This week the children had the maid's work. They made caps and aprons large enough to wear. They made dusters out of cloth, sticks, and wire. The next days with caps and aprons on they swept the floor, and used their dusters to dust the furniture. The play-house had a thorough cleaning. While some of the children worked at the play-house, others with soap and water washed the kindergarten chairs and tables.

After the children had had the actual experience of using the articles used by the maid, they free cut those articles. Their images were very clear, and as a result their work in that line was the best they have ever done.

In the cooking, we stewed prunes.

Miss Dolling.
Social Occupations.

They commenced to talk about the farm animals. The first one that they noticed as being of importance was the cow. They made a list of all the things that we get from a cow, such as milk, cream, and butter, and the flesh used as food, and the skin for leather. Then we talked about the habits of the cow, watching cows in the lot across the street. We saw that they spent most of their time in eating grass, and it was explained to the children that as the grass had very little nourishment in it, the cows had to eat great quantities of it in order to get enough food. They also noticed that when the cow was biting off the grass, she did not stop to chew it, but ate it very rapidly. Then the children observed the cows lying in the shade, chewing their cud. I explained to them how long ago the flesh eating animals preyed on the grass eating animals, and how the cows were always in danger when they went out into the open places to get the grass, so that they had to eat the grass as quickly as they could and roll it into balls, and swallowed them into the first stomach, when they could go back into the woods where they were comparatively safe. The muscles of the throat brought these balls up into the mouth again, where they were now thoroughly chewed, and then passed down into the second stomach. I showed them all the pictures of cows that I could find.

In the hand work, they have finished the wagons that they made for hauling corn, and have made some little measures to represent bushels, half bushels, and pecks.

Miss LaVicteire.

Cooking. (a)

They made the recipes for corn meal and flaked corn, and found just
what the recipe is used for: to give the materials and the quantities used.

1/3 cup corn meal
5/3 cup water
2 salt spoonful of salt.

The children were able to change 5/3 cup to 1 2/3 cups.

Miss Harmer.

Sewing,

They are overcasting the leaves of their scrap book.

Miss Harmer.

Art.

They are modeling animals in clay. They have been having the story of the little red hen. In connection with the story they have modeled the animals mentioned.

Miss Cushman.
Primitive History. (a)

In one period each week, the groups work together, and that time is spent as a general thing in story telling. This week the children divided up into parties, and acted out the journey of the wandering tribe toward the south. Each child who wished to be leader of the tribe made a statement of what he thought would be necessary to induce the others to accompany him. I found that they had received a clear idea from their previous discussions of what would be necessary to be known before such a journey could be undertaken. One leader, who stated only the reason for moving and the direction in a vague way, as southward, could get no followers, and had to yield to another who stated not only the general direction but stated by days the time the journey would occupy from certain definite points already known in the country, e.g. they would travel one day across the river, two through the forest, and perhaps seven days beyond the southern hills. This leader also stated that there were certain rules to be obeyed by the people who wanted to join her. 1) They must follow the leader; 2) if they were women they must carry their share of the burdens, or if they were men they must do their share of the hunting. She also stated that they would travel only by day, and camp out each night, and would reach the country long before cold weather set in.

They have spent about an hour in further discussion of measuring time, getting the names of the months and the lengths of the months. In planning for the making of their bows and arrows, they readily furnished the method of pointing and fastening the arrow heads, as it was the same as with the spears. They also suggested that feathers were needed to make the arrows shoot straight. In the discussion of the use of these
feathers in directing the arrow, I asked them what use the bird made of his tail, and where a man stood to steer the boat. Only two or three of the children had watched birds learning to fly, but all knew of the guiding of the boat by the rudder. Very logically they suggested that the arrows might be fastened to the arrow in such a way as to increase its length, but saw that it was impracticable on account of the fitting of the arrow to the bow string. Those who knew how the arrows that they had seen were fixed, suggested that the feathers would have the desired effect if split and tied lengthwise two or three inches from the end. Then they decided that three were enough to accomplish the result, and that more would be in the way in shooting past the bow.

Incidentally they saw the growing feathers in the turkey wing, which furnished the feathers for the arrows. They examined the various parts of the feather, especially the quill and the pith lining. They asked many questions about these, split them and straightened them ready for use, but said nothing at all about the little feathers interlocking formed the larger feather. As this is essential for its use on the arrow, I am waiting to see if when the feathers are fastened to the arrows, the children will notice that detail.

Miss Camp.

Primitive History. (b)

The children have discussed the change from chipped flint to smoothed flint weapons. They made up a story of how the invention came about, and then the story in Ab telling how it happened was read to them. They also talked about picture writing, in connection with Ab's little son Mek. They discussed the reasons for removal from Fire Valley--increase of population, scarcity of food supply, and increas-
cold. Then they talked over their preparations for departure, the things
that they would take and the things that they would have to leave.
Then the children discussed the ways for telling direction by the stars
and the sun, and of telling time by the moon and the sun.

Miss Schibsby.

Reading. (a and b)

The reading of these groups is about the same as last week.
Each group is spending 1 1/2 hours in reading, the time being about equally divided between the reading, the stories based on their history,
and phonics.

Miss LaVictoire.

Number. (b) 1/2 hour.

Problems were given along the same lines as those of the last two
lessons. Facility in the use of the multiplication tables is acquired
slowly by the class.

Miss Tough.

Cooking. (a and b) 1 hour.

Vegetables—The potato was to be studied and the children examined it
and talked about the way it grows, how it is planted, and how gathered.
Each child was given a potato to be cut and grated. They noted the
water which appeared in the cutting, and talked about the reason for its
presence. The grated pulp was placed in cheese cloth, and washed in a
bowl of water, the water being then set aside to allow any substance in
it to settle. This will be examined next time. The material remain-
ing in the cloth was seen to consist of a bundle of strings or fibers;
these were given the name of cellulose, and the use of such substances in
the plant was talked about.
Sewing. (a) 1 hour.

The hemming of the tops of the work bags was continued. The children of this group make their own suggestions almost entirely as to necessary corrections in the work, and are not satisfied with stitches that formerly passed unnoticed unless attention was called to the lack of accuracy.

Miss Tough.

Textiles. (a and b)

Some of the children used all the thread they had spun in weaving the blanket and found it rather tedious to spin enough thread to finish the blanket. One child suggested that it was rather a slow way to spin, and they were shown two spindles, one full of thread and the other nearly empty. The full spindle could be twirled rapidly, as the carded wool was drawn from it. They thought of all kinds of materials which they might use to weight the spindle stick, but the clay from the studio seemed easiest to use. They made whorls of clay and spun in this fashion. One or two of the children finished their blankets, and secured them in rather hot water to secure felting.

Miss Harmer.

Art. (a and b)

The children have spent the week in modeling animals in clay.

Miss Cushman.

Manual Training. (a and b) 2 hours.

They completed their dolls. The stock for these was 2 1/2 by 4 inches by 7/8 inch. The children were divided into groups of two, and they measured each other for the width of the shoulders and the length of the head. The head was marked by the compass, making a circle one inch in diameter. The children sawed this out and then sawed the shoulders.
With the chisel the neck was cut out, and then filed to make the shape of the neck and the head. The children then measured each other to find the proportionate length of the legs and arms. They cut the legs from the 1/2 inch dowels, and the arms of the 1/4 inch dowels. They tried boring holes in the body and setting the dowels in for legs, but this gave no joints, so they suggested wiring the legs on. We used the double pointed brads, driving them into the body of the dummy doll, and making holes through the dowels, wired them on. When the dolls were completed, they took them up to the music room, where they will dress them.

Miss Jones.
History. (a and b)

We took up again the work involved in finding out the amount of food Nansen and his men would require for one week, if it took 2 1/4 pounds per man. The children got 13 1/2 pounds as the amount for a day as a class, and then were asked to try individually to get the amount for seven days. None of them were able to do it, and were helped individually. Then we tried it as a class, and each told how he went to work. Some wanted to get the amount first for two days by adding the two 13 1/2s. This one child did by saying that 13 is one more than 12, and two 12s are 24, and then adding the additional amounts. Others added by tens. No one seemed to add the two 3s first. After we had found the amount by adding the two days at a time and then doubling, I put the 13 1/2 down seven times, and had them add the 3s, and then the 10 and all thought it an easier way. Then I told them where was still an easier way, and put the problem down in the form of a multiplication example, and they saw that in this case they would have to know "right off how much seven 3s would be, and seven 10s.

We have had a good deal of discussion about glaciers in taking the description of Nansen's crossing of the inland ice, and also what he could be likely to find in the exploration. I asked the children if they knew that this part of the country was once covered by a glacier, and none had heard of it, and wanted to know how we know. This brought out the effects of glaciers, and I told them of the glaciated stones which could be picked up now at Stony Island, and of some of the general effects on topography, such as the forming of lakes. They at once applied this to Lake Michigan.

We have been spending a few minutes a day in word forms, taking words from their reading lessons and finding others which have the same sounds.
We have had the words in ea and ai this week. These were written on the board as given by the class or suggested by the teacher, and then erased, and the children asked to bring in on paper the next day as many as they could remember. Many additional words were brought in in this way, and each child was allowed to put in his list on the board so that we all could see it.

Miss Runyon.

Reading. (a)

Same as for Group IV.

Reading. (b)

The emphasis for this week has been on review work. The less advanced division has read the simpler stories in the books they made, and enjoyed the discovery that the same word was repeated several times on a page. The attention they gave to a word in finding it several times on a page served to fix it in their minds. They also learned the value of the combinations ea, in such words as eat, meal, meat, seal, etc. The different endings t and l were sounded.

The more advanced children practiced collecting phrases rapidly and telling them to the teacher after the books were closed. In this they used both "The Story of the Horsemen" and the books they were making. For occupation they wrote in columns words from a page beginning with the same letter.

Miss Bickell.

Science. (a and b)

We continued discussing the trade winds. On the maps we looked at the belt of calms, and the general sweep of the winds and the water current and the way in which rain is caused. In connection with the latter the
bchildren boiled water and held in the steam a cold funnel upon which the vapor condensed, running down the sides of the funnel. This helped them to understand the formation of clouds when air charged with water vapor strikes a layer of cold air.

Miss Hill.

Number. (a and b)

The work of last week continued.

Cooking. (a and b) 1 hour.

Milk---A general review was taken of the work on milk, the class talking it over first, and writing the new words on the board. Then each child wrote sentences on the board, telling what he had found in his work. The writing took some time, but the results were in most instances satisfactory. The children very generally seemed to like the work and expressed a desire to take the pieces home with them.

Miss Tough.

Art. (a and b)

The children are making illustrations of Eskimo life to put in their reading books. The results of the work in this group are not quite as good as they ought to be. They have not come to the studio often enough this year.

Miss Gushman.

Shop. (a and b)

They completed the Eskimo game of pin and cup ball, and tried playing the game which they found very difficult. They are trying the snow shoes again, which they failed on before when they used the willows which they gathered themselves. We are now using the heavy willow reeds, which they use in the basket weaving, soakling them in the warm water until
they were soft, then marking on the board an outline of the shape
they wished the snow-shoes to be when completed, they fastened the
willow to the board with the double pointed tacks. They have left these
to dry. In the next lesson we shall see if they satisfactory.

Miss Jones.
History. (a and b)

The coming of the Galloway family and of Archibald Glyborn to Chicago has this week given us an opportunity to study the difficulties of travel and communication in early Illinois, a further acquaintance with the American Fur Company. The beginning of the wool industry was when little Mary Galloway knitted some little mittens when no one else in Chicago had attempted to use the abundance of wool at hand. The children were greatly interested in a few paragraphs read to them from Mrs. Gatherwood’s story of “The Black Feather”, in which the work and life of the voyageurs was described. Several of the boys were enthusiastic in their approval of the life of the fur trader.

We spent one period on the story of the Black Hawk war. The children were told at the beginning that this war resulted in good for the town of Chicago, and were asked to find out for themselves as the story went on how this came about. Via were unable to see the point, but Vib said without hesitation that Chicago would be a safer place to live in after the Indians had been driven away, and that the soldiers who came from the east would talk about the place when they went home, and that new settlers would in this way find their way to Chicago. The children were on the side of the Indians in the contest, saying that if the white men had not been so greedy there need not have been any trouble, as there was room for all. One child asked plaintively at the end of the story whether it thought the Indians would ever come and take Chicago. She wished they would, so that there might be no big city, but just the country as it used to be.

One period was spent in making a little outline of the work of the quarter. This was done by asking the children to suggest the titles
for a series of stories on the history of Chicago. By this means I succeeded in getting a statement of topics rather than the details which the children are prone to offer in a review.

Miss Hoblitt.

Reading. (b)

In the three half hours the time was about equally divided between reading and writing. Each day a few words were designated for a spelling lesson. Now that the acorn story has been completed the group has commenced on a series of stories which they are to write on the "Adventures of Ulysses". These stories are being written in class in the same way as that in which the acorn story was written. No formal reading has yet been assigned, but this will be done next week.

Miss Gruere.

Science. (a)

We examined various specimens of rock and shells testing them with hydrochloric acid. Then they blew into clear lime water. Then they made carbon dioxide by putting hydrochloric acid on limestone. They ran the \( \text{CO}_2 \) into lime water and are to test the sediment left. Some of the children think that that is the \( \text{CO}_2 \). They have very confused images of what a gas is, although we filled one jar with \( \text{CO}_2 \), and the children poured in the lime water, and shook it up, and saw that a cloudiness came. One child thought that the white stuff must have been sticking to the sides before.

Miss Hill.

science. (b)

One hour was spent in the study of roots. The children examined many different roots, carrot, turnip, sweet potato, bean, narcissus, growing
in water and compared them with onion and tulip bulbs, and the Irish potato. The children discovered that the last named had buds, and discussed the significance of the fact. They decided that only stems could send out buds, and that therefore the Irish potato and the bulbs were only stems, but used for store-houses for food the same as the fleshy roots. Roots were examined to find out the difference between water roots and earth roots. The children classified roots according to their functions as absorbers, conductors of sap, store houses, and hold fast; some having one function and some more.

We spent the second hour in writing the record.

Mrs. Healy.

Number. (a and b)

We continued the addition of currency, and began the work on the addition and multiplication tables.

Miss Camp.

Sewing.

They have cut the material for the skirts. One of the children has put the tucks in the ruffles, and gathered the top. The trimming was sewed on the drawers with a rolled Hem.

Miss Harmer.

Art. (a and b)

The children took up again the subject which they attempted some time ago. This was the bas relief of John Rogers Clark capturing Fort Kaskaskia. We commenced this immediately after Mrs. Brown had given them a lesson in composition. The results are far better than they were at the first attempt, and the interest has been maintained throughout the work.

Miss Gushman.
Manual Training. (a and b)

They are still working on the model of Fort Dearborn, and have now reached the second story, measuring and cutting the dowels for the windows which are to be 3/4 inches on a side. The children suggested that they would need a ladder or some steps to go from the first story to the second, so one of the boys made the ladder and put it in place. The making of the fort was much more difficult than we thought it would be on account of the dowels being of the hard wood.

Miss Jones.
History.

The discoveries and explorations of Henry Hudson were taken up in much the same manner as last year. The children discussed the formation of the great companies and the necessity of associated capital in great enterprises of the time. They followed Henry Hudson on his trip up the Hudson river, his seizure by the English and his second trip under the patrocyne of the English people to Hudson Bay. They have constantly referred to the map, and traced out the country drained by the tributaries to the Hudson Bay, and were interested to know that this territory has never changed hands. They took up the establishment of trading posts at Fort Orange. We discussed the fact that only men came over at first, and the feeling that the company had that they must induce permanent settlers to come over so that their trade with the Indians might be permanent. In order that they might understand the manorial system, I told them of the old feudal system of Europe, and they were much amused at the fact that after it had been discarded in the old country because it did not work, that people could be so stupid as to establish it in this country. The great difficulty in this period is to find reading matter. The reading is still to be emphasized with them, and the books are all too difficult.

Miss Bacon.

German.

Group VII have made additions to their verb vocabulary, and have read, written, and analyzed ten sentences such as:

1) Die alte Katze hat kleine Kätzchen.

2) Das Pferd zieht den Wagen.

More time, however, has been taken to a drill in phonetics; their difficulties are now few.

Miss Teller.
Group VII are making an arithmetic. Each night they write out a problem, and bring it in the next day to be solved by the class. So far all the problems have involved several processes, so that all have been represented. Some of them have three or four different processes in one example. Two of the children have taken one subject and are working out problems along this subject for three days, and are interested to see how long they can continue their problem on this one subject.

Some of the problems follow:

1) There were ten oak trees; five of them had three long branches. Two trees had four branches, and three trees had two branches. How many branches were there on the ten trees?

2) If a sheep gives four pounds of wool, how many pounds will 13 sheep give? If the wool brings 8½ per pound, how much will it all bring? If the next year 5 sheep die, how much less will the man make this year than the year before? If the following year he buys 12 more sheep, how much money will he make in the three years?

3) If a grocery man had 8 barrels of apples, and each barrel had 73 apples in it, and each apple had 4 seeds, how many seeds are there in all? If he sells the apples at 2½ each, how much money will he get? If he makes 3 times the money he gets from the apples, how much money will he make?

They have volunteered to set these up and print them, each child setting up and printing his own.

Miss Bacon.

Later

They attempted printing them, but as they needed the auth. right away, we sent the examples to a printer.
Science.

Review of adaptations of plants for climate and discussion of adaptations of some plants to secure animal food. Pictures of the diosera and the pitcher plant were shown the children, as specimens were unobtainable. Adaptations for protection were studied. Protective adaptation against grazing animals brought up the thorns, hairs, bitter juices, nettles, etc. The protective adaptations against such useless insects included slippery stems, sticky covering, stiff hairs on stems, and the cup-like arrangement of the leaves around the stems.

Later they wrote their record.

Mrs. Healy.

Cooking. Shell Fish. 2 1/2 hours.

As questions had been raised and considerable interest shown with regard to the uses of the various organs of the body, the result of the work with meats and poultry, some time has been given to the consideration of the human body, the relation which food bears to it, and the part taken by various organs in the transfer of food materials.

A portion of one period was given to the study of oysters. As far as possible the anatomy was studied directly from the animal, but where this was impossible, pictures and cuts which were shown brought out the desired points. They found the comparison with other animals which they had studied, interesting. The contractions of the heart of the oyster held their attention for some time after the class work with it was over. Each child had many questions to ask about the subject.

Miss Tough.

Shop.

Group VII has spent some time in talking about the different kinds
of wood and experimenting with them. They are now making a red cedar pin tray, 7" x 1 1/2" x 7/8". They prepared the stock and did the drawing on these themselves, and used the dowels for the first time. We have but one hour in the shop each week.

Miss Jones.
History. (a)

They have finished their maps this week. They have had a spelling lesson on the words used there. They have spent two days in writing up the conquest of Peru by Pizarro, which they began a week ago.

Miss Bacon.

History. (b)

The study of the Village Community of England for children beyond Group VII is almost ideal. In the first place it is real history. It has to do with the lives of the people: how they lived and acted, and the forces which influenced them in their actions. It is a stage or form of social life or culture which is typical of all development; but it is of special interest because it is English, and because in it can be seen the basis, the beginnings of most of the present industry in America. It is especially adapted to study because it is simple, because of its integrity, and because it lends itself so readily to constructive work. It gives the children a chance to reason. They can conceive the village in its simplest and earliest state and see its growth and organization. With its later growth comes the development of feudalism, and so it works very well up to that subject.

The subject matter—in approaching the subject the primitive wants of people were studied. Then the condition of the people in England at about the 7th century was taken up. With this was brought out the conditions of England itself: forest, moors, etc. The habits of the people, their wants, their property, their mode of getting a living, their difficulties and opportunities, were all taken up. The villagers were taken from their somewhat wandering habits to a settled life in a fixed and permanent village. Much effort was spent in the determination
of the site of the village. Then the growth of the village came with
the divisions of land:—arable, pasture, furlong, etc. The next step was
the study of the classes of people in the village—the villeins, the cot-
ters, etc. Then the different kinds of workmen; and here is where the clas
is at present.

The constructive work up to date has been almost entirely on the
land, its divisions and general appearances, as plowed, and as grain is
growing and being cut upon it. The motive for taking it up has been to
get a hold of the child’s interest, to clear up facts, and then for all the
general facts or reasons which apply to constructive work.

The mode has been conversation, class reading, and pictures.

Mr. Wells.

German. (a)

Group VIIIa have had drill in connecting the written and spoken
word. Most of the class can reproduce orally any word given them.
But it is harder for them to write it in dictation. The blackboard ex-
ercises have taken fifteen minutes each week morning this week.

Miss Teller.

German. (b)

Group VIIIb have also had dictation exercises, an old fashioned spell-
ing lesson, in which much improvement was to be remarked. They are
interested in the conversation between Mime and Siegfried in the first
act of their play.

Miss Teller.

French. (b) Nov. 22.

The same system as before was continued with this class. Incidents
in their school life were made the subject of their lessons, e.g. after
their visit to a mill, several lessons were given to a very simple account of the mill.

Nov. 27. (a and b)

New note books were brought to the class, and made the subject of three lessons. In this connection a number of new words were learned, such as string, note book, parcel, etc. The different steps in unknotted the string and opening the parcel were gone through and described by the children.

Dec. 6. (b)

One lesson was spent on a basket which one of the group had just finished. Another lesson was given in the afternoon, consisting of words and conversation about their noon recess. They are memorizing "Il etait une bergere", going somewhat slowly and taking up words suggested by the words of the lesson.

Dec. 6. (a)

This week two or three of the lessons have been suggested by incidents at the beginning of the class, e.g. one was spent on pencils, pencil sharpening, etc.

In both classes there is a certain amount of writing almost every day, and all the new words are spelled.

Miss Day.

Science. (a)

This week their work has consisted of experiments and record writing. The children have had a great deal of trouble in making their thermometers; this is partly on account of the difficulty of the work, and partly on account of their carelessness. After a boy had spent some time on an experiment in blowing glass, he was very likely to strike the
thin glass bulb on the table, and break it. After several repeated trial
of this kind, he was not very likely to be so careless again.
The children have done very well in the writing of their experiment
records.

Mr. Gillet.

Number. (b)
The time this week has been spent on review work mostly, with some
little work in long division. We have had to go slowly on account of
three people in the class, who are behind the others in their work.
Most of the children are able to work rather difficult long division
problems now, and they are doing work in class which is impossible for
the three mentioned. They are doing some work in their books at home,
and seem to like it. I have had them write out in class real problems
problems in which they would have to use long division, as well
as the other processes.

Mr. Gillet.

Cooking. (b) 2 hours.
Bread making:— Experiments were made with yeast to discover the nature
of the gas given off by its growth. This gas was found to be CO₂ by
application of the tests used for the gas from baking powder, viz. clouding
lime water and extinguishing a burning match.

To find the temperature for the best growth of yeast plant, it was
mixed in three different kinds of batter, one made with ice water, one with
boiling water, and one with luke warm water, and kept at corresponding
temperatures. On examination it was found that the extreme heat had
killed the plant, cold had retarded its growth, while the intermediate
temperature had resulted in growth shown by the formation of gas bubbles.
Bread was made and the results were in most cases fair.

Miss Tough.

Sewing. (b) Girls. 2 hours.

The hems on the bottoms of the aprons were turned and basted, after calculation and measurement of the exact width were made.

A desire prevails in the class to have the work completed by the Christmas holidays, and every available minute is utilized to accomplish that end.

Miss Tough.

Cooking. (a)

They made ginger snaps. This brought out the idea of the acid and the baking soda forming a gas, the molasses being used to counteract this soda. They were able to give directions for mixing, following the general principles of sifting dry materials together, mixing the moist materials together, and then finally mixing the batter.

Miss Hamner.

Manual training. (a) 1 hour.

The children are at work on a top. They prepared for this top stock 3 1/2" x 3 1/2" x 1/4". With the compasses they drew a circle 3 inches in diameter, and then with the coping saw they sawed the circle. They sand-pap ered it and bored a hole in the center for the 1/4 inch dowel. They did the drawing for this with Mr. Fowler.

Miss Jones.
History.  (a and b)

This week the hour has been spent in taking up Burgoyne's campaign of the north. The children were each given a part to look up, as for instance, one was to look up the battle of Bennington, to see why the English troops should have turned aside into Vermont to capture this place. Two or three others were given the move of St. Leger to see why he should go in a round-a-bout way to Lake Ontario and the Mohawk valley, and to give a description of this with its results. I have given them a subject to look up without distinct questions, as these children find it hard work to give an account of a large movement and get in the principle points. For instance they were told to write up the movement of the American army at the landing of Long Island, across New Jersey, and until they reached Morristown Heights for the winter. The papers are then taken up and the children go over these with the teacher after a period of two or three days. Coming back to the papers in this way, they themselves see what they have omitted, and make their own corrections.

Miss Bacon.

Latin.  (a)

The children studied the fourth and the fifth declensions, and had some practice in declining such nouns. The agreement of nouns and adjectives was noticed, and they had some practice in declining them together.

Miss Schibsby.

Latin.  (b)

Same as for last week.

Reading.  (b)

The papers of the previous week were gone over in class and new
papers were written on a given set of questions. The corrected papers are to be re-written at home.

Miss Bruere.

Science. (a)

The children examined the solution of lead acetate which they had made and in which they had suspended a bit of zinc. They found long lustrous lead crystals which they thought were transformed zinc. I told them their crystals were lead. They then found the zinc to be nearly all gone, and in discussion decided that lead must have been in the white crystals which they dissolved. So I gave them the name "lead acetate". They decided that evaporation would give them lead acetate again and that the zinc must have caused some change which resulted in the crystallizing of the lead. Two hours were given up to labeling and cataloging their stones collected on their trip to the lake shore. The last hour was given to a summary of the work on crystallization by means of discussing the formation of granite (taken as the type of crystalline rock). The points developed were as follows:--granite is made of three kinds of crystals; the three minerals were melted and dissolved in each other; upon cooling each mineral formed its own kind of crystals; that which cooled slowly formed big crystals; that which cooled rapidly formed small crystals. Each of these points they worked out without assistance from me, except that I have had to see that each had a turn to speak, for they were eagerly interested. Besides this a number of suggestions were made and questions asked by the children which showed that they really grasped the subject. Among these were such things as these:--the first crust of the earth must have formed like granite; if so, then if we go below the limestone of Chicago we ought
to find granite or some crystalline rock; how does it happen that these rocks are not found everywhere, and why are some rocks in one part of the country and others elsewhere; how did the rock happen to get into little stones on the lake shore? Some of these questions they answered for each other, some I answered, and some I told them we should begin work on next week. The questions show that they are ready to begin work on weathering and the formation of sedimentary rocks. Of the seven children in the group, four applied the results of their experiments with ease; two could not start a train of thought, but could carry it on, once started, to completion; and one seemed to have no idea whatever of the connection between any two ideas.

Mary Judson Averett.

Science. (b)

After weighing the coke resulting from the distillation of bituminous coal, the children proceeded to reduce the coke to ash. The ash was then weighed and the proportion of ash, and gas, in the coal were calculated. At home they looked up the manufacture and uses of coke, bringing in very satisfactory reports. Then they tried the anthracite coal in the same way, and found that they could not get illuminating gas from it, that the proportion of volatile matter is much less, and that coke is not formed. They will not continue the burning of this coal to ash.

Mary Judson Averett.

Mathematics. (a and b)

We have done some more work along the line discussed last week, some drill in long division, and we have spent some time with the theory of long division also. We are now working in decimal fractions,
the origin of the word decimal, and the meaning of the decimal system, have been discussed, also the nature of the decimal fraction, and its relation to common fractions, and the methods of reducing one to the other. The pupils have become fairly proficient in writing decimal fractions, and understand also addition, subtraction, and multiplication of decimal fractions. The basis of the work has been the U.S. currency.

Mr. Osborn.

Art. (a and b)

In view of the fact that Group IX had been the problem, I felt that I had failed to make the interest in the subject side of sufficient importance, and that the separation of the art aim had been too great, perhaps. After a conference with Miss Bacon, it was decided that she should suggest to the class that it would be desirable for them to decorate their history recitation rooms with suitable pictures. This suggestion met with the approval of the class, and I was called down to consult with them. I suggested first that it would be well to decorate the wall with a frieze, on which were placed a certain number of subjects, typical of the important epochs of their history. The class then voted on a subject. After the subjects were chosen, the measurements of the space were taken by the class. Small sketches giving the proportions of these spaces were drawn. The class was then required to divide this space into well proportioned panels. This problem really constitutes one of the first lessons in composition. In another period each individual in the class was required to make a sketch of the first subject to be illustrated, for the central panel. This was Paul Revere's ride. After balance of spots and composition were considered, the class proceeded to a more detailed study of the drawing.
A day was devoted to drawing the figure of Revere. Another day was given to the drawing of the horse; a cast was used as a model for this. The drawings were tacked to the wall, and the class voted first on the best pose for the picture and then for the best drawing. The person whom the class considered made the best drawing was chosen to do the final work. A roll of ingrain wall paper of grayish green tone was selected as best material for the frieze. One frieze has been divided up into panels and the drawing just started upon it. While there is not absolute order in the class, each individual in the class is working with apparent purpose, and their attitude toward the instructor has changed. They now feel that we are helping them, and that they are carrying on the work by themselves.

