This week we took up gardens and fields of the farmer, aside from his orchards. We studied corn and made mush of corn meal. That day we had corn bread for luncheon, eating it with some of the jelly we had made. We followed the process of sending the corn to the mill and grinding it, the children dramatizing this. Some played they were farmers, others that they were millers buying the corn from the farmers.

We had a new train of cars with a baggage car, and one group of children used this in transporting the corn from the farm to the mill and to the storehouse. Another group of children had made the sacks in which to put the corn, and it was sent home in these. This game was so much enjoyed that it was repeated the next day, chiefly to give the other group a chance to run the cars.

The window-box was painted green, filled with dirt and planted with corn in rows by the children.

In constructive work, the older children cut out of paper the wholesale house and pasted it on brown paper, and without suggestion drew the sacks of corn in the windows and the grocer’s wagon before the door. They also cut out a barn from brown paper and pasted it on white, showing the horses before the barn and the wagons of the farm.

The younger children made a plough and afterwards used it in ploughing the cornfield in their window boxes. The
older children weighed corn meal and flaked corn and found that the meal was five times as heavy.

I told them the story of the Little Red Hen and they dramatized it as I went on. This is practically all that the younger children got out of the week's work.

We have played a number game with the younger children to see how many fingers we would have if some of them were missing. We have made various combinations up to ten. In all measuring work the younger children call a quarter of a cup "up to the first line", but the older children know a quarter and a half and that two quarters equal a half.

We have taken up a new rhythm from the Gaynor book, P.101, "Sing Skip."

Music
Shop
Symposium
Social Occupations (a and b)

Continuation of dairy work. The children set the milk and skimmed it, and one group made butter from the cream and the other made cheese from the skimmed milk. Some of the children churned the cream in the old-fashioned way, using the dashers they had made, pushing them up and down. Other children thought it would be better to shake the bottles they used for churns. The children who used the dashers were much the longer in getting the butter. After getting the butter, the children washed it to get out the butter-milk and salted it. Then we exchanged butter for cheese with the other group, and ate it with crackers.

The children have had some practice in measuring gills, pints and quarts, and have played the ring toss game, changing the value of the rings to five's and ten's to make it more complicated. They were given a start of twenty, in order to get at the higher numbers quicker. Most of the children can count to fifty by five's. They also had practice in writing their scores on the board. Only a few of the children can write numbers over ten correctly. We played a number game with corns, adding small numbers together, then taking them away. They were given four corns, then three more, to find how many they had; then the seven were put together and three taken away without their seeing the remainder and they were asked to tell how many would be left. It took quite a while
for the children to realize that if they had three and four, and found it to be seven, after three were taken away four must remain.

Miss Andrews

Sewing: (a and b) Continued work last reported. Miss Tough

Cooking: (b) Cooking of Cocoa.

The material was shown to the children who seemed to recognize it as something they had seem at home. They compared the cocoa with the sugar. They found lumps in the cocoa which could be crushed.

Note. In this lesson the teacher failed to make the most of the possibilities which however was corrected in the class the following day. The points of separating grains of cocoa by means of sugar and cold water, were forgotten.

The recipe was given:
1 T sugar
1 T cocoa
2 T water
1/2 G milk

Suggestions. The children had no difficulty in preparing this although the teacher realized that she had again omitted certain steps in the presentation. She found the children treat the cocoa very much like the cereals, as to cooking and covering. This naturally caused the tough skin to rise. Perhaps in a way the children will realize more fully
the next time that skin on cocoa is objectionable, and will be more conscious of what they are doing when they avoid it with less heat.

Suggestions for Number Work


Mrs. Baxter

Cooking: (a) Reviewed the work of last week, using different proportions of materials. They were given two tablespoonfuls of cereal and then worked out the amount of cold water and of boiling water necessary to be used. They knew that the cereal absorbs five times this quantity of water and that therefore they would need ten tablespoonfuls. They first worked out that five times two equals ten and then were surprised to find that this is the same as two five's. They knew that they were to use as much cold water as cereal, to separate the grains, or two tablespoonfuls, and were then to subtract that number from ten in order to get the quantity of boiling water. All the children but one worked out this number, but for this child we were obliged to put the numbers on the board before he could see that after taking away two, eight would remain. After the children had worked this out they were asked to write their results on the board instead of giving them orally.

Kiss Harmer.
History (a) (Three week's report.)

