...PULLETIN...

September, 1912

KENTUCKY FEDERATION OF WOMEN'S CLUBS

Department of Household Economics

Awould be true for those who trust me I would be pure from one are those whoever I would be brown for there is much to ruffer a much to dare Smould by friend to all the for the friendless, I would be humble for I thought thought the month of meakness. Irrould look up, and laugh, and love and torn and lift, "I the

KENTUCKY FEDERATION

...OF....

WOMEN'S CLUBS

PRESIDENT

MRS. T. J. SMITH, Richmond

Department of Household Economics

Mrs. CLARENCE L. MARTIN, Chairman.

749 S. SECOND ST., LOUISVILLE.

Mrs. M. A. Scovell, Lexington.
Miss Aubyn Chinn, Lexington.
Miss Katharine Christian, Lexington.

Miss Clara Sachs, Louisville. Mrs. John L. Woodbury, Louisville.

Miss Mae White, Louisville.

Mrs. W. O. Eaton, Ashland. Mrs. Robt. Goggin, Paris.

Mrs. C. L. Chamberlain, Irvington.

Mrs. Augustus Thomas, Mayfield. Miss Iva Scott, Bowling Green. Miss Mary E. Chickering, Somerset.

CONTENTS.

	PAGE
Home Economics	5
Efficiency	6
Farm Homes	7
Setting Table and Serving Meals	11
Clearing the Table and Washing Dishes	11
Making Beds and Cleaning	12
The Kitchen	14
Tables of Weights, Etc	16
Food Values	17
Bread Making	18
Recipes	20
Self-Rising Recipes	33
Laundry Work	35
Removing Stains	36
Systematic Housekeeping	37
Health	38
Care of the Sick	39
Sewing	44
Care of Babies	52

x Spec Col. 1 48 \$17.50 Black Luna Books

FOREWORD.

So many requests have come to this Department for literature on Household Economics without stating what phases of the subject were desired, that it was thought best to send out this little bulletin as a general answer, though specific information will be very cheerfully given at any time.

Much matter in this bulletin is also in the bulletin on Home Economics Work issued by the Kentucky Department of Education and accredited by the Superintendent of Public Instruction to another source; but it is the work of this Department and is therefore legitimately used here.

All articles not specifically signed are the work of the Chairman.

THE STORY of the OBELISK



ago, the two Ballard
Brothers—in response to the law of supply and demand—built a mill at Louisville that was destined to gain pre-eminence among the twelve thousand flour mills of the United States.

Chas. T. and S. Thruston Ballard are the names of

these two brothers—an honored name in the historic annals of Kentucky—who in 1880 founded the institution that has come to be known in the commercial world as the Ballard & Ballard Co. The first year's output was 36,000 bbls. of flour. During the past few years the average output has been 700,000 bbls. each year.

In 1880 the wonderful shaft or obelisk, "Cleopatra's Needle," was received in the port of New York as the gift of Egypt to the United States. Quick to grasp an opportunity, the work OBELISK was then seized upon as the trade-mark of Ballard Mills. OBELISK is today throughout the Southland identified with pure patent flour—the highest grade, the best flour for all purposes.

The "Ballard boys"—as they are affectionately known—have been the pioneers of the great milling industry in modern welfare work, in sharing profits with their employees, and last, though not least, in pure food legislation.

HOME ECONOMICS.

The changing conditions of society have made great changes in home conditions.

Thoughtful men and women have for some years been studying these changes from a scientific point of view and have evolved a new science which they have named Home Economics.

To many this means only science of cooking and sewing. These, however, are only two divisions of this many sided subject.

Home Economics is the science of right living.

It was formerly thought that women needed a knowledge of house-keeping with but little or no culture; then came the time when culture was deemed necessary while a knowledge of housekeping was scornd.

To-day the most thoughtful people see that both are necessary for the health and happiness of the human race and that no woman is really cultured without a training in this science.

Home Economics is a study of foods, their value in the body, their proper selection and preparation in order to give the greatest efficiency; a study of cleanliness to avoid disease germs and to give the body the greatest strength and efficiency: it is a study of how to spend the income to buy the necessary food, shelter and clothing and preserve a balance for higher things; it is a study of home management to give the best sanitary conditions, the saving of time, strength and money; it is a study of the principles of art, not for making pictures but that the home may be decorated with a view of restfulness, peace and beauty so conducive to health and happiness; it is a study of the laws of life and how these laws may be applied to produce a better human race.

When these subjects are thoroughly understood by women there will be fewer blind, crippled, defective and delinquent children born into the world and the healthy, normal children will be correspondingly increased.

This bulletin is written with the hope that the few hints given in it may cause some careful thought on this subject.

EFFICIENCY.

Competition in manufacturing and trade has forced the business men to carefully study methods of reducing expenses and increasing profits. This has brought out, a new science called Efficiency. Inventive geniuses have industriously worked along all lines, and produced marvelous motive power to take the place of many human beings. All sorts of labor-saving devices have been put upon the market and business men have eagerly tested these and, where found available, have made use of them, lessening thereby the expense of production or the handling of goods.

It has become necessary to have competent employees to intelligently use these devices for economic consideration.

It is wonderful to see the speed and accuracy with which articles are manufactured, stores are opened in the morning and the promptness with which counters and shelves are covered, the clerks file out and the cleaners file in and scatter over the prmeises, cleaning almost like magic.

Labor-saving devices that would revolutionize the home are today on the market waiting for trained minds to use them with the same intelligence displayed by the business man.

Home Economics will give the training necessary for this much to be desired condition.

Housekeepers try some of these devices by placing them in the hands of ignorant servants which results in a failure.

It is quite common to say you must always begin at the bottom to build anything. Here is a case where it must begin at the top, if we consider the housekeepr the top.

She can no more succeed in raising the standard of living, while ignorant of the principles underlying house-keeping and home-making, than could her husband secure a living in his business by leaving the workings of it to incompetent employees.

The home is a business enterprise as well as a mental and ethical school where the housekeeper is business manager, nurse, counselor, physical director, mental, moral and religious trainer.

FARM HOMES.

By Mrs. C. L. Chamberlain, Irvington.

Farmers generally have been aroused to an interest in scientific farming, but as yet have shown little interest in improving the home conditions.

The up-to-date farmer studies the needs of the crops to be raised and provides the proper kind of soil. He rotates crops to prevent impoverishing the soil and secures the best seeds to plant.

He studies the needs of his live stock and provides the right food in the proper proportions. He sees that the stock is not overworked and that the housing is sanitary. He knows he must be careful about this or suffer material loss in value of crops, stock and farm.

But what about the housing, feeding, clothing and educating his children, the care of his wife and mother of these children?

It is said that not more than 25% of the inhabitants of any community can do a full day's work of a healthy person.

Would not any sensible farmer get rid of any of his live stock that fell below the average of usefulness? Would he not try to improve the breeding of such stock? He can not rid himself of his children; they are what he and his ancestors have made them.

With no thought given to the future generation, marriages have been made between men and women without consideration of physical, mental or moral defects, until today perfectly healthy families are the exception and not the rule.

It is high time to remedy all this by beginning with our own families in giving to each member the best possible for his physical. mental and moral uplift.

The children certainly need as careful consideration as the stock.

The largest per cent. of women in the hospitals for the insane come from the farms. The cause of which is said to be due to the dull, unattractive, inconvenient homes and the monotonous routine of work.

A certain amount of work is necessary in any profession, but it should not be the dominant feature; it should be only a means to an end.

The scientific farmer does not complain of the dull routine of his life; he is too much interested in what is happening, in the results ahead. Science has transformed "the man with the hoe" into the man with modern machinery, driven by some motive power which relieves him of many high-priced and inefficient human helpers and high-priced beasts of burden.

Should not as much be done for the farmer's wife?
Instead of the woman with the broom and smoking cook stove,

there should be the woman with the vacuum cleaner, the gasoline or alcohol gas stove. Gasoline is cheaper, but more dangerous by far than alcohol. Alcohol is free from danger to the worker. The cost at sixty cents per gallon ought not to be more than five cents for cooking any ordinary meal and could be used to cost less. For ironing the cost is three cents an hour.

A forty-five candle power alcohol gas lamp can be used for two and a half hours every night at a cost of one dollar per month.

Whatever motive power the farmer uses for doing his work should be used also for driving the washing machine, the churn, the ice cream freezer, the vacuum cleaner, for his wife.

Soon electricity will be available for all this work at less cost than the farmer now pays for the inefficient methods. When the farm home is planned consideration must first be given to the number of occupants and the ideals of life.

If the ideals are for right living, giving the best physical, mental and moral results, the site should be one giving a pleasing view in a sanitary position where pure fresh water is most easily obtained.

Each farmer must decide these questions for himself as the needs of one family might not suit those of a different one.

Whatever one's ideals may be, in the planning health, convenience and beauty must be considered, the latter two being essential in promoting health and happiness.

There should be a good supply of sunlight, air and water. Be very sure the supply of water is pure.

It is said there is more danger of typhoid fever in many country homes than in New York City.

After selecting the site the planning of the house must be carefully considered. Never engage an architect to plan a house just to cost so much money; but after frequent consultations with the wife tell the architect the needs of the family and how the members intend to live in the house.

Be sure of the proper disposal of all waste water; have the kitchen the lightest room in the house, that all dirt may be seen and removed; for cleanliness is the keynote of the health of the family.

If possible, have a tank holding a good supply of water with all necessary plumbing for use in kitchen, laundry and bath. At least have a kitchen sink with a waste pipe running through the wall into a trough in the yard. Any farmer could do this much to help his wife.

Have no closets in kitchen, which should be small. Let this kitchen be the first room designed. Place it where the odors from cooking will be carried away from the house—not driven into it.

If this necessitates making the kitchen front the public road, plan the house accordingly, concealing the fact of a front kitchen; this has been done many times. Have a light pantry opening into kitchen with a refrigerator, into which ice may be put from the outside, saving much dirt from entering the house. Plan window box and storing cellar (as directed elsewhere). Arrange windows with view of giving light to every part. Have sink high enough to allow erect position in washing articles.

Having designed the kitchen, place dining room in most convenient place for saving steps.

Proceed with plans for the rest of the house, giving especial attention to sunlight and air for living room and bed rooms, arranging every detail with a view to convenience and comfort.