Miss Cushman.
Latin.

We have made a study of demonstrative pronouns, adjectives, regular and irregular, and the comparison of adjectives. The study hours have been given mainly to the study of grammatical work, sight translation, and sentence analysis.

Class B have done work along the same lines, but are not so far along.

Miss Schibsby.

Science.

Last week a few days were spent in a study of the appearance, habits, and uses of the coral animal. In this connection there was a discussion about the method of formation of coral reefs and atolls.

This week the work has been on a study of worms. To begin the work the class wrote an essay on the earth worm. This essay was written before the children had any reading assigned to them. The main reason for giving the essay was to show how observing the children were. The main points covered by the essay were the appearance of the earth worm, its habits, and finally, in what way it is of use to man. Books telling of the habits and the uses of the earth worm were then read, and finally laboratory work on the external anatomy of the earth worm was taken up.

Mr. Garrey.

Mathematics.

We have developed the difference between arithmetic and algebra. We have discovered the fact that \( x^p = 1 \), and have found out the meaning of the word symmetry in algebra. The last idea came out in connection with problems in division, e.g. \( x^\infty \) divided by \( x - y \). The idea of infinity has also been suggested in the same connection. A number of these quotients have been given orally without performing the operation of
division. The nature of a negative exponent has been thoroughly discussed, and is well understood. Almost all the time in class is given to developing new work. Outside the class, the pupils work problems illustrating the work done in class.

Mr. Osborn.

Art.

This group has been making a study of a large spinning wheel. They are using as background portions of the room which are in range with the wheel from different positions. As the class is divided and one half sits on one side of the room and the other half on the other side, this gives considerable variety of arrangement. In composition the subject has introduced the problem of balance. The class was sufficiently interested in the subject to warrant its use as a motive for a large sketch. They made three preparatory sketches; one was the study of the wheel, the object being the careful drawing of it; the next was a study of composition by itself; the third was the arrangement of the wheel in connection with other units in accordance with the results given in the composition study. They are now drawing the whole subject on large sheets of charcoal paper. The results are so far the best ever obtained from the class.

Miss Cushman.
General exercises were held on the Wednesday afternoon before Thanksgiving. The children met together and although the four older groups had not sung together as a chorus this quarter, that day they sang together the songs that they were accustomed to use last year. Prof. MacClintock was invited in to read them a Thanksgiving story, which he did, following it with Whittier's "The Pumpkin". The club had a special meeting the Monday before Thanksgiving, at which they decided to raise the dues of club members to 25¢ per month, until the house is paid for. They have also formed an athletic department, and the president appointed a committee of three to decide definitely the work of this department.

Miss Bacon.
One period a day has been spent on Christmas presents. For the mothers we made match scratchers out of red poster board on which was pasted a disc of sand paper; a small box of red bristol board to hold the matches was made and pasted below the sandpaper. Father's present was a screen six calender. Material: on each of three pieces of green poster board was pasted a picture and a calender for four months, and then they were tied together with ribbons.

For sister or brother either a ring, reins, or rattle was made. The rattles were made of rods bound with ribbons, and bells sewed on pieces of ribbon were sewed to the rods. The reins were made of carpet binding with bells sewed on the cross strips. The napkin rings were woven out of colored Indian straws.

In the other period we worked on the story of "The Night before Christmas". They made a surface picture of a mantel piece with the stockings hung up. The mantel was directed; then they free cut the stockings. They modeled out of clay the toys the children thought would be in Santa Claus' bag. With crayon and paper they drew a picture of the story.

Miss Dolling.
Social Occupations, (a and b)

We have taken up the study of the dairy with III a and b. Our main subject has been the cow. We have talked about the habitat of the cow, how it lives, and what is needs to live upon. They readily answer: a nice green pasture, with shade trees in it and running water. We have found out what we get from the cow: milk, cream, leather, bone, etc. They know about the cows' stomachs, and how they came to swallow their food, and then when they could, choke it up and chew it. How, when it was wild and lived in among wild animals, it had to go out into the open and eat all the grass it could while dangerous animals were away, and when the dangerous animals came around, they could run off and chew their food.

The latter part of the week we have made dashers for churns, and have skimmed milk and have used the cream in the churns to make butter. We didn't have time enough to make butter; we churned it long enough, however, to see how it thickened.

In their number work they have used Mr. Osborn's blocks. They have made numbers up to ten, and found the different compositions, such as in 10—6, 4, 5, 5—7, 3, 2, 8, etc. When they come to 11, they saw that it is "once around the fingers and one more." With twenty it is twice (2) around the fingers (0), etc.

In reading they have spent some time in writing on the board. For instance in the story of the "Little Red Hen", the cat said "I won't," I take the word cat and write h on the board and tell them to write hat. The same with fat, sat, bat, rat, etc. One child writes with his left hand. They have trouble in making o and a. They go around it many times, but when it is finished, it locks all right.

Miss Lackersteen.
Primitive History. (a)

We have spent the time on the journey to the south. The points taken up were the continuation of the ways of measuring time, the time taken to travel over certain distances on plains, hills, and through forests. They have acted out the journey, drawing the country on the floor of the room, and telling the time to reach certain points in days and nights or moons. They have spent two periods on the record of Lone Dog for seventy years. They were able in many cases to guess at the meaning of the picture used for the event of each year. They have made picture stories for themselves, and worked out with little suggestion a symbol for east and west. This is a half circle with the sun on the right hand or east, and on the left hand for the west. The reader is supposed to face the north. Among the different causes for migration given by the class, the children selected the scarcity of animals as the best cause, for the people had to depend on the animals for food. They will spend the next week in working out the customs of the nomadic people, which regulate the form of the camp, and the division of labor.

Miss Camp.

Primitive History. (b)

This group has been following the Fire Valley people in their migration south. In connection with this the savage man's mode of telling time and directions were discussed. Domestication of animals and the changes animals have undergone in the process also came up. Most of the children had tried to tame some wild animals, and from their own experiences and the stories they had read, they got a clear idea of the topic.

Miss Schibsby.
Cray. 1 1/2 hours.

Vegetables:--The parts of the potato which had been separated in the previous lesson were examined; the part in the cheese cloth was seen to consist of a mass of short stringy pieces of material which was given the name of cellulose. Its work was explained as being to give form to the vegetables,—a frame work holding the other parts. That part of the potato which had passed through the cheese cloth was cooked and at the same time some starch was cooked in the same way; the results being the same in both cases the children concluded that the part of the potato was starch.

Potatoes were boiled for luncheon. 

Miss Tough.

Sewing. (a) 1 hour.

Work bags—The work reported last week was continued.

Miss Tough.

Manual Training. (a and b)

They have begun the work on their bows and arrows. They talked about the best kind of wood for the bow and how it should be made. They also examined some Indian bows. The arrows they made from the 1/4 inch dowels, cutting the ends diagonally to fit the bows, and filing the other ends for the points.

Miss Jones.
History. (a and b)

The description of Nansen's coming to the end of the glacier led to questions as to just what a glacier looked like, and I asked two or three children to draw on the board their idea of a glacier. Some of them had confused it with an ice-berg, and were not able to tell the difference. This led to a review of the way a glacier is formed, and what it does in affecting landscape.

When we finished the trip of Nansen, the children were told that we would retell the whole story so as to get it all in our minds. Each chose a part he wanted to tell, and this was written on the board with their names, and when the main topics had been decided upon in this way, we took them up in order, each child telling all he remembered about his part. The other children reminded him of things forgotten, and thus added to the whole.

Miss Runyon.

Reading. (b)

Special attention was given to the writing this week. The teacher wrote on the board the first division of Hans Andersen's Snow Queen, and the more advanced children copied it so that they could have it printed. When it was returned to them printed, they enjoyed reading it, and the less advanced wanted to copy it into writing again. The children decided that round writing ended evenly is better in appearance than scrawls, and tried to make their writing round and even.

Miss Bickell.

Science. (a and b)

Most of the time was spent in getting an idea of latitude and
the general climate of the different zones. In taking up latitude I asked the children how they would locate a place in the city, then in the country and finally on the ocean. To the latter question most of the children replied that you would have buoys at all the places you wanted to know. We then discussed ocean currents, the varying depths of the ocean, and the winds. I then told them of the division of the earth into degrees and the children made a drawing of the earth, marking off the equator, and every ten degrees between the equator and the poles. This they found very difficult and very few got anything from it.

Miss Hill.

Number. (a)

They have been working with their recipes for cocoa, finding the amount necessary for both groups, that is, for twenty people. They have had great difficulty with the two thirds of the measuring cup of milk, the amount used for one person. They cannot multiply the two thirds by the various numbers chosen. They need more practice in writing both figures and letters, so that about half the time has been spent in writing on the board the recipe used.

Miss Camp.

Number. (b)

Vb has spent the time on the measures which they used in the fall to measure the block. We worked out the difference between the definite and the indefinite measures. They gave me all the linear measures, and said that they knew more about feet than any other measure, and wanted to write the others on the board in terms of feet. Their object in getting the different measures was to find one to use to express the rate of movement of a glacier. They had great trouble in telling what part of a foot an inch was. I do not know just the reason for the confusion they showed.

Miss Camp.
Cooking. (a and b) 1 1/2 hours.

Eggs.
The different parts of the egg were examined and talked about. The air space and the skin lining the shell were noted. The entrance of air through the shell was spoken of and the consequent carrying in of germs. These, it was seen, in their growth would cause conditions for spoiling the egg. Suggestions were made by the children as to what means might be used to exclude the air. Two portions of the white of egg were cooked, one in boiling water and the other in water just below the boiling point; the first was found to be tough and hard, while the second was soft and creamy. From this it was decided that eggs should be cooked in water below the boiling point. Eggs were cooked for luncheon and cocoa prepared. Miss Tough.

Manual Training. (a and b)

They have been experimenting with their snow shoes. They found that the willow which they soaked and nailed to the board was quite satisfactory when dry. Two of the children have begun to weave, and the others will use the willow now that we have found it satisfactory.

Miss Jones.
History. (a and b)

We have spent one period this week in discussing the growth of Chicago after the Black Hawk war. The children were asked to compare the Chicago of 1830 with the city as they know it now. This brought out the need of good roads, paving, a fire department, waterworks, schools, etc. We talked about the first schools in Chicago, the first efforts to improve the muddy streets, and the division of the town into wards for the purpose of protection against fire. The remainder of the time has been spent in reading from Pratt the chapter on the departure of the Pottawatomies.

Miss Hoblitt.

Reading. (b)

The work with the Ulysses story was continued in the same way as in the previous week. In addition the children were asked to bring books of their own in which they could read at home and report in class their progress.

Miss Bruere.

Science. (a)

They spent one hour in writing records of the work they had done the week before. The other hour was spent in obtaining more of the cloudy lime water, (by blowing in \( \text{CO}_2 \)), and in further discussion of the different sorts of rock, as for instance, crystalline rock, and the fossiliferous limestone, of which they had a number of specimens.

Miss Hill.

Science. (b)

The children's records of last week were unsatisfactory, though
the children apparently understood the subject. Thinking that the difficulties of writing had so absorbed them that they gave little thought to what they wrote, I asked them to dictate to me what the experiments had taught them about the functions of leaves. I gave them no help except in the logical sequence of their sentences, with the result that they gave me accurately the most important facts on the subject. I had asked them to be careful of their sentences, that they be so clear and full that another group that had not done the same work would understand them.

In the next period we made a resume in the same way of their work on roots. This time I wrote what they gave me on the board, and asked the leader to copy it in order that it might be printed with the paper on leaves. All the children asked if they might copy it also into their notebooks, and seemed very enthusiastic over it, not being bothered with the spelling. There was great interest shown in having the sentence put in the best manner, all giving suggestions.

The uses of stems were discussed. The children gave three uses:
1. To conduct sap from the roots to the leaves.
2. To place the leaves in advantageous position in relation to light.

The second use was discussed in detail. What kinds of stems present the best advantages in this respect? The tree and other woody stems, although it is at the expense of using up a great deal of energy to make the rigidity. Climbing stems use less energy, but their leaves receive less light. Trailing plants use still less energy, but their leaves receive still less light; submerged plants are able to get the least light.

The source of the carbon dioxide used by the water plants was
discussed, and the value of the wind in stirring air into the water. Coulter's Plant Relations was resorted to for illustrations of the plants of which we did not have examples. The fungi were studied, common bread mould as an example, as illustrating plants which could not make their own food, lacking green matter, and their value in the economy of nature emphasized.

Mrs. Healy.

Number. (a and b)

They have worked out the idea that in the adding of their columns if they had a certain number of fours or fives, the quickest method of getting the result is to count the number of fours or fives, and then say four times five are twenty, rather than counting by fives, as they had been doing. In talking about this I asked them which would be the quicker way of measuring the distance across the room, putting the yard sticks down one after the other, and then adding up by threes, or take one yard stick and put it down so many times along the eighteen feet. Almost all of them had the idea of what a multiplication table is, and took great pleasure in writing out one of these tables for me at home. I have just begun to give them the arrangement in a square of the nine digits as a convenient form of the nine tables which they have been using.

Miss Camp.

Number. (b) 1/2 hour.

Problems connected with the cooking supplies were given involving the use of the multiplication tables. One child finished the work before the others, and was given some work in formal multiplication to do on the board. A number of the other children became interested in the work, and requested that they be given something similar.

Examples along this line were given to be worked out of class.

Miss Tough.
Manual Training. (a and b)

They are still at work on Fort Dearborn. They have completed the second story and the windows, and this week have been making the roof. They have been having considerable trouble in making the beams of the roof firm enough to nail the dowels on. So they decided to use rounded sticks 3/4 inch wide in place of the dowels. These they are now preparing to fit into the roof.

Miss Jones.
A resume was also made by this group to be printed and exchanged with that of VIb. The children in the two groups have been doing related work so that they will profit by reading what the others have been doing. They also did very much better when dictating than when writing.

The adaptations of the blossom to secure cross fertilization were taken up. The Chinese primrose was used as an example of plants forming two kinds of blossoms. The children studied the general appearance of the flowers, the color of the corolla, and its use in attracting insects, and noticed the central disk of brighter color. In removing the calyx the ovary was found to adhere to it, and one child suggested that it was also very useful to protect the seed pod while maturing. The blossoms were found to be of two sorts, one with high stamens and low pistil, and the other with low stamens and high pistil. The significance of this was discussed, and illustrated by means of a pin to represent a bee's tongue. The parts were drawn and labeled. It was also noticed that in the same blossom the stamens and the pistil were not ripe at the same time, thus furnishing a safe-guard against self-pollination. Diagrams of other blossoms were shown the children and other adaptations given them.

Mrs. Healy.

Cooking. 2 1/2 hours.

Shell Fish——A report was written in connection with the work done with oysters. Luncheon was planned and the cost of materials to be used calculated. Fried oysters and cocoa were prepared for luncheon.

Manual Training.

They have completed their pencil trays which they have been making for Christmas, gouging them out, filing and sandpapering them.
Science.  (a)

We have continued our work on solution, and have now practically finished the subject, so far as we shall take it up this year. We made a list of the substances which are dissolved in the sea water, and the list became so long that the children thought that "everything must be dissolved in the sea." However the children did not mention any gases, and did not seem to know that gases could be dissolved in water. So we took up several experiments to show this. I had them heat some water in a beaker and notice the little bubbles which appeared at the bottom and on the sides. Thus they found that air was dissolved in lake water. They found however that freshly boiled water had no appreciable amount of air dissolved in it. They found also that carbon dioxide is soluble in water. Then we made some sulphur oxide and tried to dissolve it. I had the children taste the water after the gas had been passing into it for some time, and they all noticed the peculiar taste.

A part of each hour has been given to writing records of their work of the quarter. They remember their earlier work of the quarter very well, and can dictate very good records of it. These records are in addition to the individual records that they write at the time of performing the experiment.

Mr. Gillet.

Cooking.  (b)  2 hours.

One hour was spent in writing about the work done with yeast. The majority of the papers were well written and showed a fair understanding of the subject. The second hour was given to practical work, and rolls were made from bread dough.

Miss Tough.
Sewing.  Girls.  2 hours.

Aprons.—Continued the work of last week.

Miss Tough.

Number.  (b)

This week our work in number has been a special drill on the multiplication table, with about half the time given to problems which the children made up themselves. The children make up problems very easily, and in most cases, they can work them. This class has a tendency to work with big numbers, numbers which have no meaning for them. In their problems, however, they had to confine themselves to smaller numbers, in order to make the problems practical ones. The children made up some of the problems at home and brought them to me; others they made up in class and wrote them on the blackboard.

The children have continued their work in the book at home, and do not seem to tire of it in the least. I look over the books once in a while, and mark the mistakes.

Mr. Gillet.

Printing.  (b)

The children of Group VIIIb have printed three of the Boreas stories for Group V, and also one part of the story of the "Little Red Hen".

Miss Radford.
Latin.  (a and §)

This group has taken up the study of adjectives, their declension, and their agreement with nouns. They have also taken up the personal pronouns.

Latin.  (b)

Continuation of the work reported last week.

Miss Schibsby.

English.  (b)

The § group was asked to write a paper on any portion of their history work during the year. There was some difficulty manifested in the selection of a subject, but the papers were fairly full.

The group is to have note books at home in which to copy their compositions each week.

Miss Bruere.

Science.  (a)

To carry over the work of last week to this we had a discussion of the formation of porphyry. This rock was new to them and was added to the list of rocks which they have begun. The breaking up of the crust was then taken as a topic. We studied pictures showing jointed and exfoliating rocks. The children knew that the great changes were wrought by the atmosphere and by running water. They told me that the reason that we break a rock before deciding what it is, is because the "atmosphere makes a crust on the rock and we cannot see what the rock really is". The crust was a vague thing to them, however. To get at this question I asked them what is in the atmosphere. They gave me a very good analysis which I put on the board. Then we analyzed the rocks in the same way. I told them that we could put the constituents of the rock and those of the air together in such a way as to have the
same kinds of things happen in the laboratory as happen out of doors, only they would happen more quickly. We selected oxygen as the first thing to work with, and began a series of experiments in oxidation.

Miss Averett.

Science. (b)

The week has been spent in rounding up the work on coal and the Carboniferous period. The results of their coal experiments were summed up very satisfactorily in discussion. They finished their small maps of the Carboniferous coal areas and put in those same maps the present outcrops of the carboniferous rocks which do not bear coal. In order to sum up the quarter's work and get clearly before the children certain progressive changes in the altitude of the continent, they began making a series of hypothetical maps of North America during the various Paleozoic periods.

Miss Averett.

Arithmetic. (a and b)

One day has been spent in drill work in multiplication and division, the basis being units of square measure, for example the length and breadth of a field in rods and the price per acre were given, to find the value of the field, and so on. Then the subject of decimal fractions, their relation to decimal whole numbers, and the common fractions, was taken up. The children have practiced reading and writing decimal fractions, also the four fundamental operations. Multiplication and division are performed fairly rapidly, and the theory is well understood.

Mr. Osborn.
This week we finished all the Christmas presents. We made decorations for the Christmas tree, such as red pepper chains, and sewed with yarn some tarleton stockings. Wednesday morning we popped corn for the stocking bags.

Thursday morning we had our Christmas party. The children sang their Christmas songs and played their Christmas games. After this we went down stairs to the gymnasium where the tree was, and the children gave their presents to their parents.

Outline of the work during the Fall Quarter, 1900.

I. Different members of the family and their daily interests.
   a. Father; his occupation.
   b. Baby; care given to it. Play things, etc.
   c. Mother; her duties in the home.
   d. Laundress.
      Washing; Use of coal
      Ironing; Barn for horses
      (Coal wagon.
      (Blacksmith.
      (Coal yard.

   e. Cook. (Kitchen utensils used.
      (Grocery store for supplies.
      (Milk man.
      Preparation for Thanksgiving day, etc. (2 days).

   f. Maid.
      (Cleaning.
      (Sweeping.

II. Preparation for Christmas.
   1. Presents.
   2. Decorations for tree.
   3. "Night before Christmas."

Miss Delling.

O.K.
Social Occupations. Outline of the work for the quarter.

During the first days of school the children talked about their experiences of last summer, and told of different interesting things they had seen in the woods and the fields. Then we talked of the change taking place in all nature. We visited the park and noticed the signs of approaching winter. Collections of seeds were made and some were saved for planting in the spring. Seed distribution was also discussed and the seeds found were classified according to the manner of their dissemination. Then it was found that some seeds were good for food, and lists of such were made. This led to the farm, where seeds especially valuable for food are cultivated.

The children decided that they would like to play farmer, and have a little farm of their own. This has been their chief work for this quarter. The farm was planned in a large sand box, and was divided into fields of different sizes. Wheat, oats, and corn seemed to the children the most valuable seeds to be cultivated, and the most probable to be chosen by a farmer. Some land was also fenced off for a pasture. Wheat was first taken up. The children planted winter wheat out of doors and spring wheat in their farm in the sand box. This latter grew to quite a height. They were given wheat in the straw and carried it through all the processes of threshing, winnowing, grinding, bolting, -- finally making the flour into a little cake. In connection with this they did a great deal of hand work, making everything possible that they would need as farmers. They had dramatic play also to bring out the idea of trade. Some were farmers, -- some played that they were millers, and exchanged wheat and flour.

Next they took up corn in much the same manner, taking corn on the
cob, and making it into corn meal.

The latter part of the quarter has been devoted to work in the dairy. They discussed the kind of land best adapted for pasture, that having good grass, shade trees and water. We talked about the habits of cows, and the various things they give us—milk, butter, meat, leather. Then they made butter by churning with a dasher and by shaking the milk in a bottle, which proved the speediest way. They played milk man, and using water for milk, learned to measure any number of gills, pints, and quarts. They are very good at this kind of work, and could tell in a short time the number of gills in a pint, a pint and a half, a quart, etc. In all these things I used pictures to help them to get clear ideas of the things they were talking about, and have encouraged them to find pictures for themselves. I have also told several stories dealing with farm life or farm animals, such as "The Little Red Hen" and "Bo-Peep." The children have learned to read these stories which have been printed for them. The following is a list of articles they have made outside of their shop work:

Farm house, wood, 12 by 14 inches.
Farm wagon, cardboard.
Flails, wood.
Dashers for churns.
Bock covers for their stories, straw board and leatherette, 12 by 7 1/2 in.
Pin tray for the mother's Christmas.
Calendar for the father.

In making these things the children have done their own measuring and cutting. They have done excellent work. They can measure any given number of inches up to twelve, or any given number of feet.

Florence LaVictoire.
Number work in the University Elementary School.—Quarterly Report.

There is no number work taught to IIIa and IIIb as such. By that I mean it is not an independent subject but it is taught in connection with their "Social Occupations," which forms a basis for all their other work.

These children first showed an interest in numbers after they had been in school long enough to give some a chance to drop out, or get ill, or have other things happen to them which necessitated their absence. Each child has his own place in the group and when he is absent his chair is left vacant. One day, on account of late busses or sickness, many chairs were empty at roll call. The number absent was so great that the children were interested in knowing just how many were away and how many were there; so they counted the number present in each group and the number of vacant chairs, to represent the absentees, and added them together, finding the total number who were enrolled and seeing how many more were present in one group than the other. As they counted, the numbers were put on the board and as they were written the children followed the movement of the chalk with eyes, hands, and mouths. They seemed to like this so much that each one was sent to the board to see what he could do in reproducing these figures. They wrote the numbers from one to ten,—with some difficulty in forming 2 and 3, 4 and 8, and 6 and 9. The 2 and 3 they wrote backwards, likewise the 6 and 8. Some couldn't remember just how the 4 and 8 looked, but they were helped by one of their number saying: "When you make a 4, just print the letter L, with a line through it, and when you want an 8, make an S and carry a line up through it." About this time they had been learning the printed letters, so this fact may have prompted the use of the literal
symbols in helping them to form their figures.

This exercise was carried on for several mornings in succession when the absentees became a fixed number and nothing advantageous could be directly deduced. Aside from this and one other incident which I shall speak of later, the number work is based entirely on the work done on their farm or in connection with it.

In their room is a large sand table, which serves as a farm. This farm had to be divided into several fields for wheat, corn, oats, etc. and also for the house and the barn. The children used rulers to divide these fields off, and they got the idea of "fourths" and "halves", etc. Maybe a diagram of the farm may help us to see it better.

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  1  1  1  1
  1  1  1  1
  1 hens  1 oats  1 pasture  1
  1  1  1  1
  1  1  1  1

  1  1  1  1
  1  1  1  1
  1 house  1 hens, etc.  1 wheat  1 wheat
  1  1  1  1
  1  1  1  1
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Of course at first the ruler (1 foot) was used as a unit of measurement and the divisions they made, though not accurate, were near enough to allow us to mark off our farm. As they became more familiar with the ruler and learned the half-foot, and the quarter-foot and inch, finer work was naturally expected of them. They didn't disappoint us in this, when they built their farm house. Four posts were needed for the corners, -- all the same size, and six or seven slats of the same size. In measuring these slats, the children frequently forgot to keep the left hand edge of the ruler on the left hand side of the slat, and so the measurements had to be done two or three times before they were correct.
What they did to one side of the house they also did to the other. And they worked more rapidly and more accurately as the work was repeated. In their handling of the ruler, it was not hard to distinguish those children who had had a kindergarten education from those who had just entered the group. While this work was going on in the class room, they got more practice in handling the ruler in the shop. Having divided their farm off into fields by a temporary marking in the sand, they decided to have something more lasting and this decision resulted in stone and picket fences. The pickets they made in the shop as nearly equal as their hands, unskilled in the use of saws and planes, would let them.

Day by day the needs of the farmers increased, and they didn't see how they could get along without a chicken coop to keep the mother hen and all her little ones in. This gave scope for more numerical handwork. The half-inch was freely used in the construction of this abode. Paper 9 1/2 inches long was used for this purpose. The half-inch served as the lap. This was divided into thirds, and flopped on the lines, making a coop. On either side at distances of 1/2 inch dots were placed and through these dots tooth-picks were thrust. Thus the hen coop was more or less secure.

Of course the farmer planted his grains and wheat in due season and in due season reaped the results of his toils, but he had not the where-with-all to carry his grain to market; so wagons were demanded and in a day or two they had more wagons than they had horses to draw them. Nothing new in the number line was introduced here, but it merely helped to strengthen what they already had.

We followed the wheat to the barn but found that the poor farmer
of long ago had not the threshing machine to separate his chaff from the grain but he had to use sticks; and after trying to thresh he found that only the edge of his stick struck the ground. Accordingly they resolved with the help of some questioning that if the farmer had two sticks joined together, more of the stick would hit the ground grain and thus the work would be done more quickly. They made the handle of the flail twice as long as the part that hits the grain. While the grain was being reaped and flailed in the class room, the little farmers were busy in the shop making miniature bushel and peck measures, etc., to measure their grain and by the use of these measures they learned the fundamentals of dry measure.

The animals have formed a sub-plot of our farm life from the beginning and when the grain drama was over we found ourselves in the chapter on the cow. Here no mathematics are directly connected with the cow, but indirectly we find our "numbers" in the dairy, for the cow furnishes us with our milk and cream, and just here we bring in our wet measure.

In order to make this work a real thing to the child and to impress it more thoroughly on his mind, we played "store". We had a dairy with our milk and cream for sale. One child is the salesman, the others are his customers. Of course they want so many gills and pints and quarts of milk, (we use water to play with), and the salesman measures out the portion asked for. If the customer wants a pint of milk, the salesman will measure it out for him in a pint measure, 1/2 a quart measure, or he will give him four gills. They are very quick to change gills into a part of a pint and quart, and they feel as if they had been asked hard problems when asked such questions as this: "If I ask the milk man for 2 quarts of milk, how many pints will he give me?" When they are
through with a lesson of this sort, a quart measure is drawn on the board, and they are asked to mark on it a pint, a gill, etc. They do this very well.

They keep right in touch with their farm work in their cooking, when they talked about grains in the class room, they cooked cereals in the kitchen and learned the cooking measurements. So many teaspoons = one tablespoon, so many tablespoons = one cup, etc. They have learned in the kitchen that 2/3 make a cupful, just the same as 3/3 or 4/4, and they talk about 1/2, 1/3, or 1/4 a cupful with just as much certainty as they talk about 1, 2, or 3. When speaking of 5/3 of a cup of water, they immediately say that is 1 2/3 of a cup.

So much for the incidental number work. What I am going to say now is not involved in their farm work, but is something more or less by itself. In order to make the children acquainted with the composition of numbers and to discourage somewhat the idea of counting by "ones", Mr. Osborn has invented a game made after the plan of our dominos, only instead of having so many dots on the block, he has so many lines, which lines when they are joined together make the numbers.