In the story of the people this group is making, the tribe has left the caves and started down the river, as given in previous reports. The children have several times proposed finding and using clay, and now stopped in their journey in a low part of the river valley where one of the children suggested they might find a clay bed. They then experimented with clay and sand, finding how both settled out of the water, and were very much surprised at finding that the clay left the water clear. They then decided that as the clay settled only in the glass that was left still, clay would only be "dropped" as they said, in quiet waters. They called these places where the water stood quietly, "ponds".

They were not able to tell any story of how people might have found clay useful for holding their food, so the story told in Group IV (b) of the baby playing with the lump of clay and putting its fist into the middle of it, etc., was told them. They then added the idea of drying it in the sun until it was very hard.

They then began to make clay dishes in any way that occurred to them,—which was in every case taking a lump and rounding it into a bowl and then hollowing it, probably having done that before. One child tried in vain to make what she called a "top-shape" so as to make the cup smaller at the top.
The next day I took them all together and talked over what they had done and asked them if they could think of a new way of making a dish. Griffith told me he would roll the clay in his hands and build it up with rolls. I thought perhaps he had seen some of the Indian pictures that represent this, but on questioning him decided that it occurred to him without help. Another child gave me the same idea after beginning to work with the clay. As soon as one child began in this way all the other children except one abandoned their method and began on the rolls. As this method requires more skill in the manipulation of the clay to keep it from drying out and breaking, some of them grew discouraged and returned to the bowl method. I showed them a picture of a Navajo Indian woman making a bowl in the roll method on a mat in her lap. They were much interested in the large jars she had made and all tried to make their own jars, but were much discouraged because of the difficulty of keeping it from drying and breaking. The largest size they have been able to make is about seven inches in diameter.

After succeeding in getting a fairly good bowl, they asked to paint them, and were given yellow ochre. They were required to put what they wanted to put on the bowl, on paper. Some of them made the bands they were going to use, straight across the paper, without any suggestion, showing that they
were able to abstract the pattern from the bowl; Others painted the bowl and then decorated it. Those who had painted the bands were far ahead of the others in arrangement and proportion.

About five or ten minutes each day, during this work, has been given to experiments. In order to find out what color the bowls would be when burnt, they baked with the Bunsen burner small pieces of clay and upon suggestion they also heated the yellow ochre to find out what color it would be when burnt. They called this "Indian red" having had the name in some of their art work. The other color upon the Indian jars examined, was black, and in asking them what could be used to get that color, three or four suggested soot. This they used, getting it in different ways, taking it from the chimney and by holding a cold porcelain dish in the smoking flame of a Bunsen burner. Almost all of the designs were characteristically primitive - lines and curves, and dots, and conventionalized trees and wigwams made in the borders.

The children are beginning to show much more continued interest and to realize apparently the general physical conditions, and are able to make pictures for themselves, therefore I began the story of Ab, and found that even leaving out the more sensational parts, or making them as mild as possible, the children were much interested.
I was pleased to have them report to me the day after the story was begun that they had been dreaming the story, and instead of dreaming of the animals in the sensational aspect one child said, "I was the baby kicking on the beech leaves"; and others, that they were living in the caves. The comic side of the difference in appearance of the people, appeals very strongly to a few of the children, and I was afraid that that side would grow the stronger; but as the people in the story began to do things, that the children could understand, as Ab meets Ok and they plan plays together, there is not so much comment upon their skin, clothes, bushy hair, etc. by children with a keen sense of humour which at first threatened to overbalance things.

In telling them the story of Ab, (which they think I got from a book) they were very much interested in Ab's first meeting with Ok, and here I introduced the first dramatic scene in which the children had anything to say; before, they have acted out and explained things in their own character, but here they had to act and carry out a conversation which would naturally be carried on between two boys meeting for the first time. They made the speeches and then I told them whether they acted out what Ab and Ok said. Their words were almost identical, except for such details as Ab vs Ok's description of the place where he lived.
They are finally beginning to work as a class, and to listen to the one who happens to get the floor, and to be willing to hold what they want to say until someone else, who perhaps has to be singled out by the teacher, has contributed something.

Miss Camp

History (b) I told the children parts of the Story of Ab", choosing the incidents which would tell about the hunting and capture of game and the sort of places the cave-men would like to live in. They talked about dangerous animals, and I told them the story of how Ab killed the cave tiger. They have all chosen names, and one of the class has been chosen leader. In talking about the qualities which would make a man a leader, they said he would have to be brave and willing to meet danger and that he must know a great deal and own a great many arrows. The tribe has talked about moving, and as they are making clay bowls have decided to move to the clay bed near the river.

Miss Hill

Science: (a) Experimented with iodine to see what foods they were familiar with contained starch. They found that corn, beans and potatoes had starch.

