Cooking (b)

Methods of Cooking Reviewed.
A pot roast was to be prepared for luncheon and the children talked about what was desirable in a roast, viz., the retaining of all the juices within the meat and the fibres made tender. From experiments made last week they knew that to put the beef in boiling water would cause the hardening of the outer surface and the thickening of the albumen, thus preventing the drawing out of the juices. They saw, when attention was called to the size of the piece of beef, that it would cool the water considerably below the boiling point and it was thought safer to sear the outside of the meat in some way before putting it into the water. The frying pan was suggested by one and that was used to sear quickly the whole outer part of the beef, and it was then placed in boiling water. The children knew from experiment that boiling would harden the fibres of the meat, so the heat was regulated to keep the water at the simmering point, and a cover was closely fitted to the pot to keep in the steam, and thus help to soften the meat.

The class wrote about the three ways in which meat had been cooked and the reasons for them—beef-tea, soaking in cold water and gradual heating to draw out the juices; stew, placing in boiling water and simmering to draw out juices partially and soften fibres; roast, searing outside with high temperature, boiling then placing in water and simmering to retain all juices and soften fibres. The written statement was clear, but the spelling of even simple words was an effort in many cases.

Macaroni with tomato sauce and cocoa were prepared in
addition to the roast.

Number Work:

If it takes $1/3$ cup of tomato to make sauce for one person, how much will it take for 7?

If it takes $2/3$ cup of milk to make cocoa for one person, how much will it take for 7?

Miss Tough.

French (a & b).

They are learning the different trades. Each child has chosen one: fisherman, baker, etc., and they have answered such questions as follows: Who are you? I am a baker. What do you have? I have a bakery. What do you make? I make bread, etc. They have taken some time to understand the difference between to be, to have, and to make. Now b understands it well and is going to find out in more detail what is done in each of the trades chosen. We have also had some exercises in pronunciation, placing special stress on the vowels, the sound of which the children have some trouble to remember.

Mdlle. Delpit.
Group VIII.  

February 3, 1900.

History.

Same as VIIb.

Latin.

We have taken up two stories. One of these is the one I have been giving to Groups IX and X. I dictated it to the children and they did it better than group X. This is the story of The Cock and the Eagle and the anecdote of Narsica and Ennius.

Miss Schibsby.

Science.

They have spent all their time working on the metric system and have now formulated all the English measures and contrasted them with the metric system. In doing this they have formulated also the meaning of mass and the way in which measure of weight differs from all other measures; also the convenience of having this measure of mass and cubic measure constituted so that one can be readily converted into the other. More than half of the time has been spent in actually making in tin and pasteboard the cubic measure, as I found that they had no clear idea of comparative sizes of a cubic centimeter and a meter. One child had no idea of what surface measure is and took half an hour to apply in the metric system what she had stated by the English square foot and square yard.

Miss Camp.

Number Work.

We finished reduction, addition and subtraction of fractions.

Miss Bacon.

Cooking.

Same as VIIb.
Voice Work.

The children are working on poems selected for them individually. These children more than any other group show interest only when they are working on the floor. Each one is anxious to recite his poem, but the rest are not interested and do not attend. They are memorizing these poems a little, but not much.

Mrs. Butlin.

French.

They have had two stories: the fable, "The Wolf, the Goat and the Kid", and an anecdote from Aesop. The children have learned the nouns and the verbs and have tried to reproduce these stories. Their attention has been especially called to the gender of the nouns and the agreement of articles and adjectives.

Mdlle. Delpit.
Latin.

They have now taken up the declensions and in addition to this I have given them stories that were given to Group VIII. for sight work and we have gone on with the Argonautic Expedition. The children as a whole are working well.

Miss Schibsby.

Number Work.

One hour was spent in getting an idea of what individual members of the class could do in manipulating numbers.

Miss Bacon.

Science.

