatization of well known incidents of Washington's life, which was well carried out. With the exception of the first grade, the Model School children were invited. The past seemed real to the children. A striking feature of this dramatization was the naturalness and yet withal the quiet seriousness and dignity with which the girls took their parts.

President Wright, after his return from Detroit, made a series of talks at the morning assembly period, reporting to the students the most significant features of the Detroit meeting. Many of the speeches at the meeting, he said, had as their keynote that we are at a crucial time. Education in the future will not mean what it means now; a time of adjustment and change is at hand, and we must educate people to meet the demands of the new life. Mr. Wright explained the surveys that are occupying so much attention now.

Better Babies Week was a great success in Greenville. The exercises were begun Sunday morning, when all the Sunday schools of the town had the babies present. A union meeting of all the churches was held Sunday afternoon. On Monday School Day exercises were held in the auditorium of the Training School. Two beautiful playlets were given by children of the Greenville graded school, "The Theft of Thistledown" and "The Narrow Door." The second grade of the Model School sang a number of clever little motion songs. The Glee Club of the Training School sang and music pupils played. There were several talks. President Wright presided and made a short talk. The Health Day exercises, talks and motion pictures were excellent. The welfare exhibit was open for four days; this, the only one of the kind in the State, was prepared by the State Department of Health.