

CANNING CLUB—I

Boys' and Girls' Club Circular 7

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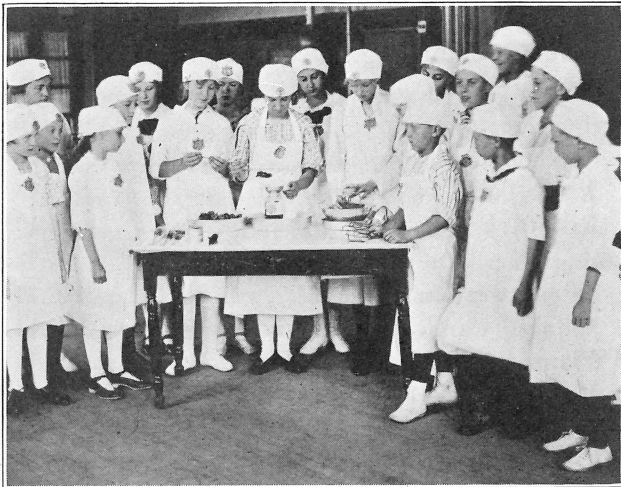


Fig. 1.—A club member giving a demonstration at one of the club meetings.

COOPERATIVE EXTENSION WORK IN AGRICULTURE AND HOME ECONOMICS

UNIVERSITY OF MISSOURI COLLEGE OF AGRICULTURE AND THE UNITED
STATES DEPARTMENT OF AGRICULTURE COOPERATING

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CANNING CLUB—I

In organizing canning clubs for the Boys' and Girls' Club work there are three objects in view:

1. To provide some canned or dried vegetables and fruits for the table during the months when fresh ones cannot be obtained; since vegetables and fruits are needed the year round to keep the body in good condition.

2. To demonstrate the best methods of canning food in order to preserve the color, flavor and texture, at the least possible outlay of labor and time.

3. To save the surplus in gardens by canning vegetables which would otherwise go to waste.

CLUB YEAR AND REQUIREMENTS

The canning club year begins May first and ends September first. The requirements are:

1. To can by the cold-pack method

- 12 jars of vegetables (at least three varieties),

- 12 jars of fruit (at least three varieties).

2. To dry 2 pounds of vegetables, and 2 pounds of fruits.

3. To keep a record of the fruits and vegetables canned and dried with the expense of each.

4. To make a public demonstration and to have an Exhibit and Achievement Day.

5. To write a story of the club work for the year in the Record Book and send it to the County Extension Agent.

MEETINGS

With the assistance of your Club Leader you can decide how often you wish to hold your club meetings and what problems you may need to discuss in order to make your work a success. Every club should plan its program according to its local needs.

If you start a canning club you will want it to be a standard one so that you may have a Standard Charter from the Agricultural Extension Service. One of the requirements, you will see by consulting the Canning Club Record Book, is that you hold at least six meetings at which the officers preside. You may have as many more meetings as you and your Club Leader desire.

NOTE.—Prepared by Essie M. Heyle, Extension Professor of Home Economics in collaboration with Mrs. J. K. Fyfer, Special Assistant in Boys' and Girls' Club Work.

SUGGESTED MEETINGS:

- I. Organization meeting.
- II. Discussion of the cold-pack method, the outfits and terms used in canning. Demonstration of testing jars, tops and rubber rings.
- III. Discussion of spoilage. Demonstration of canning fruits.
- IV. Demonstration of canning vegetables. Discussion of plans for Achievement Day.
- V. Drying of fruits and vegetables with demonstration by some members.
- VI. Achievement Day.—Officers chosen to preside, program, awards and premiums.

There might be twice as many meetings if you wish as there are many more things to discuss and demonstrate. Besides, you must not overlook the social side of club work.

RECORD BOOK

In the Record Book that was sent when you applied for your club work you will find a place to record all of the facts connected with your canning work. After each meeting write all the important facts about it and any interesting things you learned. Make the Record Book a credit to yourself and to your Local Leader, and the Agricultural Extension Service will be proud of you as a cooperator.

I. Organization Meeting

At the first meeting the Local Club Leader will take charge and explain carefully the plans for the club year. At this meeting officers should be elected. The time and place of meeting and name of the club should be discussed.

A committee should be appointed to make a simple constitution and by-laws and present them at the next meeting. A committee should also be appointed to make out the program for the year. The Club Leader should carefully explain what utensils are necessary and tell the members how to keep the records.