Their time has been devoted to working out the metric system with its relations to the English and their experiments with oxygen as a typical instance which they can see of a gas becoming part of a solid and vice-versa. They have weighed certain portions of iron filings and put them away to "rust". Some of the children know that this rusting is oxide formed by contact with oxygen. They have been told this many times but all except one or two failed to apply it, or if they did apply it, thought that a union of a gas with a solid would make that solid lighter. They told me that it either would not gain at all or lose in weight. The iron has been exposed to the air for a certain number of days, then was weighed and the percentage of gain found in each case. Then they wet it again and exposed it and are to continue this until there is no change in weight. The results of the first weighing are not encouraging. The errors
were probably due to errors in weighing.

Miss Camp.

Voice Work.

They have been reading Miles Standish. They are very faulty in breathing. Some of them concentrate very well and others lack, in even the ordinary use of English. They show a good spirit and work hard. Some of the children show a very limited vocabulary, which I am trying to enlarge.

Mrs. Rutlin.

French.

They do a little reading once a week. They have written an exercise in the form of a fable in which are used irregular verbs (vacilir, aller, dire) with the verbs of the first conjugation, all in the present tense. Some in Group X. are very good. Their attention has been called particularly to the gender of the nouns and the agreement of adjectives and articles. They are now going to learn the past of the verbs already used.

Mdle. Delpit.
History.

They began the study of the Massachusetts Bay Colony. They read and discussed the character of the people comparing them with the founders of the Plymouth Colony. They took up also the obtaining of the charter and what rights were given by it, the selection of a spot on which they settled and the establishment of the government. They took up the relations with the Indians and the later troubles with them and the forming of a new confederacy for protection. They spent a half hour out of school in looking up their subjects in current events and another half hour in writing up some subject connected with the work of the week.

Miss Bacon.

Latin.

The children that have just been added to this group have been working on the charts and the rest have been translating and learning how to use their vocabularies or writing out in Latin the story of Rome using the words they know. Once a week I give them dictation exercises.

Miss Schibsby.

Voice Work.

Each member of the class has a poem. I am taking them from standard authors. One is "How They Brought the Good News from Ghent"; another parts of "Young Lochinvar" and Longfellow's "Emperor's Bird's Nest". They are becoming interested and are learning to tie their thought to the rhythm; that is, they concentrate on a definite thought. They are also improving in breathing. They memorize what they give, memorizing
it from mental pictures, not from words.

Photography.

The work in Photography prior to January 1st consisted mostly of lectures on its discovery and the first methods for reproducing pictures, leading from the "camera obscura" to the camera of today, and from the old time daguerrotypes to the platinum finished photograph of today. Work in developing could not be taken up at this time on account of having no dark room.

Since January 1st I have given demonstrations in the taking and developing of pictures. After this I had them take pictures and develop them themselves. In this way I could point out their defects and give them the reasons for such defects.

A. T. Stewart.

Science.

During the first hour this week I gave as an example of the use of the interferometer Prof. Michelson's measurement of the meter in light waves (A. A. Michelson, Détermination expérimentale de la valeur du mètre en longueur d'ondes lumineuses) and the second hour we devoted to writing on interference.

Before describing the measurement of the meter I asked a few questions to bring out the need of a standard of length, defined the meter—the distance between two marks on a certain bar in Paris—and suggested the desirability of some standard the constant length we could feel more certain of. I then told of Prof. Michelson's and Morley's suggestion of measuring the meter in light waves, briefly reviewed the interferometer and then gave, in sufficient detail to make it intelligible, the way in
which Prof. Michelson actually measured the meter in red, green and blue cadmium light wave-lengths. I think the questions that were asked showed that the work was fairly well understood and at the end of the description Dorothy wanted to know of what good this measurement was. In answer I showed the desirability of being able to compare linear measurements made now with those which may be made a hundred years hence when the actual meter bar may be changed somewhat in length, and also the high accuracy of the value that this work gives us for the wave-lengths of red, green and blue cadmium light.

In the five minutes that were left I told, as another instance of the use of the interferometer, about a measurement that a Mr. Joffonnet made at the University of Chicago some couple of years ago of the thickness of the black spot in a soap bubble.

