days' use of four different kinds of metals that when I asked them to bring some metal from the home, not telling them any particular kind, that one of the children said: "I don't need to ask what is metal now, because I know." This remark was brought out by another slower child saying, "I have no metals at home," and after thinking a minute, asking, "Is iron a metal?" I had left iron out of the metals discussed except as it was mentioned incidentally by the children on purpose to see how soon they would bring together their knowledge of metals to include this, which of course they must have.

In giving them some work to do at home I wanted them to make thin sheets of lead out of a piece of metal that had been melted. The piece which I was to divide had every appearance of having been melted and I thought its appearance would suggest the way to divide it, since it was too thick to break. No one thought of melting it until one of the children said after examining it: "It is the same thing as the iron posts in our fence are fastened into the stone with." and knowing he must have seen it melted and poured in, I asked him how it could be used, whereupon another child eagerly volunteered that we could melt this lead and divide it. Miss Camp.

History (b)

They spent about an hour in making a sand map of the hill country and the plain below and have made tents for the tribe to live in.

Their talk has been about the animals they would find in a rather warm climate. They did a good deal of number work in counting their tribe. They planned that several families should come to-
gather and I put on the board the different members in the family and they added them together by 5s, 10s, 15s and 20s.

Miss Hill.

Reading (a)

I found that when the children wrote their own reading lessons, when it came to read it was purely memory work, so for the last two or three times I have composed the sentences myself, taking separate words from the sentences and building on them, such as at, bat, cat, fat, etc. I do this in order to give them a little time to forget what they have written. Then I will take up the work as before.

Miss Tackerstein.

Sewing:

Have continued the work of last week and begun the knitting of wash-cloths.

Mrs. Feuling.

Cooking:

Repeated the lesson of last week.

Mrs. Feuling.

Shop Work (a)

Worked on small dug-outs and prepared the foundation for brush houses.

(b)

Made spindles and completed small dug-outs.

Miss Jones.
History (a)

We followed in general the exploration of the African coast down around the Cape of good hope. I found that the children did not have a very good idea of latitude and longitude and so we began talking about that with the globe. A half hour was spent in working at the trade-winds. They decided that the air would become heated at the equator and would rise and the cold air would rush in and so a circulation would be kept up and the climate of the world modified. Miss Hill.

(b)

The children have seen the globe almost daily and pointed out the Spanish Peninsula and the contour of Africa. So I asked them to try and draw a chart for us on the board. Some said at once that they could not do it. One of the boys declared that he "had the map in his head", but upon trial could not show the outlines. Si we got the map and again noticed these forms.

In their talks about exploration I have purposely spent a good deal of time on the first few discoveries to show the children how long it took and we have only now rounded the bulging part of the African continent. I told the children of the landing of one of the explorers on the mainland with the desire to learn something of the language of the people and of the country. We talked about his meeting with the Moors and the negroes and his expedition with them across a desert country, bringing out chiefly the characteristics of the country and a caravan route. Then we took up the things in the tropical region that would impress people in Spain—the different fruits and animals, as well as the general appearance of luxuriant foliage. I sent one of the children to the cabinet in the
hall to find a specimen of a cocoanut with its outer shell. Its appearance was new to most of the children. They noted the thick fibrous appearance of the shell and without any question being raised by me, suggested the uses to which it could be put.

Since their work with Miss Cushman is at present chiefly in clay and because I thought it would be helpful, I had them spend one period in drawing a picture of a tropical region. Miss Cushman happened to be free that period and volunteered to come and superintend the work.

In reading they are steadily improving. All but two of the children can read easy sentences without help and can use the phonetics sufficiently to pronounce most words in which the syllables can readily be separated.

One period is spent each week in writing.

Miss Runyon.

Sciene (a)

This work is carried on in connection with Miss Hill's work on exploration. They followed on the globe the course of a large current off of Spain and Africa; then of the main currents in both. They then took up the causes of the air currents and also as connected with the voyages around Africa and have connected these with the work of the zones and the distribution of heat from the equator due to the change of position of the earth. This work has gone very slowly and I have tried only to bring out the equatorila calm belt and the northeast trades.