Take 8 as an example. The child is asked to take 8 blocks. At first he takes one block at a time, eight times. When he has built his 8, he is asked what he sees in it. He may see 4 and 4, 5 and 3, 6 and 2, 7 and 1, 2 and 2 and 2 and 2, etc., till all the compositions of 8 are exhausted. Now he is asked how he can take eight blocks more rapidly than just one at a time. He says: "Take six in one hand and two in the other, or four in one hand and four in the other", so he takes the blocks as he has just said he could, and builds an 8 with a 6 and 2 or a 4 and 4, etc. He has done this with all numbers up to 20.
When he came to 10, he was asked to count the fingers on both hands. They answered 10. He was told that he had counted once around his fingers, and a symbol for that was 1 (once) 0 round; and that probably was the development of cut 10. Twenty was twice (2) around, etc. In making 11, 12, and the "teens," they built their 10 and began again to build another 10, but the blocks gave out, (on purpose), and one of the blocks from each child's set was marked with a blue chalk line. This marked block represented 10. So when they make 11, 12, etc., they made it with the 10 block and 1 more, etc. They take the work very quickly, and are very interested in it. The children of these two groups seem to be mathematically inclined, and numbers are a pleasure to them.

Miss Lackeisten.

Physical Culture.

The work during November and December with these groups has consisted of marching and marching steps, such as change step, heel and toe, and change step, and games. The way that the children of these groups have taken hold of the games is somewhat surprising. At first they could not comprehend the most simple games, but in the last month they have progressed very rapidly. Some more of the games that they have played are birds, statues, teacher, gardner and scamp, black and red, etc.

Mr. Peterson.
Primitive History. (b)

The children have followed the travels of the party which set out from Fire Valley. In connection with it they have taken up the domestication of animals, and the grains they would find ready for use. In addition the children have made birch bark calenders for Christmas presents. They drew on the birch bark pictures representing the primitive man's way of telling time.

Miss Schibsby.

Cooking. (a and b)

In the past quarter the class has taken up methods of preserving fruits, such as drying, stewing, canning, making of jams, jellies, etc. The structure of the fruit, the effect of heat and moisture, the combination in varying proportions with sugar, the exclusion of air, and the nature and work of moulds and bacteria have been considered in a general way.

The attitude of the class has been one of interest, and eagerness to do the work planned.

Miss Tough.

Sewing. (a)

The quarter's work has been the making of work bags in which to keep the other articles to be made later in the year. These bags are of coarse crash sewed with heavy colored cotton. The general plan for the bag was talked over and the material measured and cut; measurements were made for seams which were basted, sewed, and overcast. A hem was turned at the top of such width as to allow 1/4 inch to turn in, 1/2 inch casing, and 1/2 inch frill at the top. This was basted and hemmed, the casing made and a drawing string put in; the center of the bag was
found and the initials drawn and outlined.

A great improvement is noticeable in the work of this group since the beginning of the quarter.

Miss Tough.

Manual Training. (a and b)

The first part of the quarter these groups worked upon brush houses, building large ones out of doors, collecting material for them, and finished a number of very satisfactory huts. Some were destroyed by outside people, and the children then built small ones which they could leave in the barn for safe-keeping. Later they made their Indian dolls and now they are working on the arrows which are to go with the bows they will make next quarter.

Miss Jones.

Physical Culture. (a and b)

The work of this group is quite similar to that of IIIa and b. They did not need as much training in the elementary games as IIIa and b, on account of their work in the gymnasium last year. This group has had some of the more simple breathing exercises, and exercises tending to train the child in a more correct standing position. The games have been similar to those of IIIa and b, though we have laid stress on the ball games with these groups. They have played call ball, tag ball, and dodge ball.

Mr. Peterson.
Science. (a and b)

A general review of the position of the earth in reference to the sun at the different seasons, and of ocean currents and winds, following in some detail the course of the gulf stream and its effect upon the climate of England and Greenland; also of the Labrador current. We looked at pictures of icebergs, glaciers, etc., in Farr and McMurry's geographies, and at their diagrams of the earth's course around the sun. The last hour was spent in modelling a map of Greenland from clay.

Miss Hill.

Cooking. (a and b)

The work of the quarter has been with dairy products, milk having been the one chiefly considered. Its composition was obtained through experiment and inference. Butter and cheese were made and the changes involved in the materials considered. The general nature of acids and alkalies was found from this and from the making of milk soups in which an acid vegetable was used. The milk soups made with vegetables involved a review of vegetables and also of the flour used for thickening.

The children had retained a fair proportion of the facts which they had found out in their first work with these materials.

Miss Tough.

Manual Training. (a and b)

Va and Vb assisted group III in the shop the first of the quarter. Later they made rulers which they used out of class in their number work. They made the Eskimo game of pin and cup ball, and collected willow for making snow shoes. These did not prove satisfactory, so they are now trying again with willow reeds, soaking the reeds, and then tacking them
on a board, and leaving them to dry. Some of the children have been very successful in this. Most of the group have made paper knives to take home for Christmas.

Miss Jones.

Physical Culture.

These groups have had a little more stress laid on the regular gymnasium work. They have used the window ladder and the vaulting bucks. The games have been more difficult, requiring more coordination and self-control. The children of these groups need systematic work in gymnastics, as many of them have faults which can be more easily corrected at this period.

Mr. Peterson.
Science. (a)

We talked about the general history of North America, following on the relief maps the general contour of the land. At first they said that the Rocky Mountains must have been the first land to rise above the sea, on account of their height, but when I asked them what happened to the land after it rose above the sea, they said the eastern part of the continent must have been the oldest, since it has been worn off. The central part, they know from the fossiliferous limestone, had been an inland sea.

We filtered the lime-water which had been made milky by the carbon dioxide, and tested the residue with HCl, and when it bubbles up, the children said that it was limestone.  

Miss Hill.

Number. (b)

The quarter's work has been connecting multiplication with addition, formulating the tables, and acquiring proficiency in their use by means of oral drill, by problems connected with the school accounts, and with the cocking classes, and by formal examples in multiplication, a desire for which developed toward the end of the quarter.

The tables up to the "8's" are used quite freely by the class. Work to be done outside the regular class time has been given and found helpful.

Miss Tough.

Manual Training. (a and b)

This quarter the class have made rulers and yard sticks, which were used out of class. They also made a set of dominoes for use in their number work. The past few weeks they have spent on their model of Fort Dearborn. This is constructed of 3/4 inch dowels, the main part
The second story has a window 2 inches by 3 inches on each side. The roof which slopes from the four sides to a point was found quite difficult to build. The children suggested putting braces in to hold the roof in place. They measured, cut, and fitted the pieces for the roof. The model was completed the last day of the quarter.

Miss Jones.

Physical Culture. (a and b)

The work of these groups in the gymnasium consists of ten minutes gymnastic work on some piece of gymnastic apparatus, and a game. The group as a whole is progressing very favorably. The coordination and self control in the games as well as the more formal gymnasium work is very much improved. The marching is more complex. It consists of evolutions requiring more attention on the part of the pupils.

Mr. Peterson.
History.

They have taken up the home life of the colonists on the manor in New York, and have decided on the construction and furnishings of their log cabins, on the clothing they wore, and on the food they ate. Then going to the outside of the home, they discussed the crops raised, the preparation for market, the mills which were run by wind power, and the markets to which they sent the grain. Each day one child has reviewed the work of the day before, the other children, supplemented it, and the teacher added enough material to keep it from being mechanical. One half hour was spent in writing on the dress of the colonists.

Miss Bacon.

Number.

As the interest in the problems has kept up, I have had them go on working their own problems. As the solution of some of these problems requires a knowledge of long division, and multiplication when the multiplier contains more than one figure, I have taken up this work. So far they have been able to work every problem. When they have hesitated, I have asked them what they would do with the things themselves if they were working it out, and they have always been able to tell whether they would multiply, divide, add, or subtract. Then I told them to do the same thing with the figures.

Miss Bacon.

Cooking.

The class has worked with meats, poultry, and fish during the quarter. The cuts of meat have been located and classified; the bone, lean, and fat have been studied as to their use in the body, physical properties,
composition, and effect of cooking in various ways.

Poultry and fish have been dissected and the connection between the parts noted. Reference has frequently been made to the human body and its organs, especially those of respiration and digestion, have been studied. This side of the work seemed especially interesting to the children and their questions were thoughtful and numerous.

As the class has shown a desire to anticipate the work of the coming lesson, a portion of the time has been given to planning the work of the succeeding week.

Luncheons have been planned and their cost calculated.

Miss Tough.

Manual Training.

Villa made bench hooks for the kindergarten, also some for the shop. They also made dominoes, 1" x 2" x 1/2", marking them off with small tacks. They have done some geometrical drawing, and most of them have completed paper knives, pencil holders or trays, and bill files. These they have taken home.

Miss Jones.

Physical Culture.

This group has done very good work in the gymnasium the past two months. Perhaps on account of the less number of pupils there has been less friction. The children have worked together. We have tried an experiment with this group of commencing with the simple games, and progressing to the more complex. In a way this has been a review of last year's work, but many new games have been introduced. Mrs. Vincent had the children two periods a week during the play hour, and did a good deal toward organizing what might be called a class spirit. It has
been noticed of this group that there is a certain amount of cooperation in their sports, especially when it is a matter of one part of the class against the other. They have seemed to realize that in order to win, it is not what each individual does that counts, but what they do as a whole.

Mr. Peterson.
History.  (a)
As reported last week, group VIII spent eight days in writing out the explorations and discoveries of Pizarro. From a hint of one of the children, I judged that they all felt hampered by the thought of the spelling, so I decided to say nothing about the spelling or writing until they had finished the whole paper. Their writing was vigorous and more flowing than any previous work that they had done for me. After they had finished their writing, I went over each paper with the children. They were perfectly willing to spend any amount of time going over the papers after they were finished. One of the children left on the final e when he added the final ing; another omitted the e on monosyllables throughout his work. These were the words corrected, and the rule was given in each case.

Miss Bacon.

History.  (b)
The Village Community.---The work as covered this week has been practically covered by the previous report, except as to construction work and subject matter. The work immediately previous has been continued. The other workers taken up have been the mill-man, the shepherd, the swine-herd, the plowman, the iron-smith. In each case the class of people to which each belonged was taken up; their good to the village; their value relative, etc. The personality of each was developed as much as possible. In connection with each man, tools which he used are being constructed, the plows, the mill, the hoes, etc. The work will be continued with the other workmen. Review of the work on classes of people has been gone over. In each case the children would distinguish between the one which they were telling about and another in another class. For instance they would pick out the lord in the village by the way he dressed, what he did, his duties, where he lived, etc. This would be in distinction to the next lower class, the villeins.

Guy F. Wells.
Number. (a)

We have tried this quarter to learn addition, subtraction, multiplication, and division. They have studied the addition table, but have given little time to the addition of long columns.

To-day when I asked the children what they had learned this quarter, they answered with one voice: "Subtraction." Evidently this has made the greatest impression. They feel as if they had won a victory over subtraction, for it was so difficult in the beginning. Their long division work proves how well they can divide, multiply, and subtract. They can work any long division problem and prove it with accuracy, but with labor. They need several weeks' more drill. They can solve problems involving one operation.

Miss Baird.


The work done with the two groups was practically the same. At first familiar objects were named (without translation) in groups. Then an attempt was made to connect these lessons more or less with the other work of the school, e.g., after the groups had visited a mill, the mill was made the subject of a series of lessons. During the last two weeks a story was told to the children, which they reproduced paragraph by paragraph. They have memorized some French verses and have done a certain amount of reading from the board.

Miss Dey.

Cooking. (b)

The quarter has been spent in the study of flour and the raising agents used in batters and doughs.

Experiments have been made with the different kinds of flour
to discover their composition and the comparative amounts of bran, gluten and starch contained in them. Flour mills were visited and the processes seen by which the grain is made into its various market products. Air and carbon dioxide were studied as raising agents for batters, experiments made to discover the best methods for obtaining them, and wafers, omelets, biscuit, cake, etc., made to show their practical use.

The yeast plant was studied. Miss Tough.

Sewing. (b) Girls.

The work of this group for the quarter has been the making of cambric aprons for general wear at home and school. The materials used have been fine and the work done by hand. A pattern was bought and by calculation made by measurement as to the amount of material required by each child; in cutting allowance was made for hems and material arranged to have the least possible waste. Basting, sewing, overcasting, hemming, gathering, and putting on bands and ruffles by hand has required patient and careful work and considerable planning ahead to make everything come out right. Miss Tough.

Textiles. (a and b) Boys.

The fall quarter, (2 hours a week) had been spent in basket weaving. Some of the boys have made large scrap baskets. Two of the class have started fish baskets which they plan to finish at home. Several tried melon baskets, only one of which turned out well. Three boys have made mats of coiled weaving, using reeds and raffia.

Miss Hill.
Physical Culture. (a and b)

More attention has been paid to apparatus work in these groups during the first quarter. They have accomplished very good work with the new piece of apparatus in the gymnasium, the vaulting box. A few of the new games introduced are center ball, battle ball, dodge ball.

Mr. Peterson.
History. (a and b)

They have finished the War of the Revolution. They took up the southern campaign, emphasizing the aim of the British in the later part of the campaign, viz., having failed to put the colonies in the middle, they determined to begin at the southern portion of the country and lop off one at a time. We did not take up each little battle, but just the large movements of Greene and Marion and their final result in the battle of Yorktown. We discussed the terms of the treaty of Paris, and traced on the map the resulting change in the ownership of territory. One-half hour was spent in reviewing the whole work of the year.

Miss Bacon.

Latin. (a)

They read the story of the green cheese, found in the gradatim.

Latin. (b)

Same as last week.

Miss Schibsby.

Physical Culture. (a and b)

The work of these groups has been similar to that of Group VIII.

Mr. Peterson.
Physical Culture.

Attention has been given more to free standing than to gymnasium work, and the class has progressed very favorably. They are able to do much better work than in the fall. The games are similar to those of VIII a and b. A small class in fencing has been formed by a few of the boys in the older groups. They have taken hold of it very well indeed. It is hoped that the experiment will justify more being done in the way of applied gymnastics.

Mr. Peterson.
On Monday the children re-lived some of their Christmas experiences. They modeled out of clay their Christmas presents; they also drew pictures of the presents and the tree.

Tuesday we started our work for the quarter. We talked about the family living together, and how we needed houses for protection and comfort. Then under direction the children built houses out of blocks, and made the form of a house out of cardboard and paper. The making of the foundation of this paper house was directed, and then each child added roof, chimney, and cut doors and windows as he desired. In order to have houses someone must build them. Then we talked about the carpenter and what he needed in his work. After this we had a carpenter play with the third gift. It was a directed sequence. First we had a row of small boards, then by putting them together in different ways we had long and short boards, long and short posts, etc.

The children made carpenter aprons. They sewed on pockets for nails and put strings on. The children will wear these aprons when they do their carpentry work in the play house.

We learned the song of "Busy Carpenters" and dramatized it.

The oldest children had 15 minutes with Mr. Osborn for number work.
Social Occupations.

This quarter we began with talking about the raising of sheep on a farm. First we talked about the kind of land a farmer would use for pasture. The children knew that the sheep need grass and water. They knew that grass would grow on land that is rocky and is not of use for other purposes. They thought that such land could best be devoted to sheep. We looked at a globe and tried to find the countries where sheep could best be raised. The children thought they could not be raised in the extreme north, because there would not be food enough for them and because it would be too cold; and a warm country would not be suitable because the wool would not grow thickly enough. They finally decided that a temperate climate would be the best, because the cold winter would make the wool grow well, and the sheep would not miss their warm coats in the summer. Then on the globe I showed them the principal sheep-raising districts, which they saw fell into a position midway between the equator and the poles. Next we examined the raw wool, and spoke of the seed distribution by the sheep, and then we noticed the natural oil in the wool. This was shown by dipping the wool into water and noticing how it shed the water. We compared the wool with duck feathers that shed water. Then we burnt some of the wool to get the characteristic odor. The children compared it with burning oil—and fat and burning hair.

Then they tested different kinds of cloth to see if it was made of cotton, first by feeling it, then by noticing its absorbent qualities, and then by burning. Then we pulled out and twisted the wool to show how easily it could be made into thread. Then we talked about the care of the sheep, and spoke of the dangers which they have to encounter on account of the little natural protection they have. Then we spoke of sheep dogs and their care of the sheep and then we played shepherd.
Next we took up the sheep shearing. We spoke of which sheep would be the ones to be sheared. The lambs would need their wool for protection even in the summer time, so that only sheep at least one year old could be sheared. Then we spoke of the manner of washing and shearing, and the manner of transportation to the factory. The children have cut sheep out of cardboard. The sheep were drawn for them, and they cut them out, and pasted cotton on for wool. Then they played that they had a sheep farm and bought and sold sheep for five dollars apiece. All the children knew how much two sheep would cost, most of them the price of three sheep, and some of them were able to find the cost of four and five sheep. They paid for the sheep with pieces of paper representing 5, 10, and 20 dollar bills, and found that in paying for 5 sheep, they could give a twenty dollar bill and a five, two tens and a five, or five fives. They have made troughs for their sheep, out of manila paper. This work involved the measurements of 1, 2, and 5 inches.

I told them a Christmas story: "The Annunciation to the Shepherds", and the story of David the shepherd boy. I showed them many famous pictures of sheep, and they brought me some from home.

Miss M. Victorine.

Sewing. (a and b)

The sewing of Group III occurs three half hour periods a week and consists of things which they use in their other work, or which are to be used in their room. The first day this week those who had still unfinished leaves of the group scrap book left from last quarter finished overcasting the edges of these. The others began some articles to be used in the school; a part began hemming dust cloths for use in their own room; the others, since only a limited number of dusters was necessary,
started some holders for the kitchen. In order to cut the 6 inch square
for the latter, a slight review of their knowledge of their knowledge of the
foot ruler was necessary. They had no difficulty in finding 6 inches,
and one child of his own accord remarked that the six is half way.
They were also able without much difficulty to find 4 1/2 inches, the
length necessary for the pieces of tape to be woven in and out of the felt
strips. By the end of the second period, a number had finished drawing
and cutting out their pieces of felt and were beginning to cut the
tapes. One child suggested cutting the necessary amount all at once
by measuring only one piece and folding the tape back and forth as many
times as there were pieces needed, using this as a measure, but this plan
was not very practical because of the elasticity of the woolen tape.

The children seemed on the whole interested in making many things
for their room and the school. When they learned that the dust cloths
were for their own room, they were interested in knowing who was to do
the dusting. They liked the red cotton and the stitch, which is a little
more elaborate than the ordinary hemming stitch, because it looks "pretty".
The additional holders the children themselves felt the need of, because
they have not enough of them for the children to use two of them at once
as the children often need to, in order to hold the hot spoon to stir with,
and the handle of the stew pan.

Alice Lachmund.

Cooking. (a and b)

The children continue the study of cereals this quarter. They
have two twenty minute periods of experimental work, in one of which part
of the time is spent in preparing for the group luncheon for the next day,
when an hour is devoted to the practical work and the luncheon.
The first period of experimental work this week was spent in choosing a cereal, which they had had once before in the preceding quarter, for the luncheon of the next day. In this way they recalled some of the things they had learned before Christmas. Flaked wheat was chosen by the majority, which of course ruled. The children were able to pick out flaked wheat from a dozen or more of other preparations of wheat and corn, and also recognized the flaked corn which they compared with it in appearance. One or two children remembered that the flaked corn is always used to balance a cup of the unknown cereal, and one child remembered that the proportion of flaked corn to water is as 1 is to 1. This they were formerly in the habit of forgetting. While one child chosen by the leader was weighing the flaked wheat, we reviewed the parts into which the measuring cup is divided, in order that they might use it correctly the next day. When the amount of water necessary for the wheat was determined, the children dictated the recipe which was written on the board for them, and then a number of them read it in turn. On the day for the luncheon the children remembered the recipe which was again written on the board at their dictation, to refer to during the cooking, should they forget.

The children have shown great interest in starch and have asked a number of questions about it. Before they take up the rice they are going to experiment with the constituents of grain—starch and cellulose, to find out the action of heat on both.

The second period of experimental work was spent in looking at various grains to see the cellulose covering and the white starchy mass within. The children mentioned the potato as something else that contained starch. They decided that the grinding of the inside of the corn would result in corn flour or corn starch, just as the grinding of the inner part of the wheat gave us the wheat flour.
The children then took turns grinding corn in a mortar in order to make their own corn flour on which they are going to experiment with the action of heat.

Alice Lachmund.

Art. (a and b)

As the group is now studying the sheep farm, the motive given as a lesson in perspective was taken from the foregoing subject. The sheep fold and pen were built with Prang blocks and charcoal was the medium used.

Two of the class represented the four lines of fence as they saw them, and the others made the fence as a square in the air. The technical side of the lesson consisted in leading the children to observe one object partly hidden by another.

The second lesson was taken from the story of "The Little Red Hen". We drew a barn, and with comparison with the barn, ascertained the relative sizes of the animals; the technique consisted in a repetition of ground and sky. Colored chalk was the medium used.

Mrs. M. R. Laver.
History. (a)

This group has been making the transition from the hunting to the pastoral and nomadic period. Owing to the fact that the children were slow in returning after vacation, and were obliged to adjust themselves to a new teacher, their progress has been rather slow. For the first day or two, questions with regard to the work of the previous quarter called out only their memory of various episodes of the story of Ab. They at last took up the dramatization of hunting life at a period earlier than that which they had reached at the end of the previous quarter. They represented their tribe as living on the side of the mountain, from which they wished to descend to a wheat-bearing plane in the valley below. The fact that they did not know the way appeared at first an insurmountable obstacle, but they at last were led to choose two of their number who should explore the mountain side and find a path. The dramatization of this journey and their settling in the valley gave the teacher an insight into their ideas of the life of the period, their dwellings, clothing, weapons, food, the division of labor, the beginning of the domestication of animals, etc. The last named point was one on which we spent some time. In order to give a reason for it, I asked them what they would do when they came to the point where there was very little game to be found. Their only solution of the problem was to move on to some other place. It was only with a great deal of help that they finally suggested raising flocks and herds of sheep and cattle, and using them for food. They were interested in the idea of keeping flocks of sheep, and suggested at once that they must be protected from wolves. The keeping of sheep dogs and the building of sheep folds were the plans which they proposed. They said also that if they were to raise sheep, they must live on the planes or on rolling ground, and that
and that they must be near the streams in order to find good pasture land and plenty of water. One suggested that if they could not find running water they might dig wells.

With this introduction we have begun the story of the wanderings of Abraham. Two periods were spent at the sand table, modeling a typical landscape containing mountains, plateaus, and plains.

M. Hoblitt.

History. (b)

The group first reviewed briefly the work done last quarter. By means of pictures we also reviewed carefully the various geographic features—plains, mountains, river systems, etc., that we had talked about in the fall. Then we went on our journey across Europe, as nomads, with herds of cattle and flocks of sheep, which we had domesticated. The children spent a couple of periods in dramatizing the journey and they told and were told stories about the different incidents and discoveries on the journey. We have now come to Palestine where the nomadic tribe comes upon Abraham. Of course it is carefully impressed on them that this journey across Europe has taken centuries, but it is hard to get the children away from the belief that at least the babies who lived in the valley are living yet.

Miss Schibsby.

Cooking. (a and b) 1 1/2 hours.

Vegetables—the work done to find the composition of potatoes was reviewed the children recalling quite readily what they had done.

For luncheon potato soup was prepared.

Miss Tough.

Sewing. (a and b)

The sewing of this group is a continuation of their work of last quarter.
as they did not finish their sewing bags before Christmas.

Miss Lachmund.

Textiles.  (a and b)

The work of these groups with wool has been laid aside in order that
the wooden dolls which they made in the shop may be dressed. One of the
children had made a chamois skin suit for his doll at home, and the rest of
the group are copying that. In the other group they decided to dress
theirs more like cave men and so have started to make each doll's costume
out of one piece.

Miss Hill.

Art.  (a and b)

The class has been modeling the animals in clay. They have worked
directly from the cast.

Miss Cushman.

Manual Training.  (a and b)

They have begun work on small spindles to be used in their textile work.
They cut the dowels 8 inches long, sharpening a point to spin upon.
They prepared the stock for the disk 4" by 4", marking on it with a compass
a circle 3 1/2 inches in diameter, and sawed out the circle with a small copi
saw. These have been made ready to file next week.

Miss Jones.
History. (a and b)

During the closing week of the autumn quarter I told them something of Nansen's expedition to the north pole, taken from his "Farthest North". They looked at the colored pictures in this showing the brilliant effects of sunset and sunrise in that latitude. The main point brought out here was the fact that Nansen, in his former explorations and study, thought he had discovered a current of water which passed over the pole. He concluded that it might be possible for a ship, so built that it would resist the pressure, if it were permitted to be frozen in the ice in this current, to drift over the pole. They were told how far north he went when he discovered that the current turned south, and determined to continue the exploration on the ice on foot, and of the latitude 84 (I think) reached in this way, and that then they were compelled to return on account of a lack of food.

At the beginning of the new quarter I asked whether they had any questions they would like to ask about Nansen before we explored another part of the world. They had several and the first period was spent in answering those.

The plan of work this quarter is the exploration of Africa, and to bring out the contrasts in physical conditions. I expect to take up Prince Henry, as the beginning of attempts to find the limits, then the Boers, as an example of attempts at civilization and colonization, then Livingstone, as an example of the exploration of an important river to its source, and of a knowledge of the mode of life of the natives. A little time will also be given to DuChaillu's attempt to discover the equatorial conditions.

In beginning with Prince Henry, first to pick out on the globe the large land masses, and write their names on the board as each decided on
what he thought was a large land mass. In this way we got the six continents, for which I gave them the word, and then they agreed on a definition for continent, incidentally learning what an island is and what an isthmus is. Then I asked if anyone knew which had people on first, and what parts were explored first. Most of the children agreed on Europe or Asia by eliminating North and South America and Africa. Some of them, however, thought it must be England.

I then located for them the region around the Mediterranean, and showed them some maps of the early cartographers showing animals at the unknown regions, and the encircling whirling sea which was supposed to surround everything. I gave them some of the early notions of the form of the world, in which they were much interested.

I then told them a little of Prince Henry and his desire to find the way to India around Africa, and the children speculated on how he would go about it. Some of them thought that he would build a ship like Nansen's, and this led us back to the kind of ships that were used in that day, the few instruments for guiding at sea, etc. They had dwelt enough on Nansen's thought in arranging for this voyage to get the idea that study on the thing was desirable, and so were ready for the statement that Prince Henry built an observatory where he gathered men for study on the problems of instruments and better methods of recording discovering. This brought up the subject of map making, and I asked each child to bring in a map showing how he came from his home to the school. This map was finally made by all the children, and showed a great difference in accuracy. One child thought of representing the distance by a scale. This experience, however, made them appreciate to some degree the series of maps which I had to show them from "Henry the Navigator" by C.R. Beazley, in which the evolution of map drawing
is very well seen.

We took up the reasons for the slowness of the explorers sent out, the strong north-east trade winds and ocean currents on the west coast. I gave them a little description of the discovery of Madiera, and then this was acted out, one group of children pretending that they were the returned sailors who reported to Prince Henry, and another Prince Henry and his friends, who asked questions to bring out the facts of the discovery, whether it was a good place for colonization, for example. In Vo Francis who was the returned captain, by some slip gave a most vivid description of the island as though it were located at the north pole, describing seals, whales, Eskimo, snow and ice, etc. The children showed at once that they saw his mistake, but no one interrupted until he had entirely finished, and then let him know his error. He was considerably crestfallen, especially as his comrades asserted that he had made all this up since he came in the room, and it was not all what they had agreed upon outside. The latitude of Madiera was appealed to as the point which must decide what is there.

Two side tracks in a way have been followed out in the last ten days which are perhaps to be recorded. One day we were in the sewing room where the sun came through so as to strike in some of the faces of the children, and one of the curtains was lowered. At the close of the hour the sun came again in the child's face, and she remarked that the sun had moved. The class was appealed to to say whether this was correct, and she immediately corrected her statement to "the earth has moved". It was suggested to them that in their next number time they find out through what part of its whole revolution the earth had moved while they sat there.

At another time one of the children suggested, in fun, that the shortest
way to reach China would be to dig a tunnel through the earth. They were asked to tell what we would come to first, and they suggested sand, gravel, and water. Most of the children seemed to think there might be a band of water inside the earth, just as there were layers of rock. On the board I drew a section of the earth as it would appear. The children suggested the gold, silver, coal, etc., that would appear in the rock, and finally the molten rock in the interior. This they saw would prevent any tunnel being made.

I have been reading to them one half hour a week from Ruskin's King of the Golden River. This they are to rewrite forme.

Miss Runyon.

Science. (a) 3 1/2 hours.

One hour was spent in a review of not only the work of last quarter but of last year. On the basis of this review, they were asked to guess what part of the world they are to study next. They gave various answers, but all agreed in the one particular that whoever the people we are to study are, they would live in the tropical zone. In this review, as might be expected, the things that they had made were the first mentioned, and in one or two cases the only things they had remembered.