When we came to write there seemed at first to be considerable vagueness as to just what interference is and a feeling of not knowing exactly what to write. The first thing given on almost all the papers was a description with explanation of stationary waves in a rope, and the second was some interference phenomena produced with a tuning fork. Two or three got so far as to write about Newton’s rings and Fred gave Newton’s explanation of them. Willie and Ralph stayed a few minutes after class to get more clearly in mind the explanation of Newton’s rings on the wave theory.

Arthur Taber Jones.
We continued working with the furnitures of the playhouses, the children that came going on with the work they had begun, so that nearly every child has been doing a different thing. Along with this constructive work we used the blocks to make things suggested by the children. One of these was a toboggan slide with little houses in which to keep warm. The next day they thought it would be fun to have a large one and work in a group. We had several houses in which to get warm and made the children's homes near and surrounded a space with blocks to indicate a pond where they could skate.

We have been playing a game in connection with the carpenter's work. The children played that they were boards in a house and then having a fire engine house built out of chairs nearby. Some of the children were horses, some firemen and others were the mother and father who discovered the fire and turned on the alarm. Then the fire engines came and the children made the sounds of the water poured on the fire. When the house was burned down, we wondered what the family would do and then brought in our carpenter game and saw how they would go to work to build a new house.

We played this game with IVa and then with IIIa and b and found that IVa really got more out of it. They had more suggestions to offer and seemed to enjoy it more than the younger children. Afterward the children suggested building a house with blocks and then building the fire engine houses near by and then brought in the patrol-box from which to turn on the alarm. They used blocks in all this work, so that the same idea
was carried out through different materials through the suggestions of the children.

We cooked whole rice.

Miss Scales.
Social Occupations (a & b).

They have gone on with the sugar plantation. They found that one of their pieces of sugar cane had buds on it above the leaf scar and compared it with growing plants and saw that the branches of a plant usually come out above the scar. They therefore decided that this might grow and so a piece of it was planted. They were shown pictures of a sugar plantation in all stages of growth and the methods of extracting the sap. They have boiled some of the sap from the sugar-cane and have found that when the water is nearly evaporated it turns into something almost like molasses and they found little grains of brown sugar at the bottom. After boiling their white sugar syrup which they made last week almost to dryness, they found that the sugar crystallized out and thus the sugar could be reclaimed from the syrup. Some of the children thought that after once being made into syrup it could never be dried again.

The children found that they could not squeeze out the sap from it again very easily as it is done in a sugar plantation and having found that water would absorb sugar they were asked about how their fruit syrups could be made and suggested boiling with water. So they cut up the cane in small pieces and boiled it with water and thus got the sweet syrup.

The cottonseed planted some weeks ago has just come up.

a & b spent one hour together and I read to them from "Black Beauty". The children of each group have spent an hour playing store with toy money. Some of the children could not make change for over 50 cents. They know that two 25's are 50 and four 25's $1 and how many dimes there are in a dollar.

Miss Andrews.
Cooking (a & b).

A review of cocoa bringing out the points touched upon in preceding lesson and then calculating how much of each ingredient would be required to be cooked for the class of twelve children. As the individual receipt required 1 T cocoa, 1 T sugar 1/2 s.s.p. salt, 1/2 cup milk 2 T of water, we found three different problems. They readily found the required amount of cocoa and sugar. The salt was worked out by pairing off the children, two should need 1 salt spoon; milk in the same way. This method was suggested by several of the children, but they were not able to see that it would require 6 cups of milk for the same reason that it required 6 salt spoons of salt. They were obliged to count it all out again. The water was counted out by 2's by each child. Several were able to get to 18 when they were lost. One child with much help finally reached 24. One child cooked cocoa for the whole class.

The cornmeal was recognized by most pupils as an "old friend". They were told that it required five times as much water as cereal and that they were to take 1/4 cup cereal. Most of the children were able to give the required amount of water and the best method of measuring it. They seemed familiar with the 1/4 and 1/2 cup and were able to state that 1/2 cup contained two 1/4's.

Mrs. Paxter.

Art Work.

They have been working on clay for about two months and have begun to show a little fatigue and a desire for colors, so that they will be given a good deal of color now for a while. Hereafter we shall perhaps alternate between the clay and the
color, with the younger children perhaps using one day color and
the next clay. We are obliged to use clay in order to give them
the handling of it.