Finding that they were not interested in the winds after they had found how they affected the voyages, I took up the next point why Prince Henry had to keep so close to the land and why Columbus
was able to venture out into the sea, this being due to the
understanding of the compass. One of the children said that the
earth was a magnet which made the needle of the compass point that
way.

They have started to make their compasses, magnetizing the
needle and finding out the law that opposite poles attract, like
repel. Their interest was, of course, very evident, but they
seemed incredulous as to their being able to make a compass that
would work.

Miss Camp.

(a)

They have gone on with the study of maps, learning the direc-
tions and getting an idea of the general geography of the country.
We have taken the map of Europe and compared the general size of
the countries in Europe with each other.

Miss Lackerstein.

Science (b)

The children showed so much interest in the movements of the
air and of the water that they are still working on the trades and
ocean currents. They took up the shifting of the equatorial belt
of calms as connected with the change of the earth's position. I
had to do this by taking some place where they know about the
seasonal changes and showing that these same changes took place at or
near the equator.

Miss Camp.

(b)

While waiting for their tanned skins to soften in the oil,
the children did some experiments with pieces of calf skins. They
wet a piece and laid it to dry, noticing that after being wet it was very stiff and even by rubbing would not get as soft as it originally was. They were told that some tribes of Indians had a way of tanning skins so that it would not lose its softness by wetting but that their secret was not known. One hour was spent in writing a record of this work. Two of the records which are typical are as follows:

"We took a rabbit's skin and soaked it in lime water about a week. Then we pulled the hair off. The hair came off easily. Then we stretched it by the furnace for about two days. Then we took the fat off. Then we rubbed it with oil.

Charlotte Foss.

None of the words were misspelled in this composition, probably because the spelling of each one was asked for.

"We burned a piece of leather and it curled up and sizzled. It smelled like burning hoofs or glue, or wood, or horn. We thought we could make glue of it. And we took another piece of leather and wet it and left it to dry, when we came back it was dry and stiff. And we compared it with a dry piece of leather."

Cordelia Goffe.

Miss Andrews

Cooking (a)

As butter was to be made, some milk had been put in pans and the cream allowed to rise on it. This cream was skimmed off into fruit jars, covered closely and shaken continuously for some time, when small solid lumps appeared clinging to the sides of the jars; on opening the jars the cream was seen to be full of small particles of butter. The covers were again put on and the shaking continued more gently, when it was found that the particles of butter gathered together in one large lump. This was removed from the jar and found
to be very soft and to contain some of the cream, which the children knew was not the proper conditions for butter as found in the market. After considerable discussion, it was decided to try cold water on it, to wash out the cream, and also to cool the butter and so make it firmer. A wooden spoon which had been soaked in water was found best to "work" the butter in order to wash all parts. When this was completed and the butter tasted, it was found to lack salt. This was added and thoroughly worked into all parts of the butter.

The children talked about the churns which they use in the country, in which the motion is given to the milk by a large dasher rotated by means of a crank or handle of some sort, thus making it possible to do very much larger quantities at one time than could be done by shaking in the hands. The color of the butter made was quite light and this led to the question of what caused the difference in color of different butter. It was thought that some might be colored to make it yellow and also that when the cows were fed in the stable as in winter, the butter would be different from what it was in summer, when they went to pasture. The children also thought that different kinds of cows would give different kinds of milk and this would make different kinds of butter.

Cocoa and corn starch pudding with figs were prepared.

Number work. If it takes 3/4 cup of milk to make cocoa for one person, how much will it take to make cocoa for the class—eight Miss Tough.

