# HOME CRAFTS OF TO DAY AND YESTERDAY



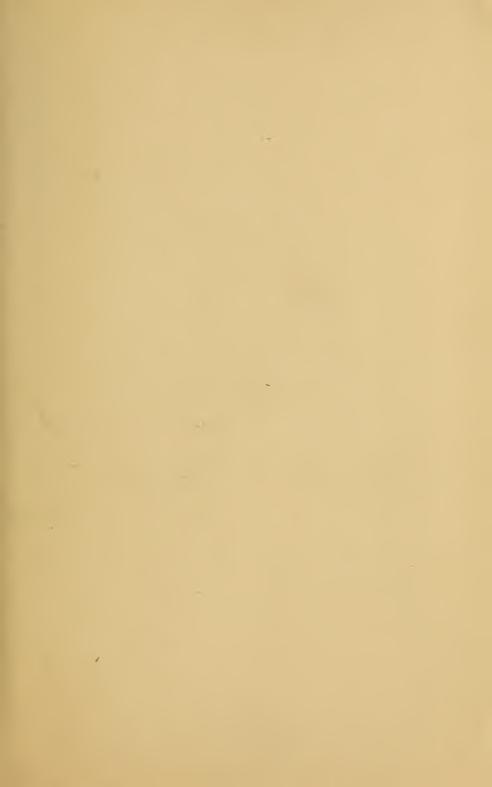


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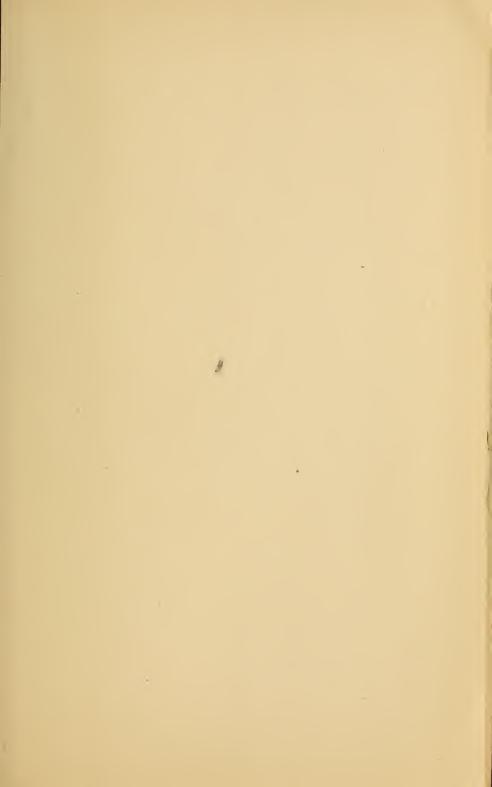
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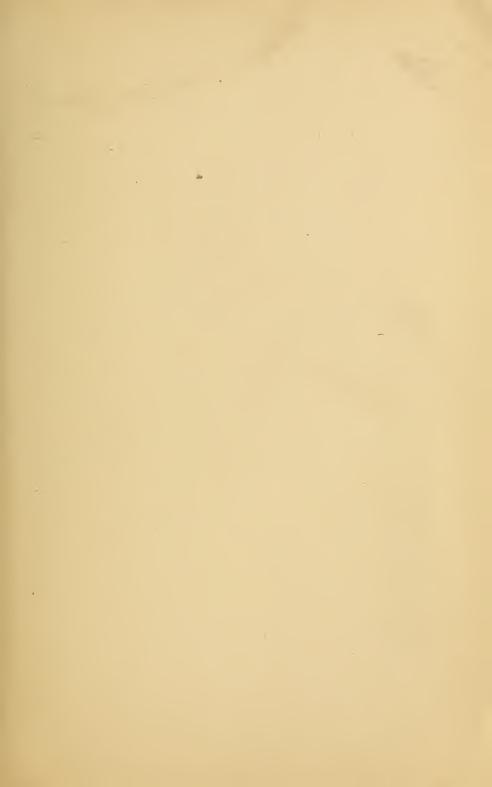
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### HARPER'S HOME ECONOMICS

#### EDITED BY

#### ISABEL ELY LORD

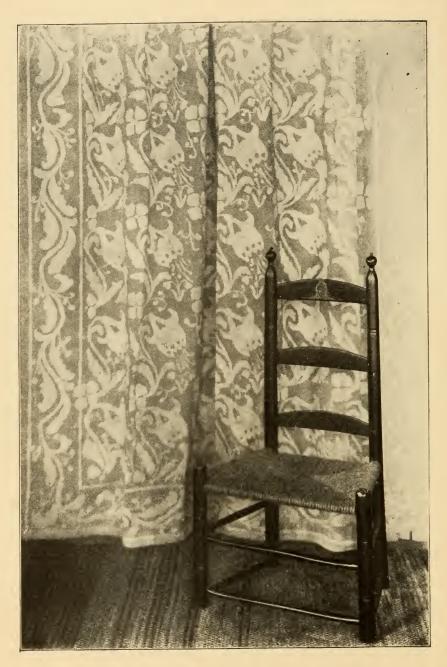
DIRECTOR OF THE SCHOOL OF HOUSEHOLD SCIENCE
AND ARTS, PRATT INSTITUTE

- HOME CRAFTS OF TODAY AND YESTERDAY. By FLORENCE BUCHANAN, Instructor in Handiwork, School of Household Science and Art, Pratt Institute.
- HOW TO COOK AND WHY. By ELIZABETH CONDIT, Assistant Supervisor in Household Science, and Jessie A. Long, Instructor in Cookery, Pratt Institute.
- PLANNING AND FURNISHING THE HOME. By Mary J. Quinn, Instructor in Design, School of Household Science and Arts, Pratt Institute.
- THE HOUSEKEEPER'S HANDBOOK OF CLEANING. By Sarah J. MacLeod, Instructor in Care of House, School of Household Science and Arts, Pratt Institute.

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HOME CRAFTS IN CURTAIN, CHAIR, AND RUG

# HOME CRAFTS OF TODAY AND YESTERDAY

BY

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SCHOOL OF HOUSEHOLD SCIENCE AND ARTS
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ILLUSTRATED



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#### EDITOR'S INTRODUCTION

THIS book is meant for the woman who likes to do constructive work in "odd moments." There are books giving careful directions and patterns for work of special types—crocheting, knitting, basketry—but there seems to be a place for the book that will suggest a number of varying uses of odd time. The directions are accurate and clear as far as they are given, but they are rather general than detailed.

The name "Home Crafts" was chosen with some hesitation, as it seems a little ambitious, but no other word could be found that suggested at the same time care in technique and due con-

sideration of beauty.

The duties of the average housewife cannot be arranged so that there will not be a good many comparatively short intervals between tasks, when head and hands are idle unless something is planned to occupy them. Sometimes these intervals are long enough for some worth-while reading or study, but many times they are not easy to use in this way. Sometimes one can use them for relaxation and real rest, but not al-

#### EDITOR'S INTRODUCTION

ways. Something is cooking that will need attention in ten minutes, luncheon is ready and the children are five minutes late, a neighbor comes in to "sit awhile." It is easy to let these moments go, but it is easy also to use them for making something at once useful and beautiful, at a very small expenditure of money.

Of course one cannot do dyeing in odd moments, or chair-rushing or painting, but one can prepare material for dyeing, get it ready for rugs, do a bit of caning or a little at basketry, pick up a trimming that is in process, or mark a piece of linen, and by the nice planning of time one can make a longer space for the constructive work that needs it.

Americans are said to be the most restless of all nations, and they uneasily confess that there is some truth in the accusation. But one can so easily be busy without being "in a stew" about it, and one can so easily be idle and yet restlessly nervous. Constructive things worth making—things of actual use and that answer a definite need—should help to cultivate poise and calm. Where these have been attained the thrifty use of odd moments can have no drawback.

ISABEL ELY LORD,

Director of the School of Household Science and Arts.

PRATT INSTITUTE, 1917.

#### **PREFACE**

THERE is hardly a woman who does not do some form of handiwork well. And with fingers that are skilled in one craft she can soon acquire an equal skill in another, whether with thread, rattan, or paint-brush. It is only the mystery and uncertainty clinging about the untried that prevents her from making the initial attack.

"Oh, but I wouldn't know how to begin," thinks the woman who perhaps sews or crochets, but hesitates to try anything that seems so entirely foreign to her art as basketry, or weaving, or decorating with dye and paint. And she is quite right. She probably would not know how to begin. The start is always the hardest part of a new piece of work, even if one has a vision of exactly what the result must be. Of course, not alone the technical beginning, but what materials to get and where to find them, the amount that will be needed, and making the working plans—all these must be counted in as part of the start. They are usually the important part. The right material saves effort in construction;

#### PREFACE

knowing where to seek it is a saving of time and usually of money as well. And an accurate plan is the only way to achieve successful results without a large by-product of mistakes.

The woman who longs to try something new but feels a bit vague about beginning will find the what, the where, and the how for a variety of crafts in the following chapters. Emphasis is placed on the start rather than on detailing the technical processes, but enough of the latter is always given along with explanatory diagrams to guide a beginner through the piece of work.

For the woman who lives in a small town or in the country, where it is not always possible to get materials for every craft, there are chapters telling about handwork for which she may gather materials in woods and fields or even in her own garden. Directions for the preparing and drying of the home-gathered materials are given, as well as suggestions of where and how to use them. The woman who lives out of town and has always sent her chairs away to be reseated will find the chapters on caning and rushing particularly applicable to her needs, although reseating chairs at home is an economy whether one lives in the city or country.

Other chapters recognize the space limitations of the city home-maker. In these she may get suggestions of how to do with small spaces and what one can do in them.

But the majority of the chapters are about

#### PREFACE

handwork that every woman will find it possible to do, whether she lives in town or country, and no matter what her mood—to ply the needle, weave a web, or play in color with brush and dye.

FLORENCE BUCHANAN.

PRATT INSTITUTE, 1917.



# HOME CRAFTS



# HOME CRAFTS

T

#### THE HOME SEWING-ROOM

THE architect who must repeat in the small house the modern improvements of its more roomy neighbor will not readily part with any of the precious floor space for a special sewingroom. He may suggest that the sewing-machine be kept at one end of the up-stairs hall, under the window, or in the linen-closet, or even in the guest-room! So the mistress of the new home that is to be must stand guard over part of the house plan for a sewing-room. She alone fully realizes the attending muss of every little sewing, how hard it is to keep threads from traveling, and how much harder it is to get them up from a rug or carpet. This may be the day of readymade clothing, but we still have with us the skirt that needs a new facing or the blouse of last season that must be remodeled, and the household in which there are growing children is never without the problem of letting out tucks and waistbands or taking them in for the next youngest. This is not the "sit on a cushion and sew a fine seam" kind of work, but requires patterns and cutting space, a form on which to fit, and means of pressing. In short, more equipment is needed than just a sewing-machine.

If, however, a separate sewing-room is quite impossible, usually the case in a city apartment where there is neither hall-room nor guest-room, a definite place at least can be set apart from one of the other rooms. Possibilities for that kind of a sewing-room substitute will be spoken of in the next chapter.

The equipment for a real sewing-room can be made at home with comparatively little outlay of money. A special ironing-board is not a necessity, but a most desirable convenience if there is the possibility of heating irons in the room. It will save steps and probable interference with other activities in laundry or kitchen. But the board should be ready for use with as little disturbance as possible in the sewing-room.

The illustration shows a five-foot board hinged by its broad end to a wooden strip fastened to the wall at the required height. The standard is made in two sections. The outer section is a four-foot length of gas-pipe one inch in diameter, with one end flattened and riveted to a threeinch-long hinge. By means of this hinge the pipe is screwed to the floor near the wall. The inner section of the standard is a solid rod thirty inches long and one-half inch in diameter. One end of this rod slides into the pipe, and the other end is also flattened and riveted to a three-inchlong hinge by means of which the rod is screwed to the ironing-board fifteen inches below the narrow end.

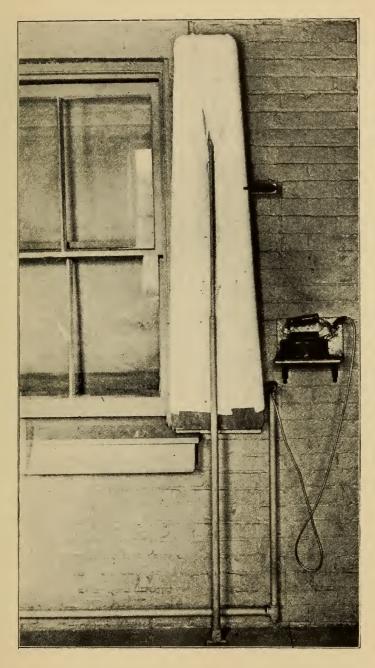
When the board is not in use it can be folded up against the wall, where a bolt holds it in place. When needed, it can easily be let down. The iron rod slides part way from the pipe and the two sections form a supporting arm or bracket. This kind of a standard does not interfere with skirt-pressing, and is perfectly steady.

The illustration also shows the little zinc shelf, to the right of the board, for the gas iron. A piece of asbestos is fitted between the wall and the shelf. The same arrangement is advisable for an electric iron. And with the latter it is a good plan to have a small red bulb attached to one end of the iron. This tiny light glows a continual reminder when the power is on. It consumes very little extra power and may save accidents. Either a gas or an electric iron can, of course, be connected to the high fixtures without interfering with the regular light. The gas or electric company can supply the necessary attachment for this purpose, and will also send a man to adjust it.

For a gown form that will be the right size and shape get enough stockinette or Shaker flannel

for a fitted waist. Make this waist from a fittedlining pattern with high collar, and long enough to come seven inches below your waist-line. It should be fitted tight, without wrinkles, over as little underclothing as possible. The seams are to be inside. After they have been machinestitched, put on the waist and have some one sew up the center-front closing. Then mix plaster of Paris, a small portion at a time, and have some one apply it rapidly and smoothly with both hands over the whole surface of the waist. Be sure the vessel in which the plaster is mixed is clean and free from any particles of hardened plaster for each mixing. When the entire waist has been thoroughly covered and the plaster has set quite firm (about half an hour) have some one cut the waist apart down the center front and back. Remove both halves carefully and dry them in a moderate oven. Then give the inside a plaster coat and after that has dried join the two parts with inch-wide strips of adhesive tape.

Your waist form is then ready to mount on a standard that will bring it to your height, shoulder to shoulder. Including the standard, for which a carpenter will charge perhaps fifty cents, the whole gown form costs not more than one dollar. Indeed, if one has tools the standard can be made at home. A board one-half inch thick and large enough to cover the opening at the base of the form must be cut to fit this opening exactly and glued into place. However, be-



A PRACTICAL IRONING EQUIPMENT FOR THE SEWING-ROOM. THE HINGED BOARD IS AN ECONOMY OF SPACE AND TIME



fore adjusting the board the standard should be screwed to it. A dowel rod one inch in diameter or a broom-handle will answer this purpose. The floor base of the standard can be made of a second board one inch thick and large enough to make a firm foundation. It must be weighted with a sheet of lead, so that the gown

form will not be top-heavy.

The only other large piece of equipment that a home sewing-room needs is a cutting-table. A four-foot-long table with unfinished top, the kind that can be purchased for about four dollars in the kitchen-furnishing section of a department store, is ideal, especially if it has a drawer in which cutting-shears and tailor's chalk can be kept. But even if the sewing-room is large enough to admit a table of that kind, sometimes the household purse is not. So a drop-shelf substitute is suggested. This can be made from the side of a packing-box, hinged to the wall and further supported by two legs braced together at the top with a four-inch-wide strip of wood. By means of this strip the legs are hinged to the long free edge of the shelf board. When the cuttingshelf is not in use it can be folded up against the wall and the legs drop back against it.

A convenient size for a cutting-shelf is four feet long by two and one-half feet wide. That allows a skirt length to be laid out. But if cramped for space even a small cutting-shelf will be worth while. It may not need the legs, but will be sufficiently supported by large brackets fastened to the wall. If the packing-box board is too rough, a white oil-cloth cover tacked over it will remedy this defect.

Now about the sewing-room floor: one of narrow matched hardwood boards is best. If that is impossible or the floor is old and has large, unsightly cracks that catch dust and fairly devour pins, it should be covered or painted. For a covering either cork carpet or linoleum is good. The cork carpet costs \$1.50 per square yard, and a good quality of inlaid linoleum \$1.85 per square yard. Both are rather expensive. initial cost of a painted floor will be less; but, of course, it will need repainting frequently, at least on the much-traveled spots. Before the paint is applied the boards should be scrubbed and the cracks filled with wood-filler (it can be bought in any paint-shop), or with a stiff mixture of flour and water—a regular dough. When the filling has dried the floor is ready to be finished with two or three coats of medium-toned floor paint.