Miss Cushman.
History (a).

They spent about half the time on individual work, each child doing something from which he must draw the conclusion himself and apply in using his smelting place. In order to find out which melted the more easily, lead or tin, they weighed one ounce and a half ounce of each and melted each, timing them. They found the discrepancy in repeating this due to the fact that the second time they melted the tin it was in a solid case as it was granular. They then repeated it again and the tin divided into small pieces and they got the same result as before. Then they saw that the tin melted more easily than the lead. They decided to use the granulated. Two of the children in trying to combine melted tin and a melted bead from a copper wire have not yet succeeded in doing this themselves. Two of the children worked out a way of molding in sand. The whole class then took up the method of molding, and are making arrow-heads or any small objects which will do for weights. The child who first worked out the method in molding has not yet succeeded in making a perfect mold and exclaimed in despair: "Do you think I ever will make one that will work?" His lack of success seems to be due to impatience which prevents his applying the two or three conditions absolutely necessary for success.

Miss Camp.

History (b).

The first part of the week we spent in talking over the kind of country through which the people owning flocks were traveling, emphasizing the sort of soil, the water supply and the distance from sea and mountains. We then began talking about
different sorts of rocks. We looked at various specimens among them at some native copper. All but one in the class knew that water as it freezes expands and that in this way would split apart the rocks in winter time, and that these rocks would be rubbed by water against other rocks and ground into soil. Much of this was review, the new part being the occurrence of metals. The children tried melting and hammering pieces of copper, tin and lead. We spent a half hour in reading. One child would whisper a sentence for me to write on the board and then the others would read it.

Miss Hill.

Art (a & b).

They have finished their horses. Out of the two groups about half are very good reproductions of the cast so far as the action is concerned. The horses are not more than 2 inches high. In doing this the children found some difficult in getting an idea of ratio in finding how long to make the horse's legs. It took some time to have them understand that they could measure the legs of the cast and then compare it with their own and so get an idea of proportion. The interest continued throughout the entire work, although about three weeks were spent on it. On the last day they reached a point where they could not see there was much to do and so asked for color work.

Miss Cushman.
History (a).

This week I began to tell the children something about the life of Columbus--where he was born, what his education had been, how in 1473 he went to Portugal. The children found out how old he was at that time, supposing him to have been born in 1436. We talked about Columbus' wish to prove that he could reach Japan by sailing west from Spain. I showed them a copy of the map which Columbus used in which the Americas were put in dotted lines. Then I asked the children how they thought Columbus would go to work to get his ships. They all thought he would open a shop and earn the money.

Miss Hill.
History.

We spent the history time in discussing Columbus. I told the children that he was a map-maker and tried to get from them some ideas of how maps were actually made. I showed them some old maps and some modern ones, so that they could see the changes that have come about with more accurate idea. We discussed Columbus' idea of the rotundity of the world and mentioned the books that were printed about this time giving this theory. We spent a little time in getting the proofs of the roundness by diagrams showing the fact that the masts of the ships are seen first when coming in from sea, and the effect of the eclipse of the moon. This last was simply done by an object lesson showing that only a round body casts a round shadow. We discussed where would be the best place for Columbus to appeal for help and the children thought of Portugal, though those who knew the story of his life jumped to Spain as the place where he succeeded.

Then I told them about the conference before the king, and the feeling that some of the advisers had that the scheme was absurd and finally of the sending out of a secret expedition by the king. I asked the children to tell me what they thought would happen and they thought the men who went would not get far and that when Columbus discovered this deceit, he would leave Portugal. When we went on to his long waiting upon the monarchs of Spain and brought out the fact of the war with the Moors and the plague of the "Black Death" in Spain which cost the kingdom so much that it was difficult for the king to undertake this new task; then finally how Columbus started to go away and applied at the convent of La Rabida for food and gained the attention of the monk who interested himself in his enterprise and secured another in-
terview with the queen. Then I brought out the fact that Columbus demanded 1/10 of the profits. I asked the children how much Prince Henry had received and they remembered he had gotten 1/5 and we decided which was larger. We also took up Columbus' demand for the position of admiral of the new lands and what this would mean in rank next to the king; and the difficulty the king would have in granting this to a comparatively unknown man when so many of his own subjects had done great things in the wars with the Moors and would consider this favor an insult to them.