(b) For luncheon they cooked scrambled eggs and made cocoa. In their lesson they took up albumen and preparation of eggs as a review lesson. A new lesson was given in the study of milk. On examination they found (1) water in liquid form (2) sugar—(taste sweet (3) cream rises to the top, (4) albumen on boiling it forms a scum similar to the albumen in eggs.
Study of cream: They said butter was made from cream by churning but they were not willing to do the churning without directions. The problem was given them to discover the cause of the separation of fat globules in the cream and the change brought about in the process of churning. Two experiments were made to show the principle of emulsion:

1. Cold water and olive oil.
   a. Mixed thoroughly; then allowed to stand.
   b. Fat globules collected quickly on surface.

2. Cold water plus albumen plus olive oil.
   2a. Mixed and permitted to settle.
   b. Network of albumen interfered with the rising of oil which collected very slowly on the surface.

We took up how the shallow pans of milk were stored in springhouses or cellars where it was cooled and how the milk grew slightly acid, this acid dissolving and breaking up some of the sells of the albumen permitted more cream to rise. We took up the effect of temperature on churning. It happened to be a cold morning and on the sides of the bowls of milk were hard curds separated from the cream. They tried the effect of higher temperature by heating the cream. We considered whether very soft or very hard butter was easier to mould and decided it should be just soft enough to be sticky. They were shown a dairy thermometer and told that the dairy men found from experience that the fat globules were just in the right condition to blend and 62° Fahrenheit.

In working out the principle of churning the children said we would have to break the network of albumen, so the fat globules could come together. We found by experiment that stirring was not effective in doing this. One of the children who had seen churning
gave a quick jerking movement. We took up the way in which the farmer ripened his cream. The facts learned in the experiment were applied in explanation of the emulsion of fat in cream. This brought out the fact that while the proportion of cream in milk was large the actual amount of fat was quite small. This amount was roughly estimated in making the butter, first skimming the cream from the milk, then the butter extracted after churning. Miss Warner.

Sewing: (a)

The children in this group are to make an afgan to use on the couch which is being fitted up by Group VII a. The afghan will be knit in strips with large bone needles and heavy colored wool. Each child will knit a strip and when finished they will be joined together by a heavy cord. The winding of the skeins of wool into balls was begun. Miss Tough.

Textile Work.

Are making reed baskets for work baskets. The necessary equipment for these is to be made in the sewing class. They are about six inches in diameter and 1 1/2 in depth. The children are making Dolah’s clothes at home and asked for the small baskets to use for their sewing. Miss Warner.

Shop Work. (a)

Made bobbins to be used by Miss Hill and also worked on a large dug-out for the whole group.

(b) Completed small dug-outs. Miss Jones.
Music. (a)

Are studying scale of F as a preparation for writing their coasting song.

(b)

Are studying scale of G as a preparation for writing their skating song.

Miss House.
History:

We have discussed chiefly the condition in England which led to the repeated attempts to colonize the new country in spite of the disasters of Raleigh's colonies. I took up next the attempt of the London Company and discussed what a company was and what it would do first. This was chiefly to get the children to think in order of procedure, first the appeal to the king for a grant, then how the persons for the colony would be selected, what would be necessary for the undertaking, etc.

In Physiography I wanted them to take up especially the Virginian coast, but began by having them give me in a quick review the formation of the earth from the rocky ball gradually worn down by rivers and elevated in places by the shrinkage of the center and the accumulation of deposits. Then we took up the mountains and the effect of these on rivers. In the lesson I asked them to name the large bodies of land, which someone remembered were called continents, and they were able to name all except Asia and Australia.

In number work they took up a new cereal, that of cracked wheat. By looking at it, they saw that it was much heavier than rolled wheat they used last week and decided it would take more water. One of the class remembered that last year it required six times as much water and with this statement they began working out the amount of water required for any number of persons up to 10 using 1/4 cup for each person. Only one of the children did this without reference to the measuring cups where the quarters are marked. With the rest I had to take each individually and let him count the six quarters and then name them in terms of cups.

No one finished the work in half an hour.