Miss Andrews

Science: (b) Continued talking about the light relations in a forest. Were asked to draw a tree in a forest and then to
draw the same tree after it had been transplanted from the
forest to a place where there was plenty of light and room.
The children all drew a picture showing that the branches
would be very very lateral and the growth upward would prob-
ably stop in the transplanted condition. We talked about the
reason why the spring plants grew and blossomed in the forest
in the spring, while there were never any blossoms in the
summer, and found that in the spring before the leaves come on
the trees there would be plenty of light, and that these plant
were accustomed to mature very rapidly and blossom before the
leaves came on the trees and that in the summer it was too dark
for summer plants to blossom. They were asked what growing
habits a plant must possess, which did not have a stiff stem
to take them up to the light. They thought that vines might
overcome this condition of darkness and could climb up trunks
by their tendrils and so get to the light.

Miss Andrews

Cooking: (a)  Cooking of corn meal and cocoa.

Corn meal was compared with wheatena. Children were asked
to tell how wheatena was cooked. They gave recipe and process
The teacher gave them the proportion of water to cereal, which
was 5 : 1. Children then found that it would take 5/4 C water
to 1/4 C of cereal. Next - How can we measure 5/4? One child
said, "Take two cups". Another said, "Pour out the first cup
of water into your saucepan, and then take 1/4 cup more."
Teacher asked whether there was any other way of measuring 5/4
besides filling the cup full. One child suggested that we
measure 3/4 and then 2/4.
Suggestions for Number work. Proportion 1 : 5.

How much water is necessary for 1 cup of corn meal? If children are acquainted with the pint and quart measure the number of cups may be expressed in these terms.

Cocoa. The lesson on cocoa was an improvement on the one of the previous day. Idea of separation of fine grains of cocoa by means of sugar and cold water, dwelt upon.

Number work, based upon recipe for cocoa, same as in Group III (b).

Mrs. Baxter

Textiles: (a and b) Are spinning.

Miss Harmer

Sewing: (a and b) Continued work already reported. OK.

Miss Tough

Art work: (a and b) Are illustrating the story of Ab. In doing this I sometimes let the class tell me something of the story first. I find out from the way they tell it what is the most vivid picture in their minds, and after the subject had been chosen, I usually talk about the general appearance of things. If, for example, the scene is in a forest, I find out whether the children have ever been in the woods. If they have, after obtaining perfect quiet I tell them to close their eyes and try to remember what the woods were like. After a minute they will say they can see the picture. Then I have them draw it as quickly as possible. I find that the spontaneity of their work depends entirely upon my putting them first into this quiet state and giving them time to form the mental image.
This week Group IV (b) were drawing a cave tiger in the forest. When I told them to close their eyes, Francis broke into a most dramatic presentation of the scene. It was as wonderful abandonment as I have ever seen in a child. I do not spend much time every day on the motor side, but it is necessary to help them in expression.

I notice a tendency among all children to put a strip of dark at the lower edge of the paper for the ground, and a strip of blue at the upper edge for the sky. The paper is left bare between. I find this is the way of showing the child's distinction between ground and sky. The space between he says is air. It sometimes takes an entire period to get them to see that we look through the air to the sky and the ground. I always take them to the window for this purpose.

Miss Cushman

Gymnasium: The children as a whole have taken hold of the gymnastic work very satisfactorily. There is a visible improvement in the general carriage and control of the body during the gymnastic lesson. At first it was difficult to obtain and hold the attention of the children throughout the lesson, and it is still so, though in a less degree. This, however, will grow less as the children grow more accustomed to the work and what is required.

The gymnastic lesson for Group IV (a and b) and V (a and b) and VI includes a drill of fifteen minutes, marching various march steps and a short game. Once a week a half
period is spent in work on the ---. One period a week is used for games by all the Groups.

The time spent on the gymnastic drill each week is fifty minutes; on games, forty to fifty minutes; and twenty on marching, running, etc.

The games for the younger children are principally running games and take the plan of a run in the gymnastic drill. They serve to develop the child's ability to co-ordinate and control himself and are used to prepare him for the more difficult games, requiring more alertness, dexterity and strength. The games for the older groups are ball games at present. The simpler ball games will lead up to the more complex, as basket ball, battle ball, indoor base ball, and others. These require of the player, greater self-control than the simpler games, also more alertness and dexterity.

The most important part of the work at present is the gymnastic drill. We want the children to stand straighter, walk better and have better control of themselves generally. The only way to accomplish this is to have a certain time each day that they are compelled to stand right, walk right, etc., then as the muscles become more and more accustomed to the correct position and are strengthened and developed, the child will take and hold the position without any special thought on his part.