The beauty and comfort of a home do not depend upon the amount of money invested; but do depend on the good sense and good taste of the family.

Two very beautiful and inexpensive homes that call forth praise from all visitors are simple log houses, built as the pioneers put them up; but designed with an eye to artistic effect, convenience and comfort.

The furnishing of the house should correspond to the building.

In a log house or a simple frame, very artistic furniture could be made by any country carpenter, if properly designed for any particular house.

Miss Louise Brigham of New York, lives in a home furnished throughout with very artistic furniture made of dry goods boxes by boys of the Home Thrift Mission in their free work shop. The furniture complete for these rooms cost from \$3 to \$5 each.

Miss Brigham taught these boys to use their hands. This work is considered so important that the municipality of New York has given Miss Brigham an old mansion in which to carry it on, and other cities are taking up this work.

Every boy in Kentucky could be taught to use the lumber about him to build and furnish a more artistic house than is now obtained by much outlay of money to buy factory-made furniture, inartistic and unsubstantial.

There is no reason why the farm home may not be as well furnished as any city home. The house containing the most expensive furnishings is not always the best furnished. We often see a house simply furnished that shows a degree of good taste and refinement that is beautiful. A room is well furnished when it has in it just what is necessary for the work in that room.

Whatever the house furnishings may be they must be orderly in arrangement to be beautiful.

The keynote for successful house furnishing is—1st, usefulness; 2nd, simplicity; 3rd, a pleasing division of space; 4th, harmonious coloring.

Having built and furnished the house the crowning touch which

must make or mar the home is the woman who must preside over it as wife, mother and good angel or evil genius, owing to her ability to undertsand her responsibility in every one of the various departments under her control.

She need not be an evil woman to be the evil genius of her home.

In so far as she fails to meet the many requirements of her positlon just that far is she the evil genius.

If she provides health, comfort and happiness for husband and children by giving them balanced rations well cooked, by thoughtful management of the home, by judicious training of the children, by wise counsels with her husband, her family will call her blessed and will be loth to leave such a home.

SETTING TABLE AND SERVING MEALS.

Lay table cloth with crease exactly down middle of table. Arrange plates, right side up, at equal distances around the table, one inch from edge of table. Place knives at right of plates sharp edge toward plates with handle ends one inch from edge of table. Put forks at left of plates, tines up, and one inch from table edge.

Place spoons at right of knives.

Place napkin neatly folded at left of forks.

Place tumblers at tip of knives, butter plates at tip of forks.

Arrange neatly inside of these the steadies, as salt and pepper, vinegar and oil or mustard, sugar and cream, milk and water.

Place coffee pot or urn and tea pot at right of hostess with cups and saucers before her.

Be sure that all these are on the table before beginning to serve meals.

If posible have some little decoration for the center of the table, either a bunch of flowers in season or a little green plant.

All hot food should be served in hot dishes. All dishes should be offered at the left of the guest if the guest is to help himself. Dishes left for the guest must be placed from the right side.

Remove dishes from the right of the guest. Never reach across the guest to place or remove any dish.

If a dessert is served, remove everything from the previous course before serving the dessert.

Have the meal a time of rest and pleasant intercourse—never a time for criticism.

Cleanliness, good taste, well cooked food and pleasant manners will greatly aid digestion.

CLEARING THE TABLE AND WASHING DISHES.

After the meal is finished, set the chairs back from table, scrape with knife or wipe with a piece of bread each plate, then stack them, placing one with scraps on top and remove to the washing place.

If any water or coffee is left in tumblers or cups pour it into some vessel, then stack cups and saucers on a tray on which also put tumblers that as many pieces as possible may be taken out at one time.

Remove all serving dishes with plates and cups and saucers.

Place sugar and salt and pepper and all other constants in cupboard, crumb off, then carefully fold the cloth and put away in a closed place out of the way of any dust.

Sweep floor and dust room, by which time there should be plenty of boiling water.

Have ready a supply of clean tea towels, two dish pans with a good supply of very hot water, one being well soaped. Into the soap suds put first the tumblers which should be washed by wrapping the dish cloth about the tines of a fork and using it as a mop, if there is no mop at hand. As soon as each tumbler is washed, set it up in the clean hot water pan to rinse. When the tumblers are washed and rinsed, take them one by one and wipe on a clean towel until they shine, then set away out of any chance dust.

Next wash the cups and saucers in the same way, then the spoons, after which wash the plates and serving dishes.

Last wash forks and knives, then brighten the blades of knives and times of forks with brick dust or a little ashes, then again wash them in the suds, rinse and wipe quite dry.

The handles of knives and forks should not be laid in hot water, but should be washed clean with the dish cloth.

By using a small mop or dish cloth on fork, very hot water can be used for washing all dishes and cooking vessels without injuring the hands as they are not put into the water.

As soon as the dishes are washed, the towels and dish cloth should be washed in fresh hot suds, rinsed and hung up to be ready for the next meal.

After washing and putting away the dishes, tea towels, dish cloth and pans, sweep the floor very hard, if it must be done with a regular broom as the dust can be wiped off the furniture and all the wood work, whereas, if it remains in the carpet, it will rise as the floor is walked over and enter the lungs, or it will rest on some exposed food during the day and thus give chance for causing disease.

If the floor is not carpeted do not use a broom unless it is covered with a soft cloth which will hold the dust.

It is never necessary to go down on knees to scrub or wipe the bare floor as a long handle can be attached to a brush for scrubbing and to a cloth for wiping the floor, thus saving the back of the worker.

After sweeping, dusting and setting in order this room, proceed to do the same work in all other parts of the house except in bed rooms where the beds must first be made.

MAKING BEDS AND CLEANING.

Every member of the family should, as soon as dressed, take off all the bed clothes, one at a time, and spread over a chair, then open windows to let in fresh air; the room should be left thus until time for cleaning room.

In making a bed shake up the mattress and pillows, laying the pillows aside till the clothes are replaced.

Put on the bottom sheet right side up and draw it smooth over mat-

tress and tuck under same, then put on top sheet right side down so that when folded over the blanket or other cover the right side of hem will be on top.

The top sheet should always be long enough to fold back at least three inches over the other covering. After putting sheets on, lay the blankets and any other needed covering, smooth over sheets and tuck in folding under the foot corners, then fold top sheet back to protect the occupant from any possible germs in covering and to prevent any possible dust or waste of body from reaching the covering.

Over all this put the spread or quilt used for decoration, then lay in place the bolster and pillows.

After this is done proceed to sweep and dust, then close the windows.

At least once a week every piece of wood work about the home should be wiped off with a soft cloth wrung out from tepid or cold water to remove every particle of dust.

Cleanliness is the most important part of housekeeping so far as the health of the family is concerned. This must include ventilation, as the air as well as the rooms must be cleaned. The air is cleaned by opening windows to let in fresh clean air which drives out the impure air breathed by the family.

In homes where the open fire places are used the opening of windows through the night is not so necessary, as the chimneys bring in fresh air and discharge the bad air; but with the use of stoves or furnaces the windows should be open through the night.

Once a week the entire walls and ceilings should be brushed off to remove all dust and cobwebs.

Every particle of waste garbage should be given to chickens and pigs if there are such occupants on the premises. If there are no animals to eat the garbage it should be burned.

Garbage should be kept in closed metal buckets until it is either eaten or burned. These buckets should be scalded each day and once a week they should be rinsed with carbolic acid solution or some other disinfectant.

The greatest danger to the health of the family comes from dust, flies and mosquitoes.

Perfect cleanliness will reduce this danger to the lowest degree.

Not only is cleanliness of the house necessary for preserving health, but each individual must observe all the laws of cleanliness by frequent bathing of the whole body at least once a week, by wearing clean clothes, and immediately washing any part of the body when soiled, such as washing the hands every time they become the least soiled and washing out the lungs by breathing deeply the pure out door air and washing the stomach and intestines by drinking quantities—six or eight tumblers of pure cold water daily.

THE KITCHEN.

Of all rooms in the home the kitchen should be the cleanest and lightest.

Dark closets should not be allowed; every cooking vessel should be kept clean either hanging under shelves or turned upon them.

Every convenience possible should be obtained for kitchen use.

If the only water supply for cleaning is a rain barrel, this should be set on a high platform, have a hole bored next to the bottom, and into this hole a pipe inserted which should extend through a hole in the kitchen wall into the kitchen and a faucet put on the end that the cook may have water without going outside. Any farmer could arrange this simple device for saving time, strength and worry of his wife.

Another simple device is a box about 2½ feet by 2 feet with 1½ feet depth. Set this on end. Make the front into a double door opening in the middle and hinged at edge of box; bore hole through middle of top through which run a stout rope and knot inside box; let this rope be long enough to run over pulley attached to ceiling and down again to floor. Put one or two shelves in this box. Dig a hole six or eight feet deep and large enough to let the box down. Around this hole board up to the height of an ordinary kitchen table, and place over it a double trap door opening in the middle. You then have an excellent refrigerator and storing cellar combined. By nearly balancing the weight of box and contents with weights at other end of rope, this refrigerator can be raised or lowered easily with one hand, saving much labor and time. Eggs, milk, butter, vegetables and meat can be kept in this if properly covered.

A window box with a hinged lid fastened on the outside of a kitchen window is another useful storage place.

Arrange every utensil and piece of kitchen furniture in the most convenient position for saving steps when these things are wanted.

A table on rollers is another great saver of steps.

Before beginning the cooking be sure that the wood, if wood is used, is cut short enough to allow the closing of the stove door, as otherwise the oven will not properly heat, causing poorly cooked food, a menace to health.

Keep everything in order at all times.

Have every ingredient ready at hand before commencing to cook any food, then clean up as you cook, putting to soak immediately any vessel not easily cleaned.

One device discovered by a Norwegian peasant woman over a hundred years ago, adopted and patented in this country within the last few years is the fireless cooker of our time or the hay box of the peasant.

Any one can make a hay box. In the bottom of any ordinary box

home
Beft
clean.
Never a
meet success
In making
thus removing

Having a through middle

When food in the grease smoking hot, t brown. This is

No grease sown grease.