Miss Runyon.
Science:

We started with Columbus as knowing very little about the world and took up the main things that would help or hinder him on his voyage across to America. With the globe they found what they had told me before—the ocean currents. They followed Columbus across the ocean. I told them that the currents which they saw marked upon the map varied in position slightly at different seasons of the year. They then took up the currents as they were on the globe and found how they would change. I had intended to work out the winds and currents entirely from Columbus' voyage but found Miss Runyon was spending no more time upon his voyage and so I told the children that we would now find out what relation these currents had to the climate of the country they were colonizing. They then followed the Gulf Stream along the coast and discovered the existence of the northern current coming down inside.

Miss Camp.

Science:

They wrote records and experimented with the malleability of pewter and granulated some lead for their next experiments. One of the records will state what they did.

- We made an alloy of zinc and lead. We made the zinc and lead weighed five grams. It took five minutes to melt it. When we melted it again it took fifteen minutes. It took 52 grams of pewter five minutes to melt. So our alloy is not pewter. Because it does not melt as soon.

Elizabeth Allbright.

Miss Andrews.

Cooking:

Same as Group Va.

Miss Tough.

Textile Work:

Are making baskets out of reed for the sewing room.

Miss Harmer.
Music:

They are preparing to write their Snowflake Song by becoming familiar with the key of G.

Miss House.

Art:

Nearly all the groups are working on the clay work reported last week. It takes about three weeks to complete these figures. No other report is necessary than that given last week so far as instructions are concerned. When the work is completed, I will give a general criticism of the results.

Miss Cushman.
History (a):

They have spent three and a half hours in writing the history which was developed the latter part of last week. They gave this orally first, wrote it out, and selected words which they thought they would need in writing it down. Then we had a spelling lesson on these words and the rest of the time was spent on their paper.

One period has been spent on the geography of the Atlantic states, locating the different colonies about which they have studied and getting their relation to one another. They have also located the different cities which they have known about in their colonial studies.

Miss Bacon.

(b):

They have taken up the adventures and discoveries of De Soto. They have read this for themselves from McMurry’s American History. This has been done in class, as the children have no regular study hour and they also need the oral reading. They have spent a half hour in discussing what they have read, in locating the places which De Soto passed through and the rivers which he crossed. Then we spent a few minutes in gathering the words which they would need in a description and a half hour was spent in writing out their paper. The emphasis has been put upon spelling in this class, because they have been so hampered by their inability in that respect. It took them too long to try to write out their reports and they were stiff because of their lack of facility in spelling words.

Miss Bacon.

German (b):

These children spent only a half hour on German and we have
taken up a review of the words given last week in many connections and have added to the vocabulary such words as: der Bleistift, das Buch, das Wort, and a few adjectives.

Miss Schibsby.

Science and Number Work (a):

Have been working on the amount of water required with six different cereals in different quantities of whole and fractional cups. They have made an examination of wheat flour. They weighed 20 grams of flour and let it stand in water and then filtered the water off. They heated some of the water that was filtered and saw that it became milky. They compared it with the white of egg which was treated in the same way in water. They had to wait some time for the water to filter through and in this time they tested the water for starch with iodine and for albumen by heating. They did not use the word "albumen" but simply saw that it became opaque and compared it with the action of white of egg in warm water.

Miss Hill.

Science (b):

In order to begin their study of the eye, they saw the image of a candle through a small hole of paper and saw that it was inverted. They were also shown the way a ray of light passed through a convex lens. This was from their general observation. They saw that to have an image of it on the retina something corresponding to a lens would have to be in front of it. Then they performed the experiment with the candle passing through a pin hole. They tried putting a lens in front of the hole and found the difference that it would make and decided that the chief difference was in the focusing.

Miss Hill.

Cooking (a) Same as Vb. Miss Harmer.
Cooking (b):

Small pieces of beef were examined, their color and texture noted, then they were washed and rubbed in cold water until the juices and coloring matter were mostly in the water. The remaining solid was found to be almost white in color and composed of a mass of fibres tough and dry. The water containing, the juices was heated and a "scum" came to the surface, which on examination and after some review work done with eggs and milk was declared to be albumen.

