COOPERATIVE EXTENSION WORK

AGRICULTURE AND HOME ECONOMICS

STATE OF OKLAHOMA

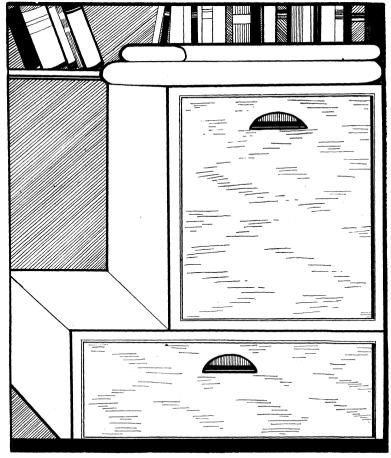
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Storage for the Farm Home MADONNA FITZGERALD, Extension Economist, Home Management C. V. PHAGAN, Assistant Extension Agricultural Engineer



STORAGE FOR THE FARM HOME

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STORAGE FOR THE FARM HOME

Storage is such an important matter in the home that consideration of it should begin when the house is planned. However, few families are fortunate enough to enjoy the results of such planning, so ways and means must be devised to provide desirable permanent or temporary storage space for the average home.

An important managerial problem in homemaking is the conservation of time and energy. The type and location of the various storage spaces within the home are closely related to the expenditure of energy as well as time, and it is chiefly in the interest of these two factors that the following discussion of storage has been prepared. Step-saving arrangement of equipment, labor-saving devices and time schedules mean much in the efficient management of the home but without adequate storage space effort will be less systematic, hence less effective.

A knowledge of the essential requirements for adequate storage space in the home is necessary before satisfactory space can be planned. Among the factors which influence these requirements are the size and personnel of the family, as well as the amount of equipment, household supplies, food materials and clothing that are to be stored.

FRUIT AND VEGETABLE STORAGE

Because of the need for greater food storage space, a cellar, cave or a room provided with shelves is considered a necessity in rural homes. Fig. 1 shows a shelf elevation for the storage of canned products, with space for stored vegetables between the last shelf and the floor.

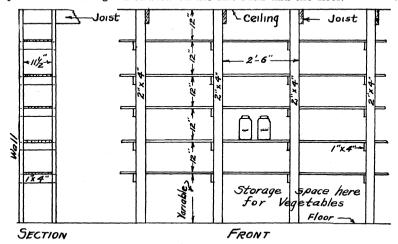


Fig. 1.—Fruit and vegetables storage shelves.

The width of the shelves may be determined by the space to be utilized and the products to be stored. A shelf 12 inches wide will accommodate three jars, while four rows of jars will require a depth of 16 or 17 inches. It is an economy in space to store three or four jars deep on shelves. The only precaution necessary is to be sure that the shelves are not so deep

Fig. 2.—Storage space for week's food supply.

that it is difficult to reach the back rows of jars. The space between the shelves is also important, as too much width is only waste space. The shelves should be placed to fit the objects to be stored, but spaces 10 or 12 inches apart are generally most convenient and usable.

The shelf arrangement shown in Fig. 2 provides an additional convenience for the kitchen. It may be made to fit a wall space in or near the kitchen. It is suitable for the storage of a week's supply of canned and dried food, thus saving a daily trip to the cellar, as well as affording an opportunity for family cooperation in planning for the food supply and transporting it once a week from the large storage space to the shelves.

KITCHEN CABINET STORAGE

Efficiency in the performance of household tasks is largely dependent upon the satisfactory arrangement of equipment to be used at the various work centers. Figure 3 shows a section of the kitchen cabinet, including the rack in the door for additional storage of lids and pans. The toe space indicated is equally desirable in the built-in or portable cabinet. Suitable widths and depths of shelves, and proper heights of working surfaces are important things to keep in mind when constructing kitchen cabinets. The dimensions shown for the cabinet in Fig. 3 are very satisfactory for the average farm kitchen. It will be seen that the cabinet is in two sections, the upper cupboard and the lower cupboard. Either of these units may be constructed separately, according to needs or space available.

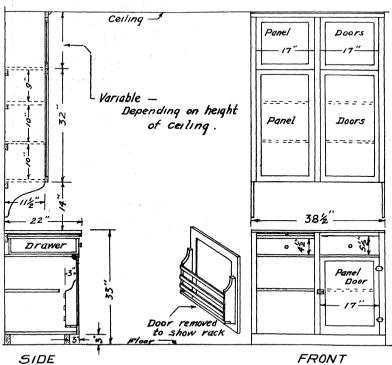


Fig. 3.—Kitchen cabinet space, showing proper dimensions.