We spent one period in trying to get together some facts of Columbus' life to write. When the children were asked to do this, they first exclaimed that they didn't know anything about him and one girl said that the only thing she knew about him was that he was a beggar, referring to his request for food at the convent; but after a little while they were able to get together some facts of his early life and to write two or three sentences.

We spent one period on number work. Only three of the class were present and we took up the drawing of parallelograms of such sizes that all could be reduced to 1/2; that is, one was 4 x 8, one 3 x 6 and another 5 x 10.

We have gone on with the reading of Robinson Crusoe. Most of the children who have been present at school have nearly finished it at home, but we are re-reading it aloud in order to see that they have pronounced all the words correctly. One day they seemed unusually tired, as it was the last period in the morning, so I read to them from 'Davy and the Goblin' of Davy's visit to Robinson Crusoe island. This is written in the Lewis Carroll style and is the story of a little boy's experience in
a dream after reading "Alice in Wonderland". The children enjoyed it very much indeed.

Miss Runyon.

Number Work (a).

One half hour a week is given up to these children for special number work. As no work had been assigned them, I simply tried to find out how much they knew about numbers and we added by 3's the grains of corn in different measures. Most of the children had difficulty with this.

Miss Runyon.

Science (a)

They continued the work on their compasses. They are trying to fasten the suspended needle inside a beaker so that the air currents will not interfere, in order to demonstrate that like poles attract like and also that glass is not impervious to magnetic currents.

Miss Camp.

Science (b).

In connection with the changes in the rock surface of the earth due to the action of water and air they have taken up the formation of limestone. It is very difficult for them to see or to believe that the marbles or transformed limestone are made from shells and I thought that perhaps it would pay to show them that the test would apply (effervescents and hydrochloric acid) and could be carried further by showing that the gas which came off was the same gas that came from the shells. We placed some pieces of clam shells in a test tube and added acids and corked the test tube to try the gas next week.

Miss Camp.
Textiles (b).

They have spent one period in spinning.

Miss Harmer.

Cooking (a).

Meat—Source, Structure (lean, fat).

The animals used for meat were classified under the heads of meat, game, poultry, and fish, and the children were asked to write all the names they could think of for each class. In the meat class it was found that the meat and the animal from which it came usually had different names. The class was familiar with all the names of both, but in several cases no one knew from which animal a certain kind of meat came. The names were all written and arranged in their order. A piece of meat was examined and found to consist of lean, fat and bone. The lean on being pulled apart was seen to be made up of many long bundles (fibres) held together by a delicate skin (connecting tissue). The fat was held together by the same substance and it was found to become liquid with the application of heat and solid again on cooling. In a liquid state it showed that it was made up of tiny separate globules, very much like what had been found in butter.

For luncheon Hamburger steak was prepared and cocoa made.

Number Work: If it takes 2/3 cup milk to make cocoa for one person, how much will it take for 5? (The change from 4ths which they have been using to 3rds was found rather difficult.)

O.K. Miss Tough.
Cocking (b).

The kitchen was too cold to work in, so Mary cooked rice and prunes for their luncheon. A half hour was given to a review of the composition of milk. The names of the parts were written on the blackboard. We undertook to separate these different parts. They said that they could evaporate the water which would leave the other materials in a dry solid condition. They were unable to find the way of separating the different solids, which will be taken up next time. They knew how to separate them qualitatively by first taking out the milk fat, then the casein, as was done in the making of butter; but saw that this method would not be a complete separation. They spent a half hour in writing out what they knew about milk and its products.

Miss Warmer.

Science.

The children distilled some water and measured out 50 cc. This was done to find the relation of weights to measures. They measured enough water to weigh 50 cc. and called that a cc. weight. It took them a long time to do the weighing and measuring. They have forgotten a good deal about balancing the scales. They first measured the beaker and then put in the water and then weighed that and then the children did not know how to find out how much the water weighed. They thought they would have to pour it out but finally discovered that by subtracting the weight of the beaker from the whole they would have the weight of the water alone. Some practice was given them in
writing 10ths, as the weights came out in fractional grams. The children could see why the French system is an improvement on the English because of its having a basis, but the fact of its being a decimal system is not appreciated yet.

