# PRACTICAL HOMEMAKING 

 A Textbook for Young Housekeepers BY
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NEW YORK CITY


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## PREFACE

" What you would have appear in the life of the people that you must put into the schools."

The aim of this book is to periect the future housewife by arousing an interest in homemaking, by imparting a knowledge of the important theoretical and practical questions that arise in housekeeping, and by promoting habits of industry, order, cleanliness, and thrift.

Homemaking has now taken its place among the great professions, precisely because it has been discovered that housekeeping is an art dependent upon skilled labor and effective tools in the same way that any manufacturing business is so dependent.

The nurse and the doctor are skilled laborers trained to relieve physical suffering and to cure disease. The homemaker is to be a skilled worker trained to rear children and prevent disease. She is to create centers of order, health, and happiness. She must realize that the way the dishes are washed, the beds aired, the food cooked, may save or ruin the important business of making a home.

The skilled housekeeper does even the smallest duty perfectly; she plans carefully and executes her plans in the manner best calculated to save time, energy, and money. Out of the very smallest house she can create a home.

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## NOTES TO TEACHERS

This book is designed for girls in their first year of domestic-science studies. It contains a complete year's course in homemaking, and is to be followed by a more advanced, second-year course.

## Lessons.

These lessons are to be given in housekeeping centers, or model homes. Such centers are to be built in the school-building, and modeled as nearly as possible upon the homes of pupils ; or they may be actual apartments, or small houses, rented near the school-building.

## Furnishing.

The furnishing of these centers, or model homes, is a lesson in color, beauty, economy, comfort, and sanitation. Each center should be completely equipped for a family of five or more persons. When possible all work incidental to the furnishing of a Housekeeping Center should be done by the pupils under the direction of a teacher. This will be an experience in the selection of color; will give many lessons in such hand work as sewing, simple carpentry work, staining and painting. The knowledge and value of materials and the planning for the economy of space can be best learned if the children themselves do as much of the furnishing as is practical.

## NOTES TO TEACHERS

## How to Use this Book.

In most cases, a chapter is one complete lesson. At the rate of one lesson a week, a group of pupils should complete the book in one school year.

## Object of Teaching Homemaking in a Model Home.

To build up a home, orderly, beautiful, comfortable - as nearly as possible what a home should be ; so that all the persons who see this home can use it as a model. Also, by lessons in actual home activities to awaken in every school-girl a sense of home-responsibility and a love for homemaking.

## Instruction.

The instruction is to consist of practical lessons in furnishing, sweeping, cooking, cleaning, laundry-work, sewing, and accounting ; in home, municipal, and personal hygiene ; in the chemistry of food; in the distribution of the income ; in reading, and in social life at home, including hospitality. All of these subjects are to be taught in such home surroundings as the pupils are accustomed to.

## Method.

The method of teaching is by groups of pupils; preferably no group to exceed ten pupils for one teacher at one time.

## Pupils' Costume.

White cap.
Apron - to cover dress entirely, but without long sleeves.

## NOTES TO TEACHERS

Towel - One for each pupil, with tape to pin at side.

Dress - A light-colored wash dress is the best kind for the kitchen. This is not always possible for the pupils, but in the teacher's use of this sort of dress the ideal costume will be observable.

The teacher's dress is to have elbow sleeves, if possible. Long sleeves are uncomfortable to work in, and hard to keep clean. Teachers' uniforms vary according to the schools from which they have been graduated, but are always easily laundered.

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PRACTICAL HOMEMAKING

## PRACTICAL HOMEMAKING

## CHAPTER I

## HOUSEHOLD HYGIENE AND FURNISHING

The home is the most important workshop in the world. It is there our babies grow strong or weak; it is from there our fathers and brothers go forth good workers or bad; and there at home we find mothers who are happy or nervous. It is all conditioned by the atmosphere, the order, and the intelligence that girls and women put into a home. It is in the place you call " my house" that the greatest business of life is carried on.

Surely in this wonderful workshop we cannot have useless things about. Every article of furnishing must add to the usefulness of the home or to the comfort of the family, or contribute real beauty. Do not give space to anything that is not necessary in at least one of these three ways. Give it away if it can be of use to any one else. Throw it away if it serves no purpose.

Remember that space, uncluttered, empty space, is beautiful, restful, and very important to health and happiness. Strive to have space in your house rather than to have things in your house.

Every girl should have a definite opinion about
every article in her home. We must be careful not to hurt the feelings of other people, but every girl has a right to know whether she does or does not like every single object in her home. By thinking for herself a girl forms her taste. There is good taste and bad taste. If you learn to like beautiful things and to dislike bad colors, crowded rooms, and useless objects, you have good taste. The poorest home can be in good taste. The richest house is often in very bad taste.

For practice every girl should go about her own home and looking at every article in it ask the question: "Is this of any use?" To broken china you would have to answer " No." To a clock that can't keep time, no matter how beautiful it is, you must answer " No." To paper ornaments you must answer " No." Let every pupil try this in one house, and see what a long list of "No's" she will have.

You are now going to work in a model home.
The workman has a model to copy when he sets to work. If a girl is making flowers the factory provides a model. If a girl wants to trim a hat, she finds a hat that she likes and copies it. And so, to-day we are beginning a course of study in how to make a home; and we start out with a perfect home as a copy; not a rich house, or a large house, but a home that would be a good place to live in.

The lesson to-day is the study of this model house and its furnishings.

The first thing a good workman does when entering a new shop is to look about the shop and note its
construction; he examines the tools he is to work with, to see if he understands them, if he can handle them intelligently; and learns where each has to be kept when not in use. That is exactly what you must do in this home workshop to-day.

## Floors.

The floors have no carpets on them. Why? Think of all the grown people and children who walk from the dirty streets into your home; every pair of shoes brings in some dirt and leaves it on the floor. Then dust comes in through the window and gathers on the floor. If we have carpets, the dirt and dust gradually get under the carpet and no matter how hard you work, unless you take up the carpet very often, the floor is never really clean. Dust is alive; that is, it has germs in it. Some of these germs do no harm; some are poison and carry disease to the people who breathe them in. We must do everything we can to get rid of dust. Therefore, we have no carpets, but stained floors, and these we can wipe up with a damp cloth.

In every good workshop it is desirable to make the best use of time. Sweeping carpets takes a great deal of time that can be better spent in other ways.

## Walls.

The walls in this model home are painted, and painted a light color. Paint washes and paper does not. A light color is cheerful and better for the eyes. In many homes the windows do not let in enough light
to make it easy to read in all parts of the room or to see dirt in all corners. Walls painted a light yellow do much to lighten the room. But no one rule can be laid down. For example, Italian people like brighter colors than Jewish people. Each family must follow out its own taste.

## Kitchen Furnishing.

Now that we have talked about the floors and the walls, the kitchen furnishing seems the most important observation to make next.

In the kitchen the floor is always plain wood or oilcloth. It must always be possible to scrub the kitchen floor. The walls of the kitchen must be painted and washable, even if the other rooms are papered. In every kitchen, no matter how large or how small, there will be always some ironware, tinware, woodenware, cleaning-cloths, dish-towels, implements for washing and ironing, brooms and brushes, dry groceries and jars to contain them; each one of these things must have, so to speak, a home of its own so that it can be found in the dark, if necessary.

A nail here or there, a little thought as to where to put things in the first place, and a determination always to put each article back in its own place will make housekeeping a pleasure and the kitchen so comfortable and orderly that it will be a good room in the house to dine in.

Now, examine everything in the kitchen, telling its use and why it is where it is.

In this same way go through each room giving careful attention to:

## Beds.

Have iron beds, never wooden ones.

## Bureaus.

See that the bureau has drawers that open and shut easily; that the handles are wooden or good brass (not light cheap handles) ; that there is a mirror over the bureau.

## Chairs.

Look at each chair and see that it can be thoroughly dusted with a damp duster. We do not want any part of any chair to hold dust.

## Tables.

A table can be beautiful even if it is of plain wood. It does not need a dusty cloth to make it pretty. Any table can be stained and waxed. The use of a table is to hold things.

## Curtains.

In a later lesson we will take up the various curtain materials. To-day we notice that the curtains are thin, so that the light may come through; short, so that the dust from the floor cannot reach them; and made of washable material.

As in the kitchen, closets were found for china, pots and pans, kitchen linen, and everything connected with
cooking, in the other rooms there must be places for bed linen, table linen, closets for clothes, shelves for books, and a desk of some kind. Also, boxes or racks for toys and stationery, boots and shoes. A large sideboard takes up a great deal of room, and is a useless piece of furniture.

As we go through a model home, we will notice other articles such as scrap-baskets, lamps, and ornaments. The scrap-basket should add to the beauty of the home. Every ornament must have some good reason for being in our house. A vase holds flowers; brass candlesticks hold candles that give light; picture frames hold photographs of our family or friends: a copper bowl can be used for fruit ; a samovar is very beautiful as well as useful. If an article has no use do not let it clutter up your house.

Every girl will carry home from this furnishinglesson four strong impressions:

First. As far as possible have all parts and all articles in the house washable or capable of being cleaned.

Second. Have every article in good order, serving some purpose.

Third. Let nothing stay in the house that is not useful or beautiful.

Fourth. Have a place for every object; even if it is only a nail to hang it on.

Three of the New York Tenement-House Laws have direct connection with this first chapter on the Home.
" A tenement house is any house or building, or portion thereof, which is either rented, leased, let or hired out, to be occupied, in whole or in part, as the home or residence of three families or more, living independently of each other, and doing their cooking upon the premises, and includes all apartment houses and flat houses."
"No room in any tenement house shall be so overcrowded that there shall be afforded less than four hundred cubic feet of air to each adult, and two hundred cubic feet of air to each child under twelve."
" No wall-paper shall be placed upon a wall unless all wall-paper shall be first removed and said wall thoroughly cleaned."

## CHAPTER II

## CARE OF THE STOVE

The most important possession of the home is the stove, for without it we should freeze and starve. If we have only a little money, the first we spend is for a home, so the rent is the expense we think of as the most pressing. Next we have to get warmth and food; therefore, the stove is the most necessary object in our house.

To understand your own stove will save you money ; you can waste a great deal of coal or gas simply by not knowing how to run a stove. You can waste more time and patience "fussing" over the fire than in any other way. You will waste good food-material if you don't know how to regulate the heat in the oven.

Every housekeeper has her fire to care for: making it, feeding it, watching it. This work can be very dull or very interesting work. This lesson is to show every girl what an interesting part of her house the kitchen stove is.

Before examining the stove, clean it thoroughly, remove the ashes over the oven-box, under the oven, and at the sides. Examine the picture in the book. Take the stove apart as far as is possible.

Each furnace, range, or stove is somewhat different, yet the principle of all is the same. Each has a damper, draught, and check. Each must have an escape for coal gas, and each must heat some water continually to prevent the air from becoming too dry. In the case of a kitchen stove, this water is placed on the top of the stove in a bowl, which must be washed and
 refilled every morning.

The damper is a flat plate which, when shut, closes the range where it connects with the chimney-flue. When the damper is open much of the heat goes up the chimney; when it is closed the heat waves go over and
 around the oven. The damper is never entirely closed, as the coal gas must have an escape up the chimney.

The draughts are doors or slides that come below the firebox. When they are open a strong current of air passes up through the fire-box, making the fire burn better. When the draught is closed the fire burns more slowly.

The check is a slide or small door above the firebox. When open it retards, or makes a slow fire.

In starting the fire, open damper and draughts, and close the check.

When the fire is started, close the damper and save heat.

For a hot oven, close the damper, open the draught, and see that the check is not open.

For a slow fire, close draughts and damper, and open the check.

As we learned in the furnishing-lesson, connected with a stove or near to it one must have a match-safe, a box for kindling, and a place for newspapers. A common packing-box divided into two parts will hold both wood and paper. One must also have an ashcan, a coal-scuttle, and a shovel; a stove-lifter, a shaker, a poker, and a rake for cleaning out soot from all airspaces under the oven as well as over it; a blackingdauber and brush, stove blacking, a whisk broom and an old glove to protect the hand. An oven-cloth should be near at hand to lift hot dishes with; a girl must never use her apron for this purpose.

All these things must be very near the stove. One should never have to look about for anything required in managing a range.

## Making the Fire.

First take out the ashes, seeing that clinkers and fine ashes are removed from every part of the stove. These prevent a free circulation of air and absorb the heat. Lay the fire lightly - first paper, then wood,
then a very little coal; remember that a packed fire will not burn. Before lighting the fire the dust should be brushed from every part of the stove, and the stove blackened. When lighting the fire have all draughts open, damper open, and check closed. Put very little, if any, coal on at first; and more coal when the fire is started. When it is really going well, close the damper. The children, not the teacher, must do all the work.

During the day it is better always to rake than to shake a fire. Never have the coal reach the lids of the stove, as this makes the lids crack. Never allow the stove to grow red-hot; it warps the lids. To cool too hot a fire, open check or lift lids.

Before blacking the stove, rub it off with a damp newspaper. The range should be blacked every morning before the fire is lighted. Never black over dust. Throughout the day clean the stove with newspaper, if anything spills on it. If it is not thoroughly polished after blacking, the saucepans will become dirty. It is necessary, occasionally, to scrub the stove with soda water to remove old blacking.

While the fire is starting we can learn something about the history of stoves, coal, wood, and matches. You are never going to forget that the amount of interest you get out of a subject is in exact proportion to the amount of study you put into that subject. In this book there are a few facts about Coal, Wood, and Matches. Let every girl in the class find something in relation to these commodities that is not stated in the book and bring this information to the teacher.

## Coal.

The first coal that was taken from the ground in America was in 1750, in Richmond, Virginia. At the time of the American Revolution coal was first used as fuel.

There are, in general, two kinds of coal: Anthracite, or hard coal; Bituminous, or soft coal.

The principal deposits of anthracite coal are found in Pennsylvania.

There are several kinds of anthracite coal:

> White Ash, $\$ 6.75$ a ton in I9I 3
> Pink Ash, 7.00 a ton in I913
> Red Ash, 8.50 a ton in I9I 3

When coal is bought by the pailful it costs twice as much as when it is bought by the ton. It always saves money to buy coal in large quantities.

Bituminous, or soft, coal costs \$io.oo a ton. It burns more quickly than hard coal and makes a great deal of smoke in the burning. For this reason, in most cities, factories are forbidden to use soft coal. The engines on many railroads use soft, or bituminous, coal,- but nowadays less and less of it, because of the smoke and the fact that soft coal sends forth sparks which, as the train rushes through the country, set the woods on fire.

Brickets are bricks made of coal-dust. They give a very hot fire but burn very quickly.

Charcoal is charred wood. It is not cheap ; it gives a very hot fire but burns out quickly. It is used by plumbers, tinsmiths, and other artisans. It is also
used for cooking purposes, but this is expensive on account of the rapidity with which it is consumed.

## Wood.

It is much cheaper to buy kindling-wood by the bag than in bundles. It is necessary to use but very little kindling to start a fire if it is laid correctly, that is, lightly on the paper - and the paper loose. Never stuff a whole newspaper in at the bottom of the firebox. Also remember that a clean stove is a saving of wood and coal; for only in a clean stove will a fire burn well. If there are ashes on top of the oven or clinkers in the fire-box, these will take the heat which we need for our cooking and heating purposes.

## Matches.

Before matches were manufactured, flint and steel were struck together and the sparks fell among tinder or on paper and set it afire. Many attempts were made to use chemicals for the production of a fire, but it was not until 1827 that a druggist in England made a really practical match. He sold matches at the high price of 84 matches for 25 cents. In 1833, a man called Preschel, of Vienna, opened the first factory for making phosphorus matches.

Find out all you can about the mining of coal, and how matches are manufactured.

Write any facts you can find on these two subjects into a composition and bring it to your teacher.

## CHAPTER III

## COCOA AND HOW TO COOK IT

The stove is so important that you cannot possibly learn all about it in one lesson.

It will be necessary to begin all over again, and a second time make the kitchen fire; or, if you have a gas-stove, review the lesson about a kitchen-range. Going quickly over the points:

How to clean a stove.
How to lay a fire.
When to open and when to close the damper.
When to open and when to close the draught.
When to open and when to close the check.
How can we save coal?
How do we waste coal?
Now we do our first cooking, for it is of no use to know our stove unless we can use it.

## Cocoa.

Cocoa is one of the simplest things to make and one of the most nourishing drinks; it takes the place of tea and coffee, which no girl under fourteen years old should ever drink. Tea and coffee make her nervous and spoil her complexion; she cannot grow up to be strong and beautiful if she drinks stimulants, and tea and coffee are stimulants.