Owing to lack of time, I have been unable to give any attention to the mark sports of the older boys, with
exception of basketball in the gymnasium. In the course of a week or so when I shall have more time, I intend doing so.

Mr. Peterson

Music

Shop
History (a) Have been comparing the Iroquois with the Sioux
and finding why they built wooden houses instead of wigwams;
why they began to plant corn, etc. They have also begun the
story of Hiawatha, part of which I have read to them from
an abridged edition
Miss Hill

History (b) The children have been asked to try to make up
legends for themselves about the Indians and three have
been brought in and told in class. These are quite simple
and short, and have been written on the board for the rest
to read. In one case, after the story had been read once
it was to be written the next day and I had the children
tell me before I wrote the words, what they imagined was
coming. They repeated the story sentence by sentence, al-
most exactly as it had been told.

One period was spent in talking about the mound-
builders. This was taken up simply as curious formations
which the Indians we had been talking about had been accus-
tomed to find and to wonder about. I pointed out Ohio on
the map as the place where most of them occurred, and told
them about the Serpent Mound. The only ideas I gave them
about these were that they had been built many years, as we
knew by the trees upon the mounds, and that from digging
into the graves found there we found that the people who
built them were probably more cultivated in certain kinds
of work than the Indians that we were talking about, but
that they probably were made by the ancestors of the Amer-
ican Indians. The purpose of the mounds we took up as pos-
sibly for worship or for fortification.
We next reviewed the geography we had had, that is, the Great Lakes, the Atlantic and Pacific Oceans and the Gulf of Mexico. Then I showed them a small map on which the land occupied by the Iroquois and that of the Algonkins was colored. The children suggested that that of the Iroquois looked like an island in the midst of a lake. This is one of the similes which has been given them by historians. Then with a large relief map, I asked the children to locate the Iroquois, and some were able to do this at once, using Lake Erie and Lake Michigan as guides. Others were quite unable to change from the small map to the large one. I then asked them whether they thought the Iroquois would be roving Indians, or would remain in one place, and someone suggested that they would have to remain in one place as they were surrounded by Algonkins. We then found that if they remained in one place they would have to cultivate fields and make their houses more comfortable, and possibly have orchards. The children readily got the idea that constant moving would prevent advance in civilization.

We took up next the combination of the Five Nations. I told them of the tradition of a great leader called Hiawatha who strove to unite the people, and his scheme for doing this. This was the idea of having parts of the eight tribes into which the five nations were divided, in every one, e.g., the Bear, Wolf, Beaver and Turtle were supposed originally to have been brothers and by their laws could not marry into the same tribe, but there were four other brothers - the Deer, Snipe, Heron and Hawk,
into any one of which families they might marry. These eight tribes made up the Five Nations and in each nation—the Senecas, Cayugas, Mohawks and Onondagas, all eight tribes were represented.

I think I made this clear to the children by writing the names of the Five nations on the board and enclosing them in a circle, calling them the Iroquois, then writing the names of the eight tribes outside and connecting each nation with all of the eight.

I next told them that the Wolf was brother to a Wolf, in whatever nation a Wolf belonged, and asked them what the effect would be if the Senecas Zawixx should decide to go to war with the Cayugas. They said that the Wolves or Bears in the Senecas would then be fighting with the Wolves or Bears of the Cayugas, and that this arrangement of Hiawatha’s would help to keep the five nations at peace with each other. I then told them of the selecting of Fifty chiefs from the whole five nations who would be co-equal and decide all matters of importance. One of the children suggested that this would give ten to each nation, but I brought out the fact that the nations were not equally strong and the number was regulated by the strength of the nation. I told them of the custom of having the chieftainship hereditary and asked them how this could be done. They of course suggested that it would be given to the father’s oldest son, and I told them that the children always belonged to the tribe of the mother, and that the father and mother always
belonged to different tribes, and then we got at the idea of a chief's brother's or sister's son succeeding him. I told them of the ceremony of raising up the new chief, who was invested with the name of the dead chief, and we likened this to the raising on their shoulders of the baseball or football hero.

I dwelt a little on the chief's importance in war affairs, and the mother's, in tribal relations; and told them of the offices of the different nations, as the Senecas were called "The Door-keepers of the House", because they protected the entrance to the Iroquois country, and the Onondagas or "Keepers of the wampum belt" into which the laws were "talked". We have discussed the long house of the Iroquois, and I have been reading to them from Long-fellow's "Hiawatha".