A narrow space near the stove may be utilized to good advantage by building a closet like Fig. 4, which extends to the ceiling and is 12 inches wide and 18 inches deep. Hooks are placed on the sides of the upper part of the closet for kettles, etc. Adjustable shelves in the lower part provide for heavy utensils. A lid rack and hooks for small articles are placed on the door at a convenient height.

INFORMATION FILE

A household information file may be constructed of light weight lumber or wall board. There are many types of containers for general home information, such as recipes, formulas, bills, receipts, and clippings. The one shown in Fig. 5 is very satisfactory. The file may be made to accommodate any number of divisions and may fit on a shelf or table or as part of a cabinet, as shown here. A small drawer on the bottom of the file is an added convenience.

In making the household information files, all of the single files should be made first and placed together in order to determine the exact size to make the cabinet. The inside dimensions of the cabinet should be approximately one-eighth inch larger than the size of the three files when placed together. This space will allow free movement of each file as it is moved in and out. Thus it will be seen that the over-all dimensions of the cabinet may vary slightly from those shown, due to different thickness of materials used.

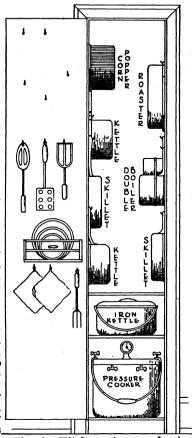
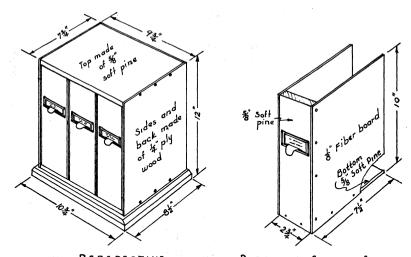


Fig. 4.—Kitchen storage closet.

(The above cut is by courtesy of the Bureau of Home Economics, U. S. D. A., from the bulletin, "Closets and Other Storage Arrangements for the Farm Home.)



PERSPECTIVE DETAIL OF SINGLE FILE Fig. 5.—A practical household information file.

FUEL STORAGE

The storage of fuelwood particularly - is a problem not only for the kitchen, but for wood storage in any room where it is to be burned. The shown is especially desirable to provide extra surface for the kitchen. A well constructed wood box of the right height is easily filled and moved for cleaning and avoids stooping to lift the wood. Place the bottom of the box proximately 12 inches above the floor, as shown in the drawing.

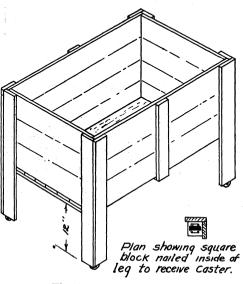


Fig. 6.—Fuel box with legs.

CLEANING CLOSET, BROOMS AND SUPPLIES

A broom closet, built deep enough to hold a sweeper, and with shelves of proper width to take boxes, bottles, and other cleaning equipment, is a desirable convenience for the home. Because it is high and narrow, it may be placed in a space which otherwise would be wasted. The cleaning closet as shown in Fig. 7 may be from six feet in height to the ceiling and is 14" deep and 27" wide.

TOOL STORAGE

Every farm home should have some definite place for keeping tools and supplies used in doing construction and repair work about the house. Repairing door latches and hinges, tightening screws and driving nails are some of the many household duties that must be done from time to time. Often it happens that the hammer, pliers or screw driver cannot be found when a certain repair job needs to be done. A great deal of time can be saved and household equipment will be kept in better repair if there is a definite place for keeping tools and supplies for doing such work.

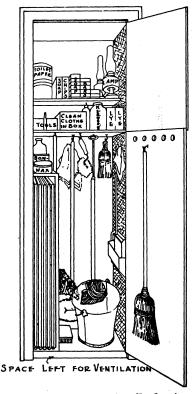


Fig. 7.—Cleaning utensil closet.
(Courtesy Bureau of Home Economics
U. S. D. A.)

