

Social Occupations. (a and b)

After a good deal of questioning as to the best method of irrigation, they thought that the natural flow of water from a high place to a lower one could be utilized, and by means of ditches the water could be taken into the different parts of a farm. They thought of bringing the water from mountain streams, and as the supply from the stream is small in certain seasons of the year, they thought that they might store the water by building large tanks to keep it in. They then went to the sand box and built farms on this principle. They poured water from the high source in the hills, and some of them found that they could not get a supply of water on their farms because they had made their ditches without any regard to the natural slope. We had a talk about the principle of water flowing from one place to another, and we had to make a good many experiments. Finally they decided that the tank must be on a hill and the ditches must extend down a slope or the water would not run in them. They decided to use pipes instead of ditches, as the ditches might get clogged up or the water might soak into the ground. Some of them mentioned the evaporation which would take place from ditches in a warm country, and the consequent loss. None of the children realized that the water could go up the hill as high as the place it started from. We arranged some glass tubing from a tank which was put up high, and bent the tubes so that the water could rise in them, and the children found that the water rose as high as the tank. They found that if they raised the tank the water would rise higher, and if we lowered the water would sink. The water in the tube stayed at the level of the water in the funnel. We decided that the best way to arrange a system of irrigation would be to have the tank on the highest hill and put the pipes on the slopes. In connection with this one child asked how we could get water to the second story when it is higher than the level of the lake. We built a little city in the sand box using little

block houses, and the problem was to get the water to a point higher than any of the houses. They built a water tower with the blocks, and with a simple pump pumped the water from the level of the lake to the level of the tower, and let it go down in pipes to the houses. They saw that the water in the pipes would rise as high as the water in the tower.

In the next week we took up the study of a rice plantation, as the children are going to take up rice in their cooking. Here they applied their irrigation to the growing of the rice. They planned out a rice plantation in the sand box. I told them the conditions under which rice is grown, and the different processes through which it is carried. They compared it with wheat and found that in many ways the process is the same. They found the places on the globe where rice is grown. We talked about the people who use it extensively. O.K.

Miss LaVictoire.

Cooking. (a and b)

Experimental period---We examined the cheese to see the effect the weight had on it, and found that more whey had been pressed out.

The children then learned the recipe for cocoa which they were to make the next day. In speaking of the manner of mixing it, the children noticed the pulverized condition of the cocoa, and suggested mixing it with cold water before boiling it. After the recipe was written on the board it was read by the children. They then enumerated the utensils necessary for cooking it.

Luncheon---On the day of the luncheon the children remembered the recipe better than they usually have done. They were especially restless and full of spirits perhaps because of the cold kitchen, so that it was hard for them to get down to work. One of the group was chosen to make the butter balls while the rest cooked the cocoa. With the exception of the bread brought by one of the children from home, the group had made all the things they had for luncheon, cheese, butter, and cocoa.

They enjoyed their luncheon even more than usual. A story from "Uncle Remus" was read to them during the luncheon.

This week the children began a study of rice. We examined the stalks of rice and compared the heads of rice with the heads of wheat and oats, and with the ears of corn. Then we discussed the processes:--threshing, winnowing, and polishing, by which rice becomes ready for use as food. The children suggested the preparations which might be made from rice; they had eaten the whole rice at home, and the suggested flaked rice and rice flour. As they were to cook flaked rice for luncheon for the next day, one of the class balanced a cup of flaked rice with a cup of flaked corn, and found that the former was just a little lighter than the latter. But the difference was so slight that with help the children suggested the same quantity of water as for the flaked corn and letting the extra amount of water evaporate with longer boiling.

The second experimental period was spent in talking about the composition of rice. A difficulty in Group V in being able to tell what part of the plant the cereal is, suggested the same question for this group. They were finally able to realize that it was the seed of the plant when they were asked how new rice is produced. We recalled the presence of woody fiber and starch in rice. The children did not know of anything else in rice. They did not at first remember that they had experimented with pop corn to prove the presence of water, but they remembered when questioned that fresh corn is watery, and decided that the water dries out as the seed ripens. They thought that none of the moisture is retained in the seed and were asked how they could prove it. After the question of the effect of heat on water was put to the class, one child remembered the previous experiment with corn, and said that the heat would turn the water of the corn into steam and the corn would pop. Then we applied the same to rice and a child was chosen to weigh $1/4$ ounce of rice which two of the children tried popping. They have their

second weighing to do next time.

Miss Lachmund.

Sewing. (a and b)

The work as reported before is progressing slowly.

Miss Lachmund.

Art. (a and b.)

We have given our attention to mountainous country for the past week and the children who have lived among the mountains have been able to tell us many things about their size and color.

The first day we worked on the blackboard, thinking only of size; during the rest of the time we used our colored crayons and tried to show how the same mountains would appear in the distance and near by. One child drew a very small man on his paper and when I asked him why he drew it, his answer was that every person knew the size of a man, and if they had never seen a mountain, they would know it is very large when they see the man. We then tried placing a mountain very far away with a stream of water below it, and mountains in the middle distance, and again very near to us. By the class, as a whole, the subject is very well understood.

Mrs. M. R. Laver.

Gymnasium. (a and b)

Groups III a and b and IV a and b have been having practically the same work, with the exception that the IVs have been having a little harder games. A short run or occasionally a march has been given first, then a short drill of mostly breathing and shoulder exercises, and games for the rest of the period. I have had no difficulty with the fours in any of their work, but have had some difficulty with the threes particularly in playing the games. They are so full of life that it has been hard to make them listen and mind during the game, but they are doing much better and are gradually learning how to play games.

Miss Wetherbee.

History. (a)

Since the last report the children have worked out the formation of clay beds, and have continued the work on the clay dishes. When asked where they thought the clay came from, they answered variously that it was "mud", "earth and water", etc. They decided at last that it must have come from the rock. In this connection their work on erosion was recalled, and it was discovered that some of them had the idea that erosion is something that can be seen and felt. One child said that erosion came and hit the rocks hard and broke them up. Questions from the teacher brought out the correction from other pupils that erosion meant the action of the sun and rain and frost in breaking up the rocks and carrying them away. They decided that when the water carried clay and sand and gravel, the gravel would be the first to sink, and the clay would be carried on until quiet water was reached. Later on we had an experiment which showed the difference in the suspension of clay and sand in water. The children were unable to tell at first how the body of quiet water in which the clay would be deposited must be formed, but a little questioning brought out the fact that the water fills the cavities of the earth's surface. One child grew very much excited in telling how one river would run into another, and then into a lake, and then into another river, and then into the ocean, "getting bigger and bigger all the time just like steps". While at work on the clay dishes an imaginary experience in which they traded for clay dishes was recalled, and one of the children asked why they had not used money instead of bartering arrow heads, etc. This led to a discussion as to the different kinds of money, and the reasons why gold and silver are used for money. They said at first that gold is used because it is so valuable, and that it is valuable because it is so scarce. When asked whether people would not prefer gold to iron even if the two were equally plentiful, they said "yes, because it is pretty." Another added

the fact that it does not tarnish. They painted their dishes, using yellow ocher after they had suggested the use of colored earth. One child brought water color paint, which she discovered would not work. They tried the yellow ocher with water at first and found that clay must be added to secure a satisfactory result.

Miss Hoblitt.

Constructive Work. (a)

The children have worked on their clay dishes. They have scraped them smooth and have rounded off the rough corners. We have talked of decorating the dishes, and what the primitive people might have used for brushes. They suggested pieces of wood, different animals' hair, etc. For color they mentioned colored chalk, charcoal, berries, and dirt.

They have made sentences about their clay dishes and have printed them with the letters.

This week the children continued their story of the clay dishes, the story being printed with the letters. They accomplished more this week than they did last week. They found the letters much more quickly and were more ready with their sentences.

They painted their clay bowls with yellow ocher and charcoal. They made red paint by ~~burning~~ burning the yellow ocher over a bunsen burner. They got their black from the soot of the chimney.

Miss Lackersteen.

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

Vegetables--carrots.

The method of preparing white sauce and the reason for each step were talked about, the children being able to think out much without assistance. They read readily all the recipes written on the blackboard. For luncheon carrot soup, having a foundation of white sauce, was prepared.

This week the work with carrots was reviewed, and also that with potatoes. A comparison was made between them, and the points of differ-

ence

and similarity which had been found by analysis were brought out. Part of the period was devoted to written statements of the work; this was done on the blackboard by the children. *OK.*

Miss Tough.

Sewing. (a) 1/2 hour.

While the children were sewing their bags a story begun at one of the luncheons was continued on condition that they should not let it disturb their work. Twice the story had to be interrupted to remind some child that he was not working and the third time the story had to cease. The class felt rather provoked with the one who was for the most part responsible for this.

Miss Lachmund.

Sewing. (b) 1/2 hour.

As the work on the needle books and the sewing bags needed a good deal of attention, the children did not have a story read to them. They worked rather better than usual.

Miss Lachmund.

Shop. (a and b)

We secured the hickory for the bows. This came in long poles and was split in halves. Working in groups of two they measured the poles and reckoned how long the ^{bows} ~~arrows~~ would have to be if they made three bows from each pole. After sawing the poles, they tried to plane the curved bark edge. This did not work very well as the hickory is very hard. Then they tried the spoke shave, which worked better. They made pictures on the board of the all the shapes possible for holding the string, and selected the one which they thought would work the best. After marking, sawing, and filing the ends of the bows, they put on the strings. Each of them promised to make the quivers at home. IVb have had more time in the shop than IVa and have completed their arrows.

Miss Jones.

Gymnasium work is same as that of III.

History. (a and b)

We have taken up Livingston's trip ~~is~~ the Zambesi. One morning ^{up} was spent at the Field Museum examining the African Exhibit. The next day each class told what they could remember having seen, and what conclusions they had drawn from what they saw as to the habits of the people. As a whole this was pretty well done, and with little help from the teacher

We took up next Livingston's reasons for exploring, his desire to stop the slave trade, to find out whether commercial relations could be established with the natives of the interior, and for this purpose the taking of seeds to give out and instructions about how to grow them, his desire to extend Christianity, and to add to geographical knowledge.

We compared what he would have to think of in preparation for his voyage, with Nansen's preparations. We found the latitude of the Zambesi and the time of year when Livingston decided to start, and then discovered where he would have to look for the sun at noon, - south of him, then as the season advanced the sun at noon would approach the equator, and Livingston would have to look north. The children were able to tell me that he probably could not see the north star from that position. This brought out a diagram of the Great Dipper, and the position of the pointers in relation to the polar star.

The rest of the time has been spent in discussing the habits of the people Livingston met, his discoveries, the animals he saw, etc. I secured some cocoa beans and showed them to the children, when we discussed what grows in Africa that is of commercial value to England. We discussed the source of rubber, and if we can get a rubber tree, we hope to manufacture some.

We concluded that ~~Max~~ Livingston would keep a diary, and the children in Va worked in twos deciding what they should put in the diaries.

Miss Runyon.

Science. (a and b)

We have started two lines of work in connection with their discussion of the characteristics of the Zambesi valley. They brought out the effect of the climate on vegetation and the character of a river valley. They discussed the difference between the vegetation under the tropics and the semi-tropics and the plants with which they are familiar with here. They were very much interested in the attempt Livingston made to introduce the cultivation of rice and cotton and to develop the rubber industry. They have started some tropical seeds to see the time of germination as a main point, while incidentally this will review what they have had about germination of seeds in the past. They have planted their rice in sand, cotton, and filter paper for purposes of observation, and some in rich loam to see whether they cannot succeed in getting it to mature. They are to go to the Washington Park greenhouse where that experiment was carried on successfully last year, to find out under what conditions it was done, and also to see how bananas and other tropical trees grow in the greenhouse. In connection with the rubber industry they have discussed all the products which they know are made from the sap of trees, such as maple sugar. They brought up resin and spruce gum as examples, and the relation of these to the sap will be discussed later. In discussing the maple sugar industry they told me that the time of year for making maple sugar is very early in the spring, and one of the children added the information that the sap began to run before the leaves appear, and asked if in the other trees the sap does not begin to run before the leaves appear. They have brought in various trees and put them in water to see if under the conditions of greater heat the buds will open.

They are still interested in their log book, probably because it is in the same book as that which they use for the lists of things they are to bring. The next week when the necessity of a record has become

apparent, it will be of their experiment of the germinating seeds, and the circulations of the sap.

Miss Camp.

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

The work with dairy products having been finished a review is to be made of cereals and vegetables.

Rice was taken up for the first lesson; its growth and preparation for market were talked about, also the general method of cooking, the last being recalled by the children from their previous work. For luncheon rice and prunes were boiled.

This week flaked rice was cooked experimentally to find what proportion of water it would require. It was found to take as much water as there was cereal, hence this was decided upon as a good standard from which to work out the proportions for cooking other cereals. The comparative weights of equal bulks of flaked and whole rice were observed and the reason brought out for the proportionally larger amount of water required in cooking the latter. Flaked rice was cooked for luncheon.

OK.

Miss Tough.

Constructive Work. (a)

They are still working on their boats.

Miss Lackersteen.

Gymnasium. (a and b)

They have been having a march, a run, and a little harder and longer drill than the threes and the fours. Then they have had apparatus work on an average of twice a week and the rest of the time, games. These are the hardest groups to manage of any that come to the gymnasium. One day they behave and work fairly well, but the next are as bad as ever.

Miss Wetherbee.

Shop. (a and b)

They are still working on their boats. Some of them gouged them so deep that they cut them through, and had to begin over again. Most of them children now have the boats shaped. They have drawn the patterns for the rudders, and are ready to begin to put the rudders and the masts on.

Miss Jones.

History. (a and b)

After the work indicated in the last report we took up the account of the loss of Virginia's charter. Before beginning the ~~next~~ story of Butler's complaints the children were asked to tell any just criticisms which they thought might be offered. They spoke of the unfortunate location of Jamestown, of the presence of undesirable classes of settlers, etc. They were greatly interested in the answers to Butler's attack upon the colony, and in the story of Nicholas Ferrar's efforts in behalf of the Virginia Company. They asked many questions in this ^{connection with} regard to contemporaneous English history. They were jubilant over the death of James, in time to save Virginia from the kind of charter which they felt sure he would have made, and agreed that under the new conditions the colony would be more independent than it had been under the Company because the king would be too busy to interfere very much.

We passed next to the period of Bacon's Rebellion, taking up the Navigation laws, the arbitrary rule of Berkeley and the Indian troubles as the causes for a popular discontent. In ~~Via~~ part y feeling ran high, the sentiment of the majority being that the governor was right. One child asked which won, saying that she wished to be on the winning side. We noticed the coincidence in the character of Bacon's declaration and that of the Declaration of Independence, which was signed just a hundred years later. The significance of the earlier rebellion seemed to make little impression on the children. We next took up the rule of Alexander Spotswood, reading from "Stories of the Old Dominion" the account of his services in punishing the evil-doers, in founding the iron works which the colony so much needed, and of the Order of the Knights of the Golden Horse Shoe. This is practically the conclusion of our work on Virginia. The children have done an increasing amount of reading in connection with their history. In addition to the books above mentioned, the story of Henry Spelman and the Indian, found in Eggleston's

American Life and Adventure, and a chapter from Scudder's Washington, on colonial life have been of service.

Miss Hoblitt.

Reading. (a and b)

In reading they have continued their stories of Great Americans. VIB have taken a good deal of interest in the spelling of the words after they have read them. VIA as a whole have less ability and less interest, though I have taken pains to select for them simpler words with a view of helping their enunciation and conception of phonics.

Miss Runyon.

Number. (a and b)

They were given the problems in multiplication which Group VII made last quarter. They were much interested in them, but most of the children were unable without a great deal of difficulty to translate the words of the printed problem into a concrete experience. They had this difficulty with even very simple problems. I do not know why this was.

Miss Runyon.

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

Colonial Cookery.

The fat which had been cut from meat, tried out and clarified was used for the frying of crullers. The reasons for using deep fat and the tests for the right temperature, to be obtained without the use of a thermometer, were talked about and practically demonstrated. The remainder of the period was consumed in mixing and frying the crullers.

This week the methods employed for preserving fruits in colonial days were discussed and the necessary differences between these and the methods of the present time brought out. This led to the cause for the employment of the present methods and the nature of the bacteria which in their growth within it "spoil" the fruit. It was decided that moulds and other bacteria which are thus destructive grow only in the presence

moisture, hence its removal from the fruit would obviate the difficulty. The drying of the fruit then suggested itself to the children as a means of preservation which the colonists could have made use of. The way in which this drying was to be done took some time to work out, (as drying in the sun was impractical ~~at~~^{at} this season); finally the plan decided on was to use a cool oven and to lay the apples on a cheese cloth surface, (the metal of a ~~pan~~ pan being too warm). Three of the class prepared luncheon while the remainder arranged some apples for drying.

B.K.

Miss Tough.

Shop. (a and b)

They are working on their little canoes. They did the drawings for these on paper and also on the board. Most of them cut them shorter than they should have done, so that the canoes are going to be quite small. It resulted ~~in~~ that it has been difficult to shape them satisfactorily. It has taken very careful work to bring out the shape at all as we wanted it.

Miss Jones.

History.

The children have read out of school accounts of the battles of Lexington and Concord and Bunker Hill. We have discussed in class why the battles should have been fought in these places, and the preparations of the Americans for these events. We read of the capture of Ticonderoga which supplied the Americans with ammunition and arms, and of the siege of Boston and its evacuation by the British. The children were much interested in the work which Washington did in the reorganization and drill of the army, and they were amused that the northerners thought Washington a "dude", as one child expressed it. They were much impressed with the character of Washington, especially his patience while waiting before Boston to be supplied with the munitions of war. Also, when asked what are the qualities of a great general, they decided that one necessary characteristic is the ability to imagine what the enemy will do, and prepare to frustrate that plan. I think this idea was gathered from our study of Washington. I asked them what they thought the British would do after leaving Boston. They were lost to know at first, but agreed finally that the British would try to cut the colonies in two. We took the relief map of the United States, and after calling to mind that there was quite a number of British soldiers in Canada, we decided that the British would try to come down to Lake Champlain and the Hudson River valley, as the children realized that the forest would be an impassible barrier for the army. I then told them of Howe's plan to have Burgoyne and St. Leger come from the north, while he came from the south up the Hudson River, meeting near Albany and thus cutting the ~~army~~ colony in two. We found the position of New York city, and planned the best defense for it against the British. I told them briefly of the result of the attack of the British on New York, of the retreat of Washington's army up the Hudson and across New Jersey to the other side of the Delaware. We spent two half hours in the discussion of the Declaration

tion

of Independence, and the attitude which the different colonies took toward its acceptance and the reasons for these attitudes. We found plenty of pictures to illustrate the history of this time, and the children bring in considerable illustrative material ~~for the class.~~

O.R.

Miss Bacon.

Number.

They are still working on their problems.

Miss Bacon.

Science.

Their maps being completed except for the point of the slope of the river valley and the altitude of the neighboring highlands, in connection with the water gap of the Mohawk Valley, they took up the general question of altitude, what it is, measured from, the tides and the sea waves as affecting the sea level, and the principle of the barometer as an approximate measure of the weight of the atmosphere, and hence an indication of the altitude. Though at first they seemed to have no recollection of any experience with anything that showed them the weight of the atmosphere, in a very few minutes they told me all about the experiment they had tried last year of making a barometer, and their attempts at making a water barometer. It seemed worth while to repeat this experiment for the benefit of the four or five in the class who had never seen it. I was very much pleased to see the ability of those who had had the work to explain that the push of the air on the mercury was due to the pull of gravitation on the air. Evidently there has not been enough care in my previous work to be sure that they have got such terms as the name of the barometer itself, and the method of estimating the weight of a column of air when the height and the cross section are known.

Miss ~~Bacon~~ Camp.

German.

They have completed the day's activities in their idiom practice. They have wakened, dressed, eaten breakfast, gone to market, and to school. In school they learned the names of their subjects of study, and the furnishings of the school room. After school they had a walk on the winter streets, ate supper, and after reciting the poems that had learned, they went to bed.

Miss Teller.

Cooking.

Fish. ---The preparation of cod fish for fish balls was discussed, and the advantages of using deep fat for frying in order to have intense heat immediately to form a crust on the outside and prevent the absorption of fat. This brought out the necessity for having a definite temperature with sufficient heat to allow for the coöling of the fat by the fish and still produce the desired ~~fat~~ effect. The cost of materials used by the class was calculated by the class.

This week calculation was made for the preparation of luncheon for the class from individual recipes; three children then prepared luncheon while the rest wrote an account of the previous work. The writing was well done in most instances, but the spelling was poor. None of the children objected to spending the period in this way, but seemed rather interested in doing so.

OK.
Miss Tough.

Shop.

The fire place which we made a failure of last time was rebuilt. The children cleaned off the mortar from the old stones, and collected more stones. This time we put the water on the lime at night to slack it properly, and made the mortar according to more scientific principles. The group of children worked the first half hour, and then two remained to finish it. They used the bent iron for the frame work to hold it in place, and they put in the crane as they built it. Instead of making

the fireplace from stone as before, they used a strip of tin and lined it with asbestos. The children found that the chimney draws very well. The little spinning wheel was made by George Blossom. He took the measurements from the large spinning wheel, and sawed the wheel out with his own scroll saw at home. The girls were to furnish the bedding and the doll, but they have not furnished them yet. The windows were cut and the glass fitted to the frames. The window casings were made to hold the glass. One of the children brought the small mirror, and the children made a circular frame for it. One child brought a picture of George Washington. It has been suggested by the children that we give the house to the kindergarden, but this has not been decided yet.

Miss Jones.

History. (b)

We have finished our work on the English town. The class has been writing records of the work, and have spent some time at this. We have taken up a general survey of the geography of the world in connection with the history review.

Mr. Armitage.

History. (a)

This class has gone on with the history of Mexico. The children read aloud in class from their books, and then the story is talked over informally. At the end of the period a little time is usually given to spelling.

Mr. Armitage.

Science. (a)

The members of this class have drawn outline maps of North America using as a model the large ~~outline~~ relief map. On their maps they have indicated the courses of the permanent winds. I told them the location of the areas of high pressure on the earth, using diagrams, and from this they found that the winds should blow from the tropics of Capricorn and Cancer to the equator and to the poles. I then had them fasten a paper disk to the table by lining it in the middle, and then while one member of the class turned the disk, another tried to draw a straight line running north and south. They found that on a turning disk, an object moving in one constant direction does not move in a straight line referred to radiating lines from the center of the disk. When the disk moved clockwise the line inclined to the left, and when the disk turned counter clockwise the line inclined to the right. Using a globe we found that to an observer at the north pole, the earth seems to be turning counter clockwise, and therefore the winds in the northern hemisphere should turn to the right. Then with no more help they drew in a diagram of the earth the system of the permanent winds of the northern and

southern hemispheres. They took no account of the land masses in this diagram, although they do change the paths of the winds to some extent. I got some paper relief maps of North America, and on these they will trace the courses of the constant winds, using a map of the winds, and then will work out the places of great and light rainfall.

Mr. Gillet.

History. (a and b)

They have finished their maps of the United States, and have begun on the period of exploration and discovery. This work is followed out practically in the same manner as that of last year, except that the children being older, can do more reading for themselves, and can go more deep into the subject.

Miss Bacon.

Science. (a)

n Sulphur was the substance to be experimented with this week.

On Monday I asked the class if sulphur would dissolve in water, and most of the class thought it would. I told them to try dissolving the sulphur in water, in hydrochloric acid, and in carbon bisulphide.

They found that the sulphur did not all disappear in water, but the class could not tell if any of it had disappeared. One member of the class suggested that if any of the sulphur had dissolved, it could be taken out of the water again by evaporation of the water. I had to remind them that they would have to filter the mixture before they could try evaporating it, for otherwise it would be possible that some of the particles of sulphur would be held in suspension in the drop of water. Consequently they filtered the mixture, evaporated a little of the filtrate to dryness, and found no deposit left. They therefore concluded that sulphur does not dissolve in water. The lack of time prevented the trying of the acid. They pursued the same method with the carbon bisulphide, and found that the sulphur disappeared from sight, and that the evaporation of a drop caused a crystal of sulphur to be left on the glass. These crystals were examined through the lens. One of the boys suggested that the carbon bisulphide smells like the rubber cement the shoe repairers use. I told him that this is also a solvent for rubber.

In the next period the class made sulphur dioxide gas. Part of the class burned sulphur in the air and so got the gas, and some used

charcoal and sulphuric acid. They tried to collect the gas under water but without success. They concluded that the gas must dissolve in the water, and on trying the water with litmus paper, they found that it was acid. They had not had this test for an acid before, and I spent some time in telling them the tests for acids. This was the second gas that they had found would dissolve in water, the other being air. They found that the gas ~~at~~ bleached calico and red ink marks on paper.

Mr. Gillet.

Science. (b)

This class has continued the review of the work of the year. We considered the following main topics: coal, its formation and metamorphism, and swamps as topographic features, and the changes which the undergo. I think the class got considerable out of the review, for it consisted of a thorough discussion of the main points, and afterwards a stating of the principles in their note books. They spent one hour in composing and answering a set of questions calculated to bring out the whole subject in its proper perspective. When they composed the questions they did not know that they were to answer them. On the whole the questions and answers were good.

Mr. Gillet.

Mathematics. (a and b)

We have been working on the proofs of inverting the divisor as Group X has. We are now trying, mostly in vain, to find some practical problems in fractions in the text book. We can use profitably about one in ten. The rest are simply scholastic puzzles.

Mr. Osborn.

Science.

The class examined live lobsters and studied their habits and external appearance. Drawings of the external anatomy were then made. Preserved specimens were then used in determining the internal anatomy. The circulatory, reproductive, and digestive systems were then worked out in the laboratory and drawings made of them.

This week the dissection work on the internal anatomy was completed. The systems worked out were the nervous system, the excretory system, and the respiratory system. Drawings of the antennae, the mouth parts, the walking legs and the abdominal appendages were then made, and the relation between their structure and the work they had to perform noted. Then after reference reading was done, an essay on the habits and the external and internal anatomy of the lobster was begun.

Mr. Garrey.

Mathematics.

We have completed fractions as far as the theoreticla part of the work is concerned, but we shall have practical problems incidentally for all the rest of the time. We spent most of the time last week in developing proofs of the legitimacy of inverting the terms of the divisor in division of fractions. We have also begun percentage, but I find that some work in decimal fractions will be necessary before we do much in that subject.

Mr. Osborn.

The children celebrated Washington's birthday, Group IX preparing the program. Each child had some part. The children themselves made out the outline. One child took the boyhood of Washington; another, his school days; another ~~his~~ part in the French and Indian War; Washington in the Revolution; Washington as president; and Washington at home. Eugenia Baker said that she knew several stories of Washington which would not come under any of these heads, so she wrote on incidents in the life of Washington. They worked together as a class better than I have ever known them to work.

The second Wednesday afternoon Miss Harmer talked to the children on the Horace Mann school, and they asked many questions and seemed interested in the subject.

Miss Bacon.

We spent two days on the lighting of houses. The children talked about the various ways their houses are lighted. I asked them about the primitive methods, and told them what they did not know about it. We made candles. The children arranged the wicks in the moulds, cut the paraffin into small pieces, (at first they wanted the paraffin put over the fire in the large cake, then decided that it would take too long to melt). When the paraffin was melted they poured it into the moulds, and left them to harden over night. The children were very proud of the result, especially on seeing that they would light.

We made lamps for the play houses.

So far this quarter our work has been centered on the houses, and their furnishings. Now they are going to take up the means which facilitate the travel from one house to another. We laid out a street, on the table, with houses on each side, sidewalks and stepping stones at the corners and crossings.

The special story of the week was the "Bell of Atri". Monday the children listened to the chorus singing of the older children. After this we sang one of our songs for them. The children enjoyed this very much.

Miss Dolling.

O.K.

Social Occupations. (a and b)

We began this week on the lumber camp. The children realized that we need great quantities of wood for houses, tables, chairs, etc., and they wanted to know where the supply came from and how we get it. We talked about the time of year suitable for lumbering, and the children finally decided that the winter would be a better time, as the roads through the forest over which the wood has to be hauled, are necessarily hastily and rudely constructed, and in the spring time the wagons would stick in the mud. However if they waited until winter the roads would be hard and the sleds could slide over them easily. I showed them pictures of a lumber camp, and in all these pictures they recognized the fact that it was autumn, for the leaves had fallen.

Q. K. Miss LaVictoire.
Cooking. (a)

We continued the study of rice. One child weighed the rice which had been popped the time before, and found that the moisture that had been lost equaled in weight thirty grams of rice, but as this included broken grains, we weighed it again in order to use whole grains. The second time the weighing was a failure, since for some unaccountable reason the popped grain had increased in weight. Although there had been only a few in the class when corn was popped to see if it contained water, and one of these thought that this proved that corn lost no water, we weighed 1/4 ounce of corn in order to try the experiment again. A difficulty in telling time during the preparation of the last luncheon made it necessary to spend some time in study of the clock.

Luncheon (a and b)

In the luncheon the children cooked whole rice, after weighing it to find that the proportion of water needed was 4:1.

Miss Lachmund.

Sewing. (a and b)

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Sewing. (a and b)

The children are nearly finished with their holders, which they are quite anxious to complete, because every time they cook they feel the need of them the more. One little girl, who in the beginning seemed most helpless and unable even to weave in the strips of tape, and who has besides been absent often, was the first to finish her holder, and made her blanket stitch around the edge remarkably well.

Miss Lachmund.

Art. (a and b)

Our regular program was changed this week by a suggestion made by one of the children. They suggested that we make a picture of a snow storm, as it was snowing outside, so we went to the windows and studied the sky and then the ground. As soon as we had decided on the colors, the pictures were made. In our next lesson we made a picture of children skating. We discussed the color of the ice on the ponds, and one of the children decided that it is a cold blue green. The work was done with colored crayons. The subject seemed to be well understood.

Mrs. Laver.

Constructive Work. (a)

The children painted their clay dishes. They used conventional designs for the most part. Some painted figures of Ab and Oak with sword and spear, or figures in a running attitude.

They used the printed letters again this week. I cannot see that they have gained much by using them. Words that they have used the day before they have not been able to spell. They seem to be pretty well acquainted with the letters. About one half the class can go ahead, and print the sentences without any help in spelling. The other half have to be helped constantly.

Miss Lackersteen.

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

Vegetables--Parsnips.

The period was spent in finding the parts which go to make up the parsnip. The sugar was discovered by tasting a small piece, the water was seen when the vegetable was cut and grated, the cellulose was separated by grating and washing, the pulp in cheese cloth. The water in which this was washed was set aside to allow any starch in it to settle; then, by boiling, the water was found to be slightly thickened, and the conclusion was reached that starch was present. As each part was found the children made a record of it, and in the end these records were compared.

Miss Tough.

Textiles. (a and b)

At the end of last quarter the children spun the cloth on a spindle weighted with clay. In the meantime the children have made in the shop spindles with the wooden disks, and have spent the time spinning the worst carded wool on the spindles.

Miss Harmer.

Sewing. (a and b)

The children are making needle books and are drawing designs for the border. The border has been made of straight lines and has been put on the cloth with the darning stitch, following the weave on very coarse canvas. Miss Cushman came in while they were making their designs and considered them most successful.

Miss Harmer.

Sewing. (a)

A number of the children have just completed their sewing bags, and have begun the preliminary overcasting of their needle books.