RECORD BOOK

After the first meeting the Record Book should have a carefully written account of what was done. The number of members should be recorded, as well as the names of the officers elected, the committees appointed, and any other facts about the business or social part of the meeting.

II. Cold-Pack Canning

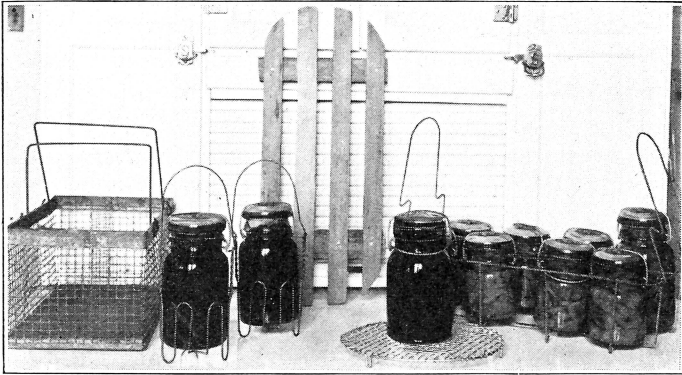


Fig. 2.—Two baskets and home-made wooden rack to use with wash boiler, wire rack to use in pail or lard bucket and jar holders to use in either boiler or pail. All will raise jars from bottom of boiler enough to prevent breakage.

After the reports are given by the committee appointed at the last meeting the cold-pack method of canning should be explained. There are other methods of canning but the cold-pack method is the one that the boys and girls learn to use in their club work.

This method is the one in which the product is put into the jars before it is cooked, or when only partially cooked, and the liquid (syrup or water) is poured over the food in the can.

The jars or containers are only partially sealed so the steam can get out; otherwise the jar would break. This will be more fully explained on another page. The food is cooked in the jar and then the jar is sealed tightly. This cooking of the food in the jar is called processing.

The open-kettle method is the one in which the fruit is cooked and then put into a jar and sealed air-tight. This method is the one most commonly used by housekeepers.

The cold-pack method has several advantages over other methods: (1) Vegetables and meats canned by the cold-pack method are much more likely to keep than if canned by the ordinary open-kettle method; (2) Vegetables and fruits more nearly retain their natural flavor, color, texture and shape; (3) It is an easier method, as most of the work can be done in a cool place and while sitting down. It saves both time and labor.

OUTFITS

There are two outfits commonly used for the cold-pack method: (a) the water-bath outfit, and (b) the steam pressure outfit.

Water-bath Outfit.—In the water-bath outfit any vessel such as a wash boiler, a lard can or a tin pail will be satisfactory, provided it has: (1) sufficient depth to allow the jars to be covered with water; (2) a flat bottom; and (3) a close fitting lid.

There should be a rack of wire, tin or narrow strips of wood which will hold the jars up at least $\frac{3}{4}$ to $1\frac{1}{2}$ inches off the bottom of the canner and allow the water to circulate under them. The glass jars would probably break if they were set directly on the bottom of the canner. Handles placed on the sides of the rack will help in lifting the cans in and out. Individual jar holders which are very desirable may be bought at a reasonable cost.

Steam-pressure Outfit.—The other type of home canner is a steam pressure outfit. Under pressure the temperature of water

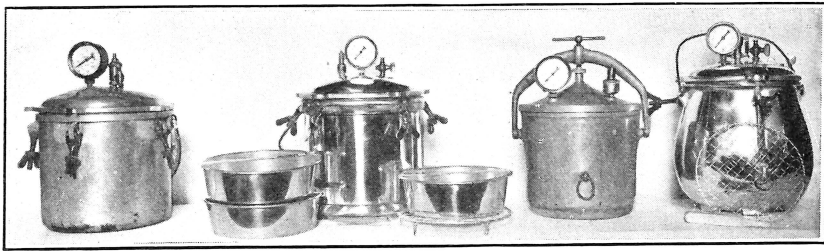


Fig. 3.—Several types of steam pressure canning outfits.

may be raised several degrees above the boiling point. The small organisms that cause canned food to spoil are destroyed more quickly by this higher temperature than by mere boiling. The steam pressure outfit saves time and fuel; but its cost is greater than the water-bath outfit.

JARS AND TOPS

For home use glass jars are probably more economical than any other container as they can be used year after year. There are several types of good jars on the market and any one of them which is capable of forming a seal that will keep out air is satisfactory. The jars should be of good quality of glass, smooth and well finished. The clear white jars will give the canned food a more natural color than those of a bluish or greenish cast. In an exhibit all jars should be uniform in size and style.