Commonly needed tools on the average farm are: a hammer, saw, square, plane, chisels, pliers, screw drivers, and brace with auger bits. These tools, with others that may be needed, should be stored in a tool box or tool cabinet located in a convenient place about the house or garage. If the main supply of carpentry tools is located in the garage or some outbuilding, it may be desirable to have a few tools and supplies kept in the house. Such equipment should consist of a hammer, a pair of pliers, a screw driver, and a supply of tacks, nails, screws, etc.

CORNER CLOSET

In some instances it is desirable to utilize corner space. This type of storage space, as shown in Fig. 8, is suitable for the breakfast or dining room. Corner shelves may be entirely inclosed, or doors may be used only on the half, the upper shelves being left open for decorative objects, and to add interest to that corner of the room. It may be advisable in some houses to combine linen storage with other storage in the corner closet. As the linen drawer or shelf should be free from dust, it is important that the doors or drop fronts be well fitted.

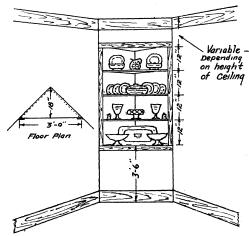


Fig. 8.—Corner closet.

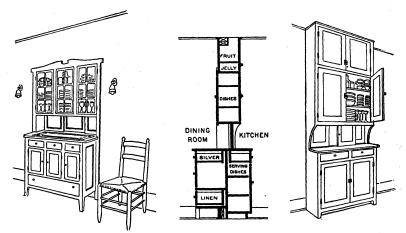


Fig. 9.—Pass closet from kitchen to dining room.

PASS CLOSET

Another useful space is shown in Fig. 9. The pass closet is a step-saver, and need not be considered unsightly if sliding or hinged doors are provided to close the opening when it is not in use. When serving the dining room, the food may be passed through to the shelf, thus avoiding many trips in carrying the food and dishes to and from the kitchen. In clearing the table, the pass closet provides an easy method of returning the dishes to the dish-washing center.

BEDROOM CLOSET

Adequate storage for the bedroom is usually a problem. If a closet was not included when the house was built, an improvised wardrobe, chest or closet must be made to substitute. Fig. 10 shows a portable storage closet, with drawers, shelves, and pole for hangers. The top provides a surface which might be used for storing hat boxes and other containers.

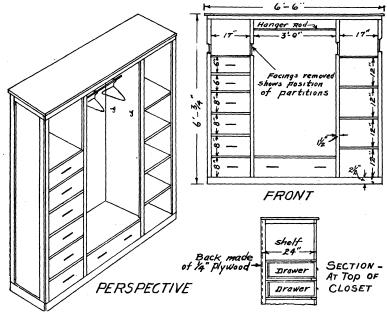


Fig. 10.-Bedroom storage closet.

This is a compact arrangement with good capacity. The height and width may be increased when additional wall space is available. It may be built-in, or made portable to fit a special wall space, so as to give the appearance of being a permanent fixture.

DRESSING TABLE

The built-in dressing table shown in Fig. 11 is especially desirable for a girl's room. It is easily constructed and may be made to conform to any wall space. The space under the mirror top provides storage space as well as the small side drawers.

When the cover is closed on the center compartment the top of the dressing table is perfectly flat.

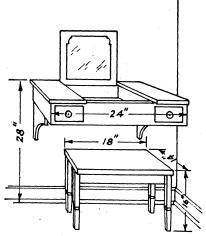


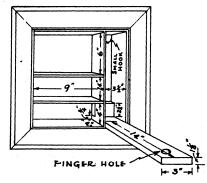
Fig. 11.—Dressing table and seat.
(Courtesy Bureau of Home Economics
U. S. D. A.)

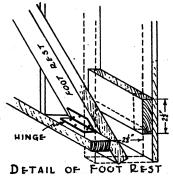
SHOE CLEANING CABINET

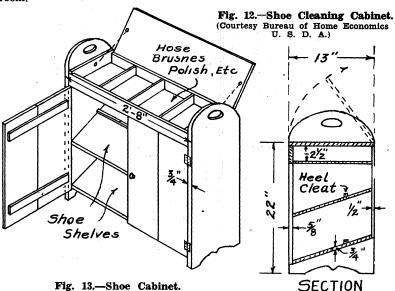
The shoe cleaning cabinet shown in Fig. 12 can be installed on the back porch. It is usually built into the wall between the studding. It provides space for shoe polish and cleaners and has the additional feature of a foot rest, to be used when polishing shoes on the feet. The bottom of the inside of the cabinet should be 16 inches from the floor. A small door for the cabinet should be hinged at the bottom.