#### SEWING-ROOM SUBSTITUTES

ALTHOUGH this chapter is to tell about sewing-room substitutes—that is, what to do when one has no special room set aside exclusively for that kind of work, as so often happens in small apartments—it is going to begin by telling how one woman substituted another room, or rather turned it into a sewing-room.

Up to the time of the transformation each spring and fall brought with its seasonable sewing a period of chaos for the household, not because the work to be done was an extra that had to be fitted into the usual domestic routine, but because of the confusion through having to do the work either in one of the two bedrooms or in a corner of the dining-room. In either case it meant putting everything away at the close of the trying day and getting it all out again next morning, which was a loss of time and not infrequently the loss of carefully adjusted pins, requiring another fitting and extra labor for their replacing. This housekeeper had always found

it more practical to sacrifice her dining-room to the siege of sewing, because from there she could conveniently manage activities in the kitchen.

Keeping the latter necessity in mind, she started at the rear of the house in her mental readjustment of its arrangement, with the hope of releasing a part of it from present service for a permanent sewing-room. No scrap of space presented itself except the pantry—not the butler's pantry, but one off the kitchen under the rear stairs that must have been planned by the architect for the storage of canned goods and quantities of things which one could never hope to use often, or at least not easily, because, barring the two lower shelves, all the rest were beyond any reach except that of a giant. It had more room in it than was needed for cooking utensils and not enough light to find them quickly. Besides, like most modern housekeepers, this woman stocked her kitchen with equipment that answered many instead of individual purposes. This reduced the quantity. And she preferred to have it hang from hooks and stand in neat rows on shelves conveniently near the range and sink. Also, like many housekeepers to-day, she found it better economy to buy canned fruits as they were needed rather than to prepare these at home.

It really seemed quite possible to get on comfortably without a pantry, but not at all possible without a sewing-room. And so a car-

penter was engaged to put a window into the outside wall of the pantry and to take out all the shelves. One of them he turned into a drop-shelf. He also made three drawers that slid into the openings of three stairs conveniently high in the flight. Remember the pantry was under the rear stairway, the soffit of which was not incased. In these drawers were kept patterns, cut-out material, and small sewing equipment. The machine stood under the window, a gown form behind the door, and after the entrance of the seamstress there was, to be sure, not much room to spare, but as an improvement over the old way it was a complete success, and far better than no sewing-room at all.

However, when there is no other way but to use a part of another room as a sewing-corner, one can prepare the necessary equipment so that it may be assembled quickly and cleared away easily. Though the initial outlay entails a slight expenditure of effort and money, the eventual saving in time and labor will amply repay one.

About the floor first—the threads that gather there and cling to the rug may be prevented from ever reaching it by spreading a piece of enamel cloth over the portion of the room where the sewing is to be done. One end should be fastened to a stick as long as the width of the cloth, so that it may be rolled up into a slim package which will occupy little room in a closet when not in service. The corners opposite those attached

to the stick must be weighted with small leads to keep their end flat while stretched on the floor. One variety of this material comes extra wide, is non-cracking, and may be had in dark colors, unfigured.

The sewing-machine, that most necessary yet unsightly piece of equipment, is another trying feature in making a temporary sewing-place of another room. It is so heavy that even though there may be a closet large enough to store one when not being used, the difficulty in wheeling it in and out for every bit of stitching makes that way of concealing the machine very impracticable. Then, too, the floor soon becomes grooved and worn by the casters. A better plan is to let it remain out, but hide its unsightliness with a fitted cover—a protection against dust as well.

Drop-head machines are better adapted to this treatment. They can, too, be used as a stand for other things when covered. The top of the cover should be fitted smooth and brought down the sides for three inches, taking out the extra fullness of the corners with a seam. Then, to the edge of the fitted part gather or pleat a deep valance that will come to within an inch of the floor. Pleating, either straight or box pleats, make the work look more professional. Plaincolored linen, dyed unbleached muslin, Japanese crêpe or chintz, are suitable materials for a cover.

In city apartments, where it is frequently necessary to use couches in place of beds, the cover for

the machine, the couch, and the over-curtains at the windows might all be made of the same patterned chintz with good effect. A cover of the material for the gown form would make that piece of equipment less conspicuous in case there was no closet room for storing it. The cover should be made long, and wide enough to easily and completely envelop the form when it is draped with a partially made gown.

Small sewing equipment may be kept together and ready for use in several ways. The chintzcovered folding sewing-screens, that contain all the required utensils either on hooks in neat rows or tucked away in their special pockets, every woman has seen even if she does not own one. But does she know that they may be recovered when the original chintz wears out or becomes too soiled? Originally the screens have their wooden foundation frames covered with material as well as backed with it. This should all be taken off when recovering, and the wood stained and waxed. It will not be necessary to take out the little brass hooks. Stain and wax can be got in any paint-shop or paint department of the large stores. The small sample-size bottle and can will be enough of each for a screen. Some stain comes mixed in varnish, but this kind is not so easy to apply nor does the wood look so well glossed in that way as with wax. If the wood is rough it should be sandpapered before staining. Begin with No. 1 paper and use No. 00 for final finishing. After staining, the screen is ready to be rebacked with new material. This requires only stretching tight and tacking around the edges. The smallest brass-head gimp tacks make the neatest finish.

A large suit-case is also a compact and convenient way to keep small sewing equipment. The straw-covered cases are the best for this purpose. Frequently they come lined and have their covers supplied with pockets. Then all that is necessary is to stretch a half-inch-wide linen tape across the cover above the pockets, tacking it to the lining at intervals to form places into which scissors, a folded tape-measure, and the supply paper of pins may be slipped. Of course, a pincushion must be added, and a good way to make this is with a small tape loop by which it may be fastened on a button sewed to the suit-case lining, or when in use fastened in the same way to the sewing-apron. A suit-case of this kind is also a place to keep the partially finished work. Both screen and suit-case require little storage space, making them practical where the economy of room is a factor

The woman who does a little carpentry will be able to make a sewing-stand out of the large wooden boxes in which cheese is packed. Some of these are eighteen inches in diameter and from seven to nine inches deep. The box part forms the upper portion of the stand, and the cover becomes a tray that is fastened to the legs about

ten inches above the floor. The carpenter's work comes in fastening on the legs. These need not be round. Four strips of wood each threequarters of an inch thick, two and a half inches wide and of a length to make the stand the necessary height are quite satisfactory for the purpose and are more easily fastened to the box and cover. A completed stand would require either painting or staining as a finish. The box may be lined and fitted with pockets for the sewing utensils, and there will be ample room for the sewing as well. If one has two boxes, or rather a box and two covers, the cover for the box of the stand will be useful if kept for that purpose. It would protect the contents from dust while not in use.

By planning a place for all the small fittings and harmonizing the large pieces of equipment to their surroundings it is thus possible to fit an inconspicuous and convenient sewing-room into one of the other rooms of the small house or apartment.

## TII

## BUYING HOUSEHOLD LINENS

"GOOD beginnings insure good endings" an old Roman belief that is especially true of household linens, for the future life and usefulness of a piece depend upon its past. And the housekeeper who goes forth to replenish her supply must, like Janus, look back and forward

before making her purchase.

Household linen is a general name, applied to bed linen as well as to towels and napery. Although nowadays few linen-closets in this country are stored with sheets and pillow-cases of real linen, as they formerly were when the bleaching, spinning and weaving of flax were done at home. Real linen bedding is too dear for most household purses. With the invention of power spinning and weaving one should, of course, be able to buy a good quality for little money. But our demand far outreaches the supply that this country can furnish, and after the transportation and duty are paid on an imported product its price has reached a mark that compels most housewives to limit their purchase. So that is why

we now sleep between cotton sheets and on cotton pillow-cases instead of linen ones that are so pleasantly cool in hot weather.

To deal with cotton first. Some shoppers maintain that English sheeting is superior to our own manufacture, giving "hurry," that usual explanation for any inferiority in American manufactured products, as the reason for this difference. However, old brand names of home manufacture should be recognized as guarantees of good material. And reliable retail dealers can be depended upon to carry both the made bedding and sheeting by the yard from only old-established mills. As for adulteration, the cotton itself is as cheap as any adulterant would be. Of course there are different grades of cloth, depending not only on the quality of the cotton that went into the spinning, but also upon the number of threads to the inch in the weave. Here again it is safe to accept the word of a reliable retailer. When buying cotton household linens the shopper usually gets what she pays for.

It is the past of household linens made from flax that must be carefully investigated. Of course, the word of a reliable firm may still be accepted as a guarantee for quality, but there are many kinds of linen, and each kind fills some place in the household supply better than any other. The successful shopper asks for the right kind to meet each of her needs and is also a judge of quality,

Most of the countries of Europe contribute to the linen-market, and each has its characteristics, due to the soil and climate in which the flax was grown, or to its manufacture, and often to all three. Russia's product is chiefly a harsh, coarsetextured stuff, rather loosely woven-more suitable for decorative than utilitarian purposes in house-furnishing. Germany makes a good strong weave out of a coarse-spun flax. This is a perfectly dependable product, but lacks brilliancy both in design and in texture. German table linen is usually half bleached. In fact, so much of it is, that the two terms are synonymous in our shops. Scotch linen is also coarse and less bleached than the German product. It must be understood that the linen-fabric output of these countries is not limited to that type of goods. In each there are mills in which fine linen stuffs are woven. but the great bulk is of the kind described and characterizes the output of the country. This partly bleached damask does in time become white and will outwear the white that is chemically bleached in the factory. To hasten the home bleaching process it may be dipped in a solution of Javelle water every time it is laundered. The recipe for Tavelle water is as follows:

I pound of washing-soda dissolved in I quart of boiling water.

½ pound of chloride of lime dissolved in 2 quarts of cold water.

Pour the clear liquid from the chloride-of-lime solution into the dissolved soda. Let the mixture settle and then pour the clear liquid into bottles, cork and keep in a dark place. This will make enough for many bleachings, since very little at a time should be used, not more than one part Javelle water to twenty parts water. The linen must be thoroughly rinsed so that not a trace of the solution remains, and then hung in the sun to dry.

France and Austria (the latter often sold under the name of Moravian linen) lead the world in fine workmanship and beauty of design. When buying the cloth and napkins for very best, ask the shopkeeper to show you the finest damask of French manufacture. Even though one is not always able to purchase that kind, it is a real treat to see and feel fabrics of such excellence, and, too, it gives one a standard both in design and in quality for judging other pieces. The French damask is closely woven—that is, many threads to the inch, out of the finest spun, long-fibered flax. In the preparation of flax for spinning it is carded and recarded a number of times. The fibers that remain after the last carding are the longest and most even, and it is these that go into the finest linens, giving a smooth, glossy surface and a firm but thin texture. And being smooth and firm, the better grades of damask are rarely starched.

Beware of linen containing much sizing. It is usually put in to give a loose-weave body or to

smooth a surface that would otherwise be rough and knotted because of the short-fibered, uneven flax from which the cloth is woven. After the first laundering such a fabric will look sadly different. It is difficult to judge the quality of a much-stiffened linen without washing it, and samples are cut not large enough to help much after they are washed. However, one fairly sure way of finding uneven places is to hold the linen up to a strong light. If it is woven of short cardings there will be a generous sprinkling of small, opaque streaks throughout that will in time wear rough and fuzzy, or there may be thin threads running the whole length of the fabric. If the thin place appears to be local, but covers more than the width of a thread, it is probably due to a bleaching reagent. But one can never be sure even though these telltale marks are not to be seen, and the safest way is to refuse a muchsized table damask or toweling.

Ireland still leads in all-around linen excellence, chiefly because the moist Irish climate is peculiarly adapted to the growing and outdoor bleaching of flax. Of course, the Irish manufacturer, in order to compete with other countries, is compelled to use modern chemical methods for quick-bleaching his product, as well as the longer meadow-bleach process. But he has the "greens," and by paying a little more one can still procure linen that was whitened on them—"old bleach," as it is known commercially. Perhaps the entire

bleaching is not done on the "greens." One might really be forgiven for doubting it, as that way takes from eight to ten weeks. However, the longer life of old-bleach linen makes the difference in price worth while, especially for towels that get rough and frequent laundering.

Like the best table linen, the best toweling is not sized. Choice old-bleach towels have a "beetled" surface finish. This means that the cloth was mechanically beaten with wooden hammers as it passed around a series of rollers until it has the smooth, glossy surface and soft texture that distinguishes it.

There are three weaves of toweling: huckaback with a small twist or "huck," thrown up in the weave to give it a slightly rough friction surface; diapered weave—a linen with a small diamond or "bird's-eye" pattern over its surface, smoother than a huck towel, but not so smooth as damask, the third type of towel weave. This last kind is not so popular as it was years ago when fringes decorated towel ends. Both are unpractical, and were popular only for a fad period. But for him who likes a soft, rather "slippery" towel, damask will meet the requirement. Double damask, made of a hard-twist thread, wears better. It is usually found among the Irish linens.

Unless one intends to finish the towel ends with one of the many attractive needlework edges, it hardly pays to buy toweling and hem the ends. To be sure, for the same amount of money a better

quality of linen can be bought by the yard than in a made towel. And so it remains for the individual to decide which is worth more, quality gained or effort and time saved. The made towels come with both hemstitched and scalloped ends. The latter develops rough edges after several launderings and a machine-embroidered scallop is never quite up to what it imitates, so on the whole a scalloped towel is not the best choice.

Now as to size. The old 27-by-45-inch towel has been abandoned for the more practical 24-by-42-inch size. Guest towels are about 15 by 24 inches. Even the Turkish towel has diminished from the enormous old-time kind to thirty inches by fifty inches or thereabouts.

A good way to judge the quality of a Turkish towel is by the border. A firm, close-woven border means that quality throughout the towel. A long, loose loop will pull out after a few launderings. With this kind of toweling, as with sheets, the English make has the name for superiority. It is true the English towel is softer, but is that so desirable for a friction towel? French "Turkish" towels (which means Egyptian cotton) are even softer and entirely defeat their purpose. There is no reason why a home-manufactured towel of this type made from home-grown cotton should not be satisfactory. A medium quality costs about fifty cents.

Union cloth, a mixture of linen and cotton,

might deceive the shopper, though a reputable firm will never label it linen or put linen prices on it. However, if the "all linen" claim of a piece of material is doubted, this test may be applied to a sample. Wash the sample free of any dressing, and, when dry, fringe it to expose both warp and weft threads. Then immerse it in sulphuric acid. The cotton will be destroyed in about half a minute, but the linen will last two minutes or longer. A 50-per-cent. solution of caustic potash will also give a linen test. Immerse the doubtful sample. The cotton in it will turn light brown and the linen a dark brown. And who has not seen some other woman at the linen-counter "telling" linen by the old-fashioned way—wetting it? Real linen is supposed to absorb the moisture more rapidly than it would if there were cotton in it. The difficulty with this test is that any dressing in the fabric spoils its reliability and a piece of union linen never leaves the factory without dressing. Shoddy, or refuse, linen and short cardings, of course, will give the linen test and still be a more undesirable purchase than a cotton mixture. The former wears evenly, but the latter develops a loose texture and fuzzy surface as the short ends and weak threads give way in the laundering. However, this kind of linen is always sold well starched and so should never deceive the shopper who knows what that means.

The five things that it is claimed the thrifty

Holland housewife must know before she will make any purchase are well worth while to know about linen before buying. They are:

1. The place and manner of its manufacture.

2. Its relative quality.

3. How to detect possible flaws or adulteration.

4. Whether it is an imitation.

5. The possible advantages there may be in a higher-priced piece.

January is the linen month. It is then that the retail merchant concentrates his attention on that stock and makes his annual bewildering array of damasks at such tempting prices. Although convention limits the form of linen service in good usage, the variety of design within that limit is legion. But the woman with a nice sense of harmony and exacting tastes keeps her dining-room furniture and her china in mind when buying her table linen, so that her choice will accord with the latter in costliness and type of design. For the dining-room in fine Sheraton, Hepplewhite or Adam style, there are damasks with delicately patterned borders and restrained satin stripes, leaving the larger and somewhat heavier floral designs for the dining-room showing Chippendale influence or in earlier English style. Among the oldest Irish patterns is one showing satiny pheasants and other game birds with startling naturalness. But, fortunately, American taste in table linen does not lean that way,

and the foreign damask flaunting gamey or fishy designs never became popular. Perhaps those cloths were originally woven for the long refrectory tables that stood in the oak-paneled halls and were used only for the service that followed a hunt.