The top is the most important part to consider. In all types of jars be sure the tops are not nicked or rough.

Screw Tops.—Screw tops should never be used the second year if they are imperfect, discolored or corroded. An old top which has been removed from a jar by prying up with a knife usually has a bent edge and should not be used. Jar tops may be removed without injury by inverting the jar a few moments in hot water or by pulling the rubber out from under the top.

Glass Tops.—When using jars with glass tops and metal clasps, be certain that the springs and clasps are tight and strong.



Fig. 4.—Three types of jars and tops.

The wire bail placed over the top of the cover should go in the groove with a snap, even when the tightening lever or clamp spring is up. If it does not, remove bail from tightening lever and bend to make tight.

To test glass and screw-top jars put water in the jar, adjust the rubber and lid, invert and shake. If the jar leaks, tighten the bail or use another lid.

Lacquered Tops.—Examine jars with lacquered tops to see if the composition in the groove of the top is cracked. If it is, do not use the top. The sealing properties of this composition lessen with age so that for this type of jar new tops are necessary each year. A top that is carried over from the season before cannot be used. If this type of jar does not seal when heated, remove, scrape the composition off the jar and use a new top.

RUBBER RINGS

It is very important that new, good, rubber rings be selected. Test for elasticity by pulling. They should not break easily and should return to shape. When doubled between the fingers, the rubber should not crack or even show little holes. When placed on the jar it should fit closely. Do not select rings by color but by test. Do not use the same rubber twice. It is cheaper to buy new rubbers than to lose a jar of fruit or vegetables.

STEPS IN CANNING

Preparation of Equipment.—All canning equipment, water-bath or steam pressure outfit, jars, and rubbers should be thoroughly cleaned and tested before any products are prepared. The jars should be placed in a vessel of cold water over a fire to heat. They will then be hot and ready for use when the products are ready for packing.

Clean and Prepare to Product.—Use only fresh and sound fruits and vegetables and can at once. "One Hour from Field to Can" is an excellent slogan for home canners.

Pre-cooking.—Pre-cook, parboil or scald products that require it. Consult your time table to see which ones need pre-cooking. If no pre-cooking is needed, put at once into hot jars. It is considered more desirable, when possible, to pack the product in the jar without any pre-cooking as it saves time and work and conserves flavor and food values that are lost unless all of the water used in pre-cooking is put into the can. Pre-cooking is necessary, however, for a number of products: (a) corn, to set the milk; (b) products that need to be shrunk, as spinach; (c) products from which the skin must be removed as carrots, beets, peaches, etc.

Pre-cooking is best done by placing the product in a jar and steaming, or in a sauce pan, or double boiler with only enough water to cook products. When possible all of such liquid should be added to the jar.

Cold Dipping.—Cold dipping means plunging into cold water immediately after scalding or pre-cooking. It should be omitted except for vegetables or fruits which need to be skinned or handled. Do not allow products to stand in water.

Packing in Jars.—Pack products carefully, as soon as prepared, in clean, hot, tested jars and begin processing each jar as soon as it is packed. Soft fruits or vegetables should be packed as closely

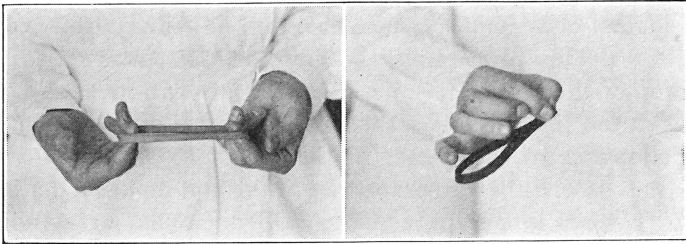


Fig. 5.—Two ways of testing jar rubbers. Stretch to see if it is elastic; pinch to see if it cracks or shows pin holes.

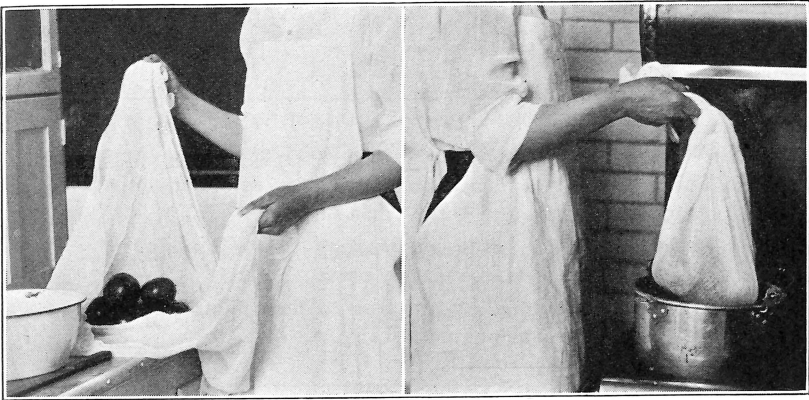


Fig. 6.—Tie product needing pre-cooking in cheesecloth and dip in boiling water.