From to-day on, you will choose cocoa or milk instead of tea or coffee. There is a great deal of nourishment in cocoa, for it is made of

Milk,<br>Cocoa,<br>Sugar.

## Milk.

Milk has all the different kinds of building-material that your body needs. You would have to eat two eggs, or half a pound of potatoes or one pound of cabbage, or nearly a quarter of a pound of round steak, to get as much strength as you can get from a cup of milk.

## WMOLR MロルK



## Cocoa.

Cocoa gives flavor and adds some protein.

## Sugar.

Sugar is not only pleasing to the taste, but gives heat and force to the body while it is growing. That is why children, more than grown people, are eager for sugar. We call this the food-value of sugar; it is a carbohydrate, which yields energy. In four lumps of sugar we get as much energy as in a large potato.

Just as we have learned that we can develop good or bad taste in the furnishing of a house, so we can

SUGAR
granulated
form good and bad taste in foods. If you form the taste for tea and coffee it


## Carbo. hydrates 100.0

 is hard to break it; but it is necessary to do so if you want to be a strong woman.
## Making Cocoa.

Never begin to cook until everything you need is on the kitchen table.
Cover the table with a paper.
Collect materials, judging from the recipe what you will want.

In the cooking of cocoa you will need: cocoa, sugar, milk, salt, saucepan, tablespoon, knife, cup for measuring, a double boiler (or two saucepans which can be made into a double boiler), an egg-beater, a utensilplate. See that the kettle on the stove is filled and the water boiling.

All recipes are in the back of the book. Cocoa, page 129.

After the cocoa is made and served, scrape, pile, and wash dishes.

## CHAPTER IV

## MILK-TOAST—RULES FOR DISHWASHING

In the last chapter you learned how to prepare a kitchen table with the necessary cooking utensils, but the dishwashing was not thoroughly studied, because there was not time.

We cannot wash dishes until we have used them; this gives a chance to try a new recipe at each lesson.

## Milk-Toast.

Again you have that valuable food, Milk, and a second valuable food, Bread.

## Bread

is one of the most nutritious of our everyday foods: three-fifths solid nutriment, only two-fifths water. There is no animal food and there are few cooked vegetable foods of which this can be said. Most foods have a great deal of water. But you could not live on bread alone. You would have to eat four pounds of bread, or five ordinary five-cent loaves, to derive enough energy and protein to get through the day. Protein is that element in bread which builds up and repairs the body. The carbohydrates, or starch, are the fuel that give heat and energy, and make us want to work. If you have milk and butter
with bread you do not need to eat as much bread, and your body will get the right things to make it grow,
 to keep it in repair and warm, and to give you a feeling of energy.

The recipe for milk-toast is on page I30 of this book, and you know now how to cover the table and get out all needed materials before beginning to cook.

## Dishwashing.

The piling, scraping, and rinsing of dishes is quite as important as the washing. Dishes that stand unpiled and unrinsed require more time and more effort.

It is well to have the directions for dishwashing typewritten and tacked on the wall.

## To Pile Dishes for Washing.

Scrape all bits of food from the dishes onto one plate - and empty this plate into garbage-pail, which should be lined with newspaper. Pile dishes in order of size, cups together, saucers together, plates together, etc., silver by itself. Never set one glass in another. Soak all cooking-dishes.

Soak all milk-dishes or dishes that have had dough in them in cold water. Soak egg-dishes in cold water. Soak all dishes that have. had sugar in them in hot
water. Soak all cereal-dishes in cold water. Boil greasy dishes, putting in soda if necessary.

## To Wash Dishes.

Use two dishpans, plenty of hot water, tray, dishcloth, and towels.

Always refill the kettle after taking water from it.
Make wash water soapy with soap-shaker. The Jewish people use soda instead of soap.

Take dishes from rinsing pan and set them on drain-ing-tray.

## Order of Washing Dishes.

Cleanest first.
Glasses, silver, teacups, saucers, rest of china, granite and tinware, pots and pans.

Kitchen knives and forks should always be scoured with Sapolio or with ashes to take off the spots.

## To Clean a Milk-Bottle.

First. Soak the bottle in cold water.
Second. Wash with other glassware in hot, soapy water.

Third. Rinse with hot water.

## Pans and Kettles.

Clean seams of pans with a match, stick, or wooden skewer. To clean kettles in which something has been burned, fill with water, add a small handful of soda, and boil - repeating this process if not entirely successful at first.

Dry tinware near the stove, woodenware in the sun.
Do not put the handles of knives or forks into water. Wipe them off with a wet cloth, and dry well; soaking them in water loosens the handles.

After dishes are washed and wiped, empty and rinse both pans, dry them, and hang them up; wipe off tubs where dishes are washed.

## Kitchen Sink.

Near the sink there always should be kept a sink brush, a sink shovel, a soap-dish and washing soap, a soap-shaker, a drinking-glass, a strainer, a jar of soda, and a jar of wood ashes for cleaning knives.

## CHAPTER V

## CREAM-TOAST WITH CHEESE-RULES FOR WASHING DISH-TOWELS

## Cream-Toast with Cheese.

The recipe is in the back of the book, page I3I.
Milk, cheese, and bread contain all the food necessary for a meal. Milk and bread we have discussed in previous chapters.

## Cheese.

Cheese is one of the substitutes for meat; that is, if you have no meat, cheese will give you the same strength. A pound of cheese has as much value as a gallon of milk, for cheese has all the protein and fat of milk, with most of the water taken out.

Cook, and serve the cheese-toast. Pile dishes, as in last lesson. Now go more slowly and more carefuliy with the dishwashing; and we shall proceed to take up

## Washing Dish-Towels.

Dish-towels must be washed every time they are used. If grease is allowed to dry on the towels they are hard to get clean. Dish-towels must be washed while still wet.

Use towel-pan and plenty of hot water, small rubbing board, and soap.

Wash one piece at a time, the cleanest first.
Rinse each piece in another basin; shake out; hang on rack with edges even.

Towels must be boiled at least once a week to keep them fresh and white.

## CHAPTER VI

## CEREALS

## Cereals.

Cereals, or grains, are simply the seeds of certain grasses, that are used for food. Cereals contain woody fiber, and so must be cooked a long time. They also contain much starch and some protein (the part of food that builds up and repairs tissue).

To know how to cook cereals is very important, because there is more real nourishment for the money in cereals than in most other kinds of food.

Time-Table for Cooking Cereals

| Cereal | Amt Cups | Water Cups | Salt tsp. | Time min. |
| :---: | :---: | :---: | :---: | :---: |
| Rolled Oats | I | $21 / 2$ | I | 40 |
| Oatmeal (coarse) | I | $3^{1 / 2}$ | I $1 / 2$ | 40 |
| Pettijohn's | I | 2 | I | 40 |
| Cream of Wheat | I | 4 | I $1 / 2$ | 40 |
| Wheatena | I | 4 | I $1 / 2$ | 30 |
| Rice | I | 6 | 2 | 30 |
| H. O. | I | 2 | 1 | 30 |
| Hominy (fine) | I | 4 | 2 | 2 hrs . or |
| Cornmeal | I | 4 | 2 | longer |

Cereals can be divided into three classes:
Raw cereals, such as old-fashioned oatmeal, cornmeal, etc. (These need long cooking.)

Partially cooked, such as Cream of Wheat, H. O., Quaker Oats, etc. (These need less cooking.)

Prepared cereals, such as Shredded Wheat, Force, etc. (These require no cooking.)

## RICE



The only difference in the cooking of cereals is the amount of time required in the boiling and the amount of water used.

The water should be boiling and salted when the cereal is added. Cook for five minutes directly over the fire, and stir lightly with a fork until all is thoroughly mixed. Then cook in a double boiler or in a small saucepan placed over a larger saucepan, the larger one containing boiling water (this to prevent the cereal from burning). While cooking, stir occasionally from the bottom with a fork.

As the water underneath boils away, more should be added; also, if the cereal absorbs the water too rapidly add more water.

For experience, cook two cereals, one in a double boiler, one in two saucepans.

Leave dishes used in preparation on the tubs for later washing.

When the cereal is cooked, serve and eat with milk and sugar; but first fill the boiler and saucepans with cold water to make the washing easier later.

Every girl before chapter understands perfectly how to make the fire; how to
 prepare a kitchentable for a cooking-lesson; how to wash dishes and dish-towels. There is more cleaning up after cooking than this. The kitchen-table must always be scrubbed.

A kitchen-table can be a beautiful piece of furniture, but it needs daily care and always the right

RYR care.

All bare wood, that is unpainted, unvarnished, and unstained, is cleaned exactly as we shall clean the kitchentable.

## To Clean Table.

Use basin of hot water, two muslin cloths, brush and Dutch Cleanser or Sapolio. (Never use soap; it makes a table yellow.)

Wash one-half of table at a time, to leave a place for the cleaning-materials.

First. Wipe it with cloth wrung out with hot water in basin.

Second. Shake Dutch Cleanser on wet space and scrub with a brush - straight with the grain of the wood - as scrubbing round and round does not take the dirt out.

Third. Wipe off with a wet cloth.
Fourth. Wipe with dry cloth.
After table is washed, put away Dutch Cleanser; empty, rinse, and dry pan; hang it up; rinse out brush and put it away, bristles down; wash out the cloths used in washing tables; wipe up floor if any water has been spilled.

Cereal recipes on pages i31, and 132 .
Farina with Dates. Indian Pudding. Steamed Rice. Rice Pudding.

## CHAPTER VII

## BEDS AND BED-MAKING

There is certain household work that we have to do every day of our lives. In the last six chapters we have been studying about these daily tasks in the kitchen : care of stove, cooking, dishwashing and clean-ing-up which always follows the preparation of a meal. We keep this work from becoming dull and monotonous only by doing it so well that it becomes an art.

Other daily duties that can never be omitted from any day are those connected with the bedroom. Just as surely as every man, woman, and child must spend a part of every twenty-four hours in bed, just so surely must the bed be aired and made daily. A girl's bedroom, in a way, represents the girl; if it smells sweet, it is because the bad air is always being replaced by the fresh air coming in; if it is clean, dainty, and orderly, and not filled with a lot of dust-collecting things; we think at once that the girl who sleeps in that room is a neat, attractive girl with good taste. We have often seen bedrooms so pleasing that we long to know the girls who sleep in them and take care of them.

## Beds.

There are many kinds of beds.
Brass beds are sanitary (that is, clean and healthy), but they are expensive and hard to keep polished.

Wooden beds are not sanitary, because bedbugs are apt to get into the cracks of the wood.

Iron beds, painted, are inexpensive, easy to clean; and they do not attract bugs.

It is more healthy to sleep in a single bed than in a double bed.

## Mattresses.

The best kind of a mattress for a bed is made of hair, but this is the most expensive. Cotton mattresses are good and less expensive. Excelsior mattresses are often used, but they are hard. An excelsior mattress will be found to be more comfortable if covered with a cotton pad (quite thick) or an old blanket. A feather mattress is bad; it absorbs the moisture from the body, and it is not good for the back, as one should have the back as flat as possible during sleep.

Turn the mattress every day, and let it air at least an hour, so placed that air can reach both sides.

## Pillows.

Too high a pillow is bad for the back. If a girl is accustomed to a high pillow it will be hard to do without it all at once, but each night lower it a little until one low pillow only is used, or better still no pillow.

## Sheets.

Each bed must have two sheets. Sheets should be two and three-fourths yards long. This not only is long enough to tuck in well, but it also serves to protect the mattress and blankets. Cheap sheets are seldom long enough. In buying sheets always insist upon having them measured.

## Blankets.

Cotton and woolen blankets are better than comforters, excepting in winter, when both are needed. The blankets wash; they allow some air to get through, and they do not hold the moisture from the body as comforters do. Feather beds should not be used as covering. A comforter must never be used on a baby's bed - for a comforter cannot be washed.

## Pad.

Cover the mattress with a pad to keep the mattress clean and to make the bed comfortable.

## Spread.

Dimity is the best material for a spread because it washes easily and makes a bed look smooth and dainty.

## Bedmaking.

Every morning the moment you are out of bed, throw the bedding over chairs and allow it to air for an hour, or while breakfast is being prepared and eaten. The following is the way we make a bed; the
exact methods of the making are to be taught to the pupils by the teacher:

First. Be sure the mattress is the other side up from what it was the night before; thus they wear longer and don't become worn down in one place.

Second. Have a pad or square of canton flannel over the mattress and under the lower sheet.

Third. Have under sheet right side up, broad hem at the top.

Fourth. Have second sheet wrong side up, broad hem at the top.

Be sure that both sheets have middle crease exactly in the middle of the bed.

Fifth. Put the blanket on the bed at least a quarter of a yard below top of the bed, and turn top sheet down to keep the blanket clean.

Both sheets and blanket should be tucked in with square, hospital corners and should be pulled so tight that there is not a crease anywhere.

Sixth. The spread should be put on, also with square corners, but the sides of the spread should not be tucked in.

Seventh. The way a pillow is put on a bed can entirely spoil the looks of a bed; but if the pillow is very clean and very smooth, and lies very square on the bed, it will add to the beauty.

Eighth. If a comforter is used it is better to roll the comforter and put it at the foot of the bed than to make up the bed with the comforter under the spread, because you want your bed as square as a box,
and it is not possible to have square edges if you make the bed up with the comforter.

In another chapter we shall learn how to clean the bed. You will not have time to clean your bed every morning, but you should clean it once a week.

## CHAPTER VIII

## MORNING SWEEPING AND DUSTING OF BEDROOM

This chapter is still about the work that somebody in every household has to do every morning. Not only does the bed have to be aired and made, but the bedroom has to be put in order and left free from dust and attractive. Every room in the house should be treated likewise.

Just as we wash our bodies, our face and hands, comb and arrange our hair, and dress ourselves as attractively as we can every morning, so we put the house in order and make our rooms fresh, sweet, and clean.

In the last chapter you learned how to make the bed. Besides the bedmaking you must pick up and put into its own place every article that has got out of place. Soiled clothes must be put into the soiledclothes barrel ; hang up any coats, dresses, or hats not in use; see that books are in the bookcase, and scrapbaskets emptied.

## Sweeping.

Now sweep the floor.
In sweeping use different sides and corners of the broom, so that it may wear evenly.

Before sweeping any room see that no uncovered food is in the room or anything that dust will injure.

Sweep out the corners of the room first (a small brush for this is best). Sweep towards the center of the room; sweep with short strokes, keeping the broom close to the floor so the dust won't fly about.

Use a dustpan and brush to gather up the dirt that you have swept into a pile in the middle of the room.

If you have a coal stove it is better to burn this dust, as it may contain disease germs. If you have a gas stove, put the dust in a paper and send it out with the ashes.

Shake out the broom after using, or brush it out with a small brush.

## Dusting.

Use cheesecloth dusters, because cheesecloth is soft.
Never use a feather duster, as it only scatters the dust.

With a dry duster wipe off the windows, mirrors, brass, china, and books. Then shake the duster out of the window and, after dampening it, wipe the other articles, dusting the shelf or table on which they stand.

Woodwork should be wiped off with a damp cloth. This includes chairs, tables, desk, etc.;-that is, any wood that is painted, varnished, or stained. For highly polished wood you must use a dry, woolen cloth; a damp cloth leaves streaks.

After the room is clean, hang up the broom.
After wiping dustpan with soiled duster, put it away.

Shake the duster out of the window, wash and hang in air to dry.

Cheesecloth dusters should be washed, scalded, and dried (out-of-doors when possible) each time after using.

Look about each room before leaving it and see that everything is clean, everything straight and in order, and nothing lying about that should be put away. The window shades at the windows should be evenly drawn.

A room can be clean and yet out of order and unattractive.

No girl should expect her teacher to do any of the work, all the work is to be performed by the pupils.A teacher's work is to direct and criticize.

## CHAPTER IX

## PERSONAL HYGIENE

Hygiene is the science of health; and Personal Hygiene has to do with those acts which we must or must not perform in order to keep our bodies in perfect condition. Sometimes, when you read or hear of the simple rules that are necessary for health, you will want to say, "I always do that," or " I never do that"; but the most careful people in the world have to be reminded constantly of the everyday acts that affect health, and the girl is in danger who is too sure of her knowledge on this subject.

In the first chapter we looked at the house to see if it conformed to all the rules of household hygiene. We examined each article of furniture to see if it was as perfectly adapted to its use as it could be. In this chapter we are to study the hygiene or health of the people who live in the house. A house consists of walls, ceilings, floors, and the furnishings. A home means the house and the people who live in it.

## The Skin.

Every girl wants a clear skin. This is a mark of great beauty; the skin more than anything else is a sign of bodily health or disease. A smooth, clear skin
means that the tiny blood vessels are in good condition; that the circulation is good; that the right nourishment is being supplied to the body and that digestion is normal. A dull, sallow skin, or pimples on the face, indicate that the blood or circulation is out of order.