From breakfast-cloth and small napery through luncheon with its doilies or runner there is a wide latitude for personal choice. To the formal dinner, however, good usage still decrees nothing but fine satin damask or the deep, lace-bordered cloth. The latter is more often used on a round table, the fall of the lace coming its full width from the edge. It is only the luncheon-cloth that shows the pattern of its lace border over the polished surface.

Nothing but finest china and plain crystal should be used on an elaborate cloth. Overdressing the dining-table with heavy silver and cut glass has given place to a simplicity where even the floral decoration is limited. In one of the New York shops, that displays its wares in a suggestive way, a tall urn-shaped compote of Venetian glass graced the center of a table covered with a lace-bordered cloth. The glass, slightly tinged with yellow, was banded by a narrow black rim and had two small black handles. It held three sprays of wild orchids—the dark-spotted, yellow kind that one finds in the spring woods. Goblets at each cover carried the color note around the table.

An unusual luncheon-cloth, made by Russian peasants, had a dull raspberry-red linen center, and around it a fifteen-inch-wide band of white. Russian linen is never real white, but ivory. The texture of this piece was slightly rough and loose. Two rows of Italian hemstitching (the directions are given in the next chapter) close together decorated and concealed the joining of border and center. The border was marked off into squares by double rows of the hemstitching done with red linen floss, and in every other square primitive flower forms were darned in two shades of dull red and just a touch of dullest vellow. The yellow, laid close and couched down, made the flower centers. All of the forms were outlined in fine chain-stitch. An ivorytoned Italian ware (not china) was dispayed on this cloth. The rather large cups had short standards. And there were also low covered bowls decorated with curious little raised form-groups all in the one ivory tone.

The many little doilies that formerly spotted a luncheon-table have now on the best-furnished tables been merged into one large place cloth, usually oblong and measuring fifteen inches wide and eighteen inches long. This is the largest size. With these may be used a runner of the same linen, or two runners, one across the table near each end if it is long. To be sure, on a round table the round doilies are in better harmony, and if not more than three are used for each cover,

with a single large centerpiece, the effect should be satisfactory. In the following chapters are suggestions for materials and ways of finishing these. Attractive sets can be made as pick-up work, costing little in time, effort, and money.

## MAKING AND MARKING LINENS

I F the nineteenth century was made for woman, as a French writer claimed, surely the twentieth century, with women in politics, in business, and in the pulpit, is being made by woman. And what more natural and appropriate than that she should express her individuality by putting her initials on all of her household linens in the most attractive form possible? Of course, the mark on some pieces has an entirely utilitarian purpose, but there, too, it may be attractive.

To deal with that kind first—the mark for laundry identification. We all know the pen-and-ink mark with its institutional look, and even worse, the rubber stamp or stencil. Then there is the name-tape, neat but not particularly individual. By taking just a little more time cross-stitch initials can be worked on sheets, pillow-cases, and family towels with a difference in result from the first-mentioned marks that is well worth the effort. The letters should be the perfectly plain block kind, a half-inch high. It is not

necessary to do the work over canvas. That takes too much time, and one soon becomes expert in keeping the crosses even. Care should be taken to have each new cross start from the holes of the cross last made, and working with the twist of the thread will also help to make each cross more distinct.

Using different colors to designate bed linen belonging to narrow and wide beds facilitates finding the right set in the linen-closet. An individual color, suitable for the room, may be used for each separate bedroom, if the house-keeper likes to keep close track of wear and tear. And the date of purchase can be easily included in the marking, by adding, after or before the mark, a single stitch, two stitches, or a "star" stitch. There must, of course, be a key to this, as, for example:

× after — June, 1915.
× before — September, 1915.
× × after — May, 1916.
× × before — July, 1916.
\* after — September, 1916.
\* \* after — January, 1917.

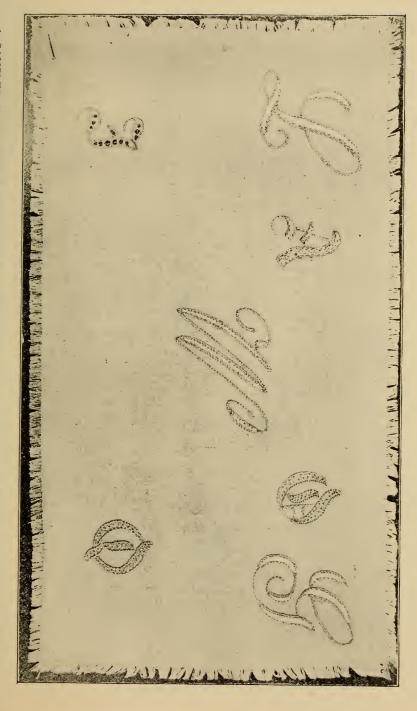
And as a further assistance in filing the mark should be made in a similar place on each article of a kind. Near a corner is a good position on sheets. Just which one depends upon how it is folded in laundering; in fact, the laundering folds control the placing of marks in any article, and since all laundresses do not follow the same method no definite placing can be suggested. The mark should never be worked in the extreme corner—first because a margin around it is better in appearance, but chiefly because the stitching would soon be worn out by the clothespins. On towels the mark is quite generally placed in the center just above the hem. Towels are usually folded in thirds, with the center third uncovered.

Never attempt to do cross-stitching over a stamped pattern, whether letters or decoration. Be the stamping ever so perfect, the material is apt to stretch, and the stamp becomes more an annoyance than a help. Canvas is the best way for transferring an elaborate pattern that cannot be followed free hand. It comes in several sizes for fine and coarse thread. The coarsest is the size needed for the wool cross-stitching, or petit point.

Outline, or etching, stitch is sometimes used in making the identification initials. But it is neither so durable nor so pleasing in appearance

as cross-stitching.

A business woman who is clever with her fingers as well as her head makes initialed insets with filet crochet. She sets them into dressingtable covers and on the ends of guest towels for her little house in the country. The piece measures one and a quarter inches in height, is four inches long, and contains four initials.





They are crocheted out of ordinary crochet cotton No. 60 with a steel crochet-hook that will carry thread of that size—No. 11 in an imported hook. The money cost is negligible, and quick fingers make them in odd moments without much time cost, either.

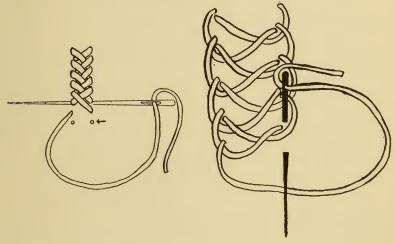
Now about linen marks that have only their attractiveness as their reason for being, and about some ways of making them. To work the monogram or initials on the cloth and napery for formal dinner service, only the satin-stitch is sanctioned. But for the personal mark on the cloth for less formal occasions and on luncheon or breakfast sets there are a number of simple stitches (nearly every woman knows how to do them) that can be combined with good effect on either letters or monograms. They are featherstitch, the buttonhole embroidery-stitch, outline or Kensington stitch, and catch-stitch. They are applied in different ways to such a variety of domestic articles that as a group they have been named the Household Stitches.

A sampler is illustrated suggesting some ways of combining them. The L is outlined in featherstitch and Kensington, with unpadded satinstitch for filling the space between the two outlines. The G in the opposite corner is Kensington outline only and the satin-stitch filling. Kensington-stitch is always used with this type of letter in order to make the fine stroke. The combination is more effective if worked in two tones, either white and a color or two shades of the same color.

A letter worked in this way on one of the colored damask luncheon sets that are among the new linens would be a particularly happy combination. They come in delft blue or yellow. The cloth has a plain damask center, but just inside the two-inch-wide hemstitched hem is a deep border made of satin stripes that are lighter than the center field. The serviettes are similarly hemmed and bordered, but, of course, narrower.

Old-English type, like the illustrated A, worked in two tones, might be used instead of script if the former type of letter is preferred. The broad stroke with checkered filling has a buttonholestitch foundation. The buttonhole-stitches should be done close together, in fact touching, across the width of the stroke. Their purling will form the outline of the stroke on one edge, and Kensington-stitch finishes the opposite edge. this much is done, the checkered effect is got by weaving, with a lighter color, over two and under two of the long buttonhole-stitches at a time, back and forth, until the whole band is filled in. Be sure to use double thread in the needle for the weaving and keep the threads of each stitch parallel.

Coarse, hard-twist embroidery cotton is better for any of this work than linen floss. It must be the hard-twist kind in order to make the stitchery clear and definite and give character to the letter. A set of breakfast linen for porch use might be inexpensively made of unbleached damask toweling, either a plain weave or one of the small diapered patterns. The runner and toast-cloth only should be marked, using either two or three letters, and centering them on one end. Old-English letters worked in long and short button-



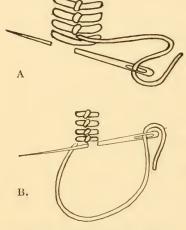
THE TWO POINTS INDICATE
THE SECOND POSITION OF
THE NEEDLE

THE STITCH MUST BE DONE WITH HEAVY THREAD

hole-stitch like the G in the upper right-hand corner of the sampler would not mean more than one afternoon's work. Instead of the usual hemstitched hem any one of the linear stitches illustrated in the diagrams on pages 31 and 32 will give a finish that is a "little different," also they take less time. Unbleached damask marked in dull green or red stitchery is especially good with a

crackle-ware service or the gay-patterned Russian dishes.

The stitchery of the Q is the only other letter on the sampler that is not obvious. The entire outline of the Q is Kensington-stitch. When this



A. FIRST POSITION OF THE NEEDLE

B. SECOND POSITION OF

B. SECOND POSITION OF THE NEEDLE is done the space between must be covered with catch-stitch, worked from one outlined edge to the other edge opposite, but catching into the linen, not into the outlining. Then with a lighter-colored thread a zigzag line is woven over the catchstitching.

The Italians make use of the stitch known as Italian hemstitching in a simple and decorative way. They usually apply it on the ivory-

toned Italian linen. This linen is woven of a coarse but smooth, round thread that gives it a firm and even texture, a quality that is required for most needlework. A tea-cloth of this linen, that was made in Florence, measured a yard and a half square. It was crossed in both directions at intervals of twelve inches by two rows of the hemstitching done close together. This divided

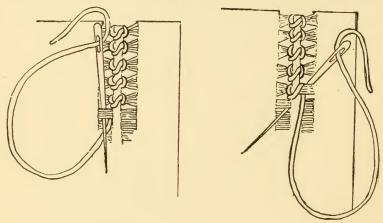
the whole cloth into large squares. The edges of both cloth and serviettes were finished with two rows of the hemstitching. The first row was worked on the edge and covered the narrowest rolled hem that it was possible to make. From each corner of the cloth hung little drops made of linen thread. That is a favorite way of ornamenting among Italian needlewomen.

The Italian hemstitching is diagramed with

needle in position on page 34.

Among the dress linens one can sometimes pick up very reasonably odd lengths that would make admirable tea or luncheon cloths if they were only wide enough, especially in imported goods. Round-thread Italian linen is often only a vard wide, and the Russian crashes both fine and coarse are even narrower. There is, however, a way to adapt these.

The linen a yard wide would be quite wide enough for a tea-cloth if six inches were added to both selvages. And that is exactly what can be done in the way of hems. The hems across the ends may, of course, be allowed for in the length, so the cloth, to begin with, will measure sixty-two inches long (allowing thirteen inches at each end for hems) and a yard wide. Then two strips each thirteen inches wide and sixty-two inches long must be basted to each selvage of the cloth, lapping strip and cloth one-quarter inch. They are permanently joined with the buttonhole-stitch in Venetian ladder form. An illustration of this stitch is given in the chapter on lingerie finishes. The buttonholing is done just outside the quarter-inch lap both on the cloth and on the strip which is being added. The bars are carried across and buttonholed as the work proceeds. The "ladder"



ITALIAN HEMSTITCHING, SHOWING TWO POSITIONS OF THE NEEDLE

must continue to within six and a quarter inches of the edge on the four sides. When entirely finished the material underneath the "ladders" is cut away close to the buttonholing. Then the hems are turned up six and a quarter inches (the quarter-inch being allowed to turn in) and hemmed to the wrong side of the buttonholing.

The cloth may be lettered with this same Venetian-stitch, graduating the width of the ladder to give grace to the strokes of the letters. This is also a novel and simple way of hemming and marking a guest towel. The stitchery should be made with round linen thread of a weight suitable to the stuff upon which the work is done.

The narrow crashes may be joined in the same way, or using one of the other variations of the ever-useful buttonhole-stitch suggested in the chapter on lingerie finishes. Not only table linen is widened in this manner, but practical bedspreads may be made from the heavier crashes. Strips of the crash of a length required for the bed might be decorated and dved in Batik-work and then held together with one of the joinery-stitches done either in white thread or thread that was dyed in the same bath with the crash.

A novel way of using any odd bits of real lace is to insert them, outlined with narrow lace beading, into fine linen for a centerpiece and doilies. The beading should be Cluny, or other linen pillow-lace, not more than one-quarter inch wide. With this insertion a conventional pattern is outlined on the linen foundation and the lace bits worked in the pattern as medallions.

However, the work cannot be so quickly nor so easily done as the telling sounds. It must be carefully planned by first tracing the design for the beading outline in pencil on a piece of stiff paper. Then place the pieces of lace on the pattern and study the effect. It will no doubt be necessary to shift and rearrange the bits a number of times before the best placing is found. Badly torn laces or scraps that are not quite large enough to fit the designed spaces may be mended or pieced out with fine net.

When the laces are arranged in their final places they must be basted down with small stitches that follow the outline of the pattern. If the foundation linen is sheer enough to allow the penciled pattern of the paper to show through it, the sewing in place of the lace medallions will be possible without transferring the pattern directly on to the linen. After basting the medallions the Cluny insertion is basted on the linen, following the entire pattern, including the outline of the lace. And then the work of fastening them both permanently is ready to start. The nicest way to do this is with a "whip-stitch," done very close together over the edge of the insertion. This finish allows the linen to be cut away from under the lace close to the edges without danger of the latter pulling away. The centerpiece and doilies should be edged with an inch-wide lace matching the insertion.

The bits of lace for the medallions need not be of the same pattern or even the same kind of lace. Point de Venice, Milan point, Guipure, old-rose point, and Valenciennes all may be applied to the same luncheon set. The outlining insertion unifies the design.

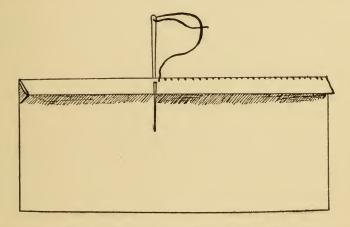
There are a few points that apply to the making

of all household linens. The first of them is in regard to cutting. To pull a thread and cut on that line is always the safest way. If this is done the piece is sure to be "true" after laundering.

Wide hems should have their open ends whipped together with fine overhanding, or top-sewing, as

it is also called.

This same stitch is used for the napery hem whether it is wide or narrow. It should, by the



A NAPERY HEM WITH THE NEEDLE IN HEMMING POSITION

way, never be wider than one-quarter inch on even the largest-size dinner napkin. To make it, turn a sixth of an inch to the wrong side of the damask and crease, but do not stretch the folded edge in the creasing. Then turn the edge a second time, making this turning one-quarter inch wide. Now bend back the hem so that there are two folded edges parallel to each other and overhand them together. The overhanding stitch is also known as the napery hemming stitch because it is used for this purpose. Be sure to set the needle at right angles to the edges each time a stitch is made and pick up only a little

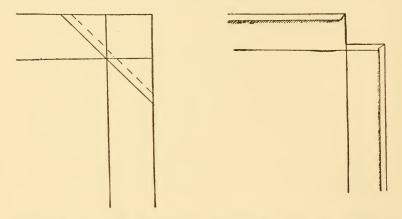


DIAGRAM FOR A MITERED CORNER. CUT ON THE DOTTED LINE, THEN FOLD DOWN HEM ON THE SOLID LINES. TURN UNDER RAW EDGES \( \frac{1}{8} \) INCH

DIAGRAM FOR A SQUARE CORNER. CREASE ON THE SOLID LINES, CUT AWAY SURPLUS MATERIAL AT THE CORNER, AND THEN FOLD DOWN THE HEMS

of the material in each edge. The diagram shows the needle in position. This makes a small, straight stitch on the right side that embeds itself in the grain of the material and does not show. Turn and hem opposite sides instead of beginning at one corner and hemming the four sides in succession.