Miss Andrews.

Art Work.

They have just about finished the sketches which they were making in clay of the woman grinding corn. This was an experiment to find out whether they could get the form by working directly from the pose where the figure was draped. I found that this would not be as good a means to give them an idea of the proportions and form of the figure as working on wire putting in the figure nude first, but that it was an excellent way of visualizing. They saw the large planes which they were working with and I think it is a good plan to give them this kind of work occasionally.

Miss Cushman.
History.

Their work has been the continuation of the Virginia Colony by reading to them from the original statement by John Smith and men of the colony published in the 'Settlement of Virginia' and by talking with them and by their reading from Eggleston's 'First Book in American History'. We have had the first year of the colony, John Smith's capture by the Indians and his release, through the intervention of Pocahontas.

Miss Runyon.

Physiography.

We have taken up the erosion of rivers as affecting the Appalachian Range. The children had found the Hudson River and the Mohawk Valley which pierces this system, but the other two openings, the Potomac and Susquehanna were not clearly enough defined on the relief map for them to notice. We began by going back to what we had said last week about the beginning of rivers in small mountain streams. Then I asked them what effect the river would have on the soil, especially in times of floods and torrents, and they told me that it would wear deeper and broader channels and finally that it would wear back in its valley and even through rocks. We saw by diagrams where the water would go and how the falls would be made to retreat and become less and less steep and how the sides of the gorge would look. One of the children mentioned that the Niagara Falls was wearing back in that way. We saw that in this process rivers would wear back and include other rivers, which we called "stealing" a river, and then increase their own flow of water. We saw that the old river with its supply cut off would dry up and become a valley.
I asked the children why, if this process had been going on for hundreds of years all the mountains were not worn down, and they told me it was because they were being lifted up again, or that perhaps some were worn down and other lands were lifted and became mountains.

Miss Runyon.

Number Work.

They have taken up the proportion of water to wheaten as 7 to 1 and use 1/4 cup cereal. In estimating the number of cupfuls for two people, four people where they got half cups or whole cups, it was more difficult for some children to see that they used 7/2 or 7/4 and then reduced it to whole cups, but some of the children did the work quite easily.

Miss Runyon.

Textiles.

They have planned a frame to be made for their loom in the shop and have made a drawing of the heddle which they are to use in their looms.

Miss Harmer.

Science.

They took a half hour in writing record of work of last week and spent the other half in making a pewter alloy and an experiment with antimony, which they have not previously used. The children were able with the blow pipe to fuse the antimony and to note the white incrustation that was made upon the charcoal and its queer behavior when the molten mass was poured out upon the table.

Miss Andrews.
Cooking.

same as Va.
History (a).

This group came to me after Christmas showing a great lack of interest in their history. After several methods were used to arouse interest, I had them choose a certain captain and represent him. They described their captain and told where he lived, what he loaded his ship with in the colonies in about 1760, the route he took, where he unloaded and with what he loaded his vessel for the return voyage. This took several days but the children were extremely interested in the work, so that for some time it shall be continued.

Miss Pacon.

History (b).

We took up the formation of the Dutch East India Company, discussing its powers and why it was necessary to delegate these powers to a company. We compared these powers with those which are commonly given to a trading company in these days. The children were surprised to think that they had the right of declaring war and making peace, of forming alliances with the different powers in the East Indies and exercising other sovereign rights. They followed the different routes which the ships would take in going to the different islands and different parts of the East Indies and spent two days in giving their ideas as to the location of the different East India islands and the waters surrounding them. They spent one hour in writing up the work of the previous week.

Miss Pacon.

Science (a).

Continued their experiments with flour. Each group worked—
ing together took two weighed quantities of two kinds of flour, which they tied up in muslin, kneaded in water until the crude gluten was sufficiently pasty to hold together, then washed out in water without using the muslin, and finally left to dry. They have not yet weighed the amount of crude gluten obtained.