Fig. 7.—Packing an exhibit jar of whole beans.

as possible without crushing. A closer pack may be obtained if the jar is shaken occasionally while packing. Shelled beans, corn and peas swell during processing, therefore a little space should be left in the top of the jar. Beans, peas, corn, greens and meat should not be packed too tightly unless they are processed a longer time, since heat penetrates to the center of the jar more slowly in a tightly packed jar. Corn that is scraped from the cob makes a denser pack and so requires longer processing. Do not open jar to add more food if it is not full after processing, as the air above the food in the jar has been processed just as thoroughly as the food and so the food will keep; while if it is opened it may not.

Add 1 teaspoonful of salt to each quart of vegetables, and hot water if vegetable stock does not cover vegetable; add syrup or fruit juice to fruits.

Syrups

Thin syrup is made by bringing to the boiling point one part of sugar and three parts of water.

Medium syrup is made by bringing to the boiling point one part of sugar and two parts of water.

Thick syrup is made by bringing to the boiling point one part sugar and one part water.

A small funnel through which to pour the hot liquid will help in preventing breakage of jars. Wipe off the top of the jars before adjusting rubber and lid.

Adjusting Jar Tops.—When using a screw-top jar, place the top in position and screw down tightly. Then make a slight backward turn to loosen. If glass tops fastened with wire bails are used, the bail is put in place, but the lower bail is not clamped until after processing. If a jar with lacquered top is used, place the wire clamp in position. This holds the top in place until it is sealed after processing. The jar tops are not put on tightly, for unless there is room for steam to escape the jars will break.

Processing.—Processing is the period during which the heat is applied to the filled jar in the canner. In water-bath canner, count the time only while the water is boiling hard; that is, when large bubbles are breaking on the entire surface of the water and when the water is jumping. If the water, for any reason, should stop boiling during the processing, time should not be counted until the

boiling begins again. Remove the jars from the canner as soon as period is up. Water in the canner should cover jars one inch. For steam pressure cookers count time only after the gauge records the pressure at which the products are to be processed. Do not remove the jars from the pressure cooker until the pressure is down to zero.

Removal from Canner.—Remove from the canner and finish sealing by tightening lids. Do not let jars cool in a draft for it may cause them to break. Test for leaks by turning jars upside down on a tray to cool.

Storage.—Store jar in a clean, dry, cool, dark place.

Wrapping jars in paper prevents products from bleaching and fading. Some one should give a demonstration of testing jars, rubbers and tops.

RECORD BOOK

As you have been looking forward to your canning work your equipment is all ready to tell about. It would be interesting for you to draw a picture of your outfit or take a kodak picture of everything in readiness for canning. Tell about the water-bath outfit you made and how much it cost, if you have a steam pressure outfit tell the make and the cost. What kind of jars are you planning to use. Why did you choose that kind of jar?

III. Spoilage

As you are interested in knowing how to can food so that it will keep, you would, of course, like also to know why it spoils.

There are present everywhere very tiny plants known as bacteria, yeasts and molds which are called micro-organisms, because they are so small they cannot be seen except by the use of the microscope. It is these small organisms that cause the spoilage of food. If in the process of canning they are killed by heat, and if the jar is sealed so tightly that no more can enter, food will keep indefinitely.

In the cold-pack method of canning the partially sealed jar with its contents is heated to a high enough temperature for a long enough time to kill all the micro-organisms that might cause spoilage. Then the jar is sealed tightly so no more can get in. If the jar is not sealed air-tight more micro-organisms will get in with the air.

Flat Sour.—One of the most common causes of failure in canning is flat sour. It is most often found in corn, peas, beans and asparagus. When no other indication of spoilage is found in these vegetables they will have a peculiar sour taste and a disagreeable odor which is due to flat sour. The causes of flat sour are not fully known. If the following suggestions are obeyed good results should always follow and flat sour should not develop.

To Prevent Flat Sour.