To keep the skin in perfect condition:
First, Food. Eat the right food at meals and eat it slowly.

Eat nothing between meals.
Do not buy impure, uncovered food from push carts.
Study what is the right food for a growing girl, and take pains to get it.

Do not drink tea or coffee while you are getting your growth.

Sccond, Air. Fresh air contains oxygen. We must breathe a great deal of oxygen into our lungs to make the skin clear and the cheeks red.

Impure air is filled with the poisonous waste substances breathed out. It contains the refuse from the lungs; it is filled with dust and germs and is lacking in oxygen.

It is just as bad to breathe impure air as to drink impure water. You would not think of bathing in the water another girl had bathed in, but you forget that it is as bad to breathe into your lungs the air which another has breathed out from hers.

Bad air, or not enough air, affects digestion and circulation, and shows in the skin. The signs are: pimples, dullness of skin, and a puffy look, especially around the eyes.

The rebuilding of the body is done largely at night, during sleep, and oxygen is a necessary part of this process of rebuilding. For this reason the window must be open in a bedroom at night to allow the fresh air to come in and the bad air to go out.

Third, Sun. If possible, have your house face south or west, as these are the sunny exposures.

Disease germs live best in dark places, away from the sun. A room with sun, therefore, is a more healthy room than one without. There have been cases of face eruptions traced to living in sunless rooms. If you cannot have sun in your room, you can have air, and then plan to be out in the sunlight as much as possible.

Fourth, Excrcisc. Exercise is absolutely necessary for a good circulation; and good circulation is necessary to carry off the waste matter of the body, otherwise this waste matter will clog and poison your systems. Nothing will ruin the skin more quickly than this kind of poison.

Choose walking, when possible, rather than riding in the subway or a hot trolley-car. Remember you are aiding circulation in the one case and retarding it in the other.

Fifth, The Morning Bath. The loose dirt which we accumulate from the outside is, perhaps, blacker, but it is not so dangerous as the dirt, consisting of waste matter and poisonous substances, which is given off through the skin, and which can be partially absorbed again to poison the body if it is not removed every day.

As a proof of how easy it is for substances to go in through the pores of the skin, if you rub a certain acid on to your skin that acid can be detected in your urine a few hours later.

Perspiration and grease pass out through the pores of the body; if not washed or rubbed off, this hardens and clogs the pores; it also gives off a disagreeable odor.

Do not wash only, - rub the skin hard every day. This is good for the nerves of the skin. This exercise makes them sound, healthy, and hardy.

The good or bad treatment of the skin has an immediate effect on general health.

## Remember:

We breathe through the skin as well as through our mouths.

We feel through the skin.
The skin must be clean so that nothing will obstruct it in throwing off obnoxious matter and in taking in oxygen.

Because there is not a bath-room in the house, is no reason for not bathing. A good way to take a bath without a bath-room is this:

Take two basins of water, one warm and one cold, have a wash cloth for each, soap and a towel. Stand in a third basin or tin tub. With the warm water and soap wash every part of your body. With the cold water rinse the body. Dry and rub hard with a coarse towel. Rinse out all basins, wash out cloths and put in sun to dry. Put towel where it will dry thoroughly
—wash this towel out two or three times a week. Never allow any one else to use your wash-cloths or towel.

## Cosmetics.

It is natural that every girl should want to make her skin as lovely as possible, but it is by air, sun, good circulation and good digestion that this beauty will come. Not by preparations and powders bought at the drug-store. These powders often contain lead, which makes ugly blackheads in the skin. Also, this lead poisoning may enter the body through the pores and affect the muscles and the digestion. Even if there is no lead in face-powders, they often contain ingredients which in time make eruptions on the skin.

## Hands and Nails.

Every girl should wash her hands just before cooking or before touching food. Also, wash the hands after going to the toilet, after arranging the hair or putting on shoes and stockings. To avoid chapped hands, dry thoroughly after washing, and at night rub with a pure cold cream.

It is not enough to manicure the nails once in a while. Keep the nails moderately short and always have an orange-stick conveniently near the wash-basin, so that the nails may be cleaned each time the hands are washed.

## Hair.

A very careful cook will always wear a cap when she is in the kitchen. This is to prevent any possi-
bility of loose hairs getting into the food. Any person who takes any part in cooking will be sure that her hair is neat and held securely in place. No girl should ever comb her hair in the kitchen, or in the room where the family eats. Nor should she wash her hair at the kitchen sink.

Once a week wash out the hair-brush and comb in hot water with a little ammonia in the water. The ammonia is needed to cut the grease which comes from the hair. Do not put the handle of the brush in the water.

It is well for a girl to remember that every time she goes out of doors without a hat, the air blowing through her hair gives it strength and beauty. Sun, air, and brushing the hair once a day will keep it in such good condition that a wet shampoo is necessary only about once in two weeks. The best shampoo for a healthy scalp is hot soapsuds made of pure unscented soap. Do not rub the soap directly on the head as this makes the hair sticky. Make soapsuds, wash the hair in these suds and then rinse four or five times in clear hot water.

## Teeth.

There is not a girl who studies this book who does not know she should brush her teeth morning and night with a tooth-brush which no one excepting herself ever uses, using tooth-powder when possible, and rinsing the mouth with fresh water after each brushing. But girls forget that much of the disease that people suffer from comes from unclean and decayed
teeth. Bad teeth are breeding-places for bacteria and germs. These disease-germs get mixed with the food and then get into the stomach and intestines, where they often cause disease. If a girl could only realize this, she would never go to school without brushing her teeth hard, and never go to bed leaving particles of food in her mouth to cause this dangerous decay.

## Feet.

A strong foot is a foot with the muscles in a healthy condition. The widest part of the foot is at the toes. Let any girl spread her foot out with her shoe off, and look at the foot and then at the shoe, and she will see that the shoe is often narrowest at the toe. When the foot is crowded into a pointed shoe the muscles are first hampered and finally rendered almost useless. The toes have had no freedom of action and the muscles no exercise. The foot loses its spring, becomes weak, and flat-foot is often the result. The temptation to buy pointed shoes is even greater, because these shoes are often the cheapest kind ; but it is money well spent when a girl buys square-toed shoes, even if she has to pay more.

If a girl changes her stockings at least every other day in winter, and every day in warm weather, she will find that her feet keep warmer in winter and cooler in summer and grow less tired. It is very simple to wash out stockings. They do not need to be ironed, but dried well.

Bathe the feet in hot water when tired, a little cooking soda in the water is a good thing. Wash the feet
in cold water every morning. This will keep the muscles hard and the feet strong.

When the feet are not in a good condition, a tired feeling, irritability, nervousness, and depression is the result.

## Eyes.

For reading, studying, sewing, or any work that requires keen eyesight, daylight is better than gas or electric light, but every one must read or work sometimes by artificial light. Whether you get your light from a window or from a gas-jet, the light should come from behind and above you. For writing, have it come over your left shoulder if possible.

If a girl has to strain her eyes to see objects clearly, or has frequent headaches, or the eyes look red at the end of the day, she should go to an oculist at once. Glasses in time often save the eyes for a lifetime.

## CHAPTER X

## SETTING THE BREAKFAST-TABLE

Before setting the table for breakfast, always air the dining-room. Even if the weather is very cold, open the window wide for a few moments to let the bad air out and the fresh air in. If the weather permits, keep the windows open while breakfast is being cooked.

If the dining-room is a room separate from kitchen, dust thoroughly before setting the table. When the kitchen is used for a breakfast-room, dust the table with clean damp cloth before setting.

You now have a place free from dust and filled with fresh air; in such a room food can stand uncovered on the table without danger of contamination.

## Setting the Table.

In preference to tablecloths, use plain, but welllaundered, doilies with a bare table; these are easily washed and ironed, and a spot on one does not mean that all must be washed.

The first thing to set on the table is a centerpiece. On this have flowers, if possible, or fruit, or one of the dishes of food.

The plates come next, set at even distances apart.
Knives and spoons should be placed at the right, the sharp edge of the knife towards the plate.

Forks and napkins at the left.
Glasses at the top of the knives, three-quarters full of water.

On the table must be pepper, salt, bread, butter, a pitcher of water, a small pitcher of milk, and sugar. What other things are to go onto the table depends upon what is to be served for breakfast.

Place the chairs at the table the last thing.
After the meal is over, take away the chairs first; then pile up the dishes neatly after taking them to the kitchen. Brush the crumbs from the table, put away the doilies in the place kept especially for table-linen, dropping the soiled ones in the wash.

Brush up under the table.
Unless the weather is very cold, leave the window open a little from the top.

A very good breakfast for a family where there are children is: coffee for the father and mother; milk for the children; cereal with milk and sugar; toast and butter for all.

In the next chapter we shall learn how to prepare such a breakfast, but if in one lesson a girl learns how to set a table perfectly she has done a good piece of work. It means training the eye to see with exactness, so that the least unevenness in the placing of any object will be noticed immediately, as well as the training of the memory to remember everything that is to be set on the table.

## CHAPTER XI

## PREPARING BREAKFAST

This is to be a Breakfast of coffee for grown-up people; milk for children; Cream of. Wheat with milk and sugar; toast with butter.

The first thing to be done is to see that the fire is made by the method described in Chapter II.

Then fill the kettle with fresh cold water, and put it on to boil. No matter what you are going to have to eat, the first important thing after the fire is made is to put a kettle of fresh water on to boil.

In Chapter III we learned exactly how to cover the kitchen-table and to collect all food and utensils to be used in cooking before beginning to cook.

For this breakfast we shall need on the workingtable:

Cream of Wheat, salt, double boiler, measuring-cup, tablespoon, teaspoon, utensil plate, coffee, coffee-pot, bread and knife. It is not necessary to set butter, sugar, and milk on this working-table. These can be put at once on the dining-table.

Three recipes are to be used in this breakfast. All are in the back of the book:
Coffee,
Cereal,
Toast.

Since it takes forty-five minutes to cook the Cream of Wheat, and only fifteen minutes to make the coffee, any girl knows, of course, that her first duty is to put the raw cereal into the boiling, salted water and let it be cooking while she does all the rest of the cooking.

Now get the coffee started, and lastly make the toast. Very few girls know how to make good toast.

In the last chapter you learned how to set the table. In this chapter you have learned how to cook a breakfast. In the next chapter you will fit the two together.

## CHAPTER XII

## BREAKFAST COMPLETE

The cereal we are to cook in this chapter is H. O., and we shall serve graham bread and butter instead of toast.

All the work referred to in this chapter will be review work, but there is one thing in knowing how to do several tasks separately while it is much more difficult to make each duty fit in with all the other duties so that there is order and no confusion.

If a girl was getting the breakfast herself she would, of course, first bathe and dress herself and leave the window open in her bedroom and the bedclothes airing. Then she would:

First. Make the fire and put the kettle on to boil.
Sccond. Air and dust the dining-room.
Third. Get out all utensils and materials for cooking breakfast.

Fourth. Start the cereal; place the coffee on the back of the stove to cook slowly.

Fifth. Air and dust the dining-room: or if the meal is served and eaten in the kitchen, wipe off the table and air the room.

Sixth. Set the table.
Scoenth. Cut the bread, and serve hot coffee, cereal, and bread and butter.

Eighth. Clear dining-room table. Pile dishes for washing. Brush up under dining-room table and wipe table. Wash dishes and put them away.

Ninth. Wash out the towels. Wash kitchen-table.

## CHAPTER XIII

## FOOD-VALUE

When you hear people talking about food-value they mean how much benefit to your body there is in the food you eat. Every moment you are throwing off used-up particles of your body, and you must take in something that makes up for this waste. But beside just repairing the loss, you must eat enough to give you energy. No cell in the human body can live for one instant of time without fuel. Just as coal is fuel for a steam-engine, so are certain foods fuel for the human engine.

## Food.

## PARSNDP

Food is anything you take into your body which repairs the waste or furnishes the body with new material, which makes heat and more energy. As you have learned, food to your body is what coal is to the stove. As soon as food enters your stomach it begins to digest or to be consumed, just as coal burns, and as the

value of coal is the amount of heat it gives out, so the value of the food is the amount of blood and

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 muscle it makes. Every kind of food that you buy has been analyzed; that is, chemists have found out what it is composed of, how much starch and fat and what is called protein, and how much water. Some foods that you call food are made almost entirely of water: for example, see the pictures of vegetables in this book. You see how large a part is water and how little solid food.

It is found that one-half of the weight of what we eat is water, but even in addition to this each girl should drink at least three glasses of water a day.

## Water.

Water is an aid to digestion ; it helps carry off waste matter and is as necessary for keeping the inside of our bodies in order as bathing is necessary to keep the outside of our bodies clean.

## Protein.

Protein is that element in food which makes good, restores, the daily wear and tear of tissue. Without protein life is impossible, just as it would do no good to put coal into a broken stove or engine. Meat, eggs, and milk are the foods which contain the most pro-
tein; but often we cannot get meat or eggs, and so we must find foods which are substitutes for these; that is, foods which have in them this power of renewing the tissue in our body. Peas, beans, cereals are some of these substitutes.

## Carbohydrates Are Starch and Sugar.

Starch and sugars make blood, and create energy; nine-tenths of your food is carbohydrates.

## Fats.

Fats, such as butter and oil and the fat parts of meats, make heat and keep you warm. The fat you eat is stored in your body as fat.

The breakfast in the last chapter consisted of coffee, milk, cereal, bread and butter.

Now let every girl consider whether the breakfast was a good breakfast or not. That is, did it make up for the waste matter she had thrown off through the night. In other words, did it have protein in it, and was there starch and sugar and fat enough to make heat and energy for the morning's work, and was this nourishment gained at a reasonable price? Carefully study each food served.

## Coffee.

Coffee is not a food at all. It does not contribute anything to the body that the body needs through the day. Coffee makes girls nervous, cross and weak, so when you spend money for coffee you get no return in food-value.

## Milk.

The reason little children can live on milk and nothing else is because in milk we find every kind of food: protein, starch, fat, sugar, and water. Milk is called a complete food because it contains, more than any other food in the world, everything the body needs.

## Cereals.

Cereals are the fruit or seeds of grasses. In all grasses there is laid up in the seed a storehouse of nourishment for the young plant while it is growing. It is this nourishing seed we eat when we eat oatmeal, or Cream of Wheat, or any other cereal. There is in cereals about $10 \%$ or $12 \%$ of protein, and the rest is starch, fat and water. As we eat milk and sugar with this cereal, any girl can see that she gets a great deal of food-value for the amount she pays; from one to two cups of cereal will feed six persons and costs about nine cents, including the milk and sugar we eat with it.

## Bread.

Bread is made from flour. Flour can be made of wheat, rye, oats, or barley, but as wheat is the most nutritious of the grains, wheat flour is the best from which to make bread. Bread is called the "staff of life" because it contains all the food elements the body needs, except fat. Bread contains wheat, milk, water, and sugar; also yeast, which makes it light and digestible. For a given sum one can obtain more food-value from bread than from any other food;
but no one could live on bread alone, as a child can live on milk.

## Butter.

Butter is almost entirely fat. We eat it to give heat to our body. Fat is eaten a great deal more in cold countries than BUTPRER in warm; and in cold weather we need more fat, because we need more heat, than in warm weather. Butter is an expensive fat. Oil and Ash:3.0
 lard and crisco give us the same heat at a smaller price.

For 5 people our breakfast cost us:
Coffee ..... \$ . 04
Milk, I 1/2 quarts. ..... I 2
Cereal ..... 03
Bread .....  05
Butter, $1 / 8$ pound, ..... o6
Sugar .....  OI

$$
\$ .3 I
$$

or $6 \frac{1}{5}$ cents a person and everything except the coffee contained exactly the food our body needed.

After reading this chapter, examine the food charts
that should hang on the walls of every Model Flat and see from each food what you get in

Protein, Carbohydrates, Fat, Water, and Mineral Matter.

The mineral element in food is needed to make bone and teeth, and to keep the blood in good condition.

## CHAPTER XIV

## PLUMBING LESSON

We have to have city, or municipal, housekeeping as well as personal, home, housekeeping. Just as the work in a large hotel is divided into departments, the cooks being responsible for the kitchen work, the chambermaids being responsible for the bedmaking and the cleanliness of the rooms, so the work of our city is divided into departments. The Police Department is responsible for the order of the city. It is its duty to see that no man is disorderly or in any way interferes with the rights of any other man. The Street-Cleaning Department is held responsible for the cleanliness of our streets. The Health Department works only to keep the people of the city from getting sick. And so we might mention many others, but these you will learn about in the chapter on Municipal Housekeeping. The department that has to do mainly with our homes is the Tenement-House Department.
"A tenement house is any house or building which is either rented, leased, let or hired out to be occupied or is occupied in whole or in part as the home or residence of three families or more, living independently of each other, and doing their cooking upon the premises, and includes apartment houses, flat houses, and all other houses so occupied."