Pieces of meat were cooked—some in boiling water and some simmering and the results compared. It was found that the boiled pieces were very tough, while those which had been simmered were quite tender. A beef stew with vegetables was cooked, the children deciding on the method to be used from the experiment they had made. Cocoa was prepared by one member of the class.

Number Work:

If it takes $\frac{3}{4}$ cup of milk to make cocoa for one person, how much will it take for 2?

O.K. Miss Tough.

Textiles (b):

We began by talking about flax and I gave them an account of its production. I told them that it had a rather fine root and so needed light soil and the children themselves said that it would be the kind that would be found along rivers where sediment was deposited. I told them that the banks of the Nile in ancient times grew a good deal of flax and that the Rhine also was a center of flax raising and that in this country a good deal of flax was raised.
in Minnesota and Michigan; that it required some light and not too much heat, as this dries it up. What is needed most in the flax used for the fibre is a long fibre and I asked the children how they would sew it. One of them said that he would sew it close together to keep it from spreading and they saw that when it was raised for the seed it would be sowed farther apart.

I gave them an account of the way in which it is heckled and retted. The latter is done in running water and its purpose is to rot the stalk. This contains pectose, which I told them was the same substance contained in fruits and causes them to jell. This was got rid of because in the water part of it became soluble and the rest is crystallized and make a white power over the flax. Dry retting is often done, though it takes longer, because when retting is done in water all the fish die from the poisonous substance formed. I told them also about the breaking to loosen the fibres to get them apart and the heckling to get the fibres running the same way. This process corresponds to the carding of wool.

They are going to make a spinning wheel in the shop for flax and looked at the one in the school and began to make drawings and plans.

Miss Hill.

Sewing:

Those who had not finished the work previously started continued that, while the others began to work on the couch which they are to fit up for the use of the school. They found that the springs needed repairing and this necessitated the removal of the covering. This was partially done. When the springs have been repaired, the children will put in a filling of moss, cover the whole with new material and repolish the woodwork.  

Miss Tough.
Sewing (b):

Finished working design for cross stitch embroidery spot to be done on scrim cushion tops. Groups Va, VIIa and VIII made sketches for bead work pattern (ink-wipers).

Note: At least three children in the different groups asked whether the objects to be decorated were to be taken home or used in school. Only one openly expressed dissatisfaction on being told that the ink wipers were for use here but all three seemed disappointed. On being asked why she preferred making things to take home one child said: "I like to put my things together to see how many I've made."

Mrs. [Signature]

Music (a):

Have studied the keys of F & G. Half of this group are ahead of the others and for this reason it is very hard for those who are behind.

(b).

Are preparing to write their sleighing son in the key of F.

Miss House.

French:

They have learned the names of the months, the seasons, the days, and have commenced to study the ordinary adjectives. Each child has taken the name of a month and to the question, Who are you? Who is such a one? Who am I? is expected to answer, I am the month of January, the first of the year. He is the month of ---. You are etc. The exercise is designed to make them familiar with the use of the verb "to be".

Adlile. Delph.
History:
Same as VIIb.

Latin:
We have taken up one of Aesop's fables as follows: 

*Vivabant* 
Grant olim in agro tres boves. 
Grant boni amici et *maxt* 
in magna concordia. 
*Ex causa non* 
a feris occisi sunt. 
Uno die tamen discordia inter eos venit. 
Tum facile singuli a feris capti et occisi sunt. 
*Fabula docet:* 
Est multum boni in concordia.

Miss Schibsby.

Number Work:

Have been working on the reduction of fractions to a common denominator and the addition and subtraction of fractions.

Miss Bacon.

Science:

One hour was spent in studying the electrical principle of the dynamo reviewed by attempting to perform Faraday's experiment of producing a current by a coil of wire about a permanent magnet. 
A detailed description of apparatus will be given when completed.