1. Can absolutely fresh fruits and vegetables.
2. Process the fruits or vegetables at the boiling point for the required time.
3. Get product into the jar and on to process as quickly as possible after pre-cooking.
4. Cool as quickly as possible after processing.

A demonstration of canning fruits may be given at this point.

RECORD BOOK

What were some of the things discussed at the last meeting? What did you do for roll call? Have you had any fruits or vegetables spoil? What kind of spoilage was it? What was the cause? Was it due to poor tops, over-ripe products, or just what? What have you canned up to the present time? Have you demonstrated any yet?

Time Table for Canning Fruits, and Vegetables by the One-Period Cold-Pack Method.

Product	Preliminary Cooking	Add	Peaches	
			Water Bath	Steam Pressure 10 pounds
FRUITS				
Apples	None	Hot thin syrup	20 min.	.....
Apricots	Scald 1 min. to loosen skin	Hot thin syrup	20 min.	.....
Berries (Sweet)	None	Hot thin syrup	16 min.	.....
Berries (Sour)	None	Hot thick syrup	16 min.	.....
Cherries	None	Hot medium syrup	25 min.	.....
Grapes	None	Hot thin syrup	16 min.	.....
Peaches	Scald 1 min. to loosen skin	Hot thin syrup	20 min.	.....
Pears	Cook 4 to 8 min. if hard*	Hot medium syrup	20 min.	.....
Plums	None. Prick skin	Hot medium syrup	20 min.	.....
Quince	Cook 4 to 8 min. if hard*	Hot medium syrup	30 min.	.....
Rhubarb	None	Hot medium syrup	16 min.	.....
VEGETABLES				
Asparagus	None	1 tsp. salt & hot water	3 hrs.	50 min.
Beans (String or Lima)	None	1 tsp. salt & hot water	3 hrs.	50 min.
Beets	Parboil 7 to 15 min. to loosen skins	1 tsp. salt & hot water	2 hrs.	40 min.
Cabbage (Summer)	Precook to shrink	1 tsp. salt & hot water	1 hr.	30 min.
Carrots	Parboil 8 to 15 min. if old to loosen skins	1 tsp. salt & hot water	2 hrs.	40 min.
Cauliflower	None	1 tsp. salt & hot water	1 hr.	30 min.
Corn	Precook to set milk	1 tsp. salt & hot water	4 hrs.	90 min.
Egg Plant	None	1 tsp. salt & hot water	2 hrs.	40 min.
Greens	Precook to shrink	1 tsp. salt & hot water	3 hrs.	50 min.
Parsnips	Parboil 10 to 15 min. to loosen skins	1 tsp. salt & hot water	2 hrs.	40 min.
Peas	None	1 tsp. salt & hot water	3 hrs.	50 min.
Pepper (Green)	None	1 tsp. salt & hot water	1½ hrs.	35 min.
Pepper (Red)	Oven-bake 6 to 8 min. then peel	1 tsp. salt & hot water	1½ hrs.	35 min.
Pumpkin and Squash	Precook until soft	1 tsp. salt	3 hrs.	50 min.
Sweet Potatoes	Precook ¾ done	1 tsp. salt	3 hrs.	50 min.
Tomatoes	Scald 1 min. to loosen skin	1 tsp. salt & Tomato juice	22 min.	.....

The time given is for pint or quart jars. Add ten per cent for one-half gallon jars.

*If fruit is cooked in water to soften it, only a small amount should be used; sugar should be added toward the end of the period so the syrup is made from the water in which the fruit is cooked.

IV. Demonstration of Canning—Plans for Achievement Day

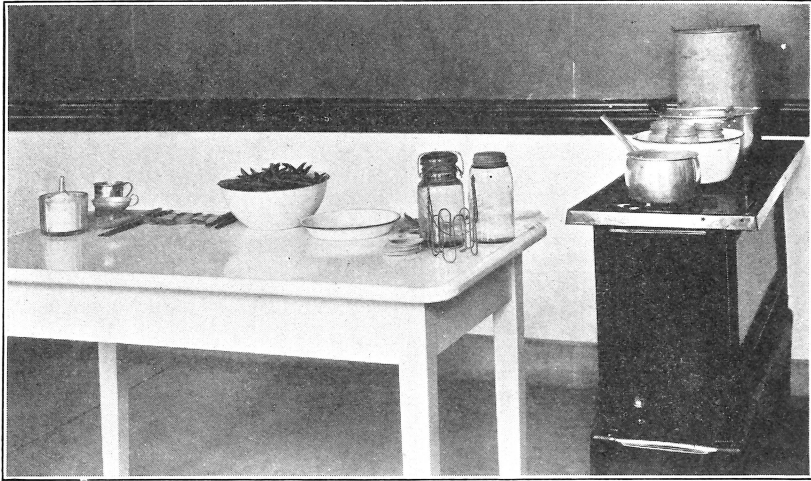


Fig. 8.—A neat, well arranged demonstration table with stove conveniently placed.