Breakfast b or broiler and placed underne

All beefste skillet or broi steak should b to ten minute

PAGE(S) DAMAGED

Melt 2 t. butter, add 2 t. flour, making a smooth paste, add dash pepper and salt. Add to this the milk and potato mixture, cook 1^{\parallel} min., add chopped parsley if desired, and serve.

Tomato Soup (Bisque.)-For one person.-

 $\frac{1}{4}$ c. strained tomato pulp, $\frac{1}{8}$ t. salt, $\frac{1}{2}$ c. milk, $\frac{1}{8}$ t. soda, dash pepper.

Melt butter, rub in flour, add tomato pulp slowly and simmer 5 min. Add the soda, salt and pepper, then the milk, stirring all the time. Let come to a boil and serve.

EGGS.

Soft Cooked-

1 t. butter,

Put eggs into a saucepan, cover with boiling water and let stand where the water will keep just below the boiling point for 5 min. For medium cooked let stay in 10 min.

Hard Cooked-

Cook 30 min, in water that is just barely bubbling. This method renders the yolk mealy.

Scrambled-

3 eggs, 1/3 c. milk, 1/2 t. salt, dash pepper.

Beat the eggs slightly, add the milk and seasoning. Cook in a hot buttered frying pan, stirring constantly until thick. Serve hot.

Plain Omelet-

1 egg, 1 T. water, 1 t. salt, 1 t. butter, 1

Beat egg just enough to blend white and yolk. Add water, salt and pepper, and beat until frothy on top. Melt the butter in a frying pan, and into it pour the egg mixture. Do not cook over a very hot fire, or it will be tough. When creamy throughout and a light brown next the pan, begin at the side next the handle and with the broad knife roll the omelet. Turn on to a hot platter.

NOTE.—Jelly or chopped boiled ham may be served with it or rolled inside.

SALADS.

Cream Salad Dressing (Boiled Dressing.)-

72 T. salt,
11/2 T. sugar,
dash pepper,
1/2 T. flour,
yolks of 2 eggs,
11/2 T. melted butter
3/4 c. milk,
1/4 c. vinegar.

1 t. mustard (may be omitted),

nion.

ii, then
umbs on

taste,
d parsley.

and pare turnips
thin slices.
To the butter,

rsley, salt and pepin if preferred.

till soft, and drain. d simmer with 1 slice Mix dry ingredients, add yolks of eggs slightly beaten, butter, milk and vinegar very slowly. Cook over boiling water until mixture thickens.

To be used cold with uncooked vegetables, as cabbage, tomatoes, cucumbers, lettuce, with cold cooked vegetable,s with cold meats or with hard cooked eggs.

Cabbage Salad-

Shave ½ a cabbage into thin strips, chop fine and mix with salad dressing. Do not mix dressing with more cabbage than you wish to use, as it will turn dark.

Potato Salad-

Cut cold boiled potatoes into cubes or slices. Sprinkle 4 cupfuls with ½ T. salt and ¼ t. pepper. Boil ¾ c. dilluted vinegar (½ water) with 4 T. butter. Pour while hot over potatoes. Add a few drops onion juice or ½ T. chopped onion. Mix well with 2 T. salad dressing. Trim with slices of hard-cooked eggs, cold boiled beets or parsley.

BROILED BACON.

Place thin slices of bacon (from which the rind has been removed) in a frying pan and cook until crisp and brown, turning often, and frequently pouring off fat from pans.

NOTE.—Save fat for frying eggs, potatoes, etc.

CORNMEAL MUSH.

4 c. boiling water, $2\frac{1}{2}$ t. salt,

1 c. cornmeal.

Add salt to boiling water. Add meal slowly, stirring all the while, and cook over direct heat 10 min. Cook over boiling water $\frac{1}{2}$ to 3 hours longer. Long cooking improves the flavor. Serve with cream and sugar.

Fried Mush-

Put left over mush into a dish and smooth it over the top. When cold, cut into slices ½ in. thick. Dip each slice into flour. Melt ½ T. lard or dripping fat in a frying pan and let it get smoking hot. Brown the floured slices on each side. Serve with syrup.

BREADS.

Corn Bread-

1½ c. cornmeal, 2 c. sour milk, 1 t. soda, 1 t. salt,

2 eggs,

2 T. butter.

Mix soda, salt and cornmeal. Gradually add eggs, well beaten and milk. Turn into a well greased, hot pan. Place on middle grate of hot oven and bake 20 min.

NOTE.—Tests for Oven.—Place a piece of unglazed paper in oven. For hot oven, paper should brown in 3 min.; for moderate oven, in 5 min.; for slow oven, in 10 min.

 $2\frac{1}{2}$ c. flour, 2 c. sour milk, $\frac{1}{2}$ to 1 t. salt, $\frac{1}{4}$ t. soda, 1 egg.

21/2 c. flour,

11/4 t. soda,

2 c. sour milk,

1 egg.

1/2 to 1 t. salt,

Mix and sift the flour, salt and soda; add sour milk and egg well beaten. Drop by spoonfuls on a greased, hot griddle (1 t. fat to a large griddle). Cook on one side. When puffed full of bubbles and cooked on edges, turn and cook other side. Serve with butter and syrup.

NOTE.—Use 1/3 to 2/3 cornmeal, if cornmeal griddle cakes are desired.

NOTE.—In making Soda Biscuit, allow not more than 1/2 t. soda to 1 c. thick, sour milk. If the milk is not very sour, 1/3 t. soda will be plenty.

Baking Powder Biscuit-

2 c. flour,

1 T. lard,

4 t. baking powder,

34 c. milk and water in equal

1 t. salt, ·

parts.

1 T. butter,

Mix dry ingredients and sift twice. Cut in butter and lard with knife; add liquid a little at a time, mixing with knife to a soft dough. Roll lightly on floured board to 1/2 in. thickness. Cut out, place biscuits on buttered pan, and bake in a hot oven 12 to 15 min.

CAKES AND DESSERTS.

Plain Cake-

4 T. butter,

2 t. baking powder,

1 c. sugar,

11/2 c. flour,

2 eggs,

1 t. spice or 1/2 t. flavoring.

1/2 c. milk,

Cream the butter, add sugar, then the well beaten egg yolks. Sift flour and baking powder together three times, and add alternately with milk to first mixture. Add flavoring and egg whites, well beaten. Bake 20 to 40 min. in a moderate oven, till cake shrinks from sides of pan. Pan should be thoroughly greased.

Sponge Cake-

Yolks of 6 eggs,

1 T. lemon juice,

Whites 6 eggs,

1 c. sugar,

1 grated rind 1/2 lemon, 1 c. flour.

REASONS

Why Ballard's Obelisk is the Very Finest Family Flour in the Whole World

1

BALLARD MILLS GRIND THE **BEST WHEAT**

We get our wheat from the celebrated Bluegrass lands of Kentucky.

This limestone soil gives the wheat those bone, sinew and muscle-giving qualities which have made Kentucky horses so famous.

These vital life-giving qualities are just as good for man as for horses, and if you want your children to have health, strength and nerve force, give them Ballard's Flour.

Paying a high price for the best wheat insures a regular, uniform flour that is Always Reliable.

2

BALLARD MILLS HAVE THE FINEST MACHINERY

Every new invention in the milling art is tried, and if an improvement we adopt it. Thus the entire inventive genius of mankind is brought here to serve you.

Our mill is a model of efficiency.

Machines do the work—the product is never touched by human hands from the time the wheat leaves the farmer's wagons until the sack of flour is sewed up.

Thus it is perfectly Clean and Sanitary.

BALLARD MILLS EMPLOY THE BEST MEN

As we are on the co-operative or profit-sharing plan, every man and woman is a partner, and, therefore, puts forth his or her best efforts to make Ballard's Obelisk Flour the finest in the land.

Working only eight hours a day, they are not tired out by long hours but are always fresh and snappy, so every machine is kept working right, and is watched as a devoted mother cares for her children.

The floors, walls, ceilings, and all things about the mill are kept clean and sanitary. Visitors say it is the Cleanest mill they ever saw.

"Cleanliness is Next to Godliness."

BALLARD'S OBELISK IS THE DOUBLE 4 CREAM SKIMMED OFF

Only a small part of all the flour is Obelisk. It is the Best—as it were, the cream of all the flours skimmed off, and, therefore, Rich, Pure and Clean.

Samples of this flour are taken out by the millers every hour, night and day. A young woman, especially trained, inspects those samples.

Only one grade of Obelisk Flour, and that is the best everywhere and all the time.

4 Good Reasons— That's Enough

The mill back of the flour with over thirty years' reputation for honesty and fair dealing insures you good treatment.



"Bread is the Staff of Life" THEREFORE HAVE IT GOOD

Always Reliable

Beat yolks until thick and lemon colored, add sugar gradually and continue beating. Add lemon juice and rind, and egg whites beaten very stiff. When whites are partially mixed with yolks, carefully cut and fold in flour, mixed and sifted with a little salt. Bake in an unbuttered pan, in slow oven for 1 hr.

Boiled Frosting-

Boil 1 c. sugar and $\frac{1}{3}$ c. water until it "threads" when a little is dropped from a spoon. Pour slowly on beaten white of 1 egg, and beat until thick enough to spread. Add any flavoring desired.

Sour Cream Cookies-

½ c. butter 2 c. sugar,

3/4 t. soda,
1/2 t. salt,

1 egg,

11 t. lemon extract or spice.

1 c. sour cream,

Flour to make a stiff dough. Soften and beat butter, add sugar, beat till creamy. Add well beaten egg, then sour cream in which soda has been dissolved. Add salt and flavoring. Add flour until dough is very stiff. Roll very thin, cut out, sprinkle with sugar and bake 3 to 5 min. in a very hot oven.

NOTE.—Always dust baking tins with flour, to prevent cookies from sticking. Remove from pan as soon as out of oven.

Boiled Custard-

2 c. scalding milk yolks 3 eggs,

1/8 t. salt,

1/4 c. sugar,

½ t. vanilla.

Beat eggs slightly, add sugar and salt; stir constantly while adding hot milk. Cook over boiling water, continue stirring until mixture thickens and a coating forms on spoon. Cool and flavor. Serve cold, with beaten egg white or whipped cream on top.