Miss Lachmund.

Sewing. (b)

Almost all the children are working at the designs on their needle book covers. Originally the designs were an exact imitation of the design of the child who began his needle book first. On being encouraged to think out borders for themselves, the children produced other designs.

Miss Lachmund.

Shop. (a and b)

They have completed the bows and have strung them. They took home the arrows which they made and are going to make the quivers at home themselves. They did some shooting before they took them home, and found that they worked very well. In their work in clay they found that they needed small potters' wheels. They spent one division in talking about how they should be made. They cut the stock 8 x 8 x 1/2 inches, found the center themselves, and with the dividers they made a circle 7 inches in diameter. This was the first time they had used the dividers alone. They clamped the pieces and sawed them with a small coping saw. The children are working out the best way to make the wheel so that it will turn.

Miss Jones.

History. (a and b)

As a means of summing up Livingston's explorations in Africa, we have begun to write a diary, two children working together. We have taken up the reasons for the voyage, the discoveries he made, and the customs of the natives which he observed.

When we came to the discovery of the Falls in the Zambesi river, we examined different specimens of rock, to decide on which kind the water would have least wearing effect. We took this opportunity, also, to talk about the position of the rocks in relation to the earth, and the causes of upheaval, making mountains, and the erosion cutting deeper valleys.

In reading both groups are continuing Robinson Crusoe, being required to read it all aloud after reading it silently.

Miss Runyon.

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

Review of cereals. --- The flaked rice which had required an equal bulk of water in cooking was used as the standard with which to balance flaked corn, which was the next cereal to be cooked. Equal bulks were found exactly to balance, and the children knew that the same amount of water would be required for each. The recipe was made and written by each child preparatory to the beginning of a recipe book.

OK.

Miss Tough.

Textiles. (a)

All the children have finished the weaving of their pin ~~sh~~ cushion covers, and some have also finished making the cushions. They take renewed interest in the work now that they see that they are making progress. Two, however, were not interested enough in their covers to take pains with their stitches, as they contemplated throwing the cushion away as soon as they had finished them.

Miss Harmer.
Miss Lachmund.

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Science. (a)

They are making a mill with a water wheel. For the water wheel we have a fan from an electric fan, and the different children are making the different parts for the wheel in the shop. They are carrying out the plan which they decided upon a few weeks ago.

Miss Hill.

Number. (a and b) 1 hour.

The time has been spent on some oral work on the tables and on the printed problems. The children are interested in this work, and are able to think much more clearly than they were a few weeks ago.

O.K.

Miss Tough.

Cooking. (a and b) 2 hours.

Colonial Cookery. --- The children ^{were} asked about the methods of preserving fruits, aside from drying, which might have been employed in colonial days; the using of a large proportion of sugar was ~~was~~ suggested as a means and the reasons for this discussed. The preparation of orange marmalade was begun by a part of the class, while the others prepared luncheon. One half hour was devoted to writing recipes in the books with which the children have provided themselves for that purpose.

O.K.

Miss Tough.

Cooking. 1 1/2 hours.

Fish--- The first half hour was spent in talking over the preparation of refreshments as a surprise for the "sewing bee", which is to meet on Tuesday afternoon. The children are to work at this out of school hours. With one exception they expressed a desire to do it; before the period was over they were all enthusiastic. The rest of the time was spent in preparing a luncheon of baked fish and cream potatoes.

S.H.

Miss Tough.

Textiles.

They are beginning colonial textile work. They are beginning wool. They opened a fleece which weighed eight pounds, observed the shape of the fleece, the quality of the wool in the different parts, and talked of the care of the sheep in the washing, shearing, and the countries in which wool is grown. The last half hour was spent in sorting, cleaning, and carding the wool.

One hour a week the boys and girls have separated, the girls finishing their dolls' clothes, and the boys making implements in the shop. The girls did not have their dolls, so they spent the period in practicing spinning on the German flax wheel.

Miss Harmer.

Shop.

Group VII are making some implements to use in connection with their colonial textile work. The first thing they took up was the skarne or spool/ holder. The description of the one given was for eight spools, four in a row. The children figured how long the piece must be to hold forty spools, in two rows. The spools are an inch in diameter, and the space between them one quarter inch. They found that this would make a large ungainly implement, so they made it half the length of one row instead of two. Two cross pieces were cut 25" x 3/4" x 1/2", and the end piece 12" x 1" x 1/2". The piece for holding the spools we wished to make of willow, but we used copper wire instead.

Miss Jones.

History. (a)

The class has followed up Cortes' entrance into Mexico with a description of the city and its people, its houses, the people's dress, their manner of living, their religion, and their government. This was followed with consideration of the danger of Cortes' position, the virtual imprisonment of Montezuma, the danger to Cortes from Narvaez's expedition, the defeat and capture of the latter, and the absorption of his army into that of Cortes.

The outbreak of the Aztecs was then taken up, the battle in the city, the death of Montezuma, and Cortes withdrawal from the city. The work has been developed orally with parallel readings from the reader

B. F. Armitage.

History. (b)

The class have corrected their papers describing Great Britain as to its physical, industrial, and commercial features. They have also finished their maps of the same, and taken a general survey of the British empire, and the waterways by which the kingdom carries on commerce with the several dependencies.

B. F. Armitage.

Science. (a)

This week the class has gone on with the indicating of the continental winds of North America and the oceans around the continent. On their first maps they drew the lines as they thought they ought to be, but on their relief maps I have had them refer to wind maps in the text books, for they could not calculate the courses of the winds nearly enough to calculate the exact position of the rainy belts. There are too many considerations entering into the course of the winds for the children to work out the whole subject for themselves. After they had indicated the courses of the winds on their relief maps, I went over with them in some detail a review of the fundamental principles governing the deposition of moisture in order to have them

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indicate on their maps the wet and dry regions of America. They had no difficulty with this work, and with only the knowledge of the courses of the planetary winds, and the principles of the condensation of moisture, they indicted the wet and dry regions of the continent.

Harry O. Gillet.

Number. (b)

The clas has continued work in writing numbers, and in concrete and abstract problems in the four fundamentals.

B. F. Armitage.

Textiles. (a)

We analyzed the Knetucky loom, and followed the development of the loom from the primitive forms. They have followed from "Home Life in Colonial Days" the conditions of spinning and weaving in those times, and noted the old fashioned names for the attachments which are now obsolete. They have spent a few minutes at the end of each period in weaving on the large loom. For some time they have been sewing carpet rags. The work is slow, tedious, and uninteresting, so a sewing bee was planned, where a number would come together to finish the work in one afternoon. The children spent one afternoon in planning a poster using colonial English and illustration. Miss Hoblitt helped them in forming the invitation, Miss Cushman in spacing the poster, and Mrs. Kern in making it. As nearly as possible the children will imitate the colonial sewing bees.

Miss Harmer.

Textiles. (b)

They have made their patterns for the loom and have selected the one they like best. Now they are experimenting with the dyes. They will have to use two dyes, making altogether three colors to weave into the pattern. Different ones are trying the different dyes in small quantities. They will select the ones they like best, and make and make a larger quantity.

Miss Hill.

Science. (a)

This week we experimented with chlorine and nitrogen. They prepared chlorine by using common salt and manganese dioxide. The class found that this gas, like sulphur dioxide gas, dissolves in water, and bleaches calico and red ink marks. As the fumes of this gas are very disagreeable, and as the room is not adapted for a chemical laboratory, our work with the gas had to be very short. In this experiment and in the following one, I had the pupils arrange the apparatus as they thought best, and tried to have plan as far ahead as possible.

At the beginning of the hour Thursday the class gave me a list of the things that they knew contain nitrogen. They seemed to have forgotten their experiment with the iron filings, which they had with Miss Averett at the end of last quarter, and could think of no way of getting the oxygen out of the air to leave the nitrogen. They used phosphorus for burning the oxygen from the air, and the experiment was successful, but after the class had left the jars of nitrogen in water to use them at the next time, some of the children of the other groups lifted the jars and let the nitrogen escape. However they had made tests of the gas before the accident occurred.

Mr. Gillet.

Science. (b)

We have begun our work in physical geography which will be continued for the rest of the year. We shall spend about two weeks on mathematical geography, including a consideration of the form of the earth, its motions, latitude and longitude. The work with latitude and longitude will give opportunity for considerable number work. The class will have Redway's Physical Geography as a text book, and will have ~~xxxi~~ assigned lessons, although the class work will consist mainly of discussion of the matter read outside of class. It has been thought best to change the two half hour periods in the afternoon to study periods, ~~as the class has little study time at home.~~

Mr. Gillet.

In connection with the streets and sidewalks, we took up the lighting of them. With the second gift the children built lamp posts. Then they made a surface picture; the lamp post was a folded form, then they free cut the post and added pencilings. We learned a song about the lamp lighter and dramatized it. I read to them Robert Louis Stevenson's "Lamplighter".

We talked about the means of getting from one home to another when the distance is too great to walk. The way which seemed first to suggest itself to most of the children was the carriage. The few who are not in the habit of using carriages spoke of the street car. The children were anxious to play street car, and we have done so several times. They have formulated it into a regular game. We directed the building of a street car with the smaller ~~blocks~~ blocks at the table, then afterwards the children worked out the same form ^{with} from the Hennessey blocks. Out of cardboard permanent forms were made. We learned a street car song and dramatized it.

The ~~story~~ story for the week was "Hans and the Four Giants".

Miss Dolling.

(D.K.)

Social Occupations. (a and b)

We continued our work on the lumber camp. I read to the children a description of the life there. I told them how the men first go there in the fall, and build rude cabins for themselves. Then I told them how one set of men called markers go through the woods and mark the trees suitable for cutting; these men are followed by other men who chop down the trees. The children realized the danger from the falling trees, and saw that the men would have to know exactly in which direction the tree would fall. Some of the children had seen trees cut down and described how it is done. I let them draw pictures on the board, showing the men chopping down the trees, and showing the nick in the tree and I had them show me how the tree falls with reference to that nick. We constructed a lumber camp in our sand box, using pine twigs for trees, and making little cabins with blocks, and playing chopping down the trees. Then we piled the logs on the sleds and carried them down to the river which we had made in the sand box. In the river the logs are left in piles frozen together till spring, when they are taken to mill. We talked about the dangers of river jams, and how they are avoided by having men pole the logs down the river. After the logs had passed the rapids in their river, and the smooth water had been reached, the children made the logs into a raft. The logs intended for different mills had previously been marked, so that each raft consisted of the logs for a certain mill.

I showed them pictures of a saw mill, and they saw how the logs can be cut into ten or twelve boards all at a time. They went into the shop and measured the logs there, both for length and thickness. From the saw mill they carried the lumber on trains to the lumber yard. They had made these little trains in the shop. They looked at pictures of lumber yards on the Chicago River. Then we dramatized the story of the lumber, up to the point where it was purchased by the

carpenter for building houses and making the common articles of furniture which we see every day. In connection with this work I have read to them several of Hans Christain Anderson's stories: The Discontented Pine Tree, The Story of the Forest, and The Last Dream of the Old Oak.

We have commenced to devote one half hour a day to reading and writing. They have a very good idea of phonics, and show great independence in forming new words. They read with intelligence and get the thought of what they read.

Miss LaVictoire.

Cooking.

We popped the corn we had weighed the time before, and found that it had lost in weight, and so like rice contained water. In preparing the luncheon we talked about the way we had cooked whole rice the last time, and compared it with the new way, -namely of boiling it in a great deal of water (eight times as much). They decided that the motion of the water in boiling would be strong enough to keep the rice grains from sticking to each other and to the bottom of the vessel, thus making it unnecessary to stir the cereal. The children had some difficulty in seeing that $8\frac{1}{4}$ cups of water = 2 cups, in calculating the amount of water necessary if one fourth cup of rice was to be used.

The last period of the week we compared rice and corn as to the amounts of starch and woody fiber in each. In order to demonstrate the difference, rice was ground in a mortar. While each one was having his turn at the mortar, the rest wrote on the board the names of the three preparations of rice which one can buy at the store, and with which we shall have worked by the end of the quarter.

In cooking their rice for the luncheon the children seemed to know how to get to work better than they usually do. Their interest in watching the boiling water carry the rice grains around was very great.

In the next period we began comparing experimentally the relative amounts of starch and woody fiber in rice and corn by gringing each and washing out the starch in water. We did not have time to finish with the corn, but the children saw in the case of rice that all the original contents of the cheese cloth had passed into the water with the exception of a few bits of grain not ground finely enough. They decided that a cup of rice would have more starch in it than a cup of corn, because a part of the latter is woody fiber.

The preparation which was to have been cooked in the next period was rice flour, but as this could not be obtained, the children chose flaked rice in its place. One or two of the children remembered the amount of water necessary to cook the flaked rice.

Miss Lachmund.

Sewing. (a and b)

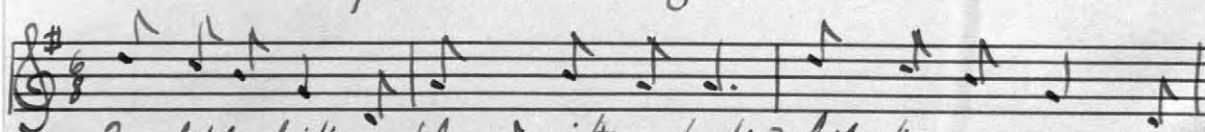
The holders were finished this week, and the cooking book covers were begun. The delicate silk to be used in sewing these impressed it upon the children that hereafter their hands must be perfectly clean on coming to the sewing class. The children seem delighted at the prospect of making book covers, and enjoy looking forward to the use of the silks on the rick green cloth. They are doing their work most carefully.

Miss Lachmund.

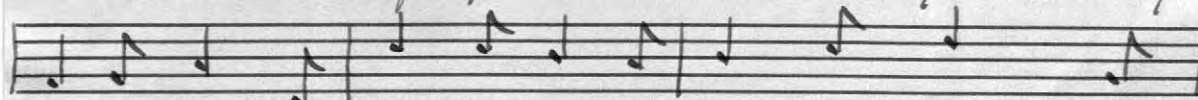
Music. (a and b)

III a and b have shown much improvement during the quarter. Imitation of pitches sung by the teacher, singing individually the different tones of the scale, imitation of two-pulse exercises sung with the syllables, and simple scale exercises sung with words have been the ~~mx~~ only means used beside song singing. Toward the last of the term, pulse and rhythm were introduced as these children seemed capable of comprehending them. They learned to recognize two-pulse

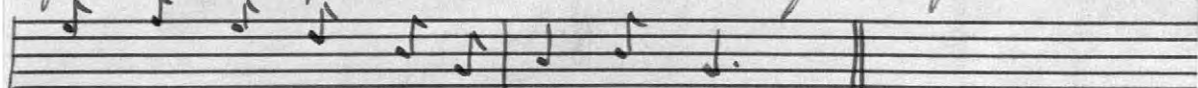
written by 3 a + b together.



Two little kittens played with a ball while they were running



up the hall they rolled it down the stairs full speed and



lost it and felt very sad indeed.

rhythm orally, and could represent it by circles on the board, though not rhythmically.

Mrs. Kern.

Gymnasium. III and IV.

They have been doing about the same work as before, except that I have added a few more exercises to the 4's drill and have given both groups some apparatus work. They seem to enjoy the apparatus work as much as the games. The games have been a little harder, and I generally have them play two during the half hour, first a running game or one from which they obtain considerable exercise and the last five minutes a more quiet one, in order to cool them off and quiet them. They are very responsive and I have very little trouble with either group.

Miss Wetherbee.

History. (a)

In preparation for their work with metals the children were given an adaptation of a part of George Eliot's "Legend of Jubal", the story being brought in a little at a time as the sequel of what the children had worked out for themselves with regard to the properties and uses of metals, the different methods of handling them, the construction of a furnace, etc. The method first proposed was that of melting and moulding, but the children decided afterwards that the people who were learning to use metals would first handle them as they had learned to handle stones. One child suggested that perhaps they might have melted some metal in the fire by accident, and found that its shape was changed in this way, and so came upon the idea of moulding. It took them some time to work out the ideas for a furnace. When asked what they would do to secure a very great heat, they said they would find a place where there was plenty of fuel, and build a very large fire. The phrase "yoked the fire" in the poem puzzled some of them very much, but when they were told that meant to control the fire as animals are controlled by a yoke, they finally said that the way to do that would be to build a furnace. Then they went on readily to suggest a door and chimney, and the plan for regulating the heat by admitting more or less air.

We talked also about the localities where metals could be found. They knew that gold and silver and copper are sometimes found in lumps, of the pure metal and sometimes mixed with rock. In spite of this they said that metals would be found in the valleys and along the river banks. So we took up the subject of erosion again, and they decided that the ore would more naturally be found where the rock foundation had not been covered up, -- that is, along the rocky valleys and in mountains. We looked at some native copper and some copper ore, tried some copper wire and discovered that it would bend easily, and

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try it to see if they could shape it by pounding. The flattened wire suggested knife blades, which they proposed to make, and thought that if they were to heat the copper it would be more easily worked. They have not yet finished the knives, as they are not able to shape them very well, and grow tired quickly of the pounding. They found some tin which they experimented with, and finding that it melted easily they wished to mould some. A mould was at hand which they were allowed to use, and then it was proposed that they make some moulds for themselves. They made moulds for arrow heads and for little hatchets which have not yet been tried.

Miss Hoblitt.

History. (b)

In this group we are studying about water, underground and surface, the nature of wells, springs, etc., the beds of rivers, river basins, action of water, and erosion. We have now begun the study of minerals. In connection with this work they have done some number work, and a good deal of reading and writing on the blackboard. They have dictated to me a number of stories on wells, springs, etc. These will be used in their reading with Miss LaVictoire.

Miss Schibsby.

Cooking. (a and b) 3 hours.

Vegetables---Parsnips---A review was made of the method of preparing white sauce, also of the composition of the parsnip. The words used were written by the children.

In the next lesson the analysis of parsnips was continued in the same manner as described for other vegetables, and comparison of the results made with those previously analyzed.

The children take turns in writing the words on the blackboard, and enjoy this part of the work very much.

O.K.

Miss Tough.

Textiles. (a and b)

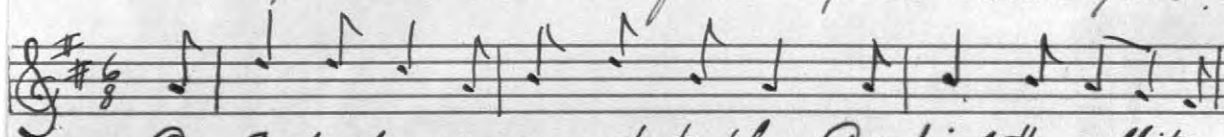
They examined a fleece, noticed the difference in texture of the wool on the different parts of the fleece, talked about the countries where wool is grown, and the reasons for sending unwashed fleece to market in this country, -- on account of the sheep catching cold on account of the early season of shearing, and the men having to stand in the cold water for so long a time, -- were talked about. They were given the average weight of a sheep's fleece and of a lamb's fleece. They examined the difference in the wool of different samples. Then we reviewed quickly the work done in the fall, carrying it out in a practical way. We reviewed the teasing, the sorting, carding, and spinning. In the last period of the work the children changed the disks of their spindles. In order to spin as the Italian women do, the spindle is twirled on the knee, and spun in the air. The children found that it spun more easily and for a much longer time. They observed without suggestion that it was because there was nothing to stop it. They were asked if there is anything to stop it if it is twirled in the air, and one child answered "no". It was suggested that it might go on forever if there were nothing to stop it. A child said that it must be the drawing out of the carded wool that disturbed the spinning. They then tried drawing out the thread first and then twirling the spindle. It was found to decrease in rapidity almost as readily as when the ~~raw~~ carded wool was drawn out at the same time. The children then believed that the air must disturb the spinning. Another child observed that of course it must as the air has weight, and mentioned gravitation, and the air being held to the earth by its weight.

Miss Harmer.

Sewing. (a and b)

The children are continuing with their needle books. One child who was trying to design a border for the canvas cover suggested a wavy

written by Ha. Used for rhythm analysis.



On Easter day we go out to play And find the rabbits
We color them red and purple, and blue To send to Auntie and

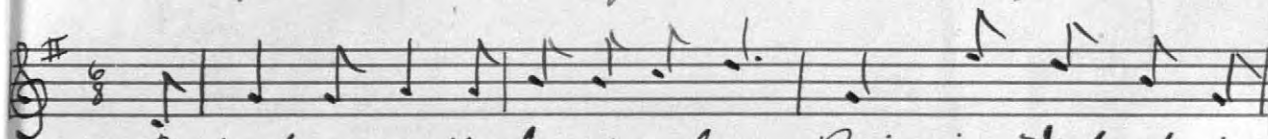
Lopping gay Their nests we see under a tree And
 And you they give us rabbit hole can- dy eggs And

And you they give us rabbit with can- dy eggs And

carry their eggs in our baskets away
little soft ducklings with yel - low legs.

little soft ducklings with yel - low legs.

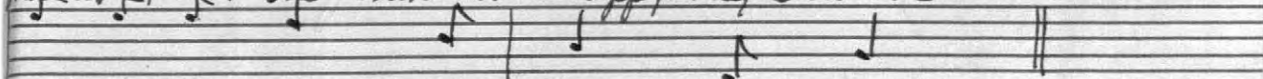
Written by 4b and used for rhythm analysis.



The postman gaily hurries along Bringing Valentines
" " goes to ev'ry house & takes a letter and



for the town His bag is full as it can hold of
hundreds yet out The children are happy as they can be



Valentines pink and blue and gold -
when the beautiful things they see.

pattern. It was with some difficulty that she realized the impossibility of making curves on canvas.

Miss Lachmund.

Music. (a and b)

IV a and b have, beside song singing, represented from two to six pulse measure rhythm by circles drawn rhythmically on the board. Each child has chosen what rhythm he would represent, and has been encouraged to take as difficult a one as he could handle. The most difficult one is a song in six-pulse rhythm when the words confuse the rhythmical ^{being} song somewhat. One member is able to do this invariably correctly.

Mrs. Kern.

Shop. (a)

This group have not all completed their bows and arrows. Those who have completed them are at work on their potter's wheels, cutting the stock 8" x 8" x 1/2", and then marking the circle 7 1/2" in diameter. These children have one half hour a week in the shop.

Miss Jones.

Shop. (b)

They have completed the disks on their potter's wheels. They spent one period in deciding how they would put them on satisfactorily. They decided to cut a piece of 7/8 inch pine to fit on the bottom, and bore a hole through it large enough to put one of the dowel rods in.

Miss Jones.

Gymnasium.

See Group III.

Science. (a and b)

They have carried their rice to the point of transplanting, placing one set in the moist earth and the other in standing water. With the exception of the rice the tropical seeds have not yet germinated. A crop of weeds has appeared where the lemons, oranges, etc., are expected. The children have not yet made any deductions as to the shorter time of germination of northern seeds in relation to the amount of heat required for their germination. They did not suggest when I brought up the point, so I left it over, until their tropical seeds should have germinated.

The children have been very much interested in the way a river carries down the soil, and where the different kinds of soil are deposited, but when they constructed a river in the sand box, they showed a lack of ability to carry out practically several points which they described quite easily. I think more of their geography should be concrete for a time.

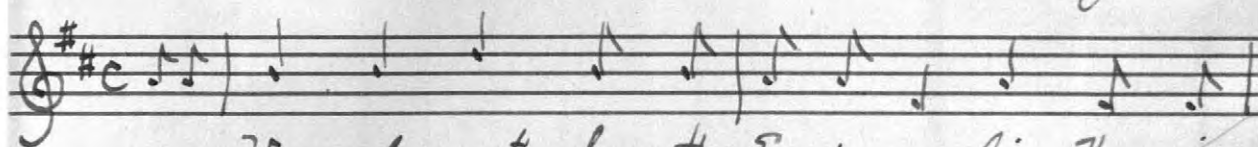
In a discussion of the germination of the seeds, and the flow of the sap in the trees and the bushes, the children asked me what the tree gets from the soil. With Miss Runyon they have also taken up the making of salty and siliceous earths in the interior of Africa. In their early work in the fall they had all of them been unable to handle the problem of getting fresh water from salty water, and had suggested to Miss Runyon that pouring the water down a hot board in the sun would leave the salt ~~fresh~~ ^{or freshen the water} on the board. They told her that last spring, when they talked about plant food, they had dissolved some salt in water and then gotten it out of the water by that method. Miss Runyon had purposely left the question in their minds, and when I asked them to tell me what they did do with the water last year, they told me that the salt did stay on the board but that the water was still salty. One or two, however, thought that if this process was continued long enough, fresh water would be obtained. I asked them what became of

the water that wet the board, and they told me it went off into the air, and then immediately exclaimed that only the salt is left. I asked them if any salt went off in evaporation or steam, and they were not quite positive. So I gave them copper sulphate which they could detect easily in the condensed vapor if it were present, and told them to find out if what they thought was true. Then they came to me with a plan for getting the salt out of salty water or out of salty earth. Their salt mine, as they called it, was made by stirring up a cup of salt in three cups of very dry black earth. Three of the children in one class discovered quite independently how to get the salt out by dissolving, boiling, and evaporating the water. None of them were able to suggest a method of getting the salt out if they had no utensils in which to boil, and when asked if they had a log hollowed out, if they could get the salt out of the salty muddy water, they said to let it evaporate and the salt would be left on top. Then they tried two experiments, letting the salt and water and earth stand over night. The next morning all in one class and all but two in the other class discovered the pure salt crystals in the solution and on the edge of the cup, and more especially on a test tube which they had left sticking up in the solution. They did not suggest decanting the salty water left above the sediment, and thus getting rid of the most of the dirt. One of the children said a native might stick a number of sticks in the mud, and let the salt form around them, which I believe they do practice. I think they were in a slight state of unbelief of getting any salt from the water, from the amount they got from a cupful of water. Kent Tenney came to school full of the idea that something would happen to a knife blade if it were put into a cup of hot copper sulphate; the children were interested to see the bright copper deposited on the steel in the copper sulphate solution.

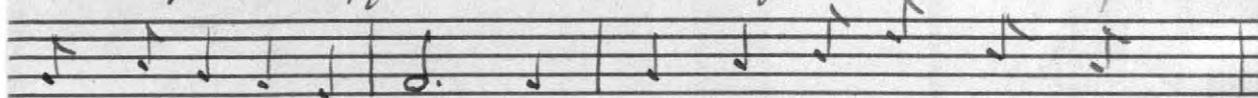
Miss Camp.

K. B. C.

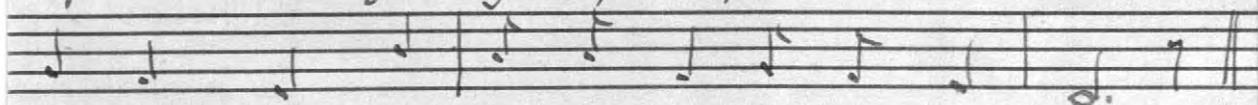
Written by 5a. Used for rhythm analysis.



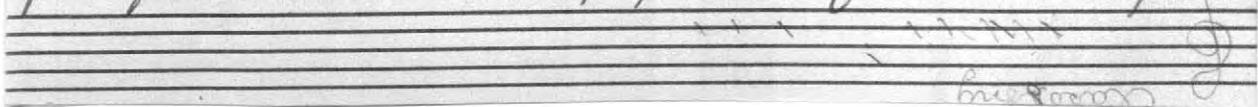
Way up north where the Esquimaux live there is
They go hunting for seals and po-lar bears And the



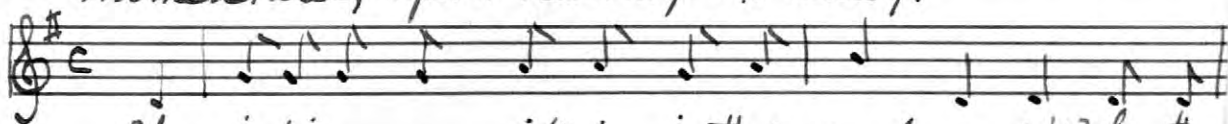
beautiful ice and snow The icebergs glitter in the
dogs draw their sledges along They bring home meat and



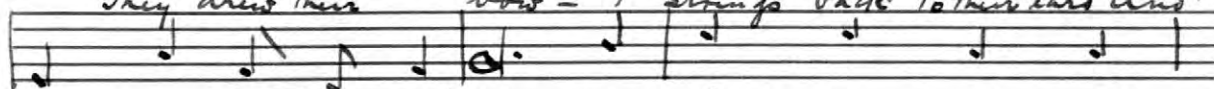
Northern Lights As hunting the Esquimaux go.
furs for their huts While singing their Esquimaux Song.



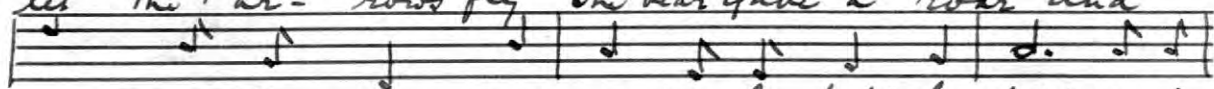
Written by J. B. This song met with enthusiastic approval by the Chorus and was learned almost immediately upon hearing it sung.



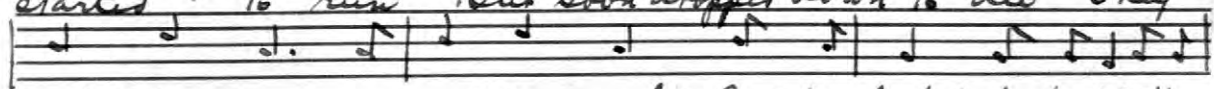
The Indians were sitting in their camp one night When they
They drew their bow - strings back to their ears And



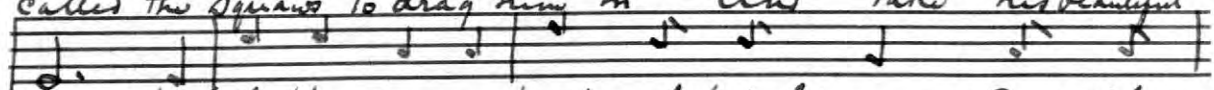
heard a growling outside The chief sprang up and
let the ar - rows fly The bear gave a roar and



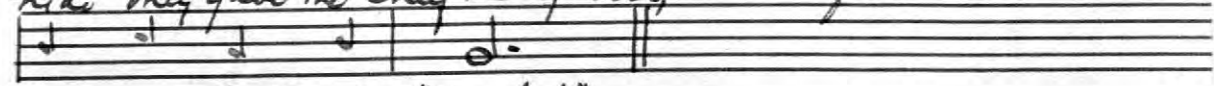
caught up his spear And quickly his belt he tied Then he
started to run But soon dropped down to die They



called his braves and out they rushed And they looked all about in the
called the squaws to drag him in And take his beautiful



dark Until they saw a pair of bright eyes And the
hide They gave the chief the glossy fur So



Indian chief said "Hark!" -
hang on his wigwam side.

Cooking. (a and b) 4 hours.

Review of cereals.---Corn.

One period was spent in writing in the note books the recipes and the general directions for the work of last week. Using flaked corn as a standard, corn starch was balanced with it, and a recipe made for blanc mange. The process of making corn starch from the whole corn was discussed.