You will see, then, that the most beautiful apartment house on Fifth Avenue is a tenement house. Or, to put it more simply, a tenement house is any house where three or more families live, each family cooking for itself.

The laws for tenement houses are made at the State capital by the Legislature, but the Tenement-House Department in each city sees that these laws are kept. There are over one hundred and fifty of these laws or rules for New York City tenement houses. In the first chapter, on furnishing, we read of the law referring to wallpaper; in this chapter we are to study the laws which have to do with the plumbing in our houses.

Plumbing is anything connected with piping, such as sinks, wash-tubs, bath-tubs, and water-closets. The laws relating to these things every girl should know by heart.

## Laws of New York as Related to Plumbing.

" In every tenement house there shall be in each apartment a proper sink with running water."
" In every tenement house there shall be a separate water-closet in a separate compartment within each apartment provided that where there are apartments consisting of but one or two rooms there shall be at least one water-closet for every three rooms. Every water-closet compartment hereafter placed in any tenement house shall be provided with proper means of lighting the same at night. If the fixtures for gas or electricity are not provided in said compartment, then the door of said compartment shall be provided with glass panels, or
with glass transom, not less in area than four square feet."
" In every tenement house all plumbing pipes shall be exposed."
" In all old tenement houses the woodwork inclosing all water-closets shall be removed from the front of said water-closets, and the space underneath the seat shall be left open. The floor or other surface beneath and around the closet shall be maintained in good order and repair, and if of wood shall be kept well painted with lightcolored paint."
" In all old tenement houses the woodwork inclosing sinks located in the public halls or stairs shall be removed, and the space underneath said sinks shall be left open. The floors and wall surfaces beneath and around the sink shall be maintained in good order and repair, and if of wood shall be kept well painted with lightcolored paint."
" Every tenement house shall have water furnished in sufficient quantity at one or more places on each floor. The owner shall provide proper and suitable tanks, pumps, or other appliances to distribute an adequate supply of water at each floor at all times of the year and during all hours of the day."

## Water-Seal.

A trap, or water-seal, is a U-shaped bend in a pipe. It must always have in it sufficient water to extend an inch or more above the bend. This water is called the seal, and its use is to keep the sewer gas from coming into the room. All water-closets, sinks or tubs have these water-seals.
(A bent glass tube can be bought at any drug-store.

Pour into this glass tube dirty water and then pour in clean water, and you will see how the clean water forces the soiled water down and forms the clean seal which keeps the odors from coming up.)


A, B, common traps; C, D, modifications of A and B-screw-caps, as shown at $a$, being added for cleaning out the traps; E, F, G, ventilating-traps with air-pipes at $b$ leading to the exterior of a building.

The stationary equipment connected with the plumbing in most of our homes is the water-closet, bath-tub, washtubs and kitchen sink, and we even speak of the ice-box in connection with plumbing for, although the pipe in connection with the ice-box is not built into the house, there is a pipe which must be cleaned in the same way as all other pipes.

## Kitchen Sink.

First consider the kitchen sink and how it must be kept clean and how the pipe under it must be kept free from grease. This sink has the U-shaped pipe underneath, and as we have learned from the reading of the Tenement-House Laws there is no woodwork enclosing this pipe. The reason for this law is so that the space around the pipe can be kept clean. Also, in a dark, damp place vermin collect, but in a light, dry place, as is true in the case of open plumbing, there is not this danger. The kitchen sink and the inside of the pipe connecting the sink with the sewer is kept free
from the accumulations of grease by the use of soda. Dish-water is apt to be greasy even if you are particular in the scraping of your dishes. Liquid grease chills as it reaches the pipes and clings to the sides of the pipes; then other substances stick to these greasy sides; and if nothing is done, these substances rot and send vile odors into the house. It is not the plumber's nor the landlord's business to prevent this, but it is the business of the little housekeeper or the grown-up housekeeper who washes the dishes. A strong, hot solution of washing-soda will dissolve this grease. The kitchen sink should be washed out with this hot solution of soda at least once a day.

## To Clean the Sink.

First brush all the bits of food and dirt from the sink with the sink brush and shovel, and put these scraps into the garbage-pail. Now place over the pipestrainer a small rubber mat or a cup. Then put a handful of soda into the sink and pour in gradually a kettle of boiling-hot water, scrubbing the inside of the sink with the sink brush while the soda dissolves. Remove rubber mat or cup, and allow the boiling sodawater to run down the pipe, pouring down this pipe more clean hot soda-water, and follow it with clear hot water, to remove all soda from the pipe. If soda is not washed down beyond the water-seal it is apt to eat holes in the pipe, and it will combine with the grease which may be washed down later, and this grease and soda make a soap which, if allowed to cool, will form a hard substance in the pipe.

## Another Way to Clean the Sink

 is to put a handful of washing-soda into the hot water kettle, let it come to a boil, pour this over every part of the sink and down the pipe, and then rinse the pipe well with plenty of clear hot water. Also, rinse well the hot-water kettle, wipe it dry and turn it upside down until morning and in such a way that the air can enter the kettle.
## CHAPTER XV

## WATER-CLOSETS AND WASH-TUBS

## Water-Closet.

Water-closets should be well-lighted and well-ventilated and should have floors that wash.

Every girl, when she uses a toilet, must feel herself responsible for the person next to come. Each time the toilet is used it must be thoroughly flushed ; at least three or four gallons of water should go down the pipe. The water-closet may be cleaned thoroughly every morning, but in one hour it can be an unattractive, unhealthy place if each person using it is not careful to flush it well, leaving the seat dry and clean, the toilet-paper neat, and no newspaper about. Let no girl hold the landlord or the housekeeper alone responsible if toilets are not in good condition, for the toilet in every house, or in every public hall, or in every public school, is every one's responsibility.

## To Clean Water-Closet, at Least Once a Week.

For cleaning water-closet you will need a long-handled brush, which is used only for the toilet; a cleaning cloth marked " T," so that no one in the house will be tempted to use it for any other purpose. Hot, soapy water and a kettleful of boiling hot soda-solution.

With the hot soapsuds and the long-handled brush wash every part of the bowl, and all the hidden cracks and crevices. Then flush thoroughly, so that at least two or three gallons of water may flow into the pipes. Now, pour into the bowl the soda-solution, allowing it, as slowly as possible, to run down the pipes. Flush again thoroughly, and with the cloth wipe every part of the woodwork connected with the seat, being especially careful to leave dry the hidden crevices, for it is in these damp hidden places the roaches collect, and from these places, if left damp, disagreeable odors come.

This thorough cleaning of the toilet should be repeated at least once a week, but every morning it should be cleaned with the long-handled brush, flushed well and wiped with the cloth.

## Wash-Tubs.

Wash-tubs are for washing clothes, and not to be used as a store-place for soiled clothes. It is almost impossible to keep wash-tubs absolutely free from dampness, and allowing clothes to stay in a damp, airtight place will surely cause them to become moldy. There is nothing dirtier, more unhealthy, or more untidy than using our wash-tubs as store-places.

## To Clean Wash-Tubs.

After using the tubs to wash clothes in, wash them out thoroughly with soap and water, then wipe them out with a clean cloth. Be very careful to dry everything about the hinges of the cover of the tubs and all
cracks and crevices. It is in these cracks that dampness collects, and that cockroaches breed. After the tubs have been washed and dried, do not use them again until you are ready to wash more clothes.

## Bath-Tubs.

Scrub out the bath-tub with soap and water every morning (not with sand-soaps of any kind, since they scratch). It must be insisted upon that each member of the family after bathing shall wipe out the bath-tub, but further the tub must be thoroughly scrubbed by the housekeeper as a part of the morning work.

A tin tub can be brightened with Bon Ami Powder. This is not a sand-soap. The stains on a porcelain or tin tub can be removed with turpentine or kerosene.

Bath-tubs should be cleaned with kerosene at least once a week, and then thoroughly scrubbed with soap and hot soda-water.

## CHAPTER XVI

## GARBAGE, REFUSE AND ASHES

The Tenement-House Law relating to the disposition of garbage, refuse, etc., is as follows:
" Every tenement house and every part thereof shall be kept clean and free from any accumulation of dirt, filth, or garbage, or other matter in or on the same, or in the yards, courts, passages, areas, or alleys connected with or belonging to the same."
" No person shall place or keep filth, urine, or fecal matter in any place in a tenement house other than that provided for the same."
" The owner of every tenement house shall provide for building proper receptacles for ashes, rubbish, garbage, refuse, and other matter."

In every apartment there must be three receptacles for the material that is to be thrown away:

> Can for Ashes,
> Can for Garbage, Basket for waste paper.

Never allow anything to go into the garbage-pail but clean food-material, as dry as possible.

NEVER THROW ANYTHING FROM THE WINDOW.

## Care of Garbage-Can.

A garbage-can should never be left open.
It must be emptied every day.
If newspaper always lines the can there will be no scraps of meat or vegetables to get into the cracks. It will, therefore, be very easy to wash out with boiling soda-water, using a stick with a cloth on the end, which should be kept for this purpose only.

## Cleaning Garbage-Can.

Be sure all food is scraped from the can. Put in a handful of soda, pour in boiling water and wash around with the stick until all the soda is dissolved. Pour this dirty water down the toilet and rinse the can with clear hot water.

When dry put in fresh newspaper.
It is not necessary to clean the ash-can in this way. Ashes are clean as long as they do not fly about.

Tie together papers before sending them out to the street to be taken by the wagon.

## What Becomes of the Refuse in New York?

There are thirteen dumps on the North and East Rivers used by the Street-Cleaning Department for the disposition of ashes and rubbish. All receive ashes and rubbish; only seven of the thirteen receive garbage. This is because the garbage is of less bulk than ashes and rubbish. With ashes are taken floor and street sweepings, broken glass, crockery, clam shells,
tin cans. When we speak of rubbish we mean bottles, paper, rags, mattresses, furniture, old clothes, old shoes, old carpets, etc.

## Ashes and Rubbish.

The city is responsible for carting ashes and rubbish from houses to the various city dump-stations and emptying same into scows (which are big flat-bottomed boats). After this the city's ashes and rubbish belong to a contractor, who pays the city $\$ 500$ a week for the privilege of looking over this refuse material and taking out anything of money value. Men hired for this purpose stand on the scow with long forks and pick out such material as is of commercial value. Thi, contractor is obliged to return to milk-dealers in New York all milk-bottles, for which he is paid by the milkdealers. The rags are sold to papermakers; tin cans are very valuable; so are bits of copper and ticking from old mattresses. After each scow of rubbish is looked over it is leveled off and taken to the rubbish dump.

Until five years ago all useless rubbish was taken out to the sea and dumped. This was stopped by the city, but they still go to sea in very cold, icy weather.

There are red cards printed by the Street-Cleaning Department, which any one can have and hang in the window when she wishes ash-carts to call for rubbish. No householder is obliged to put rubbish on the street. The rubbish-cart men must come if you hang out a card.

## Ashes.

Most of the ashes go to Riker's Island, which is opposite I38th Street, East River. This island originally had eighty-six acres; it now has, in 1914, because of all the ashes dumped there, three hundred and twenty-five acres. The Street-Cleaning Department can make land on this island until it is fifteen feet above high-water mark. Then they must stop and go elsewhere ; but as ashes are so soft that they constantly sink, land is slow in making. This land is not good enough to build on, but on account of the fertilizing value of the ashes, and the vegetable matter that gets mixed in with the ashes, it can be used for planting certain rank-growing things.

## Garbage in New York.

All the garbage of New York is taken to one of the seven dumps and loaded onto scows. These scows are separate from the ash-scows. From the moment the garbage reaches the dump, the city has no more responsibility for it. It is given to a contractor, who is paid 17 cents a ton to get rid of it. This contractor takes all garbage to Barren Island in Jamaica Bay.

On Barren Island is a large garbage plant, consisting of huge boilers, presses, and highly-heated furnaces. The garbage first runs down long narrow troughs, at the side of which little boys stand to pick out any pieces of glass, iron, or hard material which may injure the boilers. The garbage is then cooked for eight hours. At the end of that time it comes out
a pulpy mass much the color and consistency of butter. Seventy per cent. of all city garbage is water, and before the grease can be used this seventy per cent. of water must be boiled out. After cooking eight hours, the pulpy mass is put into large hydraulic presses and pressed down until still more of the moisture is squeezed out and still purer grease is left. It is then put into tanks where the water - what is still left of it - is separated from the grease by great heat, and the grease is drained into barrels. Most of this grease is sent to Belgium for the making of soap. We send it abroad because they have a process there of taking the glycerine out of the grease, and as this glycerine is very valuable it is more profitable to sell to the country where the glycerine can be extracted to the largest extent. At least one hundred and fifty barrels of grease are sent to Europe each day.

After the grease has been extracted from the garbage the fibrous part is left. The object is to get this as dry as possible. This is done by the application of tremendous heat, but even this great heat cannot entirely extract the moisture. So the fiber is then put into great cylinders and naphtha is poured in, then pumped out again and again until the naphtha comes out perfectly white, which shows there is no more grease in the fiber. The fiber is used mostly for fertilizing the tobacco countries of the South.

The hotels in New York will not send their garbage off in the city carts. Each hotel sells its garbage to private soap-makers. Each hotel receives three thou-

## GARBAGE, REFUSE AND ASHES

sand dollars a year, or more, for this garbage. All the dead animals in New York belong to the Board of Health. These animals are very valuable for the making of fertilizer and grease.

## CHAPTER XVII

## POTATOES

A potato is a root that grows under the ground. On its surface are what we call "eyes." If a potato is buried these eyes send out shoots. Now, an ordinary root does not have these eyes, or buds, so the potato

POTAT (O)
 is really a thick underground stem. If you leave the potato in a dark, warm place, it will send out shoots exactly as it does un78.3 derground. A potato is not good to eat after it has begun to sprout, because much of the nourishment has gone from the potato to feed the sprouts.

It is now about three hundred years since the potato was introduced into this country. It was introduced into Europe in about the year 1580 - that is, more than four hundred and thirty years ago; but the people in Europe thought for a great many years that the potato was poisonous, and it was not until at a time when the crops were so bad that the people were almost starving and were obliged to eat the potato, that they realized their mistake. Since that time it has become, more and more, a popular article of food.

If you cut a potato across with a sharp knife, and look at the cut surface, you will find three distinct layers:

First. A thin, outer skin. This outer skin contains a poisonous substance called solanine, but the poison in the skin is destroyed by cooking. It is because of this poison in the skin of the potato that the water in which it is boiled must not be used for anything else but must be thrown away. This is not true of the water that other vegetables are cooked in, for vegetable water as a rule is very useful as a foundation for soups. You will find that a good housekeeper always keeps vegetable water for soup-stock.

Second. Next to the skin is a broad layer which discolors when it is exposed to the light. If we allow this discoloration to take place it gives the potato a very unpleasant taste. So, if you peel a potato and cannot at once boil it, see that it is kept in cold water until you are ready to put it into boiling water; but do not let a potato soak in cold water unless it is absolutely necessary, because while it is soaking it will be losing some of the good mineral salts which are in the middle layer and which are a part of the foodvalue which we wish to get out of our potato. These minerals help to build up the tissues of our body. It has been found that we would die within a month if we did not get from our food these necessary minerals.

Third. The flesh of the potato makes up the inner part. While the middle layer between the skin and the flesh gives us the mineral matter that we need, the center gives us the starch which is the chief food-value
in the potato. Starch is what we found so abundant in cereals, but in cereals we also found a great deal of the protein which we have to eat to build up the tissue of our body, while starch gives us heat and energy ; and in the potato we get this heat and energy, but very little of the tissue-building material. Therefore, it is not a good diet to eat only potato. We must eat with the potato meat or eggs, or we must cook potatoes with a milk sauce. Then we get the needed protein from the meat, the eggs, and the milk, as well as the starch from the potato.

More than $76 \%$ of every potato is water. This water is very necessary to our bodies, but it is not what we call food. You can, therefore, see that only $22 \%$ of a potato is really food, and all the rest is water.

## How to Boil a Potato.

It is better to boil a potato with the skin on and peel it afterwards, for as we have just learned the part of the potato just under the skin contains the minerals, which are very valuable, and if we peel a potato before boiling it we lose a great deal of this good mineral matter with the peeling. It is also true that when you peel a potato and then put it into water, some of this good tissue-building value is soaked out in the water.