Stewed Apples-

Select apples of good flavor, slightly sour. Wash, pare and quarter. Make a syrup by boiling 1 c. sugar with 1 c. water for 10 min. (enough for 6 or 8 apples). Add apples and cook until tender. Keep the pieces whole, remove them from syrup, boil syrup till slightly thick and pour over apples.

Brown Betty-

2 c. chopped apples, 2 c. bread crumbs.

Put a layer of bread crumbs, then one of apples, then a sprinkling of sugar and cinnamon, in a broad baking dish, and continue in this order until dish is filled. Have a layer of crumbs on top. Cover and set in oven until apples are tender; then uncover and brown. Serve with sugar and cream, or with lemon sauce.

Lemon Sauce-

1/2 c. sugar, 1 c. boiling water, 11/2 T. flour or 1 T. cornstarch, few grains salt. 2 T. butter,

11/2 T. lemon juice, few gratings nutmeg,

Mix sugar and flour, add water gradually, stirring constantly. Boil 5 min., remove from fire and add butter, lemon juice and nutmeg. Serve hot.

CANDY.

Vinegar Candy-

2 c. sugar, 2 T. butter,

1/4 c. vinegar, 1/4 c. water.

Put butter in saucepan, when melted add sugar, vinegar and water. Stir until sugar is dissolved, but no longer. Boil without stirring until, when tried in cold water, it is brittle. Turn on a buttered platter to cool. Pull until white, and cut into sticks.

Put nothing on the hands while pulling-keep hands cool.

Divinity-

3 c. sugar (white or brown), 1 c. water,

whites of 2 eggs beaten stiff ½ c. chopped nuts.

Cook sugar and water together until a little tried in cold water becomes brittle. Pour syrup slowly on beaten egg whites, stirring constantly. Beat hard until stiff, add nuts, pour into buttered pan, and cut in squares when cool.

Caramel Fudge-

3 c. brown sugar,

1 c. milk.

1 T. butter.

Boil all together, stirring constantly, until a soft ball is formed when a little is dropped in cold water.

Let stand until nearly cold. Then beat hard, add chopped nuts, pour into buttered pans, cut into squares when cool.

A FEW HINTS ON LEFT-OVERS.

Any wheat bread left over, may be broken up, placed in baking pan and dried out thoroughly, then ground very fine in a meat grinder-or rolled under a rolling pin to a powder. Put it away in closed glass jar for use in croquettes.

BREAD OMELET.

Let 1 c. milk come to a boil, pour it over 1 c. bread crumbs (leftover) and let it stand 1 hr. Break 6 eggs into a bowl, stir (not beat)

till it is well mixed; then add the milk and bread, season with pepper and salt, mix well together and turn into a hot frying pan, containing a large spoonful of boiling hot butter. Fry the omelet slowly, and when brown on the bottom cut in squares and turn over, and fry to a delicate brown and serve hot. Cracker omelet may be made by substituting 3 or 4 rolled crackers in place of bread.

HAM CAKES.

Mix a few spoonfuls of cooked ham chopped fine with 2 c. well-seasoned mashed potatoes. Brown in a little hot bacon fat.

POACHED EGGS ON YANKEE TOAST.

While the eggs are poaching, carefully brown some neatly trimmed slices of bread in a little bacon fat. Crush a slice of cold, crisp bacon, and sprinkle a very little on each slice of toast, and serve the egg on top. Shred a leaf or two of crisp lettuce very fine and garnish the top of each egg.

CLUB SANDWICHES.

Cut the bread ½ in. thick, toast a delicate brown and butter it slightly. Lay thin slices of chicken on the toast, then a crisp leaf of lettuce, a few strips of very thin broiled bacon, and a little mayonnaise dressing. Cover with another slice of toast, and serve at once.

HOT CHICKEN AND HAM SANDWICHES.

Cut up and mix some left-over cold chicken and ham. Cut bread into slices ½ in. thick and toast to a light brown. Make a white sauce putting in a few button mushrooms, or a little chopped celery. Butter the toast, put the meat on, and cover with hot sauce and serve hot.

CHICKEN AND RICE SOUFFLE SCALLOP.

1 c. chicken, $\frac{1}{2}$ c. boiled rice, $\frac{1}{2}$ c. white sauce, 1 egg, yolk beaten, a little of the gravy left, $\frac{1}{2}$ c. bread crumbs, 1 T. butter, $\frac{1}{2}$ t. salt, a sprinkle of paprika or cayenne pepper, 1 egg—white beaten very stiff.

Mix chicken, rice, gravy, seasoning, and yolk of egg. Make a white sauce; while hot add chicken mixture. Cool slightly, fold in white of egg, put into buttered baking dish, cover with bread crumbs and butter. Bake ½ hr. Serve hot.

SWEET POTATO CROQUETTES.

Put through the finest cutter of a meat grinder cold boiled sweet potatoes, enough to make $1\frac{1}{2}$ c. Add 1 T. melted butter, $\frac{1}{2}$ T. brown sugar, beaten yolk of 1 egg, salt, pepper, cinnamon and mace to taste. Mix well together, make into small croquettes, roll in fine crumbs and in eggs and in crumbs again. Fry in deep boiling hot fat. Cold boiled carrots make also fine croquettes but omit sugar, mace and cinnamon.

SELF-RISING RECIPES.

Self-rising flour is regular flour with leavening ingredients added. Therefore you do not have to use any soda, buttermilk or baking powder.

As you spend about \$3.50 for these ingredients on each barrel of regular flour, this expense is saved if you use Self-rising flour.

EGG ROLLS.

Sift one quart of Ballard's Self-rising flour and one-half teaspoon of salt three times; then rub in one rounding tablespoon of butter. Beat one egg without separating; add to it one and one-half cups of milk; add gradually the flour. The dough must be soft, but not wet. Turn out quickly, roll in a sheet one-half inch thick and cut out with large, round cutter. Dip a knife handle in flour, press down the center, making a sort of hinge; brush one-half with melted butter and fold over like pocketbook rolls. Stand at once in shallow tins. Brush the tops with milk and bake in quick oven for twenty minutes.

SANDWICH BISCUITS.

One pint Ballard's Self-rising flour; rub in one heaping tablespoon butter and mix to a soft dough with sweet milk or buttermilk; roll out one-fourth of an inch thick and cut into rounds; spread one-half the rounds with soft butter, then a thick layer of chopped and seasoned meat; cover with remaining rounds and press together. Brush tops with milk and place one inch apart in greased pans. Bake in hot oven.

BATTER CAKES.

Three cups Ballard's Self-rising flour; two well-beaten eggs and sweet or buttermilk to make a thin drop batter. Bake at once on a hot griddle. Be sure and make the batter thin and beat well.

QUICK COFFEE CAKE.

Cream together one-fourth cup butter and one cup of sugar; add one well beaten egg; one-half cup of milk; one and one-half cups Ballard's Self-rising flour; turn into well buttered pan; pour two tablespoons of melted butter over the top; sprinkle generously with sugar, and bake in a quick oven.

NUT CAKE.

One-half cup butter and one and one-half cups sugar creamed thoroughly; one-half cup corn starch; one-half cup sweet milk; one teaspoon rose flavoring; mix corn starch with milk and add to butter and sugar. Beat the whites of six eggs to stiff froth and add next one and one-half cups Ballard's Self-rising flour. Bake in layers and use nut filling.

NUT FILLING.

One-half pint rich milk; two cups brown sugar; three eggs beaten separately; boil together until thick; then add one cup chopped nuts; flavor with extract vanilla.

BREAD.

To one quart water, lukewarm (one-half sweet milk, if desired), add one-half ounce compressed yeast and stir until dissolved; then add three tablespoons of sugar. Stir into this enough Ballard's Self-rising flour to make a dough sufficiently stiff to be turned from the mixing bowl onto the molding board into a mass. It will take about three quarts of the flour. Add two tablespoons of lard; knead the dough until it becomes smooth and elastic, then put into well greased mold, brush with melted butter and set to rise in a warm place for two hours (or less, if it's light), knead again and let rise one hour. Form into loaves, place in well greased bread pans brushed with melted butter. Let it stand until light, then bake in well heated oven.

LAUNDRY WORK.

One of the most laborious tasks for the home is the laundry work. The weekly washing is usually done on Monday, hence the expression "Blue Monday."

As all the members of the family usually gather around the home table on Sunday with frequently outside visitors, it would be wise to give a general cleaning of the house on Monday, look over and assort the washing and mend all rents in articles before washing, then wash on Tuesday.

In assorting the linens, put table linens, cloths and napkins to themselves; these must be the first washed. Never mix these with any other articles.

All soaking of clothes may be avoided. Half fill an ordinary wash boiler with cold water; into this shave an ordinary cake of laundry soap, or 1 tea cup of soft soap, then put in 1 tablespoonful of coal oil. Into this drop all table linens and let boil just as is usually done after washing. After boiling thoroughly with frequent stirring, put boiled linens into a tub of warm water and rinse, then rinse through a second warm water, through a bluing water, but do not starch. Table linens should never be starched.

In this way you can proceed with the bed linens and all white clothing; even the very finest will be beautifully cleaned without injury. Use this also for muslin or lace curtains.

It may be necessary to rub some grimy places in shirts; but as a rule no rubbing will be needed.

This is an easier method of cleansing clothes than using patent washing machines; but care must be taken not to use too much coal oil. The proper proportion has just been given.

Order of Sorting Clothes for Washing.

- 1. Table linens—cloths, napkins, centers, sideboard covers, tea towels.
 - 2. Bed and body linens.
 - 3. Handkerchiefs.
 - 4. Towels and cloths.
 - 5. Colored clothing.
 - 6. Flannels.

Colored clothes and flannels must be rubbed as they ought not to be boiled.

Hard Water May Be Softened By-

- 1. For each gallon of water, use two tablespoonfuls of a solution made by dissolving 1 lb. washing soda in 1 qt. boiling water. This should be bottled and kept on hand.
- 2. For 1 gal. water use $\frac{1}{4}$ tablespoon caustic soda (lye), dissolved in 1 c. water.
 - 3. For 1 gal. water use 1 tablespoon borax dissolved in 1 c. water.

STAINS.

Paint and varnish are removed with turpentine, except for delicate colors for which use chloroform.

Machine Oil-Wash with soap and cold water.