The children are working out the mechanism of the movements of the forearm by the biceps muscle. The mechanism of walking was also taken up.

Miss Camp.

Textiles:

In order to get the work of last quarter clearly in mind before going on we took up a brief review in the following way:

1. The materials used by people living in primitive conditions.
2. Articles made for clothing and for use in the home.
3. Method of weaving and patterns and designs used by the Hawaiian and American Indians.
4. Basket weaving divided into two classes: (1) Woven; (2) Coiled.
   a. Plain or checkered—flat material of same thickness and flexibility.
      (1) Diagonal. (2) Checkered. (3) Colors,--two or more forming a geometrical design.
      (4) Strips of different widths.
   b. Wicker work: warp rigid and weft bent in and out.
   c. Twine: warp rigid and weft two-ply. This may be made either of homogeneous material or of two colors for design.
   d. Coiled or sewed (bone needles) flexible material for calking.
   e. Baskets showing different patterns and methods of weaving examined.
   f. Choice of materials and patterns for weaving.
   g. Hand-work--
      table mats; baskets for sewing room. Suggested that children also make waste-paper baskets.
   h. Materials--bamboo, la halla, brown fern, rafia (natural color and dyed), reeds. Suggested material would be sweet grass, grass as used by Indians; also that grasses in the neighborhood be gathered by children during the summer.


For the Winter Quarter we have taken up a review of the materials and methods, 2. study of difference in cloth and basket weaving, 3. study of advantages of cloth over skins, 4. first suggestions of cloth-making discovered by shepherds finding cast fleece after long exposure to sun and rain. In this the fibres would be closely matted together. 5. Felt making due to character of wool fibre. The children found that wool could be matted easily to form a web similar to cloth. The fibre could be twisted to spin into a thread.
They examined the fibre for its length, elasticity, crinkly character. They were satisfied to think the way the wavy character of the fibre explained its felting and spinning properties. It was suggested that the surface of the fibre might be sticky and help in making the fibre stick together and to the other rough surfaces. The fibre is to be examined microscopically. The children were to find out the best way to make felt. The primitive way was suggested, where from long use of the material the first way of felting was discovered perhaps by accident. This method was considered too long and haphazard. We proposed to have each one try a different way, which was no improvement. It was proposed to them to experiment with the fibre to see what happened when it was exposed to rain and sun. In the next lesson through experiment on the wool fibre they will try to discover the processes of felt making.

In the microscope they discovered the structure of the wool fibre, and made comparison of long and short wool in a number of ways and per inch, and relative position of the waves in long and short wool. One asked about hair which was given as an extreme example of long wool. This led to a discussion of hair cloth, flannel and worsted. The comparative amount of water held by each fibre was theoretically considered, also when water was not present the amount of air. This led to the selection of cloth for winter weather and sultry and rainy weather. They examined their clothing for examples of the different classes of wool cloth.

Miss Harmer.
French:

This group is proceeding more slowly with the verbs. This week it learned the names of the months, the seasons and the days and the order of the months, which has led to the study of the ordinals.

Mlle. Delphit.

Cooking:

Same as VIIb.

Music:

In this group we have begun the study of harmony by finding out what intervals will sound well together. We commenced with the unison and went on up the scale listening for the intervals that would sound well when writing for only two parts.

Miss House.
Latin:

We have taken up all the cases except the Ablative and I am
giving them the Argonautic Expedition for drill in cases.

Miss Schibsby.