Wash your potato, using a small vegetable brush to scrub it with. Take out any black spots with the point of a knife. Boil with the skin on, peeling off a narrow strip in order to prevent the potato from bursting.

Put the potato at once into boiling water. Only very old potatoes are improved by being pared and soaked in cold water before boiling; this is done to restore the moisture that the potato has lost from being exposed to the air and from thus drying for so long a time. Potatoes must be boiled until soft in the middle. In boiling potatoes let the water boil gently. When the water boils too hard the outside of the potato gets very soft before the center is done. Do not let a boiled potato stand in the boiling water after it is cooked, because it will absorb the water and become very soggy.

## Baked Potato.

When you bake a potato it is the water in the potato that gets hot and softens the starch. This water changes to steam, and the starchy part is left dried and mealy. If you allow a baked potato to lie in the warm oven after it is thoroughly cooked, the steam will turn back to water and the starch of the potato reabsorbs the water and the potato gets soggy. For baked potatoes have a quick oven, for if your oven is slow the potato becomes dry and hard.

In the section of this book headed " Recipes" many ways are mentioned of cooking potatoes, but every girl who knows how to boil a potato correctly, how to bake a potato correctly, and how to make white sauce, can easily learn all the different ways of preparing potatoes.

## Methods of Making White Sauce.

Measure flour, salt, pepper, and butter in upper part of double boiler. Melt and cook together, over slow
fire, three minutes. Take from fire, add milk slowly, stirring constantly to prevent lumping. Put back over upper part of double boiler and cook until it thickens.

If you have not a double boiler, rub flour and butter together with a spoon in a small saucepan. Add milk, and stir steadily over a moderate heat until the sauce boils. Add salt and pepper.

No girl should consider that she has finished the potato lesson until she knows exactly how to bake potatoes and boil potatoes; knows also the recipe and method of preparing:

Mashed Potato.
Riced Potato.
Creamed Potato.
Fried Potato.
(Recipes found on pages I33 and I34.)
Fried potatoes are the least digestible, and not good for children.

## CHAPTER XVIII

## CLEANING THE KITCHEN-CLOSETS AND KITCHEN UTENSILS

In giving the kitchen a thorough cleaning (which must be done at least once a week) always clean out the closets first. The reason for this every girl can see. You do not want the dirt from the closet to be siwept into a clean kitchen.

## Cleaning Closets.

Take things from one shelf at a time, dusting each article and placing it on the table, which you have first covered with newspapers. Do not mix articles from the different shelves; it makes confusion later.

To clean closets you will need the same utensils as were necessary for cleaning the kitchen-table: a basin of hot water, two muslin cloths, small scrubbing brush, and Dutch Cleanser or Sapolio.

First. Dust off shelves with damp cloth.
Second. Scatter on Dutch Cleanser and scrub with brush and hot water (with the grain of the wood).

Third. Wipe off Cleanser with clean cloth, and then thoroughly dry.

Mold and a bad odor are the result of returning things to a closet and shutting it up before it is thoroughly dried.

Should the closet smell musty, wash it with hot sodawater, after scrubbing the shelves.

If ants or cockroaches are found in your closets: First, clean shelves as you have just been told, then use insect-powder in all the cracks; later, sweep away the powder and dead ants, and fill cracks with borax. But you must be very careful not to have the powder touch any of the food.

While your closet is drying is a good time to wash out empty jars in hot soda-water; also, wash and air the bread-box. You remember you learned in the chapter on furnishing that glass jars are considered to be the best receptacles in which to keep food; because you can see the contents without opening the top and looking in: you can see when a certain grocery needs replenishing. The jars are tight; no air, insects, or dust can get in, and any one can tell when they need washing.

## Cleaning the Bread-box.

Each week the bread-box should be emptied, and all crumbs removed; then wash it with hot water and soda; thoroughly rinse it with clean hot water, and dry and air (in the sun if possible).

The closet for pots and pans; closet for dish-towels, cleaning-cloths and aprons; drawers for knives, forks, etc., all are cleaned in the same way as the food-closet; but where the work in the home is very heavy you will not be able to clean each closet every week, but surely once a month every closet must be thoroughly cleaned,
and any closet that holds food should be cleaned once a week.

## Tinware.

When you take the pots and pans out of the closet and dust each one you will often find rust. Rust comes from dampness, so if you find a tin pan rusty in the cracks you can be sure it was not thoroughly dried near the stove, or the closet is damp.

Bon Ami or whiting are good for brightening tinware. But when tin covers of saucepans are dulled by the steam it is not possible to make them as bright as new.

## Ironware.

Kerosene and ashes will remove rust from ironware. Take an old cloth (that you can throw away afterwards) and rub the iron utensil with the ashes and kerosene. Then wash in strong, hot soda-water and rinse in clear hot water. Dry on the stove.

If iron is very rusty, cover it with some sort of grease (mutton fat is good), sprinkle with lime, and let it stand over night. Wash next morning in hot soda-water and dry thoroughly. A very rusty sink may be cleaned in this way, but be very careful of your hands as lime hurts the skin.

## Woodenware.

Wood holds odors unless very carefully cared for. Wood needs sun and air to dry it. The stove heat is
bad for wooden utensils. Therefore, any girl furnishing her own house would buy as few wooden utensils as possible.

## Agateware.

Agate- and enamelware are very good, but they crack and break if not washed and dried properly. A half-dried agate kettle put on a stove to dry is apt to crack. If an agate-lined teakettle is allowed to boil dry, the lining will crack and break off. Careful soaking to prevent the necessity of scraping these utensils helps greatly to preserve them. Never use a knife; use paper to wipe out the worst dirt. Wipe off any utensil blackened by the stove with a piece of paper before washing it.

## Kitchen Linen.

For a family of five the following number of cloths and towels are enough to keep the house absolutely clean:

Twelve dish-towels.
Three dusters.
One broom-bag.
One polishing-cloth.
Three dishcloths.
Twelve cleaning-cloths (these can be made from old underclothes).

Two oven-cloths.
Two floor-cloths.
A small bag in which to keep old pieces of cloth that
can be used for very dirty work and then thrown away is almost a necessity to a good housekeeper.

There must be a shelf or a drawer in your kitchen where you keep all things needed for ironing, such as wax, sandpaper, ironstand, holders, blueing, and old cloth for testing iron.

Each one of these shelves or closets must be kept clean by the same method.

First. By taking from closet and dusting every article.

Second. By wiping off all dust with damp cloth.
Third. By scrubbing with Dutch Cleanser and hot water.

Fourth. By rinsing, wiping, and drying thoroughly. Always return in perfect order all articles which you have taken from the closet. A closet may be perfectly clean and yet not orderly or attractive.

## CHAPTER XIX

## CLEANING THE KITCHEN-ICE-BOX AND WINDOW-BOX

The ice-box and window-shelf are both used for the same purpose, that is, to keep perishable food cold. In winter you can save money by using the outdoor shelf instead of the ice-box. The cold outdoor air is free while ice is very expensive.

## Window-Shelf.

In making a window-shelf be sure that it has a slanting roof to allow rain and snow to run off, that it has holes bored in the back to admit cold air and at least a half-inch opening between the shelf itself and the upright back to allow the dust to be swept out and to prevent the possibility of food lodging in the crack. An enamel-cloth curtain in front is necessary if you would have the contents hidden, and a clean white curtain looks attractive from the room.

The Tenement-House Law says:
" No person shall at any time place any incumbrance of any kind before or upon any fire-escape."

Under no condition break this law, and it is every girl's business to see that no one in her family is allowed to keep food on the fire-escape and thus break this city law.

## To Clean Window-Box.

Take everything from the shelf. Put them on a newspaper in some suitable place. Brush and wipe off the top of the box. Wipe out the inside with a damp cloth, using a pointed stick or skewer to dig out any scraps of food that may have got into the cracks. The least particle of food allowed to spoil in the win-dow-box gives a bad odor to the fresh food. Now, scrub with hot water and soda. Do not wash the enamel curtain with soda-water, as the soda makes the enamel-cloth crack. Soap and water are the best for enamel-cloth.

The window-box must be perfectly dry before you return the contents. Water-soaked wood gives a bad odor to food.

## To Clean the Ice-Box.

Be sure that the drain-pipe of the ice-box is in no way connected with other household plumbing ; sewer gas will be admitted to the ice-box if it is.

A pan for water is commonly found under the icebox. This must be emptied when necessary, and cleaned twice a week, at the same time the ice-box is cleaned. Clean every day in hot weather.

In cleaning the ice-box remove all food and ice, and wash the inside of the box with hot suds; rinse with hot soda-water, and again with clear hot water. Take special care, in scrubbing off racks and shelves that no particles of food are left in the grooves. Use a skewer to dig out the corners. Draw an old cloth through the drain-pipe with the help of a wire; some dirt always
lodges there. Dry the ice-box and air it for an hour. Wash in hot soda-water the pan under the ice-box.

## Care of Leftover and Perishable Food.

Cover every kind of food that you put on the win-dow-shelf. Milk must always be kept in a tightly covered bottle ; the air sours the milk.

Butter should always be covered, as butter absorbs odors. If you put a melon, for example, in the icebox with uncovered butter, the smell of the melon will be taken up by the butter and the taste of the butter spoilt. To keep milk over night without ice, scald it, cool, and then cover tightly.

Cooked meat will keep better than fresh meat.
Bread and cake do not need to be kept in a very cold place. They keep best in covered tins or earthen jars.

Olive oil is injured by freezing. Do not keep it in the ice-box.

Do not waste the space of an ice-box or window-box by keeping there food which is not perishable. Reserve these cold places for perishable food, such as milk, eggs, butter, and leftover cooked food. Never put hot food in the ice-box.

## CHAPTER XX

## THOROUGH CLEANING OF KITCHEN

In previous chapters we have learned exactly how to clean all kitchen closets and how to care for kitchen utensils. The main body of the kitchen must be thoroughly cleaned once a week, even if you do not have time as often as that to clean all the closets. Never forget that your kitchen must always be clean, always attractive. Since so much of your life is connected with the kitchen, and so largely does your health depend upon the cleanliness of this one room, no effort is wasted that you spend in beautifying it.

## To Clean Kitchen.

First, dust and take from the room everything that can be moved. Do the stove cleaning next, as this is the dirtiest work. Then sweep the floor; cover a broom with a cloth and wipe the walls; and last, wipe all woodwork with a woolen cloth. Sweep the floor a second time. The unpainted and unvarnished woodwork and shelves must now be thoroughly cleaned, as you learned in Chapter XVIII.

## To Clean Painted Woodwork.

Dust the woodwork with a cloth after the walls are dusted. Wash with warm water (not hot) and soap.

Soda and Sapolio remove paint, and should not be used. A brush is also necessary to take dust from grooves, and two cloths - one for washing and one for drying. Add a few drops of Sulpho-Naphthol or other disinfectant to the cleaning water.

While the shelves and woodwork are drying, wash the windows.

## To Wash Windows.

Use a pan of hot water, a duster, two cleaning cloths and a dish of Bon Ami. Place them on a newspaper near the window. Bon Ami is but one of many things used for washing windows.

First Method. Dust the window, and apply a thick suds of Bon Ami. Let it dry, and rub off with a dry cloth. Rinse the dusting-cloth in the water and wipe off the woodwork around the windowpanes. Newspaper is very good for polishing windows.

Besides a weekly cleaning, windows should be dusted every day.

A little alcohol added to the water in the winter prevents its freezing.

Second Method. To clean windows, add a few drops of kerosene and ammonia to a pan of hot water. Use a duster, two cleaning cloths, and a newspaper.

Dust the windows, wash, dry, and polish.
Last, wash the floor. This is also new work, but similar to scrubbing the table.

For cleaning the floor have a pail of hot water, a floor-brush, floor-cloth, and soap. Soda may be used, or Gold Dust.

## THOROUGH CLEANING OF KITCHEN

The condition of the floor must decide which cleaning agent to use. A very greasy floor needs soda.

First, sweep the floor; then, wash a small space at a time and wipe off with a wet cloth; scrub with soap, following the grain of the wood; rinse and dry with a cloth wrung out in the scrubbing pail. Change the scrubbing water very often.

Return furniture to the kitchen when the floor is dry.

## CHAPTER XXI

## APPLES

For three chapters you have scrubbed and cleaned the kitchen. It is only natural that you should want to use this clean room and prepare something to eat.

In our talks on foods we have not considered fruits.

## Fruit.

The fruit is of no real use to the plant. Fruit is meant by nature as a bait to attract birds and insects,
 and so the seed is set free, carried about and scattered. There is not much nourishment in fruit. We eat it more for the sake of the sweetness than for any food-value it has. It is good for the blood.

From eighty to ninety per cent. of fresh fruit is water. As you see in the picture of the apple, more than three-quarters of it is water, and
most of the remaining part sugar. This is not true of nuts, which we will study later. Nuts have very little water and much protein and fat.

## Apples.

Cooking makes most fruits more digestible, but raw fruit has more foodvalue. However, as we have just found out, we do not gain much strength and
 energy from fruit ; and so, especially for little children and invalids, fruit should be made digestible by cooking.

Be sure, when you cook fruit, to preserve all the juice; you will lose the best part of the fruit if you

APPLE edible portion

 allow this to be lost. Apples can be canned, preserved, used in pies and puddings, and made into jelly. This you will do next year, but apples can be most simply and digestibly prepared by baking them or stewing them.

## Baked Apples.

For baking, select smooth, sound apples, wash them, and take out the core with an apple corer. Fruits
should be cooked in graniteware or earthenware. Use, in the cooking, a wooden or silver spoon. Fruit contains acids, and so it must not be cooked in a tin or an iron dish. Place washed, cored apples in a bakingdish. Put one tablespoon of brown sugar into each cavity. Sprinkle with nutmeg, cinnamon, or squeeze a little lemon-juice into each apple. Cover bottom of baking-dish with boiling water, about one-half cup of water for each apple. Bake in hot oven until soft, frequently taking a spoon and pouring over the apples the syrup that is forming in the pan. To know whether your apples are done or not, pierce with a fork. Serve hot or cold with milk.

It does not take long to prepare apples for baking, and while they are baking is a good time to review the table-setting lesson. It is a great mistake for a girl or the teacher to think that because a pupil has accomplished a task once, she knows it. Each task in any art, especially the art of homemaking, must be done over and over again. We must form the habit of always doing each act exactly right.

For stewed apples and apple sauce see pages 132, 133.

## CHAPTER XXII

## CLEANING A BEDROOM CLOSET-CLEANING A BED

In Chapters VII and VIII you learned how to air and make the bed every morning, and how to dust and do the regular morning work. But once a week the bedroom must be thoroughly cleaned.

## Clothes-Closet.

Never hang up in the closet any article of clothing which you have just been wearing without first shaking and airing it. At night, when your window is open, or in the morning when your room and bed are airing, always open wide the door of the closet; let the cold outdoor air blow through your clothes.

Every girl, I am sure, has noticed the close odor that sometimes meets her when she opens the door of a bedroom-closet. This odor need never be there, if every day you brush the dust out of your outer garments, shake your clothes, air them before hanging them up, and daily air the closet.

You learned in Chapter XVIII that in cleaning a kitchen thoroughly all closets and drawers must be cleaned first. This is equally true when you have a bedroom to clean.

## Cleaning Closet.

Take all clothes from the closet, giving each garment an extra shake as you take it out. Brush all loose dust and dirt from the walls and floor. Then wipe with a damp cloth walls and floor, being careful to wipe out all cracks and crevices. At least once a month scrub the floor. Return all clothes when closet is thoroughly dry, and shut the door tight.

## Cleaning the Bed.

As a preventive of bedbugs, take all clothes from the bed and shake well ; throwing them loosely over a chair. Wipe the mattress with a cloth wrung out in water and sulpho-naphthol, being especially careful to wipe in the tufted places. Put the mattress over chairs. Wipe the iron part of the bed with soap and water, and then with kerosene. Wipe off the springs with kerosene. Allow the bed to dry thoroughly before returning mattress and bedclothes.

If bugs get into the bedstead, first wash it with soap and water, then with a solution of carbolic acid, or a preparation which you can buy at the drug-store; and repeat this until every trace of bugs is gone. Bedbugs hide chiefly in cracks, in castors, and under the tufting of the mattress.

## CHAPTER XXIII

## WEEKLY BEDROOM CLEANING

After closets and bed are cleaned, as in the last chapter, you are ready to give the entire room a thorough cleaning.

Dust all movable things, including small pictures, and set them in another room. Take curtains down, if possible; if not, pin them up. (Curtains should never come below the window-sill.) Sweep and take out any rugs yout may have.