At this point in your canning some good canning demonstration of either fruits or vegetables should be made. When giving a demonstration the work should move along smoothly. Someone should be talking or illustrating all the time. Always speak to the point, give each step in its order, be accurate and speak clearly, answer all questions promptly, politely and briefly. Make a demonstration always so interesting that the listeners will want to hear more. When you have presented all the facts, stop.

For achievement day you will want a lively, interesting program and perhaps you will want outside help from the County Agent or the Agricultural Extension Service. If you do want one of them it would be best to plan Achievement Day to suit their convenience.

Make your exhibit of fruits and vegetables look as attractive as you possibly can. The manner in which you label every jar, the care with which you write the labels and the arrangement of the jars, help greatly in showing your work to its best advantage.

JUDGING FRUITS AND VEGETABLES

The following score cards are used in judging canned fruits and vegetables. You can tell from the value given the different

points which are the important ones. In this score card, quality and condition refer to the grade of product canned, how young and fine it was, to the texture of the canned product and to how well it has kept. "Pack" under "general appearance" refers to how full and neatly the jar is packed, and "container" to the cleanliness of the jar and neatness of labeling.

Score Card for Canned Vegetables.

Vegetable—			
Appearance (shape, color)	15		
Flavor	40		
Quality and condition	15	70	
Liquid—			
Clearness	10	10	
General appearance of jar—			
Pack	10		
Container	10	20	
		<hr/>	
Total	100		
Fruit—			
Appearance (shape, color)	15		
Flavor	25		
Quality and condition	15	55	
Juice—			
Flavor	15		
Clearness and consistency	10	25	
General appearance of jar—			
Pack	10		
Container	10	20	
		<hr/>	
Total	100		

RECORD BOOK

Who put on the last demonstration? What was demonstrated? Who was the best one in the demonstration? Would this demonstration be a good one for an Achievement Day program? Tell everything interesting about the last meeting you possibly can. What plans did you make for Achievement Day? Have you held a club picnic or party yet? If so what did you do? Add a kodak picture of the club members if you can or a picture of any part of your work.

V. Drying Fruits and Vegetables

Another equally profitable means of saving the surplus fruits and vegetables is that of drying them. But unlike canning, drying cannot be used profitably with all fruits and vegetables.

For drying fruits and vegetables there are two usual ways that can be used in the home—sun drying, and drying by artificial heat.

Fruits and vegetables to be dried quickly should be shredded or cut into slices, because many are too large to dry whole or are covered with a skin which nature places there to prevent them from drying out.

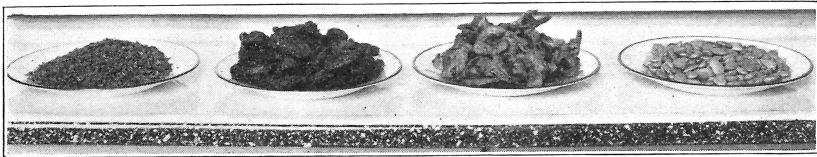


Fig. 9.—Dried corn, peaches, apples and beans.

The drying of fruits and vegetables in the sun is a simple process if they have been prepared properly. In its simplest form such drying consists in spreading the freshly prepared slices or pieces on trays with either wire or slat bottom. If wire is used for the bottom a coat of melted paraffin should be applied to the wire with a brush so that it will not rust and discolor the product. Some people use windows or door screens for trays. The trays are usually placed with one edge raised upon a short piece of board so that they will stand facing the sun and be tilted just as much as possible without causing the product to roll or slide on the tray. If the trays are set level they should be raised a few inches so there will be free circulation of air underneath them.

If flies and other insects are abundant, a mosquito bar should be thrown over the product. Once or twice a day the slices are stirred or turned over and the thin ones which dry first are taken out. Sun drying has much to recommend it, since there is no cost for fuel, and there is little danger of the product becoming overheated. However, dust gathers on the product, and unless it is protected carefully, flies and certain insects which always attack dried fruit, will lay their eggs upon it. These eggs will later hatch

out, and the worms, or larvae, will riddle the dried fruits or vegetables, making them unfit for use. The mosquito netting helps to some extent to keep out the dust as well as the flies.