A corner is always turned square if there is a

narrow hem. But when the hem is wide the corner may be squared or mitered. The diagrams show how to prepare the corner for either kind of finish.

The nicest way to turn a corner when hemstitching a hem is to draw out the threads just to the turn in each direction. Then the hemstitching of the two sides will meet at the corners instead of crossing and continuing to the edge of the hem. The latter should have a mitered corner.

It is a wise precaution to launder linen before it is embroidered, especially if the stitchery is to cover large surfaces in single masses. Then there can be no possibility of the embroidered pattern becoming thick or blurred, as sometimes happens in the first laundering when the linen has not been previously shrunk. This applies not so much to French embroidery as to the laid surface work that is done in such a variety of stitches.

Nothing has been said so far about the making of kitchen linen. And under that term might be included everything made of stuffs, from teatowels and dish-cloth to floor-cloth and duster. To-day these can all be got in the shops ready made at such a slight additional cost that it will not pay a housekeeper whose time is precious and who cares to save her energy for more profitable application to spend it making any of these. Dish-towels for both glass and china come in yard lengths, costing one cent more hemmed than the same quality of linen unhemmed. Even the much-maligned roller-towel can be bought ready made. It comes in a size only about a third of its old-time length, a sort of compromise with those who declared against it. This size is a convenience over the sink drain-board, and, being small, it is not difficult to handle in the laundry.

Each housekeeper knows best the value of her own time and energy, and must compute for herself whether she can afford one or another kind of marking. The simple cross-stitching of initials can be afforded by practically every one, but beyond that each must make her own decisions. Elaborateness is not necessary to beauty, but a decorative ideal is necessary—and a plan.

## MENDING LINENS AND USES FOR OLD LINENS

IF ever there is a place where a stitch in time will save nine it is on table linen. But it must be taken before the least hole appears. And in order to ward off the hole the linen that has been in service for some time should be carefully examined against a strong light for thin places before it goes to the laundry. If any do show, these may be reinforced by darning before they are subjected to another attack of the laundress. Darning before the hole arrives not only saves stitches, but it also saves the appearance of the linen. The pattern being unbroken, it is quite an easy matter to follow the original skips of the weave with the darning-needle, and in this way retain the pattern unmarred by stitches. But if there is a hole there is nothing to be done but lay foundation stitches in one direction and then weave across them. Of course, the weaving of the pattern or its background may even then be imitated, but that is a tedious process and is hardly worth while on old linen.

There are, however, a few points that apply to hole-darning that it is worth while to observe. Do not trim away the frayed edges of the hole, leaving a clean outline. That kind of preparation helps to reveal the finished darn. Cut away only the longest threads. Always lay the threads for the weaving with the threads of the fabric and carry these, and the weaving-threads as well, beyond the hole with small running stitches, so that they are anchored in firm material. The cloth immediately around a hole is sure to be weak.

This last point applies to the mending of rents and hedge tears in linen as well as to worn holes. But before detailing the methods of treating these, the general points that apply to all the mending of linen must be collected in a group.

For table linens ravelings of the same linen are usually the best for darning, but are not, as a rule, obtainable. So the next best thing is the linen darning-floss that can be got either at the linen-counter or in the embroidery department of the shops. It comes in all weights, and a size to correspond with the thread of the cloth should be selected. The needle must be the finest that will carry the thread. A long-eyed crewel-needle can be used much finer than the ordinary round-eyed sharps needle. When changing the direction of a darn always leave a small loop, a very small one, at the turn. This allows for shrinkage of the darning-thread in laundering and also for "give"

in the stretch of the material. The line of loops should be an irregular one, so that the strain is distributed instead of coming on the same threads the length of the darn. An unstarched piece of linen is easier to ply with the needle, but it does shift in an annoying way unless the portion in which the darn is to be made is basted on a stiff piece of paper. This completes the general methods that may be applied to every form of darning that is required by household linen.

The hedge tear, that two-sided rent which more frequently befalls linen when it is dried among shrubs or bushes, and the straight tear or cut, are the two kinds of darning, besides the hole, that one most often has to mend in household linen.

The hedge tear is the more difficult of the two. Start well beyond the beginning of the rent and darn back and forth in the material. When the tear is reached with the darning draw its edges together, using the fine drawing stitch. This stitch is illustrated with needle in position. Continue the darning beyond the tear on each side for a space of about one-half inch. As the corner is approached spread the rows of darning stitches at their outer ends and contract them at their inner ends, so as to make a fan-shaped turn around the corner. Finish the second side of the tear like the first one just described.

Straight tears and cuts are mended like one side of a hedge tear. Sometimes, in order to

1 See illustration on page 51.

strengthen them, a second layer of stitches, crossing the first at right angles, is put in. This makes the mended place quite apparent, and so cannot be used on table linen.

When a hole is too large to darn, and the article is worth the work, it may be mended with a patch. Of course this would not do in table linens, but the patch will lengthen the usefulness of bed linen and may also be used on kitchen aprons; in fact, wherever the laundering is the first consideration and appearance secondary. The process of its construction may be divided into six steps, so that is the way it is set down here:

1. Determine the required size for the patch by measuring across the hole on both warp and weft, plus the worn part around the hole. If the two measures are nearly the same, plan for a square patch.

2. Cut the patch from old material or from new stuff of a lighter quality than that of the article to be mended. Allow three-eighths inch

for seams on all four sides.

3. Turn down the edges of the patch one-eighth inch to the right side.

4. Crease the article on the warp and weft threads so that the creases cross approximately through the center of the hole. Crease the patch in the same way.

5. Place the right side of the patch against the wrong side of the article, matching creases; also,

be sure that the warp of the patch runs with the warp of the article. Baste the patch near its edges and then hem down.

6. Crease diagonally across article and patch after they are sewed together. Cut the article on these creases to within a scant three-eighths inch of the corner of the hemming stitches. This will free triangular portions of the article. Cut these off, allowing a scant three-eighths inch beyond the hemming stitches. Turn down the edges one-eighth inch and hem them down against the patch.

Note: Always hem opposite sides, beginning in a corner without a knot and finishing in the opposite corner. The two lines of hemming stitches on each side of the patch should be parallel and not more than a quarter-inch apart. The corners should be right angles. Fine thread is quite strong enough and not so discernible. Use a thread two sizes finer than the size that would be suitable for machine-stitching the article. If there is a pattern or check in the material it must be matched with the patch.

There is a special patch for table damask, but unless the linen is new and has met with an accident—laundry acid holes or holes burnt in—the housekeeper will hardly care to give the time that this patch requires. The opening for the patch is first cut out of the cloth. Then the material from which the patch is to be made is placed under the opening and shifted until the pattern

in it and that of the cloth match, and the size of the patch marked through the opening with a sharp lead-pencil. The patch may then be cut out, and the two pieces—article and patch—basted on a stiff paper all ready for the patch to be fastened permanently to the cloth with the fine drawing stitch. It should not be necessary to use any darning stitches with it unless the material is too loose to hold the patch secure with fine drawing alone. Particular care must be applied to all the cutting because clean edges are essential for the best results.

When a piece of linen is quite beyond redemption through darning or patching there is still a long term of usefulness before it in other forms of household service. Old towels make the best kind of cloths for cleaning windows and mirrors. They also make soft dusters if cut down and machine-hemmed. When the good parts of the linen are too small for any of these uses they may be cut into ten-inch squares, hemmed by machine, finished with a tape loop, and hung over the bath-tub near the jar of enamel-cleaner to be used for the tub.

But of all household linens the damask tablecloth renders the greatest variety of services before it entirely disappears. At the very end of its reign it may be found in humble places, such as the refrigerator, wrapping washed lettuce.

Squares of old linen are convenient to have on hand for drying meat and fish or potato slices that are to be fried in deep fat. A large square of damask folded in several thicknesses on the kitchen table makes a good absorbent pad for ears of corn or asparagus as it is lifted from the kettle. No water will collect in the service dishes if the kitchen absorbent pad is used.

However, before the table-cloth need become assistant to the cook, it may be made to do duty in the dining-room in a number of ways. housekeeper has not beheld with dismay that the edge of her round dining-table has worn almost through her finest damask, leaving a center and handsome border in perfect condition? The thing to do in a case like this is to turn the dinnercloth into a cloth for luncheon service by cutting the four corners off diagonally, making four large triangles of them. Then join these four triangles with one-and-a-half-inch-wide Cluny or torchon lace, whipping the lace to the edges of the damask triangles that formerly were the edges of the cloth. This makes a cross of the lace through the center of the table. The cloth may be cut round or square after the triangles are joined, and the edge finished with lace to match the pattern in the insertion. The center of the former dinner-cloth remains to be cut into luncheon napkins that will be finished on their edges with a narrower width of lace. A small-patterned damask makes over in this way better than the largescrolled and flowered kind: in fact, the small patterns make over better in all ways, and the housekeeper working with a very long plan might choose her damask with this in mind. But that would perhaps mean losing more than was gained in the long run.

When the center of a cloth is too darned or too thin to be darned, the borders are often quite good with the exception of the corners, which clothespins may have torn. These borders may be cut off and made into a runner, and four or more oblong place-cloths used instead of three doilies at each place. If there is not enough material in the borders for this, there will surely be enough for several carving-cloths to place under the platter. They save the large cloth many an extra laundering and reduce the weekly laundry bill. The nicest finish for the "made over" platter-cloth is a plain hem one and a quarter inches wide.

Then there are the trays to be covered—either the breakfast or porch tray, and sometimes one for an invalid, and both the top and bottom trays of the service-cart. They are much neater in appearance covered with a fitted cloth rather than a folded napkin, or still worse, a napkin with corners hanging over the edge. Worn table-cloths and napkins, too, are an economical source of supply for these. The edges may be finished with one of the finishes illustrated in Chapter VI. Narrow linen laces are also suitable, or a picot edge can be crocheted with very little trouble. One woman who finishes hers in this

way claims that it is not practical to crochet directly on to the linen, because the edge outlasts the tray linen and can be used again if it is crocheted separate and whipped on to the cloth.

Another woman who prefers to crochet the edge on at the same time that she makes it has two ways of making the application easier. On rectangular covers she pulls out a thread or two very near the edges and then crochets into this opening after overcasting the raw edge with needle and thread. To prepare the round, "made over" doilies for picoting she stitches very close to the edge with the machine, using a long stitch. And then she crochets into each of these stitches. They not only are a place to anchor the crochet, but help keep it even. The raw edge should be overcast with fine sewing-thread before doing the picot.

Among the made sets of table linen that come from France there sometimes are damask bands two or three inches wide and about ten inches long. They are usually embroidered along the long edges and across one end. The latter is fastened over the undecorated end with small linen buttons and buttonholed loops. They are intended to hold the serviette. For any one who does not like to see her carefully set table spotted with various kinds and sizes of family napkin-rings this is a solution. The bands are so small that they can easily be made from worn

napkins. They would, of course, have to be initialed for different members of the family.

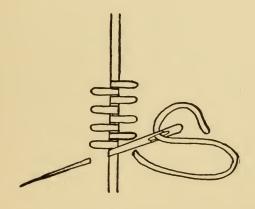
By the way, when a cloth marked in French embroidery wears out, the letters or monogram can be transferred to a new cloth. Cut out the monogram with a margin of linen an inch and a half wide around it. Baste it in place on the new cloth, pinning it first with many pins so that it cannot possibly shift. Make the first basting one-quarter of an inch from the letters, and the second line one inch outside of the first. The stitches should be small. Then turn the cloth to the wrong side, and, using No. 100 cotton, backstitch with the smallest possible stitches along all the edges of the letters. The edge can easily be felt through the linen. When this is finished the old linen around the letters may be cut away very close so that no raw edges show and the monogram will have been transferred in a way that cannot be detected.

Colored damask works up into useful suit-case covers, one for the bottom and a second for over the top of the things after they are packed in the suit-case. Why not dye the borders of worn table-cloths and use them for these? The edges should be bound with colored tape. Get the white linen tape and dye it, too. Yellow covers with orange bindings would be good—both colors dull. The perfect parts from the center of the cloth could be dyed at the same time with the borders, and then made into a nightgown

case, and pockets for brush, comb, and other toilet articles. They help keep the week-end suit-case in order.

Laundry-bags for the bedrooms made of old damask might be dyed to carry out the color scheme of each room. Damask covers of the same color for dressing-table and chiffonier need only a narrow rolled hem whipped with heavy cotton of a different color for their edge finish.

There seems to be no end to the variety of uses to which old damask may be put, so it really is worth while to pay a little more for good quality to begin with.



NEEDLE IN POSITION FOR FINE DRAWING. WHEN THE MATERIAL IS WEAK DARN BEYOND EACH STITCH

## VI

#### FINISHES FOR LINGERIE

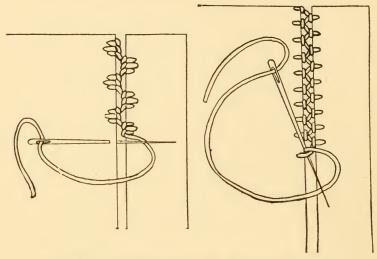
CUPPOSING all the lovely laces and em-It broideries that are shown in profusion by the shopkeepers were to disappear and neither time nor inclination allowed one to do the delicate French embroidery. There would still be at least three dainty finishes for lingerie, all of them made out of the fine, soft nainsook itself. First, one could have a scalloped edge made of two thicknesses of material. And this is how to make it: Baste together two strips of nainsook one and a half inches wide, and enough of them to meet the required length of finishing edge. Cut these on either the warp or weft thread. Make a paper pattern one and a quarter inches wide and a foot long containing twelve scallops, each three-eighths of an inch deep. Pin the pattern on a strip of double nainsook and follow close to the edge of each scallop with the sewingmachine. When the end of the pattern is reached, move it down and continue stitching until all the strips are scalloped. Then cut away all but a one-eighth-inch seam around the

curves and turn the finished trimming right side out. To apply it, stitch one of the straight edges to the garment, seam on the right side, make a narrow turning on the other straight edge, and baste it down over the stitching. Feather-stitching or one of the other linear stitches would be an attractive way of holding it down permanently; however, machine-stitching very close to the edge is a neat, quick finish.

For a ribbon run, stitch again one-half inch above the bottom row either with the ornamental stitch or the machine. Nightgowns topped by colored scallops are charming. The nainsook may be dyed fast color at home. The way to do it is told in Chapter XIII.

As to the second finish, it was no one less than Poiret who introduced to us lingerie trimmed with narrow colored bindings. His models were made of handkerchief linen, having the palest violet, yellow, green or rose binding that never exceeded a fourth inch in width—the least bit more and the effect is clumsy and heavy. Of course no machine-stitching must show on a binding as narrow as that. The first edge may be machined, but the second must be hemmed down by hand. Strips cut on a true bias are best for bindings, unless the edge to be bound must be stayed as well as finished.

The third material trimming consists of rufflings made of bias strips, only the strips must not be put on full at all. Just ease them on, and, being bias, the free edge will ripple a little. They are more attractive in most places than straight ruffles, fit smoother under outer clothing, and are less trouble to launder. Do not have them over one and a quarter inches wide finished. More like

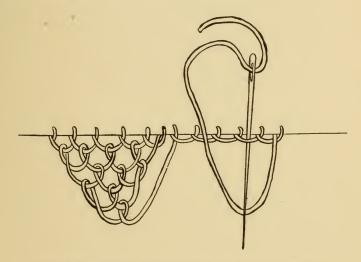


DECORATIVE STITCHES FOR JOINING SEAMS

a frill they are than a ruffle. Roll and whip the unattached edge. A nice touch is to whip one way with colored embroidery cotton and then back again the opposite direction. Or crochet a picot edge directly to the frill. But the most fascinating finish of all is a single loop tatting whipped to the edge. However, that is getting into laces, and they were not to be considered in three ways for self-trimming lingerie.

It is easier not to join frills and garment until

both are finished. Then roll and whip the untrimmed edge of the frill and draw it up ever so slightly—just enough to emphasize the roll between each whipping-stitch. Next roll the garment edge an inch at a time, and whip the frill



AN EFFECTIVE EDGE THAT IS EASILY MADE

to it with a stitch that catches under only a few threads of the frill roll, but passes completely around the roll of the garment.