Vaseline-Wash with turpentine.

Tar, Lamp Black, Stove Polish—Saturate with coal oil, then wash in soap and water.

Iron Rust—Wet with paste of lemon juice, salt, starch and soap and expose to the sunilght.

Fresh ink stains may be removed by repeated soakings in milk.

Some ink may be removed by rinsing in water to which ammonia or borax has been added.

Alcohol sometimes removes ink stains.

Perspiration-Wash in soap suds and place in sun.

Blood—Wash in cold water, then with soap and water; if goods is thick apply paste of raw starch, renewing from time to time.

Mucous—Soak in salt and water, then wash with cold water and soap.

Milk and Cream-Wash in cold water, then in soap and water.

Tea—Sprinkle with borax and soak in cold water. Soak spot in glycerine, then wash.

Coffee, Fruit and Indigo—Stretch surface over bowl or tub and pour boiling water through it from a height to strike the stain with force.

Medicine Stains-Soak in alcohol.

Iodine-Soak in alcohol.

Grass Stains—Soak in alcohol (For colored fabrics apply molasses or a paste of soap and cooking soda). Let stand over night.

Scorch—Scorched goods may be restored if the threads are not injured—Wet and expose to sun—Repeat several times.

Mildew. 1. Wet stain with lemon juice and expose to sun. 2. Wet with paste made of 1 tablespoon starch, juice of one lemon, soft soap and salt, and expose to sun. 3. Wet with paste of powdered chalk and expose to sun.

IMITATION OF OUR GRANDMOTHERS.

Mrs. Robert Goggin, Paris.

We are keen to imitate our grandmothers in our home furnishings. Why not take up their plan of household duties?

With the conveniences we have—something they knew nothing of—and with use of their system, our housekeeping should not be the burden that so many make it.

We will plan for the average family with one servant.

On Monday the laundry is visited before breakfast to arrange the washing that no time may be lost afterwards. Breakfast is then cooked and served and kitchen put in order, then a return to the laundry where the washing proceeds until finished, usually in time enough to prepare the luncheon for the mid-day. A rest is taken in the afternoon, then a good dinner is served. The mistress does all the housework, both on Monday and Tuesday, as the maid is busy in the laundry. On Tuesday, the maid serves breakfast, cleans kitchen and goes to laundry. Owing to amount of laundry work the mistress may serve the luncheon, leaving the maid time to finish her work and rest before serving dinner.

On Wednesday mistress and maid attend to house-cleaning and the mistress does the necessary mending, then attends her club in the afternoon.

Thursday, after the regular routine of cleaning and sewing, may be receiving or visiting day.

On each day the mistress puts in spare moments in sewing or reading and taking a little rest.

Friday is the fullest and probably the hardest day of all the week for the lady of the house, as it is general cleaning day. The ice box or refrigerator must have a thorough overhauling, pantry looked after, and every corner have all dust removed.

It might truly be said that every day's program should be headed with "Cleaning."

On Saturday we are confronted with that duty on which the health of the family so largely depends. The kitchen must be the main workshop, preparing for Sunday as well as Saturday, besides its own especial cleaning.

Sunday meals should be plain and simple, yet delicious in its simplicity, for that day is the first of the week on which Our Lord rose from the dead, and should be given to worship of Him.

HEALTH IN THE HOME.

Health is "perfect circulation of the blood and perfect elimination of the waste products from the blood."

In order to preserve perfect health the family must have the proper amount of air, water, food, exercise and rest.

This means that the home must be located on good soil, have health-giving surroundings and a good supply of sunlight, heat and pure air to breathe, pure, clean, well cooked food to eat; pure, clean water to drink, and suitable clothes to wear; an adequate amount of exercise; work and no less important rest, and regular discharge of the waste from the body.

In every human body there are two classes of minute organisms, invisible to the naked eye, called bacteria or germs. One class is a friend to life but the other is an enemy.

The friendly germs break up the dead animal and vegetable matter into simple elements which are absorbed by the earth to be again used in growing vegetation.

The disease germs exist always at the expense of some living creature. They enter the body and attack any part that is not in perfect helath and produce poison in that part. Common methods of spreading these unfriendly germs are:

- 1. By means of dust through the air.
- 2. By water washing over the ground or by filtering through it.
- 3. By means of flies, which put them on food or drink.
- 4. By means of clothing or animals.
- 5. Through handling articles containing them.
- 6. By mosquitoes.

Air is poisoned by the breath of men and animals, by decaying vegetable and animal matter, and by burning fuels.

Air is purified by winds bringing pure air and removing the impure and by rain washing out impurities.

Fresh air and sunshine are excellent disinfectants, hence the great importance in having the house, especially the sleeping rooms exposed to sunshine the greater portion of the day. This fresh air can well be supplied at night by placing a two-inch board under the lower sash of the window which will let in fresh air between the sashes that rises and mixes with the air of the room without a draft.

The most common diseases that come from impure water are typhoid fever, dysentery and cholera.

To prevent diseases from dust and flies, keep everything very clean; wash all fruit and vegetables before using; keep all cooked food well covered; keep outside premises clean as well as the inside of the house.

In diseases where matter is thrown off from the throat or nose, in vomiting, bowel discharge, urine, pus, or any discharge from wounds, such discharges should be burned if possible and everything connected with it must be washed in a solution of chloride of lime, 4 parts lime to 100 parts water.

Boil dishes or vessels for five minutes in solution 1 part soda to 100

parts water.

Bed and body linen may be disinfected by the following: Carbolic acid 3 pints, common soft soap $1\frac{1}{2}$ pints, water 100 pints. The clothing should remain in this solution one hour at least and the solution should be hot if possible.

For fumigating a room, hang bedding and clothing over chairs or on lines, move bed and all furniture away from walls, close all windows and doors, pasting strips of paper over cracks of windows.

Put formaldehyde candles or sulphur in some safe vessel and set fire to it, leave the room, close the door and paste paper strips over cracks and keyhole and leave thus for twenty-four hours.

Floating dust in air is said to cause smallpox, scarlet fever, measles, mumps, chicken pox, whooping cough, influenza, diphtheria, erysipelas and pneumonia.

Improper eating and eating poorly cooked food cause the greatest number of diseases—those from the liver and kidneys.

Cleanliness, rest and wholesome food will cure disease as well as keep the body in health.

THE HOME CARE OF THE SICK.

INVALID DIET.

Prepared by Miss Katherine Christian, Supervisor Household Arts Department, Public Schools, Lexington, Ky.

In the home care of the sick the consideration of the patient's nourishment is one of the most troublesome and at the same time one of the most important problems that confronts the nurse.

In many diseased conditions, the powers of digestion are much impaired and to furnish sufficient nourishment and at the same time furnish it in a form which the weakened digestive apparatus can handle, has as vital bearing upon the recovery of the patient as has the administration of the drugs by the physician. In the treatment of diseases which may be traced directly to errors in the diet, the food is of even more importance than the medicine. But whether or not the dis-

ease from which a patient is suffering was brought about by improper diet, recovery in all cases is hastened by the administration of foods which contain the proper nutrients for the recuperation of the person being treated.

To prepare intelligently a dietary for an invalid one must know the composition of foods in general, the function of the different classes of foods in the body; the digestive secretions and their behavior in the normal body; and the parts of the alimentary canal involved in the digestion of the different nutrients. Then the disease must be studied in its effect upon the normal function of digestion. Though the latter is the province of the physician, any one of intelligence who is interested may inform himself in regard to the more general rules governing the diet in disease.

All foods as we know them are made up of chemical compounds which are called the food principles. These are five in number—protein, carbohydrates, fats, mineral salt and water.

Protein is found most abundantly in the animal foods, meats, fish, eggs and milk; the only vegetable foods which contain protein in any considerable quantity being beans, peas and lentils, wheat and oats. The protein which is contained in the different members of this class appears in different forms—thus we have the albumin of eggs, casein of milk, myosin of meat, gluten of wheat, legumen of beans, peas and lentils; but though present in these various forms they all serve the same purpose in the body, that of building and keeping in repair the muscle tissues.

This group of compounds is characterized by the element, nitrogen, which they contain and hence they are often referred to as the nitrogenous foods. They are digested principally in the stomach by the gastric juice.

The carbohydrates include the starches and sugars and are found in greatest abundance in the cereals, the sweet fruits, and some vegetables. Their special function in th body is the production of energy in the form of heat. The digestion of the carbohydrates—that is of the starches is begun in the mouth by the action of the saliva and completed in the small intestine—the result being a kind of sugar called glucose. The stomach contains no carbohydrate digesting enzyme.

The fats are digested almost wholly in the small intestine where they are emulsified or split into fatty acids and glycerine. They serve as fuel for the production of energy in the form of heat—any excess being stored in the body to form cushions for the protection of the body from cold and the delicate internal organs from injury.

The mineral salts which are present in all foods in the forms of chloride, phosphate, sulphate, and carbonate of sodium and potassium; phosphate and carbonate of calcium and magnesium, etc., enter into

all the fluids and tissues of the body, playing an especially important part in building the bones. They aid also in preserving the alkalinity of the blood, and control the osmosis of the various fluids in the body.

Water, which next to air, is most essential to life, enters into all the fluids and tissues of the body, making about seventy per cent. of the body weight. It regulates the temperature of the body, dilutes the secretions, and serves as a solvent and carrier of the food.

Water and the mineral salts in food are not changed in digestion but are absorbed, principally from the small intestine, practically in the same forms in which they are eaten.

In addition to a knowledge of the character of foods in general, their function in the body, and their normal digestion, the nature of the disease must be understood. Particularly is this true if the seat of the disease is in any part of the digestive tract. As a rule, in such cases, foods are given which are digested in some other than the affected part and thus the diseased portion spared as much as possible. For example, in typhoid fever, a disease which involves the small intestine, foods which are digested in the stomach are largely given. On the other hand, in gastric ulcer, which is characterized by hyperacidity of the gastric juice, it has been found by experiment that the protein foods, which are digested in the stomach, tend to neutralize the excess of acid and aid in controlling the disease.

Many diseases are directly traceable to errors in the diet and in preparing the nourishment for such cases it is of primary importance that this fact be recognized and met with an intelligent administration of the foods which the tissues are craving, or, as in the case of diabetes, an elimination of the foods—starches and sugars in this case—which cannot be assimilated.