The surface of the ground over which trays are spread should be free from grass or any kind of growth as the foliage will give off moisture and prevent the products drying rapidly. Bare ground that is tramped as hard as possible will give best results. Fruits and vegetables, when dried in the sun, are often spread on large trays of uniform size, so constructed that they can be stacked one on top of the other and protected from the rain by means of a cover made of oil cloth, canvas or roofing paper.

A very cheap tray can be made of lumber $\frac{3}{4}$ inch thick and 2 inches wide which form the sides and ends, and lath which is nailed on to form the bottom. Spaces $\frac{1}{8}$ inch wide should be left between the laths for ventilation, and the trays can be raised off the ground by placing them on poles or an easily made rack. As laths are 4 feet long, these lath trays are most economical when made of material 4 feet in length.

In securing good dried products the kind of drier used is not as important as the quality of the fruit or vegetable, the proper temperature and the cleanliness in handling.

Drying by artificial heat is very satisfactory if care is taken. It is more rapid than sun drying, is more certain and usually gives better results.

Oven Drying.—The products to be dried should be spread thinly in baking pans, or pie tins and these should be placed on racks so that they are not in direct contact with the oven wall. The door of the oven should be left open so that the vapor driven off may pass out, and the fire should be so regulated that the material will not be scorched. Very satisfactory products are made in this way, and many pounds of fruit and vegetables may be dried by exposing them upon boards or newspapers so placed about the stove that they are kept warm while the stove is in use.

Hanging Trays for Drying.—A cheap and very satisfactory drier for use over the kitchen stove can be made by any handy boy or carpenter from a small amount of small-mesh galvanized-wire netting and a number of laths or strips of wood about $\frac{1}{2}$ inch thick and 2 inches wide. The screen may be tacked directly on the

framework to make the drying shelves, or the framework can be made to support separate trays. By using two laths nailed together the framework can be stiffened and larger trays made if desirable. This form or any of the lighter makes of driers can be suspended from the ceiling over the kitchen range or over the oil, gasoline, or gas stove, and it will utilize the hot air which rises during the cooking hour. It can be raised out of the way or swung to one side by a crane made of lath when the stove is required for cooking purposes, and lowered or swung back to make use of the heat which otherwise would be wasted when the top of the stove is not in use.

Kitchen Stove Drier.—A simple, satisfactory home-made drier consists of a series of trays with wire-mesh bottoms. These trays fit closely together, the heat is applied beneath, and the warm air takes the moisture up and out of the evaporator. Such an arrangement makes it possible to handle several products easily at the same time and to dry a quantity with little trouble.

For this drying it is advisable to use a thermometer so that the temperature may be known and regulated. An ordinary oven thermometer may be used, or, better still, a small hole may be made in the side of each tray so that a glass rod thermometer may be inserted. An average temperature of 140° will give good results. Most fruits and vegetables may be dried in 3 hours at this temperature. The temperature may be raised to the proper point quickly by spreading a piece of thin cloth over the top tray. The cloth should be removed when the proper temperature has been reached. The temperature may be kept constant by regulating the heat below.

Drying Fruits.—Apples may be peeled and quartered or cut crosswise into $\frac{1}{8}$ -inch slices. The fruit may be prevented from browning before being placed in the drier by dropping the slices into water containing one table-spoon of salt to the gallon. If the apples are dried quickly at a high temperature, they will be as attractive and light in color as commercial dried apples. During the drying process the apples should be stirred occasionally to insure even drying. The temperature should be kept at about 140°. If beads of moisture come out and the apples become very sticky the temperature is too high. From 2 to 2½ hours are sufficient for

drying apples with artificial heat at the temperature given. Apples are sufficiently dry when they will give the following tests:

Tests for Dried Apples.

1. When it is impossible to press water out of the freshly cut ends of the pieces.
2. When the pieces are sufficiently elastic that they will not break when pieces are rolled tightly.
3. When a mass of slices is pressed firmly into a ball and the slices separate at once when released.
4. When the surfaces are soft and stick slightly to the fingers.

Other fruits such as peaches, apricots, plums and pears are dried in the same manner as given for apples.

Drying Vegetables.—Perhaps for beginners it would be best to dry only such vegetables as shelled beans, lima beans, peas and corn. Other vegetables may be dried but these bring most satisfactory results to the inexperienced.