The method of making corn meal from corn was talked about, and the various preparations from the corn examined. Plans were made by which the class is to make its own corn meal and corn starch directly from the corn, the children having thought out the means for doing this.

By use of the scales the children found that corn meal is four times as heavy as flaked corn, and the recipe for boiling the former was made accordingly.

One half hour was devoted to writing recipes and general directions in the new note books; this part of the work is a source of much pleasure to the children and the books are regarded as great treasures.

O.K.

Miss Tough.

Textiles. (b)

In Vb only one child is still working on her loom. The others are decorating the edges of the felt holders with a fancy blanket stitch, while one is making a burlap mat.

Miss Lachmund.

Music. (a and b)

V a and b have, beside song singing, worked at notation in the key of C. They have drawn clefs, learned to represent the signature, studied notes from wholes to eighths, have written the scale in various tempos, have written simple melodies on the board from dictation, and have afterward read these. They have shown much interest in the work.

Mrs. Kern.

Shop. (a and b)

They are completing their boats. They brought a pan of water into the shop to try their boats; some of them were perfectly satisfactory and some of them tipped badly. They draw the pattern for their rudders, cut them, and planned how they should put them on, sawed the mast from the 1/4 inch dowels, bored a hole in the boat, and glued the ~~masts~~ masts in. Some of the made flat bottem boats, putting the keel on in a separate piece. More of them shaped the keel directly from the block of wood. They wish to make the sails at home.

Miss Jones.

Gymnasium. (a and b)

This group has been having a little longer drill, about fifteen minutes, and it has been harder. They have had some apparatus work, and the rest of the time has been put on games. They have taken great interest in indoor base ball, and play it fairly well. They are minding very much better, and the past month I have had scarcely any trouble with them.

Miss Wetherbee.

History.

Since the last report we have spent a week on the review of our study of Virginia. After going over a general summary of the work with the aid of the teacher, the children conducted the review by asking questions of each other. There was considerable rivalry as to who should ask the hardest questions, and questions and answers showed a good hold of the work.

We have begun this week the study of the Plymouth colony. The children had already learned something of the religious differences in England, and of the religious freedom which the people of Holland had won for themselves. When the story of the Scrooby Congregation was taken up, the children were accordingly ready to suggest that the people go to Holland to live when they no longer felt safe in England. They also suggested the departure from Holland to America. When the question was asked as to how they could obtain the necessary funds, one child suggested that they all put their money together, apparently thinking that to put two and two together would make at least three or four. He had already been told that there was not money enough among the Pilgrims to pay the expenses of their ~~ex~~ venture. It was suggested at last that they borrow money, and promise to pay back the value of it in timber and anything they could find in America that would be of value to the merchants in England who would lend them the money. The children have followed with interest the preparations for the voyage and the difficulties encountered in England on the way; and have now reached the first exploration of the coast. They have read aloud a part of the account of the landing on Cape Cod and Clark's Island, and afterward recalled all the details which were favorable to a settlement in that region, such as springs of good water, cleared land for fields food supplies, ~~agme~~, berries, etc. They have also read aloud from Eggleston's First Book in American History the account of the voyage and landing.

Miss Hoblitt.

Science.

They have continued work on the mill, the details of which were reported last week. We have a small electric fan wheel for the water wheel, on account of the difficulty of making a wooden wheel accurate enough to work well. This wheel is connected by dowels to a small wooden cog wheel, and this turns into another cog wheel at right angles to the first. The second cog wheel connects with a dowel to the grind stones which are made of clay.

Besides this they have begun with the geography of New England. We compared the conditions to be met there with the conditions of Virginia.

Miss Hill.

History. (continued)

We have continued this week the story of the settling of Plymouth, reading from Bradford's account to get a description of the country, and the first experience ashore. The children asked what the women did while the men went ashore, and were told of the first wash day on Cape Cod. One child asked why they did not dip the clothes over the side of the ship, but decided that salt water would not be a very satisfactory. Another said: "Why they went ashore and found a stream, of course". They planned the division of the company into families, allotting the single men to homes with some one else, and asked eagerly for themen with whose names they had already become familiar. They decided also that the first building would have to be a fort, and after that a common house for their supplies. In this connection they expressed the opinion that the idea of having everything in common was a bad one, it was more likely to succeed here than in Virginia on account of the difference in the character of the two companies. When asked for a plan for the distribution of land so that no one should be favored more than another, they proposed first that the governor make the allotments and then that the best places be set aside and not used at all.

This seemed a needles sacrifice, and far from solving the problem.

At last one of the children proposed that the Pilgrims draw lots for their plots of land.

The children were asked if they thought people could be found now-a-days who would be willing to endure the hardships which the Pilgrims encountered for the sake of their religion. Some said no, and some said, yes. The lad who was on the negative said that "people are too much hot-house plants now-a-days". The others were to support the other side but failed to do so. They were then told briefly of the "spirit wrestlers" who have come to Canada to find a home where they can be free, --or hope to be--to live as they think right; and of Tolstoi's sacrifices for the sake of a principle. In the latter they were much interested, asking many questions. The children are eager for the smallest details of the Plymouth story, and ask many questions which it is impossible to answer. We have realized that if the historians had realized that they were writing for children they would have put in many things which they have omitted. The list of the Pilgrims who came over in the Mayflower is found to be the most exciting reading. When a part of it was read at the close of the hour at the request of the children, they were impatient ~~even~~ even of any comment until they found that it was in the book and not interpolated ~~in~~ by the teacher.

The last period was spent in a review of the story of the Pilgrims. The children began at the beginning and told the ~~story~~ story for the benefit of a long absent member. They gave a connected account which is by far the best thing they have done this year. One child who had never before been able to offer anything but detached statements was able to carry the story along without hesitation and with a good grasp both of the general sequence and details. This group is coming to the point where a formulation of what they have done is at least not a cross to them.

Miss Hoblitt.

Cooking. 3 hours.

Colonial Cookery. ---The preservation of fruits was discussed and written about. For luncheon apple dumplings were prepared, the children making their own recipe.

In the second period, the preservation of fruit by the use of an equal amount of sugar in cooking and the reason for this were discussed. Orange marmalade was made to illustrate this method.

Part of the class prepared more apples for drying, as those done last week had largely disappeared from the place where they had been left to dry. *O.K.*

Miss Tough.

Number. 2 hours.

The time was given to examples in subtraction and multiplication, which the class seems to need in order to gain freedom in the processes. They show ability to think clearly when problems are given them, but the formal side of the work consumes far more time than is desirable.

Half of the time this week was devoted to writing a group report of some of the quarter's work to be read at the general exercises next week. The children express themselves freely, and all seem anxious to contribute something. The number work has been an effort to gain a general idea of subtraction of which the majority of the class had very little knowledge. They showed an interest in the problems given them to do at home. *O.K.*

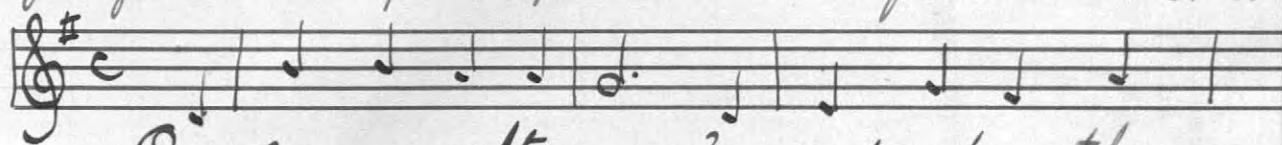
Miss Tough.

Shop.

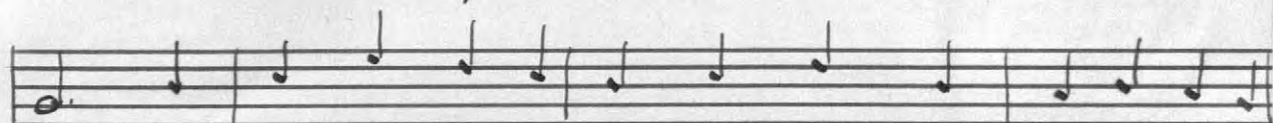
The VI's have been at work on their little canoes. When we came to try them in the water, some of them tipped, and the children were obliged to correct their work. Miss Hill had work which she wished to have them do in connection with their science, and so most of the time has been spent on their mill wheel, and making standards for the large wheel to turn on.

Miss Jones.

written by G. A. This is the first song which this group has completely notated in practice books.



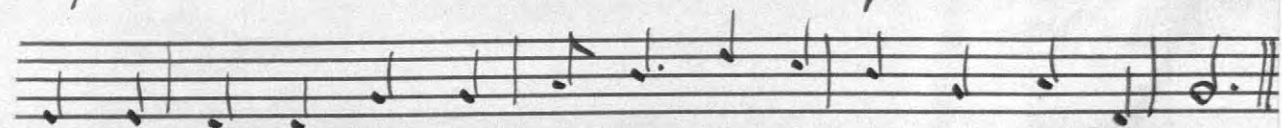
One summer afternoon we rode upon the



hay And O what jolly fun we had That bright & lovely



day The hay smells sweet As the oxen pulled the cart



And the sky was blue and sunny When the swallows swiftly dart.

Music.

Via and b have beside song singing, worked at sight reading by means of melodies written on the board from dictation, several of them being so satisfactory that they have set words to them, and have copied the whole under the title of "Half Hour Songs", in their practice books. They have written their group songs on the board, and copied them into their practice books, these songs ushering them into the key of G.

Mrs. Kern.

Gymnasium.

The work has been the same as that reported last time.

Mr. Peterson.

History.

This week the class began to plan the campaign. They knew that the English left Boston and they knew that Washington did not know whether they had gone to Canada or New York. They then agreed that the next step that the English would be likely to take would be that of separating the foremost colonies of the rebellion. We took a relief map and traced out what would be the best way of cutting the colonies in two, and concluded that the English would probably try to come down the Hudson and gain control of New York and that Washington inferring this would go to New York in this way. We studied Howe's landing at New York with his large fleet, and after looking up the geography of New York city and vicinity, we planned the fortifications that the Americans would erect. I then told them briefly of the taking of Long Island, New York, and Manhattan Island by the British, and of Washington's retreat across New Jersey. We explained to the children the way in which the English troops under Cornwallis (10000 in number) were divided into parts and placed at different places in New Jersey, and told of the battles of Trenton, Princeton, and the withdrawal of the American troops to Morristown Heights. The children were very much interested to find that General Glover, an ancestor of Elizabeth Albright's, had, with his Marblehead fishermen, carried Washington across the Delaware in safety on Christmas night. These ancestors of different members of the class add much to the interest of the subject. They then took up the campaign of Burgoyne from the north. Each time the relief is given and the children are encouraged to plan the method of attack. They were told a little of the history of Sir William Johnson and his son Sir John, and of their great influence with the inhabitants of the Mohawk valley, both the Indians and the whites. Then we followed up St. Leger ^{up} in the St. Lawrence to Lake Ontario and his campaign in the Mohawk valley with its disastrous results. I told the class of the

advance of Burgoyne down Lake Champlain, of the taking of Fort Ticonderoga, and the work which General Schuyler with a comparatively small number of men, did in checking the progress of Burgoyne on his way to Fort Edward. We had quite a discussion over the fact that a general must always keep communication open with his base of supplies, and they planned that after Burgoyne had left Ticonderoga the Americans would plan a rear movement and cut him off from his base. I then told them the story of the Battle of Bennington, with the reasons for it and the results of it, bringing in the bravery and the work of Major Stark. We discussed the change which took place in the feeling of the New Yorkers on account of the atrocities committed by the Indians who were employed by the British; men who for two years had been undecided which side to uphold now flocked to General Schuyler's army. I told them the story of the Battle of Saratoga, the reasons for it, and the results, going rather into details concerning Arnold as the hero of the occasion.

The children were much interested to know how an army would surrender and what would be done with the seven thousand prisoners which would be taken. I told them of the plan of Congress to march them overland to Boston and transport them home, of the broken faith of Congress in the matter, and of the final building of a rude village in Virginia where they were kept until the war was over. They were much amused to find that when the war was over, a large number of men, especially Germans, remained as citizens of the United States. Much geography is brought in with this work, and the children are encouraged to draw quick maps of New York and vicinity as they tell their stories. Several members of the class are reading outside of school "Heroes of the Revolution" by James Paton.

Miss Bacon.

Science.

Seven's time of an hour and a half a week has been spent on the extraction of vegetable dyes, the process of washing and curing wool, the dyeing of wool with the so-called direct dyes, and the use of a mordant. A more complete report will be given when the children have summed up the results of their three ~~house~~ experiments.

Miss Camp. *Kne.*

German.

The work of Group VII has been for the past three weeks largely a constant drill in colloquial idioms. The day's activities were used as a basis; alternate class hours were used in copying from the board and memorizing. All new words or phrases are spoken by the teacher, and then repeated by the children; written on the board and then copied by the ~~teacher~~ children. New words are, whenever possible, explained in the German or attached directly to the object or action for which they stand. No technical grammar work has been undertaken yet by the group. But on the whole they can use the idioms necessary in describing the weather, walking, buying tickets at a railroad station, boarding a train, and starting off on a steamer. At the end of the year a collection of these idioms will be incorporated in the report. A short German letter has been written, a poem, "Weisz du wie viel Sternlein?", has been learned.

Miss Teller.

Textiles.

We spent an hour in talking over the historical development of psindles. We began with spinning with the hands, the use of the twig to prevent the twist from coming out of the thread, the twig weighted with thread to give the idea of twirling the twig instead of twisting the carded wool with the fingers, then the artificial weighting with clay or a stone or wood, making the whorl in the form of a disk to get

more perfect balance. Then they were told of the different ways of spinning with the spindles: the Indian method of twirling on the knee and throwing the spindle into a bow, the Italian method of twirling the spindle in the air instead of on the floor, and of the ivory ~~xxx~~ spindle which is used by the East India people in spinning fine cotton. We then examined the New England wool wheel, showing this same spindle inserted in an upright and turned by a larger wheel, the principle of spinning being just the same. The German flax wheel was next examined. This showed the spindle divided into two parts; the part corresponding to the spindle stick was arranged to do the spinning, and a separate spool ~~wheel~~ inserted on this to hold the thread. As the wheel is turned by a treadle, both hands are left free for spinning. The New England wool wheel was compared to the German flax wheel to show the two principles of spinning, the intermittent and the continuous.

Miss Harmer.

Cooking. 3 hours.

Fish. ---The time was spent in a continuation of the written review of the quarter's work, a few of the children preparing luncheon for the class. In general there is a gain shown in both expression and writing.

This week an oral review was taken of the quarter's work, emphasizing the main points. One half hour was spent in writing an account of what had been done. The children who have been in the class regularly showed a very fair knowledge of the ground covered.

A.N.

Miss Tough.

Shop.

They are still working on the scarne, the spool winder, and the looms. As the first scarne was satisfactory they wished to make two more similar to the first. The spool winder was made after a description and picture in "Home Life in Colonial Days". The stock for the spool winder was cut from 7/8 inch poplar, making it 24 by 7 inches, tapering it at one end to 4 inches. The legs were made from 3/4 inch dowel rods

8 inches high. The standard of the wheel is similar to the standard of the large spinning wheel. The wheel itself is one which had been turned for a small flax wheel. They made the spokes of the $\frac{3}{4}$ inch dowel rods. The putting the wheel together was quite a difficult piece of work, and we cannot tell yet whether it will be exact enough to work satisfactorily. The box for the spools was made of five pieces, the ends 8"x6", the two side pieces 2"x 6", and the bottom 6"x 6". The spools are to be held in place by a steel rod, the ridge of the spool and the ridge of the wheel being connected by a band for turning the spool.

Miss Jones.

Art.

This group has worked in clay during the entire quarter. The members of the group did a great deal of creative work in clay last year. The Indian carrying the deer and the bass relief representing scenes from the life of Marquette were produced by this class. The impetus given by this creative work was sufficient to carry them through a large amount of technique. The aim has been to obtain closer observation and more accurate reproduction of form. The work has been largely individual. The children were allowed to choose from the material in the studio subjects which pleased them. One child copied the bust of St. John; another reproduced the mask of Lorenzo. The Barye animals were chosen by some and even hands and feet by others. The degree of accuracy obtained by this class was equal to, and in some cases superior, to that ever done in the school. The interest did not abate during the quarter. When the large studies were completed, a week ago, two of the class made original groups representing events in the story of Robin Hood.

Miss Cushman.

History. (a)

The class has finished reading of the final events in the conquest of Mexico, using their readers. The lessons were read aloud and discussed in class, or each one read a portion to himself and gave an oral account of what he had read to the class.

Mr. Armitage.

History. (b)

The battle of Hastings was presented orally and afterwards retold and discussed by the children. They have also written an account of the battle, and after having corrected the papers under my direction, they have rewritten them.

Mr. Armitage.

French. (a and b)

The children have continued the same line of ~~the~~ work as previously reported. They have been going on slowly with their French history, leading up to the appearance of Jeanne d'Arc. The battle of Poitiers was taken up in some detail, and some time was spent on the siege of Calais. They have been following the movements of the different armies each day on the maps which they have drawn. They retold, as much as possible of what was given them, and wrote a very brief summary of the work which had been covered in the lesson. They have also been memorizing a song.

Miss Dey.

German. (a)

Group VIIIa have had their reading book "Altes und Neues", and they have read the first three stories with remarkable ease, considering that they have never used books before. Much time has been spent on the grammar as far as the nouns and the verbs are concerned. The principal parts of verbs and the conjugation of the present and imperfect indicative have been a part of each lesson.

Miss Teller.

Science. (a)

We have continued with the geography of the Atlantic Coastal Plain and the Piedmont plateau, taking up the principal rivers of the northern part of the region. They worked out the limits of the coastal plain province by referring to their small relief maps of North America. Each member of the class chose some large city of the region and found out at home all he could about it. This brought in the history of the cities, the reasons for their foundation, (on account of their physical environment in most cases), and the products of the country around. This in turn suggested the industries of the cities of the coast. We shall continue the same work with the southern coastal plain next.

Mr. Gillet.

Science. (b)

In summing up the six experiments given in the laboratory, they have spent two hours in writing, and in talking over what they did not understand. The main idea of combustion as the source of heat in the steam engine was given in answer to a few questions. No formal statement of this had ever been given them, and the children made the connection between their experiments and the chemical union as the source of heat in the steam engine without any difficulty. I found that one or two of the boys had been giving lectures on hydrogen and oxygen to some of the younger children, and they are now interested in anything I give them on the subjects of making diamonds, the smelting of ores, etc. In the beginning they were interested merely in the different kinds of engines and such striking phenomena as those concerned in the making and use of liquid air. They have asked many questions, such as exactly what happens in the explosion of gun powder, the striking of a match, the burning of red fire, flash lights, etc. Some time has been spent in the spelling of the words used in these experiments, the children ~~like~~ liking the drill of them very much. In reviewing again the differences between an

element and a compound I found that they knew some of the properties and the names of about seventeen elements. They mentioned the gases they had been using first, then gave a very complete list of the metals in common use, adding chlorine, potassium, sodium, simply from the fact that they knew that they are in the compounds they had been using, and knowing nothing about their properties. They have asked me some questions as to what light is, and how it differs from heat, but this discussion was left over until they should have reviewed all they have had about heat.

Miss Camp.

RBC.

Number. (b)

The class has worked concrete problems in finding the area of oblongs and analyzed them, indicating their steps briefly. They have deduced a rule for finding the areas of rectangles. They have carried the same work over into finding the second dimension of an oblong, one dimension and the area being given.

Mr. Armistage.

Textiles. (a)

The same work as that of Group VII.

Textiles. (b)

They have been experimenting with dyes. They are going to use two colors for dyeing cotton yarn for the small loom.

Miss Hill.

Shop. (a)

Most of them have their frames in shape ready for carving. They drew these according to directions given by Mr. Fowler. Some of them were obliged to do their drawings over since they did not make their triangles even. The children have done very well with this work, although it is the first of the kind that has been given them.

Miss Jones.

Gymnasium. (a and b)

From fifteen minutes to twenty minutes has been given to the drill as in the previous months, but they have had less apparatus work and more time has been spent in games during the last ten minutes. The drill has consisted of more difficult exercises than before and the games played have been mostly indoor baseball and basket ball. They are still doing very good work.

Miss Wetherbee.

History. (a and b)

Group IX took up the life of Prince Henry the Navigator. We studied of his trip to Africa, at the time of the war with the Moors there, and of his stay afterward, during which he became very much interested in the products which came from the gold coast and Timbuctoo, which led to his inquiries concerning the natives who brought these products, of the land from which they came. We read of his return to Portugal, his withdrawal from court, and of his residence at Segres, at which place he built his observatory, where were gathered all the best scientists and sailors of the time. Prince Henry's idea was to collect the scattered knowledge and put it in form, as well as to make further inquiries. We followed this work of exploration and discovery up to the time when after Henry's death Vasco de Gama reached India by going around the southern part of Africa. The children have read the life of Columbus from Fiske's history, and several who have Irving's works are reading his "Life of Columbus". We discussed in class what influences in his early education tended to control Columbus' later life. I told the children the story of his stay in Portugal. They agreed that his reason for going there was that he would find there men interested in his special work. We have read and discussed his plans for the discovery of the New World, or as he thought, the Old World. The children could not believe for a while that if the scientists and philosophers had believed for 1000 years that the earth is round, but that they would have put their theory to the test. They concluded that the ideas of those men would not so readily reach the sailors and the men who could carry out the proof of the theory, as in these days, and the priests, who held such a sway over the common people, would keep the masses from hearing such an idea as they believed the globular theory of the earth to be. We have followed Columbus to the court of Spain, and at present have him ready to start on his voyage.

Miss Bacon.

Latin. (a)

The group has been studying adjectives, their declension and comparison, adverbs, their formation and comparison.

Latin. (b)

This group has gone on reading in their books.

Miss Schibsy.

Science. (a)

We have spent a part of the time on a written and oral review of the work of the quarter. Some time was also spent on the subject of soils, how they are made, and the changes which they undergo. They collected samples of soil from the garden, from the play ground in the yard, from the lot across the street, and from the corner of 54th place and Ellis Av. Each took 100 grams of one of these soils, and found by experiment the relative amounts of vegetable matter in them. They found that the garden soil had 22% vegetable matter, the play ground soil 9%, the soil from across the street 5 1/2%, and that at the corner 3%. We discussed the reasons for this difference. They made the generalization that soil is made of rock and vegetable and animal matter. We followed the changes through which the sand of old Lake Chicago has passed to make the soil around Chicago to-day. We noticed especially the interaction between the soil and vegetable matter growing on it.

On Friday the class went on a trip to Glencoe. The report will be given in that of Group IXb.

Mr. Gillet.

Science. (b)

In the geography work this week we have tried to get a world view of the surface features. Beside some problems in mathematical geography, such as those concerned in latitude and longitude, we have covered the ground in the third chapter of their books.

On Friday this group and Group IXa went on a trip to Glencoe.

The region shows very well the processes of soil making, the composition of the glacial till, the young stages of drainage, and the making of different kinds of shores. It is too early to bring out much of the different floras on the different parts of the ridges and the ravines, as compared with that of the plain above.

Mr. Gillet.

Arithmetic. (a and b)

I had to abandon the attempt to find good problems in fractions in McLellan and Ames' book, and have been making practical problems for some time. The problems all involve fractions, common or decimal, and are mostly in mensuration. Most of the class understood the work pretty well.

Mr. Osborn.

Music. (a and b)

A song was given to Group IX which pleased them very much. In one half hour they learned the song by rote, and finding it too short, wrote a second verse of six lines, which was accepted gladly by the rest of the chorus.

"O for a book of ladies fair
Or knights of olden days,
Of kings and queens of great renown
Or minstrel's stirring lays,
Of gallant ships that sail the seas
Or tales of outlaws bold."

Chorus. "For a jolly good hook, wherein to look
Is better to me than gold".

Mrs. Kern.

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Art. (a and b)

This group has finished the historical frieze. The subject of this is Paul Revere's Ride. The frieze is divided into panels.

In the center space is represented Revere mounted and looking over the bay at the signal lights. The smaller panels contain the following subjects: The Old South Church, Giving the Alarm, Gathering of the minute men, Putting up the lanterns. The very narrow panels contain conventional figures of minute men. Every child in the group has made all the preliminary studies for each section of the work. Each child has done some work on the frieze. In some cases the work on the frieze has been the first thing that has ever appealed to the child. Howard Burns ~~saw~~ drew and colored one of the narrow panels. He came up and worked extra time on it, and was delighted when he saw that it was a success. He said he never liked drawing before. The work with the group convinces me more than ever that it is necessary to give the child a taste of the creative side of art first and let the technique follow in its natural place, when it will cease to be drudgery.

Miss Cushman.

Gymnasium. (a and b)

The interest in base ball has revived with the coming back of warm weather, and at present both the boys and the girls are very enthusiastic. The boys have organized a school team, elected officers, collected dues to pay for the outfit, and are already beginning preliminary practice. The girls have taken up the fencing and are doing quite well. The boys' fencing was dropped on account of lack of time, and the base ball has taken its place. The corrective work in the gymnasium has been similar to that of last month.

Mr. Peterson.

Dr. Coulter gave a description of his trip to the Yellowstone Park in 1870 when he went out with the expedition appointed by the government to explore the Wyoming geysers.

The children being disappointed in their speaker the next week, we had an old fashioned spelling contest, Groups IX and X doing themselves credit.

On last Wednesday Miss Camp spoke to the children on the Hawaiian Islands, dwelling especially on the sugar industry.

On Friday the children have general exercises to which they invite their friends. The program consists of a German play, the composition of which has formed the basis of the German work of Group IX VIIIb for the winter quarter. There will also be songs, and English and French recitations.

Miss Bacon.

We talked about letter writing as a means of communicating between the homes. Out of cardboard medel~~y~~ing we made post boxes. The number work helps the older children considerably in their measuring. The next day they made the posts and fastened the boxes to them by means of wire. Then we spoke of the mail cart and the place it plays in the service. One child said he knew it came the same time every day because he met one going home. The children were given cardboard boxes and after a few suggestions worked out some mail carts. We had a dramatic play of postman; some lived ~~a~~ in the houses and wrote letters, some collected the mail, and others delivered it.

Friday we colored eggs which the children enjoyed immensely.

The special stories for the week were "Bramble Bush" and the "Butterfly".

Miss Dolling.

O.K.

Social Occupations. (a and b)

This last week we have taken up mining. We began with the coal mine and traced the coal back from the time of seeing it in their homes to the time when it was mined. I have read to the children descriptions of coal mines and the life of the miners, after which they drew pictures of the mine. As we talked they suggested the difficulties of mining, and the ways in which these difficulties may be overcome. They went to the sand table and made several coal mines, using little stones for the coal. Some of the children played that they were miners and got the coal from the mine, others put it on trains for the coal yard, and others took it from the coal yard to the places where people wanted to use it.

Then we talked about the other things that we get from mines, gold, silver, and such, and we examined different kinds of ore. The children suggested different ways of getting the metals from the waste products. I showed them all the pictures I could find about mines, miners, and all the connected processes.

making
During the spring quarter we shall spend twenty minutes a day on writing connected sentences.

Miss LaVictoire.

O. N.

Experimental Cooking. (a)

We began the review of cereals and the study of fruits this week. After mentioning the different kinds of fruits and the fact that they could not be kept indefinitely in the fresh state, the children told they ways in which fruit might be prepared and preserved. Then we discussed the manner of drying fruit, the change occurringⁱⁿ the process which one of the children had noticed in the case of persimmons, and directions were given for the drying of apples. The recipe for flaked corn was reviewed for the luncheon the next day, and in connection with this the different preparations of corn and wheat were distinguished.

Miss Lachmund.

Luncheon (a and b)

Group IIIa prepared the apples for drying and weighed them before putting them on the drying frames in order to compare the weight before drying and after drying. Group IIIb cooked the cereal for the whole class, and so were required to double the recipe which they did individually and with ease. In the last experimental period in the week, both divisions spent the time writing out the recipe for flaked corn which is to go into the recipe book.

Miss Lachmund.

Sewing. (a and b)

The children were ready to decorate their book covers, so that one period was spent in talking over the water stitches, which are to decorate the edge of the cover, their size and arrangement, and the ^{yellow} different embroidery silks to be used in the work. The children showed great interest in arranging the colors in two piles according to cold colors,--those likely to be found in the ocean or the lake--, and warm colors--found in the sunset. The children are very anxious to do neat work on their covers, and one child in particular is doing remarkably accurate work.

Miss Lachmund.

History. (a)

We spent the week on our furnaces. We built them out of clay and stones, using fire clay for the floor. We have experimented with the finished furnaces to test the draught, the effect of a larger or smaller chimney, and of a larger or smaller opening for air at the bottom. We spent one half hour before a grate fire, and the children found that the fire burned better when the cold air was not allowed to flow in on the fire from above. Some of the children were surprised to find that some of the wood in their furnaces had "turned to charcoal" when the fire died ~~in~~ out, and asked if that was the way charcoal is made. Later on the little stove used by the Japanese jewelers was described to them, and when they were asked to suggest a fuel which would make a very hot fire and no smoke, one knew that charcoal would answer. We decided that we would make some charcoal and try it in our furnaces. The children said that to prepare the charcoal the best way would be to shut up the furnace so that there would be very little air.

As yet we have only one furnace which will draw. One of the children insisted that the reason her fire would not burn was because the chimney was too large, but the others told a taller chimney made the fire burn better.

In their reading the children spent one period in dictating a story which they had heard, and wish to be able to read for themselves; one in a "game" in which one writes on the blackboard directions for the others to follow, as for example: "Run around the room", "Bring me a book". One period was spent in reading from the first volume of "Heart of Oak."

Miss Hoblitt.

History. (b)

The class have been working on minerals. Last quarter they began working with them, talking about them, examining them, etc. This week,

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after talking about the things necessary for a good fire place, they have been constructing a smelting place out of clay and stones. They have also been making clay molds for arrows and ex heads.

Miss Schibsby.

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

Vegetables---Parsnips.

One half hour was spent in talking over the work done ~~xx~~ with all the vegetables which have been taken up, and outlines were made in each case. The children remember clearly what they have done, and seldom become confused when asked to tell the results of previous work.

Parsnips and cocoa were prepared for luncheon.

O.K.

Miss Tough.

Sewing. (a and b)

With the exception of two new children who have just entered the group and are beginning to ~~makx~~ make their sewing bags, the children are sewing on their needle books, which are decorated with borders. A number of the children found it difficult to invent borders after they had seen what some one else had done, while two of the children objected to putting any border at all on their covers.

Miss Lachmund.

Shop. (a and b)

They have completed the disks for their potter's wheels, 7 inches in diameter. ~~at~~ The children decided to put a heavy piece of wood at the bottom of these, to bore a hole in it for a 1/2 inch dowel, and fasten the four inch length of dowel firmly in it by nailing it. They are now ~~ix~~ working on how they can best arrange this so as to turn easily. They have tried to find some heavy wood to fit the dowels into.

Miss Jones.

History. (a and b)

In the closing days of the last quarter we finished the ~~story~~ story of the life of Livingstone. I told the children of his last trip with only natives as his guides, and of the discoveries made. I then told of Stanley's search for him, and the meeting of the two men. Next of Livingstone's illness and death, and the faithfulness of his native attendants. During the telling the children asked many questions, and expressed their opinions freely. They finished writing their own narrative in the shape of a diary of Livingstone.