After dusting each piece of furniture that is too heavy to move, cover it with old sheets kept for the purpose. Sweep floor with windows closed. Now, open windows and brush walls with a covered broom. Sweep again with a damp cloth on the broom. Allow dust to settle. Then clean the woodwork, as taught in Chapter XX, also wash windows. Uncover the furniture. If there is a stained or waxed floor, oil or wax it the last thing.

Do not forget to dust the gas-fixtures. Never try to clean them with polish. It is not satisfactory, and hard rubbing will loosen them.

Wipe off the mirrors. Wash the glass of all the pictures before rehanging them. If curtains have been taken down, shake them well - out of doors if possible.

All brass and nickel should be cleaned before returning it to the room, if it is not already polished. (Some housekeepers have a regular day for polishing their brass, silver, and nickel, not the general cleaning day.)

The cleaning of brass, silver, and nickel will be taught in the next chapter.

After a room has been cleaned, see that it looks orderly. A room may be clean and yet not attractive. See that the shades are even, the chairs straight, the blotter clean, ink-well clean and filled, plants watered and dead leaves taken off.

## CHAPTER XXIV

## CLEANING BRASS, SILVER, AND NICKEL

Dampness tarnishes brass and nickel; gas, food, and dampness tarnish silver; and acid eats into silver.

## To Clean Brass.

For cleaning brass it is necessary to use some substance to remove the dirt, tarnish, and corrosion, and also a dry polish to give a highe: luster. First collect the necessary implements:

A newspaper to protect the table
An old tray upon which to set the article to be cleaned

Wet polish, or brass paste
Dry polish (Whiting or silver powder is good)
A cheesecloth for dusting
Three pieces of old cloth (that you can throw away)
A polish cloth (tissue paper, or newspaper, may be substituted for this cloth)

Never use good cloths of any kind for hard cleaning; it wears them full of holes.

## Method.

Dust the brass. Apply wet polish with an old piece of cloth, rubbing very hard. This cloth becomes very dirty and has to be thrown away.

Use a piece of match-stick under cloth to remove dirt from cracks and grooves.

Wipe off the wet polish, which loosens the dirt, with a second piece of cloth. With a third, apply the dry white polish. Rub with polishing-cloth.

Brass will keep bright twice as long if treated with a final dry polish.

## To Clean Silver.

Collect newspaper, old tray, silver polish, saucer, alcohol or water, duster, and two pieces of old cloth.

## Method.

Dust the silver.
Mix some silver polish and alcohol in a saucer. Rub this on each piece of silver and lay each aside on a piece of newspaper to dry. When thoroughly dry, polish off with another cloth. A soft brush is necessary to remove the polish from grooves or designs.

Wash the silver in hot water before returning it to the drawer.

## To Clean Nickel.

Nickel may be cleaned in the same way as silver.
Wash all cloths that can be used again.

## CHAPTER XXV

## TABLE ETIQUETTE-AFTERNOON TEA

The attitude of a girl at meals can make or spoil that meal for the entire family.

Each member of the family should cultivate a habit of appreciation ; that is, don't be faultfinding, but take the food that is on the table and eat it with apparent pleasure. There are girls who always come to the table in a faultfinding mood, seeming to take pleasure in saying that they " hate" this or that dish, forgetting that some one has worked hard to prepare it. A bad temper or an unhappy mood while eating is bad for the stomach and often produces indigestion. Talking pleasantly and eating slowly, while at meals, aid digestion.

When a meal is ready, go at once to the table. If you are late, the food gets cold and you have spoiled the pleasure of the cook, as well as annoyed the family and ruined the taste of your own meal. A meal is a family gathering. No one must think of herself alone, but of what will give the entire group the most pleasure.

Do not be over-anxious as to what is on your plate. Keep your eyes open. Notice when some one wants his plate replenished or his water glass refilled, or is in need of butter, salt, pepper, or such things. A little
girl should never allow her mother to wait on her; she should be the one to rise and wait on those older than herself.

Some people have what we call a servant. That does not mean that the work of preparing meals is a work for which a lady is too fine and so hires a person less refined to do it for her. It means only that in a home there are a great many important things to do, especially in homes where children are to be cared for. If the mother, or head of the house, has enough money she pays some one to come in and do a part of the housework in order that she may be free to do more thoroughly her duties in the home. This is the very same way in which business is carried on in an office or a store. One man cannot keep the books, run the errands, sell the goods, and attend the telephone; and so he takes others into his service, or engages " servants," to help him. A man does not look down upon these associates in business, he knows they are exactly as good as he is and their work is as important.

A good housekeeper will plan to save the strength and time of her servant as though it were her own. A good woman will have the same sympathy with, and will exercise the same courtesy toward those in her service as she feels for her own family. A sensible woman will not scold the servant because she is sometimes slow. No one works equally fast at all times. If a dish is broken, the head of the house will say to herself, "We all are liable to drop things." If the servant has her own way of doing things, the good
housekeeper will let her follow it; for she knows that there are other ways than hers,- and good ones too. Remember the servant is as human as you are; she gets tired as you do; she likes to play; she is often lonely. While she is in your house you and your family are responsible for seeing to it that she has good food, does not hurt herself by working too hard, and lives happily in your home. If a servant can clean your house better than you can do your work (even if your work is teaching a public-school class), she is a smarter woman than you are.

## Serving Tea.

The girl who serves should have clean hands and neat hair, and wear a white apron.

This is a ceremony of hospitality, and always should be performed with such a spirit of happiness that each member of the family and every guest will feel welcomed to the house.

## Tea.

There is something in tea that is called tannin. It is this ingredient that is bad for our stomachs. Tannin is especially poisonous to little children. The longer tea stands after the boiling water has been poured over it the more of this tannin is dissolved out of the tea leaves into the water which we drink. If you wish to have as little tannin as possible in tea, serve your tea within five minutes after pouring on the boiling water.

## Method of Making Tea.

Never use water that has boiled before or has been standing in the teakettle. Draw fresh cold water and let it boil for the first time. Water that has boiled before and stood on the stove tastes flat because the air has gone out of it.

The amount of tea to be used depends upon the kind of tea used. The saying goes " a teaspoon for each cup and one for the pot," but this is too much tea; usually two teaspoons for four or five persons is enough.

Warm the tea-pot by rinsing it with hot water. Put tea into the warm tea-pot and pour in boiling water. Let it stand five minutes and serve. (Never give tea to children; it is a drink for grown-up people.) If you wish to use the tea later pour off all liquid from the tea-leaves and heat this liquid when desired. You will, thereby, avoid drawing the poisonous tannic acid from the tea-leaves.

Many things can be served with tea: bread and butter, crackers, toast, or cake.

## Bread and Butter.

Have the butter soft. Butter the bread before cutting from loaf; cut thin; place two slices together as in a sandwich; cut these sandwiches in similar shapes and sizes,- uneven pieces of bread are unattractive.

## Toast.

Ordinary American bread is improved in flavor and digestibility when it is toasted. Soggy bread hurts the stomach and is bad for the health.

To toast bread is one of the ways of making use of stale bread.

## To Make Toast.

Cut stale bread in one-fourth inch slices. Put slices on wire toaster; lock toaster and place over clear fire, at first holding it some distance from the fire. Turn often enough to keep the two sides equally brown. Hold it nearer the fire after the bread is well dried on the outside, and the color an even golden brown.

To toast over a gas range, use an asbestos wire-mat, allowing mat to get well heated before putting bread on it ; or toast in the oven turning the bread frequently.

## Tea-Tray.

On a tea-tray there should be a clean white traycloth, cups and saucers, teaspoons, tea-strainer, napkins, sliced lemon or milk, sugar, bread and butter sandwiches, toast or crackers, and lastly the freshly made tea.

## CHAPTER XXVI

## ODORS

Odors are danger signals. A bad odor means " look out ; there is trouble somewhere."

If you smell gas, at once you look for the leak, knowing that fumes of gas cause death.

If you smell that dry, disagreeable odor which is the sure sign that agate- or tinware is burning, you instinctively rush to fill the kettle or saucepan. The water has boiled away; the smell is the warning which in this case often comes too late to save the kettle.

Every girl has noticed as she has entered a bedroom where the windows have been closed all night a stale smell. It may be she has not realized that this is a warning that the oxygen in the air has been exhausted and poisoned air is left. Had one window been opened top and bottom no odor would have been apparent in the room. Oxygen, or fresh air, has no odor.

Every girl has had the experience of trying to avoid the offensive breath of a friend,- has had days when she herself was conscious that her own breath was not sweet. This is nature's danger signal. The breath is practically without odor in health. It is often the ordinary habits of a girl's life that are the cause of an
unhealthy condition that the bad breath is but the sign of. A girl may have been eating candy between meals, or eating too fast while at meals, or forgetting to drink water, and indigestion has been the result. A coated tongue, a nasty taste in the mouth ; these she can hide. The breath that comes from a bad stomach no girl can hide from others.

Or, possibly the trouble is that the waste matter from the system has not been carried off. In the rush of getting to school on time a girl often neglects the most important morning duty. Constipation is the result. A clogged system, then a poisoned system. Every one tries to avoid the breath of the girl in this condition.

Decaying teeth throw out such a signal of danger that it would seem impossible that a girl with the odor of decay in her mouth should not hurry at once to a dentist, and after her teeth had been filled always brush them morning and night.

The close odor that is sometimes called the human odor is very noticeable in crowded places; for example, the subway in the rush hours. And it is even at times associated with an individual. This odor is like a loud voice crying. The body has not been bathed recently. The clothes have not been changed often enough, or the clothes and the closet in which the clothes have hung have not been aired. Dainty odors, or no odors at all, make a girl more attractive than any manner of dress or any kind of beauty. A bad odor is repellent to every one.

It would be interesting, while on this subject, for the with the house or with the human body that are disagreeable and give the remedy for each. There is almost always a remedy.

## CHAPTER XXVII

## BATHING SICK PERSON IN BED AND CHANGING THE SHEETS

If a girl's mother or any one in the family is very sick, of course the care of this patient could not be entrusted to a little girl; but there are often times in the home when some member of the family is obliged to stay in bed; with a bad cold, for example. Staying in bed may mean breaking up the cold more quickly and preventing the rest of the family from catching it. In a case like this a small girl often can play the part of nurse.

The great thing is to keep the patient comfortable and clean. Have nice fresh air in the room, and see that the room is attractive.

In this chapter you are going to learn how to give a bed bath and how to change the sheets, for a fresh sheet on the bed is very refreshing to a sick person.

First prepare everything that you will need for the bath, and place all the utensils on a chair or table near the bed, because when a girl once begins to give her sick mother or any member of the family a bath she must not leave her to run to the kitchen for water or cloth or soap. For this bath you will need a basin of warm water, soap, one or two bath towels, alcohol,
and wash cloth of gauze (do not use a handkerchief). The bath should be given before the sheets are changed.

First, take the spread off the bed, folding it neatly, and put it out of the way. Make your patient comfortable on the pillow before beginning the bath. Sick people are often irritable and easily made uncomfortable. We should do all in our power to make the morning bath a pleasure, and not something to be dreaded.

Have plenty of hot water near at hand. It is well to have an extra pitcher of hot water and a jar in which to empty the water in the basin when it becomes too cold or needs replenishing. Make the water a little soapy by shaking the soap in it. This is better than rubbing the soap directly on the face.

First wash face and ears, paying particular attention to the ears. The back of the ears often gets very dirty, and the creases do, too. This is true, especially, of little children. Remember to be very gentle when you are playing the part of nurse, as it is trying to the patient to have her ears washed. Do not expect the patience in a sick person that you do in a girl who is well. After washing the face and ears, rinse out the cloth, wipe the face off again and then dry face and ears carefully.

Next, take off the nightgown, shake it out carefully and hang it over a chair. If the weather is cold have the chair near the stove. Now, lift one arm from under the bedclothes and lay it on the turkish towel, which you have placed over the clothes to protect
them. Rub plenty of soap on the cloth, and rub the arm well, particularly under the arm. Rinse out the cloth, wipe the arm once more, and dry thoroughly. If the patient is not very sick, rub with a good brisk stroke. Before washing the hand it is well to trim the finger-nails, if they need it. Put the patient's hand over the basin, wash it thoroughly with soap and water. Clean the finger-nails with an orange-stick when the hand is thoroughly dry. Now wash the other arm and hand in the same way.

It is very refreshing to any one who is obliged to stay in bed to have the arm and hand rubbed with alcohol after it is thoroughly clean. Never use wood alcohol, but $50 \%$-pure alcohol gives a cool refreshed feeling.

No matter what part of the body you are washing, remember you must always keep the patient covered, excepting the part which is being washed.

Now, throw back the clothes to the waist line. Wash the body to the waist with the soapy cloth, rinse and dry with the turkish towel, as you did the arm, and if possible rub the body with the alcohol. Next, turn the patient on her face and wash the back in the same way.

The turning of a very sick patient is quite a difficult matter because often one is so sick that she cannot turn herself; but the girls who are reading this chapter are too young to take care of a very sick person, so we will take it for granted that all you have to do is to ask your mother, or the member of the family to whom you are giving the bath, to turn over so that
you can wash her back. Always use a turkish towel under the arm, or under the body, to protect the bed.

Next, draw the bedclothes up around the throat of your patient so as to keep her thoroughly warm. Loosen the bedclothes at the foot of the bed. Take out first one leg, place under it the turkish towel and be sure that all the rest of the patient is well covered. Wash the leg well with soap and water, wipe it off with fresh water, dry the leg with a brisk stroke, and if possible rub with alcohol. Cover that leg; take out the other and wash and dry it in the same manner.

Now you have bathed the face, the arms, the body and the legs of your patient; but you have not as yet washed the feet. When one is sick in bed, her feet get tired and hot, and need careful bathing. Ask your patient to bend her knees so that the feet are resting flat on the bed. Put the towel under the feet and place a basin on the towel and the feet in the basin. Now, wash the feet well with soap and water, dry thoroughly, and after drying cut the toe-nails. Do not be in too much of a hurry when you wash the feet. It is a good thing to let them soak for a few minutes in the hot water.

Now the bath is finished. It is not the place of the little girl who is giving the bath to collect the basin, the towels, the cloth, and soap and take them away, because she does not want to leave her patient until the bed is made and the patient comfortable. So she should call some member of the family to take all these utensils out of her way.

## Combing the Hair.

The next task in order is to comb your patient's hair. Put a towel (fresh if necessary) under her head. Part the hair from front to back with the comb. Comb first one side and then the other. Always begin at the end of the hair and work up, taking a small part of it at a time. If tangled, twist it around your finger to relieve the pull on the scalp. A good nurse will never pull her patient's hair ; that might start a headache that would last all day.

After combing one side, braid the hair on that side; then braid the other in the same way. Have the braids go quite near the ears so that the back of the head may be left free and your patient may not be obliged to lie on a twist of hair.

Wash your hands after combing the hair.

## Teeth.

If not too sick, your patient will want to brush her teeth. Nothing is more refreshing in illness. Any fever or any trouble with the stomach at once gives a nasty taste in the mouth. Cleansing does much to relieve this. Put a towel in front of your patient, covering the bedclothes carefully. On this put a basin, hand the patient a glass of fresh water and her toothbrush - tooth-powder, too, if she has it.

Now make a mouth-wash with half a glass of fresh water and a half teaspoonful of salt. Before taking the basin away let her rinse her mouth with this.

## Changing the Sheets.

First, take out top sheet from under the blanket and place it one side to use as a draw-sheet later. Now take the pillow very gently from under the patient's head; move her onto one side of the bed, roll the sheet under and draw it up next to the patient. The clean sheet is then laid on so that the fold in the sheet comes midway in the bed. Tuck in this clean sheet on one side and make it smooth as far as the middle of the bed. Roll the remaining half of the clean sheet up tight against the patient beside the soiled sheet. Now for the top sheet, which you took from bed, - fold for draw-sheet and tuck it into side with the clean sheet; roll this also and lay it next to patient.

Turn the patient to other side, over the roll of sheets. Pull out and throw to one side the soiled sheet and soiled draw-sheet. Go to the other side of the bed, pull sheet tight and tuck in with square corners. At the same time pull draw-sheet as tight as possible and tuck in with sheet. Be very careful that there are no wrinkles under the patient. The drawsheet is used with a sick person to protect the under sheet.

The pillow is now put under the patient's head. Lift her, with one arm under her shoulders, and slip the pillow in with the other hand.

Pull the pillow down so it will be a little way under each shoulder. Always ask your patient whether the pillow is comfortable. Place the clean top sheet over the blanket. Pull the blanket from under, having your
patient hold the sheet at the top. The blanket is then placed over the top sheet, and sheet and blanket are tucked in at the bottom of the bed.