SHOE STORAGE

Some place for the storage of shoes must be provided, as the proper care of shoes is a problem in every home. There is a large variety of commercially made racks, rods, and shelves for shoes, but a homemade convenience, such as the cabinet shown in Fig. 13, is very satisfactory. The compartments on top increase the storage capacity, and when closed, the lid provides a flat surface which makes the cabinet a useful and attractive article for the bedroom.







BOX FURNITURE FOR STORAGE

An inexpensive chest, bedside table or dressing table, may be made from orange crates or other boxes.

A chest made from boxes may have a hinged lid, padded on top, and be used as a window seat.

Definite directions for making box furniture, in general, are not practical, since much depends upon the originality of the worker; the size of the box, and how and where it is to be used in the room.

However, a dressing table may be made from orange crates in the following way. Select two good crates of the same height and width, sandpaper the surfaces in preparation for painting or papering them. If additional shelves are to be used, they should be placed in the crates after the finish has been applied to the inside surface.

The crates should be set upright, far enough apart to provide ample knee space, then one board nailed across the two crates at the top and one at the bottom to support them firmly. When it is desirable to raise the boxes, for the table, spools or blocks may be nailed or screwed to the corners

The top for the dressing table may be a straight or shaped board, the same width or a little wider than the base of the crates. The top should be painted or enameled before being placed on the base, if screws or nails are not to be used in fastening the top to the boxes. Cleats extending over both ends and in the center back will hold the top in place very nicely. A piece of heavy glass cut to fit the top board makes an attractive table top.

A curtain made of washable material to harmonize with other furnishings of the room may be arranged on the table by a curtain spring or heavy tape, caught on small hooks at the back of both ends and in the center front. If the curtains are made to fit the table, decorative upholstery tacks will hold them in place.

The shelves of the crates provide good storage space for clothing and toilet articles.

BOOKCASES

This simple bookcase or bedside table, shown in Fig. 14 is made reversible so that it may be used on any wall space. It is practical for the storage of

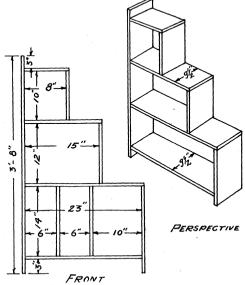


Fig. 14.-Bookcase.

books and magazines, and the three extending surfaces provide places for decorative objects, books, or sewing equipment. This bookcase is suitable for the living room as well as the bedroom.

Another type of bookcase that is especially desirable for the living room is shown in Fig. 15. This may serve as storage space for books, magazines, or what-not. The drawer space provided at the top of the bookcase increases the utility of the article.

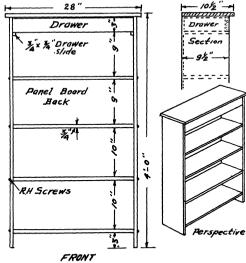


Fig. 15.—Bookcase.

WINDOW SEAT

The wall space under a window may well be utilized. A window storage box built so that it may be easily moved is a great convenience for seasonal storage in the household.

A box of this type with an appropriate slip cover makes an attractive piece of furniture as well as a comfortable seat.

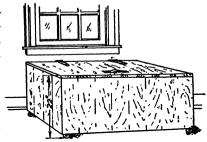


Fig. 16.—window seat—storage box.

MEDICINE CABINET

Some plan should be made for a medicine cabinet in the home. The usual place for medicine storage is in the bathroom, but other locations may seem more convenient in some homes. A shallow case with narrow shelves is desirable for a medicine cabinet. A locked compartment for poisons is a useful addition. In houses where no provision has been made for keeping medicines, either purchased or homemade cases may be screwed to the wall and will give good service. Homemade kits fitted with the usual first aid supplies are especially convenient when it is necessary to utilize small spaces for storage. The cabinet shown in Fig. 17 may be built between studding, face flush with the wall with adjustable shelves. The cabinet is 14" x 45".

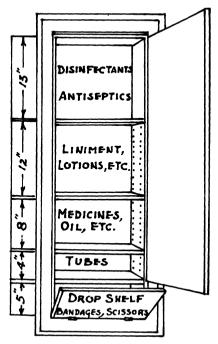


Fig. 17.—Medicine Cabinet
(Courtesy Bureau of Home Economics
U. S. D. A.)