Most of the facts on the Iroquois I have obtained from Professor Starr's book, from Morgan's "League of the Iroquois", and from the reports of the Bureau of Ethnology.

Miss Runyon

Science: (b) With this Group I have talked about the salt licks and lakes of the west and of the formation of crystals around their edges. We also talked of the different sorts of materials rivers carry along and the different ways they are finally separated from the water. Thus we talked about clay and the way it is dropped when the flow of water is checked, as by a lake or by the slow subsidence of the water after it has overflowed its banks. Most of the children tried making salt crystals at home, and reported upon them in class.
Cooking (a) Reviewed what had been learned about the various vegetables studied, i.e. growth of plants, part of plant to which vegetable belongs, what substances make up vegetable, method of cooking. Cooked potatoes and onions, and made white sauce and cocoa.

Miss Tough

Cooking (b) In reviewing vegetables of the previous week, the children asked to cook spinach, as they did not remember from last year just how it was done, so that was given them as a final review.

Protein food was taken up, beginning with the albumen of eggs. They examined the shell and found that it was porous, and noticed the air chamber in the large end and were told how this was filled with liquid and as the egg was exposed to the dry atmosphere the water evaporated and a coating was formed by the impure air. They were told of how eggs were packed in bran to keep them from the air, thus keeping them fresh for a long time. An egg was broken open, and they noticed how the yolk was suspended by the cords in the center of the shell, the thin membrane protecting the yolk from the white and the membrane inside the shell. They were then told that the white of egg was the purest form of protein food and in order to study the cooking of meats we must make a careful study of the albumen of egg. They noticed the difference of the yolk in coloring matter and oil. They then made an experiment to determine the best cooking temperature for albumen. Not having thermo-
meters enough for the class, they were asked to observe the heating of water from the cold to the boiling temperature, noticing the physical changes taking place at scalding, simmering and boiling, so that in the next experiment they could notice the changes taking place in the albumen at these different stages. Each filled a saucepan half full of cold water and added a small quantity of yolk and white, then heated it very gradually to the boiling point, making the required observations. They were also asked to notice the difference between the yolk and the white at these different stages and were told that they might then control the condition of the yolk, and white in the cooking of eggs in the shell. Some people like the yolk soft, and others solid in a medium cooked egg. Hard cooked eggs were prepared to serve with spinach.

Miss Harmer

Number (a) Have spent half an hour a week in summing up numbers.

Miss Bacon

Number (b) This Group was found to be very slow in their working of problems in cooking, so they took a recipe, doubled it, tripled it, quadrupled it, to gain facility in manipulating quantities.

Miss Bacon

Textiles: (a) Spinning.

Miss Harmer

Textiles (b) Are making baskets.

Miss Harmer

Sewing: Class did not meet.

Miss Tough
Science: (b) Have continued world geography, and have discussed the necessity of travellers having some means of finding out places on the globe, and that latitude and longitude is a much more convenient way than by designating by linear measurements. They understand what longitude and latitude mean and can find a place on the map, having given the latitude and longitude of the place. They noticed the Equator as the natural place for measuring latitude, but did not know where to measure from in longitude and I explained to them that the astronomers at Greenwich being much more interested in the meridian at that place, where they had an observatory, used this as a standard, but that other nations having observatories had their own standards.

Art: (a) Have been making a picture in color of the Iroquois Long house and the place where it stood. In comparing this work with that of last year, I do not notice any marked improvement. They have formed certain general ideas of landscape but they do not readily get beyond that. I think it will be necessary to resort to pictures in order to enrich their conception of different kinds of landscape.

Art: (b) Illustrated Hiawatha and Mandamin. Most of the children showed Mandamin as an actual stalk of corn. One drew it in such a way that it might have been mistaken for a human figure by a man half awake and dreaming. She said that the Indian legends come from just such things.