History:

Since the last report we have continued the history of Vir-
ginia down to the time of Governor Spotswood—taking up in order the
following chief topics: The First Representative Assembly,
the Indian Massacre, Dissolution of the London Company, Berkeley's
Rule and Bacon's Rebellion, Knights of the Golden Horse-shoe and
ending with a general review. We read from Scudder's Washington
the description of a Virginia plantation and individual children
reported on brief references concerning manner of life, schools,
modes of traveling, the coming of the Cavaliers, etc. In discussing
the first House of Burgesses the children were asked to suggest laws
which would probably be enacted and from their remembrance of the
early mistakes and difficulties of the colony were able to propose
laws against idleness, trade with the Indians, laws regulating
agriculture, etc. They decided in advance that King James would
not be likely to tolerate for long Virginia's growing independence.
As to the significance of his seizure of the charter there was a
division of opinion, some thinking that Virginia would thrive bet-
ter under the king's protection because he had so much to think of
and would not interfere with them, and others remaining loyal to the
London Company.

In connection with the reading from Scudder the children were
asked to notice his paragraph structure, to sum up each paragraph
in a few words and then to take these topics as a guide in their
written reproduction of a part of the chapter. The results varied greatly, but a talk about their papers showed that most of them have gained a fair idea not only of the proper unity of the paragraph but also of what constitutes good connection between succeeding paragraphs. It was also noticed that without any further suggestion some members of the class attempted to apply the results of this talk in their next written work.

Miss Hoblett.

Number Work:

The work given the children to do at home was to look over their note books and learn their definitions thoroughly. This was done to some extent. The next day I gave them one or two different examples in Proportion simply for them to give the statement. Then I asked them to write a general rule for the application of Proportion and in case they could not do this gave them other examples to work. Only one child succeeded in giving a rule. This was Ralph. His rule was as follows:

When two things of one kind are known and one of two related things is known, the fourth thing can be found by Proportion."

All but the word "related" was his own. For the next time I have asked them to try again.

I find that they do not know how to cancel and how to reduce to a common denominator. So Miss Bacon has been taking some of the children at this period for drill in this work.

Miss Moore.

French:

This group is studying the verbs of the first conjugation,
and has begun to write the short phrases they have been using. We read short stories once a week.

Mdlle. Delpit.

Science:

At the beginning of our work this week I stated what it is that we are to study this quarter and since we need occasionally to make or talk about measurements, I gave briefly the measures of length in the metric system. We then continued work on the amount of oxygen in air, this time using instead of a match a bit of phosphorus. The results differ more widely than I am able to account for. In one case in which I think everything was done with considerable care, the result was in the neighborhood of one-half.

We also prepared some carbon dioxide and saw that a match goes out in it, that its solution in water turns litmus reddish and lime water milky and that the reddish solution of litmus can be turned blue again by ammonia and this in turn red again by hydrochloric acid.

Arthur Taber Jones.

Sewing:

Sketches for pattern and execution to be in bead work on chamois ink wipers. A few principles involving rhythm, balance and foundation form or motive were given and well borne in mind by the children. A sense of limitation was apparent in the designs as a whole but as these children have done absolutely free work hitherto, they are ready for system and will soon assimilate these few ideas and work under their influence unconsciously. Mrs. Brown.

Miss Feuling.

Number Work: Have continued work of reducing fractions to decimals and the reverse. We have begun Percentage in connection with quantitative work in connection with their science.
History:

They have been given an hour a day as a study hour five times in the week. This is divided so that they spend a half hour on two days with their history, a half hour on three days with their mathematics, a half hour on two days with their Latin, a half hour on their French and an hour on science. This work is done at home and the children are held accountable for the performance of it in school. One of the half hour history periods is spent in looking up current events, the other in writing out the work of the week that has been given or in looking up some point connected with it. The other facts for their history are given by the teacher or are read in class. It would be better if the children had an extra half hour at home, but in giving out the study time we thought it best that they should not have over an hour a day and that they be held rigidly to the work given them.

This week they have taken up the government of the Plymouth colony. They have looked up who were the voters and what powers they had and in which departments of the government the legislative, judicial and executive power was vested and have discussed the change from a democracy to a representative government.

Miss Bacon.

Latin:

We have reviewed the declensions and done a good deal of grammar analysis.

Miss Schibsby.