The remaining hour and a half was spent in the discussion of the methods of navigation previous to the discovery of the compass, and the probable methods of its discovery. The rest of the time was spent in making a compass by magnetizing a # sewing needle and floating it in water. They were first asked to float unmagnetized needles, as many of the children had never seen a needle float before. Then they were shown that after one end of the needle had been attracted by the magnet, that end was repelled by the other pole. They were then told that the best way to
make a compass was to rub a needle along a magnet, always having the same end of the needle leaving the same pole. They then experimented with the needles floating in the water to fix the idea of the attraction of the north seeking end for the north pole, or the opposite pole of the magnet. Then they were given their needles tied in the air, and with a little review of the position of the magnetic poles on the globe, they were each given a bar magnet which was to be the earth magnet. Starting with the balanced needle at the center they were to travel north and south over this earth. Three of them without any assistance got the idea of the declination of the needle. Their records of these experiments were very imperfect, and more time will have to be spent on the re-writing of them.

The group tested the strength of magnets made of steel pens by the load of wire they could carry. They found that the pointed end made the stronger pole. They are to have further experiments with iron dust to show the shape of the magnetic field.

Miss Camp.

Science. (b)

The work is substantially the same as that of Va, with the additional work of testing the strength of two magnets by the distance at which they attracted the floating needle.

Miss Camp.

Cooking. (a and b) 1 1/2 hours.

Dairy Products.---The general characteristics of eggs and the methods for cooking them which had been found best were recalled and from this the deduction drawn that omelet should cook slowly and only long enough to enable it to retain its shape when handled.
As the work to be done involved steps which could best be explained by demonstration, an omelet was made for the class. The children were in most instances able to give the reason for each step. Each child then made an omelet for luncheon.

Sewing. (a and b)

The weaving of the square to be used for the top of the linen cushion was continued.

Textiles. (a)

Group Va is continuing to weave their pin cushion covers on their looms. The work is progressing very slowly, as it seems to be rather difficult for them.

Textiles. (b)

One of the children has begun making his pattern—a green diamond on a white field. The others are doing plain weaving. All have great difficulty in keeping the edges of the cloth straight.

Art. (a and b)

We have tried the experiment with the group of having it carry out a piece of work to scale. They have copied the Barye tiger, reproducing it just half size. In doing this we allowed them to measure the study, and then decide what dimensions the other should be. Technically we made a special attempt at large proportions and planes.

Manual Training.

About half the children have completed their snow shoes. The rest have completed the frames and begun the weaving. Some do the weaving very easily, and some have trouble with it.
History. (a and b)

We began the quarter with a brief review of the work on Chicago. The children were then told that we should go back to the story of the first settlement of white people in America. The children in VIb were asked to recall the story of Columbus and the other explorers whom they had heard about last week. In VIa there was no one present for the first few days who had had this work. It was necessary therefore to tell them briefly of the English claim to North America, and of the papal decree which for a time compelled England to keep her hands off this continent for a time. The children were asked to suggest probable motives for American colonization. The desire to find gold was the only reason first suggested but when the old time search for a north-western passage was recalled they thought it probable that this would be an additional argument for settling in America. They were told of the hostile relations between England and Spain, and of the Spanish trade in America, and then saw that it would be a great advantage for England to have a hold in the new country. One child also suggested at last that perhaps England had not land enough at home, and wanted more. They were then told of the economic conditions in England due to the growth of the wool industry, and said that the farmers that were driven out of their farms in England ought to come to America and have farms of their own for sheep raising.

We then took up the story of Raleigh's efforts at colonization. On concluding it, they decided that the best plan for future attempts would be the formation of a company to furnish the money. The East India and the Muscovy companies were touched on in this connection. The children were greatly interested in Captain Barlowe's account of his exploration of the coast of Virginia, and on being asked what they thought the best argument for colonization said that the possibilities of new homes
in this fruitful land was the best argument of all. We have begun now the story of Captain John Smith. The children spent one period this week in reading aloud from "Stories of the Old Dominion" the account of his early adventures.

M. Hoblitt.

Reading. (a and b)

No regular book has been agreed upon to be used with this class to succeed the Stories of Illinois which is finished, so I have been letting them select stories to read alone while I helped the more backward.

Miss Runyon.

Science. (a)

We talked about the general geographic features of Chicago which are known to the children, as for example, the general flatness, the river, the soil, the kind of trees, the size of the trees, the absence of mold showing that there had never been a forest, etc. I then told them the story of the geography. Last quarter they had had the geographic history of North America, as far as the order in which the land came. We now took up glaciers and studied the effect it had had on the contours and soil of Chicago.

Miss Hill.

Science. (b)

A review of the children's work of last year and last quarter showed about the same thing as was found in Group V. I carried the review back a year further and they seemed to remember the fourth year better than they remembered the fifth. Of course the explanation of this may be that I had them last year; Miss Hoblitt will have a similar review of the work of last year, for they always tell a more connected story of the work to a stranger than to their old teacher, who they know will know how to fill
in the gaps. Another half hour was spent in the review of last quarter's work, and the remaining hour in the study of the general geography of the eastern half of North America, taking up in particular the position of Virginia, the climate of which they are studying by comparing it with that of Chicago. They use the maps showing the mean annual temperature and the rainfall very cleverly. They interpret them without much suggestion, and while showing a natural interest in the extremes, such as the belt of heavy rainfall along the gulf and the lower temperatures on the tops of the mountains, yet they come back to the point of the lesson, the conditions affecting Virginia and Chicago.

Miss Camp.

Number. (a and b)

The first day I had the children I gave them a few examples in addition in columns, and asked them to add rapidly. Most of them did fairly well. Some of them asserted that they always took all the large numbers first and added them together, then the next largest, etc., e.g., all the 9's, then all the 8's, etc. I had them try breaking them up into 5's and 10's, and counting 9 as 10 less 1, and 8 as 10 less 2. They brought me in problems where addition could be used. They do not seem to have subtraction formally, except one child. I have not yet decided whether this should be taught without connecting it with some work. I mean in the sense of using larger numbers. They can of course subtract in small numbers, and the computer's method was used in the few examples brought out.

With Mr. Osborn's blocks I had them take groups of three blocks up to twelve, and tell me all the combinations they could make. Each child put those he found on the board, and then I looked them over.
simple combinations of 6×2 and 4×3 were found at once; then they were asked what part of the whole 3 is, and four, and 8, etc. Then 16 blocks were used, and the combination of 4's found. In this case I drew their attention to the square made by the 16 inch blocks, and they gave me the name "square" for the figure. None of the children, however, could give any better definition for a square than that its sides are straight. I showed them that I could draw a four-sided figure with straight sides which was not a square. Then one child suggested the test which is probably used in the shop,—drawing diagonals which are equal. I gave them in addition the name "right angle", and defined it by referring to the contactors which I knew some of them had made in the shop last year to show degrees. We put two groups of 16 blocks together and found the resulting number; put the 36 together and divided them in halves, in fourths, etc. Then they took away nine and found how many were left, and manipulated the blocks in as many ways as they could to show the number relations. The children need a good deal of drill to be able to do this quickly. In putting their combinations on the board I gave them the right signs to use. Many of them used the multiplication sign or the addition sign without realizing the difference. By referring to the combination they had made they could tell me quickly whether they had 6×2, or 6 plus 2. They were given the - sign also, simply as a sign on the board to tell me what operation they had performed. I expect to use the Speer blocks in connection with the inch blocks to show the ratios.

Miss Runyon.

Cocking. 1/2 hour. (a and b)

Colonial Dishes—The work of the quarter is to consist of the preparation of dishes made from recipes used in Colonial days. Some of the
general directions to be followed were read, and pictures shown of the
utensils used. The children were interested and had many suggestions
to offer; they regretted that there was no large fireplace in which to
do the cooking, as they knew gas and coal stoves were not in use at that
time. Hasty pudding and chocolate were prepared for luncheon. The
extensive use of corn meal and the reason for this were talked about.
The children decided to take turns during luncheon in telling stories
of colonial life and customs.

Connected number work:—in making hasty pudding for one person were
required 1/2 cup boiling water, 4 saltspoons salt, 1/4 cup corn meal, and
1/4 cup cold water. How much of each will be needed for three people?
Cocoa for one person:—2 teaspoons sugar, 2 teaspoons cocoa, 1 tablespoon
water, 3/4 cup milk; how much of each will be needed for the class of six?

Miss Tough.

Art. (a and b)

The children have been modeling small heads of animals directly
from the cast. In this we have required accurate reproduction of the
model.

Miss Cushman.

Manual Training. (a)

This group worked so long on the model of Fort Dearborn that they
wanted to do something for themselves, so I let them choose what they wan-
ted to do. Two of the boys are making dolls’ tables. They prepared
the stock 8” x 6” x 1/2” of gum wood, squaring it, and then rounding the corners
with a chisel. One of the children is making a bracket, using the one half
inch stock, cutting it 12 by 6 inches. She has had to do some broad
surface planing, which she found rather difficult, but which she succeeded
in doing. The others are making tops similar to those of IVb.

Miss Jones.

Manual training. (b)

The children of this group are all making tops, cutting the stock for the disk 3 1/2" by 3 1/2" by 3/4", then drawing the circle 3 1/2 inches in diameter, then sawing it. The piece from spinning at the top is 3" by 7/8" by 7/8". The stock was cut larger, and then cut down to the size needed. They had some trouble in doing this.

Miss Jones.
History. 3 1/2 hours. 1 1/2 hours reading.

The history of this group had been the study of the home life of the Dutch in New York. They have reviewed it, and the rest of the time has been spent in writing out what they have discussed. Each chose a topic instead of all writing on the same subject. Three of them wrote fluently and well; the rest of the class were very much hampered by their spelling. While waiting for their histories, they have been reading the "Heart of Oak" books. In illustrating the life of the times, the illustrations in "Home Life in Colonial Days" were very valuable indeed.

Miss Bacon.

Science. 1 hour.

On account of difficulties in the program I was able to get in only one hour with this group. This was spent on the geography of the Hudson River valley, and especially of the region around New York. The children showed great interest in their work, and asked why they had so little time for it. When the possibility of having more time was suggested, three of them immediately asked if they could do some work with metals as the class did with Miss Andrews last year.

They drew maps at home, and in their drawing showed appreciation of the scale used. They also found out how best to work out the general proportions and to show what they wanted to on a certain size paper.

Miss Camp.

Number.

While waiting for their number books to be printed, they have been working on the multiplication table, using the blocks invented by Mr. Osborn for that purpose. They have now taken up multiplication where the multiplier consists of more than one figure.
The children have become interested in seeing how short a time they can become familiar with the multiplication tables, and get them so that they can never forget them. Each night they take home one table, as that of the 5's. With the exception of two they are working very faithfully at home it during the study hour.

Miss Bacon.

Jerman.

They have had the story of Siegfried, and have taken the story again at dictation. They have studied the verbs, putting all the present tense forms in sentences. The attention has been almost perfect this week. The phonetic difficulties are becoming less. Several of the boys who had great difficulty before are now studying Jerman.

Miss Teller.

Manual Training.

Group VII decided that they would like to do some class work. They have decided that they would like to furnish the inside of a colonial room. First we decided what was necessary to be in the room. The boys went outside and collected the stones; after they had decided that they would make the fireplace large enough to make a fire in it. They have also made a four-post bedstead, a colonial chair, a tall clock, and a spinning wheel. The girls said that they would like to make a colonial doll for the room, and weave the rug for the floor. They have started on the furniture, and have got a part of the stock ready for next week's work.

Miss Jones.
History. (a)

This group has begun to study the conquest of Mexico. They have made a preliminary study of old Mexico, its location and local geography together with drawing a map of the old city and its immediate vicinity. The leading characteristics have been noted. The conditions under which Cortes started out to conquer Mexico have been taken and his movements followed to Flascala. The class has begun to read "Cortes and Montezuma" as a parallel study. The pupils will now draw an outline map of Mexico, including the natural geographic features, and on this they will locate the movements of Cortes.

B.F. Armitage.

History. (b)

The children seem unable to express what they know, and the time has been given to clearing up some of the knowledge of the village community and putting it on paper. They have several lessons in spelling, writing, and those language forms which they were unable to use to express their thoughts.

B.F. Armitage.

German. (a)

Same as that of VII.

German. (b)

They have finished the first act of the play of Siegfried, and have had spelling lessons based on it. They have had also conversational practice on the same subject. They have been more than usually enthusiastic over their work.

Miss Teller.

French. (a)

They began work in French last Wednesday. They were learning a
little French round with Mrs. Kern, about a ship and some sailors. They have been taking up the words which came in connection with this and which were suggested by it. First of all we drew the things on the board, then named them, and wrote the names, words such as light house, bank, winds, waves, sand, sail, mast, keel, sailor, etc. Then as a sort of review of the lesson, I had them draw the pictures for themselves hurriedly, and write the names under the pictures.

Miss Dey.

French. (b)

In addition to this work of group VIIIa, these children are now having a connected story which is given to them in small amounts, and which they retell to me.

Miss Dey.

Science. (a)

Our work for the first few weeks of the quarter is to be on the tides. In preparation for this subject we have taken up two main subjects, namely: the solar system, and gravity. In the study of the solar system, the class talked over with me the shape of the earth, with which they were familiar, the sun and what we know about it, the planets, considering especially their size, their composition, their weight comparatively, and their distance from the sun. We also took up the moon, and looked at pictures of the surface of the moon, scarred as it with what are supposed to be the craters of once active volcanoes. When I asked them how these craters are formed, they told me that they were the result of volcanoes. From this they thought that the moon must have been hot at one time. Then I asked them to look up at home the composition of Jupiter, and the rings of Saturn. They found that Jupiter is still hot, so hot that it is supposed to be made of gases, not yet consolidated. I told them, however, of the possibility and even probability of a solid core of the planet. It took some time to
to show the class that the heat of the sun did not come from fire.
We had to find out what fire is, and how oxygen is necessary for it.
The children showed a decided familiarity with the size and form of the
plants, and some of them knew the order of the planets from the sun.
The physical condition of the sun, Jupiter, the rings of Saturn, Mars,
and the moon suggested to them the probable origin of the earth, and its
probable future state. They looked up at home many of the ideas which
they discussed in class. I did not take up the meteoric or the
nebular hypothesis as I should do with an older class, but gave only the
fundamental ideas.

After spending three hours on this kind of work, the class began a
study of gravity. I had them make cubic centimeters of paraffin, by
whittling the blocks down to the required size. They had some difficulty
with this, for the paraffin softened from the heat of their hands, and
would not remain in the cubical shape. Finally each child made a satis-
factory cube, and we set them away to use in a further experiment.
Then they found the weight of a cubic centimeter of water by weighing
50 cc, 100 cc, 200 cc, etc. Their weighings were accurate for the most part;
one boy got within 1/4% of the correct result, and the others were not more
than 2% wrong. Next week we shall go on with this work, and shall learn
at the same time the metric system of weights and measures.

Harry C. Gillet.

Science. (b)

After reviewing the main points gained in the machines they were con-
structing, the class was asked what was the source of the power in each
case. The muscular energy was referred to the food, and the food to the
light from the sun. Then the power of the steam engine was carried back
to the same source. The heat obtained in burning coal brought up two questions, what happened to the coal in burning, and what did they mean by heat. The first was answered in part by one or two of the class, and left over for further discussion. The second was left for a later class and when after an interval of four days it was again taken up, it was as eagerly discussed as when it was first proposed. They all brought in instances of the effect of heat on various substances; three declared heat to be friction, several others, heated or hot air, but were unable to state what they meant by hot iron. One boy said that hot iron was full of hot air or hot gas or something, i.e., heat. But when I reviewed what they had had about mass as a measure of the amount of matter in a definite amount of iron, three of them declared that hot iron did not weigh more than cold, therefore heat was not "something", i.e., matter added on or taken away. Don made the inference that as iron expanded it should weigh less hot, i.e., be more buoyed up by the air replaced. Then followed a long discussion of the ways of measuring matter in a certain cubical unit of different substances. Through the difference between the solid, liquid, and gaseous forms of water, iron, "air", they got the idea of the molecular constitution of matter and what they meant by "heat is a motion of the molecules of the heated body". This definition was contributed by one child, but not of course, comprehended. As soon as they understood the theory of the different states of matter in elements, they asked questions about compounds, and are now working with some experiments to illustrate:—Change of state of an element, mercury, lead, tin. 2) Combination of two gases, hydrogen and oxygen. 3) The measure of the unit of mass, specific gravity.

Miss Camp.
Science.  (b)

This class meets but three times a week. The work is a continuation of that of last quarter. The first part of the week was spent in a review of the three classes of levers. Then experiments with pulleys and friction of surfaces were worked up in class. The children have continued to make the apparatus necessary. As to method:—In the case of the pulley the children gave many instances where the pulley was used to advantage. They were given pulleys and are now experimenting to see where the advantage lies and what it is. In the case of the friction of surfaces, the children are finding, after having reasoned about it in class, what makes friction under different cases vary. In connection with these two experiments the idea of the foot pound as a unit of measure is being brought in.

Guy F. Wells.

Arithmetic.  (a)

Having used fractions to some extent in their cooking, the children readily learned by means of object lessons what the denominator indicates, the number of parts into which the unit is divided, and the numerator the number of those parts which are taken. They began with simple problems, for example,—If Mary has $3/16$ of a cup of butter in her cake, and Jane has $4/8$ of a cup in hers, how much is there in both?

The fractions must first have the same name, or a common denominator which they explained by means of picture circles, first by dividing the circle into sixteenths and by heavier lines marking the three sixteenths. Then the other circle was divided into eighths, and by dotted lines into sixteenths. There was no difficulty in seeing that $4/8$ is equivalent to $8/16$, which added to the $3/16$ is Mary's cake equals $11/16$ in both.

Miss Bartd.
The class is very uneven, some being deficient in the simple processes in division, and in fundamental combinations. I have been giving them work along these lines. I have also had them find the area and perimeter of squares and rectangles, first having them draw the figures. They will next learn to draw to a scale, and so represent and find the areas of larger surfaces. This will lead to measuring in rods, and to finding the area of the furlong-acre, to be applied in their history.

B. F. Armitage.

Music. (b)

Group VIII asked to write a song on Robin Hood, a subject taken up in their literature work, in which they have been deeply interested. They wrote the first and last verses, and set these to a melody with which they grew more and more dissatisfied, although as a melody it was good. They objected that "it was too much like everything else," to suit the subject. It was interesting to observe their increased ability to handle composition as a tool. The novelty of composing having worn off, they are no longer easily pleased with their melodic ideas, but handle and twist and turn them with considerable mastery. Having just learned a quaint minor setting of "Under the Greenwood Tree," they observed that its key gave it a quality different from their other songs, and that this quality was what would be suitable for their subject. With the help of the teacher they proceeded to take their melody—finished up to the closing phrase—and put it in the minor. An excellent close was given to complete it and the group were so delighted with its success that they interpolated a verse between the two already written.
1. In the depths of Sherwood forest
Dwelt an outlaw, Robin Hood
With his band of seven score merry men
Who helped him all they could.
His right hand man was Little John,
A yeoman tall and stout,
And in a bout with quarter staves

He went disguised to Nottingham town
And kept the sheriff in awe.
He called bold Robin a saucy knave
Though he was clever and good,
And that is why we like to hear
The tales of Robin Hood.
1. In the depths of Sherwood forest
Dwelt an outlaw, Robin Hood
With his band of seven score merry men
Who helped him all they could.
His right hand man was Little John,
A yeoman tall and stout,
And in a bout with quarter staves
He'd knock the strongest out.

The sheriff gave a shooting match
To catch bold Robin Hood
And Robin with his band was there
Disguised as friars good.
They crowded round the royal seat
So they could see the fun
And carried off the greenwood tree
The prize that Robin won.

He took from the rich and gave to the poor
In spite of the strictest law,
He went disguised to Nottingham town
And kept the sheriff in awe.
He called bold Robin a saucy knave
Though he was clever and good,
And that is why we like to hear
The tales of Robin Hood.
Sewing. (b) Girls 2 hours.

Aprons—The aprons not having been finished before the holidays, a few weeks are to be given to this work before anything new is started. The aprons were gathered at the tops preparatory to putting on the bands.

Miss Tough.

Textiles. (a)

They have begun to collect rags to weave into the carpets on the Kentucky looms. The spinning wheel and the loom are being put in order for use this term.

Miss Hill

Textiles. (b)

They are going to use the small loom and are making necessary fixings for it in the shop, such as reed, heddles, etc. They are also starting a primitive loom, since some of the children have never woven before.

Miss Hill.

Manual Training. 1/2 hour.

They have completed the tops which they started last year. The boys who have completed the tops are making stairs for the doll house.

Miss Jones.

Printing. (b)

The class has set up, printed, and distributed the last two pages of "The Little Red Hen" and one page of sentences, making thirty copies of each. They have also set up the first page of the German play "Siegfried".

Work has been somewhat impeded by the size of the class. Half of the number can work comfortably with the printing; the rest should be occupied with stencil work, according to the program.
History. (a and b)

I have been working on the "Critical Period of United States History" and the children have become quite enthusiastic over constitutional questions and the topics that were most important to be discussed and settled while the new government was being formed. The questions of finance seemed to hold their attention longest. Two recitation periods were spent in giving them a somewhat clear idea of the banking system, of the meaning of paper money, of when it would be of value, and why it was so depreciated before the formation of a strong federal government in America. They had many indistinct ideas and the recitation consisted mainly in the clarification of these. The children asked the teacher questions. The introduction of finance arose through the fact of the condition of the soldiers immediately after the war, for they had been paid with continental money which was of very little value.

The children knew that the land north of the Ohio and east of the Mississippi had been given to the federal government by the states laying claim to it, and since the soldiers did not value the money, they were paid off in land. From this arose the question as to when the continental money would be of value.

The question also arose as to what powers the federal government could assume, and it was decided that it could adjust all questions of the relations of our country to foreign nations and protect the country, take charge of the army and navy, and decide in all matters which concerned all the states alike. In connection with this work they took some of the later biography of Jefferson, Washington, Marshall, and Hamilton.

Miss Bacon.
Latin. (a)

Study of personal and demonstrative pronouns in Latin.

Latin. (b)

They have gone on reading in their books. In connection with this they have studied pronouns, and the imperative mood of the vero.

Miss Schibsby.

Science. (a)

We have continued the work of last quarter in science. As an experiment was left unfinished from last quarter, we took up that first. The children had left exposed to the air some wet iron filings, and they found that after several days rust appeared on the filings. The children said that oxygen had united with the iron, and had changed the color of the iron. I asked them how they knew that oxygen had done this and they could not answer. They said that there were other things in the air besides oxygen, and for all they knew the carbon dioxide had done this. Naturally the next experiment was to prove to them that oxygen could rust iron. They made oxygen in test tubes, using potassium chlorate. The children had difficulty with the technique of the experiment. They were very willing to get together a great many tubes and vessels, but they had little idea of their use in the experiment. As far as possible I had them find a way out of their difficulties themselves, though it took more time for the experiment. They tested oxygen with a glowing match. They knew this test and suggested it themselves.

This experiment proved to them that oxygen could rust iron, but it did not prove that carbon dioxide would not have the same effect, so they made some carbon dioxide and found that it had no effect on the iron filings. They made the carbon dioxide with marble and hydrochloric acid. In this
also they had some difficulty with the technical part of the work, but not so much as in the previous work, perhaps because this experiment was less difficult, and some of them had made the gas before.

Harry C. Gillet.

Science. (b)

At the close of last quarter Miss Averett was considering with the class the Carboniferous period, together with the ways of making coal and metamorphosing it. This quarter we made a hurried review of it, in order to be sure that all the important points had been brought out. The class showed a very satisfactory knowledge of the subject, but they had a hazy notion of the way in which bituminous coal is changed into anthracite coal. This, therefore, was the first subject taken up this quarter. We worked out three ways in which coal could thus be changed, namely: pressure, exposure, and heat. The pressure came from the heavy layers above, but more from the foldings of the crust in mountainous regions. They saw from their maps of the coal regions that hard coal is found only where there has been a disturbance of the crust. They saw that the exposure would come when the land was raised, so that the rivers could cut valleys into the coal layers. They had some trouble in accounting for the heat which turned the soft coal into hard. So they thought that it came from the interior of the earth, or from fires, or that the heat of the sun was sufficient to change the coal. Nobody in the class suggested that pressure itself could cause heat. When I asked if pressure could cause heat, one girl said that when she pressed the air in her bicycle pump it grew hot. Another said that friction causes heat. They readily saw now that the pressure on the crust could cause heat, and that the pressure, the heat, and indirectly the pressure, exposure, came from the folding of
the crust. They made records of the work in their note books, and these records were corrected as to spelling, punctuation, etc.

The children did not understand how pressure could cause heat, and asked about it. The answer to this brought out the nature of heat, and the kinetic theory. They asked for some idea of the size of a molecule, and I told them how the size of molecules is got at, namely by measuring by the interference of light waves the thinness of a very thin film of water.

Later we took up the Permian. The children learned that during the Permian there were deposited in Kansas and Pennsylvania great beds of salt and gypsum. To give them some idea of the conditions under which salt is deposited from solution, they tried an experiment to show that in a saturated solution of salts in water, one salt is deposited before another, for the one salt because the solution for the one becomes saturated, before it is saturated for the other. This explained why the salt was deposited in beds and not with other substances mixed with it.

Harry C. Gillet.

Mathematics. (a and b)

We are aiming at accuracy and ease of statement. The pupils have little idea of logical processes. They seem to be almost or quite unable to carry a train of reasoning through to its conclusion, at least when this involves the solution of a practical problem of considerable complexity. They have a good deal of difficulty in deciding whether to multiply or divide, and seem to have no sure way of finding out. Because of this I have begun the use of note books in which absolutely definite statements, which are quite lacking in the text book, are recorded. I have dictated formal analyses as follows:---
For addition—if an apple costs 5¢ and an orange 3¢, the two will cost the sum of 5¢ and 3¢, which is 8¢. For subtraction—if a has 8¢ and spends 5¢, he will have left the difference between 8¢ and 5¢, which is 3¢.

For multiplication—if one orange costs 5¢, 3 oranges will cost 3 times 5¢, which is 15¢. For division—(a) when the divisor and the dividend are alike—if one orange costs 5¢, as many oranges can be bought for 15¢ as there are 5's in 15 (or as 5 is contained in 15) which is 3.

(b) when the divisor and the dividend are not alike—if 3 oranges cost 15¢, one orange will cost 1/3 of 15¢, which is 5¢. For the "rule of three" a) ratio method—12 oranges are three times 4 oranges, therefore if 4 oranges cost 20¢, 12 oranges will cost 3 times 20¢, which is 60¢.

b) the "one" method—if 3 oranges cost 15¢, one orange will cost 1/3 of 15¢, which is 5¢, and 12 oranges will cost 12 times 5¢, which is 60¢. The multiplier must always be considered abstract in the explanation. In the actual work, it is usually best to consider the smaller number the multiplier.

Practical problems are put on the blackboard every day, and are copied and worked out of class. Neatness and form as well as accuracy are insisted upon in the explanations. The papers are handed in, marked, and returned for correction. The work has been upon linear and square measure. A rod pole was made out of yard sticks, and also cut out of foot sticks, and was used in actual measurements in the yard.

The pupils were also shown how to construct a perpendicular when they were given only a straight line, in this case a fence, and a pole. This is the practical farmer's method. All of the problems given are actual problems of real life, though not necessarily within the pupil's own experience. The pupils have already begun to see that the analyses
given above not only furnish means for explaining problems after they are solved, but afford clues for the solution of new problems.

Mr. Osborn.

Art. (a and b)

They are continuing the work on their friezes. While one or two are laying on the work that has been planned for one of the central panels, the others are making sketches from the model for the minute man. This figure is to occupy one of the narrow places.

Miss Cushman.
Latin. (b) They have read further in their books. In connection with it they have taken up the comparison of adjectives.

Latin. (a) They have done the same as the b’s, and in addition have taken up the function of the passive verb.

Miss Schibsby.

English.

Thus far most of the time has been spent in learning to recognize the various parts of speech in English and form definitions for each. The children have also written twice; once on a topic they were studying in science, and the other time they retold a story from the Odyssey after I had read it to them.

Miss Schibsby.

Science.

After laboratory work on the internal structure of the starfish each member of the group wrote an essay on the starfish embracing habits, and internal and external structure. A discussion was then held of the other animals belonging to the group Echinodermata. It was then found advisable to take up the study of the digestive and respiratory systems of the human body in order that the students might better understand the structure of the lower animals.

Mr. Sarrey.

Mathematics.

We are studying certain principles of multiplication and division that lead up to fractions. The pupils have discovered for themselves stated in good English, and put into their note books the facts relating
to the square of the sum of two quantities, the square of the difference sum and of two quantities, and the product of the difference of two quantities. They are now applying the associative law so as to bring trinomials, and polynomials of four terms under these rules. The work in arithmetic has also been begun. For some time they will do all the work in arithmetic that group IX are doing, and as much algebra as they can do besides.

Mr. Caborn.

General Exercises.

The club took fifteen minutes of its time to attend to some of its business, and a half hour was spent in studying different samples of wood of wood brought over by Mr. Fowler, who told them something of the value of kinds the different woods, and why certain ones are used for certain purposes.