With the spring quarter we began the life of Columbus. We reviewed the reasons for the beginning of the discoveries under Prince Henry, and what was accomplished during his life. I then asked the children how the idea that the world was not flat came to people, and added to the reasons they gave--such as the eclipse of the moon. I found that while all the children knew that the earth goes around the sun, very few knew of the revolution of the moon. The nature of an eclipse was made plain with object and globe.

We next found where Columbus lived when a boy, and added to the names of land forms we have been studying that of peninsula and of isthmus. We got also the definition of a harbor and a cape. The children told me what they thought would most interest a boy who lived in the town of Genoa as I described it, and compared his interest in wharves and sailors to that of Robinson Crusoe. They told me what they thought he would learn at school, and we talked a little of why he learned Latin, and whether he would be likely to follow his father's trade, that of a wool comber. Some of the new children have had no experience with the processes of preparing wool, and had to have it explained by the other children. Several in Va did not remember of ever having seen a card, or what it was used for in wool. We took up the first sea voyage Columbus made, and connected it with the knowledge of geography of the

time by saying that it occurred at the time when Columbus was 14 years old, and that it was in this this year that Prince Henry died. The children remembered how far down the African coast explorers had gone at this time, and were able to decide that Columbus' voyage was probably only in the Mediterranean.

I told of his interest in navigation, of his careful collecting of books and charts, his study, the getting the maps and papers of his wife's father, who was a captain under Prince Henry, and of his final determination to seek means to prove that the world could be circumnavigated.

In reading we have continued Robinson Crusoe in the same way, but now give more attention to expression. For this purpose we have read the same lesson over two or three times before going on. At first the children rebelled at this, but the greater ease with which they could read it and the pleasure of hearing it read naturally, have reconciled them to it. They are all now anxious to be able in this review to read a whole page at a time. This is permitted as soon as they are able to do it without stumbling too much.

Miss Runyon.

Science. (a and b)

V have started experiments in the testing of seeds to be used in the garden, to find what part of last year's seeds will germinate this spring. We reviewed the conditions necessary for germination, and decided on the number of seeds necessary to make a fair test. They reviewed the difference between the sub-tropical spring and our spring. They transplanted the willow shoot which had sent out roots in the water. We talked about the movement of the rootlets and the growth of the roots, chiefly at the tip, the office of the root hairs, etc. They discussed the question of how much of the plant's food came from the earth, and how much from the air. Most of them thought it came from the soil and

the water. The planning of the garden has occupied the rest of the time.

Miss Camp.

Cooking. (a and b) 2 hours.

Review of cereals---Corn.

One half hour was spent in writing recipes and general directions in the recipe book. Nearly all the children write easily and well, and enjoy doing this part of the work especially. The preparation of corn starch from the whole corn was reviewed. The reason for mixing fine cereal preparations with a small amount of cold liquid before putting them into boiling water or milk was talked about.

The method of preparing cocoa was discussed with the reason for each step.

For luncheon cocoa and blanc mange were prepared.

OK.

Miss Tough.

Textiles.

The V's are doing some simple design and color work with Mrs. Brown. They have planned borders for a table mat to be done in coarse linen thread on a very coarse weave of linen crinoline. The darning stitch is used. The idea is to get masses of color to bring out the design without giving much attention to the stitch. The mats are to be lined with a chintz of a darker color that will bring out the border.

Miss Harmer.

Shop. (a and b)

Most of the children have completed the boats. They measured to find the center at which to place the masts, after which they cut the masts and fitted them. They drew a plan of the rudders, cut them from the wood and fastened them as best they could so that they would turn. Most of them have been successful but some of them had to be helped.

Miss Jones.

History.

We spent most of the time in reading aloud from Arber's Story of the Pilgrim Fathers. Two periods were spent in writing, the children being allowed to choose for themselves some topic from the story of the Pilgrims. One began at the beginning, another chose the first encounter, and some could not choose without help. The papers were much better than those that they have composed as a group by dictating to the teacher and then copying from the blackboard. The children worked much more industriously, tired of their work less quickly, and showed greater freedom of expression. The work was continued through the second period at their own request. One period was spent in spelling a list of words which they had needed in their writing.

Miss Hoblitt.

Number. 1 1/2 hours.

Problems in addition, subtraction, and multiplication have been the work of the week, with attention to the reading of the numbers used, as this seemed of interest to the class. The problems have been variously connected with house supplies and cooking materials. Most of the children enjoy the work. *OK.*

Miss Tough.

Cooking. 1 1/2 hours.

Colonial Cookery--Sausage.

Meat was chopped, seasoned, and made into cakes for sausage.

The apples which were dried two weeks ago were weighed a second time and found to have lost considerable in the drying. It was at first thought that the juice had evaporated but on talking the matter over it was decided that little else than water would pass off and this could easily be returned to them in the cooking. The apples were stewed for luncheon. *OK.*

Miss Tough.

History.

This week we have gone back to follow Washington's movements, and have followed him as he passed through New Jersey. We followed Howe in his first attempt to reach Philadelphia through the Delaware, and then as he turned back and went around through Chesapeake Bay up the Susquehanna. The children read of the battle of Germantown, of the reason of our defeat there, and the taking of the fort on the Delaware, and the settlement for the winter at Valley Forge.

Miss Bacon.

Number.

We are now working on multiplication by one, two and more figures. Problems of this kind come up in the books which they made for themselves. A five minute review is given on the multiplication table is given each day, and the children continued the working of problems in their books.

Miss Bacon.

Reading.

I have begun this quarter to have this group for an hour or an hour and a half in oral reading. The aim in this is chiefly facility.

Miss Runyon.

Textile.

They are writing a record of the work they did on ^{the development of} spinning and are making diagrams of the various implements and parts of the machines to show the principle of each.

Miss Harmer.

Shop.

They have finished the two more scairnes for use in the textile room, and now each one of them has been allowed to make something for himself. They made drawings for these and brought them to class. Two of them wish to make small boxes for use at home, two of them are

making blotter pads, and some of them are making paper knives. In their geometrical drawing, they have taken the measurements of the spool-winder using one fourth inch as the unit of measure to represent an inch. They have had considerable trouble in reducing this. They have had their number work in this way. The class is still working on the drawings.

Miss Jones.

History. (b)

An oral presentation of the land tenure and vassalage in the feudal system and a study of castles were made. Stories were read in regard to William the Conqueror, showing how the feudal system was transplanted into England, and other incidents in the career of William. They read the stories to the class individually, and then the different points of the stories were discussed. They tried to coordinate the different points with the facts that they already knew. One point that might be noted was the way in which William made the subvassals dependent on him by swearing fealty to him at the time they swore fealty to the overlord. A summary was also made of the leading characteristics of William.

Mr. Armitage.

German. (b)

c Considered phonetically the work of VIIIB was better than had been anticipated. The writing of the play "Siegfried" occupied the first half of the winter quarter. After it was completed the parts were assigned in such a way as to give each member of the class something to do. There were four scenes; therefore four Siegfrieds, two mimes, two Greek choruses who described the stage setting, Brünhilda the bird, Wotan, the dragon and the bear completed the cast.

All possible stress was laid upon the thought underneath the text, with the result of comparative freedom when on the stage. All the work was done in the class room except a final rehearsal in the morning of the presentation. The work done was very creditable to the children's enthusiasm and perseverance.

Miss Teller.

Science. (a)

This quarter we have taken up the geography of the United States. Our first work was with the Atlantic plain. From the relief maps they

got an idea of the topography of the coastal plain, and how it differs from the Piedmont Plateau to the west of it. This was partly review work. We followed this by tracing the principal rivers from their mouths to their sources, and learning the names and locations of the principal towns on each. I told them the general principle on which all the towns were founded, and why so many are on the fall line between the coastal plain and the Piedmont Plateau. The early settlers could not use boats above the fall line, and had to unload their goods here and have them carried for the rest of the journey inland on horses or wagons. The towns thus started as trading posts later became important on account of the use of the water power along the fall line, as the power was used by numerous factories and mills. The class now has the geography of the upper part of the coastal plain well in mind.

Mr. Gillet.

Number. (a)

They are continuing the work on division of fractions. Nearly all of them have this and will be ready next week to begin their new work.

Miss Bacon

Number (b)

I had them for one half hour last week, in which we took up distinctly formal work. Mr. Armitage has them in the concrete work of the group.

Miss Bacon.

Number (b)

We began with determining through examples what are the prime odd and even numbers, and prime factors. Then we determined experimentally how we can tell whether 2, 3, and 5 is a factor of a number. From that they have tried to find the greatest common divisor of abstract numbers up

to 100, and have begun to make practical application of this in problems. For instance, having a plot of ground in the form of an oblong, 64 feet long and 48 feet wide, to find the length of the longest board which could be used in fencing it without having to cut the board to waste.

Mr. Armitage.

Science (b)

Following are some of the children's reports of the work done in science. The subjects of the experiments are : hot air engine, making iron from the ore, burning sugar, splitting up of water, burning iron, burning of hydrogen and testing of oxygen made from electrolysis of water, and safety matches.

1. Hot Air Engine.

Subject---Heat engine.

Drawing-- diagram of engine, all parts lettered.

Directions--Put Bunsen burner under a", making air expand in a', and when piston is up, f lets the hot air out. The weight of the piston lets it drop, giving the motion of the wheel.

2. Subject--Burning of iron in oxygen.

Apparatus--consists of tubing to let oxygen from tank.

Directions--dip hot iron wire in sulphur, then hold over light and it will burn; turn on oxygen and the iron will melt and burn.

3. Subject--Smelting iron from the ore in one minute.

Directions--Take a fire-clay crucible, and put iron ore well pulverized in it; cover with powdered aluminum and magnesium, and touch off with magnesium ribbon lit with match.

To cool put under running water for about five minutes, and break crucible with hammer to get iron out. The iron came out in the shape of a flat round stone with slag on top.

4. Subject--Burning of sugar with Potassium Chlorate, touched off with a drop of sulphuric acid.

Directions--Put potassium chlorate well mixed and sugar on asbestos mat, and drop a drop of sulphuric acid on it. It will blaze up to the ceiling like a geyser, and will show the deadly uniting of sugar and oxygen.

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5. Subject--Safety matches.
Directions--Safety matches are made by a mixture of potassium chlorate and sugar, rubbed on phosphorus sulphide.
6. Subject--Splitting up water into hydrogen and oxygen by an electric current.
Apparatus--Shown in diagram, parts all lettered. (Note below--or decomposition by electric current.
Test for oxygen--Take a piece of wood, light it and blow it out so it glows, and oxygen will light coal. Test for hydrogen--light it. Collect in test tube and light.

Miss Camp.

Textiles. (a)

They are doing the same work as Group VII.

Shop. (a)

They are still working on their picture frames. After getting the work squared and cutting the hole for the picture 4x5 inches, they made a border, using triangles in a design which they carved. This is their first attempt in carving and they are doing very well in it. They found that they could not work with dull tools, and have had considerable practice in sharpening their tools. They find that they have to be very accurate.

Miss Jones.

History. (a and b)

The children have read for themselves the Life of Columbus by Washington Irving, or from "The Discovery of America" by Fiske. The topics have been the preparation of Columbus for the voyage, his trip across, the discoveries and explorations he made in the West Indies, of the loss of one boat, of the treachery of his captains, his return home and his reception there. Ten minutes are spent each day in the spelling of geographical names, and the location and relative position of places.

Miss Bacon.

Latin. (a)

This group has begun to read the Gradatim. They are doing more English than Latin though. They are working over the parts of speech, and analysis of simple sentences, both in Latin and English. They are to write a composition once a week.

Miss Schibsby.

Latin. (b)

This group is reading on in their Gradatims. We have reviewed the syntax rules which they have learned at from time to time and also the more recent grammatical questions they have taken up. In English and Latin both they have reviewed the functions of the parts of speech, and the analysis of sentences.

Miss Schibsby.

Science. (a)

This class has had the same work as Group VIIIb.

Science. (b)

We have continued the work in Redway's Physical Geography. The special aim of the work of this class this quarter is to get an idea of

topographic forms and their life history, and to get the acquirement of reading.

This week we reviewed the work of the chapter on "Oceans and Continents" and brought in as many concrete examples of the statements made as possible. In many cases the children were able to answer the questions suggested, but in most cases they were not able to suggest problems for themselves. Perhaps I did not go at it in the right way. On Friday we had a written lesson consisting of an application of the work of the week. I did not ask them to write on points which had come out in the discussions directly, but they were able to work out the answers from what had been brought out in class. The papers were satisfactory in subject matter, but not in composition and punctuation.

Mr. Gillet.

Latin.

The class is concentrating on Latin prose and rules of syntax.

Miss Schibsby.

English.

In the work on analysis the group uses both thought analysis and diagrams. When we come upon grammatical points which must be taken up we do so. We have just been studying pronouns, the general classes, their functions, ~~etc~~ etc.

Miss Schibsby.

Arithmetic.

Work in percentage has been continued. All examples have been solved both by fractions and percentage, so that percentage has been seen to be a special application of common and decimal fractions. The pupils have solved problems with base b , rate r , and percent p , and have developed formulas by which they may, if they choose, solve the problems. However ~~in~~ in most cases they prefer to solve by analysis, using the formula as a check on the correctness of their solution. Work is now going on very well, although there was considerable difficulty with the practical problems in the beginning.

Mr. Osborn.

General Exercises.

Miss Runyon talked to the children in general exercises last week on the George Junior Republic. They were much interested in her description and asked many questions. The club held its quarterly meeting week before last and elected officers for the next three months.

Mr. Fowler has assured the children that if they work hard they can finish their house in one month so that it can be used, and they have promised to give a little extra time in order to accomplish it.

Miss Bacon.

We continued with the subject of mail service. We made the postman's bag ~~xxx~~ and then played delivering letters. The children visited the post office on 55th Street. Then to sum up our work on the mail service, they free-cut all the forms we had used in this connection. As all our cranberry jelly had been used up, we took one period to make some more for picnics.

Miss Dolling.

OK

Social Occupations.

The work of the spring quarter will be the making of an out of door farm. We spent last week in planning the farm, deciding what grains and vegetables would be best to raise, and the amount of ground we could give to each one. We planted some of the seeds in the house so that the children could watch the germination.

About half an hour was spent on reading and writing, and a little time in playing with Mr. Osborn's blocks, helping the children to get the idea of thirds, halves, and quarters. Before this they had had only the idea of a part of a single thing, as a cup. Now they are to get the idea of parts of more than one thing, of 2 for instance. I want them to look at a number of things as a whole.

Miss LaVictoire.

Cooking. (a and b)

We balanced one cup of flaked wheat with flaked corn to determine the amount of water necessary to cook it. As each child was to take one half cup of wheat, the amount of water necessary for that amount was worked out. With IIIa a longer period of time was taken in distinguishing between corn and wheat preparations, as a number of the children are new.

Group IIIa cooked the cereal for the class and Group IIb prepared the fruit--baked apples. The last period of the week was spent in reading and writing the recipe for the cereal cooked this week. As all but two or three had a good deal of difficulty in doing this, the children were unable to finish their writing.

Miss Lachmund.

Sewing. (a and b)

The children are continuing with the water stitches in silk around

the margins of their cooking book covers. They seem to be interested in the work, especially now that they are more accustomed to the stitches which at first they found difficult to space, but which have been greatly improved. The new children who have just come from the kindergarden are doing less difficult work--namely, overcasting scrap book covers.

Miss Lachmund.

Cooking. (a and b)

The vegetable cooked this week was celery. In order to decide how celery was to be stewed, the vegetables previously studied were discussed, and also their method of preparation as determined by their composition and the constituents most valued in each. Then after talking about the composition of celery and the value of its sweet juices, the children decided that it should be cooked with as little water as possible; and in order to retain all the sweet juices after the celery was cooked, the water could be allowed to evaporate instead of being poured off. From the character of the cellulose, it was foreseen that the celery would need only a short time to cook. The part of the plant used and the reason for the lack of green color were also talked about.

Miss Lachmund.

Sewing. (a and b)

Same as that reported last week.

Miss Lachmund.

History. (a and b)

In one period the children told me the names of the countries from which they thought people could be seen in Genoa at Columbus' time. Our object was to find out if we could see a greater or less number of nationalities in Chicago now than Columbus could in Genoa. We compared Chicago as a town to which ships come, with Genoa to find out what the difference would be to a boy or girl living here and there.

I told the children that Columbus thought the world was 14,000 miles around, but that it is really 25,000, and to find out how much greater it is than Columbus thought it was. We also determined how long it would take to go around it if one could go at the rate of 5000 miles a day, and at other rates. Henry Mead said that he knew the earth is 8000 miles through from Alice in Wonderland, and I asked if one knew the distance of the circumference how one could find the distance through. Several of the children thought that it would be half the distance round, and measured to find their error. Then I had them measure different circles and get the relation of the diameter to the circumference. None of them, were, I think, able to make the generalization, but seemed to understand the relation when it was shown. The rest of our time has been spent in writing a record of Columbus for their books. I did not at first tell them that I wanted them to put it in their books that they made last fall and in which they have kept their printed matter. When this was suggested nearly all wanted to copy it over so as to do the writing better. This was permitted, and some suggestions were made as to order and neatness.

Miss Runyon.

Reading. (a and b)

Considerable advance has been made in facility in reading, especially

in keeping the voice natural. They are still on Robinson Crusoe with occasional other stories.

Miss Runyon.

Cooking. (a)

The children had hominy grits to cook this week. In working out the recipe they had great difficulty in finding the amount of water necessary for one fourth cup of the cereal, when one cup required five cups of water. In cooking, however, we found that the proportion of cereal to water should have been one to six, as the scales are inaccurate.

Miss Lachmund.

Textiles. (b)

The children are continuing their table mats. Part of the children are running the line of stitches around their mats to ~~guard~~ to guide them in the making of their borders while two of the others had to design their patterns, as they had been absent when the rest of the class had designed them.

Miss Lachmund.

History.

We have continued our reading from Arber, Guerber, and from Moore's "Pilgrims and Puritans". The children are anxious for more details than can be supplied. Names of people and ships, who died and who was married, are among the things eagerly sought after. In our discussions we took up among other things the question of the common house once more. The children have been long looking forward to the time when the common store would be given up, and were ready for the trial of an individual allotment of land in order to encourage better effort in the trying times of 1624. They said that they thought that men would work better if they had a chance to keep the results of the work themselves, and that there would be some who would not work at all if they could live without work. One child asked whether the men who had done most of the work complained on that account, and others began to ask about individuals in whom they were especially interested. One volunteered the opinion that Edward Winslow would not complain if he happened to draw a lot of poor land, but that if he thought he was doing more than his share of the work he might complain.

While reading the story of Captain Standish's expedition to Wessagusset to anticipate the attack planned by the Indians, the children were struck by the fact that in the struggle with Pecksuot and Wituwamet, Hobamok, the Indian guide, stood quietly looking on. One of the boys wished to know why he did not help the other Indians. He was asked whether he himself would have turned upon the white men after he had promised to be friendly with them, and answered that an Indian would not care about keeping his promise. He was reminded of Little Turtle and other noble minded chiefs of whom he had heard in his Chicago history, but could not

be moved from the position that in Hobamok's place ,even if he had given his allegiance to the whites,he would not have let a little thing like a lie keep him from helping his people.

The children took one period to finish their written stories,and one for reading ^{them} aloud. This exercise gave an opportunity for a review of our work on the Plymouth colony,the children being asked questions suggested by their papers.

Miss Hoblitt.

History.

This week they have taken up the campaign of Clarke in the Mississippi Valley. On a relief map they traced his route across the Allegheney Mountains down ~~am~~ into the disputed territory. We read from McMurry's History of the Mississippi Valley the story of the capture of Kaskaskia and Vincennes, and discussed what the conquering of this country meant to the Americans when they came to make the treaty after the Revolution. On two days of the week we spent five or ten minutes in exercises for gaining ~~and~~ ease and facility in writing. So far the work had been done on blackboards, and the attention of the children has been led to neatness and good form in all their written work.

Miss Bacon.

Number.

They have finished their work on multiplication. They grew so interested in it that some of them on their own accord are working at home. Johnson had an example which he made up which contained fifty figures in the multiplicand and twentyfive in the multiplier. They have spent two days on short division, and have had one lesson in a long division. While they were learning the multiplication table they also learned the division table. While we were working on multiplication, Charlotte one day volunteered the information that if the division tables were the opposite of the multiplication tables, you could prove the answer of multiplication by dividing it by the multiplier. Then all the children tried it to see if it would come out as Charlotte said, and since then they have not been satisfied unless they proved every example. They wanted to learn multiplication because they could not prove their multiplication examples where the multiplier contained more than one figure.

Miss Bacon

German.

We have commenced reading from Hempl's Nursery Rhymes in German. The ease with which they take up the different symbols shows that the time spent without a book has given them a clearer idea of words, and that it is now very easy to analyze them. They are better able than either of the other two groups to discuss the contents independently of the book. Some written work has also been done.

Miss Keller.

Reading.

One and one half hours a week are now spent in reading aloud for facility.

Miss Runyon.

History. (b)

The work has been reading stories in connection with the reign of Henry I and the civil war during the reign of Stephen, and the accession of Henry II. Considerable time has been given to the discussion of the several points and the bringing out the significance of some of the things they have read. They have had one written exercise.

Mr. Armitage.

German. (a)

They are reading the fourth story in Altes und Neues, and are using it as the basis for conversation and grammar work.

Miss Teller.

German. (b)

They have just begun on their book. It seems to be necessary to have each child in the class read aloud the same paragraph in order to have it fixed in memory. Preparation is made outside of class and the drill in class is largely in pronunciation and conversation. They are paying very good attention, and already show improvement in their reading.

Miss Teller.

Science. (a)

This week the children have studied the southern part of the Atlantic coastal plain, and in a general way the geography of the adjoining part wherever we had to locate places with which commerce is carried on with the Atlantic states.

The class spent some time in school and more out of school in preparing some papers on different places on the coastal plain, and the industries carried on there. The children chose the topics themselves and read what they could find on their subjects. They received help

in getting material from their parents, but not in composing their essays. They chose Margaret Flower to read these papers in the general exercises on Wednesday. These are some of the topics:--The Great Dismal Swamp, Rice Cultivation, Formation of Coal and Coal Mining, the History of Trenton, the City of Washington, and the City of Atlanta and Sherman's March to the Sea.

On Friday I took the class to Stewart Ridge near West Pullman. At that place there is shown very well the way of development of the Chicago plain and lake plains in general. There is a lake in the process of being filled up with vegetation and silt. The sides of the lake are very swampy and at the edge of the old lake there is a dense growth of sedges and coarse grasses. They saw the vegetation zones which are dependent upon the water supply for their succession. For instance in the center of the lake there is no vegetation, nearer the edges is a belt of bulrushes, without this a belt of sedges, then a belt of willows, then a belt of huckleberries, with various mosses, including the sphagnum mosses, which are so influential in making the peat deposits of the great swamps of the east. Around this is a belt of oaks and other trees. West of the lake is an excellently preserved beach ridge of old Lake Chicago. The ridge is fully ten feet high, and is followed by another about half a mile away. The second is twelve feet above the first. Between the ridges is a wide terrace.

On the way to the Ridge the children noticed the level character of the Chicago plain, and saw how the owners of the land had been compelled to put in ditches to help the insufficient drainage.

Incidentally the children got some frog's eggs and observed the holes of the crayfishes which bore down to water level. The children thought that holes were snake holes, and did not seem to be familiar with crayfish.

The trip was made by Group IXa also. The class left the school at 8:30 and returned at 12:05 o'clock.

Mr. Gillet.

Number. (a)

This class has begun work in decimals. (They had a little of this work last year, but it seemed to slip from them.) We based this work on the United States currency, and the metric system, especially the table of lengths. They have written decimals and have brought in little problems to be solved by the class. It was necessary before beginning the work to make them conscious that our system of notation is a decimal one. It was evidently something which they had known, but had not been conscious of.

Miss Bacon.

Number. (b)

The work in Greatest Common Divisor has been continued with practical problems, and of reducing fractions to their lowest terms. I have also given them some rapid drill work on the multiplication tables, problems in long division, and in reducing improper fractions to whole or mixed numbers.

Mr. Armitage.

Art. (a and b)

These groups are coming to me for the first time this year. I commenced the art work by taking up the subject of composition. We had a discussion in which we brought out the fact that there is a difference between imitative aim, and the interpretation of nature with reference to beauty. I drew on the blackboard a landscape which was somewhat panoramic, and suggested that we would imagine that we were on a sketching trip, and that this was the sort of material we would find on our trip. As they were supposed to be artists the first thing they would do would be to select a portion of the landscape which would fill the space in a manner which would be pleasing. They cut frames of paper and the children held these up and covered portions of the landscape until they found arrangements which they considered good. These arrangements were drawn in charcoal in outline.

In another lesson I showed the class a small picture of Ruben's

Descent from the Cross, and one or two of Millais' pictures. I held these so far away from them that they could not see the details of the pictures. They were in this way able to see the spots of light and dark. After discussing these with regard to composition, I requested them to draw a tulip with leaves, making up their arrangements in two tones. In doing this they first drew a well formed rectangle; inside the rectangle they rubbed in a charcoal tone, and with an eraser they drew the tulip form in white against the dark. The results of this lesson were very satisfactory, and the class was interested in the subject. They have made other studies with reference to the same problem, and have used India ink instead of the charcoal.

Miss Cushman.

History. (a and b)

The history time has been devoted largely to geography this week. The children have located the countries of Europe, getting the relations and directions. They have located the mountain systems, the rivers, and many of the larger cities of commercial, historical, and artistic importance.

In their history they are finishing the third and fourth voyages of Columbus. They have been using as a basis for the work the books mentioned last week. The home work has been mostly geography work, so that it has been necessary to a large extent for me to give them the history matter.

Miss Bacon.

Arithmetic.

This group has taken up work in denominate numbers. The measure idea has been uppermost, i.e. money is a measure of value, the foot is a measure of length, the pound a measure of weight, the acre a measure of area, etc. Some time was spent in learning to locate sections, quarter sections, and forties of land as follows: the N.W. $\frac{1}{4}$ of the N.E. $\frac{1}{4}$ of Sec. 21, Range 58 N. 19 W. To get an idea of an acre the group used a rod measure and measured an acre 10 rods by 16 rods.

The immediate aim has been to get better form and order in the written work and to teach self reliance. The latter is to be obtained by written lessons.

One lesson in percentage was given so that examples like, "What part of a pound is an ounce, 8 ounces" could be answered by using common fractions, decimals, or percents, or all three.

B.N. Wheeler.

Science.

After completing reference reading on the honey bee, an essay was written on the life history and the communal habits of this insect. Before the writing of the ~~essay~~ essay, however, a thorough discussion of the similarities of structure between the bee and the grasshopper was held. The special adaptation of structure to the habits of the animal was also emphasized.

A study of the butterflies and moths and their habits was then taken up, and a comparison made with the grasshopper.

Mr. Garrey.

General Exercises.

Last week the children had a musical program in part, the music being furnished by the children themselves. The latter half of the program consisted of geographical papers prepared by Group VIIIa.

Miss Bacon.

The new children and the younger ones have been put at one table, and they are furnishing the large play house for the kindergarden. They stained the stair case, doors, and the window frames. Then they papered the kitchen and laid the oil cloth. With the blocks we made the different articles of furniture for the kitchen.

The older children have been making play things to use out of doors. They modeled some marbles, and after letting them get dry, they decorated them. The children were especially delighted with the tops made by fitting a meat skewer on a large button mold. The bean bags which they made for the kindergarden, the children wanted to take home, so we decided to have them make some more for the kindergarden. They made pin wheels, each child having his choice of color.

Through our songs and stories the attention of the children has been directed to the change in nature. On our walks we have noticed the lilac buds, and have seen one blue bird, one meadow lark, and several robins.

The special story for the week was "The Butterfly that went Calling".

Miss Dolling.

Social Occupations. (a and b)

The work done this week has been in their garden. They planted lettuce in a hot bed out of doors, as they realized that it is better to have it grow quickly so as to be tender. The weather was so cold and rainy that we could not plant other vegetables. We made a little hot bed in the house with some cotton flannel, some glass, and a box. First we had to decide what seeds we should put into this hot bed. We saw that some seeds are very hard, that the peas are shriveled, and that this comes from loss of water. I told them that ~~the~~ the plant could not start to grow until the seeds had softened up, and that if we put them in the ground at once they would have to lie there until there was sufficient rainfall to soften them. They realized that this might take some time, so we tried to find a quicker way of solving the problem. It was suggested that we soak the seeds in water, so we put some in a glass jar of water and left them to soak. After they had been left in the water for three days, it was found that they had burst. We examined others, and found that little roots had formed, and little leaves. In order that they might grow still more quickly, we made a hot bed in the house, so that they would get heat as well as moisture. After we had left the plants there for three days, we found that the ^{roots} leaves as well as the ~~leaves~~ had started out. The children realized that the ^{roots} ~~leaves~~ would start before the leaves so that the leaves would have a supply of nutriment as soon as they were able to use it. They remembered this from their experience with the bulbs in the fall, where some of them started the leaves before the roots were well established, and then the plant did not have any way of getting a sufficient supply of food. The children were surprised to find how great an amount of warmth could be obtained by letting the sunlight go through glass.

We have spent about twenty minutes a day on reading and writing.

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The children are getting a very good idea of phonics, and if they are given any simple word like "in" they can go to the board and write all the words having that sound for an ending. The other day they wrote thirty in about fifteen minutes, words that were unfamiliar to them. These words were all made from the three words "fin", "fish", and "gold". So far all their writing has been done on the blackboard.

Miss LaVintoire.

O.K.

Sewing.

The children are continuing with their book covers and scrap book leaves. The nice materials of the former keep^{up} the children's pride, and eagerness in doing nice work.

Miss Lachmund.

Cooking.

As the children in IIIa have been unable to read and write their recipes, we spent some time in working out the recipe for flaked corn. The children helped dictate it, and then read it, but they had difficulty in picking out the words even after they knew what the line meant.

The children cooked corn meal and apple sauce for their luncheon. It was IIIa's turn to cook the fruit. After weighing the corn meal and working out the individual recipe, we discussed the method of cooking apples for apple sauce. The children decided that the apples must be cut into small pieces to cook in time, and that just enough water was necessary to keep the fruit from burning.

In IIIb the children had to double the recipe, as they were going to cook the cereal for the class, which involved doubling 1 1/4 cups of water. Then they had to determine the amount of cold water necessary to moisten the cereal, and subtract this amount from the total amount of water to find the amount of hot water. All this the children did with remarkable ease.

Miss Lachmund.

History. 2 weeks. (a)

We continued our work with furnaces. Some of the children did not succeed very well in keeping a fire, and had to try many times before they could lay one which would burn. One succeeded in preparing a considerable amount of charcoal, and then in melting lead in her charcoal fire. We used the bellows to increase the heat. The children anticipated its value and grew greatly excited as they saw the charcoal burning to fine ashes. They have been trying to make some clay molds for hatchet heads, but had great difficulty in working out a plan for molding an object which had two convex surfaces. At first they could not see why it was not sufficient to press their model into the clay, and get the impression of one side. When they at last realized that this was not enough, they proposed various plans. One drove the hatchet head into the clay, blade first, and then covered over with fresh clay the part exposed. When he attempted to draw out his model the day after, he realized that this would not work. At last one of the children suggested making two impressions, one of each side and then fitting them together.