The "open-seam" stitches illustrated in the diagrams may also be used to join frill and garment with a pretty effect that is rapidly got. Work them either in white or in a color like that used on the rolled hem of the frill. The stitches are so simple that the diagrams explain them without further words. Both the edge of the

garment and the edge of the frill should be rolled for a space of three or four inches and then joined for that distance, then a little more rolling followed by the joinery stitch. Heavy hard-twist cotton must be used; regular embroidery cotton or just a very coarse sewing-thread will answer.

Decorative little yokes and bands may be made by a combination of the "open-seam" stitches and narrow bands of the material. The latter must not be more than three-eighths of an inch wide. Cut the strips for them on the straight of the goods—unless the yoke is curved—and cut them twice the finished width plus seams. Stitch the edges of the strips together on the machine and turn this long, narrow tube right side out by sewing one open end to a bodkin and then running the latter through the tube. Press the bands before attempting to join them, and have the seam come on an edge in the pressing.

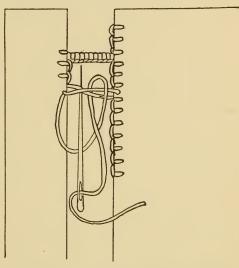
One of the joinery stitches is nothing but the embroidery buttonhole, that same useful stitch that one finds applied in a hundred and one forms. Rarely does a piece of French lingerie have its lace edge or medallions set into the material in any other way than with a close buttonhole-stitch. Undoubtedly that is the greater part of the secret of their daintiness. All raw edges or double seams between lace and cloth are eliminated, and the narrow ridge of buttonholing that takes their place is really an additional embellishment.

Another way the French needlewomen achieve

the daintiness of their work is by using the finest quality of embroidery hemstitching, "entre deux," for joining seams or wherever the buttonhole joinery would not be practical. And this they

apply to the garment with a narrow whipped seam, never a double one like a French seam. Though neat, that would be far too wide and heavy.

The Venetian ladder stitch shows another application of the buttonhole-stitch. The little bars are a ribbon run as well as a decoration. This



NEEDLE IN POSITION FOR MAKING THE BAR IN THE VENETIAN LADDER STITCH WORK WITH BLUNT END FIRST

and the pointed edge both come from Italian lace and cut work, which is, by the way, a good place to look for trimming-stitches for all manner of purposes. Most libraries have at least one or two books with lace plates, and if nothing better can be had, the bound numbers of household magazines. They frequently print "lace pages" containing excellent examples clearly reproduced.

And in speaking of laces, what about laces as

a practical underwear trimming? Yes, if they are the heavy kind like Cluny, torchon, Maltese, and Irish crochet; but no, if they are on fine nets like Valenciennes. One feminine economist decided that it would be a better investment for her to buy French embroidered lingerie—and every woman knows it costs—rather than spend time and money mending or replacing laces on partly worn garments. However, that statement is too inclusive. The linen laces do wear very well, and need not be the heavy kind to give good service.

Lace does require more time to apply than embroidery edging, because a lace should be put on by hand. The machine never gives it quite the right "look." And another thing, beware of too much fullness in a lace edge. Nothing steals away the airy lightness of a lace-trimmed bit than too much ruffling of the lace. Just a little more than ease it on, and that will be fullness aplenty. There is a heavy thread along the edge of machine-made laces with which to draw them up.

And finally, when all the rest is finished, come the buttons and buttonholes, unless it is one of those "slip-overs" that do not have either. The trouble one has when making a buttonhole in lingerie is usually due to the fine, soft material—a difficult body to make firm stitches on unless they are deep—and that will not do because the buttonhole would be clumsy. A good plan is to baste a strip of firm material to the under

side of the sheer stuff, work the buttonholes through both, and when all of them are finished cut the firm material away, cutting close against the stitches. Another point, buttonholes are easier to make, are improved in appearance, and wear quite as well when made of fine thread. Also use a needle as fine as possible.

The four-holed pearl button without ornamental cutting is the typical underwear variety, unless one can get the linen kind that is washable. They are made of fine collar-linen stretched over a bone or composition foundation. Those with metal base are not safe in the long run, as the protecting coat of the metal wears off, and rust soon comes through the linen cover on to the garment. When buying pearl buttons make a point of getting the same style every time and your underwear will always be fastened with matched buttons.

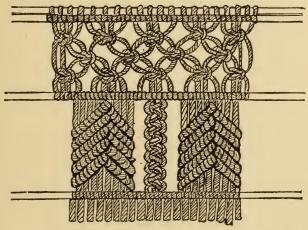
## VII

# MACRAMÉ KNOTTING AND NETTING

ACRAMÉ is a variety of knotted handwork M ACRAME is a variety of finders of the that originated under the deft fingers of the Arabian women, but now it may be found tied in the knots and fringes of every country. The needlework in Italy is fairly knotted together with it. Every little linen-shop along the Arno in Florence displays among its choicest wares bags both plain and embroidered with seams macraméd together. A favorite form for these bags is four-sided, pointed, with a tassel at the end. They are not unlike the ecclesiastical miter and no doubt the pious Italian needlewoman got her inspiration at high mass from the hat of the church dignitary. There are also long, rectangular pillow-covers that have ends banded by inset strips of macramé. Such covers are especially cool and attractive over the chaise-longue cushions in summer. Linen sets for the dressing-table, consisting of a long pin-pad that has an inch-wide macramé band uniting the top and bottom linen slip-covers and a scarf of the same material

decorated by end strips of macramé, are among the practical articles that one may see. Even dainty caps for infants are macramé knotted of linen thread by the skilful Florentine.

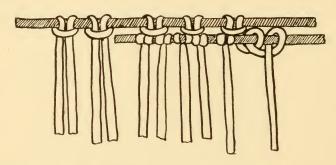
The type of design that is possible with macramé is limited to geometric forms by the nature of the work, but the variety of patterns has only



THIS SHOWS THE BAND OF MESHING WITH THE BAND OF MACRAMÉ BELOW IT. A SECOND BAND OF MESHING MUST BE WORKED TO COMPLETE THE WIDTH OF THE INSERTION

the ingenuity of the worker for its limitation. And their interest depends upon her critical spacing. A recipe for the latter is, of course, impossible, but a very safe guide is this: avoid obvious divisions. If a band of macramé for an inset is to be made, plan it so that its width and that of the hem above which it is put are not the same, or the one just half of the other. Also

avoid the obvious when spacing the pattern in the macramé itself. One may, however, go to the other extreme, getting in too much variety or not enough contrast between the widest and the narrowest spaces, and that means a con-



EACH CORD THAT IS CAST ON MAKES TWO WORKING ENDS. THE TWO BEADS FORMING ONE MACRAMÉ KNOT ARE SHOWN ON THE SECOND FOUNDATION CORD

fused effect. A preliminary spacing on paper of the whole decoration before beginning the actual work helps one to a clearer vision of its proportions.

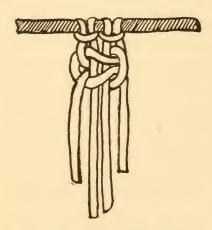
The easiest way to learn macramé is by doing it, so the doing of the diagramed motif is here explained. Start with a four-inch length of cord for a foundation cord on which to work. Stretch it taut on a board or cushion. The latter should be stuffed solid and mounted on a wooden base. A cushion of that kind would, of course, have to be made especially for macramé work, and should be about eighteen inches long and ten

inches wide, so that it will be possible to work large pieces on it. However, a smooth board and a dozen small tacks for securing the foundation ends do very well.

For the first practice piece of macramé any firm cord will answer. The special kinds are told about a little further on. When the foundation cord is fastened at each end "cast on" ten working cords each thirty inches long. The way to cast on is shown in a detail of the diagram, which also shows how each cord makes two working ends; so that with the ten cords there are twenty working ends. Stretch another cord below the first and knot each end on to it with a macramé knot, pulling them up close so that the second foundation cord lies against the first. The detail of the knot is shown in the diagram.

Then comes a half-inch of "meshing." The knot that is used for this is also shown by a detail diagram. Four threads are used for each knot, making five knots horizontally across the work. When these are completed make another horizontal row below the first, skipping the first two working cords and omitting the last two. That will mean only four knots in the second row. Then there must be a third row, using all of the cords and having five knots across. This unit of macramé is, of course, intended to be repeated in order to make a band with it, and the meshing is then more effective. But for the saving of space only one unit is illustrated.

When the meshing is knotted its lower edge must be finished by a foundation cord. Then the point is reached where the macramé pattern may be made. Divide the twenty working cords into three groups, eight cords to each outside



KNOT USED FOR THE MESH-ING AS WELL AS FOR THE BAR

group and four in the middle. Make a bar of the four cords by knotting the two on the outside over the two in the center with the same knot that was used in the mesh. This simple knot, by the way, comes from sailor's cording, and they have given it the wise - sounding name of Solomon's knot.

Each group of eight

cords is treated in the same way, therefore the knotting of only one group of eight will be explained. Divide it through the middle and take the inside cord of the four cords on the right in the left hand. Hold it taut and on the slant, and knot the four cords of the left side over it with macramé knots. The slanted cord is, it will be seen, acting as a foundation cord, but when one of the working ends is used in this way it is called a "leader."

Next use the inside cord of the group of four

cords on the left for a leader, slant it toward the right and knot the remaining three cords of that group over it. Then hold the inside cord of the four on the right in the left hand again and knot the four ends of the left group over it. Continue working from one side to the other in this way until the work is the depth desired. In the diagramed pattern only five ridges of macramé were made. The bar of Solomon's knots in the center must be the same depth. The group of eight cords on the other side of it is worked exactly like the group just described, and then the macramé pattern is finished with a foundation cord, followed by a band of meshing, and still another foundation cord. The short working ends will hang below this last cord, but may be concealed inside the hem when the strip of macramé is applied.

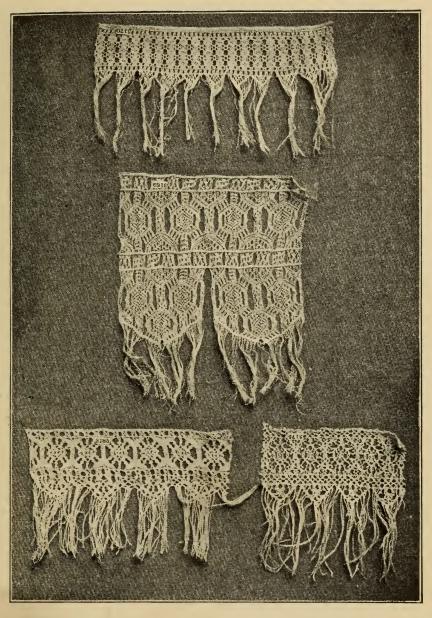
A special cord is manufactured for macramé, usually from cotton. It is made four or more ply with an extra hard twist that is supposed to have the special virtue of bringing out each knot distinct. Such cord is very well where a harsh surface is not objectionable, but unless the work is heavy that quality is undesirable. Italian macramé is made of a linen cord (for fine work linen thread), which is firm but has a smooth surface and is so well finished that it does not rough up in the working. It is more satisfactory for the majority of work than the kind known as "macramé cord." Most embroidery-supply shops

carry something similar to the Italian cord. Be sure to get a kind that will not fuzz in the handling, will remain round, and yet is not very hardtwisted.

But the use of macramé is not confined to household linens. Porch cushions, hangings for the mountain bungalow, and a cover for the couch all of burlap, arras cloth, or monk's cloth, would be transformed from the commonplace into draperies with character by wide bands (at least five inches wide) of macramé made with jute. Use the three- or four-ply one-eighth-inchthick jute and dye it either the same color or a color that is a pleasant contrast with that of the cloth.

In a collection of old-time bell-pulls, among the many of tapestry were several knotted in macramé with heavy silk cord. And in old English houses the shades are still drawn at night by a long-looped band of macramé made an inch or more wide of fine linen cord. Some of them, instead of looping up, end in a large tassel fashioned out of knots.

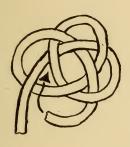
For these tassels and, indeed, not only the tassels on English curtain bands, but tassels for every purpose and from every country, even those from Turkey and especially the elaborate Chinese tassels, all are sure to have the trefoil knot or some variation of it in their construction. The first diagram shows how to tie the foundation of this knot, and the arrow indicates where

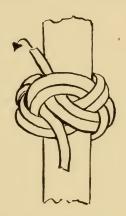


EIGHTEENTH-CENTURY ITALIAN MACRAMÉ, WITH SIMPLE, WELL-SPACED PATTERN



the working end must continue in order to make a little band like the second diagram. Each time that the original four loops of the knot are followed around with the working cord it adds to



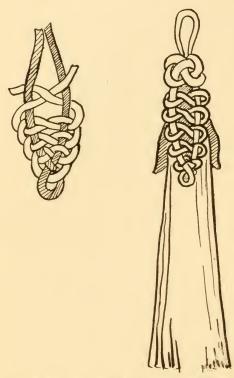


SHOWING HOW THE TREFOIL KNOT IS STARTED

A CONVENIENT WAY TO SHAPE A BAND MADE FROM TREFOIL KNOT

the width of the band. A convenient way to keep it round and open is to work it over a lead-pencil, or a rod of wider diameter if necessary.

Caps for topping tassels can also be made with the trefoil knot. It is done just as the band was made, but allowing only one opening to form instead of two. And when both openings are closed a ball may be made. For little ball-drops slip a wooden bead inside of the balls for their foundation. The beads are washable and may be used in ball-drops for tea-cloths or other diningroom linens. Each petal for the tassel with the three-leafed cap is made with a trefoil-knot foundation. The detail diagram next to the finished tassel shows how to start a leaf of the cap. Make the three



A SIMPLE TASSEL WITH A THREE-PETAL CAP MADE OF KNOTTED CORD. THE SMALL DIAGRAM SHOWS HOW EACH PETAL IS MADE

leaves separately and tack them together with a few stitches at the top. The ends may be concealed by slipping them inside the cap. The cord of the tassel itself bring up through the opening at the top between the leaf cap, and for a finish slip a trefoil band over it.

The tassel part is easily made. Cut a stiff piece of cardboard as wide as the depth of the tassel and wind it with the linen, silk, or tinsel

thread—whatever the tassel is to be—until there is enough thread on the card to make it the required thickness. Then slip a strong thread be-

tween the card and its wrapping, tie it tightly around the wrapped thread, and slip the latter off of the card. Tie the tassel again below the first tying, wrapping the tying thread about it several times, and then cut the bottom loops of the tassel.

The best effect in macramé does not depend upon elaborate and involved construction, nor upon the variety of knots in a piece of work. One is more sure of a unified whole if only one kind of knot is used to develop the entire idea—surely never more than two kinds, and then one must dominate the other. A piece of knotting with many turns and twists is apt to be tiring instead of interesting. Simple construction, the introduction of not more than two contrasted textures, and well-related spaces go far toward a happy finish.

### VIII

#### FROM RUSHES TO CHAIR SEATS

"WHAT shall we do when the rushed seat in that old chair is completely worn through?"

Why, rush it yourself. If you live near a marshy place where the rushes grow they can be gathered, cured, and the chair re-rushed all in your own home.

The time to gather rushes is late in July; and a barn loft is the best place for drying them, because they can be spread on the floor, permitting a good circulation of air around them without exposure to the sun's direct rays. Wherever they are dried some precaution against sunscorching must be taken, and they must also be turned occasionally, so that all parts of the long leaves will dry evenly. This will take a week, perhaps longer, depending upon the dampness of the atmosphere. When thoroughly cured they will be changed from their original bright green to a dull-yellow green, and their texture will be rather brittle—too brittle to be twisted into the long rushing rolls.

So the night before the chair is to be rushed, two big armfuls of rushes (that is about the quantity for an ordinary-sized seat) must be "dampened down." A big piece of canvas, or several sacks, or even some old sheets, will do for this. Whatever is used should be wrung out of hot water. While this is still steaming, the rushes are spread out on it and the cloth rolled up like a jelly roll. The bundle must then be put into a closet or some air-tight place overnight. The idea is to get the rushes evenly dampened but not water-soaked.

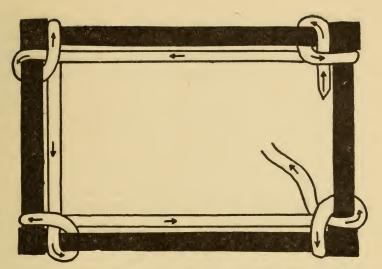
However, even with this much care it is best to squeeze out superfluous water and the air before commencing the seat. The squeezing process is simply pressing a blunt-edged stick against the rush from stem to tip end. The air usually leaves with a snap. And if the leaf is thoroughly prepared it will have an elastic quality. It is wise not to prepare the entire dampened bundle before beginning the real work, because after the leaves are squeezed they dry quickly, and the last might be too dry for finishing the work.