Miss Bacon.
We continued the work of the carpenter. We talked about his tools, and why he needed each one. The children made some saws, using tin for the blade and wood for the handles. They modeled the tools and nails out of clay. The results were very satisfactory; I think this was due to the children's having had experience in the kindergarden with the actual tools. We made the carpenter's ruler out of heavy straw board, one foot in length, and marked off the inches. The oldest children asked to put on the numbers that they had learned from Mr. Caborne's blocks. Then they built houses, barns, etc., using their rulers to measure the blocks. They had a gift play of building the carpenter's shop, his work bench, his tool box. In making the carpenter's bench the older children made their own measuring and sawed their own wood.

In connection with the carpenter we talked about the hardware store as the place where he buys his nails and tools. Then we had a dramatic play; some were carpenters and others clerks in a hardware store. The children thought it necessary to have a lumber yard also. They were very well satisfied with having imaginary tools and nails, but when it came to having a lumber yard, they wanted the Meenesey blocks to sell as lumber. After the dramatic play the children told the story of the carpenter and his work with gummi and paper and crayon.

Miss Dolling.
Social Occupations. (a and b)

This week the stress has been laid on number work. After hastily reviewing the work done on the sheep farm, we spent the time in buying and selling sheep. Last week they made little sheep of cardboard covered with wool, and these they sold at five dollars apiece, since it is easier for the children to count by fives than with any other number except one. They finally got so that they could buy or sell as many as 5 sheep at a time. Some imitation paper money was given them. I explained to them that there are only 1, 2, 5, 10, and 20 dollar bills (I did not mention the higher ones). The next time they played, they used these bills making change when necessary, thus making the process more complicated. Then we sold sheep for four dollars apiece, and the children got so that they could sell as many as four at a time and make change when necessary.

The latter part of the week we spent in playing with some of Mr. Osborn's number blocks. They are inch cubes having holes in the centers so that they can be strung on sticks of any given length. The children called each cube one dollar, and got so that they could count by fives to sixty. Some of them could count to 100, but the principle practice was in counting to 25. They strung four of these on a stick, and letting each stick represent the cost of a sheep, found the cost of 2, 3, and 4 sheep. They learned to count by 4's to 16, and can count backward as well as forward. I spent this time on the number work chiefly to get them out of the habit of counting by ones. Very few of them could count in groups.

In reading they have been working on their records of their farm work. They have been making these records themselves.

Miss LaVictoire.

O.K.
Reading. (a and b)

They have pasted more pictures in their scrap books and have pasted more stories in their reading books. We spent one period in reading. I found it hard to manage the two groups together, holding the work back to keep it in range of the new pupils and those not so advanced, at the same time retaining the interest of the more advanced.

Miss Lackersteen.

Cooking. (a and b)

The children sifted and bolted the corn they had ground the time before and compared it with the prepared corn starch. Then one of the group boiled the starch but previously mixed it with a small quantity of cold water upon a decision of the class that hot water would cause lumping. They noted the thickening and compared it with what happened in the cooking of their cereals. As this experimental work took the whole time the children were not given the recipe for the corn starch pudding until the day for their practical cooking. This did not give them a long enough time to familiarize themselves with the recipe, and they were at a loss as how to go about their cooking, especially as it involved one or two more ingredients than they had been used to. As their pudding did stiffen to turn out of the mold in time for their luncheon that day, they had cocoa which had been cooked for them, and sandwiches, which two of the group prepared for them.

In the second period for experimental work we talked about what had happened in the cooking of the pudding, and what they had done before putting the starch into the boiling milk. The children were shown various ground preparations of cereals, soem flaked wheat and corn starch and each was asked to decide for himself which would need to be mixed
with cold water before boiling. An exchange of opinion showed that they all agreed in thinking it necessary to mix the ground preparations and the corn starch, but some thought that the flaked wheat would also need to be mixed with cold water. To prove which was right, we dropped some of the flaked wheat into boiling water and saw that it did not lump. In spite of their decision in regard to the other preparations, some wanted experimental proof that the corn starch would lump in boiling water, and they proved this to their own satisfaction.

We then boiled wheat flour which was seen to thicken and look very much like the cornstarch pudding. It was difficult for them to tell what caused the thickening. Some suggested water, but they realized when questioned that pure water boiled hours would not thicken. Others suggested heat, but they did not seem to be able to connect the heat with the starch. The period closed before they were quite sure of what caused the thickening.

Miss Lachmund.

Sewing.

The group is continuing to make their dusters and holders. Those who are doing the latter have begun weaving the tapes, but a number of the children find it difficult to remember to go under the strip that the last tape went over, and they are slow to see their mistakes.

Miss Lachmund.

Art. (a and b)

We continued the story of the sheep farm. After I told them some of the story of David they tried to model the sheep in clay, but they had considerable trouble in this. One of them did succeed in making a model which did lack somewhat like a sheep. The next day, I told them more of the story of David, and tried to bring out the idea of composition, with the sheep on one side and the figure of David on the other. The children got the idea by a dramatic representation of it.

Mrs. Laver.
History. (a)

A member of the group who had the same work last year which we are doing now suggested the use of clay dishes instead of the stone ones which we had talked about previously. Another knew that clay could be made more durable by burning it in the fire. When she was asked how she thought people made this discovery, she said perhaps they found a piece of clay which had been baked in the fire by accident. Another suggested that perhaps people experimented with the clay to see how it could be hardened. We imagined coming upon a tribe which was using the clay dishes, and wondered how we could learn to make them. The strange tribe was not supposed to understand our language, and could not tell us how to work the clay, but we decided that we would watch them at work and learn the process. It was suggested by the teacher that perhaps there was another way of making the pottery besides making it ourselves. Some wished at first to ask for it, but we decided at last that it would be better to trade something from our stores for it. It took some time to think of something to offer. Hams and arrows and cattle and sheep were finally chosen for exchange.

The children were interested in hearing how the importance of the domesticated animals was indicated in the language of the early people who depended on them so largely. After hearing that the father of the patriarchal father was called "the lord of the cattle", and the morning the milking time, they suggested terms for evening and for the daughter of the family—"the calling of the cattle" and "the one who does the milking".

We have had the story of how Abraham and Lot separated after the quarrel of their shepherds. The children thought that the reason for their quarrel was because they could not tell their herds apart, or
because there was not room enough for all.

Miss Hoblitt.

History. (b)

We have traveled across southern Europe and have come to Palestine. We are using the Abraham and Lot stories and are living the way the Jews lived. In construction work we are making tents. We are also beginning to make clay dishes.

Miss Schibsby.

Construction work. (a and b)

We have talked about mountains, plateaus, valleys and plains, and have made a map of them in the sand table. We took up the subject of erosion with IVa. in the formation of plateaus and its effect on mountains. I managed to get something out of Margaret and Percy of which feat I am very proud. The children left the class determined to ask at home what erosion is. This suggestion came from them, so it showed the interest they had in the subject.

IVb worked an hour and a half on their books. They are not quite finished yet.

Miss Lackersteen.

Cooking. (a and b) 1 1/2 hours.

Vegetables---Creamed potatoes were prepared for luncheon and this involved a review of white sauce which had been made the previous week. The children wrote the recipes and were able to recall the general plan of the work.

Miss Tough.

Sewing. (a and b)

The children are still sewing their work bags. One child who has finished has been decorating the dress of her primitive doll.

Miss Lachmund.
Sewing. (a) 1/2 hour.

Work Bags—Part of the children are finishing the hem at the tops of the bags and others are planning for the initials to be outlined on the outside. This necessitates making measurements and calculating to find the center, then drawing the letters on paper to be sure of the right form, and again on the bag when they are satisfactory.

Miss Tough.

Textiles. (a and b)

The children have continued dressing the dolls which they made in the shop. One child finished his decorating with paints of different colors.

Miss Hill.
History. (a and b)

Most of the children thought that when Prince Henry's men landed anywhere in Africa they would meet with negroes, and were surprised to find that this was not the case,—that the black people were south of the point reached for many years.

I told them of the difficulties of passing Cape Bozador because of the meeting here of currents from the north and the south, and because of the dangerous coast. It was only when one captain was brave enough to venture far out to sea where the water was more smooth that he was able to pass the point, and continue the explorations.

I gave them an account of the capture of some of the natives and got their ideas of what they could be used for, as this was the beginning of slavery and the slave trade. I told them of Prince Henry's desire to make them Christians and of the fact that at first it was attempted to teach the slaves trades and that the children were often adopted, but that their inability made the work turned over to them laborious. We also took up what might be expected in the way of trade with the natives.

One period was spent in an attempt to make a map of Africa. I asked them how many thought they could make a map and only three volunteered. I told those to go to the sand box and model it. Immediately, of course, the rest of the children thought that they could do it too, so I asked them to draw maps on the board. The map of Africa in the atlas was used to refresh their memories. Not one of the maps drawn had much resemblance to the maps drawn in the book. The only general impression that most of the children had was that it was longer than it was wide.

The rest of the week has been spent in writing an account of Prince Henry. This was at first dictated to me by the whole class, and we
agreed upon the form. Then I put the hard words on the board where they could be found when needed. The children seemed to have enjoyed writing and have worked hard at it. One or two cannot form the letters so that they are readily legible. When this piece of work is done, I intend to spend a little time in showing them how to form the letters and arm movement.

We have spent parts of several periods in a little brief number work. This has been connected with their voyages by taking the log book and finding the total amount traveled in a certain number of days. The children cannot all add by threes up to 36.

Miss Runyon.

Science. (a) 2 hours.

The children made long compass needles out of steel wire, and placed them on cork floats to be used in glass dishes over compass cards. In making these compass cards, they took only four points, one in each quarter, but they were shown a picture of the ship's compass with thirty-two points. In the second period they started on the actual difficulties confronting the navigator in Prince Henry's time, and organized themselves into a ship's company, and are on the point of departure from the southern port to Madiera. In discussing the time for departure the children brought out the point of a best wind in leaving that particular harbor, and also stated the problem of how they could use less favorable winds by tacking. This is to be worked out later by using a small boat and a bellows. Two or three of the children who have sailed a good deal have attempted to solve the problem but have no definite idea of the position of the sail with reference to the rudder in going about.

The second problem stated but not yet solved is the method of leaving
a harbor where the bars have not yet been charted. One child suggested that they could sound, and next week in playing out the trip on the bay to the ocean they are to take actual soundings and record them on the charts similar to those furnished by Prince Henry and his geographers in the observatory. One of the children acting as Prince Henry, without any assistance from the geographers, wrote out his orders for the voyage in this brief and concise manner: 100 miles west, 1000 miles south-west. This was only a beginning, as the time did not permit anything further.

Miss Camp.

Number. (a)

The number work was incidental to the construction of the compass card. Filter paper was first used, the halves, quarters, and eighths being found by folding. Then they wished to draw it on heavier paper, and solved the problem of the size of the radius needed to draw a circle of the desired size, which was five inches and three inches. They had additional problems given them with such numbers as 4, 6, 8, 5, 7, 8.

Miss Camp.

Science. (b)

The work is practically the same as that of Va., except that as yet they have so little idea of a map which would show the route to be taken, that more time will have to be spent on the map before we can go on with the voyage.

Miss Camp.

Cooking. (a and b) 1 1/2 hours.

Dairy Products—The general characteristics of eggs were reviewed in order to find out the best way to prepare poached eggs, then working together the children cooked one in this way before the individual work was begun. The appearance of the finished products was crude owing
to inexperience in handling materials, but general principles were carefully observed.

Miss Tough.

Sewing.

The weaving of pin cushion covers was continued.

Miss Tough.

Textiles. (a)

The work on the looms is progressing very slowly. The children, however, seem to be getting a little better hold of the work now.

Miss Lachmund.

Textiles. (b)

They continued work on their looms as described in last week's report.

Miss Hill.
History (a and b)

We spent the week on the history of the first year at Jamestown. The children were able to anticipate in large measure the directions given by the London Company with regard to the choice of a site, precautions with regard to the Indians and other possible enemies, etc. They were surprised that Smith was not chosen at once for leader, and were sure that he would be later on. They condemned the common kettle in advance, saying that the men would be even more lazy if that plan was carried out, because they would think some one would provide for them whether they worked or not. This expression of opinion came from VIb; VIa were inclined at first to think that the common kettle would be a good thing.

The children felt the value of Smith’s early experience and his self-inflicted discipline as a preparation for leadership. In VIa this led to a conversation as to the children’s plans for the future. They decided that it was a good thing for a boy to look ahead to the life he expected to lead when a man, and prepare for it. Three out of four of the boys present said that they intended to be doctors, “not the kind that doctor sick people, but a doctor that teaches in the University”.

We have done considerable reading, both in class and at home. The children’s interest in work at home is increasing. Among the books that they have used for themselves are Eggleston’s Beginner’s History, Higginson’s Explorers, Montgomery’s First Book in American History, and Captain John Smith’s account of the settlement of Virginia. Each group spent one period in summing up a portion of their work to be prepared for a reading lesson.

Miss Hoblitt.
Science. (a)

I told them the story of the glacier and Lake Chicago. One of the children had seen the Swiss glaciers, and told all he could remember of them. We looked at pictures of glaciers and of glacial scratches on stone. On the map we traced the southern boundary of the ice sheet.

Miss Hill.

Science. (b)

In taking up the nature of the Virginia country, the children have been discussing the character of the soil of a river bed on a flat plain, and the different levels at which they would find a river distributing the silt it carries from a mountain to the sea.

Miss Camp.

Cooking. (a and b) 1 1/2 hours.

Colonial Cooking.—The first half hour was spent in calculating the amount of materials required for the class, the cost of each, and the total cost. Plymouth Indian pudding was prepared for luncheon.

Miss Tough.
History and Reading.

Group VII have a new reading book which they take home each night, and from it prepare a given lesson. Sometimes this is read in class, but generally the teacher asks questions on what has been read to see if the work has been done understandingly. The four half hours devoted to history and reading were spent by giving half the time to writing up the history and half the time to discussing the subject. I gave them a short account of how the Dutch Netherland was given to the English. Then we started on the Revolutionary period.

Miss Bacon.

Science. 1 1/2 hours.

They spent the time in discussing how the map of the Hudson River valley is to be made by the group. The wall space to be used is ten feet by six feet. The tract to be represented is 200 miles long, and each child is to construct in detail 20 miles of the valley. Some time has been spent in discussing the reading of scales in order that they may be able to translate the scale of the map used to the scale of their wall maps. They were very intelligent in their way of going at it. They handled such problems as: --if one foot represents 20 miles, how much does one inch represent? I found that the difficulty was that they did not have any definite idea of what 8/12 means; only two were able to tell that it was the same as 2/3. In addition to the making of the map, they are to collect from railroad folders and magazines as many pictures of the country as possible.

Miss Camp.
Number.

While waiting for the printing of their problems, the children have been learning how to draw diagrams of objects by scale. They measured their height and drew a diagram reduced to one fourth, then gave the point where their legs should be fastened on, and the point where their necks should begin. Then from the simple dimension of length, we went to that of surface and have measured the surfaces of different objects at home and have reduced one or two to small diagrams. Two or three minutes at the beginning of each number lesson are spent in reviewing the harder combinations of the multiplication table.

Miss Bacon. OK.

German.

Group VII listened to a "märchen" on Monday; on Tuesday it was re-told and questions were asked in German, and answered as far as possible without any aid from the teacher. On Wednesday part of the story was copied in the new note books from the board and the new words spelled and used in sentences.

Thursday and Friday the hours were spent in copying the first two verses of the "Erlkönig" and learning the meaning of the new words. The time has arrived for more conversational drill, in getting fuller responses than formerly. The children can understand the longer German sentences, but cling to the simplest answers.

Miss Teller.

Cooking. 1 1/2 hours.

Fish---Luncheon was prepared for next week and its cost calculated. The recipes used were written by each child in order to keep them for the recipe books which the class decided were desirable and will be brought next week.
For luncheon creamed shrimps, baked potatoes, and cocoa were prepared. In examining the shrimps the children were interested in noting the difference of the location of the familiar organs from that which they occupied in other animals with which they had worked.

Miss Tough.

Art.

This group has not been in the studio before this year. They have shown great enthusiasm on their return to the studio. They were allowed to choose a subject to be worked out in clay. One group chose the tiger, another group the elephant, one child started the McNeal Indian, another child copied the wolf, another a crouching panther. Some of these figures require the building of a support built to scale. The children worked quite independently on these supports. They figured out the scale went ot the shop and got the material, and fitted it together. The group as a whole is talkative, yet they work with the spirit of a studio full of grown art students.

Miss Cushman.
History. (a)

The class has read the main facts with regard to Montezuma and also in regard to Cortes — and his expedition as far as Ilasca. Oral reproductions of essential facts are given. Written spelling, including the use of words in sentences, is given attention.

Mr. Armitage.

History. (b)

We continued the study of the village community. We have taken up the kinds of stock, crops, methods of cultivating, haying, and harvesting, with some attention to the tools used. We have noticed spelling and the writing of paragraphs.

Mr. Armitage.

Science. (a)

Last week the class made cubic centimeters of paraffine. This week they made moulds of plaster of paris of their cubes. When the moulds had become hardened and set, they were weighed and filled with lead, and then weighed again. In this way they got the weight of a cubic centimeter of lead approximately. As a rule the results were not more than 10% wrong, and this difference can be accounted for by the fact that the lead contracted when it cooled, and that their weighings could not be accurate on account of the lack of weights of small denominations. They had found that one cubic centimeter of water weighs on a gram, and now they were able to see the ratio between the weights of a certain amount of water and the same amount of lead by volume.

They saw that the water which we took as a standard would have to be at a certain temperature if the standard were to be constant, for they discovered in last quarter's work that the weight of a cubic centimeter of
varies with the temperature. I told them that the standard temperature is four degrees centigrade, for at that temperature water is heaviest. I told them the specific gravities of other substances, among them those of gold, silver, lead, copper, iron, and mercury, and asked them to find the weight of a certain number of cubic centimeters of that substance. Miss Baird is teaching the class the subject of cubical contents this week, and we intend to use it in a practical way next week.

Harry C. Gillet.

Science. (b) 1 1/2 hours.

One half hour was spent in discussing the purpose of the experiments; all except two chose to perform the experiment of making water by burning hydrogen, and the apparatus was discussed in detail. Don suggested that was water was put into flask #1 it might be carried over into the flame where the hydrogen burning formed water, so a drying solution of sulfuric acid was introduced. In putting up the apparatus the children were very careless and need constant suggestion to point which should be obvious. The melting and bending of the glass tubing was recognized as an instance of change of state on account of heat.

Miss Camp.

Number. (a)

The work of this group in science demanded a knowledge of area and cubical contents, so we postponed our fractions. At first we used the inch squares of paper and counted the squares. They quickly saw that an square of 12 inches on a side gave an area of 144 inches, and then they made their own rule. They were familiar with the square foot, having used it in connection with their shop work.

The plastering having fallen from the ceiling on one of the rooms
the pupils wished to find the cost of re-plastering. They worked out the problem themselves and with a few questions made allowance for the closet in the corner. They inquired the cost of plastering and ascertained the entire cost. The pupils brought in problems of their own from other departments, principally problems in connection with the new building which they have just completed.

Miss Faird.

German. (a)

Group VIIIa had the same fairy tale as Group VII, but spent more time in the declension of the masculine nouns,—the four cases in the singular of wind, himmel, wald, etc., being written without assistance in their notebooks. The verbs were also conjugated in the present indicative, and given orally. The first two verses of "Erlkonig" were discussed and all new words used in sentences and related to words already in use.

Miss Feller.

German. (b)

Group VIIIb have printed the stage directions for the first act of "Siegfried". They have memorized and written in their notebooks most of Act II. The general interest is still growing. The dramatic suggestions are always given in English but are always reproduced in German.

Miss Feller.

Reading. (b)

Don and Henry read with me four days a week one half hour a day. We have taken stories that are of intense interest to them in the hope that the interest in the story will make them forget the words and help them to read more fluently. The trouble with both boys is that their minds are centered on the words instead of on the thought. The whole class
is also given a study hour four times a week under supervision.

Miss Bacon.  

Arithmetic.  (b)

Drawing squares and oblongs to a scale, finding area and perimeter, and the statement of method. Measuring the rod as a unit of measure, in terms of the foot and yard. The class measured the furlong acre in rods, drew the same to a scale, and found the area and perimeter. Same with acre flats of various relative proportions. Area of square foot, and square acre.

B.F. Armington.

Sewing. (b) Girls. 2 hours.

The gathering and sewing on of the bands was continued. One of the children finished her apron, which being somewhat soiled, she washed, and ironed herself, to feel that she had completed the work.

Miss Tough.

Textiles. (a)

They have been preparing the rags for the rag rug they are preparing to weave.

Miss Hill.

Textiles. (b)

Two of the new children worked on a primitive loom. Two of the other children have been cutting strips in the shop of which they will make a loom.

Miss Hill.
History. (a and b)

This class has four half hours a week of history, with two half hour study periods at home. As the study periods are not sufficient to prepare for the work in school, one of the recitation periods has been given up to study. This class has taken up the eight years of Washington's administration that they might understand the difficulty there was in establishing the government and defining the rights of the states and of the United States. They also took up the first few years of Jefferson's administration. A great deal of time was spent in clearing up indefinite ideas. We went quite a little into the civil government, the children being anxious to know what rights the states did give up to Congress. With them we worked out quite a number of the powers which were granted to Congress. The discussion started with the alien and sedition laws. The children at first thought that the government had the right to punish persons who were abusing it.

One day was spent by the children in writing on the board on certain topics which were a review for them.

Miss Bacon. OK.

Latin. (a)

This group has been reviewing their declensions and studying adjective declension and demonstrative pronouns.

Latin. (b)

In grammar work this group has been studying pronouns and have begun comparison. They have gone on with their reading in the gradatim.

Miss Schibsby.

Science. (a)

This week we continued our experiments with oxygen. The gas bag
was filled with oxygen by one member of the class while the others prepared their apparatus for their further experiments. As in their previous experiments with oxygen, the children put tin, carbon, lead, and magnesium in test tubes full of oxygen, and let them stand for several days at the end of several days they noticed that the substances had not changed their appearance, and doubted that oxygen had any effect on them. They heated the tin and the lead, however, in the open air, and noticed that there was a decided change. From this it was decided that oxygen acts more slowly on cold substances than on hot ones. (I told them that the substances had probably changed somewhat, but such a small amount that it was not visible.) Then a jet of oxygen was played on a piece of hot carbon, and it burned or united with the oxygen, giving off a brilliant light. The product of these two substances is carbon dioxide gas which is invisible. The magnesium ribbon burned vigorously in the tube of oxygen. They are beginning to get some idea of the nature of chemical action. This idea will be brought out more fully next week.

Harry C. Gillet.

Science. (b)

This week we began by taking a hurried survey of the different geologic periods following the Permian. I showed the children pictures of the animals which lived in each of these periods, and on Tuesday we shall go to the Field Museum to see the fossils there. The work in their note books was corrected by Miss Bruere.

Last Saturday a part of the class went with me to the brick yards at Purington near Blue Island. They found that the glacial clay there is made of all sorts of rock mixed together in the most promiscuous way. They identified as many of the rocks as they could. After spending some
time in the clay pit, we went to the ridge which marks an old lake shore. This ridge runs from near Blue Island to Englewood-on-the-Hill. At Burlington it is about a mile wide, with steep sides. The children saw that this was the first departure from the flat plain that they had come across since leaving the city. 

Harry C. Gillet.

Mathematics (a and b)

The work on mensuration outlined in the last report has been continued. The work has been hampered by the lack of sufficient problems. The text book must be supplemented in some way. Fractions have been begun; we are working on the principles involved. I am not at all sure, however, that the time should not be given to mere mechanical manipulation for a while, but I hope that the present method may be successful.

Mr. Osborn.
Latin.

This group has been studying the modes of expressing time, and place, and comparison of adjectives. In addition they have gone on with their reading in Gradatim.

Miss Schibsby.

English.

In English this group has been reviewing the parts of speech and studying the subject punctuation.

Miss Schibsby.

Science.

The work the first part of the week was a continuation of the study of human physiology, i.e. a study of the respiratory organs, the digestive organs, and the circulatory system. The latter part of the week was given to recitation work on "The Primary Conditions of Life" and the "Struggle for Existence".

Geo. H. Jarrey.

Mathematics.

This group has been doing the same work as Group 16 with some work in the squaring of binomials besides. Their ignorance of arithmetic is almost appalling, and it may be necessary to start afresh and begin from the beginning.

Mr. Osborn.
This week we started work on individual play-houses. The children were given the choice of color for the play-houses; some painted them red, others green. In connection with the painting we talked about the painter's work and why we had our houses painted. The reason that the children gave was that paint made them look better. I told them how paint helps to preserve the wood. The children papered the walls of the play-houses and laid matting on the floors. We talked about the necessity for different rooms in the house. Then with the blocks the children partitioned off the different rooms and built the furniture for each.

The period we gave the children free choice of material; the majority chose sand.

Miss Dolling.

O.K.
After considerable experiment I think I have proved that the technical work in music should be graded in the following way, the children responding with unfailing interest:

Groups IIIa and b, the scale with its tonic sol-fa names.

Groups IV a and b, the recognition of 2, 3, and 4 pulse measure rhythm, and the rhythmic drawing of the same with circles on the board.

Groups V a and b, the writing of the C scale on the staff, and the reading at sight with the tonic sol-fa names of simple, short melodies; the signification of the signature; the whole, half, quarter, and eight notes; bars.

Groups VIa and b, the notation of their original songs, which includes dotted notes, rests, and accidentals.

A successful device with IIIa and b has been to let each child in turn sing a pitch of the scale, each member in turn being "do". This has been of use in concentrating the attention, and of laying stress on exact pitch. Comparatively few children of this age should sing so low as middle C. It is better to work with the scale of E.

The children are accustomed to singing sol-fa exercises of marked rhythmic motion before their attention is called to rhythm. These then are the bases I select to work upon with IVa and b. The children first swing the pulse in the air, noting the accented beats, then they draw the swings upon the board while the teacher sings the exercises. The free motion of the arm while drawing these swings is an elementary training for drawing and writing. The art teacher having seen this work is of the opinion that a set of ambidexter movements made in rhythm would be especially useful in securing freedom of motion in handling charcoal and crayon. After two pulse, three pulse, and four pulse rhythms have been perceived, I have
found it well to allow each child to go to the board in turn and choose what pulse he will draw and whether he will draw it to an exercise or to a song; the latter having a much less marked rhythm, adding considerable difficulty. In the same group one child will be able to draw six-pulse rhythm to a song while another will struggle with two-pulse rhythm drawn to a marked exercise. The work seems equally fascinating to all, however, and is frequently continued through the half-hour period.

We start, in Va and b, by finding middle C on the piano and noting the names of all the white keys. Then the G clef is drawn on the staff to show the staff prepared for our singing voices. The children are told that there are other clefs which prepare the staff for men's voices, etc., but these are not shown. After noting that the clef gets its name from the second line, we proceed to name the lines and spaces, finally locating middle C. It is then explained that scales may be played or sung beginning on any one of those lines or spaces, and that the name of the line or space on which the scale begins names the scale. This fact is apparently difficult to grasp, and I have borrowed imagery from the "Scale Family" to fix it in the children's minds. Preparing for this problem the two do's of the scale are referred to even in IIIa as the "father and mother do", a scant explanation serving to introduce this terminology. The V's are then prepared to hear that as George's father names the family and Henry's his, so the "father do" means the names his scale family, and as we are to write the scale of C, the "father do" must be on C. (Singing the scale shows which C.) This is the only occasion which I find for using allegory, though it is possible that other family names might be used for the scale were we to introduce work in harmony.
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The group leader makes a whole note for do, the next member re, and so on till the scale is on the board, the teacher writing the syllable names under the notes. We then sing the scale giving each note its full value. This being too slow, the children are told that there are other sorts of notes which will make the scale more interesting to sing, and experiments are made with half notes, quarters and eighths, they making the necessary changes in the notes according to their fancy, the only stipulation being that they shall be alike. They next choose what signature shall be used—what rhythm and what sorts of notes—the correct figures being put in their proper places. This leads to putting in bars which must be changed as the kinds of notes are changed. This work interests the children of this age for about twenty minutes, song singing finishing the half hour, until they have become so familiar with it that we can pass on to the next step and instead of singing familiar songs can begin to read at sight a melody made by slight changes in their scale. This sight reading which was lowlyabled by VIa and b last quarter, is fascinating to children of this age—8 years.

Eventually both VI a and b should begin the notation of their original songs, but as the present VIa has not had sight reading before, I am keeping them at that work. VIa are apparently in advance of VIa in this technical work in music, and have been able to write their "Skating", "Columbus" and "Kindergarten, Goodbye" songs correctly on the board and to copy them neatly in their music note books.

May R. Kern.
Social Occupations.