Miss Hill.

Textile (a).

They looked at the flax stalks they had left to soak last week and tried breaking some of it by pounding with a mallet. They left the rest to dry and are breaking.

Miss Hill.

Science (b).

This group is now to take up work on foods in connection with their cooking instead of going on with their work in physiology. The reason for doing this is to make a better correlation in their work and reduce the number of subjects. This week they worked out the quantity of water needed for cooking various cereals, the amount required for one cereal being known. The work is the same as that done by VIIa and described in a report a few weeks ago.

Miss Hill.

Textile (b).

This group also tried breaking some of the retted flax and one of the boys went to the shop and made a heckler by driving nails about an inch long through a 1/2 inch board. The plan was his own.
Cooking (a).

They were able to give directions for the quantitative analysis of milk. They said they would take a sample and weigh it, then evaporate the water, weigh again and get the difference. In order to separate the solids they would have to add a solvent that would separate one of the principles at a time. They could then filter and evaporate, the difference giving the weight. They knew that ether would separate fat, as they had used it in their experiments on cream. They were then told to add boiling weak alcohol, which would dissolve out the sugar and mineral salts, leaving the albumen and casein to be dried, then weighed. They started the experiment by evaporating the water, which took nearly an hour. In the meantime they wrote a record on the making of butter and cheese.

Miss Farmer.

Cooking (b).

Meat (continued). Study of cuts.

A picture showing the skeleton of the ox was studied and the various parts with their names and uses discussed. The reason why certain parts were tender and others tough was talked about and a picture showing the muscles in the animal’s body was looked at.

For luncheon a piece of mutton was roasted, using the principles discovered in previous lessons. The meat was weighed and the time of cooking regulated accordingly.

Last week the roasting was by moist heat and this week by dry; the outside being crisp and brown in the latter case, while in the former it was moist and soft, was found to be the chief difference in the result.
Group VII. February 9, 1900.

Besides the roast, cranberry jelly, boiled rice, and cocoa were prepared.

Number Work: For cranberry jelly use $\frac{1}{3}$ of the recipe finding the measurements in cups: 1 qt. cranberries, 1 lb. sugar, 1 pt. water.

Miss Tough.

German (b).

They spent a week on the German phonetic system. This has been done chiefly to drill ëméex=ërëë, so that they can write the various sounds from hearing.

Miss Schibsby.

Sewing.

Embroidery on canvas; mats and pincushions. In German a game before work of sewing was begun, introducing adjectives, colors of threads and size of spools. Not enough was done with the German to amount to anything, but the failure suggested a new method, which was tried with some success in the following lesson.

Mrs. Paxtor.

French (a & b).

They have continued their exercises in the pronunciation of the vowels, in which they have made some progress. They pronounce more easily. I have told them two fables and then asked question in which I used the words which occurred in the fable. Some remembered the words very well but others did not.

Mlle. Delpit.

Art (a).

They have finished their figure of Washington leading the
army and one of General Wolfe. The action in these figures is quite spirited. They took some pictures of Washington and Wolfe and tried to work up the expression of the face somewhat and succeeded pretty well. They will study the costumes so as to reproduce them. They are still very much interested in the clay work.

Miss Cashman.

Art (b).

They have completed their figures of Spanish heroes. In this they reproduced the Spanish costumes. Many of them succeeded in depicting the Spanish type of face and manner of wearing the beard. After the figures were all finished, they were put together and we picked out three or four of the best to keep for the school. The others were allowed to be taken home by paying for the clay. Only one or two cared to have their work destroyed in order to use the clay again. I took a vote of the class VIIb and VIII who worked together and only two children out of twelve preferred to draw.

Miss Cashman.
History.

Same as VIIb.

Latin.

Have finished Annius story and have just begun grammar work. We have taken up the actor and object case singular of the declensions.

Miss Schibsby.

Number Work.

They have been finding the solid contents of the different cubes, using the metric system for measuring.

Miss Bacon.

Textile Work.