Three rushes twisted together make a mediumheavy roll. Be sure to place stem and tip ends together so as to equalize the thickness throughout the entire work. The twist that is given should be long and smooth, never short and abrupt. To begin with, twist about six inches and start the work in the upper right corner of the frame by laying the twisted end over the frame of the chair, end pointing through the seat. Bring the twisted roll around under the frame and to the right, passing over and around the right side of the frame close to the corner and across to the left side. The beginning end is held tight against the corner by this time, and the roll will be just long enough to go over and around the left side of the frame. The first half of the illustration shows this much of the work.

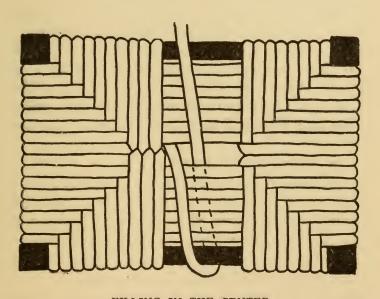
Now three new rushes must be tied on. The old and new ends are allowed to stick out on the under side, and are not cut close until the seating is finished. A splicing of this kind will occur at every corner. The stubby ends will form a line from each corner to the center on the under side of the finished seat. Be sure to twist the rushes evenly at the corners, but the stretch from side to side need not be twisted at all.

As the work progresses pockets will develop at each corner both on the upper and on the under side of the seat. When the rushing reaches about one-fourth of the way across it is time to pad these pockets with the heavy or irregular ends of rush that were discarded when making the roll. These pieces should be laid parallel across the frame with their ends tucked into the pockets on the upper side of the seat. The padding is put in to prevent the seat from sagging. It is not necessary to pad both top and bottom if the top is padded quite firm.

Most chair seats are narrower one way than



RUSHING-THE START



FILLING IN THE CENTER

the other; hence the rushing on the narrow side will meet while there is still a space on the wide side. This space is rushed with a figure-eight motion. Quite simple, as the second half of the illustration shows.

Really, the only hard part about putting a new rushed seat in that old chair will be the aching arms and blistered hands it will surely leave. And, of course, it must all be done in one day. No night rest and a fresh attack in the morning, because in the mean time the part already rushed will shrink and loosen. An old man who knows all about rushing from the time the rushes shoot up in the spring to the time when they get their last preserving coat on the finished chair, was once asked how long it ought to take an experienced rusher to do a seat, and he replied, "I think I can do better seating of rushed chairs now than I could fifty years ago, and all I will seat is one in a day." And then he added: "But you want to understand that this will be a fine seat that will not settle—always the same until broken."

The seats are far more attractive if left the natural rush color, but something should be done to protect the rushes. Several coats of flat-finish varnish will preserve them without making the seat shiny. Of course, our great-grandmothers used to paint their rushed seats. But then the whole chair was usually painted too.

Paint is a good finish to apply to the various

# FROM RUSHES TO CHAIR SEATS 75

rush substitutes, such as heavy jute cord and the prepared rolls that can be bought for rushing. A six-ply jute cord makes a satisfactory "rush" seat. Instead of painting the finished seat the jute can be dyed before working it, and one has the advantage here of making it possible to carry out some cherished color scheme. It is, of course, a much easier process, as there is no dampening to be done, and the work can be left at any point and taken up at will. Down South the mountain folks use corn-husks for their rushing, and get very good results with a mixture of yellow and reddish husks.

## IX

#### CANING CHAIRS AND OTHER USES FOR CANE

ANE is manufactured in five or six widths, o so that the first thing to do in preparing to cane a chair is to decide what width is needed for the new seat, in case there is nothing left of the old seat for a sample. The width to choose depends on two things—the diameter of the holes in the chair rim that are to receive the cane, and their distance apart. If the holes are onefourth inch in diameter they are large enough for the widest cane. But if they are close together as well as large, the widest cane will make an unpleasantly thick-looking piece of weaving. A medium-width or even finer cane will be more satisfactory in appearance and quite as strong. Indeed, the finest width is the most attractive of all when woven, if the holes are very close together. When a seat is designed for the finest caning, the holes are bored around the rim in a zigzag line. Much of the fine old French furniture was caned in this way, and finished without a binder.

The binder is a wide, heavy piece of cane that is sewed down over the holes to hide them after the seat caning is in. Binder comes in two widths only. The width and also the length needed can be easily measured. It is not so easy, however, to determine the necessary quantity of cane. The latter is cut in lengths of from twelve to twenty feet, for commercial purposes. Every chair caned with the simple cane pattern has six layers of cane crossing it when finished—four at right angles and two diagonal layers. To estimate fairly close how much cane will be needed, measure the distances across the chair in all three directions and multiply each of these by twice the number of holes on either side of the seat. Each hole means two rows of cane running parallel to the chair rim, and two diagonal rows. The sum of these three figures will approximate the number of feet of cane needed. But be sure to buy two extra lengths for good measure, and a third length for sewing on the binder. The average chair seat requires about three hundred feet of cane.

Cane is sold from the factory by the thousandfoot bundle—nothing less. Furniture dealers and repairers of furniture will usually sell it in the small quantities needed for a single seat.

The only necessary tools are a half-dozen wooden pegs that will fit the holes in the chair rim snugly. These can be whittled by the home chair-caner or she can use some of the wooden

skewers with which the butcher dresses the roast.

Soak the cane in warm water until it can be bent without cracking, usually about ten minutes. Then, with the chair squarely in front of you, find the middle hole of the near rim and secure one end of a length of cane in it with a peg. Allow three inches of this end to stick out through the bottom of the hole. Carry the length of cane across the seat, put the end down through the hole exactly opposite the hole in the near rim, and bring it up again through the first hole on the right. Peg in this hole to hold the cane. Now carry the cane across to the near rim, put it down through the first empty hole, and bring it to the top through the next hole to the right. Remove the peg from the hole in the far rim and fasten with it the cane coming from the hole in the near rim. Continue back and forth across the chair in this way until the entire right half of the chair seat is covered. There are two things to remember—to keep the tension even and not to keep it tight. Keep the rows of cane parallel, even if a hole must be skipped in order to do so. A skip is sometimes inevitable when the back corners of the seat are rounded and those in front are not.

When the right half of the chair is stretched with cane, leave the remainder of the cane hanging from the last hole and peg it there. Use a new length of cane and cover the left side of the

seat, starting in the first hole to the left of the one from which the three-inch end is hanging. Tie this end and the end of the new length together with a flat knot. Wet the old end until it is pliable before attempting to tie to the new length. A cloth or sponge can be used for this purpose. It is also necessary to redampen the cane while working with it, as it becomes brittle when dry and is liable to snap off.

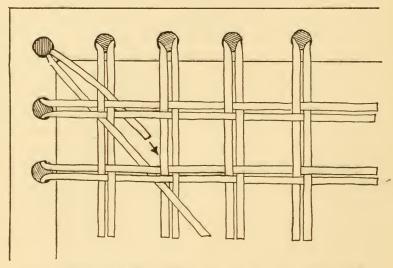
After one layer of cane is in the seat, stretch a second layer over it at right angles. Use the same method as was used when putting in the first layer. When this second layer of cane is completed, stretch a third across the second at right angles to it and parallel with the first layer.

The seat is then ready for layer number four. This one runs parallel to the second, but must be woven in, going over the strands of cane that layer number two goes under, and under those strands that the second layer goes over. This fourth layer of cane will tighten the work.

Next come the diagonals. Use the long ends of cane left hanging from the holes on each side of the corner when the former layers were stretched in. Cane one-half of the seat at a time, just as before, but now it will be a diagonal half. Starting with a long end of cane hanging from the hole to the right of one of the seat corners, bring it up through the corner hole and weave it diagonally across the seat, going over the paired groups of cane that cross in one direction and going under

the paired groups that cross the seat in the opposite direction. These diagonal strands of cane should slip in between the lengths of cane where they cross at right angles, as shown in the diagram.

When one layer of diagonal weaving is in, weave in a second layer at right angles across it,



THE DIAGONALS MUST SLIP CLOSE AGAINST THE LITTLE SQUARES FORMED BY THE FIRST FOUR LAYERS OF CANE

weaving over the groups that the first diagonals wove under, and *vice versa*. Tie all ends together with the flat knot and cut them off close. If it should be necessary to piece the cane, do it with the same kind of a knot and have the knot come on the under side of the chair rim just as the other tyings did.

The work is now ready for the binder, which

must be soaked until it is very pliable before it is used. Shave one end thin and lay it over the holes near the center of the back rim of the seat. The piece of cane with which the binder is to be sewed in place must also be soaked. Start to sew on the binder about three inches to the left of its end. Bring the sewing-cane up through a hole from the under side, cross the binder, and put the cane down again through the same hole. Pull hard. If the holes are close together skip one and come up through the third hole to the left on the same side of the binder as before, cross the binder and go down through the same hole. Pull the sewing-cane very tight and be sure the binder lies smooth over the holes in the rim. Work all around the chair seat in this way and finish by lapping the binder three inches. Shave the finishing end thin, just as was done to the beginning end, so the three-inch lap will be no thicker than the rest of the work. Tuck the ends of the sewing-cane around some of the cross-stitches of cane on the under side of the frame to secure them and cut them off.

Chairs are not the only articles that can be restored to usefulness in the household by caning. A most serviceable and attractive tray can be made out of an old picture-frame, especially from the oval kind that linger on in the attic since Victorian days. Any carpenter will bore the necessary holes for the cane around the inner edge. If the wood is in good condition a

thorough rubbing with boiled linseed oil will bring back a surface that has become dingy. If, however, the frame is battered, rub it with sandpaper, starting with a coarse grade and finishing with the finest. Be sure to rub with the grain of the wood. After the sandpaper treatment, either a good wood stain and then waxing, or two coats of flat-gloss carriage paint, will produce a result that is well worth the labor.

The cane should not be woven into the tray until the frame is refinished. Usually it is more attractive if left its natural color. But if the frame is very dark there may be an unpleasantly sharp contrast between the rim and the caned center. In that case the cane can be dipped in a dye bath. Commercial dyes marked, "cotton" will do if the special dye for cane, raffia, jute, and reed cannot be had.

When the tray is caned glue a layer of felt or heavy broadcloth over the rim on the under side, so that the ends of the cane will not scratch a polished surface. Handles are a matter of design. Some trays are complete in appearance without handles, and quite as convenient. Most hardware-stores, or hardware sections of department stores, carry handles of either all brass or brass and wood.

Reclaiming an old wooden bedstead with cane is somewhat more ambitious, but not out of the reach of the home caner if she has the advice and assistance of a good carpenter. The entire head and foot must be cut away, leaving only a structural frame about three or four inches wide. The caning must be done on separate rims that are then fitted into the openings. It will be necessary to have two rims for the foot end. These must be fitted in with their wrong sides together, so that both back and front of the foot will present a finished surface.

A caned window-seat for breakfast-room, hall, or small waiting-room is more sanitary than the usual upholstered kind, and a bit finer in appearance than the uncushioned wood. Have a carpenter make the seat ready for caning, but do not let him fit it into place until after the cane is woven in. The work can then be done out of doors or in a more convenient place and in the worker's leisure moments.

## BASKET-PLANNING IN GENERAL

B ASKETS have so long been the place for all the hundred and one small things of the household, including even the baby, that the old maxim for order might well read, "A basket for everything and everything in its basket." Of course, a basket that is made for the service that it must render will usually do it better than one bought in a department store and adjusted to the purpose. And in the making, from gathering the materials to the last touch of color, there is the pleasure that comes with all creative work.

Almost any tough vine or grass can be woven or sewed into a basket of some kind. The only requirement besides toughness is length. Wild honeysuckle- and grape-vine, shoots from willows that grow near rivers and in marshy places, splints of ash and the inner bark peeled from a hickory sapling—all can be woven into the sturdy, stiff kind of basket. This is the kind that is so useful in the garden for keeping trowel, pruning-shears, and gloves from straying apart,

or on the hearth to hold a supply of wood and pine cones for the open fire.

The smaller baskets that have lighter tasks expected of them can be made with good results of the delicate willows and vine shoots or from rolls of corn-husk, using some red husks with the yellow for streaks of color. Square baskets woven of rushes present an interesting checker-board surface.

But whatever the material, it should be suitable for the kind of usage the basket is to have. A work-basket intended to hold delicate stuffs is not useful if woven of rough hickory bark. Though that is not such a common mistake as the wood-basket woven of too fine reed or willow. It can, of course, be braced to make it physically strong enough, but it will look too delicate for its service. The completely successful basket is not only satisfactory in service, but looks as if it could be used for what it is intended. And to get this convincing "look" in a piece of basketry the weaver must select materials that are similar in character to the kind of work the basket is to do.

For those who have not the opportunity to gather their own materials, but who have to buy them, there is quite an assortment from which to choose, so basket and purpose need never be at variance because of meagerness of choice. The large family of rattan that includes reed, flats, ovals, reed windings, and cane, offer a range from which can be made a basket for nearly any pur-

pose. These plus raffia free a weaver in the city from any limitations except the pleasure of the outdoor gathering and drying of her own supply. Rattan is the generic name for all the trade products of the one source. It is also a specific commercial name for the long, slender, vine-like stem before it has been peeled or finished. The silicious outer coat and surface irregularities make this material very stiff, less pervious to water, and rather difficult to control when weaving. But baskets woven of it are admirably strong, with a pleasing irregularity of surface and a rustic, sturdy look that can never be got with reed or the other products of rattan origin that have been machine-peeled and finished. It does not "take" stain and dye readily or well, but it really need never be artificially colored, because it has naturally a pleasing mottled and streaked warm-gray tone. Unlike the finished products, rattan is not sold by the pound in assorted sizes, but by the bundle containing a variety of thicknesses. The number of pounds to the bundle depends on the particular tradesman who puts it up.

Reed is a round, machine-cut product that is manufactured in about twelve different diameters, from oo, the finest and most expensive, to a size that measures one-half inch across. The numerical indicators differ somewhat with the factory, but sample cards and prices are sent out on request. However, a factory will not, as a rule, sell in small quantities of two or three

pounds. If the local department stores do not have the material in stock (usually in the toy department), and will not order it, an order can be placed through a chair-caner or florist. The latter uses raffia for tying his plants, and not infrequently the wholesale dealer from whom he gets his supply carries rattan and its products also.

Now briefly to go over the other rattan products mentioned above. Flats is a rather roughsurfaced form, flat on both sides, and made in two widths, one-quarter and one-half inch. The lengths vary from ten to fifteen feet. It is hardly stiff enough to use for a basket that is to have knock-about usage. A waste-paper basket is the limitation of its strength. "Ovals" are similar to flats, but have one slightly rounded surface. "Reed winding" is also a flat product with one rounded surface, but of a better quality than ovals, and made in three widths, the finest about one-eighth of an inch broad and the widest not more than one-quarter inch in width. It is much too pliable for anything but weavers, and requires a foundation or "spokes" of flats or reed. The use of cane in chair seats for so many years has made every one familiar with its texture. Like reed winding, it needs support when used for basketry. However, attractive candleshades can be made of it without much more support than the wire foundation frame to which the lining is fastened. Directions for making one

of these cane shades follows in the next chapter, on Basket Construction.

After selecting suitable material for the basket the next thing to plan is the form. To be sure, its purpose dictates its form in a measure, but the material limits it even more. A basket woven of stiff material that does not lend itself to bending easily can never have sharp curves without appearing contorted when finished, and as if in constant anguish. But it does not follow that the more pliable the material the more curved and fanciful can be the basket woven of it. Far better to limit the silhouette of the basket to one curve or angle—two at the most, with the second always subordinate to the first. But place this dominant curve in exactly the right position in relation to the height of the basket and have it just the right size in relation to the width of the basket. For example, a basket in which the curve comes half-way between base and top is never so pleasing in silhouette as one in which the curve does not make such an obvious division of its height. Even or compass-like curves are never so interesting as those that are a bit straighter above or below their deepest point. And for the same reason barrel forms are never good. So it is not the number of ins and outs of the outline that takes a basket out of the commonplace, but elimination and studied spacing.