This week we began a study of a cotton plantation in contrast to the sheep farm which they have just finished. First I showed the children a branch of a cotton plant, and we made a list of all the things that are made of cotton. The children drew a picture of the branch of cotton. After we had counted the number of seeds in a boll, they decided that there were a great many more seeds in the cotton than were necessary for planting, as there were 10 seeds in the boll they examined. The question came up as to what could be done with the excess, and as the children did not know, I had to tell them. First I let them open some of the seeds, and they saw that the inside is almost like a little nut, and thought that it might be good to eat. I told them that it was really ground up, was fed to cattle, and made an excellent food for them. They saw for themselves that the inside of the seed is very rich and oily; I told them about cotton seed oil and the things it is used for. Then they wanted to plant some of the cotton seeds and raise cotton themselves, but as it was too cold to plant it out of doors, we planted some in flower pots in the house. We also planted some corn and wheat at the same time to see which would germinate first. In planting the cotton seed the question of climate came up, and the children found the places on the globe where it could be raised very easily. I described a cotton plantation to them, and told of the old-fashioned way of separating the seeds from the cotton. We weighed an ounce of the cotton, and it took ten children ten minutes to remove all the seeds from it. They saw that this would be a very slow process, and suggested the use of machinery. Then I told them of the invention of the cotton gin. The children readily understood that this would make the cotton much cheaper, for less hand would have to be used. The latter part of the week they have spent in
removing the seeds from a quarter pound of cotton and making it into bales. After this cotton was ginned, they weighed it again, and found that it had lost half its weight, that the seeds weighed half.

In the work of weighing the cotton the children have become familiar with the pound, half pound, etc., weights. They are able to tell how many ounce weights are equivalent to a pound, how many quarter pound weights to the pound or to the half pound, and how many ounces there are in each of these weights. I have also spent a little time in letting them count by 2, 3, 4, and 5.

O.K. Miss Lavictoire.

Reading. (a and b)

The work I have tried to do, not identical with Miss Lavictoire's has been in reading. I have been trying to teach them to read and use the words which we have used in connection with our study of farm yard life.

Annie W. Armitage.

Music. (a and b)

The work so far with these groups has been chiefly song singing, though ear training,—the imitation of single or more pitches,—has been a feature and they have been taught to sing the scale, first with words:

"Up in a tree cherries I see,
Some are for you, some are for me."

and

"How we hurry up the hill,
Whoa my horses, whoa, be still," etc., afterwards with the tonic sol-fa names. Several members of the groups who were unable at the beginning to sing at all, are now enthusiastic singers and are willing to sing faithfully to acquire exact pitch.
Having sung a song written by last year's Group III, they desired themselves to write one and chose as topic: "Christmas Eve". The first verse was full of difficulties for them, and after it was completed with the exception of the third line, they worked on that for a part of two periods. The music was offered chiefly by a child whose mother had referred to her as being extremely unmusical, but who has proved quite the contrary.

She came to me alone after the completion of the music, wished to

\begin{music}
\text{The snow falls, fast. The sleigh goes back. The sleigh bells are}
\text{ringing at once. The snowbirds fly around in the sky. And Christmas is coming soon.}
\end{music}

The sleigh bells are ringing a tune,
The snowbirds fly
Around in the sky
And Christmas is coming soon.

We hang up our stockings on Christmas Eve
On Christmas Eve
The moon is shining so bright,
The children are gay
And happily play
As church bells are ringing good night.

Mrs. Kern.
having sung a song written by last year’s Group III, they desired themselves to write one and chose as topic: "Christmas Eve". The first verse was full of difficulties for them, and after it was completed with the exception of the third line, they worked on that for a part of two periods. The music was offered chiefly by a child whose mother had referred to her as being extremely unmusical, but who has proved quite the contrary.

IIIb came to me alone after the completion of the music, wished to surprise IIIa by lengthening the song which they all agreed was too short. They decided to write a second verse, which they completed in that one period. The song as at first written had a musical phrase for "around in the sky" ranging from g above middle c down to middle c, and after it had been so learned an unmusical boy objected that the music was too low for sky, and himself gave the improved phrase.

Christmas Eve.

The snow falls fast
The sleigh goes past
The sleigh bells are ringing a tune,
The snow birds fly
Around in the sky
And Christmas is coming soon.

We hang up our stockings, on Christmas Eve
On Christmas Eve
The moon is shining so bright,
The children are gay
And happily play
As church bells are ringing good night.

Mrs. Kern.
Cooking.

As the previous week's cooking had been very unsatisfactory due to lack of time and the fact that the pudding had frozen so that the children could not eat it, they repeated the making of cornstarch pudding. The first period was spent in learning the recipe and in familiarizing themselves with the written form, so that they might be able to read it in case they forgot. The children also decided on the utensils necessary, and then told with some help the manner of mixing the ingredients. On the cooking day, after reading the recipe, which they did not remember very well, the children went to work with a more definite idea of what the work was, than they had the week before, and the result was that they were able to eat the pudding the same day for their luncheon, and they enjoyed it very much.

Among the things containing starch, the children mentioned the potato, which in the next experimental period they grated in a piece of cheesecloth under water. As the time was over before they were able to examine the contents of the cloth and the substance in the bottom of the bowl, they had to let this go till the next time. While grating the children noticed the water or juice in the potato, and while washing her grated potato, one child remarked that there was scarcely anything else left in her cloth as the starch had been washed out and she could feel it at the bottom of the bowl. She had remembered about this from the time when the group had studied about starch with another teacher, the quarter.

Miss Bachmund.

Experimental cooking. (b)

We briefly reviewed the preparations made of wheat and corn. The children told me these had been previously cooked and remembered
that starch is found inside wheat and corn and a woody fiber on the outside.

The effect of heat on starch was demonstrated experimentally. The children took delight in observing the effect of pouring moistened wheat flour in boiling water. The children told me that these preparations must be moistened or they would be lumpy when cooked. We then talked of corn flour (corn starch), speaking first of corn, its growing, how it is gathered, and the various processes through which it passed before it was ready to be cooked for their luncheon. I wrote on the board the recipe for cornstarch pudding which they read to me very well. I also led them to explain the utensils necessary in preparing the pudding. They also tried to learn the recipe.

We also, later, grated potatoes, previous to demonstrating the presence of starch in them.

Annie W. Armitage.

Sewing.

The children are getting more accustomed to their sewing, and the appearance of their work is improving as well as the rapidity with which they work. One of the younger ones who is especially skilled with his hands was the first to finish his dusting cloth, which he carried with great pride to the teacher in room 8 for which it was intended.

Miss Lachmund.

Art. (a and b)

In connection with the study of the sheep farm, the children were very much interested in the story of the shepherds who, while watching their flocks at night, were surrounded by a bright light and to whom the angel voices proclaimed the birth of Christ. The children were quite
successful in making a night scene with their colored chalks.

Their attention was then called to the story of the Good Shepherd who left his ninety and nine sheep to search for the one which had gone astray. Six of the children were successful in grouping the sheep and almost all of them were able to show the rough ground and the least sheep in the distance on the rocks.

Mrs. Laver.
History--Construction work. (a)

We continued with our talk on plateaus, valleys, plains, and mountains. In giving one probable formation of plateaus we talked of erosion. They were very interested in the subject.

(b)

We have been working on our tents. The poles were grooved in the shop but when the children came to tie them together they found that it was too bulky. They took them back to the shop and cut a deep notch in each stick so that they would fit closely together. Instead of using string to tie them together with they used wire. When this was done they cut paper patterns for the covering.

Miss Lackerstein.

Reading. (b)

They have had to have phonics since their printed lessons have not been ready for them.

Miss LaVictoire.

Cooking. (a and b) 1 1/2 hours.

Vegetables--The cooking of vegetables by means of hot air was demonstrated by baking potatoes for luncheon. This method was found to be quite as effectual in cooking the starch and softening the cellulose as the hot water had been, though it required a longer time.

Cocoa was prepared and the reason for each step talked about.

The work was well done. OK.

Miss Tough.

Sewing. (a) 1/2 hour.

Work Bags--The overhanding of the hems was continued and the stitching made, forming the casing for the drawing string. The children show more of a desire to plan ahead than at first. OK.

Miss Tough.
History. (a and b)

We took up this week the beginnings of trade between the Europeans and the Africans. I told them something of the desire of Europe for the products of India and showed the routes by land, especially the route across the Suez and through North Africa, with especial reference to desert travel. I had a few pictures of deserts and camels to help out. In this connection I told them about Egypt and the monuments that were there then and can still be seen. The pyramids and the sphinx were new to more than half the children. I used the fact that deserts surrounded the valley of the Nile as reason for the culture of the Egyptians not spreading farther among the native Africans. We connected Egypt with the story of Moses and Joseph.

We have spent some time in writing and another period on the map, which cannot yet be sketched in anything like its right proportions.

I number I have given them columns of three figures to add, having them write the figures and add independently. The carrying is difficult for most of them. Only one child could write 10,100 accurately.

Miss Runyon.

Science. (a)

Va and b spent one half hour together in which Vb acted out the provisioning of their ship and the setting out from the harbor. The group acting as audience guessed the parts played by the children. Then Va took their places and took their turn at acting the same thing. The difference between the captains of their respective ships made the performance of Vb where Kent was leader a decided success, whereas Harley failed entirely. As a result Va were willing to spend some time in preparation for their respective parts. They worked out the points
needed for the keeping of the log, and the method of getting the speed
of the ship. They began to make the glasses for timing the casting of the
log ship.

Miss Camp.

Science. (b)

They have done about the same work as Va, with the addition of one half
hour longer on naming the parts of the ship, and the way of setting the sail
the sails to sail before the wind and with the wind at right angles to the
course. They saw that the ship could not sail directly toward the wind, but their experience told them that the boats were able to sail quite close to the wind.

Miss Camp.

Number. (a and b)

Their number work has consisted in finding out how far a ship traveling so many knots an hour would go in 2, 3, and 4 hours. The number of knots was varied from 2 to 10.

Miss Camp.

Construction Work. (a)

They finished their snow shoes, and some have finished making their rulers. Others have begun to make a boat.

Miss Lackeusteen.

Cooking. (a and b) 1 1/2 hours.

Dairy Products. Milk.

A recipe was given for the making of baked custard and the children were asked to think of some plan by which it could be baked without having its temperature high enough to toughen the egg albumen.
Experiments were made some time ago showing that water did not rise to a higher temperature than 212 degrees. Remembering this the children thought that by setting the dish of custard in a pan of water the temperature could be kept lower than if it came in direct contact with the hot metal of the oven. This may have been suggested to some of them by observation of the method employed at home.

The cost of materials used by the class was calculated.

OH.                                      Miss Tough.

Shop. (a and b)

They completed their snow shoes and talked about boats.
They prepared the stock for the boats from rough lumber 10 by 4 by 2". They had considerable trouble in sawing this lumber. They finally got them planed on the four edges, then drew a line parallel to the long edges, bisecting it. They also drew a line parallel to the short edge 3 inches from the edge. The children were asked to bring in drawings of the boats as they wished to make them. Only two remembered to do this. They have all promised to bring them next time.

Miss Jones.

Textiles. 1/2 hour.

Pin Cushion Covers---The work reported last week was continued.

The pattern weaving seems almost too difficult for the majority of these children as they need a great deal of help.

OH.                                      Miss Tough.
History. (a and b)

We have this week taken up briefly the story of the return of Smith to England, the administrations of Percy, Lord Delaware, and Sir Thomas Dale. The children were surprised to find that even after Delaware had established a new order of things and restored order in the settlement, Percy in his second attempt was unable to enforce the laws and control the colony. They asked whether he had not had the same power which Delaware had possessed, and why, if he had, he did not make as good a governor. They were reminded that in their group they found one child a better leader than another, although the condition under which they acted and the authority they possessed were the same. They were led to suggest the abolition of the common kettle and the establishment of a system of land tenure, before they were told of the reform instituted by Sir Thomas Dale.

We have taken up the cultivation of tobacco, going back to its introduction into England by Sir Walter Raleigh, the growing demand for it there, and the necessity in Virginia for some development of the country's resources in order to satisfy the expectations of those in England who were interested in the colony.

Miss Hoblitt.

Reading. (b)

All but one in this group can now read fairly well. They are taking stories which are first read silently, and then two or three read aloud what they have read. Each child is keeping account of the number of chapters or pages he reads at home and reports on it once a week.

Miss Runyon.

Science. (b)

This group is making a sand map of the Virginia coast from the present southern boundary of Virginia to the mouth of the Susquehanna.
River. They used the scale of the map consulted to find the number of miles this would represent. They then took five feet of the table to represent 200 miles, this falling a little short of the distance they wanted to show, but this was chosen as an easier scale. Then they divided the map into strips of 40 miles in length, and divided the table into foot strips to correspond. Each constructed his own strip, paying particular attention to the character of the coast line and the plan of the rivers. In order to show how far the rivers are navigable by large ships, one of the children is making little wooden boats, which are to be taken to the limit of navigation in each river. Some of the others are making small houses to locate the English settlements, and others are making wigwams for the Indian villages. They are to bring from home leaf mould for the fertile valleys, and twigs of pine and oak to show the locations of the forests. They discussed how much the character of a river could show the character of the country, and decided that unless they knew the character of the soil, what they had previously said—that a winding river showed a flat plain—is not always true.

Miss Camp.

Number. (a and b)

They are working on the multiplication tables. They have used the inch blocks first to count rapidly, and put these in the form of tables up to the sixes. In forming a square, I got them to define it in terms of angles and sides, and to compare it with the rectangular shape. We have made all combinations, dividing a square of blocks into fractions, adding and subtracting from the whole, etc. The aim is to gain facility so that their formal multiplication shall be easy.

Miss Runyon.
Cooking. 1 1/2 hours. Colonial Cookery.

The preservation of meats was talked about and different methods were suggested by the class, such as smoking, salting, etc.

The conditions of life making this work necessary were discussed and brought forth some interesting thoughts. The corning of beef was the practical work and this involved accurate weighing and measuring of meat, water, salt, sugar, and salt petr, which the children enjoyed greatly.

The connected number work was the changing of the recipes for cocoa and hasty pudding from individual to large amounts, as the work was to be done by two children for the class.

\[ \text{Miss Tough.} \]

Shop. (a)

Most of the children of this group are working on their tops. The cross pieces for spinning the top were cut 2 1/2" x 1" x 1", and a whole was bored for the stem of the top to go through. Some of the children were obliged to do this several times, as we were working especially for accuracy. On the cross piece they drew lines 1 1/2 inches from the end, and a quarter of an inch from the edges they drew a line in order to make a 1/2 inch square at one end. It was some time before the children got this accurately. Most of them have completed it satisfactorily now.

\[ \text{Miss Jones.} \]

Shop. (b)

The children of Vib are working on various things. Beth Rusted is making a bracket. She spent considerable time in getting the brace and pieces squared and putting the drawings on, with a small hand saw cutting them out, and filing them so that the two pieces would be alike. They are ready to put together next time. Kent Chandler wished to make a doll table for his little sister. He wished to finish this to take home Saturday, so he stayed after school and worked half an hour,
Group VI

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doing very satisfactory work on the doll table. A part of the children have been working on the doll house, and the rest finishing their tops.

Miss Jones.

Group VII

History.

Group VII has spent one half hour on their history. I began the work on the Revolutionary period. We took up the Navigation laws and in order to make it concrete, each child selected an imaginary captain, and traversed his “trip from America to some foreign port and back,” giving the products with which he would load his ship in America and the products which he would select in the foreign port to bring back with him. This furnished a review of the occupations and productions of New England, and the Middle and the Southern States. I then told them of the attitude of England toward her colonies at that time, viz., that the colony was supposed to exist for the good of the mother country. We discussed at some length how England would be able to make money out of the colonies, and then followed the Navigation laws. Each one told of the effect of these laws on the prosperity of his captain.

Miss Bacon.

German.

We learned the first three verses of Erlkönig. They have copied it on the board and have built sentences on the new words. They are showing some improvement in constructing their sentences. A trial at dictation proved that half of the class are in need of phonetic training and I am going on with this work now even if we do not progress so rapidly with the German.

Miss Teller.
Literature.

Reading and discussion of Howard Pyle’s "Merry Adventures of Robin Hood". Reading from the ballads from which the Adventures are taken. Memorizing of Sir Walter Scott’s Allan-a-Dale. Preparation for the writing of a story "The finding of the fox cubs in Sherwood".

Mrs. MacClintock.

Science. 1 1/2 hours.

They have spent the time in working on their maps of the Hudson River valley. In spite of the time spent on the nature of a scale of a map, three children could not readily use a new scale, and more time will have to be given to the very simple ratios. Most of them have the idea very clearly, but have no method to use in locating principal points by measuring on a fixed line of the map and then changing and locating that point on the other map. Two of them preferred to work out the ratio between their map and the hand map. This involves the use of thirds.

Miss Camp.

Number.

They have had one hour in number work. The children continued their work on the drawing to scale for one half hour. The other half hour was spent in looking over the problems which they have made and which have been printed for them.

Miss Bacon.

Manual Training.

They are still working on the furniture of their colonial room. They have the stone ready for the fire place, and have completed the four-post bedstead. They are now working on the clock, the spinning wheel, the table and the chairs. The children have made all the suggestions themselves, and have brought in drawings of what they wanted to do. They will make the feather bed and the bedding at home.

Miss Jones.
History. (a)

The class gas written connected accounts of Cortes' movements up to his arrival at Cempulla. These were corrected by the pupils and in part rewritten. They spelled the difficult words several times. Individual reading. Cortes' course from Santiago to the coast has been traced upon the map. The class is now drawing an outline map of Mexico which will contain the important natural features and on which Cortes' movements in Mexico will be traced and the places where important events took place will be located.

B. F. Armitage.

History. (b)

A general survey of the industrial life in a village community has been finished. The study of the political life as brought out in studying the duties of bailiff and reeve. Work in studying paragraphs; correcting the same and rewriting. Spelling of difficult words in connection with difficult written work.

The following books have been consulted in preparing the work on the early English villages: Ashley's English Economic History; Traill's Social England, Vol. 1; Gibbon's Industry in England; Rogers' History of Agricultural Prices in England, Vol. 1.

B. F. Armitage.

Literature. (a)

Same as for Group VII.

German. (a)

They have had three verses of "Erlkönig". Besides making original sentences in German they have conjugated the verbs and declined the nouns. There are two in the class who do not seem to be able to keep up with the rest in regular dictation. On the whole there is great improvement.
in writing from dictation.

Miss Teller.

German. (b)

This group has nearly completed the second act of their play. Some of the boys have spent time out of school in reading and studying the first act with a view to reciting it in class. The spelling has been from the second act. The words have been grouped so as to bring in their connection with as large a vocabulary as possible.

Miss Teller.

French. (a and b)

As a sequel to the series of lessons on ships the children have been learning the "petite navire". The continued story which VIIIb have been reading for some weeks has been finished. Both groups have begun the story of Jeanne d'Arc.

Miss Dey.

Science. (a)

We have gone on with the experiment described in the last report. They filled their molds with lead, and by weighing the mold with the lead and without it they found the weight of a cubic centimeter of lead. The results were not very accurate. Our work this week was almost entirely the application of the principle they found in the experiment. They found the weight of certain boxes full of lead, silver, gold, mercury, etc., by finding the cubical contents and knowing the specific gravity. I did not give them the term "specific gravity", but stated the problems by saying that iron is 10 times as heavy as water, etc.

The latter part of the week we spent one half hour on the planets and the moon and the sun. We shall bring in the causes of tides next week.

Mr. Gillet.
Science. (b)

We continued the work on the three experiments begun last week. Two obtained a steady enough stream of hydrogen to light the jet and collect the water formed. When I asked one to taste the water he had made, he was much disappointed, for the amount of water generated was very small. Calcium chloride was used instead of acid in the apparatus where the jet was lighted. The distilling of the mercury was to be carried on without help except as to the amounts of mercury to be used.

Miss Camp.

Science. (b)

The work of the first week has been continued in both shop and class room. In the shop four of the boys are continuing the work with the pile drivers. The rest are experimenting with the pulleys, the fire drill, and the friction of sliding surfaces. The members of the class have made their apparatus, and the pupils are changing about.

In the class room sometime has been spent in spelling, the remainder in studying the foot pound and friction. In the case of the foot pound many problems have been worked involving many things, which are common to the children, as the raising of bricks, and hay, to the top parts of the building.

Guy F. Wells.

Number. (b)

Most of the time has been given to the four fundamental principles. Examples have been abstract and concrete and much individual work has been done to secure correct form and methods of work.

Mr. Armitage.
Sewing. (b) Girls. 2 hours.

Aprons—The ruffles were gathered and sewed in place, and the lining for the insertion cut out. The interest in the work grows greater as the garments near completion.

Miss Camp.

Group IX.

History. (a and b)

Group IX has spent a part of their time in school as study hours, as during this time I can give them help in their methods of study. The recitation time has been given to a discussion of how the United States has obtained possession of her territory. It was necessary in each case to give a little history showing how events led up to the purchase or annexation of the different portions.

Miss Bacon.

English. (a and b)

Each class has had an hour and a half of English work. One half hour was spent in punctuation exercises. Sentences were dictated which they wrote down and afterwards punctuated. One half hour was spent in writing brief autobiographies as an exercise in original composition. One half hour was spent in reproducing part of one of Hawthorne's Tanglewood Tales, which I read in class. This reproduction work is always done on Fridays.

Miss Bruere.

Science. (a)

Last week we combined oxygen with certain metals. This week we derived oxygen from certain combinations, notably mercuric oxide or
red oxide of mercury and lead oxide. In the first case, that of the mercury oxide, the pupils heated the oxide on test tubes made of glass tubing. Without suggestion they tested the gas coming off, and found that is was oxygen. They got the oxygen from the lead oxide in another way, by using a blow pipe. The hot flame of gas was played on the lead oxide (they used the reducing flame) and small globules of lead soon appeared. The class had some difficulty in explaining the process without help. I had to tell them that the hot hydrogen of the gas united with the hydrogen oxygen of the lead oxide and left the lead. From these two experiments they have got some idea of the chemical union of elements. We discussed the symbols used to express the different substances we had used, especially those used in the last experiments. The children got the idea of the symbol quickly, and could explain the meaning of any symbol I gave them.

Mr. Gillet.

Science. (b)

On Tuesday we went to the Field Museum, and saw the fossils and casts of fossils of the geological periods after the Carboniferous. Our time to stay there was too short to get more than a general idea of the characteristic animals of those periods, but perhaps it is all the pupils of this age need.

On Thursday we took up the study of glaciers. At first I asked them what their ideas of a glacier were. I found that most of the pupils thought that a glacier is a piece of ice sliding down a mountain. We could not go very far in the explanation of glacial phenomena until they had a better idea of the nature of a glacier. So we began to read in class descriptions of glaciers in the various text books, and to look
at all the pictures of glaciers we could find. The pupils brought some books which are interesting in this connection. They will read some of these at home.

Harry C. Gillet.

Mathematics. (a and b)

We have been working in fractions. We have nearly finished our theoretical discussion, which is fairly well understood. We shall continue it for a day or two longer. The theoretical work was taken up before the practical, because they have had enough practical work already to make it understandable. Mr. Osborn.
Mathematics.

They have been doing the same work as Group IX, with some work in squaring polynomials in algebra besides. Mr. Caborne.

Shop—Club House.

The work on the club house is being rapidly pushed to completion by Group X. They have completed working drawings of the stairway, front door, and window trim, and interior finish, and so thoroughly understand what is to be done that in the shop all the different structural parts of the stairway have been taken charge of by the individual girls members of the class, each being responsible for whichever part is selected. The boys have taken charge of the front door, made the necessary drawings, cut the stock, and are well on toward its completion.

They are already considering what difficulties will be met when they put on the hinges and hang the door in place.

On the stairway the different structural parts such as the stringers have been carefully marked out to show the proper size of treads and risers and the upper and lower ends marked to make the proper connections with the adjoining parts, which may be either the first part, the landing, or the second story floor. The four stringers have all been nicely sawed from 2" by 12" planks, and are now ready to be put up. The joists, posts, and framework of the two landings are also nearly ready and work will now commence on preparing the treads and risers.

All the pieces and parts will be made separately in the shop from the drawings and by the individuals, then assembled in the club house by ceilings the entire class. Then will follow the covering of the fixtures and walls with the flooring which will be comparatively quick work. The finish of the mantel piece with shelf and the trim of doors and windows with
the bricabac shelf on brackets extending quite around the room will make the house ready to receive the furniture which the children are anxious to make and should now be planning. All the children are becoming enthusiastic as they begin to see the vision of the completed building and are lending their best efforts in its behalf.

Sec. J. Fowler.

General Exercises.

On Wednesday the program consisted in reading of papers by the children, the papers being selected from the different class work of the various groups. Hermann read a long paper which he had finished before Christmas giving the history of the conquest of Peru. Eugenia read a report of a series of experiments which have been carried on in science during the fall. Since Mr. Fowler has been able to give help on the club house, there has been a noticeable awakening of interest with regard to the club.

O.K. Miss Bacon.
The work for the week has been the furnishing of the kitchen. The children made a table and two chairs. Part of the wood used for them was sawed by the children. From direction the children built cupboards with the blocks. In the next period they made cupboards for their play houses out of spool boxes, adding paper for shelves and door. The older children did the measuring for this work. Then with clay we modeled dishes, kettles, etc. that belong in the kitchen cupboard. We have been playing games suggested by the snow and the cold weather, such as snow man and skating. Then with the blocks we built toboggan slides and warm houses.

Miss Dolling.  O.K.
Social Occupations. (a and b)

The children have continued the work on the cotton plantation. This week they baled the cotton they had ginned and got it ready for shipping to the factory. In order to do this they had to cut four-inch squares of heavy cloth. They first cut the squares out of paper and worked out the problem for themselves. Then they sewed the cotton in these squares of cloth and tied them with a string. Next they are going to ship it to the factory in the north. They have decided to send some of it to a cloth factory and some of it to a thread factory. I showed them a case of samples of cotton in its various stages of manufacture from the raw cotton to the finished product. We talked about it and afterwards I tried to get them to tell me about it without looking at the samples. At first they could not do this so we had to repeat the whole lesson, and the second time they seemed to have the process. To-day they commenced to make little combs for combing the cotton, as this is the first step after reaching the mill.

During the week they have been playing store several times, using the different weights and measures. First they made a list of the things that we buy by the pound, then those bought by dry measure, by liquid measure, and by the dozen. We did this so that when they played store they would know what set of measurements to use. At first they played the game without using money, and after they were able to weigh and measure easily they used the imitation money. They have gone on with the record of the work, which is printed for them from time to time and which they read.

Social Occupations. (b)

III b made combs to comb wool out of pieces of wood two inches in length with nails one fourth inch apart. They also had practice in phonetics, both in reading and writing.

Miss LaVictoire.

Miss Lackersteen.
Experimental Cooking. (a) 1 hour.

The children continued the experiment with the potato, examining the cellulose left in the cheese cloth and the starch which had been washed out into the bowl. They insisted that the substance in the bowl was starch, but subjected it to the action of heat as they had previously done with the wheat and corn starch to be sure, and found that the result was the same. The cellulose was boiled at the same time, but as the period was up before it was quite cooked that they had to leave before they had time to appreciate fully the change that had taken place. I was accordingly surprised that they were able at the next period to tell a new member of the group what had happened, including the rest of the experiment with potato. The children were shown potato, corn, and wheat starch through the microscope which interested them exceedingly. They drew some of the different starch grains on the board.

In the practical cooking for one hour, followed by luncheon, the children cooked flaked wheat.

Miss Lachmund.

Experimental Cooking. (b)

This week we continued our work with the starch found in the potato, showing the effect of heat on the starch. The children again observed that the effect of heat on the woody fiber was not the same. We also talked of flaked wheat, learning the recipe preparatory to cooking it for luncheon the next day.

On Friday we examined the starch grains of corn, wheat, and potatoo under the microscope, and the children then drew on the board what they had seen. The use of the woody fiber was dwelt on, the children illustrating with the potato, grains, celery, and twigs.

Mrs. Armitage.
Sewing. (a and b) 1 hour.

A number of children are absent, so that those who finish their dusters are helping on the holders of those who are out, in order that all may begin the covers for the cooking books as soon as possible.

Miss Lachmund.

Art. (a and b)

They had a figure pose dramatization of the picking of cotton. The result was not as successful as some of the earlier poses, perhaps because they have not been drawing figures for some time.

Miss Cushman.
History.  (a)  Last Week's Report.

IVA have been at work this week on their tents.  In addition to this they have developed the idea of barter, and have had Bible stories illustrating the hospitality of the nomadic people, the advance made in the preparation of food, the settlement of disputes by the payment of an indemnity, the care of flocks and herds, and the importance of the wells of water.  The children abandoned of their own accord the tribe organization which they carried on last quarter, in favor of that of a patriarchal family.  When they talked over their new plan, it was difficult to find anyone who was willing to take the part of father in the patriarchal family, but they voted that the one who was chosen should not be allowed to refuse the honor thrust upon him.

This Week's Report.

The children have spent a large part of their time this week on the tents which they are making.  The dowels for these were sawed and notched in the shop, then tied together and covered with burlap.  The children first cut a pattern and then cut the material and sewed it together.  They have also been dramatizing their Bible stories, and are developing a great power in the use of pantomime.  They have begun to demand reading in their history time.  The two were therefore combined for one period by making a list on the board of all the articles of food etc. used by the nomadic peoples but not by the cave men.  The children made the suggestions and the teacher did the writing.  One period was spent in reading and talking about the domesticated animals used by the nomads.