Shelled Beans and Peas.—Wax beans, lima beans or mature string beans and peas for drying should be gathered when full-grown but before the pods have begun to dry. They should be shelled and blanched 3 minutes in boiling water.

Blanching means dipping into boiling water or treating with steam. The beans can be placed in a wire basket or in cheese cloth bag for blanching. Count time only when water boils.

Blanching should be done carefully as the quality of the vegetable will be affected by the blanching. Blanching prevents darkening or discoloration, preserves more of the natural color, and hastens the drying process.

Plunge the beans or peas into cold water after blanching and remove the surface moisture by placing between two towels or exposing them to the sun and air for a short time. It takes about 3 hours to dry beans or peas at a temperature of 140° to 160°.

Corn.—Corn for drying should be selected when it is in the condition to eat from the cob. Gather it early in the morning, and prepare it as quickly after gathering as it is possible. Blanch the corn on the cob by placing it in boiling water from 8 to 15 minutes, or until the milk "sets". Then plunge it into cold water for a mom-

ent in order to cool the cobs enough to handle. Cut the corn from the cob with a thin sharp knife, being careful not to cut the cob.

Spread the kernels evenly on trays to a depth of $\frac{1}{2}$ inch or less, and start drying at once. Dry corn at 140° to 160° . It will take about 3 hours to complete it. When the corn is sufficiently dry the kernels will crush. They are hard and clear looking.

Storing Dried Products.—It is very necessary to protect dried fruits or vegetables in order to keep out insects and worms. Tin cans, glass jars, paste board boxes with tight covers, paper bags and paraffined cartons are good for storing products. Packing a small amount in one container is advisable for then if insects do enter the container only a part of the dried product is spoiled.

If the fruits or vegetables are not thoroughly dried they will "sweat" when placed in a tight container, then they will soon mold. Examine products after storing for 24 hours and if any moisture is present give them further drying.

JUDGING DRIED PRODUCTS

Following is a score card that is used in judging dried fruits and vegetables.

Score Card for Dried Products.	
Size and shape of pieces	20
Color	20
Degree of dryness	30
General conditions (freedom from imperfect parts and foreign matter)	30
Total	100

RECORD BOOK

What fruits and vegetables did you dry? Did you have any difficulties? What method of drying did you use? Tell the method of packing you used. Did you find any trace of moisture after packing? A kodak picture of the drying equipment you used might be placed in the Record Book here. Any and all items of interest you found in the work should be written in the Record Book.

VI. Achievement Day

The Achievement Day in your club work is something like the "last" day of school. It is a "finishing up" and "showing off" the work you have done during the club year. It should be made so interesting that you ought to have a large attendance if you have talked about it to your friends and neighbors and asked them to come.

The program should have been well planned and should move along smoothly. Never have one so long that the visitors will get restless and tired. Make your place of meeting and your canned



Fig. 10.—An attractive exhibit of canned fruits and vegetables.

and dried products look attractive. Be sure your club aprons and caps are clean and fresh.

RECORD BOOK

The Achievement Day Program should be kept in the Record Book and a list of the awards, premiums or prizes given. How many came to your meeting? Did any of the visitors want the club members to help them in cold-pack canning?

A picture of the exhibit of your canned and dried products would help the Agricultural Extension Service to know what you have done.

SUGGESTIONS FOR ROLL CALL

1. Kinds of fruits and vegetables I plan to can.
2. The canning equipment I shall use.
3. One advantage of cold-pack canning over open kettle canning.
4. Comparative cost of home canning over factory canning.
5. What makes canned products spoil?

SUGGESTIONS FOR CLUB DEMONSTRATIONS

1. Making home made canning rack.
2. Testing jars and rubbers.
3. Canning greens.
4. Canning fruits.
5. Drying corn and apples.

SUGGESTIONS FOR PUBLIC DEMONSTRATIONS

1. Canning fruits and vegetables.
2. Drying fruits and vegetables.

CANNING CLUB MAXIMS

1. Can all you can, and what you can't can dry.
2. Eat what you can; can what you can't eat.
3. Can a can of fruit and one of vegetables for every day the garden doesn't supply fresh ones.
4. Can enough for winter, as fruits and vegetables are better than iron tonic.
5. Can an abundance, as fruits and vegetables keep the body working smoothly.
6. Can enough tomatoes for use twice-a-week for six months.
7. Can vegetables so there will be others to eat beside potatoes every day.
8. Learn to like all kinds of vegetables.



Fig. 11.—A canning team ready for demonstration work with clean caps and aprons.

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