Restraint is also a safe guide in planning the

variety of weaves to be introduced. Here, as when limiting the curves in the shape, two weaves are all one basket can contain without beginning to look like a sampler. But the two must be very different in their surface effect or the change from one to the other gives a disturbed appearance, and may even look like a poorly concealed mistake. Yet with such a sharp contrast between the weaves something must be done to make one dominant. Using more of one than the other will do this to some extent, but in order to emphasize the one further, and also to unify the whole design of the basket, the dominant weave, the center, and the border of the basket should all be similar in character. Of course, that is possible only when there is a definite center and border, as in a round basket woven of stiff material. Most square baskets, however, do not have a center or base pattern, but in these the border can still be related to the dominant weave and so hold together the design.

That brings up another point in basket design. Any structural line or feature should appear strong enough to do the thing it is supposed to do as well as to be actually strong enough to do it. If this visual test is applied to handles, borders, and covers and their fastenings, many of the twisted and fanciful contortions that one sometimes sees on baskets will be avoided.

But if there is one thing above others that will keep basketry within its successful possibilities

of design, it is the use of materials before they have been through a machine that smooths them all down and takes away their basket look. Out of home-cut and dried willow switches or grasses it is almost mechanically impossible to make a basket that looks as if it were masquerading as a vase, or one with handles after a teacup pattern, or to follow any other unbasket-like fancy. The wild materials with all their original spring and vitality simply will not take delicate or intricate curves and twistings.

Only the most general directions can be given for gathering and preparing the wild materials, because there is such a variety throughout the country. With most grasses the time to cut is when they have grown their full length, but before they have become the least dried or brittle from sun-scorch. A barn loft or other covered place where they can be spread out, with a good circulation of air about them, but protected from the direct rays of the sun, is the best way to dry them. They must be turned frequently. Willows and vines can be cut at any time. cutting depends only on the size needed. Willows in their rustic-looking outside coat are more effective for window-boxes and fern-bowls or any outdoor basket than after they are peeled and stained. And, of course, no one would think of trying to improve the color of the yellow and red corn-husk that is ready for use for a coiled basket just as soon as it is jerked from the dried ear,

USEFUL BASKETS OF REED, CANE, AND GRASSES

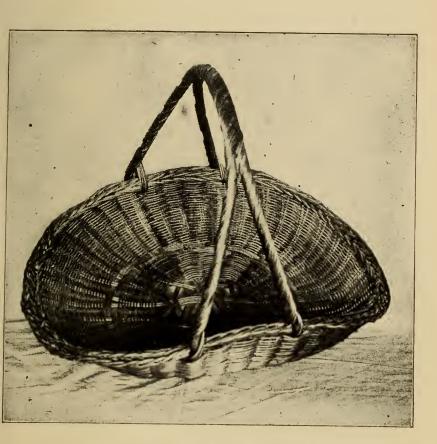
RATTAN and the other materials on the market that are made from rattan make perhaps the source of basketry supplies that is most accessible for the majority of weavers in this country, certainly for those who live in a town or the city. And for these users of rattan there is a group of do's and don'ts that apply to the weaving of all baskets from that material. Many of them are also applicable to the making of baskets from any stiff material.

First, rattan does have to be wet in order to make it pliable enough to bend without cracking. However, don't soak the whole lot of it, but only those lengths or parts of the lengths that must do the bending; as, for instance, to start a center. Here only the portion of the material that is to be in the center need be soaked. Hot water will hasten the softening process. When the spokes (the foundation over which the weaving is done) must be turned up for the sides or the border woven, water may be applied to the work with a

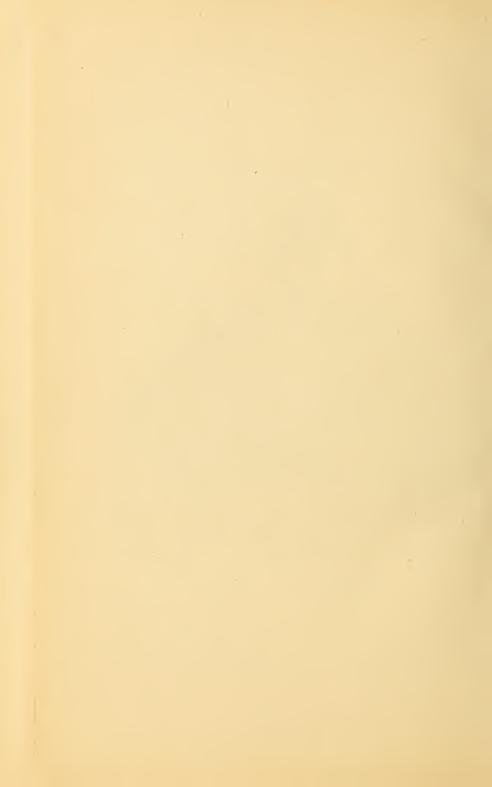
cloth just wherever the bends must be made. If it is necessary to keep the place damp, a cloth wrung out of hot water may be wrapped around the basket like a bandage over the portions that must be made pliable. But do not immerse the entire basket. And this is why. The material swells as it absorbs water, and a basket woven of wet rattan is loose after drying and likely to be warped as well. Also, each wetting roughens the surface and makes the fiber more brittle when dry.

When the base of the basket is finished and the sides have to be shaped and woven at the same time, the weaver is sometimes embarrassed by the lack of enough hands, especially if the basket is large and very stiff. It will usually require two hands just to hold it down unless some mechanical device is used. A good way is to fasten the woven base, round or rectangular, to a board with quarter-inch-wide tapes. If the base is round, the tapes must cross one another over the center, and if it is a rectangle, the necessary number are fastened across the base in one direction and then a second layer at right angles over them. For either base enough tapes must be used so that the edge of the weaving will not lift up between tapes when the spokes are turned for the sides.

The small-headed tacks called gimp tacks are best for fastening down the tapes. And they should be driven into the board all the way, as



A USEFUL BASKET OF REED



close as possible to the edge of the weaving. Any thick board that is larger than the base of the basket will do. A box end is good and can be got from the grocer. This simple system of tapes not only frees both hands of the worker for weaving and shaping the sides, including the border, but it will insure a flat base for the basket. This is a feature that one is not at all sure of when weaving entirely "in the hand."

Another help in shaping the sides of the basket is to tie the spokes together at the top so that the tying comes directly above the center of the base. If there are many spokes it is usually necessary to tie them in groups, taking three or four together from opposite sides for each group. The spokes may then be pulled out or pushed in until they form a skeleton of what the basket will be in silhouette. Even if the side of the basket is to flare, it is easier to make the turn from base to side if the spokes are tied while the first two or three rows of side weaving are put in.

Another advantage in tying the spokes is that the weaving can be left at any time without fear that the basket will be sprung out of shape by sagging spokes or that the latter will get broken.

If the basket is woven over round rattan and is designed to have straight sides, tying alone will not insure a right angle between base and side. But a small wedge cut out of each spoke at the inner point of the bend will make it possible to turn the side up perpendicular.

One particularly difficult point in shaping the weaving, especially of a round basket, is to gauge the flare at its start so that the finish will be exactly the planned-for width or have the expected curve. A full-sized outline of the basket drawn in heavy crayon on a sheet of paper can be used as a working pattern to check up the weaving as it is done. By holding the pattern behind the work, with its base on a level with that of the basket, any divergence in the sides of the latter from the pattern outline can be easily detected. Of course the outline on paper must not be in perspective, but drawn as if at eye-level, with straight lines for the top and bottom—not ellipses.

Just one more do and another don't—both for the border. Do try to finish it at one time after beginning. It will be smoother than a piecework border. And do not cut off the ends after the border is finished until the material is dry. It shrinks in drying and may get too short to hold. This "don't" applies to the cutting and trimming off of all ends when using rattan.

There are just two tools needed in basket-making—i. e., something to cut the reed and a long, straight awl. A pair of strong scissors will do for the cutting, but pruning-shears make a cleaner cut and do it more easily. So it is worth while to get them if much weaving is to be done. The small, nickeled kind with a spring, sold by the name of German pruning-shears, is the best.

Any large hardware-store can supply them and also the awl. The latter is for making a start under tight bindings, or between close, firm weaving into which ends must be tucked for concealment—or where the foundation of a handle must be thrust. It is also useful for straightening spokes that get bent during the weaving. By the way, one of the nice indications of good workmanship in basketry is the character of the spokes. A round basket that is symmetrically made has spokes that radiate straight from the center and are equal distances apart on the same circumference. In a square basket they are straight and parallel to one another.

The basket with the star center, shown in the illustration, is for gathering flowers or vegetables from the kitchen garden. Before the handle is added it is only a slightly bowled round tray basket, not so difficult to make as one with an oval center, and by means of the handle it is compressed into the oval form that is more practical for holding long-stemmed flowers.

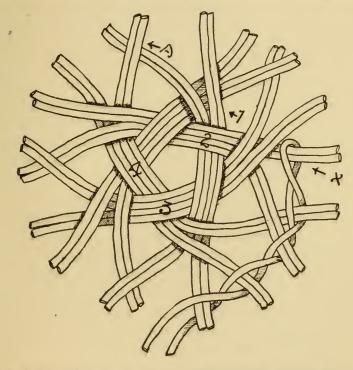
The original of the illustration was made of reed, but it can be copied in willow or any stiff, round material. Twenty spokes each forty-eight inches long of No. 5 reed are needed for the center. These are divided into five groups, and in the beginning the four reeds in each group are treated as a single spoke, making only five spokes for the center. Two of them are crossed, marked No. 1 in the diagram, and a third spoke,

marked No. 2, is crossed over and under an end of the first two. Then a fourth spoke is added as shown in No. 3 of the diagram. And the fifth spoke, marked No. 4, must interlace so as to make a pentagon opening each side of which measures one and a quarter inches. The center thus far will be star-shaped, and to prevent its slipping each crossing of the spokes should be tied with strong twine or raffia.

The circumference of the center will now have reached such a size that the spoke groups will be too far apart to weave over and must, therefore, be divided each into two spokes. Then one of the newly divided spokes must cross its first neighbor on the right, marked A on the diagram. Similar crossings are made with one new spoke from each division. Be sure to tie all of these crossings as they are made, and then the center is ready for weaving.

Whenever there is an even number of spokes to weave over, either two weavers at a time must be used, or, using a single weaver, a skip under two spokes at each round must be made. For this basket two weavers were used, and the first two ends were got by doubling one reed. This makes a loop beginning—a much less noticeable start in an open center than an end would be. It is marked X in the diagram.

Beginning with a loop of No. 3 reed, two and a half inches of twisted weave are put in. Upon the completion of this much weaving the spokes must again be divided, because the circumference has grown so large. The division will bring a single reed for each spoke, and that would not be strong enough to support a basket of this size,



AN EXPLANATION OF THIS STAR-CENTER DIAGRAM AND DIRECTIONS FOR MAKING THE ENTIRE BASKET ARE GIVEN IN THE TEXT

so another No. 5 reed is added alongside of each original one. By slipping it down a half-inch into the weaving it will be steadied in place while the weaving continues. But in order to make a

decorative feature of the spoke separation, a new weave is introduced instead of continuing with the twisted weave. "Ribbon weave" consisting of bands, each four reeds wide, was used because it is similar in appearance to the banded center. The ribbon weave is made by weaving the two weavers parallel around the basket twice, then reversing by slipping under two spokes and repeating the parallel weave for two more rounds. When this point is reached the basket must be taped to a board, so that from the ribbon weave on it may be bowled slightly while five more inches of twisted weave are put in. The basket is then ready for the border.

The three rolls of which the border consists are made with the spokes, and in the making each reed is treated as a separate unit, and no longer does team-work with the partner it had when acting as a spoke. Starting anywhere on the rim, a reed is bent down behind its first two neighbors on the right and to the outside of the basket. Then the next reed on the right goes through the same process behind the first two reeds on its right, and so on until the circumference of the basket has been finished with a roll made in this way. A second roll is then made with the reeds that now stick out from the edge of the basket almost at right angles. The second roll should be close against the outside of the first one. After it is completed the spokes are poked under the two rolls to the inside of the basket and the third roll made with them. When finished the three rolls should lie close together, the first in the middle, the second outside it, and the third inside. The three together make a firm, broad-edged border.

The handle is made of two half-inch-thick reeds as a foundation, each fifty inches long. Six inches of this length on each end is forced into the weaving of the basket, starting just below the outside roll of the basket. It is necessary to shave down the reed over this six-inch portion that enters the weave in order to allow it to slip down more easily. The two foundation reeds are five inches apart at the border, but combine to form a single handle across the top. Here they are held together and completely covered by a wrapping of No. 3 reed. The winding of this reed is started as a loop around the border at the base of one of the foundation reeds, and is wound three times around a single reed before it binds the two together across the top. It does this binding together with three windings, and then continues to the opposite border over a single reed in three more windings. On reaching the border, the winding reed makes a loop around it, and returns over the handle close against the wrapping just made. Winding the handle in this way is continued back and forth until the unwrapped space over the middle, where the foundation reeds are bound together, equals the wrapped space. When this point is reached it is

time to start a new winding, beginning at the base of the second foundation reed. The second winding will fill in the uncovered portion over the center of the handle, and when this is accomplished the handle is finished. The end of the winding reed is thrust under the wrappings of the handle close to the border and cut off.

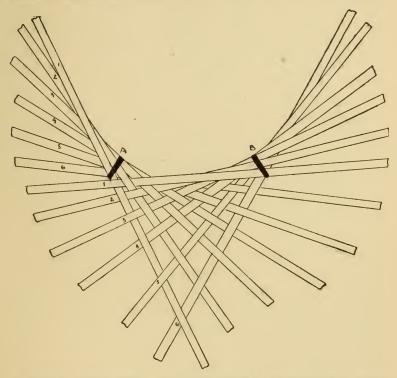
## CANDLE-SHADES OF CANE

Although cane has not many possibilities as a material for strong, useful basketry because it is too flexible, the candle-shades or small lampshades that can be made of it are attractive as well as useful. The variety of cane manufactured for finishing and sold by the name of "binder" is better for the purpose than even the widest width of weaving cane because it is thicker and stiffer. Binder comes in two widths. The wider is a little less than one-fourth of an inch, and it is this size that must be used for large candle-shades.

A shade six inches high, three and three-quarters inches in diameter across the top, and twelve inches across the bottom, needs thirty strips of wide binder each twenty inches long. These are divided into five bundles of six strips to each bundle. Like cane, binder has a smooth, shiny side and a rough side. The strips in each bundle must be laid one on top of the other, rough side down, and then spread fan shape. A piece of

raffia or strong, fine cord woven over the ends will keep the strips spread.

Here is a most important detail—the strips in each bundle must all spread fanwise in the same



A AND B REPRESENT THE TEMPORARY TYINGS THAT HOLD THE TWO BUNDLES OF SIX SPOKES EACH

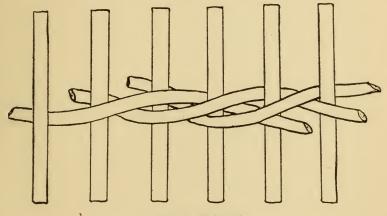
direction. If in the first bundle the strips were fanned with their top ends to the left and their lower ends to the right as the bundle was held vertically before the worker, the strips in the other bundle must be fanned in the same way.

When the five bundles are spread and secured with weaving the actual construction of the shade may be started by slipping the lower end of the bottom strip of one bundle under the lower end of the second from the bottom strips of a second bundle. Suppose the bundles are labeled A and B, respectively, and their strips numbered from one to six, beginning at the top and working down. Strip 6 of bundle B must slip under strip 5 of bundle A. Strip 5, bundle B, must slip under strip 4, bundle A, and so on until all the strips in the two bundles have been interlaced. This slipping under once, however, will not be firm enough to hold while the third bundle is added to bundle B in the same way. Therefore it is necessary to interlace or weave the ends of bundles A and B further by passing each strip of bundle B over the next strip of bundle A. The diagram shows bundles A and B held together by interlacing in this way. The directions sound as if the making would be hard, but it really is not. All it requires is methodical treatment.

When the five bundles have been interlaced a closed circle will be the result. This is the small diameter of the shade and should be made the right size to put on the holder by pushing together the strips. The tying of each bundle that held the fan firm must be cut in order to push the strips together, and the five-growth centers should not be discernible when the circle is com-

plete. A little water applied to the cane around the circle will prevent slipping and shifting of the strips.