Put on the spread to protect the blanket and to make the bed look attractive.

No little girl could do this work at first without the help of the teacher.

## CHAPTER XXVIII

## THE INVALID'S TRAY

In the last chapter you learned how to bathe a patient and how to change the sheets on her bed. In this chapter you are still going to take the part of nurse. Play that it is your little sister who is sick. She has been made comfortable for the day. She has a clean, cool body; the sheets on her bed are fresh; and the room has been aired and dusted. Now she is ready for something to eat, and it is the duty of the little nurse to get the breakfast.

This meal must be daintily served, the dishes attractive, the linen spotless; and when hot food is used the dishes must be hot.

The appetite has a great effect on digestion, and sick people are very apt to have poor appetites, and so it is the part of the nurse to do everything in her power to stimulate, that is to arouse, the appetite. An attractive room, a flower on the breakfast tray, a happy, cheerful nurse in a very clean apron, all these do much toward making the patient willing to eat. If the traycloth is a little soiled, if the tea has slopped into the saucer, if the outside of the water glass is wet, if the nurse's finger-nails are dirty, the patient may lose her pleasure in the breakfast.

There are six things the girls who read this chapter must try to remember in preparing an invalid's tray:
I. Have it look attractive.
2. Have everything taste just right.
3. Be sure everything on it is easy to digest. (When you are working or playing you can eat more solid food than you can when you are lying still in bed.)
4. Be sure everything is the kind of food that will give the patient strength. She wants to get well and strong as soon as possible, and every mouthful of food must help her toward health.
5. Let no time elapse between the cooking and serving.
6. Never ask your patient what she wants to eat, never talk about the food where she can hear you. Surprise her, if possible. This surprise helps the appetite, and adds interest to the dullness of a long sick-day.

The tray on which you serve the meal must be large enough to hold all the dishes without any appearance of crowding. If, for example, you are serving only milk and toast, use a small tray; but three or four hot dishes will require a large one.

Cover tray with a tray-cloth. This does not need to be expensive, but it must be spotlessly white. If you have not a tray-cloth use a perfectly clean napkin.

Choose the best china you have; also the silver and glassware must be the best in the house.

In setting the tray follow the same rules as you did in table-setting. Place the plate where it can be con-
veniently used; knife at the right ; sharp edge toward the plate; the spoon at the right of the knife; the fork at the left of the plate. A bread and butter plate should be placed above the fork. The napkin must be placed at the left of the fork. Cup and saucer at the right - with the handle so that your patient can reach it easily. Water glass over the knife, not full enough to spill as you carry the tray. Be sure that there is salt and pepper on the tray, sugar if required, and a small pitcher for cream, or milk, if needed. Now the tray is ready for the hot dishes of food as soon as they are cooked. Food must be served at once after it is cooked so as to be the more tempting to your patient. It spoils cooked food to be left standing.

What will you cook for your sister, whom we will suppose to be in bed with a bad cold?

Nothing fried. Fried food is not as healthy as boiled or steamed or baked food.

One good breakfast is:
Orange, or baked apple
Dropped Egg on Toast according to recipe on page I34.

## Hot cocoa

A cooked apple is more easily digested than a raw one, so you will bake your apple and serve it with milk and sugar; but if you have an orange this is, when served cold, often more acceptable than hot fruit, especially in warm weather. The flavor of this fruit will help give your patient an appetite for the more nutritive part of her breakfast. Fruits also aid digestion. You have read before in this book that
fruit is largely composed of water, and contains but little nutritive value, the little it has being mostly sugar. But there are minerals in fruit that the blood needs very much, and so you will begin this breakfast with fruit.

Eggs have a great deal of protein and repair the waste of the body as meat does. There is so much food-value in eggs that even if they are expensive you will try to buy one or two fresh ones for your patient's breakfast. Try to give the sick person the best, even if the healthy members of the family have to deny themselves. To determine whether an egg is fresh or not, put it in a cup of water, it will sink if fresh and rise to the top if not. The reasons you give eggs to sick people are many:
I. They have a great deal of food-value;
2. They taste good and are easy to eat ;
3. They are easily digested when raw or soft cooked;
4. They are free from bacteria.

But while eggs have a great deal of protein and fat, they have not much carbohydrate, that property that gives energy. So eggs are not a food you can serve all alone, any more than you serve meat with nothing else. Eight eggs are equal to one pound of meat, but you wouldn't feel like working or playing even if you ate one pound of meat or eight eggs, that would be too much for the system to take care of. If you serve your egg on toast you will give your patient the added food-value of the bread. You studied about bread in Chapter IV, and bread, you remember, has a great deal of carbohydrate.

Cocoa we learned how to make in Chapter III, and how much strength was in the milk.

First prepare the fruit and put it on the tray. If it is an orange have it cold on a cold plate.

Then make cocoa; when the cocoa is hot, make the toast and poach the egg according to recipe. Have the cup for cocoa, and the plate for egg, hot. Hot dishes must be used for hot things, cold dishes for cold things. Serve all as daintily as possible, being careful not to spill anything in carrying the tray from the kitchen to the sick-room.

## CHAPTER XXIX

## FRESH VEGETABLES

Most vegetables contain only a small amount of nutritive value. The exceptions are peas, beans, and lentils. But although you may not get energy out of the other vegetables, you get what the body needs in other ways. As you see by the pictures there is a great deal of water in vegetables; also there is mineral matter. The water is needed for the kidneys, the mineral acids to purify the blood; and the bones need these minerals as well. Our intestines need a certain amount of bulk in order that the proper action shall take place. Vegetables do much to give this required bulk.

In choosing vegetables in summer, be very careful to select fresh ones. Summer vegetables should be cooked as soon after gathering as possible. Vegetables purchased from push-carts must be carefully examined to see if they are fresh, and very carefully washed before cooking. If the peas or beans you buy seem old, it is better to make them into soup than to serve them as vegetables. The subject of vegetables is a big subject, for there are dried and canned vegetables to consider as well as fresh ones.

Next year you will learn the great nutritive value
of dried peas and beans, and how to cook them. You will also learn to can vegetables to use in winter when fresh vegetables are dear. And what vegetables are good for sick people and what ones are the best for children.

But in this chapter you can only begin the study of vegetables, by learning about fresh summer vegetables. These all give the body minerals and water and necessary bulk; and peas, beans, and lentils give a great deal of nourishment.

All vegetables are cooked in boiling salted water. Some of the common summer vegetables are

|  | Time for Cooking |
| :---: | :---: |
| Lima beans | . I to $1 \frac{1}{4}$ hours |
| String beans | . I to 3 hours |
| Beets, young | 45 minutes |
| Beets, old | 3 to 4 hours |
| Cabbage | 35 to 60 minutes |
| Cauliflower | 20 to 25 minutes |
| Celery | Used raw |
| Corn | 20 minutes |
| Lettuce | Used raw |
| Onions | 45 to 60 minutes |
| Spinach | 25 to 30 minutes |
| Tomatoes | Cooked or raw |
| Peas | 20 to 60 minutes |

A small scrubbing-brush, which may be bought for five cents, with the word " vegetable" marked on the back, and a small pointed vegetable-knife are a necessary part of every kitchen equipment.

## To Cook String Beans.

Wash the beans in cold water, string, cut into oneinch lengths. Put beans in fresh boiling water, and add salt the last half-hour of boiling.

The time for cooking any vegetable varies, some vegetables being fresher and younger than others. These take less time than the older vegetables. So each girl must test her beans to see when they are soft enough to eat. The cooking will take from one to three hours. When soft, drain and season with butter and salt. These beans contain a great deal of nutritive value, and can be eaten instead of meat.

## To Cook Peas.

Peas contain a great deal of proteid, too, and when young are easy to digest.

Take peas from pods, cover them with cold water and let them stand one-half hour. Skim off peas that rise to the top of the water and throw these away; drain the others free from all water.

Cook as you do the beans in fresh boiling salted water. Cook from twenty minutes to one hour. Season with butter, salt, and pepper. While these two vegetables are cooking talk with your teacher about the other vegetables.

As peas and beans have so much nutritive value, you can serve them as the main dish for a meal. It is a good thing, if there is time, to set the table and serve one of these vegetables with bread and butter, and a pitcher of cold milk. This is a good enough meal for any one on a summer's night.

## CHAPTER XXX

## GOOD THINGS TO REMEMBER THAT ARE OFTEN FORGOTTEN

Do not keep dirty cloths under the sink. If a cloth is good enough to use again, wash it ; if not, throw it away.

Dishes should never be washed under the faucet or in the kitchen sink.

Scraps of food will not get into the sink if dishes, pots, and pans are scraped before washing, and the scraps put at once into the garbage-pail.

No girl should wash her hands or face at the kitchen sink unless she uses a separate basin kept for this purpose. After the dirty water from the basin is poured down the pipes the sink should be thoroughly rinsed.

Never throw any waste material from the window. You are breaking the laws as truly as if you stole another's property.

Keep soiled clothes in a small barrel or a basket provided for the purpose. Never let any dirty garment lie about for others to see, and never keep soiled clothes in the wash-tubs.

Mice, cockroaches, and bedbugs will not visit a clean home - where the food is always covered, the beds washed weekly with kerosene, and roach-powder put in the cracks at the sight of the first waterbug.

There is an almost universal tendency to "run out and buy" just before a meal. This is expensive of both time and money. Market once a day for the next twenty-four hours.

Every time any one allows the sink, bath-tub, toilet, or ice-box pan to run over, or carelessly spills water on the floor, she causes those in the apartment below to suffer, not for one day only : the ceiling is spoiled and may not be recalcimined for years. It is the throwing of hair, matches, pieces of old cloth and such things down the toilet that causes it to run over.

Order can become a habit. It does not take one minute longer to hang up a coat than to throw it on a chair.

Do not use dishcloth or dish-towel for anything excepting dishes.

## CHAPTER XXXI

## TESTS FOR PUPILS

By this time every class should be able to cook a simple dish without the help of the teacher. The teacher can write down every mistake as she sees it but she will make no comment until the end of the lesson.

She will call a mistake any disorder in the arrangement of work; any unnecessary untidiness in the personal appearance of a girl, or in her manner of working; any forgetfulness of what has been taught, or any failure to meet well an emergency.

The class will be asked to prepare for cooking a certain dish: cook it; do all dishwashing, sink cleaning, table cleaning, and towel washing that is necessary; also, see that the stove is left as it should be for a slow fire.

At the end of the lesson the teacher can tell each girl of her errors. Beginning with one hundred, each mistake may take off five; a slight error may count but one off.

Another way your teacher may test you is to write on slips of paper a•number of occupations which have been taught in class and allow each one of you to draw a slip. She will then expect you to perform the allotted
task without assistance. The teacher will take a note of every mistake you make and subtract from one to five marks from the perfect mark of one hundred for each mistake.

Some of the tasks you will be asked to do alone may be as follows:

Task I. Set out everything necessary for making cocoa; arrange kitchen-table; see that draught, damper, and check are right for hot fire. Tell how cocoa is made.

Task 2. Wash kitchen-table; clean sink with soda.

Task 3. Wash out ice-box.
Task 4. Take bed apart as for morning airing. Make bed.

Task 5. Explain how to clean bed for bedbugs.
Task 6. Show how you take rust from iron. Show how you clean tin.

Task 7. Dust the front room as you would each morning.

Task 8. Show how you clean the stove each morning. Fix draught, check, and damper for starting fire. Fix draught, check, and damper as you would after fire is started. Fix draught, check, and damper to keep fire all night.

Task 9. Set table for four; clear dishes and pile as for washing.

Task io. Show what is needed for washing dishes, and how it should be done.

Task in. Show how kitchen closet should be thoroughly cleaned.

Task 12. Show how bread-box should be washed; how kept from smelling musty.

Task 13. Clean silver. Clean brass.
And there are many other tests your teacher may give you.

## CHAPTER XXXII

## TEST QUESTIONS ON HOMEMAKING

If a girl has really been interested in the work of homemaking and has studied conscientiously for a year this wonderful art, she should be able to answer the following questions, and many more.
I. If you were furnishing a flat, what would you do with the floors?
2. What kind of furniture would you have in the kitchen?
3. What kind would you have in the parlor?
4. What kind of beds would you buy? Why not wooden beds?
5. What kind of curtains are best?
6. How would you ask the landlord to decorate the walls of your flat?
7. What do you do with damper, draught, and check before lighting fire?
8. When fire is well started and you want a hot oven, how should draught and damper be set?
9. When stove gets red-hot, how do you cool it off?
io. When you want a fire to last over night what should you do?
ir. How can the wrong use of draught and damper waste coal?
12. Why is it better to poke a fire than to shake it?
13. How often and when do you blacken the stove?
14. If oven door is hot or dish in oven is hot, what do you use to handle it with?
15. How often and when do you wash dish-towels?
16. How do you keep a tin dishpan from getting rusty?
17. What will take the rust from an iron sink?
18. What is washing-soda for?
19. In cleaning a kitchen thoroughly, do you clean the main part of kitchen first and then closets, or closets first?
20. What would be the result if you put things back in closet before shelves were dry?
21. Why do we use glass jars for dry groceries?
22. If the wood of the closet smells, what do you add to the washing water?
23. If you have a wooden pail or box to wash out, where should you put it to dry? Where not?
24. What is kerosene good for?
25. If you find cockroaches, how do you get rid of them?
26. Where should you keep leftover food, such as milk or butter?
27. How keep milk from getting sour?
28. How often should the ice-box be cleaned, and how?
29. How can you keep a garbage-can sweet and without smell?
30. How do you take rust from iron saucepans?

3I. How do you wash windows?
32. What is the best mattress for a bed?
33. What mattress is cheaper, but still good?
34. Why is a feather-bed unhealthful?
35. How often should you turn a mattress?
36. How long should a sheet be to tuck in well?
37. Why do we use a pad between the mattress and the sheet?
38. What do you wash a bedstead with to prevent bedbugs?
39. What do you use if bugs are found in the bed ?
40. What is necessary to do to a room in cleaning it every morning?
41. What is the best kind of a dusting-cloth?
42. When should a dry duster be used?
43. When should a damp duster be used ?
44. Is it good to use a feather duster?
45. When must windows be opened?
46. How must windows be opened?
47. When do you air the dining-room?
48. When do you dust the dining-room?
49. When do you brush up under the table?
50. What should the temperature of water be for washing the dishes?
51. What is the result if food is returned to closet 'x fore closet is dry?
52. In airing a room, why do we open the windows both top and bottom?
53. What care do we give windows every morning?
54. What makes the covers of a stove warp and crack?
55. What would you do with a very greasy pot or kettle if washing it in hot water was not sufficient to remove the grease?
56. Why is it necessary to flush the water-closet thoroughly?
57. What causes sewer gas?
58. Why is it wrong to clean a bath-tub with sandsoap?
59. If the weather is cold, how can you keep the water from freezing while you are washing windows?
60. Give the order of work for weekly cleaning, beginning with the drawers.
61. Give the order of morning work in a bedroom, beginning with the removing of the bedclothes.
62. Why is it well to have few woolen tablecloths, few useless fancy ornaments, and no stuffed chairs?
63. If you have n't money for meat, what food can take its place?
64. What is the danger if water-closet is not kept clean?
65. What are the diseases that can be prevented by letting plenty of air and sunshine into the house?
66. What will often prevent consumption?
67. What is the danger in dirt and dust?
68. How does so much dust and dirt get into our houses?
69. What sours milk?
70. How much water should we drink each day?
71. Why drink water? Where do we find water?
72. What makes garbage-can smell badly?

## RECIPES

## BEVERAGES

## Cocoa for One

2 tsp. cocoa
2 tsp. sugar
$\frac{1}{2}$ cup milk
$\frac{1}{2}$ cup water (boiling)
Pinch of salt (for each cup)
Dissolve cocoa and sugar and salt in boiling water, in saucepan or upper part of double boiler. Cook five minutes, add milk, place over fire until hot, or if made in double boiler over hot water until scalded.

## Coffee

For each cup:
2 tbsp. coffee
I cup cold water
Rinse coffee-pot with freshly boiled water. Put in coffee. Pour on cold water and let it slowly come to the boiling-point.

## Tea

Have freshly boiled water. Rinse tea-pot. Put into it I tsp. tea for each cup. Pour on water and let stand just a few minutes (about five) and serve.

## TOASTS

## Dry Toast

Bread is best for toast when two or three days old. Cut bread in $\frac{1}{4}$-inch slices and place on a broiler or hold on a long fork over clear red coals until done golden brown. When done on one side, turn and brown on other side. Toast should be served as soon as made, with butter or with milk or with white sauce.