Miss Hoblitt.

Reading.  (b)

In reading IVA have had to have phonics as their printed lessons have not been ready for them.

Miss LaVictoire.
Cooking.  1 1/2 hours.  Za and b)

Vegetables—All the work which has been done with potatoes has been reviewed and was found to be quite clear in the children's minds. For luncheon potato cakes were made.  

Miss Tough.

Sewing.  (a and b)  1 hour each.

The majority of the children in both groups are still sewing on their bags. Group IVb which is inclined to be the less industrious, worked more earnestly one day when they were told a story, the condition of their having a story being that the moment that any member of the group should be disturbed by the tale so that he found it difficult to work, the story should stop short.

Miss Lachmund.

Sewing.  (b)  1/2 hour.

Work bags—The majority of the class began work on the initials on the sides of the bags. They are drawn in pencil and outlined. The letters are first drawn on paper to ensure the correct size and form, then the position which they are to occupy is found, and a duplicate of the initials made there. They are then outlined in Bulgarian cotton.

This all requires very careful work and is also work which the children enjoy doing.

Miss Tough.

Art.  (a and b)

This group made a group in clay. The subject was a shepherd with his sheep lying beside him. One of them posed for the class. They had already modeled a sheep from a cast and remembered the form. In doing this work the children first make a clay slab and make a figure on this in full relief. It was noticeable that Luther made the best group this time. Within the last week Luther has awakened.

Miss Cushman.
Manual Training.  (a and b)

They have completed the spindles described in the last report. They have been preparing the tent poles to be used in the other class. They measured these poles with the dowel rods and cut them. They tried tying them withoutnotching them, but found that this did not work, so they cut deep notches in three inches from the end, and made narrow notches all around the rods to hold the string.

Miss Jones.
History. (a and b)

In writing their account of Prince Henry many words were misspelled even though they had them put on the board, and had been allowed to look at them when writing. These were such words as world, because, boat, about, built, etc. They were written on the board by the children who volunteered, and corrected when wrong, then the whole list of twelve was dictated to them. This was the third time they had written them. Even then none of the children got all right, and two or three were unable to write a third of them. The children have shown a good deal of interest in writing, and have volunteered to take things home and copy them or finish them.

In the discussions we have taken the reasons why Prince Henry's men did not get into the interior of Africa, because of the lack of navigable rivers, and the desire to push on the discoveries. With a small paper relief map we picked out the mountains, and deduced the effect on climate of the mountains along the coast, accounting for the desert of Sahara by the prevention of rainfall.

We followed briefly the slow advance along the coast until Diaz finally rounded the cape, and made the discovery of the route to India.

In reading we have spent the interval before the arrival of the Robinson Crusoe books, in reading stories from the school stock of readers. Each child was allowed to select a story to read by himself. Then all listened while one read aloud.

Miss Runyon.

Reading. (a)

They have been having work in phonics because their Robinson Crusoes have not come.

Miss LaVictoire.

Science. (a and b)

V and b have continued writing their ship log, as I found that it contained sufficient material to keep their interest while it gave them
opportunity for the kind of number work that they needed, — the addition of columns, — and considerable practice in writing. They are to keep the log for one day and then write up the log sheet in the log book according to the common practice. The adjustment of the wind and weather and the art of sailing have proved rather difficult to three in the class. For all of them the simplest combinations have been suggested, that is that they should sail before the wind for most of the day, and when the direction of the wind is changed, the rate of sailing is lessened, the amount being quite arbitrary.

Miss Camp.

Cooking. (a and b) 1 1/2 hours.

Dairy Products. — The general principles for making boiled custard were talked over and the children were able, from the work with baked custard, to tell the way in which it should be done. The work was of such a nature that some experience was necessary to secure the best results. Many of the children cooked the mixture a few minutes after it should have been removed from the fire, and the result was a curdled custard. It was decided to repeat the work next week.

Miss Tough.

Textiles. (a and b) 1/2 hour. Cushion Covers.

The work of last week was continued. One child finished his square and was so pleased with the result that he carried it about with him for three days.

Miss Tough.

Textiles. (a) 1/2 hour.

The work of the pin cushion covers is progressing very slowly.

Miss Lachmund.

Art. (a and b)

They have made some illustrations of the "King of the Golden River" by Ruskin. They modeled a mug with a face and a leaf on it. Another day they made an illustration in color of a valley. This will be followed later by pictures of mountain scenery in which their first impressions will be accepted.

Miss Cushman.
History. (a and b)

We spent one period in review, one in writing, and one with Weedrew Wilson's article in the January Harper's, brought by a member of the group. The children found the portraits and the quaint signatures of some of the Elizabethan personages of whom they had heard, and read a part of the account of the founding of Jamestown. The remainder of the time was spent on the administration of Argall and the events which led up to the establishment of representative government in American Virginia.

Miss Hoblitt.

Reading. (a and b)

One hour a week is given to reading with me. In VIb all the children can read simple stories quite independently, except Leonard, who is independent but slow. The emphasis has therefore been placed on expressing the thought so that others can understand easily. We have had stories part of the time, which they first read over silently and then aloud. They are using "Great Americans for Little Americans" as a reading book, and after a story is finished I have them select the gard words to spell.

Each child is reading at home and reporting to me once a week the number of pages or chapters read.

In VIa the same general plan is followed, but the children require more individual help.

Miss Runyon.

Science. (a)

After discussing the North American ice sheet and the effect of it upon the soil and the geography of Chicago, the children traced out on the map the path of the French explorers down the St. Lawrence to the Mississippi. They then made maps in the sand of the great lakes.

In taking up the geography of Virginia, the children at once suggested that it had never had a glacier. From that they worked out its
geography,—that it would have no lakes and no boulders. They talked about the character of its lowlands and the work of its rivers as influencing the soil.

Miss Hill.

Science. (b)

They continued the construction of their map, the points taken up being the characteristic features of a river basin, using the James river. I read them Captain Smith's description of the river which he sent home in a letter to England.

Miss Camp.

Number. (a and b)

We have applied the multiplication tables to problems where two or more numbers are used as a multiplier. The method has been to show that the sum of the products obtained by multiplying by the parts of the multiplier is the same as the product obtained by multiplying by the whole number at one time. I have tried to show the reason for carrying.

In taking the tables we are now focussing attention on the parts of the tables which must be learned; e.g., I showed them that they knew all less than 7 x 7, because these combinations occurred in the earlier tables. They would know 7 x 10 and 7 x 11, so there remained to learn only 7 x 7, 7 x 8, 7 x 9, and 7 x 12.

Miss Runyon.

Cooking. (a and b) 1 1/2 hours.

Colonial Cooking.—The difficulty of obtaining raising agents in colonial times in comparison with the present was discussed in connection with the making of pancakes for luncheon. The method of obtaining yeast was talked about and, as this was decided to be too long a process
to make use of in the time at command, it was decided to use eggs as the raising medium.

The mixing and baking of the batter were found very interesting and left no time for a thought outside themselves.

Miss Tough.

Art. (a and b)

They are producing the forms of various animals in clay. The work of this group requires accurate reproduction of the subject.

Miss Cushman.
History.

After finishing the Navigation Laws, we reviewed the French and Indian war, which they had last year with Miss Runyon. They saw what this war taught the colonists, namely, their own power, and gave them military power and training. Then the question came up of who should pay for the war, and the children read in Guérber's history of the Stamp Act and its results. As much as possible I am having them do their own reading. The map has been referred to and as much geography as possible brought in. Generally now, I draw a quick map of the eastern part of the United States with strong characteristics of the coast line, and the children place on this the places which we are going to talk about.

O.K.

Miss Bacon.

German.

We have had more spelling and conversational idioms, for instance: Ich habe die ganze Nacht gut geschlafen. Sind Sie schlafig?

Miss Teller.

Science.

Some members of the group still experience some difficulty in changing the scale of their map to the scale of their larger maps, and more time will have to be given to this in the number classes. The changes involving the fraction 1/3 seem to trouble them more than the fraction 1/4.

Miss Camp.

Number.

The children have cut the covers for their arithmetics and have bound the problems which were printed for them. They have spent one half hour working the problems in class, and most of them have taken them home and have worked on them there.

Miss Bacon.

Cooking. 1 1/2 hours. O.K.
Cooking. 1 1/2 hours.

Fish. — A whole lobster was examined, then the shell was removed, and its organs and their location examined, and compared with other animals which the class has worked with.

For luncheon lobster salad with mayonnaise dressing, with cocoa was prepared.

The amount of materials and cost of the same for the class were calculated.

Miss Tough.

Art.

They are reproducing directly from the cast in clay. One of the number is now building up a small reproduction of the bust of St. John.

Miss Cushman.
History.  (a)

The class has nearly completed the map of Mexico, including the outline and the natural features, and now the course Cortes took will be traced. Two recitations have been given to reading Cortes' voyage to Tobasco and the two resulting battles. The pupils reproduce these accounts in the form of a written story.

B. F. Armitage.

History.  (b)

Individuals of the class have written on assigned topics relating to the village community. These papers have been corrected and rewritten. The spelling has been incidental to the written work. The class has taken some more general features preparatory to taking a view of the whole nation.

B. F. Armitage.

German.  (a)

Group VIIIa have the beginning of the geographical idioms, e.g. Die Stadt Chicago ist in Illinois. Der Staat Illinois ist in den Vereinigten Staaten. Die Amerikaner wohnen in Amerika.

Miss Teller.

German.  (b)

They are still on their play. They are memorizing the first scene and are learning Mime's song and Siegfried's song.

Miss Teller.

French.  (a and b)

These groups have begun the story of Jeanne d'Arc. This week they have made a map of France to use in connection with their history. Incidentally they have learned the names of the surrounding countries and their inhabitants, the cardinal points of the compass, words for the compass, etc.

Miss Dey.
Science. (a)

This week we studied the tides. I used the tellurion to give them a definite idea of the way the earth revolves and rotates. They had some idea of this before, but very indefinite. Then I showed them how the moon goes around the earth as the earth goes around the sun. We talked about the effects of gravity on the earth and the moon, and what would happen if gravity could be removed. When they realized what gravity means, they began to ask why the earth does not fly into the sun and the moon into the earth. I tried to show them that the tendency of the earth to go off on a tangent to its circular course almost exactly balanced the tendency to move toward the sun directly. I showed them that the earth is really being pulled toward the sun, but that it does not get much nearer to the sun.

We worked out the cause of the tides from the differential attraction of the sun and the moon on the opposite sides of the earth. They saw that the sun had more to do with the tides than the sun, because it is so much farther away, though it is of greater mass.

On Friday evening we went to the University to look through the telescope at the moon. Dr. Laves was there to explain to the pupils all they wanted to know. The observations were very interesting to them, and they were able to tell me a good deal about the moon on Monday. We shall go on with the theory of the tides next week.

Mr. Gillet.

Science. (b) 1 1/2 hours.

In order to give a little more definiteness to this group's ideas of the different forms of matter and to give them a little idea of combustion as a source of heat, the experiments that were given them last week have been continued. One half hour has been spent in discussion of the experiments carried on in the hour period.

Miss Camp.
Number.  (b)

The class has taken concrete examples in the fundamentals, with oral problems from their arithmetic.

B. F. Armitage.

Sewing.  (b) Girls.  2 hours.

Aprons---The button holes were made, the buttons sewed on, and the aprons completed. On Friday the children wore them to school, taking pleasure in the result of their work.

Sft.

Miss Tough.
Science. (a)

Our work this week has had to do with carbon dioxide and hydrogen. The class had previously made carbon dioxide, and so were able to go directly to the discussion. I told them how soda water is made, and how the carbon dioxide is used for other things, especially plants. Then we took up the preparation of hydrogen. We prepared it from zinc and sulphuric acid, two pupils working together. I did not have to tell the class so much about the arrangement of the apparatus this time, though they still ask more questions than are needful. They were unsuccessful in making in hydrogen burn in a jet, though they made it burn in a test tube. They tried to make hydrogen soap bubbles, but this was not a success, probably on account of the irregularity of the flow of hydrogen. Next week we shall try these experiments again. We shall have a smaller jet of hydrogen, and to get a more steady pressure for the bubbles, we shall have the gas bag filled with the gas.

Science. (b) Mr. Gillet.

We have spent most of the time this week in reading aloud in class Nansen’s account of crossing the inland ice of Greenland. Part of the period was spent in reading in succession, and then the pupils told what they had read or wrote an account of it in their note books.

Mr. Gillet.
Science.

Laboratory work on the internal structure of the clam was taken up and then the relations between the structure and habits of the clam were discussed. Next the mollusca as a class of animals was undertaken. Specimens of clams, oysters, squids, snails, crepidula, sycotyphus, etc. were passed around and drawings were made of several of the typical mollusca. During their study hour the children wrote an essay on the habits and \textit{structure} of the clam.

\textit{Mr. Garrey.}

\textbf{Club.}

The club had invited a woman to talk to them on parliamentary law. As she disappointed the club, we asked Mr. Osborn to take her place, which he did. The children decided that they would conduct their meetings in an extremely formal way, observing all parliamentary law. They asked Mr. Osborn to bring in a model constitution which he helped some children make out last year, and which they wished to discuss and copy as far as was practicable for the society.

\textit{Miss Bacon.}

\textbf{General Exercises.}

Last week Mr. Fowler gave a very informal talk to the children about his experiences while in Cuba during the late war. The children were so much interested that they stayed half an hour afterwards asking \textit{questions}.

\textit{Miss Bacon.}
After completing the outfit for the kitchen we took the dining room as the next room to furnish. We talked about the need of having the kitchen and dining room close together and about the articles for furniture for the dining room. Then following the directions of the teacher the children with the blocks built the furniture. The children (especially the older ones) are becoming more apt in the use of the hammer and saw, so that they can do more of the work themselves. They have spent considerable time on the dining table and the chairs. After sawing and putting material together they stained them brown. Then they cushioned the chairs by putting a little cotton on the seat and covering that with leather and paper. The children were delighted with their results.

For a time I have decided to take one period a week to have the children illustrate our stories. This week the older ones illustrated the story of King Midas, using the water color paints. The younger children illustrated the story of "The Little Red Hen", using the crayons. Before any material was given the younger children, we went over together the various parts of the story that we could draw, and after this they were ready to go ahead with the drawing.

Miss Dolling.
Social Occupations. (a and b)

This week some new children have come into the group, and have had to review the work of the cotton plantation several times for their benefit. We have also played games with the weights and measures so that they might learn them as soon as possible. We have carried the cotton through the different processes and are waiting for the little trains which are being made in the shop, so that we may transport it from the factory to the wholesale stores.

This week we have spent some time in reading. The children have learned the sounds of about eight consonants and are able to give the sound of the letter when they see it written and can write it when I give them the sound. They have continued their record of the work done on the sheep farm, and have read a short story about cotton.

Miss LaVictoire.

Cooking. Ex. 1 hour. Luncheon 1 hour.

Groups IIIa and b as a rule work separately in the experimental period, but occasionally they join together when there are altogether but four or five present, or when the work for both divisions is experimentation which each child performs individually. This has been the case this week.

We started a review of the dairy work at the request of the group teacher, since the results of the former work had not been satisfactory. After mentioning the things that come from the dairy, including butter, and telling from what butter is made and how milk is measured, we reviewed the measures, - the gill, half pint, pint, and quart. The new comer from the kindergarten was given the measures and the water to prove the relations between the measures experimentally. Then one child was chosen to measure a quart of milk which was allowed to stand in order that the cream might be skimmed off the next day. Each child made a
guess as to the amount of cream that could be taken from a quart of milk, and at the next lesson they compared their estimates with the actual amount taken from the milk. Their guesses ranged from two to five gills, while the true amount was one gill. The children were able to recall the method of making butter. On being told that each child was to have a gill of cream of which to make butter, they calculated the number of quarts of milk which must be allowed to stand in order that each might have a gill of cream. In order not to waste milk, however, pure cream was ordered. As the cream could not be procured for that period, one child was chosen to measure two quarts of milk out of which to make cheese. To the milk was added two tablespoons of rennet to thicken it. We used a thermometer to see that the milk was about the temperature of the body. Evidently the children had used a thermometer, for several of them were able to read the height of the mercury in the tube. The milk was set aside and the following day the children noticed that it had thickened, and learned that the coagulated portion is the curds. They noted too the liquid which was around and under the curds, the whey. On considering the difference between the coagulated milk and cheese, and the means by which this could be made into cheese, one or two children suggested straining. So the curds were poured into a cheese bag and the whey allowed to drip. The children found that one quart and a gill of whey had come from two quarts of milk. The cheese was examined and the children decided that salt must be added, so one child salted the cheese while the others went to work on their butter, shaking the cream in bottles.

There was no cooking this week. For lucheon the children had junket which they relished on the whole much better than any other class has, perhaps because they were ignorant of the preparation of rennet.

Miss Lachmund.
Sewing. 1 hour.

The children are continuing their work on the holders, dusters, and scrap book leaves. The under sides of the holders are being basted to the felt squares now, and the children are doing this with greater accuracy and ease than was expected. Several new children from the kindergarten have entered Group III, and these are working on the leaves of the scrap book, as that is the simplest for them.

Miss Lachmund.

Textiles, 1/2 hour.

Art. (a and b)

The children were sent to the blackboard for a lesson in visualization. Familiar objects were shown them for a moment and then withdrawn. They were then asked to draw. The first attempt was not very successful, but as soon as they found that they must give their full attention while the object was before them, they did better. Then the plan was tried of comparing one part with another, namely: how many times the height of the canoe was contained in the length, or how much longer than the brush part is the handle of the broom.

The second lesson consisted of a talk on cotton growing. We made a figure pose showing the people carrying the cotton from the fields on their heads. The children drew a file of cotton with the pickers at work, and carrying the cotton from the field.

Mrs. Laver.
Constructive work.  (b)

We made clay bowls. Those who had been in the kindergarten had the idea of making them by coiling the clay and building it up on the bottom. The others made theirs by making a hole in a ball of clay. We tried baking it over a bunsen burner with a low flame and also over a high flame. Both methods cracked the clay badly. So we tried an oven. We did not have time sufficiently to bake them.

Miss Lackersten.

Reading.  (b)

I have commenced this week to take both the groups of fours at one time, and let one group do the work by themselves while the others read to me. Then the groups change places and I hear the other group read. The children who are working by themselves are not at all disturbed by the children who are reciting and do very satisfactory work.

Miss Lavictoire.

Cooking.  (a and b)  1 1/2 hours.

Vegetables--Carrots.  --

To find the composition of the carrot the same means were employed as with the potato, that is, it was cut and examined for water, then it was grated and the fine particles placed in cheese cloth and washed in a bowl of water to separate any starch which might be present. This water was then set aside to allow the solid part to settle; it will be examined and tested for starch next time. The part remaining in the cloth was seen to be similar to that left after the same process with the potato, and was the cellulose which the children compared with shredded wheat and cod fish.

The children enjoy writing new words on the blackboard and the privilege of doing this work is much sought after. They remember the words from week to week almost without exception.

Miss Tough.
Sewing. (a) 1/2 hour.

The work reported last week was continued.

Miss Tough.

Sewing. (b) 1 hour.

Those who have finished their bags have begun needle books. Most of the children whose bags are still in the process of making are making the casing of the cord. This group still finds great difficulty in applying itself to the work in hand.

Miss Lachmand.

Shop. (a and b)

They have been working on their arrows, putting on the feathers. They cut the feathers in the right shape, and then tried various ways of fastening the arrows on the arrows. One of the boys decided to saw the stick down the end far enough to slip the feather in. This feathers proved satisfactory, and then slipped the arrows in and glued them. Then they wired them or clamped them and left them to dry. We have not succeeded yet in getting material for the bows.

Miss Jones.
History. (a and b)

Most of the time this week has been spent on the paper relief maps. I secured a map for each child, and told them I wanted them to trace on the maps and name the four largest rivers. They found what they considered the largest rivers as indicated on the map, then took geographies and found their names and inserted them. In doing this some of the children considered a river only a central single stream, and left out all the tributaries. They were asked to decide which way the water flowed, and from the examples they had, they made the general statement that all rivers flow to the sea. Also since their four rivers started from the central part of Africa, and each took a different direction to the sea, they inferred where the highest part of the central plain must be, and got the word "water-shed". Since they did not suggest anything that might be added to the map, I suggested that they show the fertile regions, which they did by coloring the river valleys green; and the sterile parts, which they did by coloring reddish brown the deserts of Sahara and Kalahara.

I suggested then that they show the climate in some way, and this was done by finding where the equator would divide the continents, and the distance from it of the tropics of Cancer and Capricorn. The tellurion was started, and they found on it the limits of Africa where the sun's rays are at any time in the year perpendicular to the earth's axis. Each child had to find in the geography map where this would come, and apply it to his own relief map. Since they could not work to a scale, they were allowed to compare coast lines to decide where the tropic line should be drawn. They put in arrows to show the direction of the ocean currents. They were told to color all "salt water" blue. Some of the children wanted to color all the large lakes, and had to be questioned before they realized that they were probably fresh. One or two completed their maps,
putting in the names of the oceans and of Madagascar. All now, I think, can locate the Nile, Congo, Niger, and Zambesi. The Nile I have told them a good deal about, and the Zambesi they are to follow in connection with Livingston's expedition with which they are to get the interior conditions.

This week, instead of reading to them, I told them the story of the "Ancient Mariner", quoting the more famous passages.

About once a week I have them write, sometimes a reproduction of something I have read in the half hour in which I read to them, sometimes from dictation, and sometimes simply words with which they have difficulty.

Miss Runyon.

Reading. (a)

They have commenced the new story of Robinson Crusoe, very simply told. This is much easier than the reading they have been having. They were able to get the thought of it. They did not have to give their whole attention to the merely technical side of it.

Miss LaVictoire.

Reading. (b)

All but two now have copies of "Robinson Crusoe for Youngest Readers" and are reading a good deal at home. The three for whom this was not bought are so far ahead of the rest that it was deemed best to give them something more difficult. They have been using the books of the school.

Miss Runyon.

Science. (a and b)

They have continued writing the logs, taking up the points of direction.

Miss Camp.
Number. (a and b)

Five to ten minutes are devoted about three times per week to some number work. They have some difficulty in adding, so we took in one period all the combinations we could think of which would make ten. Then I gave them one part of the combinations and asked them to give the other. We have had columns where they have had to carry.

Miss Runyon.

Textiles. (a and b) 1/2 hour.

The work is the same as reported last week. A few of the children whose work had got into bad shape showed a rather remarkable interest in starting their work all over again.

Miss Lachmund.

Manual Training. (a and b)

They are still working on their boats. They planed the stock off and did the drawing on the wood for the boats, sawing the bow and and shaping the stern of the boat with the spoke shave. Most of the children have done very well with this, and are working on the boats quite independently. They are using the gouge for the first time.

Miss Jones.

Cooking. (a and b) 1 1/2 hours.

Dairy products—Eggs.

The making of floating island for luncheon involved a repetition of the process employed in making boiled custard last week, and most of the children remembered how this had been done and were able to tell those who had been absent.

The amount and cost of the materials used by the class were calculated.

Miss Taugh.
History. (a and b)

We took up this week the new charter and the representative government granted to Virginia. The occasion of this charter, the addition of the Bermudas to Virginia, was anticipated by the children after hearing of the account of the islands taken back to England by the survivors from the wreck of the Sea Venture. The children knew something too of the two parties—the king’s party and the people’s party—in England, and were told of how the latter was gaining in power in the London Company. The opportunity for a new form of government offered by the revision of the charter was presented to them, and when they were asked what kind of government the people of Virginia would choose if they had their own choice, they proposed that in which the people themselves would have a voice. I asked if this meant that all citizens were to vote directly upon the laws that were to be made; but they said "no, each settlement ought to choose someone to vote for them, just as we do now". The actual plan was then presented to them and the coming of Governor Yardley and the first meeting of the assembly described. The children suggested some of the matters which would be probable subjects of legislation, the amount of taxation and the treatment of the In/ dians being mentioned among other things.

The next period we spent on Cooke’s imaginary visit to the house of a Virginia planter in the early days. The dress, food, houses, treatment of slaves, and other features of plantation life are here described. The teacher related it to the other group. The children asked what books the planters had, and were told of Hamor’s True Account of Virginia, of the story of the wreck of the Sea Venture, which perhaps gave Shakespeare the suggestion for his play The Tempest,
and of King James's Counterblast to Tobacco. The children also wished to
know whether there were any stores in Jamestown, and this led to a talk
on the trade between Virginia and England, bringing out the point that the
planters, being so busy with the cultivation of tobacco, had not learned to
manufacture the necessary articles of furniture, clothing, etc., but depended
upon the home country for these supplies. We noticed the independence
of the planters, living far apart on great plantations and receiving the
ships from England at their private wharves. The children saw for them-
selves that if the chief business was to be the cultivation of tobacco,
large plantations and country life would be inevitable. The fact that
tobacco rapidly exhausts the soil and necessitates frequent changes
was given them as an additional reason why the Virginia planter must have
plenty of room.

In connection with this study of the daily life of the planter
we read a letter from the Verney papers giving directions and advice
to a prospective emigrant to Virginia. The children also spent one perio
d in reading from Henry Spelman's account of his life among the Indians
from 1609 to 1622, and one in writing.

Miss Hoblitt.

Science. (b)

We have spent one hour on the action of the tides and of the waves
on the shore, and the relation of the building up of the river at its mouth
and the carrying away of the soil by the ocean.

Miss Camp.

Number. (a and b)

We are still working on addition, subtraction, and multiplication,
alternating between concrete objects and symbols. They have taken up the
table of eights, reviewing the others from time to time, and in each case
finding out what new combination they will need to learn. We have taken multiplication with two figures in the same multiplier, and in answer to a request one child brought in several problems in which multiplication would be of use. This is the kind: "if one yard of cloth had 1,654 dots, how many dots would 24 yards have?"

One period we took the square feet blocks, and with two, four, six, and eight inch blocks, found out how many square inches there would be in one quarter of a square foot, then in the whole. We added by twelves to get the total amount because this was the only way suggested by the children; then I told them how it might be done by multiplication, and require less work.

Miss Runyon.

Reading. (a and b)

Each group now has a book of "Stories of Great Americans" in which we read. After the story for the day is read, each is permitted to give out words for the others to spell, selecting the "hardest." Then after they have been over these once, they are dictated to them, written and corrected in class.

Miss Runyon.

Cooking. (a and b) 1 1/2 hours.

Colonial Cookery.

The cost of materials was calculated and luncheon planned for next week. The individual recipes were changed to large amounts, as the work of preparing each dish was to be done by one child for the entire class. Peas porridge and cocoa were prepared for luncheon.

The children perform the number work more readily and seem to be able to get at the desired results more easily than they did.

Miss Lough.
Manual Training.  (a)

One child in Vla wished to make an Indian canoe. They prepared the stock ten inches by two inches, sawed off at each end to make it pointed, and drew lines from the center to each end. Most of them have cut theirs off too short, so that the canoes are smaller than they intended, but they wish to try to finish them as they are. If they are not satisfactory they will work with longer sticks.

Miss Jones.

Manual Training.  (b)

Josephine has completed her envelope case. She had considerable trouble with it on account of the wood's warping, but she did very satisfactory work. Elizabeth has completed her bracket. The wood she used also warped and caused some trouble. The others have completed their tops and two of them have started to make boats.

Miss Jones.
History.

We followed the logic of events taking up the results of the stamp act, the destruction of the stamps by the colonists, the meetings held by the people who were agitating the question of England's right to tax them. Then we took up the molasses act, and the revenge which the colonists took of refusing to import goods from England. We saw also how the navigation acts were followed by smuggling on the part of the colonists, and how the English gave their officials the right to issue writs of assistance, and we followed out an imaginary individual case. I then told them of the case which was brought up, on account of which James Otis resigned his position as attorney under the king in order that he might try the case for the colonists.

Miss Bacon.

German.

Group VII have been talking volubly all the week in pursuing an idiomatic study of the day's activities. The conversation begins each morning with a discussion of the night's rest. Then follow the dressing, washing, and hair combing, after which breakfast is ordered by each child. The remarks embrace such as: Haben Sie gut geschlafen? Ich bin nicht schlafreich, ich kann nicht mehr schlafen. Wie viel Uhr ist es? Es ist Zeit zum Aufstehen. Haben Sie die Hände gewaschen und das Haar gekämmt? Haben Sie einen guten Appetit? Sie haben nicht genug gegessen.

Miss Teller.

Science.

We spent one half hour in general discussion of the nature of the Hudson River valley, and compared it with the rivers that each of them had seen. They spent about one half hour on the comparison of the map used with that of their own maps, one inch on their own maps being 1 2/3
miles and one inch on the other maps being 13 1/2 miles. Then they found that by measuring both scales in thirds of an inch they could compare them they worked out without assistance that 40/3 is 8 times 5/3.

Miss Camp.

Number.

The children have learned their table of 8's outside of school and in school they have worked on their problems.

Miss Bacon.

Cooking. 1 1/2 hours.