ICELESS REFRIGERATOR

A very useful convenience for the farm home where ice is not obtainable is the iceless refrigerator, Fig. 18. It will keep meats, fruits, and vegetables cool and will extend the period for keeping milk, butter and eggs. It costs very little to build the refrigerator and nothing to operate it.

Construction. The refrigerator may be built any desired size, but the dimensions shown are very satisfactory for the average farm home. The first step in constructing the refrigerator is to make all of the shelves each 14 by $16\frac{1}{2}$ inches. These are made of $\frac{1}{2}$ -inch box lumber nailed to $\frac{1}{2}$ " x $1\frac{1}{2}$ " supports. The posts are then marked out and nailed to the corners of each shelf as shown. A close fitting door is a very desirable feature for the refrigerator. However, satisfactory results may be obtained without a door. Galvanized screen wire should be used to cover the back and sides of the refrigerator and also the door, if used.

A baking pan 14 by 18 inches is placed on top and the frame rests in a larger pan, usually 16 x 20 inches. If pans of the proper size are not available, they can be made at a tin shop at a very reasonable cost. The lower pan should be provided with a hose connection to take care of surplus water without overflow.

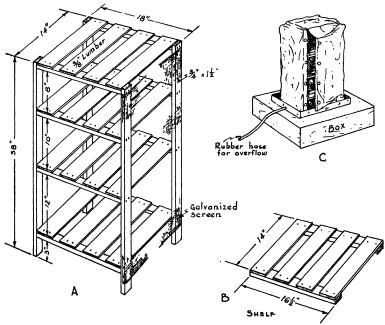


Fig. 18.—Iceless refrigerator.
(Courtesy Bureau of Home Economics U. S. D. A.)

A frame work without door showing dimensions and method of construction; B—Shelves are made as shown and posts nailed on corners allowing desirable intervals between shelves; C—The completed unit placed on box or table.

All the woodwork, the shelves, and the pans should receive two coats of white paint and one or two coats of white enamel. This makes a very attractive surface and one that can be easily kept clean.

A cover of canton flannel, burlap, or duck is made to fit the frame. Put the smooth side out if canton flannel is used. The cover is buttoned around the top of the frame and down the side on which the door is not hinged, using buggy hooks and eyes or large-headed tacks and eyelets worked in the material. On the front side arrange the hooks on top of the door instead of on the frame and also fasten the cover down the latch side of the door, allowing a wide hem of the material to overlap the place where the door closes. The door can then be opened without unbuttoning the cover. The bottom of the cover should extend down into the lower pan. Four double strips which taper to 8 to 10 inches in width are sewed to the upper part of the cover. These strips form wicks that dip over into the upper pan.

Operation of Refrigerator. The operation of the refrigerator shown in the illustrations is as simple as its construction. The lowering of the temperature of the inside of the refrigerator depends upon the evaporation of water. To change water from a liquid to a vapor, or to bring about evaporation, requires heat. As evaporation takes place, heat is taken from the inside of the refrigerator, thereby lowering the temperature of the inside and the contents.

Keep the upper pan filled with water. The water is drawn by capillary attraction through the wicks and saturates the cover. Capillary action starts more readily if the cover is first dampened by dipping it into water or throwing water upon it with the hand. The greater the rate of evaporation the lower the temperature which can be secured; therefore, the refrigerator works best when rapid evaporation takes place. When the refrigerator is placed in a shady place in a strong breeze and the air is warm and dry, evaporation takes place continuously and rapidly and the temperature inside the refrigerator is reduced. Under ideal conditions the temperature has been known to be reduced to 50 degrees F. When it is damp, and the air is full of moisture, the refrigerator will not work as well, since there is not enough evaporation.

Care of Refrigerator. The refrigerator should be regularly cleaned and sunned. If the framework, shelves, and pans are white enameled they can more easily be kept in a sanitary condition. It is well to have two covers, so that a fresh one can be used each week and the soiled one washed and sunned.

THE COLD CLOSET

A cold closet for the storage of perishable food when ice is not obtainable is a practical convenience for the farm home. Any well constructed box fitted to the outside of the kitchen or pantry window is satisfactory. Raising the window gives access to the box, while the light from the upper half of the window is still available.