Music
Shop
Gymnasium: See Group IV.
History: We have spent this week on the log cabin age in Chicago. We took up the re-building of the fort in 1816, and the reason for this. I had the relief map and we traced again the water courses leading from the east to the Mississippi, showing how it would be possible for people to go to the Mississippi, and that Chicago was on the way of one road. Then I asked them to follow my finger while I traced for them the longest waterway west, and I followed the Mississippi-Missouri up to the Yellowstone, up the Yellowstone to its source in the Rocky Mts., then across a short portage to the Snake river, down this to the Columbia and along this to the Pacific Ocean. We saw that there was a watercourse that could be used from the extreme west to the extreme east, and decided that Chicago would be a common meeting place for Indians of the West and people of the east. We took up the early settlers: Billy Caldwell, the half-breed Indian, for whom the government built the first frame house, obtaining the nails, clapboards and bricks from Cleveland. We found Cleveland upon the map, to see how far it is away. We spoke of the importance to the village of the coming of Mark Beaubien, the first fiddler, and of the preacher who was also a blacksmith. Then we tried to imagine village life, and to decide what the people would do in case of illness, with no doctor, getting at the idea of neighborly helpfulness; what the children would do for schooling, and what the chief events of the village would be, such as the annual coming of the Indians to get their pay and to sell their skins. I told them that the agency house was commonly called
"Cobweb Castle", and asked them to imagine how it could get the name. They said it was probably because there were so many cobwebs there, and cobwebs, because the man did not keep it clean, and he did not keep it clean because he had no one to do it for him. They were told that the agent was an old bachelor and this name was given his house because of his poor house-keeping. They were interested in knowing the name of the Kinzie house, which was called the Kinzie mansion, though it was a very simple house, viewed by present standards.

I asked them what would cause the greatest surprise to the Indians who had formerly lived here, if they were to come back now, and with a good deal of help they got at the idea that the Indians would be unable to see where the food supply of so vast a multitude would come from.

We took up next the fact that Illinois became a territory, and one of the boys was able to tell that a territory had its governor appointed by the President, while a State elected its governor, and we named some of the territories they knew, such as Alaska and Oklahoma. No stress was laid on this. The question was simply asked if any of them knew.

We took up the first Assembly in Illinois, what it would have to do, and what taxes were laid first and the time it took the delegates to reach Washington on horse-back.

On Friday we went down to 18th St, to see the monument of the massacre. On the four sides of this monument are bas-reliefs describing the event.

Miss Runyon
Cooking: Reviewed vegetables previously studied. From experience with various vegetables, a general rule was formulated for cooking them. From receipt given them for one person, calculation was made for the amount of cocoa and white sauce needed for the class, as they had to be prepared by two children only. Cooked onions and potatoes, and prepared white sauce and cocoa.

Miss Tough

Science: We discussed briefly the physiographical reasons why the Indians and the white traders met at Chicago, and talked about some of the animals whose skins the Indians would want.

Miss Andrews

Sewing: Worked on sofa pillows, of crash, on which is drawn a design which is to be outlined in Bulgarian cotton.

Miss Tough

Textiles: Spinning

Miss Harner

Art work: Spent one hour in finishing their clay figures. These were placed in a row and criticized by the Group. They decided which represented action best, which was best modeled and which gave the expression of an old man. Four of them were kept because they were good in some particular. Others were destroyed.

Miss Cushman

Gymnasium: See Group IV

Shop

Music
History: (b) They have been taking a short survey of the history of Peru from its conquest by Pizarro up to the present time in its formation of a republic. They have also been given a short history of the settlement and development of Brazil and its final change into a republic. There has been no book to which they could be referred in this matter, but the history has been told them by the teacher. In studying the settlement of South America, they have gone back and forth between the countries in Europe and in South America, trying to parallel events as to time. They had no idea what time King John came to Brazil, when I told them it was in 1608, but when I took them back to Chicago and its history, and we figured that it was four years after the first fort had been built, they seemed to grasp the idea in time. Then they asked if this was before the French and Indian war, and we took a short review of events and found that Washington had been President and had left, that Adams had been President, and that Jefferson was in the chair when John II came from Portugal here and when he left in fear of Napoleon.

They have spent one half hour in writing on the later history of Peru.

Miss Bacon

Science: (a) They are studying the contour of the country west of the Appalachians, and finding out on the map what seems to them would be the easiest path from the coast west across to the mountains. They have also talked about the effect of glaciers upon soils, and compared the soil of New England with that of Virginia. They looked at specimens of granite and of limestone with reference to the materials they
Cooking: (b) Cooking of vegetables in review. Onions, Potatoes, Celery and Cocoa. Vegetables were first classified. Onions belong to strong juiced vegetables? Children were then able to tell without difficulty how to cook them.

This order was taken straight through, and in each case children could tell how to proceed. As each child prepared one thing, it was necessary to make calculations based upon individual recipes. Thus: white sauce was tripled. The pupils were asked to calculate the amount of cocoa needed for the Group and two visitors. Mrs. Baxter

Number: (a) Are keeping the school accounts.

Number (b) Have continued measuring Room A.

Miss Hill

Textiles: (b) Fibres continued.