We have continued the work we did with our furnaces and have reviewed the work of last week. A part of this review took the shape of a letter dictated by the children describing the construction of a furnace and the reasons for making a door, a trough in front of the floor, a chimney, etc. We also talked a little about the Greek people, and I told the children a part of the myth of Persephone, emphasizing the journey through the under world and the treasures of gold and silver that could be found there. In this connection we talked about the meaning of such stories as this. I told the children they were the attempts of people who had not found out about things to explain the ~~sk~~ things they could not understand. The children themselves gave some instances of very little children who thought that the moon, the stars, and the wind are ~~sk~~ alive, and when I asked why they should think so, one of the boys answered:

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" because they move; the wind moves, and the moon moves, and the stars just go whizzing".

Miss Hoblitt.

History. (a and b)

I told them the story of Prometheus to let them know the Greek myth of how fire was brought to man. A few days after this they told the story in their own words.

Miss Lackersteen.

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

Vegetables--Spinach.

A review was taken of the work done last week, and the vegetables used were classified. The various parts of the plant from which vegetables are obtained were discussed and each vegetable which they have used was thus classified.

The method of cooking spinach was talked over and the reason why the cooking of it is different from that of the other vegetables was considered. The children were able to formulate the method with very little assistance. For luncheon spinach and cocoa were prepared. Calculation was found necessary for the amount of materials used in making cocoa for the class from the individual recipe. *O.K.*

Miss Tough.

Textiles.

They have removed the yarn from the spindles, and made it into skeins for scouring and dyeing.

Miss Harmer.

Art.

They have been water color painting from the object. In doing this work the object is generally put away after they have looked at it. Some of the studies have been flowers, bulbs, and easter lilies. They have also illustrated the processes of mining and smelting. This they did on the large sheets of paper.

Miss Cushman.

History. (a and b)

Emphasis is being laid this quarter on writing. We have planⁿed to put the children's own statement of history into writing for their books. The facts which appeal to them worth recording are always those which are to some extent within their experience or sensational. For example, in the story of the boyhood of Columbus, the thing remembered by all the children was that once when sent away on an errand he stayed away all day playing on the wharves. The places he would visit in his first trip around the Mediterranean had little interest, but the statement that once in a fight with a pirate vessel, both ships caught on fire and Columbus sprang overboard with an oar and swam six miles to shore, was remembered, and desired to be recorded. Comparisons of ships of those days with present ones were not appreciated, but found some interest. I had quite a good many pictures illustrating the life of Columbus which have been examined. The usual facts have been taken up to show the ways of those times in which an enterprise could be forwarded. The scarcity of books, the invention of moveable types, etc. were talked about. The writing has improved on the stimulus of preserving it in the books made in the fall.

Miss Runyon.

Reading. (a and b)

All of the children but one are now more or less independent in reading. We have practically finished Robinson Crusoe, and will take up next Columbus in the five cent classic series. Some of the children who can read easily are using the stamp outfit to print some reading matter for the rest.

Miss Runyon.

Science. (a and b)

The seeds which had been placed in cotton to germinate were looked at after two weeks. Out of the fifty cotton seeds five had failed to germinate, and from this experiment the children worked out the proportion

to count upon as not good. They planted the little seedlings in the hot bed, and are to set out a second set tomorrow. In counting the proportion of seeds germinated with the sugar beet seeds, they made the discovery that what they had called simple seeds were compound, finding in one case four little plants from one seed, and drew the conclusion that no matter how the seeds were planted, they would have to be thinned as soon as the seedlings were well started. They arrived at no proportion here, as beet seeds were so near the cotton that the moisture conditions were not perfect. In putting the seeds into a hot bed they have discussed the advantages of a cold frame. In dividing up the garden they have the following problem: the space was four rods long; they found by other measurements that this is 66 feet. They had to multiply by 16, and then by 2 and by 4, and spent some time in learning how to multiply a number of more than two figures. I found that two or three of the children were not quick enough to handle even the fives well enough to do this work. The next problem they have is the dividing up of their own group garden into seven beds. The space is 16 by 12 feet. They first proposed seven strips, using the two feet left over for walks. Then one child worked out a plan by which one had a bed extending across the entire garden, one half as wide as the remaining six beds; the three strips divided in the middle made the six beds. One child made at home a plan of the plot, dividing it up into square feet, and showing how with that plan we could get a bed of any desired size or any desired part of the whole garden. In the discussion of the preparation of the soil for the garden, the question came up of just what the worms and insects do, as some of the children remembered incidents of last year's work in which cut worms and beetles injured the plants, and others furnished the information that the angle worm is a great help. Next week's work will take up just what the angle worms, the larvae of beetles they find, live upon and what relation they bear to plants.

Miss Camp.

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

Review of Cereals. --Farina.

One half hour was devoted to writing recipes and directions in the note books; in this work the children are gaining greater freedom both in writing and in expression. Farina was balanced with the standard cereal and calculation made to find the amount of water required in cooking. From this the recipe was formulated by the class.

Farina with figs was prepared for luncheon.

O.K.

Miss Tough.

Textiles.

They have been working out the borders of the table mats in the darning stitch.

Miss Harmer.

Art.

This group has also been painting. I find a tendency in this group for the children to object to whatever is presented for the day's lesson. I think perhaps Amelia Barton is responsible for these tendencies. It is especially noticeable in her group. I have never found it so strongly marked in any other group. If an illustrative lesson is proposed, for instance, Robinson Crusoe, they object and wish to paint. If a water color lesson is introduced they wish to illustrate. I have not paid any attention to the objections except when I have attempted to give an illustrative lesson. It is impossible to get any result unless the children are interested.

Miss Cushman.

Science. (a)

They have been working in the garden. They measured off their gardens and made paths between them.

Miss Lackersteen.

Textiles. (b)

The table mats are progressing finely and the children on the whole are working better now that they have gone far enough to begin putting the border on the mat. One child in particular, who is sometimes inclined to be troublesome, worked very industriously and took pride in his work.

Miss Lachmund.

Number. 1 1/2 hours.

The keeping of some household accounts involving multiplication and ~~division~~ addition has been the work of the week. Special drill was given on those tables voted by the class to be most difficult.

O.K.

Miss Tough.

Cooking. 1 1/2 hours.

Colonial Cookery. --- Fried Hasty Pudding.

A review was made of the work previously done in the preparation of hasty pudding, and the class was able to recall a general outline of it, and to formulate a rule for the work to be done.

Half of the class prepared luncheon while the rest began the ~~cooking~~ ^{smoking} of some beef, the process for which had been talked about when the Colonial methods of preserving meats were discussed. The work was not a success owing to the lack of proper fuel, this being unattainable.

O.K.

Miss Tough.

Art.

They have been working in water color chiefly this quarter. The element of composition has been introduced to a slight degree. I have now commenced to read to them from Miles Standish, and they will illustrate this.

Miss Cushman.

Science.

Group VII have been working on direct dyes long enough to sum up the following conclusions:--The preparation of the wool(the cleaning) has an important effect on the dyeing. Aside from the shrinkage of the fibers through the heat, the alkalies used in the washing ■ sometimes cannot be washed off so thoroughly as not to affect the color. Hence the washing must be very carefully conducted as to the amount of heat and alkali used. 2. The strength of the color depends not only on the strength of the color used in solution, but also on the length of time. (I have not yet found an experiment to show the saturation of color, i.e. to show that the color of a dye after a certain point cannot be increased in depth or brilliancy by longer heating or spronger solution.) They have also appreciated the mechanical side of the manipulation in turning and stirring in the dyeing, and in rinsing. With dyes requiring a mordant, they have now reached the point where they appreciate the necessity of getting the soluble mordant into the fibers of the wool and the second necessity of removing as much as possible the mordant by rinsing before dyeing in the second solution. They also found that in prolonged washing, some of the mordant would "wash out" of the fiber so that they could not entirely prevent the loss of the dye by precipitation of the color outside of the fiber.

Miss Camp.

Reading.

An hour and a half was spent in reading aloud.

Miss Runyon

Textiles.

They followed the invention of carding implements from the hand work to the carding machinery in the factory. After having worked out the principle of carding, and the necessary work to be done by the machine, they were told to make a diagram of a carding machine that could be run by power. Without suggestion they got the idea of a cylinder

turning over a flat lower part. They made a record of this work.

Miss Harmer.

Art.

At the beginning of the quarter I suggested to the 7's that they form themselves into an art club, and appoint committees each month to provide for the work of the club. On my suggestion they decided to have a figure pose on one week, and an out of door landscape sketching the next week. A committee was chosen by the children to appoint a child to pose in fancy costume and also another committee to take charge of selecting committees for sketching. The children have shown themselves quite efficient so far in carrying on this work.

The first pose provided was a Mexican. The second was a Puritan costume, -a girl at a spinning wheel. This class has not drawn before this year. It was limited to clay. When they began to draw from the figure I noticed a wonderful advance in their technique. It was a greater improvement than I had expected.

Miss Cushman.

Reading. (b)

We have been reading Marmion. The chief object of this reading is to acquire the power of reading fluently and with expression.

I found that the children had an excellent background for the work. We have an edition with plentiful notes, and they are required to look up all the references and to prepare the ~~is~~ lesson before they come to class. After the child has read a passage slowly for the reading, I insist upon his re-reading it to give some fluency and natural expression to it. In connection with this subject, they drew on the board a ground plan of a feudal castle, and read a description of a castle from Viollet de Duc's *Habitations of Man in all Ages*. I require them to bring in written work in connection with the reading.

Miss Cushman.

Science. (a)

We discussed the trip of last Friday, bringing out the points which they remembered, and some conclusions which they were able to draw for themselves. I did not have to help them very much. We talked about the formation of the Chicago plain, for instance, and they finally worked out the conclusion that it must have been formed in a way similar to the way in which the ~~little lake~~ ~~plain~~ at West Pullman was formed, because the black layer just beneath the upper sand ~~layer~~ of the Chicago plain shows that a swamp was once here. We also brought up another point of evidence that the lake was once over the region,--the numerous beach ridges, and the composition of the soil.

We have discussed the other ways in which plains are formed, as the flood plains of rivers, base leveling, rising of the sea bottom, and glaciation. The children brought up a number of places where they had seen plains and explained how they must have been formed. They did this

by telling how they could not have been formed, and deciding on the others.

Mr. Gillet.

Science. (b)

In making the change from the general subject of energy and the source of energy in the steam engine and the particular one of combustion to the subject of the quarter--physiology, the children brought out the fact that the air that they breathe is as important a source of their energy as the food they eat. Then they had the following questions to find the answers of without suggestion, if possible:--what do you do when you breathe what moves, and how is this motion brought about and regulated? Make a drawing of the thorax to illustrate this. They spent some time on the arrangement of the ribs, the way in which they are attached to the spinal column, and the effect of the shape of the cartilages attaching the low ribs to the sternum in the expansion of the chest. They studied the position of the diaphragm and its relation to abdominal and costal breathing. They placed an inflated rubber bag in a flask, and by pumping ~~the~~ air into the bag showed that with increased pressure the volume of the bag was lessened, and with decreased pressure the bag decreased in size noticeably. The question of the quantity of oxygen in the air having an effect on the amount available for breathing was among the first the children brought out, and they have started an experiment by the burning of phosphorus to determine the amount of oxygen in the air. One of the problems which came up in the setting up of the apparatus was to get the water level on the inside and outside the same at the beginning of the experiment. After some suggestion they used an air siphon, which connected the inside and outside air by ~~an~~ glass ~~ix~~ tube. They have begun to ask questions of which the following are typical:--After examining the phosphorus with

with great interest, getting such points as its viscosity combined with crystalline character, its melting under very low temperature, and the main point of its combustion in the air under very low temperature, they asked where it is found, whether in the earth as an element, or was it gotten out of the earth as metals are, in the form of ore, and how the ore is reduced. After the experiment was over we examined with interest the iron salt, (probably a mixture of iron oxides and phosphates) formed on the ring stand by the action of the phosphoric acid on the iron.

Miss Camp.

Textiles. (a)

We examined carefully the Kentucky Loom and its attachments. Then we traced back the probable invention of each attachment from the hand work. The children made a record which gave them the history of the invention of the loom from its primitive form to the colonial. From this will be worked out the power loom.

Miss Harmer.

Mathematics.

In the work in compound numbers, the relation between the fundamental operations of addition, subtraction, multiplication, and division and the same operations in compound numbers, was shown. Also the use of common of fractions, decimal fractions, and percentages as equivalents in compound numbers was shown.

Mr. Wheeler.

Science. (a)

The work of this group in science is very similar to that of Group VIIIa, although in this class we have more time and are able to go more into detail. I am not trying to keep the two classes together, but we are taking the same work in the same order, so that a separate report is unnecessary.

Mr. Gillet.

Science. (b)

The work this week has been the chapter in Redway on Plains, Plateaus, and Mountains. We read the chapter aloud in class, and discussed the points as they came up. I showed them pictures of plains, and the different kinds of mountains, and they tried to tell me how they were formed. The work in this regard was satisfactory. In explaining processes, I encourage them to make diagrams on the board. They are learning to do this now, although it was hard work for them at first. Some of the class have trouble in telling me what they know, and would much rather write an explanation.

On Fridays we usually have written lessons to answer some general questions, and also the explanation of some region with which they are familiar, but of whose formation they have not worked out before.

Mr. Gillet.

Mathematics.

They are reciting every day this quarter, one hour each three days a week, and three quarters of an hour the other two days. The work is in factoring, the following outline being used. Case 1--The general case including in one sense all the others, is the case of common factoring. Principle--A factor common to each of several terms may be removed by division, the divisor and the quotient being the factors of the dividend. 2.--Binomials.--Binomials usually factored are of the form or are reducible to the form $x^{\frac{n}{2}} \pm y^{\frac{n}{2}}$, that is to the form having the same exponent in both terms. These are divided into two general classes, (1) when the exponent is even; (2) when the exponent is odd. Each of these is divided into two sub-classes, a) when the sign of the second term is positive, b) when the sign of the second term is negative. 3.-- Trinomials. 1) Perfect square--the middle term is twice the product of the square roots of the other two. 2) The middle term is the square root of the first into the algebraic sum of the factors of the third. 3) and 4) Variations of the others. 4. Polynomials of three more than ~~two~~ terms. By applying the associative and the commutative laws of addition, some such polynomials may be reduced to some of the preceding forms, and so factored.

The class is now doing review work in factoring.

Mr. Osborn.

From one to two hours a day has been spent in working in the garden. As the soil was very stony, it took considerable time to get it ready for the seeds. The children suggested that we plant some kind of flowers that would climb over the pump that stands in our patch. We decided on morning glories. We transplanted some daisy and pansy plants. The children made seed labels, measuring them 3 by 4 inches.

Thursday we had a picnic at Washington Park. We noticed that they were making gardens at the park also. The children were greatly interested in the frogs. We have some frog's eggs in the kindergarden that we are watching.

We learned a new song entitled the "Dandelion".

Miss Dolling.

Social Occupations. (a and b)

This week has been so rainy that we have not been able to be out of doors, so that we have spent the time on reading, writing, and number. When possible I have them read things in connection with their farm work. They have also been doing some reading in their readers. All their writing has been on the blackboard, as in this way they learn to write correctly by using the arm muscles, and this is a preparation for the free arm movement when they will write on paper later.

Several times they have played that they were farmers, and have taken to market the vegetables and the different things that the farmer raises and sold them. In this game we used the imitation money. The children have become quite accurate in making change, and in finding the cost of the different things.

A number of the children of this group have been having the measles, so that we have had only two, three, and four in the class.

Miss LaVictoire. *D. K.*

Cooking. (a and b)

As there have been only three children present from the whole group, the divisions have been combined. During one period when those were present who have recently entered, the children reviewed the parts of the measuring cup--halves, thirds, quarters--and drew pictures of the cup on the board, showing the different parts and ~~showing~~ writing the fractions. We began reviewing also the recipe for flaked corn in order to learn to read it. As the drying of the apples had proved a failure, we tried drying some again instead of cooking during the luncheon period. For their luncheon the children had a cereal cooked for them. We reviewed the ~~at~~ methods of preparing fruit, the reason for drying apples, and the change

occurring in the process.

Miss Lachmund.

Sewing.

The work is the same as that reported last week. The child who has come from the kindergarden most recently has shown remarkable dexterity in overcasting an scrap book leaf. His stitches were more accurate than those of most of the children who have had more experience in sewing.

Miss Lachmund.

Art (a and b)

With the coming of Spring, we began the study of farm life. We talked of the things the farmer would do when the snow was off the ground and the children thought he would plow and then sow the seed; we then had the poses of the man plowing and sowing the seed. We talked also of the appearance of the sky in early morning, and made a picture of a farm, the cattle, and the farmer feeding them.

When the warm days came, we went out of doors and studied the trees against the sky and the comparative size of the child and the tree.

The children had no trouble in seeing that things in the distance are much smaller than near by. For two days we have been studying flowers, and the children visited the park to see the tulip beds, and were very successful in showing the teacher how they looked. Their study of landscape helped them very much in comparing the distant beds of flowers with the ones close to us.

Mrs. Laver.

Constructive Work.

They have worked in their garden, dividing it off, and planting their seeds.

Miss Lackersteen.

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

Vegetables--Turnips.

The mode of growth of the turnip was discussed and a classification of the vegetables made; the cellulose was examined and found to be extremely tough, hence long cooking was decided upon, and the vegetable had to be cut in small cubes. From the taste, and the odor of the turnips in cooking, they were classified as strong juice vegetables, and would therefore require a large amount of water in boiling. Having formulated a method of cooking turnips, and compared it with that of other vegetables which had been used, boiled turnips with white sauce were prepared for luncheon.

Miss Tough.

Textiles. (a and b)

The IV's have been combined, so we spent the time sewing, and the few children who could not spin well have spent the time in spinning.

Miss Harmer.

Shop.

They have been working on plant labels and posts for marking off the garden out of doors. The plant labels they made 8" by 1 1/2", drawing a line three inches from the end and making the points. These they sawed or planed, whichever they chose. For the posts they had stock given them 18" by 1" by 2". They planed these and made the long points for sticking into the ground.

Miss Jones.

History, (a and b)

I have spent some time in trying to have the children realize for themselves how long and difficult a task it was to secure the help Columbus needed. I have nearly always found that children had an idea that Columbus merely presented his case to the queen, and she pledged her jewels to have the plan carried out. To make them realize the real difficulty in getting support for a new idea, I have dwelt upon his repeated attempts, at the court of the king of Portugal, at Genoa, and for seven years in Spain. We counted up the number of years in all that he spent in trying to secure support and found it to be fourteen. This, with a statement of the different ways in which he tried, led the children of themselves to say how difficult it had been.

We then took up the way in which the help could come: that some of the money came direct from the king and queen, and that two of the ships were levied from a town. I asked them how this demand for ships from the town could be made known to the people. They suggested various ways, and we brought out the fact that it could not be done through the newspaper. They then suggested calling all the people together to the king's castle. I reminded them that this was far from Palos, and then we got at the idea of having a messenger from the king read the document to the people from the church pulpit.

We went over briefly the objections of the people, and the difficulties that had to be encountered in manning the ships.

One of the children suggested that we might write a play of Columbus, and as the class as a whole seemed to be very much taken with the idea, and suggested many things for it, I told them we could if we could get it in shape. They suggested that they could make the scenery with Miss

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Cushman, and could give it in the club house, each member inviting one guest. They were told to think over all they had had about Columbus, and find out what would be best for the parts of the play.

Miss Runyon.

Reading. (a and b)

We have finished the reading aloud of Robinson Crusoe, and I have secured Columbus in the five ~~maxt~~ cent classics for them. The children who finish this alone, read something else while I help those who are backward, for the first fifteen minutes, then all join in reading aloud.

Miss Runyon.

Cooking. (a and b)

Review of Cereals. Wheat.

The comparative weights of flaked rice and rolled wheat were ascertained, and calculation made of the amount of water needed in cooking. The recipe was then formulated for rolled wheat. Rhubarb, which was also to be cooked, was examined and found to contain a large amount of water, considerable cellulose, and from its taste there was thought to be acid, comparison being made in this respect by the children to vinegar or lemons. The class was told that in cooking rhubarb one pound of fruit would require one half pound of sugar; the weighing of the fruit and then of the sugar was then found necessary and considerable calculation had to be made in changing ounces into pounds, and vice versa. This work required a long time, as the class worked slowly at it. They have not had as much of this side of the work as some of the other groups, and show a decided need for it.

They spent one half hour in writing and made a list of all the words misspelled by the class; each child is to keep this list for reference in order that the same mistakes may not occur again.

Miss Fough.

Textiles. (a and b)

They are finishing the borders on their mats.

Miss Harmer.

Shop. (a and b)

We began work on the wooden spoons for use in the kitchen. They first spent some time on the drawings, making them the size they wanted. Then they took the stock, planed it off, and made the drawings on the wood. They are now ready for the wood work.

Miss Jones.

Cooking. 1 1/2 hours.

Colonial Cookery. Poached Eggs on Toast.

The composition of eggs was talked about, also the reason for eggs growing stale and unfit for use. Suggestions were ~~for~~ offered freely by the children for means of preventing the entrance of air through the pores of the shell, and thus preventing the eggs spoiling. They thought eggs might be kept indefinitely if only some of these means were adopted. Experiments were then made showing the coagulation, by various means, of the egg, due to the presence of albumen, which they remembered was a substance that they had found also in milk, in the work of last year. Tests were made to find the best temperature at which to cook eggs. Boiling was found to give a tough, undesirable product, while cooking at a temperature just below the boiling point was found to give a soft tender substance, presumably easier of digestion and certainly more palatable.

For luncheon poached eggs on toast were prepared.

Miss Tough.

Number. (1 hour)

Ten minutes of each period were devoted to an oral drill on the tables. Problems from the cooking class were given involving the first work in division not wholly mental. Interest and inquiry evolved the formal process of short division which the children have taken to very easily.

From fifteen minutes to twenty minutes home work is given twice a week.

Miss Tough.

Shpp.

The VI's are also making wooden spoons for use in the kitchen. They made their drawings and prepared their stock as did the V's. Each one made his spoon according to his drawing.

Miss Jones.

German.

Group VII are reading Old Mother Hubbard and The House that Jack Built in German. They answer relevant questions easily and quickly, and are doing very good work.

Miss Tellar.

Reading.

I have secured the five cent classics on Lincoln, and ask the children to read a page quickly and to themselves, and then tell what is on it. After we have gone around the class in this way, the whole is read aloud.

Miss Runyon.

Textiles.

The children have been divided into groups of fours, one set carding, another spinning, and a third set making looms for weaving.

Miss Harmer.

Shop.

They are still working on the things they are making for themselves.

Miss Jones.

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German. (a)

Group VIIIA have had some of the same work as VIIIB and show themselves more responsible in doing their work at home. There is a marked difference in the two classes in the matter of books and pencils--it is the exception for a member of VIIIA to forget either, while with VIIIB it is exceptional when one remembers both. VIIIA have memorized two paragraphs of a story, are able to write at dictation a new German story and are quicker in applying principles to specific cases.

Miss Teller.

German. (b)

The work of VIIIB has been very unsatisfactory during the last week, and it has been found necessary to go back to fundamentals for a review. In order to make this review of interest work has been largely from the board and not from the book. A small elementary grammar is being prepared. The first lesson is in phonetics; the second a simple one in declension and conjugation. The third is one of definitions as: Ein Satz ist ein in Worten ausgedruckter Gedanke, wie: "Der Knabe schreibt". Das Subject is die Person oder Sache von der etwas gesagt wird, wie: "Der Knabe". Das Prädikat ist das, was man von dem Subject sagt, wie: "Schreibt".

In the reader a paragraph has been assigned to each member of the class to be read perfectly, translated, and understood in its elements before being left.

Miss Teller.

French. (a and b)

The groups have been doing practically the same work. They have been writing and learning a short a short adaption of the 16th century "Farce de Maitre Pathelin".

Miss Dey.

Science. (a)

This week we have continued the geography work of the United States, using the material we got last week in the study of plains and how they are made. The section studied was the central part of the United States, especially the eastern Mississippi Basin. We have studied the maps in the geographies, and have then drawn them on the board as well as possible, then looked at the books again, correcting their ~~own~~ own, and so on. We located the principal cities and rivers by showing how boats could get from one to the other.

(On Friday I took the class to the ravines near Highland Park. The report of this trip is given with that of Group IX.

Mr. Harry C. Gillet.

Textiles. (b) and (a)

They have made book covers for their textile records, and finished writing the records.

Miss Harmer.

Shop. (a)

They have completed the picture frames which they carved, and are now making blotting pads, making the piece to hold the blotter semicircular. This is quite a difficult piece of work and they have had some trouble with it, but they came out very well. Their time with Mr. Fowler has been spent on the house.

Miss Jones.

Science. (a)

On last Friday this group, with groups VIIIA and IXb were taken to Highland Park for a study of the ravines, and the flood plains of that place. We studied also the different kinds of shores and shore lines. It was an all-day trip. Miss Bacon took Group VII, who were able to get a number of points that the older children got.

The topics to which we paid special attention were: 1) the Chicago Plain, 2) the old beach ridges and what they prove, 3) the character of the surface material at Highland Park, and how it was derived from glacial action, 4) the many small ravines along the lake shore on account of the high cliff at that place, 5) the development of a ravine, 6) the development of a flood plain, 7) the final stage of base level.

From the steep grade in the track of the Northwestern Railroad near Winnetka, it could be easily seen that Chicago is in a sort of basin. As the children expressed it, it seems that the track ends suddenly in going down the steep grade to the basin. "At looks like the end of the world", said another.

The class could see how the cliff was formed, for there was evidence of landslides last winter. In some places the cliffs were covered with vegetation, and in others it had been all swept away. Where the beach was very narrow, the cliff was bare, for the lake had been cutting at the base of the cliff.

The formation of a flood plain was brought out by several examples in the ravines. There was still considerable mud on the bottoms of the trunks of the trees, as high as two feet in some places where the ravine was narrow. There was a layer of mud over the bottom of the valley.

Everything considered the excursion was a profitable one, although the groups were not so well represented as I had hoped they would be.

Mr. Gillet

Arithmetic.

During the two weeks ending Friday, May 3, this group worked with board measure and with some promiscuous examples in compound numbers. To gain the idea of a board foot (the unit of measure) two pieces of 1" by 6" and one foot long were placed side by side. The two pieces were placed together to make a 2" by 6"; a piece of 2" by 4" was also examined. This gave the problem of how to measure boards 9" wide, 8" wide, etc. Problems in board measure like the following:-- a man was building a ~~brn~~ barn on 57 St. The sills were 6" by 6" by 18', and the barn was square. How many square feet in the sills? The cost of a fence 16' high, around a lot 50' by 100' at \$18.00 per M.

General work was spent on bills, how to make them out, and correct computations, such as :-- $3 \frac{3}{4}$ lb. tea @ 80¢, 300 lb. sugar @ $4 \frac{3}{4}$ ¢, etc. This ~~groups~~ group seems to lack in ability to do their work accurately.

Bert N. Wheeler.

Group I.

The children have finished papering the house. They laid the matting in the dining room and the matting in the library. They stained the floor in the bed room, for they intend having a rug in that room. They made the dining room furniture.

Group II.

In commencing the garden work these children planted a few seeds indoors just to start them. They made window boxes by painting cigar boxes. In order to fill them with good dirt we had to go a few blocks from the school. On our return we planted nasturtium seeds, and each child took his home to watch them. We have two boxes at the school so that the children can compare the growth of their seeds with that of the seeds they have at home. In connection with talking about the seeds' needing rain to help them grow, we learned Mrs. Gaynor's Pit-a-pat song. I told them the "Legend of the Dipper".

Miss Dolling.

Social Occupations. (a and b)

The work in the garden has been continued. The children have measured off the beds, using their foot rulers, making each bed 16 feet by 2 feet. They mark off the beds with sticks and string, and make paths between the beds one foot wide. They have planted peas, two kinds of beans, radishes, and lettuce. From their experiences with planting seeds in the house, they knew just how to go work to plant them out of doors. We have continued to watch the growth of the seeds in the window boxes and the hot beds.

Owing to the measles we have had only two and three in the group.

Twenty minutes a day are spent in reading and writing.

Miss LaVictoire. *O. K.*

Cooking. (a and b)

This week we made steamed rice and steamed apples. IIIb cooked the fruit and IIIa the cereal. Group IIIa had difficulty in working out the amount of water necessary to cook the cereal, so that some time had to be spent on this and learning the recipe. The reading is becoming easier for them now. In preparing to cook the apples we compared the new method with that of making apple sauce.

Group IIIa is not as interested in the cooking as IIIb.

Miss Lachmund.

Sewing. (a and b)

The work of IIIb is the same as that reported last week. All but one of IIIa are able to do more difficult work than the overcasting of the scrap book leaves, and one of the children is able to work on a cooking book cover, while another is going to work on a design in darning stitches on a mat.

Miss Lachmund.

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Construction Work. (a and b)

They have made furnaces out of clay and stones. Most of the children took the clay in one lump and moulded the furnace out of that lump. One or two made theirs in sections. They took the clay and laid the stones in sections, and then put the whole together. They have built fires in them, and have melted lead. They saw that a slow fire was needed for charcoal, but a hot one could be made quickly by the use of bellows.

They have made arrow head moulds in the clay more or less successfully.

Miss Lackersteen.

Sewing. (b)

The children are continuing their bags, ~~and~~ needle books, and mats. One of the new children is not at all interested in the sewing, which he does poorly.

Miss Lachmund.

Group V.

Construction Work. (a and b)

They have been drilled in the multiplication tables which they could not do in their heads. To some it comes very easily. Others have difficulty in the numbers carried, as when we multiply 15 by 6 = 90; they forget ~~was~~ where to add the three. They have been using this number work in connection with the laying out of their garedn.

Miss Lackersteen.

Cooking. (b)

The children weighed flaked wheat to determine the amount of water, and worked out the recipe. Then the different preparations of wheat and corn were given them, and the children set aside all they knew, and we talked about the others.

Miss Lachmund.

History.

We spent most of the time in reading aloud from "Pilgrims and Puritans" the story of William Blackstone and the coming of the Puritans. One period was spent in writing a list of the principal events of their history with the dates. This was the result of a discussion in which some of the children had shown rather hazy notions of the sequence of events. They took great interest in straightening things out, and declared when the papers were finished that they must be taken care of, for they "were worth saving".

In talking of the history of the English town of Boston, the word "monk" had to be explained. On being told that the old idea of a holy life was of separating one's self from the world and giving up most of the things that make life pleasant, one of the children remarked that people "were much mistaken when they thought that way". They were greatly interested in the story of William Blackstone, but could not understand at first why he should invite the Puritans to come to Shawmut and then be unwilling to live there with them. The solution of this problem was found later in the fact that church membership was made a condition of citizenship in Boston. The children had many questions to ask on this point, as to where Blackstone went, whether he ever married, whether he had any children, etc. We went on, therefore, to the account of his journey to his new home and his marriage there. The children thought that many of the questions they wished answered might have been answered if only Blackstone's papers had not been burned.

One period of the reading time was spent in a ~~re~~ spelling lesson, the words being taken from their written papers.

Miss Hoblitt.

History.

They have taken up the final campaign in the Revolution in the south I gave the children a general idea of the movements of the campaign, and read them the final battle of Yorktown. Since then we have spent some time in writing, and they have done some reading in connection with their history. The stories which we read were taken from Eggleston's books. In connection with this they have taken the political geography of the southern states.