The cold box is placed on the window sill, which is extended and supported by wooden brackets. The box should be fastened to the window casing by screws or nails, placed near the top and bottom. A sloping top on the box is an advantage in shedding rain. Screened ventilation holes in the ends of the box and shelves made of wood or heavy screening complete the construction. Food placed in a cold closet should be protected from dust.

Suggestive methods of constructing the cold box may be found in Farmers' Bulletin No. 927, "Farm Home Conveniences."

GARBAGE DISPOSAL

In rural districts, as in urban, garbage disposal presents a real problem. Garbage containers should be water-tight, vermin-proof, and have tight-fitting covers. Heavy galvanized pails are most serviceable, as they are easily cleaned and kept in sanitary condition.

HOME BUSINESS CENTER

Every home should have some sort of business center where farm and home records and papers may be kept. Pigeon-holes are useful for systematic filing, and the drawers and shelves provide adequately for the storage of receipts, stationery and small articles.

One drawer may be set apart for a strong metal box for storing valuable papers.

The "business center" shown in Fig. 19 is 69 inches high, 18 inches deep and 18 inches wide.

OTHER STORAGE UNITS

There are many other devices for storage, so those shown and discussed in this leaflet are suggested with the idea that they may be constructed to fit the requirements of the space in the individual home.

The finish used on the article should harmonize with the woodwork and other furnishings of the room in which it is to be used. A good finish not only makes the article more attractive but protects the surface and increases its durability.

Planning storage for homes in which there are children presents individual problems. Suggestions

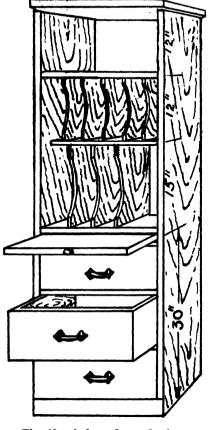


Fig. 19.—A farm home business center.

(Courtesy Bureau of Home Economics U. S. D. A.)

for adapting storage space to the needs of children are discussed in Extension Circular No. 298, "The Wholesome Child's Home."

CONSTRUCTION METHODS FOR STORAGE EQUIPMENT

Methods of constructing the various storage units described herein may vary somewhat, depending upon materials and tools available, and also upon individual preference. With the general plans and dimensions shown, any person who is handy with carpentry tools should be able to construct any of the storage units.

Materials

All lumber used in constructing cabinets, closets, etc., should be selected for the qualities of light weight, strength, and workability. White pine or soft pine is usually preferred. The panel material used in doors and in backs of bookcases and closets should be of synthetic fiber board construction, strong, grainless, light weight, non-absorbent, and easily worked.

Construction of Doors and Drawers

A suggested method of constructing cabinet doors is shown in Fig. 20. The molding used for the doors is $\frac{3}{4}$ -inch by $\frac{1}{2}$ -inch with a groove in one edge to receive the panel board. Molding of this kind can be specially milled for approximately two cents a linear foot. The doors are shown with mitered corners joined with corrugated fasteners. The 17-inch door width is suggested as a standard width for single unit construction. The length, of course, will vary according to needs and convenience.

A suggested method of drawer construction is shown in Fig. 21. The sides are attached to the front with half-lap joints and the bottom is held in place by means of ½-inch by ½-inch nailing cleats.

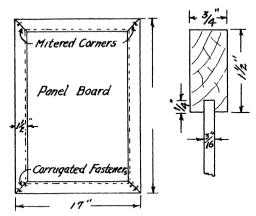


Fig. 20.—Detail of panel door construction.

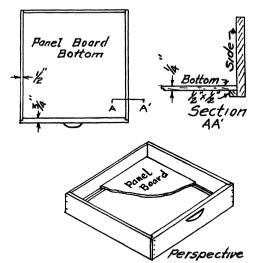


Fig. 21.—Detail of drawer construction.

PLANNING STORAGE

The following suggestions may be helpful in planning home storage:

- 1. Articles frequently used should be stored near the place where they are used.
- 2. Avoid waste space by planning each unit to fit the size and shape of the articles to be stored.
- 3. Arrange articles so that each may be removed or replaced without displacing others.

Any one of the storage facilities described in this leaflet will make a home more livable and more convenient. The proper utilization of materials and labor available in the average home will yield a large return in orderliness, comfort and economy of space.