Comparison of long with short wool. First by examination with the naked eye, then under the microscope. This was rather disappointing, as there was hardly any difference. A review of the fibres studied, jute, cotton and wool. Differences brought out and connecting these differences with the differences in the manufactured product. Jute and flax produce a loose thread; cotton, a lightly twisted thread; wool tight or loose, and the cloth is better adapted for winter clothing because of the air spaces between scales which are warmed by the heat of the body. This idea
was brought out by the difference between tight and loose gloves, and the attempt to warm icy-cold feet with a blanket.

Mrs. Baxter

Sewing: (a and b) finished shop aprons. Continued work on sofa pillows similar to those reported in Group VI.

Miss Tough

Art: Are continuing the work of last week.

Miss Cushman

Gymnasium

Shop

Music

French
Group VII

History: (a) Same as Group VII (b)

History (b) Miss Hoblitt

Science: (a) Parallel with the practical adjusting and putting up of bells in the house, they have carried on the following experiment.

After making a magnet of soft iron and steel, they made a magnet of light sewing machine needles, which could be floated and whose relation to the earth as a magnet could thus be easily shown. Part of the class succeeded in working out the fact that if a needle were placed in a coil, with its head at the inner connection, and then removed and another needle placed where the head of the first had been, the head in one case would point north and south. The term
"north-seeking" was always given them as the name of the end that pointed north, and "south-seeking" for the other pole, to avoid confusion as to the use of terms north and south, irrespective of their relation of their moments.

The rest of the time was spent in adjusting and putting up their bells. In one case the wiring of the bell shows such a lack of that might almost be called "common-sense as to raise the question whether at this age also they ought not to be given independent, individual work more than they have been, that is, work with no one by to appeal to or to stop absurd or irrational work. One child carried the wire up the newel post and down, instead of across between the balustrades and down along the molding. In the same way, another child put in all her double headed tacks and then was going to drag her wire through them from the bottom, threading it through like a needle, instead of carrying her wire with her and putting both wires in place with each successive staple.

Miss Camp

Science: (b) Have done the same experimental work with the needle and have spent the rest of their time taking to pieces some exhausted dry cells, first testing them with a compass magnetized needle they had made to find whether there was any current, the test, of course, being movement of the needle within a coil of fine wire attached to both poles of the cell, brought near the floating needle. Several of these children are setting up bells at home, using the Le Clanch salimoniac cells.

Miss Camp
Science: (b) Wrote a report of the geology of Chicago.

Miss Andrews

Cooking: (a) Same as V (b).

Cooking: (b) Prepared salt codfish balls. In continuation of the study of meats, they will take up the study of the composition of muscle, and from this work out the composition of beef tea and its nutritive qualities.

Miss Harmer

Number: (a) Have been given the problem which vessel will hold the more – a vessel in the form of a prism or a vessel in the form of a cylinder when the diameter of the base of the cylinder is the same as the side of the square base of the prism and when both have the same height. In working out this they have first found the volume of the square prism. This was done by taking the square base and imagining that the prism was one inch high. They saw that they would then have a layer of cubic inches whose number would be the same as the square inches of the base. Then if they had a prism of the same base two inches high, there would be two such layers of cubic inches, etc. Then they were given a great many examples in finding the contents of a square prism.

Miss Bacon

Textiles (a): Continued work on mats.

Miss Harmer

Textiles: (b) Are preparing an Indian loom for their mats. They worked out the development of the loom to this stage. The children were asked to suggest material that would probably
be used in the first weaving, and suggested rushes and grasses. The question was brought out which was first invented spinning or weaving, and all decided in favor of weaving as there would be little use for thread before this time. They were given the various theories regarding weaving, as to its invention, one being that the Egyptians living along the Nile were apt to have their houses flooded, and it was necessary to protect the floor with rushes. These were gradually placed with some attention to order and arrangement, and the first use of the beam of the loom was probably as cross-rods to keep the rushes from being displaced. Then probably the people gradually introduced patterns. The children were shown pictures of the three looms that were found on Beni Hassan's tomb. One of these looms showed a man preparing a mat for his floor.

Miss Harmer

Sewing: (a and b) Made mats of gray canvas by fringing and overcasting the edges. A border design in cross-stitch is to be worked with colored silks.

Miss Tough

Gymnasium
Shop
Music
French
History: We have completed the description of Bacon's Rebellion, both as given in their copies of Fiske and in Cooke's, and the children have written it up according to the outline in Fiske and these records have been corrected and kept. They have been asking for sometime when we would get to Bacon's Rebellion, probably having heard of it from Group X. They were much interested in it, though I suspect that the strongest impression left on their minds in regard to it is that Bacon was acting for the people against the Indians, and that Bacon, having trade with the Indians, refused the commission. Though I spoke of the Navigation Act and the question of the treatment of the House of Burgesses, and tried to bring out the larger view of the Rebellion, these seemed to make very slight impression.