Miss Bacon.

Number.

They have continued the work on long division, and nearly all of them have it now fairly well; and they have worked out the proof.

Miss Bacon.

History. (b)

We took from Bulfinche's "Age of Chivalry" the story of Sir Launcelot, read it, discussed it, reproduced the story orally, and then wrote compositions. The purpose of this was to let them see what was the real spirit of the age, and what seemed to be the ideals of the knights. The stories they told and the songs they sang were reflected in their kind of story.

Mr. Armitage.

Science. (a)

We have made more of the point brought out last week, namely: the different ways in which plains are made, and the ways in which certain plains were made. I showed them pictures and they explained to me as well as they could how such plains could have been formed. In general the pictures showed the different phases of river work, and the several varieties of shores. They told me of a good many kinds of river erosion topography, ~~textbook~~, and in these cases we discussed what the fate of the region would be, which in most cases would be that it would be reduced to base level if the present conditions continue. Most of the class had seen some of the deep river valleys in the drift of Wisconsin, and remembered enough of them to draw good diagrams on the board, and could tell about them clearly enough so that that rest of the class easily got the idea.

Mr. Gillet.

Number. (a)

They have finished their work with fractions, and are beginning work in decimals. They had no trouble whatever with addition and subtraction, and now are going on to multiplication. Most of them have worked out for themselves the rule for pointing off. We compared numbers at first, taking, for instance, 23, 2.3, .23. After this comparison we used each ^{of these} numbers as a multiplier with the same number for a multiplicand.

Then we drew the inference that the product obtained by multiplying by 2.3 would be a tenth ^{of that} obtained ^{from} by multiplying by ~~x23~~ 23, and that obtained by multiplying by .23 would be 1/100 of that obtained by multiplying by 23. The next step was to take a multiplicand composed of the same digits, but of different values as 45, 4.5, and .45, and proceeding as before they made their own rule for pointing off.

Miss Bacon.

Number. (b)

Starting with the reduction of simple fractions to a least common denominator, I presented fractions that had such large denominators that they could not readily reduce them, and they saw the necessity of having the least common multiple of these denominators. Then starting on the basis of what they knew in finding the least common divisor in factoring, we discovered the steps necessary for finding the smallest number that each of the several numbers would divide, that is the factors which must enter into the that larger number. When they could find the least common multiple of numbers, we applied that to finding the least common denominator, and worked out the steps for getting the proper numerators for each of the denominators.

Mr. Armitage.

History. (a and b)

They have finished the voyages of Columbus, and have taken up those of Vasco de Gama. Most of the time has been spent in geography. They have now finished the map of Europe.

Miss Bacon.

Science. (a)

Same as for VIIIa. One period was spent in mapping several of the city blocks, and then using the scales of the other maps in a practical way. After they had paced the blocks and made maps of them, they had the idea of what the scale of a map is for, and how a map is made.

Mr. Gillet.

Science. (b)

This week we took up the chapter in Redway on the underground water as a preparatory chapter to the wasting of the land. We read aloud the chapter in class, and answered many questions about points they did not understand or wanted expanded. We had to look up some of the geographical points in the text books. We spent one period in looking up on the maps places illustrating what we had been reading about. In the regular period for study they wrote papers on subjects of interest which had come up during the week.

We are planning an excursion to a place which will show some of the points described in the book, such as springs, permanent and temporary streams, when a river becomes permanent, etc. I think we shall go to Highland Park to see these things.

Mr. Gillet.

Science.

The first three days of the week were spent on a review of work on the sponges, hydra, and earth worm, and the completion of the essays on these animals. The last two days of the week were given to a collecting expedition to Riverdale and Wildwood and to taking care of the collected material.

Mr. Garrey.

Shop.

The work this term has been devoted largely to finishing the club house, and the different classes have gone at it with eagerness and enthusiasm, which rather increases than decreases as they see the progress toward completion.

If those who are planning the furniture in the art classes will furnish us with drawings, we could profitably employ some of each group in the making of it, as sometimes the nature of the work on the club house prevents all being employed on it at once. Of those who are not at work on the club house, many are showing an increasing sense of accuracy in the laying out of the work and also of skill in carrying out their plans.

They have been most decidedly interested in the making of the photo frames, which Miss Jones planned. (Group VIIIA). These combine the constructive work with the ornamental features, for a simple design in chip carving has given them an idea of the possibilities in that direction, which I have tried to further by bringing them examples of that kind of work. This also has made them familiar with a new tool, the chip carving knife.

One of the boys has made a good, strong, and very neat box for some of his own tools at home; another has nearly finished a hand mirror, and still another a frame with the mitred corners. This frame also necessitated the use of the rabbet plane, which I supplied from my chest,

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and which was a new interesting tool to him.

With one or two exceptions an increased industry has been shown that is very gratifying.

S. W. Fowler.

General Exercises.

The children have been eating their lunches so hurriedly that it was thought best to invite Mr. Post to talk to them on the necessity of taking care of themselves if they were going to be baseball players, especially in the matter of eating and the amount. The children listened with a great deal of interest to what he had to say, and this week I noticed a considerable difference in the amount of time they were giving to their eating. Besides this Group X selected some of the most interesting papers on the bee, the butterfly, and the earthworm, and read them to the children.

Miss Bacon.

This week we have talked about the garden work in the parks. The planning of the beds, the transplanting of the plants from the hothouses to the garden, was done under the direction of the teacher. They were given opportunity to build the same form alone later, and most of them were able to do it. We spoke of the wheelbarrow, the hoes, rakes, and other tools used by the gardener in his work. They modeled the tools out of clay.

The children began hanging baskets by weaving raffia on a frame of rattan.

Thursday we had a birthday party to which we invited the III's. The kindergarten children spent part of the morning making candy boxes and decorations for the table.

Miss Dolling.

Cooking. (a and b)

For the benefit of the new-comers we began reviewing the making of flour, commencing with the planting of the wheat. The children cooked ground wheat for their luncheon. As there happened to be no flaked corn with which to compare the weight of the wheat, the children guessed the relative weights of the two cereals, and then were given the weight. From this they had to work out the amount of water if one cup were used, and then the amount for one ~~cup~~ fourth cup.

The last period was spent in reviewing the recipe for flaked rice, which the children had cooked the week before. They learned also how to recognize the words.

Miss Lachmund.

Sewing.

The children continued their cooking book covers.

Miss Lachmund.

Gymnasium.

The systematic corrective work has been discontinued, and the time has been taken up in out of door games.

Mr. Peterson.

History.

At the conclusion of their work with metals the children had the story of Prometheus and the gift of fire. Their comment on the contrast between the Golden Age and the time preceding the use of fire was that people would be better off for a little cold and hunger and scarcity of food, and that it would make them stronger to be obliged to work for what they needed instead of finding everything ready at hand.

We next began work on our gardens. The two groups went out together to divide the space, which measured 22 feet by 16 1/2 feet. The ground was divided into two strips 11 feet wide. IVa then decided to make six beds, and by the aid of a diagram on the blackboard drawn to the scale of an inch to the foot, arranged for beds 5 1/2 by 5 feet, 1 1/2 feet being taken off for a path. There were only five children in the group, and the sixth bed was offered to the teacher. It was decided at last to call this the group bed. One of the children ~~then~~ then suggested that as IVb had much smaller beds than ours, their group being much larger, they ought to have a share of this extra bed. Only one of the group objected to this plan, and he was immediately condemned by the others as stingy.

Miss Hoblitt.

Sewing. (a and b)

The children continue their work on their bags, mats, and needle-books.

Miss Lachmund.

Cooking. (a and b)

Vegetables--Potatoes reviewed.

A review was made of the work previously done with potatoes, the class, with one or two exceptions, being able to recall the facts which had been discovered some weeks ago.

For luncheon, potatoes were baked. Rhubarb was also prepared and this involved the weighing of the fruit and also of the sugar, as the recipe required that there be half as much sugar as fruit. The children enjoyed this part of the work and seemed quite as well able to do it as Group V. C.R.

Miss Tough.

Shop. (a and b)

They have not decided how they want to make their tents so they are working on ring-toss games for themselves, which they will play out of doors. $7/8$ inch stock was given them, $6\frac{1}{2}$ by $6\frac{1}{2}$ inches. They planed the working edge and squared one ~~edge~~ end, and then with the ruler made the second edge. Some of them thought that it would not be necessary to have the edges the same length in order to have a square piece, but after studying on it, they decided that the edges must be equal. After securing their six inch square, they marked it for a quarter inch bevel, using the marking gauge. These they expect to complete next week.

Miss Jones.

Science.

The work in the garden has been transplanting of morning glories, wild cucumbers, the self-sown seeds of the yard, and lettuce from the hot bed. Before beginning the transplanting we took up the subject of the little root hairs and their function. All except two of the children applied what they had had in taking great care of the seedling roots. The transplanting was done in the morning, and necessitated shading the plants from the excessive heat, and evaporation. Part of the time was spent in preparing and planting some seeds in the vivarium to compare equible moisture conditions with the variable ones in the garden. The rest of the time has been spent in observing and collecting angle worms, larvae of the May beetle, "lady bugs", and the small brown ants. They have constructed an island ants' nest, in order to observe the ants under more favorable circumstances than we can find in the field. We have sodded a glass box half full of earth in which to keep the angle worms and larvae.

Miss Camp.

Cooking. (a and b)

Review of Cereals--Wheat.

Wheatena was to be cooked for luncheon, and to find the amount of water it would require in cooking, it was balanced with flaked wheat and the flaked wheat with flaked corn which is the standard. This involved a double amount of calculation which at first seemed rather difficult, but was made clear by having the required number of cups of cereal at hand and then setting aside a definite amount of water for each.

Dried apricots were to be prepared and the process of drying them was talked about, the change of appearance being noted and the reason for it discussed.

Miss Tough.

Textiles. (a and b)

The two divisions of the group had one teacher for a part of the textile period. Better work resulted by keeping the divisions separate, and being now with one and now with the other, and the spirit of Va in particular was improved under this arrangement, for they felt more responsibility than usual.

Miss Lachmund.

Shop. (a and b)

They have spent some time in working on their spoons which they began some time ago. They spent one lesson in taking measurements for some ~~spoons~~ screens which Miss Cushman wished them to make for the scenery which they are to use in the play of Columbus. The height of these screens is to be nearly 7 feet, and the children will have to have assistance in doing it, as it was an ungainly piece of work for them.

Miss Jones.

History.

We continued in "Pilgrims and Puritans" the story of the coming of the Puritans, and then took up a discussion of the settlements made by Roger Williams, Thomas Hooker, and others who found the rule of the Puritans too oppressive. The departure of Blackstone in order to free himself from the "Lord Brethren" was the starting point of the discussion. The children were divided as to the amount of religious liberty which ought to have been allowed. One said that the Puritans had a right to any plan they chose to make, and ought to be allowed to make church membership a condition of citizenship if that seemed the right thing to do. There was plenty of room, so that those who did not agree to this could find another place and live in their own way. The ~~same~~ same question came up again when we took up the story of Roger Williams. There was also a similar division with regard to his criticism of the settlers for dispossessing the Indians of their land. One said that there was room enough for the Indians and the white people too, and thought the Indians did not care very much where they lived, anyway,--this inference being drawn from the fact that they were in the habit of roaming about from place. It was, therefore, all right for the white people to take all the land they wanted, if they did not drive the Indians from land which they were actually occupying. The children saw, however, that the religious intolerance of the earlier settlements was an aid to the growth of the new country, since they would have less reason for people to scatter if the terms on which they might be admitted to the older settlements had been less severe.

Miss Hoblitt.

Number.

The same general plan of work as that of last week has been followed.

B.H.

Miss Tough.

Cooking.

Colonial Cookery.-- Sweet-meat Tarts.

From the work already done, the children were able to tell what materials would be required for the pastry of the tarts. They thought that some raising agent such as baking powder would be necessary, but on talking of the air that would in the process be entangled in the dough, they thought this might be sufficient. Its expansion by the heat of the oven and ~~this~~ raising the dough was found deeply interesting.

OK.

Miss Tough.

Shop.

They are working on the spoons, the drawings of which they made last week. They told about the wooden spoons they had at home, and made drawings of the different ^{shapes} ~~makes~~ of spoons. Some of the children have difficulty in gouging out the bowls of the spoons. Others are getting along nicely.

Miss Jones.

History.

Group VII has been studying the acquisition of territory by the United States. They discussed the terms of the treaty at the end of the Revolution as concerned the land, and traced on the map the United States territory in 1783. They were then told of how Louisiana, extending from the Mississippi to the Rocky Mountains, came into the possession of the United States. Later they read of the Lewis and Clarke expedition down the Ohio and up the Missouri across the mountains into Oregon, and the claims of the United States to this region based on this exploration and that of the earlier ~~settlers~~ explorers. They read of and discussed the annexation of Texas. In connection with the history they have read a great deal for themselves, and on two days a week have written on a story in connection with the Revolution which was read to them. They are becoming much more careful as regards the looks of their papers, and several expressed a desire to copy their papers with pen and ink.

Miss Bacon.

Science.

The children prepared the so-called German or Soda vats for indigo dyeing. Because of the difficulty in controlling the fermentation, this did not succeed, and the method of reduction with sulphuric acid was tried. One or two of the children succeeded with their samples, but as a result of their experiments with the small quantities, they decided that the process is too difficult to carry out with large amounts. In connection with the indigo dyeing, they had the ~~fast~~ process as actually carried on in the factories, and showed a very intelligent interest in the machines used in the preparation of the indigo and the construction of the dyeing vats. Because of the lack of success with the indigo, we have begun dyeing with an aniline dye, called medium blue. This dye is a direct dye. With the cotton the children have worked out a process involving the use of three solutions; lime

water, lead acetate, and lime water again. As these three solutions are saturated solutions, the children had no difficulty in making them up. The potassium bichromate was a ten percent solution. The dyeing in the bichromate is necessarily guided by the eye; the children soon worked out the time necessary to give a the most brilliant dye, namely, five minutes in the boiling solution. They found that ten minutes in the lead acetate gave a slightly orange tint which they also wished to use. The time for the limewater solution varies between five and ten minutes, and if the rinsing and wringing are carried on in the same way, a shorter time seems to be as good for small quantities as a longer. After using these two dyes on cotton, they tried to dye raffia fiber for their baskets. The process used for the cotton does not work in the case of the bichromate and the lead acetate. The direct blue succeeds very well, but they have not found the time necessary to give a smooth surface to the fiber and yet give a perfect blue.

Miss Camp.

Shop.

They are still at work on their individual work. They began also some group work in connection with their textiles. They are making large looms, 3' by 2', cutting it from the 7/8 inch pine, and making the frame work three inches wide, and fitting it to the end. They have made also small shovels after a drawing given by Miss Harmer.

Miss Jones.

Gymnasium.

Group VII has been playing basket ball during this quarter, and has developed considerable proficiency in the case of individual players and also as regards team work.

Mr. Peterson.

History (b)

We have followed Richard and Philip on their crusade to the point where Richard captured the island of Cyprus. We talked about his marriage there, and his journeys to Tours and Acre. We followed the siege and assaults of Acre, its final surrender. We took up also Richard's movements in the Holy Land, and Philip's return to France. There was some discussion of the methods of fighting and the weapons used, and a comparison of the methods of Richard and Philip, and those of the Saracens.

Mr. Armitage.

Science. (a)

This week we have followed up the work we had at Highland Park last Friday. We have talked about the formation of the different features, and of what will be the history in the future. The children of this group were very eager to tell me about the ravines and flood plains they had seen in different parts of the country, and compared them with those they saw on the north shore in point of size and ~~form~~ formation. This trip seemed to bring out more clearly in their minds the fact that physiographic processes are going on now, as well as they have gone on in the past. They could see that the present land forms are the result of erosion forces working slowly in the past, but the same kinds of forces as they ~~saw~~ saw at work then. The children suggested that mountains could be formed between deeply eroding streams, and I took some time in telling them about regions where mountains have been formed by the wearing away of the softer layers. This is most noticeable in the Appalachians.

Mr. Gillet.

Science. (b)

The class inflated the sheep's lungs, and discussed the method of aeration of the blood. They then reviewed all the notes they had

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made under the general subject of respiration, and in their discussion formulated fairly well the general idea of the process. In diagramming the relation of the blood vessels and bronchial tubes in the lungs, several children asked for more work on the circulation of the blood, and were very much interested in the circulation of the blood in the lungs. The girls, however, wished to take up the subjects of assimilation and respiration in plants. They are to choose special topics for next week's work, making plans for experiments. This individual work will be carried out if the first set of experiments show enough independence in the work, so as to make the individual work as valuable as class work in the same subjects.

Miss Camp.

Number. (a)

They have dropped the regular work to compute the number of square yards on the inside and outside of the clubhouse, which require staining. In this computation there have been several quite complicated surfaces, and Hermann, Charles, and Conant have been very quick in dividing them into triangles and rectangles.

~~Miss~~ Mr. Armitage.

Shop. (a)

They have completed the picture frames and are at work on the blotter pads which they began last week. They wish to do some chip carving, and are making their own designs.

Miss Jones.

Gymnasium.

The work has been out of doors, and has consisted of out of door sports. During the month of April and that of May one period a week has been spent in the regular gymnastic work.

Mr. Peterson.

History. (a and b)

They spend only two hours a week with me now. They have been drawing outline maps of Europe, and have located the different natural and manufactured products. They have drawn also the outlines of Asia, locating the surrounding waters, the mountains, rivers, and countries. In the history they have discussed the conquest of Peru by Pizarro, taking it up in much the same manner as Group VIII took ~~it~~ it up last year. They do considerable reading for themselves.

Miss Bacon.

Science. (a)

The work of this group has been very similar to that of Group VIIIA. We have discussed the meaning of what we saw at Highland Park, how the ravines are made, and what will finally become of the high cliffs along the lake and the streams. It is much harder to get this group to express themselves than Group VIIIA, and they are not willing to work out an idea to a conclusion.

Mr. Gillet.

Science. (b)

We have continued reading in Redway, doing much of the reading in class, as only one study hour has been arranged for this group for home work in this subject. The special topic taken up this week was that of the surface water and the streams and their work. We have illustrated a great many points by what we saw at Highland Park.

Mr. Gillet.

Gymnasium.

The work has been on the play ground entirely, giving most of the time to basket ball and base ball.

Mr. Peterson.

Science.

The time was given to completing the work on the external anatomy of the frog, and the development of the frog. The latter part of the week was given to studying and drawing the internal anatomy of the frog. Especial attention was given to the digestive, circulatory, and respiratory systems.

Mr. Garrey.

Mathematics.

Work in fractions continued. The principles involved in adding and subtracting fractions have been thoroughly discussed, and also the relations between these processes and those of factoring and finding the greatest common divisor and the least common multiple. The class has nearly finished the subjects of addition and subtraction of fractions. In all the theoretical work they are referred back continually to the principles as they had them in their arithmetic note books.

Mr. Osborn.

Geography.

For the last three weeks Group X has been meeting with me at a quarter of nine o'clock for the study of geography. They took up the continent of Asia, drawing quick outline maps on the board, placing the prominent points of relief, and locating countries, products, and cities. With the map of Africa the process has been much the same, getting the general shape of the continent, and putting in rivers, countries, important cities and products.

Miss Bacon.

A week ago Wednesday the children had a spelling match. Groups VII and VIII had made out a list of words (100) commonly misspelled, and Group VII had printed these and handed them around to the children a week before, so that those who wished might study them.

Last week Mrs. Fake, an old resident of Chicago, came to talk to them on the early history of Chicago.

Miss Bacon.

School Base Ball Team.

The club was organized early in April. The organization was decided upon by the boys, and they have had charge of the financial and the general conducting of the club, under the supervision of Mr. Post, the coach, and myself. They have practiced almost every afternoon, Mr. Post being with them on Wednesdays, and when they have played some match games. The boys have shown a great deal of enthusiasm, and have accomplished a good deal in the way of ability, not only with regard to playing baseball, but in working together as a team. In some of the match games with other schools, they have been successful, and in others they have been defeated.

Mr. Peterson.

The children finished weaving their hanging baskets, and lined them with tea lead. We have commenced work on the out of door village, and expect to spend the rest of the year on it. We talked over the plan, and had the children suggest the stores which are most important to a small community. The one store that they all agreed we should have is the grocery. In order that the children might have a clearer idea of what we are going to do out of doors, we made a community with the Hennesey blocks.

We have marked off the ground into residence and business districts. For the streets we cut the grass and left the dirt for the ~~ur~~ roads. We spent a few minutes every day in the garden, watering the seeds and plants, and keeping the place tidy.

Miss Dolling.

Social Occupations.

No report on account of small attendance.

General Report of Cooking---The Cooking of the Younger children in The Elementary School and Some Suggestions in regard to it.

The subject of cooking here discussed is limited to that of the third, fourth, and fifth years. During these years the unity of the child's experience in school is made to harmonize with that outside, by basing the work on the child's present interest, which lies in social experiences and relations. The fifth year, however, constitutes a transition to the next period in which there is a shifting of the interest, and the unity is found in motive and application. In Groups III and IV the attitude of the children is direct, and so to correspond, their method of approaching and dealing with a subject must be likewise direct. Things are perceived by the child as a whole; there is little analysis, little reflection and formulation. With the child of this age, from six to eight, a special concrete motive exists for each activity: for him a particular thing produces a particular result, while with Group V the children have a growing realization of their lack of skill and power, which in the next period is manifest as a general motive in their work. In this transition group also there is an increasing consciousness of an adaptation of means to ends, of processes and results.

The value of cooking for the younger children lies especially in the fact that this activity arouses the spontaneous interest of the child, and calls forth his voluntary attention by an appeal in the thing itself. In cooking there is something to be done, and done in order to cause a change in the activity the child is directing. Since an effort is being constantly produced, each change in the process must be watched closely as a guide to what must be done next, and this calls upon the child for alertness, concentration, and an orderly sequence

of steps in his activity. In the character of this stage, however, (which is qualitative--chemical) lies perhaps one of the few defects which cooking, from the point of view of the younger children, has, namely that the parts, and therefore their relations, are not evident in the finished whole. An anticipation of the outcome and a comparison between the actual effect and that anticipated, are indications, as well as the result, of a most desirable attitude which the child retains when working in domestic science. The fact that the goal is immediate, concrete, and practical, and is attainable in a relatively short time, is another feature in cooking which is a strong appeal to the younger children.

On the side of discipline, cooking teaches exactness and neatness and system both in the series of steps necessary to bring about the desired result, and in the care of utensils. In a course of domestic science taught from the educational side instead of the practical, (in which the main object is to increase skill and power), experiment plays an important part as a means of explaining and illustrating general principles. The motive and interest of the child in experimentation lies in its immediate and direct application in his cooking. Altho as just stated, the aim in cooking is not the utilitarian one of making efficient cooks of the children, there is nevertheless a most decided gain on the practical side, through a knowledge of general principles gained from experimentation. Thus instead of having to remember the methods of cooking innumerable individual dishes, one learns in vegetables, for example, how to group them under a few heads according to the composition, which determines the mode of their preparation.

Last but not least the social side of the subject bears consideration. Beside calling into play the child's various powers and so developing the individual side, the cooking of which the group luncheon is a very important part also develops the social side, by affording expression to the social and cooperative spirit of the child.

To sum up in general the educational value of cooking considered above: this form of activity develops the child's executive ability by presenting a motor appeal; it trains the power of observation and critical judgment; is a means of discipline; and promotes the development of the social side of the child's nature.

Besides its significance as a subject of educational value in and of itself, domestic science also serves to supplement the study of existing occupations in Group III, and the history of Groups IV and V, by affording a means of expressing and illustrating the activities that occur in these subjects. In Group III there is a close connection between the cooking and the rest of the children's work, for they cook just what they study in connection with their grain farms and plantations. With the other two groups, little has been done as yet to carry out in the cooking hour the experiments suggested in the history. It is in this connection that a few suggestions might be made.

For Group IV a working out or re-inventing of the primitive modes of cooking, beginning with the pointed stick planted slanting over the fire, and the burial of meat in hot embers, then the hollow tree with a smouldering fire inside (the origin of our cooking ovens), also the pit in the ground heated by a wood fire, and the process of stone boiling; this would be of value in giving the children an appreciation of the conditions under which the first housekeepers worked, and afford an interesting and valuable comparison with present day conveniences in their own cooking. Something along this line has been done in making the smelting ovens, in which the children worked out the principle of draught, and this could easily be carried further in regard to methods of cooking as above suggested. The roasting of chestnuts, apples, corn, and potatoes out of doors, which last has already been tried, illustrates one of the most primitive forms of cooking, while the baking of ^{cakes} ~~skewers~~ on hot stones is the origin of our modern soap stone griddles. Since the getting

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of food is so precarious under primitive conditions, there arises, in connection with the question of the sustenance of the tribe, the problem of preserving food in times of abundance for the time when a fresh supply cannot be secured. Thus the children can work out the methods of preservation, as the drying and smoking of meat and fish, parching grain, drying potatoes, the drying of fruits and also preserving them in wild honey. Methods of preservation also are means of decreasing bulk and weight, quite an item in the case of a tribe that is migrating to a new territory. The regular cooking of the group during a part of the year consists of preserving of fruit, by means, among ^{other} ~~the~~ ways, of canning and drying, so that the historical cooking would fall in line with this very well.

In group V, in which the study of explorations in different parts of the world is taken up, the problem of food supply for arctic explorations exists. The children are led to develop the principles which must dominate in the selection of food: the food must contain the greatest amount of nourishment in proportion to least possible bulk and weight, and must consist of those elements which are adapted to the needs of man in a cold climate. Experiments in crystallizing eggs (or at least in evaporating the white), in evaporating potatoes, smoking and drying meats, making pemmican, and in condensing milk, if that were practicable, serve to illustrate the principles in a concrete way. Since the previous work of the children has involved a study of the main constituents of food: water, acids, salts, sugar, cellulose, starch, fat, and nitrogenous compounds (so far in the form of casein in milk), the work in connection with the selecting of the proper food for a northern voyage, will probably not be too difficult for them. The question of fuel, means of ~~suk~~ cooking, and of melting ice, is another matter of importance for the voyages, and it might be worth while to have the children determine experimentally (if that is possible for them in the crude way in which it

would have to be done) the advantage of alcohol over coal in regard to less weight in proportion to greater heat. The inhabitants of the ~~art~~ arctic regions for lack of any natural source of fuel, solve the heating question in another way, and it would be interesting to compare the heating power of a certain amount of oil with that of the same amount of alcohol in bringing water to the boiling point. The result of oil as fuel is interesting in its influence on the methods of preparing food: stewing and boiling are almost the only ways of cooking. A study of people living in the other extreme of climate affords a comparison of the influence of a hot with that of a cold climate on the source of food required by the inhabitants, and on the kind of food, both vegetable and animal. In general the food of the Africans consists of vegetables, fruits, dairy products, meat of cattle, and fermented drinks. As it happens the regular cooking consists of a study of dairy products, in connection with which the children make butter by shaking cream in a bottle--similar to the method of the Kaffirs and Fulalis--of which the former obtain butter by shaking the milk in leather bags, the latter by stirring cream violently in a large calabash.

The foregoing are just a few suggestions, desultory and incomplete in character, but they may give a hint as to the possibilities of making a part of the domestic science go hand in hand with the history to the advantage of both. Not only is the history vivified by carrying out these processes of domestic industry, but the cooking gains by it too, in that it affords the child the opportunity to take the initiative instead of depending on the teacher's direction--this being one of the few defects of cooking in general. A complete satisfactory working out of the subject along the lines suggested will be rather difficult as the material is so difficult of access,--hours of searching in many books yield but a very few and isolated facts--but the work seems to me well worth the effort. There is a danger, however, which must be guarded

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against, and that is, for the teacher to waste time by carrying out the suggestions from the history side into valueless detail from interest in the subject,--for it is most fascinating work--and so teaching it from the standpoint of the subject instead of that of the child.

The obvious defect in cooking just spoken of was one inherent in the process itself. There is, however, one difficulty in particular which appears in the practical carrying out of the work. The children of Group V, in which the writing of reports is required, object in a number of instances to writing out what they have done. They feel it more or less an imposition and an injustice to be expected to do anything but cook or experiment in the cooking hour, and their attitude is that of one never quite forgiving the teacher, at least during the first part of the period in which they write. The same spirit is likely to prevail when the class is to spend the time in an oral review. If however, the group know in advance that there is to be no cooking on a certain day, they would be spared the disappointment on coming to the class. But the main difficulty lies in the fact that the children have no definite motive in writing a record--, they write a few sentences which are handed into the teacher, and if there are no mistakes in the facts or the spelling, the children do not usually see them again, or at least have no purpose in keeping them when they are returned. If, on the other hand, the children knew that these reports were to be permanent, and made into cooking books to refer to in the immediate future,--for the cooking of the lunches often involves the preparation by one or two of some additional dish which the children have had in a previous lesson,--they would recognize the value of such records, and so have a motive for writing and keeping them. Even Group III could make cooking books,-- they would take great pride in making their own covers for their books and writing or printing their recipes, while the children of Groups IV and V especially the latter, would write the experimental work in addition, in

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order to guide them in the combination of materials. If the groups reported to the school as a whole the work each had been doing, as was formerly possible in the opening exercises, there would be another motive for the child's keeping an account of the work. A final suggestion I should like to make, namely: that the children of all three groups buy the materials each week they need for their cooking, in order to learn the value and the handling of money, and also the price of foods. Group V could possibly learn by degrees to keep accounts and to calculate the cost for each child. This would then afford the opportunity for number work, based on the experience of the child.

Although, in beginning to work out the points discussed in this paper some of the teachers of the three groups are consulted as to the general character of the work to be undertaken, still it is questionable whether the details, so far as details have been suggested, can be carried out in the time at present given to cooking, and carried out to the advantage of the child; for the suggestions are based on the inadequate experience of three months' work with the children, much of which was merely observational.

Alice Lachmund.
Dec. 21, 1900.

Cooking. (a and b)

Vegetables. --String Beans.

Beans were classified as to the part of the plant to which they belong, also as to composition and manner of cooking. The same general plan was followed as in previous work with vegetables.

Miss Tough.

History. (a and b)

The children spent most of one week in the garden, measuring off their plots, making beds and paths, and planting seeds. The common bed was sown with wheat, oats, and barley, and the individual beds with lettuce, radishes, beets, ~~asparagus~~ carrots, and a few flower seeds. In connection with this work the children had the story of Persephone, which the children enjoyed so much that they begged for it a second time on the return of an absent member of the group.

To see the effect of surface sprinkling on seedlings we put some ~~spr~~ sprouting peas into a glass, the lower part of which was filled with dry cotton, while a layer of wet cotton was stretched across the top, and the roots thrust through it. One of the children anticipated the result of the experiment by saying that of course the roots would turn upward to find the moisture. He could not see any question at all about that. Another thought that plants should be watered by digging a deep hole and pouring the water into it, so that the roots would be obliged to grow downward to find it.

Miss Heblitt.