It might be well to mention some of the diseases which are most often caused by an improperly balanced diet and the consequent deficiency of one or another of the food principles, and to give a few of the foods which will be found beneficial in each case.

One such disease is scurvy, which was very common among sailors in the earlier times of long sea voyages, commonly caused by the prolonged use of salt meats and other preserved foods; and in infants by the use of sterilized milk, which is a preserved food. With the better facilities for the transportation of fresh foods, the disease is much less common. In its milder forms it yields readily to a diet consisting largely of fresh vegetables and fruits—especially oranges and lemons—and rare beef. An infant affected with scurvy should be given raw milk, orange juice and beef juice.

Rachitis, or rickets in children is a condition of insufficient calcium in the tissues. This is sometimes due to a deficiency of that ingredient in the food but is more often due to a diseased condition of the tissues, particularly the bones which interferes with the assimilation of cal-

cium. If suspected that the food is deficient in calcium give milk with additional cream and for older children, in addition to the milk, give eggs, meat and fresh green vegetables. In any case restrict the amount of carbohydrates in the diet.

Anaemia, a condition arising from a deficiency of iron in the blood. This is due often, but not always, to the use of foods poor in iron. When this is the case the conditon may be corrected by giving foods rich in iron—such foods are eggs, beef, wheat, oats, green string beans, cabbage and spinach, which is of special value for the large amount of iron it contains, the green vegetables and fruits. The tonics containing iron in an inorganic form are of very little value unless accompanied by foods rich in iron.

Pulmonary tuberculosis, which is directly caused by the tubercle bacilli which find lodgment in the lungs is found, however, most prevalent among the poorly fed and housed and the treatment upon which the physician counts most in effecting a cure is fresh air and sunlight and an abundance of good nourishing foods. The protein foods are specially recommended in such cases to counteract the excessive tissue waste which accompanies this disease.

The time and manner of serving the food should be considered with great care. The invalid's tray should be covered with a spotless cloth and the food served in the daintiest china obtainable. The appearance of the food does much toward making it appetizing and the appetite and digestion go hand in hand in illness. Then the food should be served with regularity, care being taken not to give food to a patient laboring under strong emotion or fatigue or in great pain. Have the hot foods hot and not luke-warm, the cold foods cold and served on cold plates. If the meal is one of more than one course, serve one course at a time and remove the dishes from each course before serving the next. Remove the tray from the room the moment the patient has finished the meal and destroy any remnants of food left.

Diets for the sick are divided into three general classes—the liquid, light and convalescent and a patient should pass very gradually from the liquid to the more substantial diets and never be given an opportunity to bring about a relapse by over-eating.

Liquid diet includes:

Milk in any form.

Meat juice, tea and broth.

Milk and egg combinations.

Fruit and cereal waters and gruels.

Cream soups.
Tea, coffee and cocoa.
Ice creams, water ices, etc.

Light diet:

Custard, jellies, junket, milk toast, soft cooked eggs, oysters, clams, scraped raw beef.

Convalescent diet:

All the foods of light diet with the addition of any easily digested foods such as lightly broiled steak, chops, fish or chicken; potatoes, spinach, asparagus, tomatoes, delicate puddings, simple cakes, etc.

A few recipes follow which I hope will be found helpful.

Albuminized Water-

White of 1 egg, ½ cup water, 1 teaspoon lemon juice, 1 teaspoon sugar.

Place all ingredients in a bowl, beat until well mixed, strain and serve.

Albuminized Milk-

White of 1 egg, ½ cup milk. Prepare as albuminized water.

Albuminized Orange Juice-

Juice of 1 organ,e white of 1 egg, 1 tablespoon sugar. Prepare as albuminized water.

Beef Juice (quick method.)-

Broil small pieces of round of beef very slightly on both sides, score with a sharp knife and express the juice with a lemon squeezer or vegetable press. Remove all fat before serving and if desired hot, use a thermometer and heat carefully to 130 defrees F., a temperature safely below the coagulating point of the albumin.

Beef tea is beef juice diluted with water.

Another method of making beef juice and to be preferred when not in a hurry for the juice: Cut round beef steak into half-inch cubes, put into a Mason fruit jar which has been sterilized. Set this in a kettle of water on a trivet and heat the water carefully to 130 degrees F. Keep at that temperature for four or five hours. Express the juice according to directions given in "quick method."

Broth (Beef, Mutton or Chicken)-

1 lb. of meat (cut into inch cubes, 1 qt. cold water.

Cover meat with water, let stand one hour, heat slowly to boiling point, skim, reduce heat and simmer until meat is tender, from three to five hours. Strain, cool and when ready to serve remove all fat, reheat and season or it may be seasoned while cooking.

Gruels-

1/2 cup cereal, 2 cups water, 1/2 teaspoon salt.

Put boiling water and salt in upper part of double boiler. When rapidly boiling, stir in the cereal and cook directly over the fire until thoroughly boiling. Put the two parts of the double boiler together and let continue to cook until done, two hours for farina, cream of wheat, or rolled oats; five or six hours for corn meal or steel cut oatmeal, or, if soaked over night, three hours.

Thin the gruel to the desired consistency with milk or water and strain. Reheat before serving. The addition of an egg beaten into the gruel will increase its nutritive value.

Egg Nog-

1 egg, $\frac{2}{3}$ cup milk, 1 tablespoon sugar, a pinch of salt improves the flavor. Flavoring (a little vanilla or nutmeg.)

Mix ingredients, beat until well blended, strain.

Separate eggs, beat yolk, add other ingredients, strain, add beaten white and serve.

There are many good books upon this subject. One of the best for practical purposes is "Food for the Sick and Convalescent" by Miss Farmer and published by Little, Brown and Co., Boston.

SERMON IN CIVICS.

On one of the pikes of the Blue Grass there lived a farmer who loved his fellowmen. Between his house and the public highway was a never failing spring, which he had walled in with stone in an artistic way, leaving a flat top for a stone figure of his favorite dog as a decoration. At the spring he placed a cup, then made a walk from the road to the spring, that the thirsty wayfarer might be refreshed.

A neighbor, having a decided frontage on another pike, planted trees along both sides of the road to give beauty to his domain, as well as to provide shelter from the sun's rays to passersby.

Today these trees form a beautiful avenue along this pike and the spring still gives its cooling water to the traveler.

A son of the tree planter married the daughter of the other farmer. May they add to the work of their parents.

DOMESTIC ART.

SEWING.

Prepared by Miss Clara Sachs, Teacher Domestic Art, Western Departmental School, Louisville, Ky.

For any information apply to Miss Clara Sachs, 817 Third Avenue, Louisville, Ky.

Sewing should become a part of every girl's education, from child-hood to womanhood, not only as a useful art to be practiced at home, but for its educational value. By this means skill and attention are developed, habits of industry are acquired and a love is cultivated for

other domestic arts, which are irksome only to those who have not had any kind of manual training.

As a child can be taught to be generous by teaching it to give, it can be taught to be industrious by teaching it to work, if the teaching is begun early, and if the work is made attractive. Make the sewing a part of every day's routine to be taken in hand several times, if possible. For variety and to develop thought and skill, interest the child in the useful occupations of making practical and useful household articles. Girls also enjoy taking this course at home. Mothers are amply repaid for their efforts and co-operation, by the benefits which their daughters derive from domestic training in all the arts of home making, and sewing is a very important one.

TO CUT.

A FEW GENERAL DIRECTIONS FOR THE CUTTING OF GARMENTS.

1. A table or lap-board large enough to lay the entire pattern upon, is required; also paper, sharp shears, weights, pins, tape measure, needles and thread.

2. The first thing to be observed in cutting, is whether the cloth has a right and a wrong side. If it has a design, consider the heavier part as the bottom. A vine should run upwards; the nap on the cloth should run downwards.

3. Before cutting ascertain if there is sufficient cloth, by laying the different parts of the pattern upon the cloth in such positions that the cloth will not be unnecessarily wasted, being careful as to the up and down of the cloth. When there is a scarcity of material the underneath parts of the sleeves may be pieced, hems may be faced, and the small pieces may often be used for the trimmings.

4. The length of the main parts of a garment (as back, front and sleeves) should be cut parallel to the selvedge or warp of the cloth. In cutting plain goods, two similar parts can be cut at once, by folding either the right or wrong sides together. The selvage or edges of the material should first be pinned together, to prevent slipping. When the cloth can not be doubled, great care must be taken, not to cut similar parts (as sleeves) for the same side; this can always be avoided, by laying one part upon the material with either the right or wrong sides together. Having the cloth spread out evenly, place a weight or insert a pin at the middle of each part of the pattern smoothing out each part from the middle, pin it to the cloth, being careful to place pins closely at the middle of the darts at the curves and one at each corner of the pattern. Cut evenly and close to the pattern, and be very particular at the curves.

- 5. Linings should be cut and basted carefully on to the wrong side of the cloth. In cutting plain goods, two similar parts can be cut at once. The notches on the edges of the pattern, should only be cut in the lining. In cutting linings or unlined garments, the marks for the seams may be made by a tracing wheel, or they can be pricked with a large needle. Where there are perforations, a pencil or chalk may be used.
- 6. When two parts of a garment are cut at once, especially on woolen materials, the following tailor's method of marking the perforations may be used. Pin the pattern securely through both thicknesses of cloth. With a coarse double thread, take the first stitch in the center of the perforation and through both thicknesses of cloth; take another stitch in the same place, and in drawing the thread through, leave a loop the size of a pencil. At the next perforation, make a similar stitch leaving the thread loose, between the perforations and so continue until all the perofrations are marked. Then cut out the parts, separate the two edges of cloth as far as the thread will permit and carefully cut the thread midway between the two edges. Cut the long stitch on the upper side, in the middle and remove the paper pattern. The threads left in the cloth serve as a guide for basting.
- 7. Matching. A plaided, striped or figured cloth requires great care in cutting. If the breadths of a skirt made from a checked or evenly plaided material, all cut off in the middle of a check, the breadths will readily match. In other plaids or designs cut the lower edge of each breadth on the same line of the plaid or design.
- 8. In cutting a garment similar to a dress waist which opens in front, first decide what part of the plaid, stripe or design will look best for the middle of the front and back. Then lay the pattern for the front of the cloth, so that the outer fold of the hem is ¼ of an inch or one half the width to be lapped beyond the middle desired. Cut this side out and cut the other half of the front, by laying the part already cut on the cloth, with the right sides together and plaids or designs exactly matching. Lay the pattern for the back on the cloth, so the back edge of the pattern is ¼ of an inch beyond the middle desired; this allows for the seam. Cut the other half of the back as in cutting the second half of the front.
- 9. In order to cut twilled material on the bais, with the twill perpendicular, the cloth must be folded at right angles to the twill. To do this lay the cloth lengthwise on the table with the right side downward. Fold over the right-hand corner, and cut on the fold.
- 10. Linings for broad hems or a curved edge (as a hat) should be cut on the bias. Cotton cloth, calico or flannel may be torn when a straight edge is required. Linen should be cut by first drawing a thread.