## Milk Sauce for Toast

For 6 slices of bread
2 cups milk (scalded)
add
$\frac{1}{2}$ tsp. nutmeg
$\frac{1}{2}$ tsp. salt
I tbsp. butter
I tbsp. sugar
Pour over toast.

## White Sauce for Toast for Six

$2 \frac{1}{2}$ tbsp. butter
3 " flour
$\frac{1}{2}$ tsp. salt
I pt. milk
Melt butter in upper part of double boiler or saucepan. Add flour and salt, and stir to a smooth paste. Remove from fire, stir in milk. Put back on fire, over hot water if made in double boiler, and cook until it thickens. Pour over toast.

## Cream-Toast with Cheese

Make toast
Make white sauce as in last recipe.
To white sauce just before taking from fire, add $\frac{1}{2}$ cup grated cheese. When cheese is melted pour over toast.

## CEREAL PUDDINGS

## FOR SIX SERVINGS

## Farina with Dates

3 cups boiling water
i cup farina
I tsp. salt

Put boiling water and salt in top part of double boiler. Add farina slowly while water is boiling, stirring constantly. Cook over fire until mixture thickens. Then place over hot water in double boiler. Steam 30 minutes. A few minutes before serving add I cup of dates washed and cut in small pieces.

## Steamed Rice

I cup rice
3 cups boiling water
I tsp. salt

Add washed rice slowly to boiling salted water in upper part of double boiler. Then place over hot water in lower part of double boiler. Steam 30 minutes, at least. Serve with cream and sugar.

## Rice Pudding

4 cups milk
$\frac{1}{3}$ cup rice
$\frac{1}{2}$ tsp. salt
$\frac{1}{3}$ cup sugar
Few gratings nutmeg or I tsp. vanilla
Wash rice. Mix all ingredients together in bowl, pour into a buttered baking dish. Bake 3 hrs. in slow oven.

When time is limited, wash rice, put in scalded milk ( 4 cups), steam 20 minutes. Add sugar, salt and flavoring. Pour in buttered baking dish. Bake 30 to 40 minutes.

## Indian Pudding

I qt. scalded milk
8 tbsp. corn meal
$\frac{1}{3}$ cup molasses
I tsp. salt
I tsp. ginger
Pour milk slowly on meal. Cook in double boiler I 5 min. Add molasses, salt and ginger. Pour into buttered baking-dish. Bake 2 hrs. in slow oven.

## FRUITS

## Baked Apple

Wash and core tart apples. Place in a shallow baking-pan. Fill centers with I tbsp. sugar for each
apple. Pour over boiling water enough to cover bottom of pan well. Sprinkle with nutmeg or cinnamon. Bake in moderate oven until tender when pierced with a fork. During baking, dip spoonsful of syrup over apples two or three times. Serve hot or cold with or without cream.

## Stewed Apples

Select sour apples for cooking.
Wash, pare, and cut into quarters. Remove cores. For every 4 whole apples make a syrup of the following :

I cup sugar $\frac{1}{2}$ cup water
Drop in apples and cook until clear, stirring carefully to avoid breaking. I tbsp. lemon juice, or $\frac{1}{2}$ tsp. nutmeg may be added, where apples lack flavor.

## Apple-Sauce

Wash and pare 6 nice sour apples. Cut in slices. Put in saucepan with water enough to prevent their burning to pan. Cook until tender or soft. Just before taking from fire, add i tbsp. sugar for each apple. Stir well. Take from fire, and strain through fine strainer. A sprinkling of nutmeg or cinnamon adds flavor to apple-sauce.

## POTATO RECIPES

## Mashed Potatoes

Put hot boiled potatoes through a sieve or ricer, or mash with potato-masher. For six medium-sized pota-
toes add 2 tbsp. butter, I tsp. salt, few grains pepper, enough milk to make creamy, about $\frac{1}{3}$ cup. Beat well to make light. Pile on hot dish and serve.

## Rice Potatoes

Force hot boiled potatoes through a potato-ricer or coarse strainer. Serve lightly piled on hot vegetabledish.

Creamed Potatoes with Cheese for Six
4 cups cold boiled potatoes (diced)
I pt. white sauce
$\frac{1}{2} \mathrm{lb}$. store cheese (cut in small pieces)
Reheat the diced potatoes in the white sauce to which the cheese has been added.

## Fried Potatoes

Cut cold boiled potatoes in cubes or slices. Melt in frying-pan 3 tbsp. butter for each cup cold diced potato. Put in potatoes. Fry until well browned.

## Eggs

Dropped Egg on Toast.
Butter inside of muffin ring and put in frying-pan of hot water to which one-half tablespoon salt has been added. Break egg into saucer, then slip into ring, allowing water to cover egg. Place on frying-pan a tin cover and set on back of range. Let stand until white of egg is of jelly-like consistency. Take up ring and egg, using a buttered griddle-cake turner; then onto a piece of buttered toast.

## APPENDIX

## SUITABLE FURNISHING FOR A MODEL HOUSEKEEPING FLAT OR HOME FOR FIVE PEOPLE*

Kitchen Furnishing.
Stove, coal stove if necessary, ..... \$ 9.00
Connected with stove:
Poker ..... o6
Rake ..... II
Whisk broom .....  13
Blacking brush \& dauber ..... 25
Stove lifter ..... 06
Shovel .....  08
Coal scuttle ..... 35
Woodenware.
Kitchen Table ..... 2.40
Chair ..... 50
Bread Board .....  20
Moulding Board ..... 40
Spoon .....  10
Rolling pin .....  5
Chopping bowl .....  20
Clothes horse ..... 65
\$ 10.04
*This furnishing is also necessary for a model Housekeeping Center in connection with a school, where homemaking lessons are given.
Iron-, Tin- and Wireware.
Tin sugar box ..... \$ ..... 52
Tin flour box ..... 52
Strainer ..... 25
Measuring cup ..... IO
Bread box ..... 66
Wire egg beater ..... 05
Grater ..... 05
Potato masher ..... IO
Tea Strainer ..... 03
Can Opener .....  08
Cork Screw ..... Io
Kitchen forks (3) ..... 30
Griddle spade ..... 03
Biscuit cutter .....  02
Dishpans (2) ..... 50
Pie tins (2) @ . 07 .....  14
Layer cake pans (2) @ .04 .....  08
Apple corer ..... 05
Funnel ..... 05
Cake pans (loaf) (2) ..... 20
Pepper shaker ..... 05
Salt shaker ..... 05
Saucepan covers (2) .....  20
Flour sifter ..... 10
Match box ..... 05
Bread knife .....  60
Chopping knife .....  5
Kitchen knives (3) ..... 36
Skimmer ..... 08
Paring knives (3) ..... 30
Toaster .....  10
Tråys (2) ..... \$ ..... 30
Iron frying pan (large) ..... 28
Iron frying pan (small) .....  12
Carving knife ..... 30
Garbage can ..... 35
Ash can ..... 45

Agateware.

Agateware.

Agateware.

Agateware.

Agateware.

Double boiler ( I qt.)

Double boiler ( I qt.)

Double boiler ( I qt.)

Double boiler ( I qt.)

Double boiler ( I qt.) .....  .....  .....  .....  ..... 0.55 .....  .....  .....  .....  ..... 0.55 .....  .....  .....  .....  ..... 0.55 .....  .....  .....  .....  ..... 0.55 .....  .....  .....  .....  ..... 0.55

Saucepans (2)

Saucepans (2)

Saucepans (2)

Saucepans (2)

Saucepans (2) .....  .....  .....  ..... 50 .....  .....  .....  ..... 50 .....  .....  .....  ..... 50 .....  .....  .....  ..... 50 .....  .....  .....  ..... 50

Wash basins (2)

Wash basins (2)

Wash basins (2)

Wash basins (2)

Wash basins (2) .....  .....  ..... 36 .....  .....  ..... 36 .....  .....  ..... 36 .....  .....  ..... 36 .....  .....  ..... 36

Coffee pot

Coffee pot

Coffee pot

Coffee pot

Coffee pot .....  ..... 35 .....  ..... 35 .....  ..... 35 .....  ..... 35 .....  ..... 35
Teakettle
Teakettle
Teakettle
Teakettle
Teakettle ..... 50 ..... 50 ..... 50 ..... 50 ..... 50
3.39Earthen- and Glassware.
Large yellow bowls (2) ..... 0.30
Medium yellow bowl .....  10
Butter jar (glass) ..... 29
Pitcher (qt.) ..... 20
Lemon squeezer ..... 05
Glass jars ( $\mathrm{I}^{1 / 2}$ doz.) .....  80
1.74
Brooms and Brushes.
Hard broom ..... 0.45
Whisk broom .....  18
Dust pan .....  10
Scrubbing brushes, small (4) ..... 20
Scrubbing brush, large (i) .....  5
Waste paper basket ..... 35
Soft floor brush ..... 70
For Sink.
Soap dishes (2) ..... \$ 0.36
Sink brush .....  08
Sink strainer .....  18
Sink shovel ..... 05
For Washing and Ironing.
Wash boiler ..... 1.15
Washboard (large) ..... 45
Washboard (small) ..... 25
Ironing board ..... 95
Padding for ironing board ..... 49
Covering for pad ..... 24
Sandpaper .....  OI
Pulley line .....  25
Pulley (2) .....  20
Clothespins (ioo) .....  5
Iron stand ..... 05
Flatirons (3) ..... 30
Kitchen Linen.
Dusters (4) 2 yds. Cheesecloth ..... 0.10
Cleaning cloths (12) 3 yds. muslin ..... 18
Floor cloths (2) ..... 36
Pot cloths (2) .....  20
Dish towels (I2) II cts. yd. ..... I. 32
Small hand towels (6) ..... 33
Dish cloths (3) .....  5
Broom bag .....  10
Polishing cloths (2) .....  20
APPENDIXI4I
Chambray for bags (to hold paper, string, clothespins, etc.) 3 yds. .... $\$$ ..... 33
\$ 3.27
Dining Room Furnishing. Table ..... 5.00
Chairs (6) ..... 4.50Table Linen.
Napkins (I doz.) ..... 1.50
Plate doilies ( 1 doz.) ..... I. 44
Tumbler doilies (I doz.) ..... 48
Table Silver.
Knives (I doz.) ..... 1.80
Forks (I doz.) ..... 1.20
Tablespoons (4) ..... 40
Soup spoons ( I doz.) ..... I. 20
Teaspoons (I doz.) ..... 60
Butter knife .....  10
5.30
China and Glassware.
Dinner plates (I doz.) ..... 1. 80
Tea plates (I doz.) ..... I. 44
Soup plates (i doz.) ..... 1.44
Bread and butter plates (i doz.) ..... I. 00
Cups and saucers (I doz.) ..... 2.66
Large platter ..... 65
Small platter ..... 35
Vegetable dish ..... 55
Dessert dishes (i doz.) ..... I.00
Tea-pot ..... 55
Pitcher ..... 45
Water glasses (i doz.) ..... 48
Sugar bowl (glass) ..... \$ . 15
Milk pitcher (glass) .....  15
Salt shaker (glass) .....  19
Pepper shaker (glass) ..... 19
Living Room Furnishing. Folding couch ..... 6.00
Rocker ..... 3.25
Arm chair ..... 2.50
Waste paper basket ..... 50
Scrim curtains (9 yds.) ..... 1.80
Curtain rods (3) ..... 75
Desk (kitchen table stained) ..... 3.75
Stain for table .....  20
Rack for back of desk ..... 1.00
Couch cover (denim) 6 yds. ..... 90
Bedroom Furnishing.
Iron beds, single (2) ..... 12.00
Crib (i) ..... 6.50
Mattresses (2) ..... 9.60
Crib mattress ..... 4.00
Pillows (4) ..... 4.00
Small rocker ..... 2.00
Straight-back chair ..... 2.00
Chiffonier ..... 7.50
Mirror ..... I. 50
Muslin curtains (6 yds.) ..... 75
Rods (2) ..... 20
Bedding and Bath-Room Linen. Comforters (3) ..... 4.50
Blankets (3) ..... 4.50
Crib blanket ..... \$ 1.50
Bed padding, I yd. 60 in. wide .....  82
Bed padding, $3 / 4$ yd. 36 in. wide ..... 39
Sheets (12) $54 \times 99$ in. ..... 7.68
Crib sheets (4) ..... I. 52
Spreads, large (4) ..... 6.00
Spreads, small (2) ..... 2.00
Pillow cases (8) ..... 2.00
Face towels (12) ..... I. 20
Bath towels (6) ..... I. 74
Bath mat .....  54
Face cloths (I2) ..... 50
\$ 34.89173.72

This is a completely furnished home. If a girl has not sufficient money to buy everything, she can wait for many things. Also, by taking time for shopping she may be able to find many of the articles at less expense.

## AdDITIONAL SUGGESTIONS FOR HOMEMAKERS.

To stain a floor, the natural wood should be well cleaned and dried. If the floor has been painted, remove the paint with lye and hot water, being careful not to let the lye touch clothing and hands. For staining floors, oak floor stain, without varnish, is good. One quart is enough to stain two rooms. When perfectly dry, shellac with white shellac. Dry for twenty-four hours; then wax with common floor wax.

There should not be a shade in the kitchen window, as it must be open from the top, and the shade gets torn and becomes ragged. For protection have muslin half curtains.

When purchasing the kitchen stove, be sure that it has a hot-water boiler, if hot water is not furnished with the flat.

A window-seat in the dining-room, made of pine and stained, is a convenience. Under this seat there may be shelves, and there should be a door in front, hinged from the top. In this can be kept the table linen, bed linen, or boots and shoes, etc.

In each bedroom a shelf, from which hangs a curtain, is needed if closets are not built in the flat. A seat with closet underneath, similar to that in the living-room, may be built in one bedroom to hold the children's toys.

Shelves for china in the dining-room are better than a sideboard, the latter being too large for an ordinary tenement room. Cheap sideboards are also very ugly.

Book-shelves are a necessity in the living-room, and shelves in the kitchen, under which the pots, pans, brooms, etc., hang, and on which stand the glass jars for dry groceries.

The furniture (which is better bought in the white) and all shelves, excepting those in the kitchen, can be stained with alcohol stain. If the furniture is varnished and one wishes to stain it, remove the varnish with var-nish-remover, then wash the wood clean with benzine. After it is dry, stain with alcohol-stain, or, if it is a hard wood, rub with linseed-oil without staining.

Alcohol-stain is made by mixing dry aniline-stain with alcohol. The proportion of each should be regulated according to the shade desired - if the color is too dark, add more alcohol; if too light, add more stain. After staining, furniture should be rubbed down with any good furniture or floor wax.

A rack for letters and papers to be used on the desk can easily be made by any carpenter and stained with al-cohol-stain.

An extra bureau can be made from a soap-box, with shelf and legs added. This can be stained and a cretonne curtain hung in front.

A good receptacle for soiled clothes is a pickle barrel, price fifty cents. Holes should be bored in the sides to admit air, and a barrel top may be purchased at any hard-ware-store. This is kept in the kitchen and serves also as a seat.

A screen is necessary in the bedroom for privacy. This may be made of a clotheshorse, painted and hung with burlap. Brass tacks in the top of the screen serve as knobs. On these the burlap curtain hangs by brass rings. This makes it easy to take off and clean, and is better than a gathered curtain tacked fast.

A trundle-bed, which can be pushed under the iron bed in the daytime, is a great convenience in crowded quarters.

A box about three feet high and one and one-half feet wide, with one shelf in the center, is needed in the kitchen. In one half can be placed kindling wood and in the other paper.

If a bin is not provided in the cellar, a coal-box holding one hundred pounds is a saving, since coal costs forty cents for one hundred pounds and twenty-five cents a bushel.

Every glass jar in the kitchen should have printed on it the name of the commodity it holds, the printing to be done with a very small brush and black, ready-mixed paint. After it is thoroughly dry, paint over with white liquid shellac. The jars can then be washed without injuring the painted name.

Teacups may be hung under the shelves in the kitchen china-closet, in order to economize space.

If there is a bath-room in the flat, have a shelf built above the bath-tub for cleaning materials; also, a rack to hold tooth-brushes, and a rack for towels and washcloths. Each member of the family should have his own soap, soap-dish, and towel.

If there is not a bath-room in the flat, white enamel basins may be hung on the side of the bureaus, where also there must be towel-racks. The basins may be taken to the kitchen sink for bathing purposes, as rumning water is always preferable, and washstands take up space, are a nuisance, and seldom are kept clean.

A few good pictures add a great deal to a home. It is well to have these on the living-room wall. If it is desired to have pictures in the bedrooms, a sanitary way is to paste the prints on the painted walls and to wash them over with liquid shellac. Pictures and wall may then be washed at the same time.

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