History. (a and b)

The children worked on their play, deciding first what scenes in the life of Columbus would be used, and how they could be so arranged as to give a connected view of his life. Some of the children suggested that we have the room in which Columbus was born, and have a baby lying on the bed. Another suggested that we end the play with the erection of a monument to Columbus, but later ~~six~~ said that we could not get one nice enough, and if we did, it would be too heavy to lift. It took a good deal of discussion to select action parts of Columbus' life, and make conversation to fit the action. As a result of the discussion, a play of four acts arranged, which the children decided was satisfactory, and the people were selected for the different parts. They planned the scenery that would be necessary to use, and decided to paint it with Miss Cushman. With Miss Camp they were to plan the costumes and stage setting.

Miss Runyon.

Cooking. (a and b)

Review of Cereals---Wheat.

After reviewing the work done with the various preparations of wheat farina and the others used were compared, the former being found the one which required more water. By balancing this was found to be four times as much water as the standard.

Miss Tough.

Number.

Problems in short division is the work to which most of the time has been given. Long division was touched upon, but seemed too complicated to be taken up until the children acquire more freedom in the use of number.

Three of the class, who ~~xxxx~~ have been here only this year, are able to do the formal side of the work with ease, but are decidedly behind the others in ability to think out the problems.

Miss Tough.

Cooking.

Colonial Cookery.--Gingerbread.

The preparation necessary for making ginger bread with sour milk and soda, was the working out of the nature of the acids and alkalis, and the effect of mixing them in different proportions. Litmus paper was used to show the reaction. The nature of the gas given off by sodium bicarbonate was also discussed in connection with batters and doughs.

The general principle for mixing batters was talked about, and with very few directions in particular, the children were able to work out the general plan of action. Two of the children said that they did not like gingerbread, but that they wanted to make it, "just for the fun of doing it". They worked quite as happily as the others and gave the cake to some of the other children when done.

Miss Tough.

Shp.

They are still working on their spoons to be used in the kitchen. Kent has finished one, but he wishes to take it home, for he thinks it is too small to use in the kitchen here. They have discovered considerable about gouging the different kinds of wood.

Miss Jones.

History.

The last week the children have finished the subject of the acquisition of territory by the United States. This week we took up the trouble with Spain, the children furnishing a great many of the facts, and the resulting treaty, which brought up the question of the subduing of the Phillipines, the acquisition of Porto Rico, and the acquisition of one of the Ladrone Islands. Later we discussed how the Hawaiian Islands came into our possession. I gave them a short sketch of their discovery by Captain Cook, of the migration of the missionaries and speculators to the islands, and of the gradual immigration of foreigners there, and then the request of the white population that Hawai be annexed to the United States. Also I told the children of the purchase of Alaska by the United States from Russia. We discussed the climate of Alaska, and what there was of commercial value there that would tempt the United States to buy it. The children of course thought of gold first, for they thought of the Klondike, but they finally concluded that they did know about the gold at that time, and that if they had, the migration would have been years before it was. They then suggested seal skins as a very valuable product of that country, and I told them somewhat of the trouble between England and America over the seal fisheries. They located Klondike on the map, and I told them of the boundary dispute between England and America over the Alaskan boundary. They have written at home a paper which is a resume of the discussion of the last two weeks, and have handed it in. This finishes the work planned for the year, and the rest of the time I shall spend in geography, and in the ~~writ~~ writing of reviews of the history they have done this year.

Miss Bacon.

Science. (a)

In addition to the political geography of the Mississippi Valley states, the class has continued the work of studying the ways of mountain making in general. They have been given specific cases of mountains which were made in each of the ways they pointed out, or which were pointed out to them. In general mountains are made by: 1) a folding of the crust of the earth, which we compared to the crumpling of the skin of an apple or an orange when dried; 2) faulting, where great blocks of the earth's crust sink beneath the general level, or rise above it, (the Basin Ranges were made in this way, and in fact all mountain systems are greatly faulted); 3) erosion of plateaus, especially those made of non-horizontal layers, in which the hard layers make the ridges and the erosion of the soft layers, the valleys, as is the case in the Appalachians and other smaller, ^{and larger} systems of mountains; 4) volcanoes; 5) a combination of two or more of the other ways.

The ~~first~~ field trip last week to Highland Park has helped greatly in bringing out the points. The children took a greater interest, and were able to suggest more for themselves. For instance, they brought out for themselves the way of making mountains by erosion, something they would have had difficulty with if they had not seen the effects of long continued erosion for themselves. It took some time for the children to see why the crust of the earth should crumple, for the analogy between the crumpling of the apple skin and the crust of the earth is not complete. The pulp of the apple shrinks because it loses a part of its mass by evaporation of water, but the interior of the earth shrinks because it is getting cooler. I tried to have them collect all the ideas they had about the contraction of metals from cooling, and then brought out the fact that the earth is cooling and therefore growing smaller. The inside is growing smaller faster than the outside, and therefore there is a crumpling of the outside layer.

Mr. Gillet.

Number. (a)

They have finished the computation for the house, and have this week been working on the division of decimals. We worked out the principle that multiplying the dividend multiplied the quotient, that dividing the dividend divided the quotient, that multiplying the divisor reduced the quotient accordingly, and that dividing the ~~quotient~~ divisor increased the quotient. Multiplying the dividend and divisor does not change the quotient, if the same multiplier is used for both. They performed several problems showing these principles, and then reduced the principles from them. They then applied this to decimals. They divided problems, as for instance, 25 by 5, and then divided 2.5 by 5, and they saw that they had made the quotient ten times smaller. We shall go on with the further steps next week.

Miss Bacon.

Geography. (b)

I have these children for half an hour a week in geography. They have finished their study of England, and so I have started them on the geography of the globe. They were to draw maps to scale, and they selected Africa as the easiest one to draw, and drew that.

Miss Bacon.

Mathematics. (a and b)

The work has been done with a view to identify percentage with fractions, and to acquire facility in the use of either the common or decimal method of solving problems of the form: 25% of \$100 = X and $1/4$ of \$100 = X; and What percent \$25 is of \$100, and What part \$25 is of \$100. General terms, as cost, gain or loss, selling price, rate percent, have been identified with base, percentage, etc.

Simple problems in algebra to teach the use of letters and the equational form of statement have been given. A few exercises in rapid addition, multiplication, and changing from the decimal to the common fraction form have been given.

Mr. Wheeler.

Science. (a)

I have tried to carry the work as with Group VIIIA, but this group is not able to do the work as Group VIIIA. We have to go more slowly, and have to have more writing to get them to see that general principles do not mean anything unless they have examples.

Mr. Gillet.

We are using starch boxes for the houses of our village. We made the openings for the doors and the windows for two houses. We painted the houses. Sidewalks of gravel have been laid on each side of the business street, and from each house to the main walk. We transplanted some lettuce from the hot bed into the garden. As it happened the children present this week were behind the others in number work, so I have given them special drill.

I read the stories of "Grasshopper and Measuring", and "The Ants that wore Wings".

The work this week has been interrupted somewhat on account of the many children out with the measles.

Miss Dolling.

Social Occupations.

The time has been divided between their garden work and the reading and writing. In the work in the garden the children have hilled the beans, and have pulled up the weeds which were likely to choke the other plants out. Some of the plants had to be transplanted twice, for the hot sun killed the ~~sym~~ young plants before they were strong enough to bear the heat.

We have been reading some of Aesop's fables which concern farm life, such as "The Fox and the Wagon", "The Blind Man and the Wolf", etc.

With me they do all their writing on the board. They write on paper only in their cooking.

Miss LaVictoire.

Cooking.

We continued a review of the process of flour making, and worked out the recipe for the cooking of flaked wheat, which the children cooked for their luncheon. They also tried writing the recipe, which is very difficult for all but one or two.

Miss Lachmund.

Sewing.

The children are continuing their water stitches on the margin of their cooking book covers.

Miss Lachmund.

Reading and Writing. (a)

I have this group each day for one half hour for reading and writing. They are spending most of the time on writing, using pens and ink.

Miss LaVictoire.

Cooking. (a and b)

Vegetables--Peas.

The pod-bearing plants used as vegetables were talked about and compared, and the reason for using the pods in some cases and in others the seeds. In shelling the peas some were found which had sprouted; these the children carefully laid aside, and when the work was over, asked that they might plant them in their gardens.

They were interested in seeing just where and how the sprout made its appearance.

Peas were cooked for luncheon.

Miss Tough.

Textiles.

They have finished the borders of their mats, and are now lining them with colored chinz to give body to the mat and give color to the design.

Miss Harmer.

Shop. (a and b)

They are still at work on their ring stock games. They have squared the stock that was given them last week, making it six inches square, and beveled the edges $1/4$ inch. In order to find the center, they used the diagonals of the square, and are now ready to work on the perpendicular sticks.

Miss Jones.

Reading and Writing. (a and b)

I have each of the V's one half hour each day. We are emphasizing the reading and writing. This group is planning to present a play of Columbus, and it is necessary that each child shall write his part to take home and learn. The writing is improving greatly. Five minutes is given to acquiring free arm movement, and the rest of the time to writing

Miss LaVictoire.

Cooking. (a and b)

Review of Cereals.---Oats.

Rolled oats were balanced with flaked rice and found to be twice as heavy, therefore requiring twice as much water. The children were told to use $3/4$ cup of rolled oats with two saltspoonfuls of salt for each quarter of a cup; from this they were asked to make their recipe, and with one exception, were able to do so.

One half hour was spent in writing recipes and directions.

Miss Tough.

Shop. (a and b)

They have been making the frames for the scenery to be stretched on for their play of Columbus. They measured these 7' by 5', 7' by 4', and 7' by 4', making the frames to fit the house. They nailed them together, putting on cross pieces for support. It was an awkward piece of work, but they have succeeded in doing a large part of it themselves. One more screen must be made.

Miss Jones.

Textiles. (a and b)

Some of the children have begun to line their mats. Group V felt disinclined at the beginning of one period to work on account of the heat, but went to work and worked well while a story was being told them.

Miss Lacmund.

Science.

Some time ago the children ~~had~~ planted lettuce, mignonette, and pink seeds in a hot bed, and shortly after this they planned their garden and divided it into individual plots, saving a certain proportion for the plants to be held in common. In this common plot they planted potatoes, so that they could see the sprouting of a tuber. Indoors they planted a number of seeds, some in earth and some in water, and besides this indoors they studied the food of a plant, finding out that the water dissolves certain substances from the soil, and compared that dissolved from ordinary garden soil with that dissolved from sand. They did this by filling two glasses, one with sand and the other with garden soil, poured a certain amount of water over each, shook them up, and evaporated the filtrate. Besides this they have studied the arrangement of leaves with relation to light, and the branching of roots in relation to water. They did this by looking at pictures in books and some from plants themselves, although they remembered a great deal about the arrangement of leaves on plants. They have also thought out possible arrangements for best securing light for plants.

Miss Hill.

Number.

The same general line of work has been followed as previously reported. Home work is given each day and reported on in the morning. A feeling of responsibility about this work is developing.

Miss Tough.

Cooking.

Colonial Cookery. --Corn Bread.

The extensive use of corn meal and the reason for this in colonial times were discussed. Some experiments were made showing ~~that~~ the action of baking powder, and the difference brought out between this and soda which was used last week. The children seemed especially impressed with

the fact that they must work rapidly, in order that they might not lose the gas, after the soda ~~an~~ or baking powder ~~was~~ mixed with the liquid.

One child was chosen to watch the oven, and this position proved to be one requiring the greatest strength of mind in resisting the pleas of the other members of the class to open the oven door more frequently than had been decided was necessary.

The outcome of the morning's work was, on the whole, an improvement over that of last week.

Miss Tough.

Reading.

We continued the same plan of getting the thought of a page quickly and giving it orally, and then reading.

Miss Runyon.

Number.

They have finished their long division, except those who were absent during the time in which this was taken up. The class has made a marked improvement in accuracy and quickness.

Miss Bacon.

Sewing.

The girls of this group have put the buttons and the button holes on their dolls' underwear. They are now making hats for their dolls; the hats will be lined and trimmed.

Miss Harmer.

Textiles.

Some are warping the looms, some spinning, and some weaving their coil baskets in which to gather grass this summer, so that their interest may be aroused to gather grasses to bring back to the school in the fall.

Miss Harmer.

Shop.

They have been making some large looms to be used in the textile room. They cut the stock 33" by 3" by 1", and the cross pieces 3' long. They fitted them at the corners, and planed them and nailed them together themselves. The dowel rods have not come yet so that they have not been able to finish them. Some of the children have finished their individual work.

Miss Jones.

History. (b)

I read a selection from the first of Ivanhoe to this class, giving a picture of social life at the time, and incidentally they reviewed some points in history that the reading suggested. Since they have read and discussed a chapter on Cedric's house and household, and the entertaining of the prior and the templar.

Mr. Armitage.

Arithmetic. (b)

We reviewed addition and subtraction of fractions, using mixed numbers as well as fractions. We also made a beginning of multiplication of fractions. We began by measuring the blackboard and then found fractional parts of that, such as $\frac{3}{4}$. We carried that over into abstract numbers, finding such as $\frac{11}{12}$ of 1728.

Mr. Armitage.

Science. (a)

The main work in science this week has been in connection with the excursion to Dune Park last Wednesday. Groups VIIIA and b, IXa and b, and X went on the excursion. Each member of the party was given a short itinerary of the trip, containing questions to be answered by observation both on the way to the dunes and at the dunes themselves. I explained to the class, ^{before they went} the features of topography they were to look out for, and the interesting things along the way. The class saw how the Calumet river formerly flowed into the lake near Dune Park, but its outlet was stopped up by the advancing sand dunes, and now the outlet is near South Chicago. They saw that the dunes increased in size from South Chicago to the east, and explained that the winds are mostly from the west. The question of where all the sand comes from took them back to their trip to Highland Park, where the lake is cutting down the land, and where the shore current carries the sand to the southern part of the lake. The finer stuff is deposited off shore at some distance. This is because

the undertow is strong enough to carry off the fine particles, but cannot carry the heavier sand grains. These are urged along the shore by the current, which is formed by the waves coming in at oblique angles to the shore.

Near Whiting, Ind., the class noticed that nearly all the trees are dead, and gave as reasons, that the gases given off by the refineries would be bad for the plants, and that prairie fires had done considerable damage. The process of getting the oil from eastern Indiana and western Ohio was discussed, and the reasons for bringing it here were talked over. It was found that there is a slight slope from the oil fields to Lake Michigan so that much pumping would not have to be done, and that Chicago is a great distributing point for everything, oil included. We talked about the reasons for this. We discussed the reasons for the different belts of vegetation, for instance, in some places there were wide belts of oaks, possibly four miles wide, and in other places belts of cottonwoods or pines.

At Dune Park they were able to realize that things are dynamic in nature, that processes are going on, as well as they have gone on in the past. They found swamps being buried by the advancing dunes; they saw forests which are now being uncovered after a long period under the sand; they saw how the plants changed their structures to keep pace with the advancing sand, for instance the branches changed to roots as soon as the sand covered them; they saw that some plants could withstand considerable covering up before dying; and they saw the effect of great exposure on plants. In the sheltered places the flora was entirely different from that on the exposed places. This was the first time they had seen evidence of the work of the atmosphere, and the effects seemed so great that I am afraid they gave too much importance to the work of the winds in shaping the earth's surface. In the afternoon, when the wind was brisk, they could see the sand being blown from the crests of the hills,

and could appreciate the cutting effect the sand has on trees, when they put their faces near the surface of the sand and felt the sand cut their faces. In general the northern sides of the trees are cut more by the sand than the southern sides.

Near the shore the dunes are active, and about half a mile from the lake the dunes are covered with vegetation. We discussed the meaning of this, and found that it had some bearing on the question of the vegetation zones we had noticed near Pine, Ind.

We have by no means finished the discussion of the dunes yet, and shall finish it next week. I think the children got more from this trip than from any previous trip. Their interest in it seems to be about as great now as when they were on the ground.

Mr. Gillet.

Textiles. (a)

They selected the colors for the blankets with Mrs. Brown, and now they are weaving the blankets. Their tendency is to select very brilliant colors, and they are just beginning to see that a few bright spots on a dark background is much more effective than a mass of bright colors. Two of the boys are weaving with the Kentucky loom, and are finishing the rug.

Miss Harmer.

Textiles. (b)

The different members of the class have made small looms, as only one child at a time can use the large loom. They made the small looms as a part of their shop work. They made on paper the designs they will use in their weaving. On the large loom they were not able to do all the weaving, but they helped with the warping, and two of the children helped in threading it, although this was too fine work for most of them. The large loom they are working on had never been used here, and a great many little details had to be attended to in the shop. It has been a long process to get it in order for weaving. The children are now weaving

with white warp, 26 threads to the inch, and are using for woof the yellow cotton they dyed early in the year.

Miss Hill.

Shop. (a)

They are still working on their blotters which they began last week. They helped the V's cut out their large frame for their scenery.

Miss Jones.

History. (a and b)

They have finished the history of the conquest of Peru by Pizarro, and this week we have studied the transformation of the South American countries into republics. Most of them had heard of the French Revolution, and one of the children could tell somewhat of the reason for the revolution. I told them of the wave of democracy which swept over the land at the end of the 18th century, illustrating with America and France, which they knew of, and then went to South America and told them how it affected the countries there, and gave a short account of Bolivar's work. One child asked if the Chilians had ever been conquered, remembering from their previous history that Amagro had returned from Chili without conquering the people. They then asked what was the trouble between Chili and the other South American republics at the ~~present~~ present time. Evidently they had heard a little discussion of it at home. I told them somewhat simply of the attempt to form a ^{Pan} South American court of arbitration, and the stand which Chili had taken in insisting that the court should have nothing to do with disputes now pending, but that it should have power to decide disputes which should come up in the future.

Miss Bacon.

Science. (a)

See the report of VIIla.

Mathematics.

Work in fractions continued. Addition and subtraction completed, also multiplication and division. The next lesson will be in complex fractions. The outline used in arithmetic has been followed in general, a few changes being necessary to adapt it to ~~arithmetical~~ algebra. The negative exponent demonstration for the principle of inverting the terms of the divisor, has been worked out, put in the books, and learned.

$$\text{To Prove: } \frac{a}{b} \div \frac{c}{d} = \frac{a}{b} \times \frac{d}{c} = \frac{ad}{bc}$$

$$1) \frac{a}{b} = ab^{-1}; \quad \frac{c}{d} = cd^{-1} \quad (\text{def. exp. + divisor})$$

$$2) \therefore \frac{a}{b} \div \frac{c}{d} = ab^{-1} \div cd^{-1}$$

$$3) \therefore ab^{-1} \div cd^{-1} = \frac{ab^{-1}}{cd^{-1}} \quad (\text{def. fract.})$$

$$4) \frac{ab^{-1}}{cd^{-1}} = \frac{ad}{bc} \quad (\text{same as (1)}) \quad \text{or principle of transferring factor from num. to denom.}$$

This week the children made the fences for the village, which in height measured three inches.

The grocery store was made. In front it has one large window and a door. The door is put with leather hinges. Some of the fixtures for the store were made, such as the counter, stools, and scales. The shelves were started. With the blocks we built shelves and counter; the shelves were uniform, as the work was directed. We had a dramatic play of grocery store.

We continued the number work. The children built the "steps" without help.

Miss Dolling.

Cooking.

The children cooked prunes and farina for their luncheon this week. In talking over the method of cooking prunes, we reviewed the work the children had done with fruits during the quarter. In working out the recipe for the farina some of the older children were remarkably quick to determine the amount of water necessary for $1/4$ cup of the cereal, when one cup required 5 cups of water.

The last period was spent by the group in reviewing the recipes for flaked corn and flaked rice which some of the older children had still to write. While these were writing the recipes, the others who were not able to write, dictated the recipe, which they then read from the board.

Miss Lachmund.

Sewing.

Work the same as that reported last week. One child has finished the border of his cover.

Miss Lachmund.

History.

We planned the details of the fire-kiln for baking our clay dishes. The children decided the shape and the materials with very little help. They agreed after some discussion that they would make it round, though at first a part of the group wanted it built square. The door and the chimney were quickly planned, the fire clay and fire brick for the floor and walls being suggested by the children from their experience with the small clay furnaces which they had made previously. They thought at first that they would like to put the fire clay floor directly on the ground, but decided that it would be better to put a brick floor under it. The building of the furnace was delayed because of rainy weather and the failure of the materials to arrive on time. We finished it, however, in time to bake a part of the dishes.

The brick laying was the occasion of much discussion, one of the boys insisting that the brick layer always placed them squarely one on top the other. The examination of the brick foundation of the house and of the chimney of the club house only partly convinced him as to the proper method. The children all agreed, however, that a wall built with the bricks overlapping would be stronger than one made according to his plan.

In the course of the construction of the floor, the question came up as to whether we should put the clay dishes in the fire to bake. A majority were satisfied with that plan, but one suggested a shelf to hold them be placed above the fire would be better. "One of those iron things they have in stoves" would be the best of all. The grate from an old stove, which had been waiting for this suggestion, was accordingly produced and found to fit exactly. The kiln when finished was about two feet in diameter and two and one half feet high, the floor being of fire clay laid on a brick foundation and the three lower layers of brick in the walls being plastered with fire clay.

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On the outside it was banked up all the way with earth and sod, and surmounted with a stone pipe chimney. The children were greatly excited over it before it was finally finished and there was much rivalry as to the division of the work, the brick laying being the favorite occupation. Three of the boys offered their services for work outside the regular history time in order that it might be ready on time, and on the last day they were too much interested to complain of the heat which for several days had been a drawback to their interest.

In addition to this work we spent two periods on the reading of the story of the formation of the clay beds, which one of the children was to read at the closing exercises, and three in telling one or two new stories with a review of our old ones. A severe thunder shower, which drove us in from our work on the fire kiln, and excited some of the children greatly, was made the occasion for a "Greek rainy-day story", the myth of Hermes and Apollo's cows, which held their attention until the thunder and lightning were over.

Miss Hoblitt.

Cooking. (a and b)

Vegetables--Asparagus.

Comparison was made of this vegetable with those previously used to see if there were others forming the same part of the plant as this ~~an~~ does. After considerable effort the class was able to recall such and the names were written on the board. The method of preparation of white sauce was reviewed, the children writing the recipe for it.

The presence of three children who had been away on account of illness and who had not settled down to regular work, proved rather distracting and the usual amount of work was not accomplished.

Miss Tough.

Cooking. (a and b) 2 hours.

Review of Cereals---Oats.

The uses of the various parts of the oat plant were talked about, and the method of separation of each from the other parts. The children's ideas on this subject were intelligent and freely expressed. For luncheon steel cut oats were prepared, the children making their recipe by balancing the grain with the standard used, and calculating from this the amount of water required.

One half hour was spent in writing recipes and in reviewing the spelling of those words which had proved especially ~~interrantia~~ difficult.

Miss Tough.

Textiles.

The work is the same as reported last week.

Miss Lachmund.

History.

Before leaving the history of the New England colonies last week, the children worked out the formation of the federation of '43, with the causes which led to it, its advantages and its weaknesses. The first suggestion was, as is usual when any form of cooperation is proposed, that "the colonies move up closer together." I gave them briefly a few details of the later history of Massachusetts, ending with the coming of a rogue governor, and we then turned to New York. The children read the accounts of Henry Hudson in Eggleston's "First Book", and Guerber's "Stories of the thirteen Colonies". I told them something of the Muscovy and the United East India Companies. They saw the opportunities for trade opened up by Hudson's discovery, and were led to suggest ~~and~~ a West India Company.

During two periods I read aloud to them from ~~Wadsworth~~ "Young Puritans of Old Hadley". I had intended that they should read for themselves, but the book proved rather too difficult.

We proceeded to work out the probable course of events in the settlement of New York. The children saw that without the motive which led the Puritans ~~which~~ to forsake their homes, the Dutch people would be more interested in trade than in the permanent occupation of the country and the development of agriculture. One of the children suggested that the West India Company would have to pay somebody for taking the land. I told them of the grants made to the patroons, and in this connection gave them a brief statement of the feudal system. When I mentioned the survival of traces of the system in England, one of the children remarked loftily that "we were always, way ahead of England, anyway".

There was a surprising interest shown in the plan for the allotment of the land among the patroons. We drew a line for the Hudson and mapped out imaginary estates on either side of it, and there was an animated

discussion as to the comparative advantages of sixteen miles on one side of the river and eight miles on each side of the river. Some of the group thought it would be "so nice to have the river run right through your land".

For their reading this week the children have had the story of the Puritan boy in Jane Andrews' "Ten Boys on the Road from Long Ago."

Miss Hoblitt.

Number. 1 hour.

The making up of problems by the class has proved both helpful and interesting work. The first of this was not restricted to any kind of problem, but covered work in addition, subtraction, multiplication, and division; later, the special problems for addition were required, then for subtraction, and so on. These problems where practical are given to the children to work.

Miss Tough.

History.

They have been working this week on geography, drawing the map of the United States by scale. This is rather difficult work, but I wanted them to take this up so that they might put in the places which they have been studying about during the year, and make it the basis for a review.

Miss Bacon.

Number.

We have been working with areas, the children measuring different things at home, drawing a diagram to scale, and bringing them to school as problems for the other children. This has helped them in their work of drawing to scale.

Miss Bacon.

German.

The work of Group VII has been simply a continuation of their lessons in reading from Hemple's "Mother Goose Rhymes in German". They are reading with comparative ease, and use the new words in each lesson as the starting points for conversation. As a whole the class is not doing as well as it did before several new pupils came in, who are without any knowledge of German and are therefore inattentive when the most elementary exercises are taken up.

Miss Teller.

German. (a)

Group VIIla is doing finely. They have memorized a five stanza poem "Der Knab' vom Berge", and are reading with renewed interest a more difficult story. Grammar has no terrors for them.

Miss Teller.

German. (b)

Group VIIlb are spending each class hour in constant drill in concentration, --German, at present, being a "by-product". The progress of one or two in the class is noticable and evidently due to an awakening pride. The die, der, and das are still stumbling blocks, as are the principal parts of the verbs.

Miss Teller.

Number. (a)

They have finished work in decimals, and this morning I want^{ed} to give them a test to see how well they could plan and carry out some examples. I told them to take paper to Room F, and to ask me questions about how to go to work on it, but were to hand in the papers when they considered them finished. They worked in twos, and the two did their measurement without any help from me, and found for themselves the areas to be deducted. They have taken the papers home to finish them.

Miss Bacon.

Science. (a)

This week the work in geography has been on the political geography of the western states. When we were considering the formation of some of the mountains in these states, the questions of volcanoes and geysers came up in connection. The children showed an interest in the subject, and knew more about the formation of a volcano than I had supposed. Working in pairs, the class made volcanoes, using wet sand, sodium carbonate and hydrochloric acid. The neck of the crater was made of a glass tube in their experiments. The experiments worked very well.

Mr. Gillet.

History. (a and b)

We have studied the life of Livingston, and I am now telling them of his thirty years in Africa. On account of the shortness of time and the lack of books, it is necessary that I give them the whole narrative myself. In connection with this they are making maps of Africa, and putting in the lakes and rivers as Livingston followed them out.

Miss Bacon.

Science. (a)

The work of this group has been very similar to that of Group VIII, with the exception that we did not have the experimental work, on account of lack of time.

Mr. Gillet.

General Exercises.

As several of the children were going on an excursion to Starved Rock on Saturday, I told them the story of why this is called Starved Rock, of the building of Fort St. Louis there, and reviewed with them the history of LaSalle and Marquette's trip to this region.

The club held a meeting on Monday. The principal business was the discussion and adoption of a measure whereby certain people outside the club, who had worked very hard on the club house, could become members of the club, without dues or initiation fees. They voted that a committee should be selected by the club to decide who these honorary members should be.

Miss Bacon.

School copy
etc

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Last Report of Spring Quarter.

In connection with the grocery store we made delivery wagons. All working together we built a barn for the village. The talk about the care taken of the grocer's horses suggested to the children the need of a blacksmith in the community. We visited a shop where we were fortunate in seeing the entire process of shoeing a horse. On their return the children drew what they had seen. I told them the story of Old Dobbin. We learned "Mrs. Gaynor's Song of the Blacksmith". The children took special delight in dramatizing this subject, and finally organized a regular game. For our shop we modeled clay horse shoes, nails, hammers, and the anvil. The children made also a surface picture of the blacksmith shop out of paper and added pencillings.

One day the III's and the kindergarten had a picnic at Washington Park. Our gardens supplied lettuce for sandwiches.

The last day we spent in having a party.

Miss Dolling.

Cooking. (a and b)

We continued the review of the cereal preparations, and reviewed the method of cooking cereals in general, distinguishing between the finely ground preparations and the coarse ones, which can be put into hot water immediately without being mixed with cold. The general method for cooking fresh and dried fruits was similarly summarized. The older children of the group finished writing all the recipes we have used this quarter. The recipes are ready to go into their cooking books. The review took so much time that their luncheon was prepared for the children.

Miss Lachmund.

Cooking---General Report for the Quarter.

The work in cooking this quarter with Group III consisted in a review of cereals and a study of a few fresh and dried fruits. The children reviewed the processes through which the wheat goes before it is converted into flour, and the various preparations which are made from corn, and wheat. In studying fruits, the children were led to see the reason for cooking and drying fruits as a means of preservation, and we mentioned the other ways of keeping fruit. They dried apples which they had later on for one of their luncheons. The practical cooking consisted in preparing various cereals, after the weight of water required had been worked out by comparing the weight of the cereal with the weight of a like amount of flaked corn. The children stewed and baked fresh fruits, and cooked dried fruits after working out the method of preparing each. In the beginning of the quarter, when there were two divisions in the group, the division which cooked the fruit one week cooked the cereal the next. When the number of children in the group was decreased on account of sickness, there was but one division, and the fruit was occasionally cooked for the children when they prepared the cereal. The second last week was spent in summing up the methods of cooking fruits and cereals in general, while the cooking time during the last week was given over to sewing, so that the children

xxxx

might finish their cooking book covers.

During the quarter the children learned to read recipos quite readily, and also how to work out the amount of water necessary for a fraction of a cup of cereal, when the amount necessary for a whole cup was known.

Miss Lachmund.

Sewing. (a and b) Quarterly Report.

Group III spent the sewing periods during the quarter in making cooking books covers to hold their recipes. In spite of the fact that the covers proved quite complicated, so that the children had to have some of the pasting and cutting done for them, they took great pride and delight in the making and tried to do as accurate and neat work as possible. Those children who came from the kindergarten last, overcast scrap book leaves and made mats of coarse scrim, decorating them with the darn- ing stitch. A number of those, however, who had made covers, had been unable to read and write the recipes, so that when the covers were finished, they had no recipes to put in them. This made them most eager to write, at least for a while before school closed, and they begged to have them written out so that they could copy them. One little boy who had left in a hurry on the closing day of school, returned the following morning and asked for all the recipes which he wished to write in his book.

Miss Lachmund.

Art. (a and b)

At the beginning of our school year, our work consisted of medeling; we used fruit and vegetables. Then the story of "The Little Red Hen" was told, and the children medeled the various animals found on a farm. Also we talked over the life and duties of the farmer. Work in illustration followed the medeling, and the different occupations of the farmer, such as sowing, plowing, going to mill, etc. were represented. Our memory drawings were from familiar objects.

During the spring quarter, the children have been sketching out of

doors, and by holding the hand on a level with the eyes, they were able to tell how much space should be used for the sky and how much for the ground, and that tall trees and buildings appear to be against the sky. By comparing the trees in the distance with those near by, the apparent difference in size was plainly seen by all; by looking carefully, the children saw that the color of those far away was not so brilliant as that of those near by. They then drew with their colored crayons, showing color and size as affected by distance. Two-thirds of the children were able to put on their papers the things they had actually seen.