FELLING.

A fell is a seam hemmed down to protect the edges. Straightway fell:

- 1. Place the pieces of material together, baste a narrow seam.
- 2. Sew the seam with a running stitch and a back stitch.
- 3. Take out the basting thread, unfold the pieces of cloth and lay the seam over, so that the wider edge will be uppermost.
- 4. Turn to the right-side and press carefully exactly at the sewing of the seam.
- 5. Make a narrow hem, tucking the ravellings under with the point of the needle.

Suggestions.—Hem a fell cut on the bias, with a grain of the cloth or from the wider part to the narrow, as drawers from the top down. A fell can be made by sewing it with the edges even, then pare one edge, being careful to have the right side of the sewing come on the upper side of the fell.

EDGINGS AND RUFFLES.

Lace Edging-

1. Holding the scalloped edge towards you make a narrow hem, at the right-hand end of the lace.

2. Holding the right sides of the lace and cloth together, place the hemmed end of the lace at the top edge of the upper left-hand corner of the cloth.

3. Holding the lace loosely, lightly over-hand the edges to within a fourth of an inch of the corner.

4. Run the needle in and out of the cloth, to keep it temporarily secure.

5. Pin the lace at the corner.

6. Measure the width of the lace and tearing twice the width, pin again at the corner.

7. One-fourth of an inch beyon dthe corner, pin the lace to the cloth.

8. Run a gathering thread in the edge of the lace from the overhanding to the last pin.

9. Over hand around the corner, bringing the fulness as much as possible at the corner.

10. Turn the corner in the same manner, and finish by hemming the end of the lace.

Suggestions.—Lace can be sewed on full by dividing the lace and the edge to which it is to be sewed, into halves, quarters, etc., and running a gathering thread through the edge of the lace before basting it on. In turning corners it is better to leave a little more than twice the width of the lace, as there must be enough on the outer

edge, to prevent the lace from hooping. With wide lace leave more than one-fourth of an inch on each side of the corner, for fulness of the lace. When measuring for the quantity of edging needed allow enough for the corners. When the ends of the lace meet join by a fell.

HAMBURG EDGING.

It can be sewed on, as no fulness is required, by a fell, a French seam, a facing or by over handling, when fulness is required by a facing or by whipping. When much wear will come on the edging it is advisable to over hand it, as it can then be easily removed; the raw edge of the Hamburg should first be overcast with very fine thread. The corners should be turned, and the ends sewed as with lace.

RUFFLES.

Ruffles are made of various materials, and are plaited, gathered or whipped.

A Ruffle Faced On-

- 1. Mark the raw edges of the ruffle and the cloth, by notches, into halves and quarters. Also mark the middle of the facing by a notch.
 - 2. Gather the ruffle.
- 3. Place the right sides of the cloth and the ruffle together, and pin at the corresponding notches.
 - 4. Draw up the gathering thread and fasten around the pin.
 - 5. Adjust the gathers and run exactly on the gathering thread.
 - 6. Pin the middle and ends of facing to the ruffle, and baste.
- 7. Turn the other side towards you and half back stitch close below the running stitch.
 - 8. Take out basting threads.
 - 9. Turn the facing over and crease it carefully in the seam.
 - 10. Baste and hem the opposite edge of the facing.

Suggestions.—A heading on a ruffle can be made by folding the required width for the beading and gathering it, making one or more rows as desired. The fulness of the ruffle depends upon the material. A narrow cambric ruffle should be about one and a half times the length of the part to which it is to be sewed. In making a ruffle of more than one breadth the ends should be joined neatly before hemming or gathering.

WHIPPING.

Whipping is forming gathers by overcasting a rolled edge of fine material, and drawing up the thread. Rolling. Roll tightly the edge of the material,—must be rolled not folded.

- 1. Trim the ravellings from the raw edge.
- 2. Hold the wrong side of the material toward you.

- 3. Beginning at the right-hand corner, roll the material towards you, between the thumb and the forefinger of the left-hand.
- 4. Inserting the needle at the corner, under the roll take one or two stitches to fasten the end.
- 5. Hold the end of the roll between the right thumb and forefinger and placing the cambric or material between the third and little finger of the left hand, draw tightly.
- 6. Pressing the left thumb against the forefinger, rub the edge upwards and downwards until a small firm roll is made.
- 7. Overcast as far as the cloth is rolled tightly inserting the needle under the roll.
- 8. Draw up the thread, holding it on a line with the raw edge of goods. If the roll is small, and the stitches are taken loosely and at regular intervals, the ruffle will draw easily on the thread.
 - 9. Continue rolling and whipping an inch or two at a time.

Suggestions.—In whipping some prefer to take hemming stitches instead of overcasting stitches. A ruffle for whipping should be twice the length of the part to which it is sewed. It is sometimes advisable to make it more than twice as full. A ruffle cut across the cloth whips more easily than one cut lengthwise. A fine material whips more readily than a coarse one. Ruffles should be cut by a thread which can be done by tearing, and then trimming the edges. It is best to use short lengths of thread, as a great strain comes, when the ruffle is drawn. In making a long ruffle, have a thread for each division, and measure as you draw the thread. The thread will draw more easily if a large needle is used. When corners are to be turned allow extra fulness, so that the ruffle will lie flat in over handling a ruffle; the garment can be held towards you, but if the whipping thread should prove too short, there is no way to lengthen it, while, if the ruffle is held towards you, the thread can be drawn up or lengthened.

SOME SUGGESTIONS IN STUDY.

COURSE 1.

- 1. The economic value of soups in the diet and how to make them.
- 2. The place of the home-maker in the economic world.
- 3. Division of income.
- 4. How to cook the cheaper cuts of meats.
- 5. Home organization.
- 6. Suggestions, course dinner for six for \$1.50-Prize for best.
- 7. Clothing.
- 8. Household management.
- 9. Conference—Benefits derived from course.

COURSE 2.

Magazines on Home Economics for each month.

October Meeting—Home, how used in vacation—Plans for school and winter.—Editor some number.

November Meeting—Home, social, thanksgiving.—Editor changed. December Meeting—Home-coming,—Christmas, how used and abused. Editor changed.

January Meeting—Home planning for incoming year.—Editor

February Meeting—Sorting old things and Seeing to new—Editor changed.

March Meeting-Spring Cleaning. Editor changed.

April Meeting-Garden. Editor changed.

May Meeting-Trees and Birds. Editor changed.

COURSE 3.

- 1. Evolution of Home from Tree to Tenement—Adaptability of modern Home.
 - 2. Planning Site, drainage, light, air, water, heat.
 - 3. Furnishings.
 - 4. Food.
 - 5. Disposal of Household Waste. What is Waste?
 - 6. Home. The house, apartment, hotel, community housekeeping.
 - 7. Home—A Business Enterprise.
- 8. Problems—servant, seamstress or ready-made clothing, nurse or infirmary, guest.
 - 9. Home Competitors-College, Church, Club.
 - 10. Home Duties adjusted to Social Obligations.

The following books from the library of the American School of Home Economics may be borrowed from this Department by paying cost of transportation both ways.

Vol. I, "The House," Bevier. Vol. II., "Household Bacteriology," Elliott. Vol. III., "Household Hygiene," Elliott. Vol. IV., "Chemistry of the Household," Dodd. Vol. V., "Principles of Cooking," Barrows. Vol. VI., "Food and Dietetics," Norton. Vol. VII., "Household Management," Terrill. Vol. VIII., "Personal Hygiene," Le Bosquet. Vol. IX., "Home Care of the Sick," Pope. Vol. X., "Textiles and Clothing," Watson Vol. XI., "Study of Child Life," Washburn. Vol. XII, "Care of Children," Cotton.

Write to your Congressman or to the Department of Agriculture, Washington, D. C., for any of the following Farmers' Bulletins: No. 128, "Eggs and Their Use as Food;" No. 242, "Facts about Milk;" No. 290, "Use of Fruit as Food;" No. 363, "Use of Milk as Food;" No. 342,

"Cooking Beans and other Vegetables—A Model Kitchen;" No. 249, "Cereal Breakfast Foods;" No. 270, "Modern Conveniences for the Farm Home;" No. 295, "Potatoes and Other Root Crops as Food;" No. 332, "Nuts and their Use as Food;" No. 375, "Care of Food in the Home;" No. 317, "The Farm Home;" No. 185, "Beautifying the Home Grounds;" No. 256, "Preparation of Vegetables for the Table;" No. 287, "Poultry Management;" No. 345, "Some Common Disinfectants;" No. 389, "Bread and Bread Making;" No. 391, "Economical Use of Meat;" No. 393, "Habit Forming Agents;" No. 432, "How a City Family Managed a Farm;" No. 450, "Some Facts about Malaria;" No. 459, "House Flies;" No. 463, "The Sanitary Privy;" No. 34, "Meats—Composition and Cooking;" No. 114, "Skim Milk in Bread Making;" No. 85, "Fish as Food;" No. 93, "Sugar as Food;" No. 182, "Poultry as Food;" No. 183, "Meat on the Farm;" No. 193, "Bread and Toast;" No. 244, "Food Value Cottage Cheese, Rice, Pears, Bacon."

Secure some of these books: "Sanitation in Daily Life," Richards; "The Art of Right Living," Richards; "Eve's Daughters," Harland.

THE CARE OF BABIES.