Cooking:

We have taken up a study of meats, first, with regard to the structure of the muscles. We found these to be bundles of fibres held together by connective tissue. This connective tissue was
dissolved in cooking as gelatine. Second, we took up the composition of the muscles and made a rough estimate: water 75%, fat 2%, galactose (muscle sugar) 2%, salts 2%, albumen 2% extractions myosin 18%. Third, we took up the difference between tough and tender cuts of meat. The tough cuts we decided were due to exercise, that is, more blood or juice in the parts exercised. This gave more flavor and more stimulants in the form of extractions. The tough tissue is made tender in long slow cooking. The tender cuts we saw were dry and contained little juice, had less flavor and less nutrition and the only advantage in having tender cuts was for broiling. We took up the divisions of the animals in various cuts of meats and they made a drawing of the cuts and the qualities of cuts indicated by the position in structure.

Myosin was given as a form of proteid which could not be dissolved either by hot or cold water; could be used in stews, broths, etc. When only the liquid is used, they lose the nutritious parts of the muscle fibre and have the water with galactose, salts, a small amount of albumen, fat and extractions in solution. The extractions were given as a product of decomposition through the exercise of the muscle and acted as a stimulant on the nervous system. They should be given to convalescents and at the beginning of a meal starting the flow of digestive juices. This analysis suggested the advisability of using meats left from stocks, broths, etc. in made-over dishes, of course combining with foods of decided flavor.

Miss Harmer.

Textiles:
Reviewed the development of the loom for the benefit of Group IX and wrote an outline to put with their records on development of spinning and carding made last year. Miss Harmer.
Sanitation:

We took up in general the planning of a house, first in regard to its primary conditions of location and situation, and, second, in regard to its ideal conditions and the laws governing them. The following points were brought out in the lesson through discussion; after a few leading questions were put, such as, what are the first considerations in building? the class readily suggested the substance of the lesson.

1. Location in a city. This would be influenced by business and the character of the neighborhood which might be either fashion or convenience or health.

2. In the country the location would be due to elevation on a hill-top or the slope of a hill or valley. We took up the desirability of each position with regard to exposure to winds, amount of moisture, drainage and sunshine. The top of the hill we found would be bleak and there would be strong winds. It would be hot during the day and cold at night. On the bottom would be too much shelter, drainage would be difficult and the nights would be damp and close. The slope of the hill would probably be breezy, sunny and have drainage. Therefore, the best position would be as near as possible to the top without loss to the benefits of shelter. We saw that the slope must not be too steep and that if the hillside were close to the back of the house, it would tend to create dampness and lack of free circulation, so a gradual slope was considered most ideal.

We took up the general aspect with reference to sunlight, prevailing winds, etc. Most of the children chose an eastern exposure because of the character of the prevailing west winds but they reconsidered their previous choice with reference to sunlight.
to the south and southwest exposures. Different members of the
class were assigned to select rooms at home to find out the duration
and time of sunlight available in each exposure. To each child
was assigned as home work the planning of a house in the best pos-
sible position with respect to these considerations. Widely diverse
locations were selected, such as Chicago, Lake Geneva, Denver,
Alabama, Colorado and California. The children asked about the
primitive houses and were shown illustrations of the habitations of
man in all ages, by Le Duc. The first ten chapters are to be read
aloud during the sewing period. The boys are taking turns in read-
ing at home in the evenings.

Miss Harmer.

Sewing:
The boys worked on the loom. The girls who were making skirts
continued that work while others prepared work for the lower groups,
such as putting on the first stitches for wash cloths which are to
be knit, winding wool into balls, etc. New materials were measured
and cost calculated.

Miss Tough.

Music:
Same as Group VIII.

French:
This group is studying the verbs. They have
short phrases which each child makes up himself and in which
the verbs of the first conjugation are used in the present, the past
and the future. At present they have learned only the reflexive verb, se promener, and have described what is seen in a
walk in the country. In connection with this we have seen that