Fish--the work planned was to have been with clams, but as they were not obtainable salt cod fish was substituted. Its general appearance and texture were noted, and the reason for salting it and the method of doing it were talked about.

A means of extracting some of the salt before cooking it being desirable, the children were able to suggest plans for doing this, and carried them out in the practical work. Creamed fish, baked potatoes, and cocoa were prepared for luncheon, the children making out their own recipes for the work and writing them on the blackboard.

Miss Tough.

Manual Training.

Last Friday the 7's spent their time in building the fireplace in their room. They first drew the pattern for it, and lined the chimney and the hearth with asbestos. The lime had not been slacked. We pounded it up and pureed water on it. This worked all right at first but when it was dry it crumbled, so that we shall have to do the work all over again. The children have been working on their furniture. They have completed the tall clock, one chair, the center table, and the rag carpet for the floor.

Miss Jones.
History (a)

Individuals have read to the class selected portions from large readers. In one instance one member of the class prepared a selection and told the story to the class. There have been written reproductions of these, and spelling lessons based on the written work. They have also had two reading lessons in the reader.

B.F. Armitage.

History. (b)

Group VIIIb has finished the history of the English village as such, and have taken a general survey of England in the tenth century, the social and civic conditions, etc. The class is now making a general study of Europe approaching it through the successive migrations to England and northern France. This will lead to the geography of the British Isles with map drawing.

B.F. Armitage.

German. (a)

They have done the same work as group VII, with more grammar.

Miss Teller.

German. (b)

This group is working at its play. They are using their dictionaries for the first time. They are copying their note book work on paper.

Miss Feller.

French. (a and b)

These groups have been taking up the story of the Hundred Years' war previous to the appearance of Jeanne d'Arc. They are continuing the memorizing of the "Petit Navire" and learning words related to the words in the song.

Miss Dey.
Science. (a)

We went on with the study of the tides. We talked about the causes of the tides, and the effect of the tides on the different parts of the coast. Why the tides are greater at different times of the year was brought out. In their study hour with Miss Baird the class read about the tides in Shaler’s Outlines of the Earth’s History.

All the latter part of the week we spent in writing records in the new note books. Each member of the class contributes a statement, which must follow in logical order the previous statement. The statements are criticized by the other members of the class, and after a statement has been agreed upon, I write it on the board and they copy it. They take interest in the work and all take part in the criticisms. Sometimes the children take turns in writing the records on the board, instead of my writing them.

Mr. Gillet.

Science. (b)

In continuing their experiments on the distillation of mercury, three or four have succeeded in changing all the mercury, and seeing it condense on the sides of the tube. We have been taking points to look up, such as the temperature at which mercury vaporizes, and iron melts. In their experiments in specific gravity of solids, they made a cube of tin, and one of amalgam of tin and mercury.

Miss Camp.

Science. (b)

The work in general is a continuation of the previous work. Part of the pile drivers have been completed and the pupils are continuing their work on the construction of elevators. All have now practically finished the current experiments and are putting data and the things done in permanent form.

Mr. Wells.
Number. (b)

The class has continued the work in the multiplication and long division, using numbers 20 to 30 as divisor. They have taken concrete problems in connection with their history, reviewed the multiplication tables and have done some concrete work in fractions.

Mr. Armitage.

Printing.

The classes in printing have been occupied with setting up, printing, and distributing sentences for use with Group IV. They have partly finished the fourth page of the German play.

Miss Willis.
History. (a and b)

They have spent their two recitations this week on the political geography of the United States. The children are so pitifully ignorant as to the relative positions of the states that it seemed worth while now to spend some time on the subject of geography.

Miss Bacon

Science. (a)

Our work this week has been with hydrogen. The class made hydro- gen with zinc and sulphuric acid. First they proved that hydrogen burns by filling a test tube with the gas and igniting it. We tried to make a jet of it burn, but this failed at that time. We also tried to make hydrogen bubbles to show the weight of hydrogen compared with that of air, but this also failed. Both these experiments will be tried again next week. We derived hydrogen in another way, by heating bituminous coal in a sealed clay pipe. I told them that the gas that came out was not pure hydrogen, but that it contained a large proportion of hydrogen.

In the discussion we brought out that is one way of making illuminating gas, although the gas used in Chicago is not made in this way. The method used in making gas in the gas plants in Chicago will be explained next week. I assigned various readings to be done at home for next week’s work, the work being especially the formation of illuminating gas, and the manufacture and use of coke.

Mr. Gillet.

Science. (b)

The class has gone on with the reading of Nansen in the recitation periods. Part of the time was spent in reading and part in discussion and writing. On Friday we had a review of what they had read, and I was surprised to see how their ideas of glaciers had changed since the
discussions of a week ago. They no longer had the idea that a glacier is a block of ice sliding down the mountain, but that it is a great mass of ice spreading out because of its own weight. We spent the Friday morning hour in discussion and writing the results in the note books. In their note books they described the formation of an ice sheet, and the cause of its movement. They noted that a glacier can be formed in a depression just as well as on a slope if there is ice and snow enough. This idea seemed to impress them, for in their note books I saw that in almost every case the diagrams were of depressions in which great masses of snow had accumulated.

In the half hour Friday afternoon the class collected some icicles and prepared experiments to prove that ice will bend under sufficient pressure. They proved this in the case of sealing wax, but they are not yet sure of the ice.

MR. GILLET.

Arithmetic. (a and b)

Reduction, addition and subtraction of fractions have been completed. Most of the class understand the processes thoroughly and are fairly accurate and rapid in their work. The general attitude of the class toward the subject is very much improved, and considerable progress has been made in breaking up the habit of interrupting, in which they seemed to be thoroughly confirmed at the beginning of the year.

MR. OSBORN.
Mathematics.

This group also has finished reduction, addition, and subtraction of fractions. It has begun multiplication and is studying percentage in connection with the work in fractions. There are two or three members of the class who do not yet know their multiplication table, and whose work is greatly hindered because of this fact. I do not feel, however, that I can take time to attend to this matter, but think that it should be left to the regular teachers of the school or to the parents.

The class is very much interested, which is rather surprising considering their attitude toward the subject several weeks ago, and considering the fact that it meant a going backward. We may be able to finish the work in arithmetic in less than the time previously mentioned (this quarter), and so get back to the algebra more quickly than was expected.

Mr. Osborn.
This week we took the library. First we talked about the convenience of having a room where one could keep all one's books together and do one's reading and writing. The children asked to make the writing desk for it. They built desks with the larger blocks and then for a while wrote letters. They made desks for their play-houses out of wood and stained them brown. The children decided that the next thing to be made was the book case. We built this with the third and fourth gifts adding paper strips for shelves. In doing this work the children had to follow very closely the directions of the teacher.

On Wednesday each child made two valentines, one for a playmate in the kindergarten and the other for a brother or sister at home. We also made envelopes to fit. We put them all in a box and Thursday we distributed them.

The children illustrated the story of King Midas with crayons. We are going to keep our illustrations and put them in a book.

Miss Dolling.

Number work. Oldest group.

We have been using my digit dominoes twice a week for fifteen minutes each time. The children have discovered nearly all the combinations up to eight, and they know the symbols used, that is, the square symbols, not the conventional ones. They do not yet know the combinations without the blocks, but they can build them with the blocks. Analysis and synthesis go together. For instance, we may to-day build six, then by separating it the children see for themselves that it made of two threes, (they nearly always try to divide the number as nearly as possible in the middle to start with). They discover also that six is made of four and two, and five and one. I find the following difficulty in this work: some of the children are much quicker than the others to see these things, and the slower
children are quite likely to copy the work of the quicker ones, instead of doing it for themselves. I do not now see how this is to be avoided when all are grouped together around a single table, but perhaps some way will suggest itself.

Mr. Osborn.
Social Occupations. (a and b)

As the train has been finished, the children made a play. First we had to plan the different steps necessary so that each one would have a definite idea of the part he was to take. The children made a list of the places to be represented in the play, such as the plantation, the factory, the wholesale and retail stores, etc. I wrote the list on the board and opposite each place I wrote the names of the children who were to be in that particular part. Some were hands on the plantation, some were train men, some were factory hands, etc. It took some time to organize this play, and as after we played it once there was not enough organization to carry on the work for a while, we played it over again the next day and everything went smoothly. Each child realized the part he must do, and each got the different steps in the different processes.

In connection with the work on the plantation, they worked up and read a story consisting of the chief facts they knew about cotton.

In looking at the globe and trying to locate the places where cotton would grow, they pointed to Egypt and the adjoining country, the desert of Sahara, and could not understand why it would not grow in the desert. I had to explain to them the conditions there, and then they realized that cotton needs water as well as heat.

One of the children immediately asked what farmers do when they cannot get water on their farms. We looked at the globe and saw the great stretch of country in the western part of this continent where there is never sufficient water supply. We talked about the causes for this. They said right away that the water would have to come from the Pacific Ocean, which is the nearest large body of water. I explained to them how the winds blowing across the lands would strike these high mountains and would lose their moisture. Some of the children said that the wind could still get over the mountains, but that it would
be a dry wind. Then looking from the eastern side of this dry district they saw that the wind traveling over the land from the east came such a great distance from the sea that it was dry. They seemed to get this idea perfectly; it did not seem to trouble them at all. One of the children had been in Lower California and spoke of that as a dry country. Another child brought up the question of why it is a dry country when it is so near the sea shore, where it can get such a supply of water. One boy suggested that the wind might blow from a different direction. We looked and saw that if the wind came from any direction than the west it would be a dry wind because cut off by mountains.

In looking at the barren district in the western part of this country, they saw that on the western side there are mountains. The children saw that the western sides of the mountains would be places of great rainfall, and the eastern sides barren regions. They said that if they could get the mountains for these dry regions, it would be all right. They suggested that the water might be carried by train and in carts, and I had to show them how impractical this would be. For Monday they are going to try to get a solution for this problem.

Miss LaVictoire,

Cooking. (a and b)

The children continued the making of butter. The first experimental period was used in finishing the churning or rather the shaking of the cream. Great delight was evinced by the children when they saw that a large lump of butter had formed. The butter milk was drained off, and this the children took up stairs with them for their regular eleven o'clock lunch. At the next period the children decided that the butter must first of all be washed to get the milk out, which would sour if left in it, and then it must be salted and colored.
While the children were taking their turns at washing the butter and grating the carrot for the coloring matter, those who were not working examined the cheese and found that there was still some whey in it which ought to be pressed out. One child suggested a bottle filled with something, another the pound weights, which we used since we had them at hand. When the butter was washed, one of the group weighed it and found it weighed 6 1/4 ounces. Then 1/4 ounce of salt was weighed and this together with the carrot juice worked into the butter.

Miss Lachmund.

Sewing. (a and b)

The children are continuing with their holders and dusters. Those who have finished their dusters are overcasting leaves for a new scrap book, while they are waiting for the rest to finish, as they are all to start the covers for their cooking books together.

Two of the children who are making holders have begun button hole stitching the edges to hold the back piece to the felt. One, a little girl got the idea very nicely and has no trouble with the stitch, but the little boys turn out overcasting stitches. The others are still basting the two pieces of the holder together.

Miss Lachmund.
History. (a)

Since the last report we have spent further time on the habits of the domesticated animals, and their different modes of service to man. In this connection we read the story of Wully from Ernest Seton-Thompson's "Wild Animals". The children were greatly surprised at the conclusion, and when convinced that Wully the sheep dog and Wully the marauder were really the same animal, asked over and over again "Why did he do it?" One child suggested that the reason why he did not molest his master's sheep was that he was a fraid to; and another said that he preyed on the neighboring flocks because he had been trained to behave until he had forgotten how.

In talking about the necessity for wells, many of the children had an idea of underground lakes, but the fact of underground streams seemed to be new. They knew that when a well is dug the water will rise in it sometimes even to the surface of the ground or above, but explained this by saying there had been earth on top of the lake which the water could not get through, and when a hole had been made in this impervious layer, the rest of the water pushed some up to the top.

We spent one period in looking at a map of Palestine and Egypt. The children were greatly interested in reading it, pointing out what is land and what is water, noticing rivers, mountains, islands, etc. They themselves called the teacher's attention to the fact that there is a difference between the northern part of Africa, where there are no rivers, and the western part of Asia with its network of "crooked black lines", and said that there must be a desert in Africa, and that camels would be useful there.

In their hand work they have finished their tents and have begun their clay dishes.

Miss Hoblitt.
History. (b)

We have been working on clay dishes for the last week. The children learned from the bible stories that the Jews had clay dishes unknown to the tribe they had been following before this. In getting hold of these dishes and learning the process the idea of barter was again discussed. Then we talked about clay. The children told all they knew about clay and the places in which it is found, and then they were told simply how it is produced from felspar, and the places where we found, the reasons, etc.

In connection with this the children made a great many clay dishes and tested the effects of heat on the clay.

Miss Schibsby.

Number. (a)

With these children also have been using the dominoes for thirty minutes a day twice a week. They know all about the square symbols now, the combinations to ten pretty well, and are discovering the combinations from ten to twenty. They are using the method used in the kindergarten. I experience here also the same difficulty in getting independent work that was mentioned in connection with the report of the kindergarten work.

Mr. Osborn.

Cooking. (a and b) 1 1/2 hours.

Vegetables, carrots. — The water in which the grated carrots were washed had been set aside to allow any starch present to settle; this was examined and the thick part cooked in a little water to see if it caused the water to become thick and clear as that from the potato had done. There was found to be no change from the cooking and the conclusion was drawn that carrots contain no starch.

Lists of the parts composing the potato and those composing the carrot were made and a comparison made of the two. The children were able to write nearly all the words without assistance.

Miss Tough.
Sewing. (a)

The overhanding of that portion of the work bags through which the drawing strings are to pass was begun. In this work the stitches must be close together without overlapping and the same difficulty is experienced in getting satisfactory results. 

Miss Tough.

Art. (a and b)

I am going back to illustrative work with the group. I find it difficult to arouse their interest in color. They enjoy their clay work so much that once or twice when I have attempted to give a lesson in color there has been such unanimous and decided protest that I have allowed them to continue the clay work. If it had been an older group I should have done differently, but I felt that the art should be their free expression. In this second year's work I aim in particular to gain such expression, and consequently I allow them to follow their own impulses. I succeeded in interesting them in color again by using the large sheets of gray paper. I had divided the group into classes of threes; subjects were chosen from the stories of the wanderings of the people of Abrahams time. They represented various landscapes with flocks of sheep and figures of shepherds. A great difference was noticeable between the ability of the different groups to work out a unified plan.

Miss Cushman.
History. (a and b)

A good deal of the time set apart for history was spent this week on the geography in connection with finishing their relief maps. They were required to get most of their facts to use on their own maps from the school geographies. As the pages on which maps appear differ in the different books, the children were taught to find use the index in finding the maps. I brought out the chief facts about the contour by studying the directions of the flow of the rivers. In this they got the names for the parts of the river, such as "mouth" and "source". We found that three rivers started near each other, but flowed in different directions, so we inferred that a "water shed" must exist between them.

We have reviewed the causes of rainfall, in selecting the mountains on the map which would help to condense moisture, or prevent it from reaching a region.

Miss Runyon.

Reading. (a and b)

In reading they are at work on Robinson Crusoe with the exception of two children from whom it was too easy. They have been allowed to read by themselves, except one period, when they read with the rest.

Miss Runyon.

Cooking. (a and b) 1 1/2 hours.

Dairy Products——Eggs.

The cooking of eggs was reviewed and the reason for not allowing the water in which they are cooked to boil was talked about; this led to a review of the composition of eggs and the nature of albumen.

For luncheon stuffed eggs were prepared. 6/4.

Miss Tough.

Textiles. (a)

Some of the children are losing interest in their weaving. A number for variety's sake wished to exchange looms with each other, just for the period.

Miss Leachmud.
Art. (a andb)

They have been working on the large sheets of gray paper. They represented the valley of the golden river. This gave an opportunity for the study of mountain scenery. A variety of pictures of mountain scenery was brought to the class and these were studied by the class before they went to their work.

Miss Cushman.
Reading. (a and b)

I have spent one hour a week with each, continuing the methods already reported. Group VIb are having spelling lessons from their reading lessons after the reading is finished. This is sometimes, oral, sometimes written, according to the time.

Miss Runyon.

Number. (a and b) 1 hour with each.

Both groups are still on multiplication. I am afraid I did not approach multiplication with two figures slowly enough, or the time between lessons was too long. It has taken them some time to get the process, and I doubt whether they really understand why it is.

Miss Runyon.

Cooking. (a and b)

Colonial Cooking.

The corn beef which the children had put in pickle three weeks ago was boiled for their luncheon, with potatoes and cabbage, and cocoa. The time for cooking the beef was calculated for four pounds, knowing that ten pounds require six hours. In order to have the work performed it was found necessary to point out the steps, and where that was done there was no further difficulty. An improvement is shown in the number work done by this group. Some fat cut from meat was tried out and the clear strained part set aside to use in deep frying, which has been planned.

Miss Tough.

Art. (a and b)

In the studio they are working directly from the plaster models. I have undertaken to give individual attention to three in this group who seemed to be incapable of doing anything by themselves. In doing so I found that one of the boys who seemed to be dreamy reasons well when his attention is held to the reasoning. By holding his attention
to his work he has modeled a very good sheep's head. He is so pleased with his work that he says he did not used to like drawing, but now he just loves it. Once or twice he has made the remark that this is the best thing he has ever done, and I am hoping that the delight that he feels in really accomplishing something will be an incentive for doing more work.

Miss Cushman.

Gymnasium. (a and b)

Since the last report emphasis has been placed on the gymnasium drill. The effect of this upon the standing position of the child is a marked one.

Mr. Peterson.
History.

The children have read from Guerber's History of the United States of the results following the Stamp Act, its nullification, of the taxing of tea, and of the Boston Tea Party. They have spent two or three days reading the stories to gain an idea of the times and of the feeling in 1775, especially in Boston. I read to them the story of Paul Revere, and four of the children who had been east in the last two years described different places in and around Boston. Most of the children have read stories of this time, and are much delighted when they are placed in their historical setting. Margaret Hale, for instance, told of the boys in Boston remonstrating with the British officer because of the interference of his soldiers with their sports. When I was telling them of the Quartering Act and of the placing of the British soldiers in Boston, she was much delighted to find that her story happened at that time.

Miss Bacon.

Number.

I have had Group VII one half hour in number this week. They have taken up the multiplication table of eights and have applied it to the work they are doing in physiography, in which they are drawing the map of a certain part of the United States. They are making their map eight times larger than the map copied.

Miss Bacon.

Cooking. 1 1/2 hours.

Fish---Fresh cod was boiled and escaloped for luncheon; it was examined and talked about, then weighed and the time required for cooking calculated. After boiling, the fish was separated from the skin and bones, mixed with white sauce, covered with buttered crumbs and baked.

One child prepared cocoa for the class after calculating the amount needed from the individual recipe. Miss Tough.
Art.

They are working in clay. They are so interested in their work that they come up to the studio in the noon hour and work sometimes the entire hour. They seem to feel that they are going to have only this quarter in the studio and that they have to make the best of every day. One of the number remarked regretfully that they were going to lose an hour on account of Washington’s birthday. One of the members of this group is modeling a bust of St. John, another is modeling a large sized head of one of the Medici, and the rest are working with the animals.

Miss Cushman.

Gymnasium.

The work in the gymnasium is especially good. Since the first of the year the progress has been rapid.

Mr. Peterson.
History. (a)

The class has followed Cortes' progress to where he conquers the Tlascalans and forms an alliance with them to conquer their old enemy the Mexicans. There has been individual and class work and reading covering Cortes' movements in Mexico up to this point, and lessons in spelling growing out of this. The next exercise will be a written account of his meeting, conquering, and forming an alliance with the Tlascalans.

B.F. Armitage.

History. (b)

The class has made a general survey of Europe, and is now making a special study of the British Isles. They have drawn outline maps of the latter, indicating the prominent geographical features, with an incidental study of description.

B.F. Armitage.

Science. (a)

This class has spent the week in finishing their review of the work of the year on the tides and the waves. They are making continuous records of what they remember.

Mr. Gillet.

Math. Number. (a)

These children are taking up the addition, subtraction, and multiplication, and division of fractions. They began with their rulers and reduced to common denominators concrete fractions, such as 3/4 foot and 2/3 foot. At first they gave them in inches, but they were easily led to see that an inch is a twelfth of a foot, and they were led to see why they had to reduce measures of quantities to parts of the same size. Hermann and Conant have become able to reduce all fractions to common denominators, in which the common denominator is less than 144. They wrote out a very good rule for the addition and subtraction of fractions. The other four children can reduce concretely from the ruler, but they have not generalized yet.

Miss Bacon.
Number. (b)

The class has continued the work in the fundamentals, especially in multiplication and long division, with a review of the multiplication tables. They have also done some introductory work in fractions, reduction to common denominator and addition and subtraction, the work being based on exact measurement and comparison.

Mr. Armitage.

Number. (b)

I have taken this group for Miss Baird for an hour a week for the rest of the quarter. Mr. Armitage gives them distinctly concrete work, and with me they work out the technical points which trouble them. With most of them there is difficulty in the reduction of fractions to a common denominator, and the multiplication and division of fractions. We have been working on these points since last week.

Miss Bacon.

Manual Training.

In trying to make a report of the work of the classes which come to me I am met with this difficulty to begin with:—I began with them right in the midst of work that had been previously planned and most of which is still not completed, though nearly so.

The boys of VIIIb have been applying the lessons of the school room, illustrating certain propositions like the force of gravity, for instance, by the erection of a small but perfectly practical pile-driver.

They have shown much originality and cleverness in construction, and the device for automatically releasing the weight after it has been hauled to the top of the shaft, was quickly understood after a slight suggestion on my part, and very well carried out.

The boys of this class have a very discouraging thing to contend with, in that those of other classes have played with their structures before they were fully braced or while the glue was soft, and thus partly
wrecked them, necessitating going over the work several times.

The girls of this class have been constructing doll beds, and have shown some originality in difference of shape of side, head, and foot boards, although size and method of construction have been alike.

A difficulty is that some come to the shop with nothing planned, no ideas that they want to give expression to, and as I am too new and ignorant of the work they are doing, I find it a puzzle to know just the best thing to help them to understand that which they are studying.

My brother has reported in full the work of those classes which are at work on the club house, so I have said nothing of that work, which is progressing nicely.

We have several good pile drivers, doll beds, a doll house for the kindergarten, tops, etc. to show. They are all, I think, striving for a better technique.

S. W. Fowler.
History. (a and b)
They were asked to take charge of the afternoon general exercises for
Washington's birthday, so they met, decided what subject they would take,
namely the life of Washington, and each chose some part of his life to
write about. They selected a committee on decorations, one on program,
one on music. They have spent the history time in school reading up
on their special subjects, and in writing out their subjects:

O.K.          Miss Bacon.

English.

In the half hour with IXa on Monday, paragraph structure was
discussed. A simple sentence was given by a member of the class,
and from this a whole paragraph was formed. The subject of a paragraph
was the idea of the lesson.

On Thursday, the day on which IXa and IXb meet together, an original
theme is written. The class had been asked to come prepared to make
suggestions for the subject of the composition. These suggestions were
written on the board, a vote was taken, and the subject which received
the most votes was the subject chosen. In this instance it was
"One Summer's Camping Experience". Before beginning to write, the class
the class united in working out an outline for the composition, which
was written on the board. More interest was shown on this day than on
any previous Thursday, and on the whole, better work was done.

On Friday the work of both classes was the same again. Those who
had not finished their work for the Washington exercises went on with it
and the rest of the class criticized Hawthorn's story of the Minotaur.

Next week the work on the literary period will be on Irving's
"Legend of Sleepy Hollow". In some cases the style of the author read
is visibly reflected in the compositions, both in the choice of words and
in the manner of telling the story.

Miss Bruere.
Latin. (a)

These children have been studying indefinite pronouns, adjectives, and irregular adjectives.

Latin. (b)

This group is reading in the book, the Gradatim, and have finished comparison of adjectives.

Miss Schibsby.

Science. (a)

The work this week has consisted in a retrial of those unsuccessful experiments which were described last week. This week the class was more successful. In addition to this, the class tried an experiment to prove that there is hydrogen in wood and soft coal. They heated some saw dust and some soft coal in sealed clay pipes, and tested the gas which issued from the stems of the pipes. From this I drew out the fact that the composition of wood and that of coal are similar. In a very brief fashion, the manner of the formation of coal was brought out. They discussed the uses of coke, and the uses of the gases which are formed by the heating of coal. I was surprised to find that some found trouble in understanding why the air had to be kept from the hot coal.

Considerable time had been spent in discussion of the meaning of the experiments performed last week and this. Next week we shall try to go to the Field Museum to see the stages of the formation of coal, the oil exhibit, and if possible, the ores of several common metals.

Mr. Gillet.

Science. (b)

This class has continued the work on glaciers. After they had fully in mind the process of formation of an ice sheet, and thus the idea of the nature of an ice sheet, they were ready to take up the effect of glaciers on the country over which they pass. This was in some
degree a review for the pupil$. for this subject was taken up in the geography of Chicago before they had the work on glaciers. I think I made a mistake in taking up the work as I did. Another time I should, with a group of children of this age, take up glaciers first and then the work they do. It is hardly to be expected, perhaps, that these children can reason from effect to cause, when the cause is so complicated as in this case.

Mr. Gillet.

Mathematics. (a and b)

The work in fractions has been continued, with problems from the text book. The following principles have been developed since the last report: by definition a fraction is an indicated operation in division, therefore to multiply by a fraction, e.g. \( \frac{2}{3} \), is to multiply by the numerator 2 and divide by the denominator 3. The children have reasoned this out for themselves, and have discovered also that the short method of doing this is to multiply the numerators of the fractions together to form the numerator of the product, and to multiply the denominators of the fractions together to form the denominator of the product. They have also discovered that cancellation is a more rapid method of reducing to lowest terms. These principles have been formulated, written in note books, and the children are now expected to be able to give them orally readily, not necessarily in the form in which they have written them in their note books, but in concise and elegant English. At the last recitation the word syllogism was introduced; some major and minor premises were introduced, and the children discovered that if they admitted these, the conclusion was inevitable. They also discovered the errors in some false syllogisms which I gave them. A few of them are now struggling with the proof that a dog has ten tails.

The object of all this is to introduce them to the lesson which they have to-day, which is to complete the following syllogisms, and to make the
application to some simple problems: 1) to multiply by a fraction is to multiply by its numerator and divide by its denominator; 2) division is the ______ of multiplication, 3) therefore, to divide by a fraction is to ________________. I am much interested to see if they will be able to complete and apply this argument.

Mr. Osborn.

Art. (a and b)

One of their number has been drawing the horse and rider for the frieze, "Giving the Alarm". The horse is going at full speed. The rest of the class made the composition study for the "Gathering of the Minute Men".

Miss Gushman.

Gymnasium. (a and b)

The work in the gymnasium is similar to that described in the last report.

Mr. Peterson.
Latin.

The children are reading in their books—the Junior Latin Book and Gradatim—and are studying the irregular verbs and reviewing the regular verbs.

Miss Schibsby.

English.

We are working on paragraphing and punctuation. They write one composition at home during the week, and in class take up analysis, punctuation, paragraphing, etc. Whenever grammar points come up they are likewise discussed.

Miss Schibsby.

Mathematics.

They have done practically the same work as IX with more detail.

Mr. Osborn.

Gymnasium.

The work in the gymnasium is progressing satisfactorily. They are doing stronger work than formerly and are taking more interest. During the period of accelerated growth which occurs with the girls during the years between 11 and 13, and with the boys between the years of 11 and 14, it is a question whether severe physical work is not too much of a tax. It is, however, necessary that they should have sufficient corrective work to overcome the physical defects which, if neglected at this time, are apt to become permanent.

Mr. Peterson.

General Exercises.

The children invited Mr. Jenkin Lloyd Jones to talk to them on the subject of Lincoln. He accepted the invitation and entertained them for half an hour with stories illustrating the characteristics of Lincoln.

Miss Bacon.
The children made comforters for their beds out of cheesecloth and cotton. They cut the cloth the required size, then sewed the edges over and over with yarn. With the blocks we planned a chiffonier, and then made one out of small boxes, straw board, and silver paper (for the mirrors). In one period we reviewed most of the furniture forms that have been made in connection with the play houses. After this we played furniture store; the children formulated the game. They had one part of the room for a house, dividing the space into a kitchen, dining room, library, and bed room; some lived here while the others kept the furniture store.

The children in Group I with a few exceptions have finished furnishing their houses, and with great delight they took them home. We took up the subject of heating the house. First we took up the various methods of heating a house. The children went down stairs to see the furnace. Then they cut out of paper the furnace with the various chimneys, and they modeled the long poker and shovels. As another means of heating, we took up the fire place, building one with the blocks, and making one in permanent form.

Groups have not taken up heating as yet, for they spent considerable time weaving a library rug with raffia, the body of it being copper wire. They illustrated the story of "The Gingerbread Boy" with crayons. We learned two new songs: "Brownies" and "Kitchen Clock".

Miss Dolling.

Dx