Have finished experiments in making of felt and are now writing their records, which will be given when finished. Specimens are being mounted on cardboard with typewritten statement of treatment below.

Miss Warner.

Cooking.

Same as Viib.

Art Work.

Same as VIIb.

Science.

They have formulated the metric system again individually and have continued their work on metric measures.

Miss Camp.

Sewing.

Some of the children are making scrim doilies and others are working on needle books or mats. Mrs. Baxter.
French.

They have been given the two fables given to group VII. They have answered the questions regarding the fables quite well and have then related them.

Adieu. Depliez.
History.

We have discussed the life of the Pilgrims in Holland, their reasons for leaving there for America, the negotiations with the Dutch and the Merchant Adventurers for funds, their grant of land and attempt to obtain a charter from King James, the journey and further adventures up to the final choice of Plymouth as the site of their new home. We have used chiefly extracts from Bradford for our discussion. The children continued to make light of the "desperate venture" of the Pilgrims, feeling apparently that those who raised objections to the emigrations were unnecessarily disapprovable. One boy suggested also that King James was foolish to give the Pilgrims their grant of land except on conditions that they conform once more to the Church of England. Some of the children were asked to make lists of the supplies which the Pilgrims would need to take with them and it was noticed that weapons and ammunition of various sorts were uppermost in the minds of the boys, food, clothing, etc. being an afterthought. When asked how the colonists were to make their living in the new home, the first answer was, "Hunting", although the fact had been emphasized that most of them were farmers. The children were asked to suggest points to be considered in the choice of a site and gave water supply, timber for building and cleared land for planting, a harbor for their vessels and a hill for fortifications—all of which conditions they found satisfied in Bradford's description of Plymouth. When Plymouth harbor was first mentioned, one child thought it was very strange that John Smith should have named it Plymouth when he could not have known that the Plymouth colony was to settle there. Another suggested that it should have been called Scrooby.
in memory of the Pilgrims' English home.

Miss Hoblett. O. L.

Latin.

I have just begun working consciously on the conjugations with the personal endings. I have given them some stories to do at sight and have continued the Argonautic Expedition. We are analyzing very short sentences.

Miss Schibsby.

Number Work.

The work of this group has been in general the same as for VIII. But four of these children when asked to find the solid contents of the cube got the area of the bottom and sides. They were given a small set of blocks and built up the cubes of different sizes using 1, 2 and 4 inch cubes. We first cut out a square of paper 2 by 2 inches and found that there were 4 square inches in the bottom 2 rows of 2 inches each. Then they were asked to make a solid having the same bottom and 1 inch thick. They took four 1 inch cubes and put them together and saw that there would be as many cubic inches as there were cubic inches in the bottom. Then they made their solid 2 inches high, so that there would be 2 layers and then built up cubes 3 x 3 x 3, 4 x 4 x 4, and 5 x 5 x 5. It was necessary to turn back to linear measure because there were no solids of the metric system size.

Miss Bacon.

Number Work.

In order to find out whether the children had a definite
idea of the use of Proportion. I first gave them three blocks and asked them to find a fourth which would be the fourth member of a proportion. In some cases the blocks were of the same shape and in others of different shapes. Of course the cubic contents had to be obtained, so a review of the method of getting it and its meaning was necessitated. The final proportion might be put either in terms of length (where the blocks were of the same shape) or cubic contents. The next day four blocks were given them to find whether they were proportional in any way, with the purpose of giving them a clearer idea of the mechanical rule. The product of the means equals the product of the extremes. Each day they are required to make up an example that can be worked by proportion. Except in one case these examples have been correct. However, there is a lack of originality shown and a curious disregard of possible conditions. Strangely enough, not a single child has given me an example whose subject is the relation of light to the distance, which was the starting-point of all the work. Not all the children have yet been able to frame a good statement of when an example can be worked by proportion. Neither have they yet grasped the proof of the rule that the product of the means equals the product of the extremes, principally because they are not familiar with the principles of common fractions.

Miss Moore.

Science.

They continued their work on the making of metric measures and weights and repeated weighings of their rusting iron. One hour was spent in summing up, in relation to the changes of all the things they know as elements in the earth, the fact that the