A few of the children who have been in the class for only a short time were able to tell but not to do. We spent several lessons on the spring flowers, looking carefully at the color and finding what type form they resembled; after the flowers were covered, the children reproduced from their mental images.

Mrs. M. R. Laver.

History. (a and b)

The weather this week allowed but little out of door work. The children spent two periods in copying their accounts of the construction of the clay furnaces. This took the form of a letter dictated by IVA two weeks ago. The rest of the time was spent chiefly in talking over the work of the year, and in dramatizing, as a means of setting the two groups on a common footing. I told them the story of Phaethon.

Next we began work with clay again, this time using the potters' wheels which the children have made in the shop. The wheels did not turn readily enough to be easily used by the children; only one was really successful, its owner being delighted to find that it was a help. We had talked about the advantage of the wheel before we began to try them, but the proof of the value of this particular one seemed to come like an original discovery. We had some bits of tile and slate which had been brought by Miss Runyon for the children to study, and after talking about them and deciding how they had probably been made, we reviewed the process of the formation of the clay beds. Most of the children had a very vague remembrance of the matter, so we went over it again, and then went over the other elements of the soil in our gardens. The children said that plants need "black earth", and were led with a great deal of difficulty to state that the richest earth is found where a good deal of vegetation has gone to decay. One of the children spoke of the leaves that fall in the fall, and by decaying, form a part of the soil. The presence of sand in the garden soil they were unable to suspect, though they agreed that something besides clay and loam is necessary to make a soil through which the water can percolate readily. One of the boys spoke of the part played by the earth worms in preparing the soil for plants. We tried sifting some soil to find the sand. The sieve was too coarse to get out the sand, but the children were surprised at the amount of fine gravel, and concluded that there was ~~xxx~~ sand there as well.

Miss Hoblitt.

Cooking. (a and b)

During the quarter the work has been continued with vegetables, their analysis (in a rough way), classification, and method of cooking. Recipes have been made and written by the children on the blackboard. Number work has frequently been employed in calculating materials for the class when individual rules only were given.

The entrance of new children into the groups and the absence of many of the others have interfered with the work somewhat, so that the review showed a need of further work along these lines for some of the class.

Miss Tough.

Textiles and Sewing.

In their sewing they have finished their bags, needle books, and mats. The children who had finished these made a coiled basket of raffia, with the suggestion that they could make some baskets of swamp grass during the summer.

Miss Harmer.

Sewing.

The sewing of Group IV has consisted, on the part of the old members of the group, in finishing the bags and needle books, and in making mats with borders in darning stitches. Just before the end of the quarter, they began sewing coiled baskets, in order to be able to do some basket work during the summer vacation. Those who had mats to finish took them home to work on.

Miss Lachmund.

Shop.

Many of the children of this group have been out with the measles, so that the work has been most unsatisfactory.

They made their potters' wheels, which have been used in their clay work. They made also their ring toys games, which they played, and which involved some number work. A few of them did some individual work to take home.

Miss Jones.

History. (a and b)

The play of Columbus was finished and did much to get the children to review the life of Columbus. While the play was in the process of making, we went on and finished the chief events of his life. In reviewing the ~~his~~ life for the play, the children spoke of the few events known of his early life, and were specially impressed with the fact that the date of his birth is not known. I said that people did not expect him to become great, so no one wrote down much about his boyhood. Amelia said: "Do you think I'll ever do anything great, and people will read about me?" I replied that I could not tell, perhaps she would. Amelia has seemed to have the strongest dramatic sense of any in the class. She is very ready to show at once by action how the thing would appear, and has stimulated the other children to do this. I have allowed them to be very free in attempting to act out the play while they were making it, and with most of them, it is quite simple to do this.

I have been impressed with this class with the way what I should call the adventurous spirit has grown during the year. I believe now they have a vivid image of sea conditions, of tropical lands and natives, of possible adventures on sea and land, and an awakened interest in recognizing differences in what they know in their own environs and the images that have come to them in the study of going out by sea into different climates and conditions.

This result, might, I think, be obtained much earlier in the year if the proper materials for observation and construction could be obtained. For example, if the earliest methods of taking the altitude of the sun could be found, and used by the children to determine latitude; some accurate weather observations and their relation to storms. If in some way they could work out the steering of a ship, tacking, etc; terminology necessary in direction; organization of crew, etc.

Then if when they came in contact with new countries, the products

were actually examined, and manufactures from them attempted,--as rubber from the caoutchouc, chocolate from the cocoa beans, and had the imported fruits to see and eat, it would more rapidly secure the images which would make permanent and valuable the work. This would also serve to keep in mind the true motive of most explorers, the wealth to be acquired for an individual or a country, and help to an understanding of the contact between the civilized and the uncivilized, and the result of the contact. It would give a meaning to search for waterways in and through a country, and for shortest routes.

I am convinced that there has not been enough handling of materials or constructive work.

In their work on the Eskimo, they ought to handle the different skins, and learn to know furs from different animals which come from the Arctic regions, as well as the animals. It is difficult to teach this year, as it should be without a museum at hand, and a stereoptican.

I should also ~~recommend~~ recommend another year, that early in the fall the children be sent on short exploring trips singly or in twos, in school time, and be required to give a report of their discoveries on their return. The report should include a map of directions as well as things seen.

This would make it possible to do more on the geographical side, later.

From the point of view of getting a rational idea of the explorers and their aims, I have been well satisfied with the work this year.

I think the children have a correct idea of just what made Columbus and the other explorers great, and do recognize that some of their deeds were not commendable. I believe also, that they have the idea of contrast between their own times and the times in which the men they study lived; and also of contrasting and comparing different countries. I do not yet feel that a right connection has been made between their primitive

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life study and their explorations.

Report of the last week of the quarter.---

The time was spent with these groups in telling the narrative of Magellan, finding out just what he would need to search for ~~the~~ to get to the Pacific, of which he must have heard from Balboa's trip. The children suggested that he would look for a water way though the land which he had found. Some of them thought this would be a river, and we discussed whether the way between two oceans would be of fresh water. I told them of the discovery of the Straits of Magellan, and of Magellan's determination when he found himself in the Pacific, to circumnavigate the globe. The children told me what he must expect to meet in the way of air and water currents by reference to the equator, and of the clam which would have to be endured. I told them of the distress from the lack of food and water that occurred, and of their at last reaching the Philippines where Magellan was killed. I recalled the edict of the pope dividing the world between Spain and Portugal, and asked the children to determine in what territory the ships were now, and what the effect would be. I then told them finally that the ships rounded Africa and returned to Spain, and of the discovery of the loss of a day in time, which we took up in connection with the two motions of the earth.

The last period was spent in talking over what we had studied & during the year, and comparing the different men.

Miss Runyon.

Science. (a)

The children have spent most of the time in the garden. They planted more radish and lettuce seeds, until their beds were full. They transplanted lettuce plants, and covered them to keep off the ~~rain~~ rays of the sun. Those whose papers had blown off during the day noticed that their plants had withered and they accounted for it.

They saw also what happened when they watered seedlings merely on

on the surface and at irregular intervals, and they appreciated the need of leaving the plants alone until the rain should come, unless they dug trenches for the water and filled them regularly. They saw also the need of weeding the garden carefully.

Miss Lackersteen.

Cooking. (a and b)

The quarter's work for this group has been a review of cereals, the study of which they took up first last year. They have discovered much that was new, and have always been glad when they recalled what they had found out before. The study of the grain, its growth, composition, and preparation for market, the balancing of each preparation with some standard to discover the amount of water required in cooking, and the cooking, varied with by combinations with fruits dried and fresh, has constituted the main part of the work.

One half hour a week has been given to writing the recipes and directions in the backs of the books obtained for that purpose. This the children have enjoyed, and it has helped them in expression, in writing, and in spelling, as well as impressing on their minds the work done.

Miss Tough.

Group V Textiles.

The children are finishing their mats, though a few are not yet ready to put the lining on.

Miss Lachmund.

Textiles Quarter's Report.

Group V spent the quarter in finishing the weaving of their pin-cushion covers, and in making the cushions. After these were completed, the children made mats of linen crinoline embroidered in the darning stitch, and lined the mats with denim. Almost all those who had not finished took their mats home to finish during the summer. One child who has been inaccurate in making his border, and had not finished it, asked permission to leave

the mat at the school until fall, since he feared he would make a mistake if he did it alone.

Miss Lachmund.

Shop. (a and b)

The children completed the mats begun last quarter. Most of them made spoons to work with in the kitchen. They made also the frames for the scenery for their play of Columbus. They have had little time in the shop.

Miss Jones.

History.

The contemptuous remarks made by some of the children concerning "Dutchmen" in the course of our first lessons in New York history indicated that the story of the West India company and the brief references we made the history of Holland, had failed to impress the group with a proper respect for their new acquaintances. We spent two lessons, therefore, in a further study of the Dutch people at home. I told them briefly of the long war between Spain and Holland, and of the courage and devotion of the Dutch during that struggle. One of the children knew the story of the "Boy at the Dike", and told it to us. The effect of this work on the attitude of the children was noticable. We then went on with the story of New Amsterdam. The first work on the coming of the Walloons and Peter Minuit's administration were reviewed for the sake of some members of the group who had been absent, and we passed to the study of Van Twiller's rule. We took up the relations with the Indians and the English during his time, but went over the ground hastily. They adopted at once Fiske's characterization of Van Twiller as "King Log", and called him by that name generally when they spoke of him afterwards. One of the children knew the story of King Log and King Stork, and told it with great dramatic effect.

Miss Hoblitt.

Number.

This quarter has been spent in finding the connection between addition, subtraction, multiplication, and division, reviewing the first two, (which in most instances were not well enough in hand on the formal side), and working out the last two. Problems have been given connected with cooking and school accounts, involving any or all of these processes, and the children have made problems for themselves and each other. They are all able to use the multiplication table quite easily. Short division has been involved in their problems, but so little long division that the

process will need reviewing by all.

Home work has been found very helpful, not only in giving freedom in the work, but in developing an ability to work alone and to feel responsibility in the matter.

Miss Tough.

Cooking.

Colonial cookery has been the work of the group during the quarter. The conditions of the time have been considered briefly, and the materials then employed have been dealt with. Processes for the preservation of food have been studied and in most instances worked out by the children.

Recipes of colonial days have been read with much interest, and comparison made with those of the present.

A record of the work has been kept by the children, who have, in many instances, repeated it at home.

Miss Tough.

Shop.

This group spent most of their shop time on the mill, which they have been making with Miss Hill. Each of them has also done some individual work. Each made spoons to use in the kitchen.

Miss Jones.

Textiles.

The looms are being warped and the weaving started. The mats are to be woven during the summer. The children made their designs and selected their colors before they made the mats. The baskets which have been incidental work while waiting for looms and so on have been finished.

Miss Harmer.

Sewing. Girls.

They have finished their doll's clothes, and trimmed the hats.

Miss Hamer.

Shop.

The children of this group have had more work in the shop than any one other group. They have done some individual work and with this mechanical drawing. They have done this exact work very well. They have made also large looms and shuttles to use in their textile work. The last week they have been caning chairs for the school.

Miss Jones.

Printing.

During the spring quarter, Group VII has done printing, averaging in time about an hour a day, two members working at a time. In the course of the quarter approximately the following work has been done:

- Last four pages of the German Play.
- Six pages of words for spelling.
- About ten stories or lesson sheets.
- One two-page song.
- One page of the French play.

This is, of course, exclusive of any work done by Group VIII.

The children's interest in their work and the increase of proficiency in the mechanical processes involved, has been very gratifying.

Gwendolin B. Willis.

History. (b)

The pupils read from Ivanhoe the chapters describing the tournament and the attack on and the capture of the Norman castle. These incidents have been discussed and related to the history of Richard's reign.

Report of Spring Quarter.

Reviewing the Conquest of England, the outline of the history through the reign of Richard has been given, noting the social and institutional changes. A brief survey of feudalism was made, its external features, how used and held in check by William and his successors. Richard was followed in his crusade, and a brief study of the latter resulted. Then followed the reading of such chapters from Ivanhoe as revealed certain social conditions-, the relation of Saxons to Normans, etc.

B.F. Armitage.

Number. (b)

The class has taken the several cases of multiplication of fractions, and developed the method of dividing a fraction by a whole number. Use has been made of abstract and concrete problems.

Report for Spring Quarter.

The class began with factoring, then followed Greatest Common Divisor and Least Common Multiple. The application of these in reducing fractions to their lowest terms, and to equivalent fractions having a common denominator. They then took addition and subtraction of fractions, applying in concrete problems. The cases in multiplication of fractions were taken and one case in division.

B.F. Armitage.

Textiles. (a)

They have finished their rug weaving and in some cases the rugs

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are being finished at home, and will be brought back in the fall.

Miss Harmer.

Science. (a)

Those of the class who went to Starved Rock told the others in class what they saw there, and the explanations of the different types of topography. The class has also made "geysers", using tin cans with covers tightly sealed, and glass tubes extending into the water in the cans. The work of sealing the covers on the cans was somewhat difficult, but it was done successfully at last. The work on this experiment so interested them that they spent their study hours on it, as well as some time out of school hours.

Mr. Gillet.

Shop. (a)

They have completed the picture frames begun last quarter. The carving that they did on them was very good for the first work of the kind. They have also made pads for blotters, carving them. The most of their work has been done with Mr. Fowler.

Miss Jones.

English. (a and b)

Their English has been of the same nature as that of Group Xb and a. They have covered much less ground in English grammar. They have taken up only noun and verb forms, simpler syntax, and simple analysis.

Miss Schibsby.

Latin. (a and b)

They have read the Gradatim for translation--they have read most of the stories to page 97. They have used Bennett's Grammar, and have covered the part relating to forms. They have done only such syntax work as is given in the Gradatim.

Miss Schibsby.

Number. (a and b)

The group has continued the work in percentage looking toward some facility in solving problems of the type-- $P = B \times R$. A written lesson in which a problem using a certain percent for cash showed an intelligent use of percentage. Interest, one case of percentage, with the added time element has been used. Exact and common interest with use of terms as: principle, rate, interest, amount, compared with general terms have been noted.

The last week has been given up to review and general discussion of principles.

The group shows some weakness in manipulations with fractions, i.e., the changing of a common to a decimal fraction, also case 2 of percentage, (the same thing), when required to find what percent one number is of another.

To secure accuracy and meaning, work like this has been given: divide a series of terms by 5, and place the results in a column; divide the same numbers by .05, what has been done? Or by 7, and then by 7%.

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Or multiply by 10%, and divide by $1/10$.

The group has improved in accuracy in common operations, but not very much in accuracy of written statement. The latter will develop in their study of algebra.

For the next year I should suggest that the class take up algebra in the fall quarter, and work up to fractions, giving the arithmetic, and algebra for the rest of the year.

The work of the following pupils has been satisfactory:

Howard Burns-----	good
Floyd Willett-----	excellent
Margaret Bell-----	good
Edith Greeley-----	good
Clifford James-----	good
Edwin Kuh-----	good
Clara Barton-----	good
Caryce Brooks-----	fair (needs help in percentage--was out)

Not satisfactory.
 Elizabeth Tenney--- fair, but absent.
 Lucile Marks----- poor
 Mabel Raichlen----- fair, but absent.

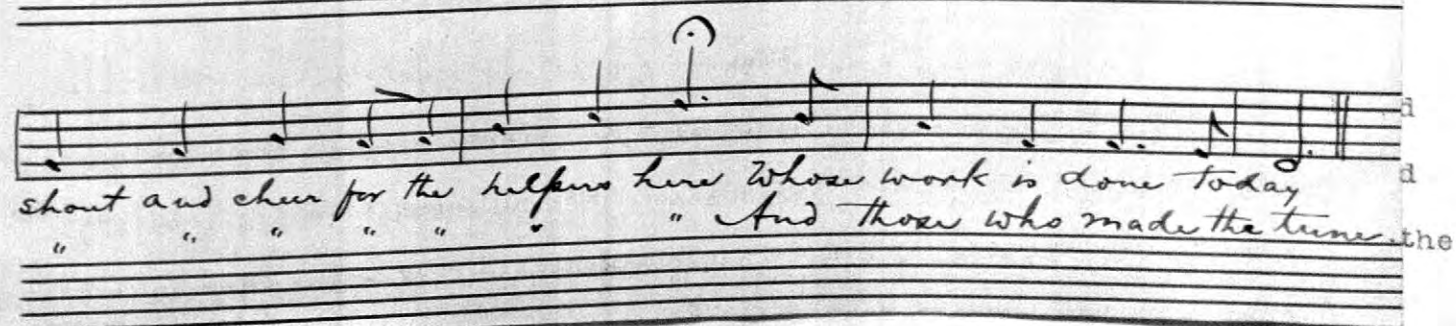
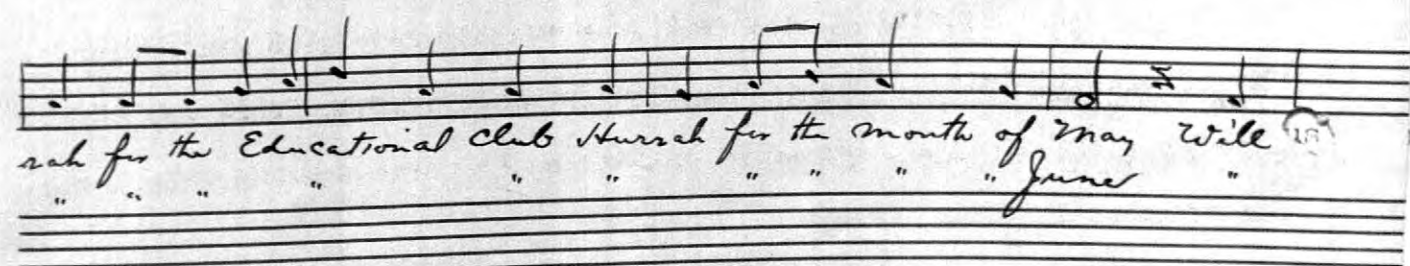
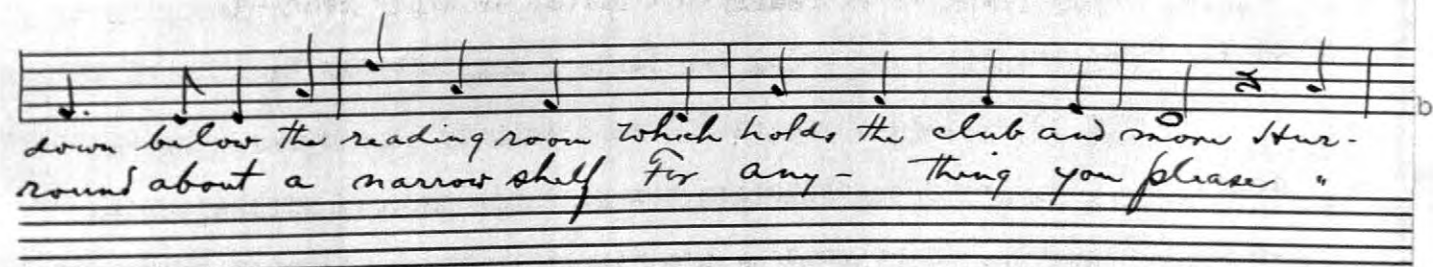
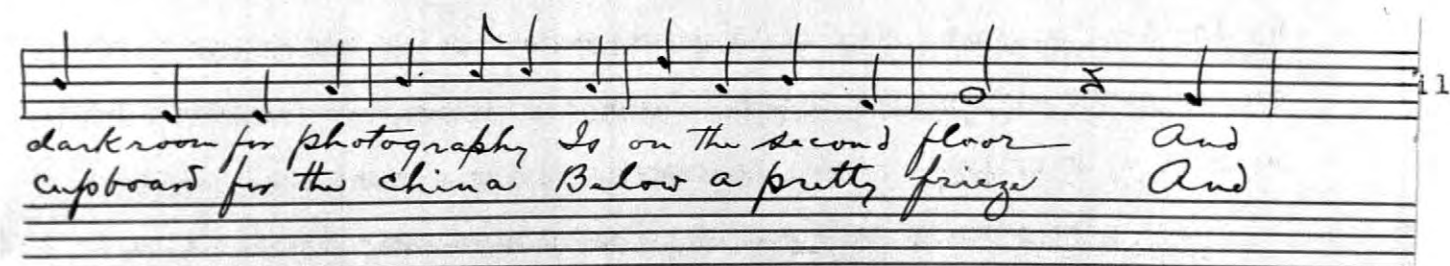
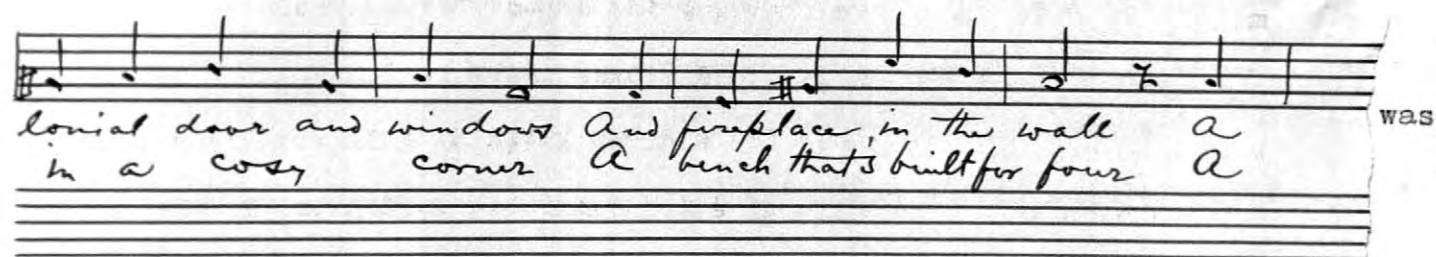
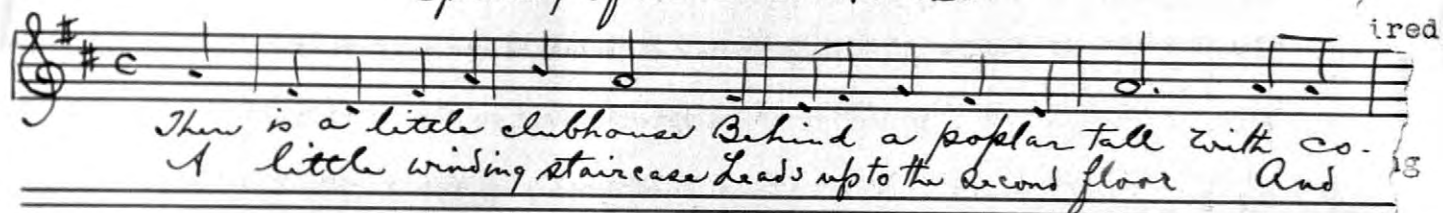
C. S. Wheeler.

Music. Spring Quarter. IX and X.

We have tried concentration in the work of these groups; their work during the winter quarter being exclusively voice production and song singing; during the spring quarter, formal work, i.e. melody work and sight reading in the various keys. It has proceeded as follows:

The rule for finding the key-note of successive scales was given, each member having individual work at the blackboard, sol of one scale ~~xx~~ being the key-note or do of the next scale. This was carried through from C up through the sharps to F#, then with the enharmonic change to the scale of G flat, back through the flats to C again. We found that the new sharp in the sharp scales and the dropped flat in the flat scales were always the ti of the new scale. After some drill on these rules,

Opening of the Club House





learned in chorus practice by Groups
VII and VIII.

any member of these groups can write the proper signature for any desired key. To prove to the class that it is as easy to read with the voice in a "difficult" key as in the key of C, drill was given in sight reading by pointing to the staff with a ruler, no signature being used, and only the do being given. This being proved, they were as ready to read a melody in five sharps or flats, as the key of C.

The material for sight reading was given as follows: One pupil was asked to arrange the staff for a given key, and to denote the rhythm, the ~~ix~~ others in turn were given one measure or short phrase orally by the teacher, which they would repeat, name with syllables, and then put on the staff with proper rhythm. When the melody was finished, each pupil read it with syllable names, the teacher giving a piano accompaniment.

The next step in this work will be to have the reading without accompaniment. The pupils have gotten considerable ear training in this work. Ear training is really the basis for sight reading.

It was voted that there should be a song for the opening of the club house, and IXa having a reputation for facility in composition, was chosen to do the work. Unfortunately one half the members of that group are "anti-club", but by dint of much patience exhibited by club members, and the promise of later cooperation in a baseball song, the work was accomplished. The last lines of the second verse and the chorus were contributed by Group X.

SONG.

The rote-song work of these groups has consisted in learning an old English round "We Merry Minstrels", and French round, "Oiseaux Cheris", and a duet "The Wanderer's Night Song" by Rubenstein, of which they learned the alto part, the soprano part being learned in chorus practice by Groups VII and VIII.

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This duet is fully appreciated by the children.

Mrs. Fern.

Science. (a)

The work for the last two weeks has been a review of the quarter's work. The review took the shape of a map of the Chicago area, indicating by colors the different kinds of topography which they had seen in the region, as well as the origin of each. The work was partly done outside of school hours without my asking.

Mr. Gillet.

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Mathematics.

This group should do some more work in mensuration and in percentage and its applications. The rest of the arithmetic they knew fairly well. In algebra they should begin with equations involving fractions. I should think that to finish the work in arithmetic and to go to complete (affected) quadratics in algebra would take the whole year. The work in algebra next year should be easy, because most of the class have done this year's work very well. Phoebe Bell is behind in factoring; Dorothy Kuh has missed the latter part of the work on account of sickness; and Ruth Brooks will have to repeat the whole course. The rest I should call satisfactory or a good.

C. S. Osborn.

Music.

See Group IX.

Latin. (a)

The group has used the Junior Latin Book, (Rolfe and Dennison) for translation--Caesar--for sight reading, and Bennett's Grammar. In grammar they have studied thoroughly the part relating to forms. They have also studied, though not in detail, the main points of syntax.

Latin. (b)

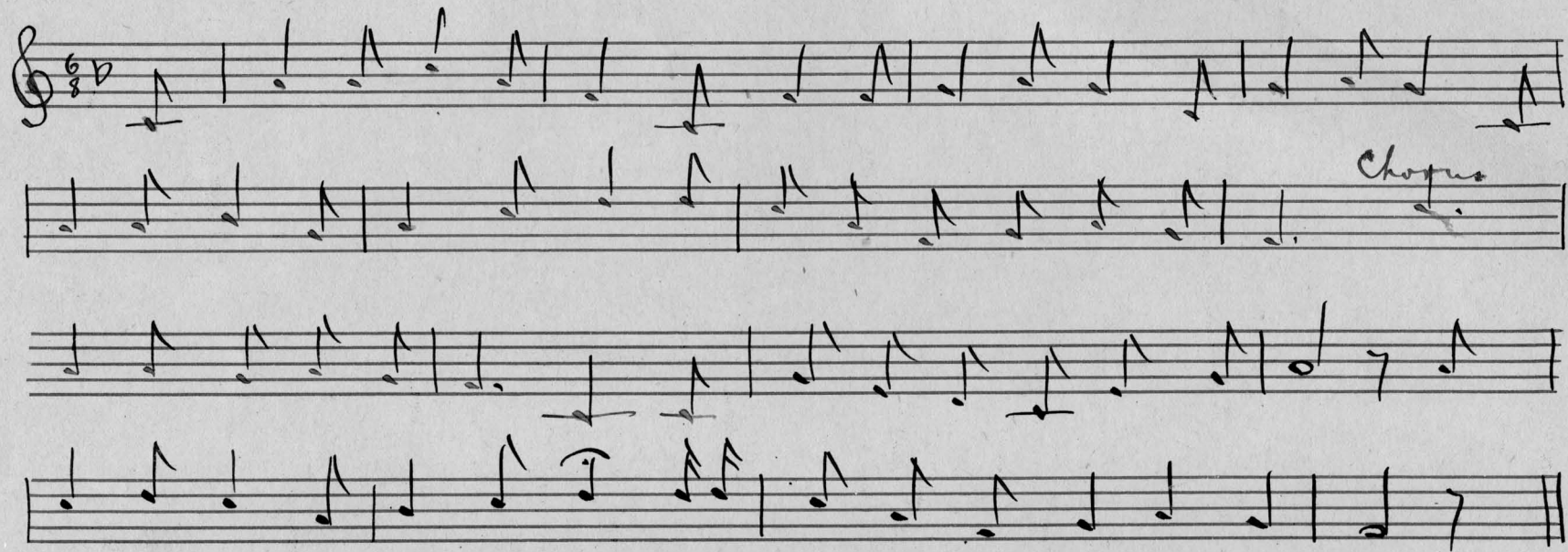
They have done the same grammar work as Xa. They have used Scudder's Gradatim for reading in stead of the Junior Latin Book. They have not quite finished it, but will leave it to go with in more advanced work.

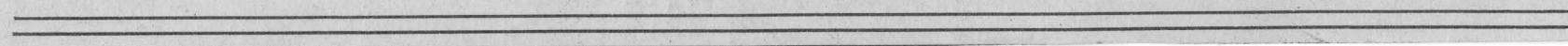
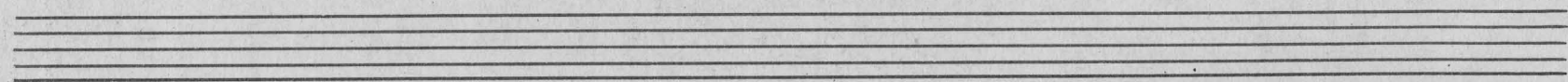
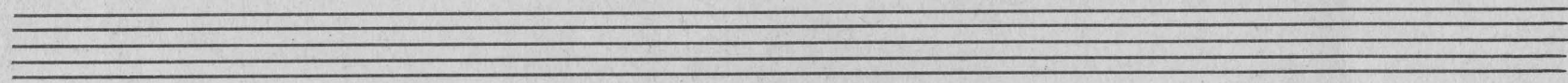
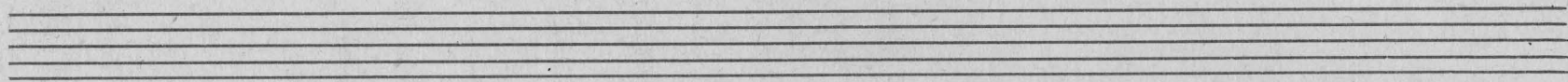
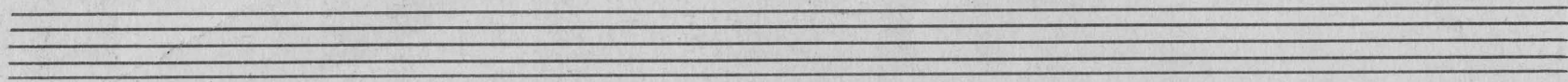
Miss Schibsby.

English.

Their work has been of two kinds. They have had composition work once a week when they either wrote a theme on a given topic or reproduced some story or poem read to them. They have studied English Grammar: Forms, Punctuation, Syntax, Analysis.

Miss Schibsby.





ACCESSION NUMBER 90
OFFICE OF RECO. & RESEARCH
THE LABORATORY SCHOOLS

90

Elementary School

AUTHOR

Teachers' Reports

TITLE

1900-01

DATE LOANED	BORROWER'S NAME	DATE RETURNED