Mrs. W. O. Eaton, Ashland.

For the best results the care of a baby must necessarily begin long before it is born. The normal development of the unborn child depends so much upon the physical vigor and mental balance of the mother that her health during pregnancy is of most vital importance. Everything that tends to improve her physical and mental condition, such as wholesome food, pleasant surroundings, congenial associates, exercise, fresh air, and sunshine should be secured for the expectant mother. She should not indulge in laborious occupation and violent exercise, especially in the advanced stage of pregnancy, but walking, and the performance of light housework are beneficial. Heavy laundry work, long use of the sewing machine, hill climbing, and driving over rough roads should be avoided.

Corsets should be discarded upon the first evidence of conception, and light, loose clothing worn, suspended from the shoulders, thereby relieving the hips and abdomen of all weight. The ideal dress for this period is the union suit, a light petticoat fastened to a loose waist, and an empire gown. In cold weather, wool tights are much more desirable for warmth than additional skirts.

The process of making blood and tissue for the unborn as well as for the mother makes heavy demands on her vital energy, therefore, she not only needs increased nourishment but extra sleep, and a daily nap should be secured, unless it interferes with the sleep at night. A liberal supply of substantial but easily digested food should be eaten, and if the appetite is sluggish, it should be stimulated by outdoor exercise and tempting dishes. Fresh fruits and vegetables in season should form part of the dietary, and when not obtainable, canned vegetables and stewed fruits may be used. A heavy diet of meats and rich foods which overtax the digestive organs should be avoided.

The tendency to constipation at this time may usually be relieved by a generous supply of juicy fruits and the coarser cereals, such as, oatmeal, cornmeal, graham, whole wheat and brown bread. The morning sickness so common during the first months may occasionally be relieved by a cup of hot coffee or broth, taken before rising. Dry magnesia will frequently relieve heart burn (sour stomach) and may act as a mild laxative. If constipation be obstinate a daily enema of from one to three pints of soapy water may be necessary.

Gentle rubbing of the abdomen with olive oil or goose grease tends to make one more comofrtable during pregnancy. The breasts, so essential to the future nourishment of the child, should be treated daily to the same gentle massage, while the nipples during the last two months should be gradually toughened by the application of diluted

alcohol, or equal parts of brandy and water. If flat, they should be drawn out with a cupping glass, or developed by moulding with the fingers.

A specimen of the urine should be furnished the doctor from time to time for examination, especially during the later months of pregnancy, as dangerous kidney troubles may be thereby discovered and relieved by timely treatment.

The teeth, which are inclined to soften and decay during this period, should be put in first-class condition by the dentist during the early months, to prevent probably much suffering and may be shock later.

The expectant mother should regard the coming of her baby with pleasure. She should read some of the good books now on the market which will help her to do the very best thing for her own and her child's welfare, follow the suggestions obtained, and be cheerful and happy in the work nature has delegated to her—being a mother. Herein lies woman's greatest opportunity for doing good in the world. There is so much improvement of the race to be gained by bettering the conditions of child-bearing and rearing that every expectant mother should make an effort to procure some of the helpful literature on the subject, a list of which is hereto appended. There is great pleasure and satisfaction in doing one's work well.

All preparation for the arrival of the baby should be simple, rational and complete, long before the last week of pregnancy, thereby avoiding over-work and worry.

The clothing should be simply made, with an eye to comfort of the babe, and convenience of nurse or mother in handling. The object of clothing for infants being to secure uniform temperature, there need to be as much clothing on the arms, and legs as the body. No garment should be more than thirty-six inches from neck to hem. Dr. Cotton, author of "Care of Children," has designed a baby bag or sleeveless sack which is a very practical garment for infants until they are six week or two months old. Clothing should not interfere with freedom of muscular movement or blood circulation. The evils of the old fashioned pinning blanket, the tightly drawn diaper, as well as bands about the chest and abdomen, are apparent to all educated people today, and instead of the tight band a bias piece of soft flannel is pinned by small safety pins around over the abdomen for a week or ten days, until the navel dressing is no longer needed, after which a knitted band with straps over the shoulders is used for warmth. The best undergarment for a baby is the knitted long sleeved shirt of mixed lamb's wool and silk. A mixture of wool and cotton is suitable for the stockings, which should be long enough to pin to the diaper, which, in turn, is pinned to the shirt, thus leaving no portion of the child uncovered.

The pinning of diapers tightly around the hips of babies when the bones are soft is one of the causes of prolonged labor so common to American mothers, and a tight band around the abdomen prevents natural muscular movements of the stomach and bowels, weakening the abdominal walls, and is frequently the cause of rupture both of the navel and groin.

A new-born babe's needs are few but imperative. They are warmth, food and repose. It should be disturbed only when necessary for drink, for its daily bath (after the first few days), change of clothing, or for fresh diapers. It should be nursed every two hours during the day and once at night.

Immediately after birth the baby's eyes should be cleansed with separate pieces of gauze moistened in tepid boric acid solution.

A saturated solution of boric acid in boiling water, carefully strained, cooled and bottled should be prepared for the confinement room and nursery.

The baby should not sleep with the mother or nurse, but in its own crib or basket from the first.

In the care of the infant no day should be allowed to pass without at least one free bowel movement. The establishment of the habit of regular defecation is possible at a surprisingly early age.

The normal infant loses weight the first three days, but this is usually regained by the end of the first week, and after this the gain should be steady, about an ounce a day, up to the end of the second month. During the third and fourth months the gain should be about three-fourths of an ounce per day. It should be weighed regularly every week, and if baby is not growing, some change must be brought about in the quality or uantity of the mother's milk, which will necessitate a change in the mother's food and usually is best secured under the guidance of a competent physician.

A few simple rules which are important in the hygiene of nutrition should be observed. 1. The nipple, as well as the infant's mouth for the first few weeks, must be cleansed before and after nursing, and a few drops of milk should be drawn from the nipple by the thumb and forefinger before each nursing.

- 2. The infant should be put to the breast every two hours during the day and once or twice at night during the first six weeks. The intervals between feedings should be increased according to age, and night feeding discontinued after six months. Regularity of feeding is very important.
- 3. The time occupied in nursing and the quantity taken should be controlled by the mother. About twenty minutes should be given to each nursing.
- 4. Give water systematically and freely. Restlessness is frequently only an expression of thirst. There is very little danger of giv-

* HQ 1901

1912 Sept ing too much sterilized water, as it quickly passes out of the stomach. The water should be given at blood heat, either with a spoon or from a nursing bottle.

The infant at the breast is in normal relation with his greatest need, and one should never substitute artificial for natural feeding

unless it is necessary.

Do not experiment on the baby with all kinds of food—patent and otherwise—but, if it becomes absolutely necessary to resort to artificial feeding, consult a competent physician. Some one has said that it is twice as dangerous to be a baby as it is to have smallpox. The death rate in untreated typhoid fever is less than half that of artificially fed babies. It is quite as necessary to have a physician to supervise the artificial feeding of an infant as it is to have him attend the mother in confinement, for the mortality during birth is slight, compared with that of bottle feeding.

No method yet devised can take the place of breast feeding. No substance nor combination has been discovered that meets all the requirements of the infant as does breast milk. A great amount of study and research by the best minds has evolved only a few scientific principles, the application of which to individual cases, calls for best work of the trained physician. Many of the so-called baby foods on the market contain little more than starch, and are therefore not digestible for young children. Others are deficient in fat. Still others have an excess of sugar, especially cane sugar, or a high percentage of unconverted starch, and the fact that all of these prepared foods have been cooked, makes them less suitable for the purpose of infant feeding than modified cows' milk, which is the next best thing to mother's milk.

The supervision of the physician does not lessen the care required of the mother or nurse, nor make it less necessary that she understand the situation. However wise the advice may be, trouble is almost sure to follow unless the rules and precautions given are followed to the letter.

The mother who is unable to nurse her baby must acquaint herself with the average capacity of an infant's stomach at birth, and at different ages, must know that milk from a herd is better than from one cow, and must see that the dairy is in sanitary condition, and give the modification of the baby's milk her personal attention.

The hygeia nursing bottle is the best.

The "pacifier" or "soother" should never be used.

[&]quot;Care of the Baby," by J. P. Crozer Griffith, M.D., \$1.50.

[&]quot;Care of a Child in Health," N. Oppenheim, M.D., \$1.25.

[&]quot;Care and Feeding of Children," L. E. Holt, M.D., 75c.

[&]quot;Hygiene of the Nursery," Louis Starr, \$1.00.

[&]quot;Care of Children," by A. C. Cotton, M.D., \$1.50.

A STORY WITH A MORAL.

A Scotch minister, on visiting a parishioner, found him in a despondent mood.

"Dominie," said the man, "I am a bad, bad man."

"Ay, ye are none the best; I have seen straighter furrows than these," responded the minister cheerfully.

"It is a fearfu' thing, Dominie to lie awake at night and number one's sins."

"Yes, man, it is indeed; but you have no need to commit the same sins again. Friend, next season you won't be putting in corn without manure, will you, now?"

"And, Dominie, I'm afraid there's something awfully wrong with me; the Almighty does not smile upon my labors."

"Try him, my friend, try him," smiled the kindly minister. "It is right hard, if not impossible for the Almighty to smile with clover by son a soil that is as sour as yours. Try a good coat of lime; plow better; get a wee bit of manure. I think you will find that the Almighty will meet you more than half way, and you will see his smiles all right."

If every housekeeper who, today is complaining of the drudgery of housework and the incompetence of servants, would learn the principles of Home Economics and apply them to her housekeeping, she would find that the Almighty would meet her more than half way and that her troubles would be so much relieved that she would not only find pleasure in her household work, but she would find also that her husband and children would enjoy their home more and would not be so anxious to leave her fire-side.

Try it, dear woman, and prove the truth of it.

The American School of Home Economics of Chicago has published a library of twelve volumes, treating of the various subjects of house-keeping. Secure this library and other books either by purchase yourself, on the shelves of your public library, by borrowing from this Department, or from the State Library.

The State Library will charge you \$2.00 for transporting any case of books.

This Department requires that you pay the transportation both ways whatever it may be.

A list of helpful books is given 'n Bulletin No. 2, issued by the Kentucky Depuartment of Agriculture.