Miss Runyon.

Number work: I gave them problems to work out for practice in logarithms. I drew a right triangle and lettered the angles A, B, C, and the sides a, b, c, and then gave them such problems as this: Given \( a = 3; \ b = 4; \) find \( A, B \) and \( C. \) I made them tell me that they had to use the functions that involve the two given parts, that is, we where \( a \) and \( b \) is given, then tangent \( A \) equals \( \frac{a}{b}. \) I had to bring out the idea that a fraction, a ratio, and division, all mean the same thing, in order to explain the functions of the tangent, sine and co-sine. Then we went back to logarithms in order to divide one number by another.
i.e. by subtracting the logarithms, so the next step was to put the equation into logarithms, and we had Log. A = Log. a - Log. b. Then I showed them how to look up the logarithm of the tangent in order to get the value. To do this I had to explain the fact that in a great many tables the logarithms or functions are printed ten higher than they really are, and explained the convenience of this.

I asked the children how many saw the connection between the work we were doing in number and the work in physics with Mr. Jones. All said they did, and Fred said, "Now I can get the angle of minimum deviation in the prism. I gave them for next time, examples to work out in which the value of a and b would be the value which they themselves had found in measuring the distances from the eye to the table and from the table to the prism, in the experiments with Mr. Jones.

Science: (Three week's report)

Although meteors are not exactly in our line, we have talked a little about them because of the interest in them just at present.

We have continued our determinations of the angle of minimum deviation of the prism, and our study of conjugate foci. In the latter several have come to the conclusion that when the candle and screen are at conjugate foci the image is smaller, the nearer the screen is to the lens, that the distance between conjugate foci is not a constant, and that the candle may be so near the lens that we can get
no image on the paper although we can see an image right side up and enlarged by putting an eye in place of the screen.

We have also begun a determination of the focal length of a convex lens. This is to be done in four ways, and the results compared and the differences accounted for. The four ways are as follows:

1. Move the lens back and forth in front of the eye while looking through it at the farthest house we can see from our window (perhaps twenty rods away). When the lens is as near the eye as possible for the house to appear distinct, the distance from the eye to the lens is measured and taken as the focal length.

2. The lens is held in distinct sunlight and the distance measured from the lens to a piece of paper so placed that the spot of light is as small as possible.

3. With the candle and screen, the conjugate foci at equal distances from the lens are found, and half the distance from the candle or screen to the lens is taken as the focal distance.

4. The eye is placed some little distance from the lens, and the candle is moved back and forth until we see the real and virtual images both at once. The distance of the candle from the lens is then taken as the focal distance.

We have just started the work, and no one has yet made the determination by all four methods. As soon as we have this, we shall be able to take up the construction for the image in a convex lens.

The children evidently enjoy work of this kind. One of them exclaimed the other day in a tone of extreme
gladness and importance, "O Mr. Jones, we've made a discovery".

Mr. Jones

Cooking: Same as Group VIII (b)
Sewing: Same as Group VIII
Art work
Music
Shop
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History: In preparation for the secondary work for Group X, they have been given a little studying to do at home; in history I have given them questions to work out the answer of, on their history, and the next day have asked them the amount of time it took them to find the answers. If it has taken over half an hour, the questions have been lessened in number for the next time.

In order that they might not read in an aimless way, I have given them definite questions to look up. In the class we have taken the facts that they have already found out and after discussion have drawn certain conclusions. From these conclusions we argue until the children find that that have not the necessary data for going farther, and so they are given this data to look up in their study hour at home. This week some of the questions have been these: What did the stay in Holland do in preparing the Pilgrims for their home in America? What steps were necessary to take in planting a colony? Since the king refused to grant them a charter, to whom would they go to obtain a grant of land? Between what parallels was the land owned by the London Company, and that of the Plymouth Company? Of what class of men was the company who furnished the money, formed and what were the terms of the loan? Where was the land situated which was granted to the Pilgrims?

The teacher has given them the names of certain books in which they will find the answers to these questions so that they will not waste their time in working with too many books. They have been referred to Thwaite's

Once during the week they have been asked to write the answers in the form of a composition.

Miss Bacon

Science: Same as Group IX.

Sewing: While waiting for the arrival of a sewing-machine with which to complete the garments on which they have been working, aprons, towels, etc., have been made for use in the kitchen.

Miss Tough

Cooking: Same as Group VIII (b)

Textiles: Continued work last reported.

Shop

Music

Gymnasium

French