The band of weaving that circles the shade near the top must now be made. It consists of three rows of triple weave, using the finest-size reed (No. 00) for weavers. It is woven over the



TRIPLE WEAVE

strips of binder that point in one direction only. It does not make any difference which direction is chosen—the object is to have triple weave done over thirty spokes instead of sixty. The weaving would buckle if done over all of them. The small detail diagram shows how triple weave is done. After these rows are in the ends of the binder are again interlaced until their woven depth is five inches. Five rows of triple weave must then go in with the No. oo reed, but this time all of the ends of the interlaced strips are included

as spokes. The shade is then ready for the border finish.

The ends of the cane that extend below the five rows of triple weave must be cut off close to the weaving. A piece of reed slightly less than one-quarter inch in diameter (No. 6) must be cut long enough to fit the inner circumference of the lower edge of the shade, allowing three inches for lap. Shaving the two ends of this reed to half its thickness for the space of the three inches will avoid a clumsy lapping. It is then bound in place against the inner edge of the shade with a piece of wide cane or binder that has been soaked until very pliable. The binding must include the two lower rows of triple weave each time it wraps the circumference reed. In this way the cut ends of the reed are held firmly between reed and weaving. If the wrapping-cane is pulled tight enough the border will never slip off. After binding the edge in one direction, a second binder worked the opposite way will make a crossed pattern on the edge, repeating the interlaced design of the body of the shade and making the border doubly tight.

Shaping the shade will probably give the most trouble. An inverted bowl used as a mold is an assistance, or still better, a round, wooden chopping-bowl. The work may be tacked to the latter and so held in place while the weaving progresses. It is not necessary to have a bowl just the dimensions given here for the shade.

With thirty strips for the interlacing spokes the lower diameter of the shade may vary as much as an inch beyond or below the twelve-inch diameter.

And next comes the lining. But before suggesting any ways and means for this, a few words about the wire frame to which it is fastened may be helpful. It consists of at least two circles of wire, one at the top circumference and one at the lower, with four or more brace wires between them. If the shade is large, or has a flat top, the frame should be assembled with more than two wire circles. There are specially constructed supports for kerosene, gas, or electric lamp shades. Most department stores carry the three kinds in stock or will order them.

Usually it is only in the larger cities that one finds firms that make a specialty of wire-work where frames will be made from given measurements. A florist who deals in floral pieces should be able to furnish the address of the nearest firm of this kind. In some department stores the lamp department will take orders for them. But any hardware dealer who does mending could make one if encouraged just a little.

All of the wires (except those of the attachment that holds the shade over the light) must be wrapped before the frame is covered with the lining material. The wrapping makes the wires less conspicuous and is a base to which the lining can be sewed. Dressmaker's silk binding-ribbon

is best for wrapping, and should match the dominant color of the lining if possible.

Besides the usual China silk there is a variety of stuffs that are suitable for shade linings. There is chintz. A gay Oriental pattern on a black ground would be a particularly good choice for lining a shade made of brilliant red cane. Dye the cane before the shade is made, and use the dye pure. The natural color of the cane will gray the red enough, and will also give it a slight yellow tone. Among the dress goods one can find linings that are both unusual and inexpensive. Gingham with vellow and white half-inch checks made an effective lining in a brown-cane shade for an attic bedroom. It was taken on the bias so that the checks were diamonds, and repeated the figures made by the interlacing of the cane. And, by the way, the curtains for the two small windows at either end of the room were of the same stuff.

"Silk" mull, really a silk-and-cotton mixture, is good for small shades that need a thin lining. And then there are the stiff materials, both cloth and paper, such as kid cambric (a calendared cotton cloth), wall-paper, Japanese paper-cloth, and pineapple tissue.

Thin materials are applied over the wire frame in half-inch-deep folds. The folds are slightly less than that width at the wide circumference, and gradually get deeper toward the top of the frame, where the circumference is narrower. The top and bottom edges of the lining are turned over the wires and sewed down.

When using stiff materials the lining must be made in fitted sections, and the seams of the sections should be planned to fall over the vertical brace wires of the frame, so that the former can be slip-stitched to the wrapping of the latter. The sections of a paper lining can be lapped and pasted. It is possible to join kid cambric with paste, too. Both cloth and paper linings must be lapped over the top and bottom circle wires and sewed or pasted in place.

Although the inside of the lined shade does not show much, it is customary among the best interior decorators to back the inner surface of the covered wire frame. This backing, usually thin China silk, is always fitted in smooth, with as few sections as possible. The side seams are turned under and slip-stitched to the wire wrappings, and the top and bottom are turned down and slip-stitched to the outer lining. Besides being a finish, the backing is also an opportunity to modify the color of a shade when lighted; for instance, the black chintz suggested above may supplement a color scheme effectively by day, but it would cast a gloom at night. If the shade were backed with a strong yellow China silk this would be changed to a mellow light.

This way of making a shade out of cane is only one of a number of possible ways. If it is for an electric light, no opening at the top is necessary and a basket center may be used at the start. Then the shade is simply an inverted bowl-shaped basket, and is easier to make than the one for which directions are given. The side must not be woven its entire depth, else the light would be shaded too much. Only enough weaving to hold the center and another band just above the border are necessary.

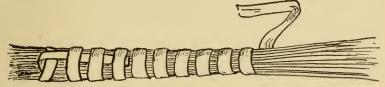
Attractive shades for the bungalow porch lights can be made on the basket plan with cane.

## THE COILED BASKET MADE OF GRASSES

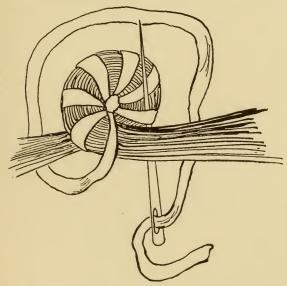
The coiled basket is just one of the many kinds that can be made from grasses, corn-husks, rushes, or any of the long, pliable shoots and leaves that may be gathered throughout this country from April until October. Among the earliest is sweet vernal grass, then comes June grass, and when the summer is well on its way sedges and other water-grasses flourish luxuriantly along the brook and in low, marshy places. Down South there are the long pine needles that grow in threes from a tiny sheath as if all ready for a coil. Although these materials are all soft, the finished basket will be stiff and sturdy if the coil is held firm and sewed tight.

The coiled basket belongs to the great family of sewed baskets, but, unlike so many others in that family, it is not slow or tedious work—neither does it require a design or pattern, but

depends for its interest upon the variation in the natural color of the grasses themselves, and for its beauty in form upon the symmetry of the coiling. Sometimes, to vary the texture, broad



WRAPPED START OF A COILED BASKET



NEEDLE IN POSITION FOR THE FIRST STITCH IN THE COIL strips of corn-husks are worked in with the slender grasses.

But to get started. Take a bundle of the dried grasses (the way to dry them was told in the chapter on basket-planning) and dampen them slightly. A good way is to sprinkle them with hot water and allow them to remain rolled in a cloth until evenly moist. Then draw enough from the bundle to make a small roll, one about a quarter of an inch thick, thread a heavy needle with a strand of raffia that has been dyed to match the grass, and you are ready to sew. Both hemp and manila fiber are also used for sewing, but they are both fine and cannot be used single, so that they are rather troublesome to handle. They can be got from shops that keep rope and cordage, or from a carpet mender and weaver.

Tie the raffia to the coil very near the thick ends of the grasses (the root ends) and wrap the raffia around the coil nine times, leaving a space between each wrapping as the diagram shows. The center of the basket must be formed with this wrapped portion by coiling it around tight, so that the short end is in the middle and the long grasses pass toward the right. To make the first stitch bring the threaded raffia over and around the grasses and stick the needle diagonally from right to left through the first wrappingstitch. The second diagram shows the needle taking the first stitch. This brings the needle out on top again, ready to wind around the coil and fasten into the second wrapping. Continue coiling and sewing, and it will be noticed that the stitches form curved lines that radiate from the center. When the circumference gets so large that the radii of stitches are too far apart to keep the coils firm, extra wrappings around the grasses must be made between stitches. The next time around these wrappings will be places to anchor stitches. The extra wrappings must be symmetrically added—that is, one or two between every two stitches.

Making the curve or flare for the side of the basket is simply a matter of building the coils over one another at just the right angle for each successive circumference. A drawing of the form helps to keep it more clearly in mind. As soon as the coiling of the side begins it is no longer possible to work from left to right. The needle must be brought through a stitch to the under side of the work (what will be the outside of the basket), and then the sewing and coiling continue as before, except that the latter is now from right to left.

Lawn or porch mats, that are far more serviceable than cushions, or gardening mats to kneel on, are especially satisfactory made in this way, and would be easy pieces to begin on. They require no shaping and work up quickly, using a halfinch-thick coil.

Grasses are not all the same length, so the coil will begin to get thin before its end is reached. As this happens, insert the stem ends of new grasses, a few at a time, into the coil and continue sewing until the last round is sewed in place. Three inches before the end of this last

round cut out a third of the grass from the coil, cutting from the center, so that the ends will not show. Continue sewing for another inch, and then reduce the coil by half and finish sewing to the end. Be sure to fasten the end with several stitches sewed over and over.

Just one last word about large coiled baskets made with thick coils. With these each new stitch must catch into the coil as well as under the stitch. If the coil is quite thick, a half-inch or more, and is made of fine grasses, it will be necessary to brace it. A reed, concealed by the grasses, like a core in the coil, will answer this purpose, or broom grass that grows along the roadside late into the fall is also a good coil-stiffener.

## XII

COLORING BASKETS WITH COMMERCIAL AND HOME-BREWED DYES

ASKETS made of machine-cut and smoothed materials are generally improved by color. But the materials that are gathered and prepared by the weaver never really need any improving. However, some of the expert weavers among the mountain folk down in Kentucky peel their willows and treat them in a way that does give a pleasing variety to their baskets, even if it is not an actual improvement over the original color. For a warm gray they boil the peeled switches with onion skins. To get a brown that is lighter and has more yellow in it than that of the willow bark, they peel the switches and then boil them with these peelings. And strange as it may seem, the brown that is got from the peelings is different from that of the peelings themselves when they are still on the switches.

Both of these methods are simple and easy to follow. Of course there are other vegetable dyes—the kind that went into the dye-pot of our grandmothers—smartweed for yellow, goldenrod flowers with fustic for buff, black walnuts chopped when green and boiled for a green-brown, madder for red, and wildroot for blue. But to brew these requires unlimited patience, the kind those grandmothers had. And what is the use when prepared dyes and stains can be bought that need only the addition of a color sense in the mixing to bring about beautiful results?

The color may be applied to the material before it is woven or after the basket is finished. Both methods have their advantages. If the color is mixed with water the material must be dyed before weaving, for if the woven basket were wet it would probably warp in the drying. By dyeing the material first, colored stripes and simple patterns in color are possible through the use of different colored weavers. This dyeing before weaving is, however, not an economical method, because some material of each color is usually left over, and even if it is only a little, both it and the dye are wasted.

Package dyes are now on the market, under various trade names, that are advertised as usable for basket materials, including raffia. And then there are dyes known as basic that can be bought in bulk and may be used with either water or alcohol. When dissolved in the latter the color is applied after the basket is woven, and the directions for that will be put down a little later under the second method of coloring.

The basic dyes do not dissolve readily in water without the addition of a little acetic acid (or vinegar). So for each spoonful of dye powder two spoonfuls of acid or strong vinegar must be used, and the two ingredients dissolved in about a quart of hot water. This strong dye liquor can then be added to the water in the dye-pot in the quantity needed to produce the desired shade. Basic dyes will color silk and wool, too, but in that case the strong dye liquor must be strained through a cloth before going into the pot, in order to remove particles of undissolved dye. Spots or streaks on basket material usually improve instead of marring the effect, so that here the straining is not necessary. These dyes are so powerful that only a very little is needed to bring a full color. But the material must remain in the dye-pot and be kept near the boiling-point long enough to allow the dye to permeate the fiber thoroughly. A good plan is to put it into a warm bath and bring it gradually to the boilingpoint; after that it can remain in the dye as long as is necessary.

These dyes are as harsh in color as they are powerful. That, however, is easily remedied. If a color is too sharp a little of each of the other two will soften and gray it. For instance, if the red seems glary, a little yellow and blue will tone it down. But too much blue will make it purple, while an over-amount of yellow will change the red to orange. The safest way is to add the

color drop by drop from the end of a glass rod or a dropper.

If a basket is colored after it is made, not only the basic dyes are available, but also many of the commercial wood stains and paints. But to finish with the basic dyes—when applied after the basket is woven. They dissolve readily in alcohol and for economy the denatured alcohol is the kind to get. The colors may be mixed to get other colors, just as when the dye was dissolved in water, and the solution applied with a brush. One with rather stiff bristles will get the color into the crevices of the weave better than a soft brush. The color always grows darker as the alcohol evaporates, so that one should use a solution that looks as if it would be too light.

The wood stains that can be used for basketry are similar in action to the basic dyes, and most of the directions on the bottles or cans in which they are marketed call for alcohol as a thinning agent. A stain without varnish is better. Those with varnish dry unpleasantly shiny, and are more difficult to apply.

Wood-stain colors cannot be mixed with entire surety of success. Sometimes "mud" is the result of mixing. However, they do not, as a rule, need it. Most of them are pleasing. The mahogany, however, is usually too red to give that brown-red the Japanese get in their bamboo baskets, so a very little green stain and a more generous addition of oak must be mixed with it. The

"forest green" or the most brilliant green among those in the color samples, is the kind to use for this mixing. If a number of baskets are to be stained different colors, a pint or a half-pint each of dark mahogany, forest green, and dark-oak stain is a selection that will give the greatest variety with the least initial outlay of colors.

A surface finish will improve a basket, whether it is dyed or stained. White floor wax that can be bought under the name of prepared wax will give the surface a dull gloss and is easily applied. When the basket is dry rub a thin coat of wax into the fiber with a stiff brush. A cheap clothesbrush is best for the purpose, because the bristles are fine and close-set, but a small scrubbingbrush will do. Only a very thin waxing is necessary, and no particles must remain lodged in the crevices of the weaving. 'It should be allowed to dry at least one hour before attempting to polish the surface; in fact, overnight drying is better because the wax will then have plenty of time to soak into the fiber. Polishing can be done with the waxing-brush, and the friction will not only bring out a dull gloss, but will rub off many of the loose surface fibers. Reed gets particularly fuzzy when it is water-dved. If the surface of a basket is very rough and shredded, a singeing before the wax is applied will improve it. This is done over a flame in the same way that a fowl is singed.

Flat-drying varnish may be used instead of

wax. It does not, however, bring out the grain of the material as wax does. Quite the contrary, it fills it in, and so for a dyed or stained basket it is not so satisfactory. But for one with a painted surface varnish is best. Be sure to get the flat-drying kind, or too much shine will be the result. White shellac is also good, though more expensive.

Baskets with painted surfaces are really more attractive than the idea seems. It is an especially good way to treat those woven of machinecut ash splints or any of the commercial flat products that have no color or texture of their own left. The peasants of Norway and Sweden make some of the materials similar to our flats and paint them in strong colors—brilliant blue with great spots and dabs of red, yellow, and white, with a bright-yellow handle. The effect is gav and amusing, and makes the basket particularly appropriate for outdoor use or in a summer bungalow. Flat-drying automobile paints are sold in a variety of colors, and are ground fine enough to use on baskets. They may be had in paste form or ready mixed. The paste, being more concentrated, will take up less room in the supplycloset. All that is necessary is stirring in turpentine, a little at a time, as it is needed. colors can be mixed to make others. If one color is to be applied over another in decoration, the first must be dry before the second is put on, or the two will mix on the basket surface. The

safest way is to allow the paint to dry overnight before putting on a second coat or the finishing coat of varnish.

Only the person who has tried realizes the variety of beauty that can be got out of a few basket materials, a little dye or paint, and a little varnish.

## XIII

#### PREPARING AND DYEING MATERIALS FOR RUGS

WHAT housewife has not looked at a pile of stockings too worn for darning, or wool underwear in the same condition, and thought with regret that so much of an investment must be thrown away? But it need not be. These and all other old worn things—suits that belonged to the man of the house and have passed from active business life through a hard season of afterbusiness gardening and are not fit to give away, old shirts, velvets too worn for steaming, discarded neckties, hopeless sheets and pillow-cases—all will make wonderful rugs.

First the material must be collected. The best way to do this is to keep separate bags for wool, silk, and cotton. It will save future sorting when the dyeing begins. For all these derelicts must be dyed so that a rug of harmonious colors will result, and one that will fit the color scheme of the room that has needed a new rug so long.

The cotton-bag is the easiest one, because most of its contents will be white stuffs—muslin

underwear, sheets, and other household linens. These can all go into the dye-pot just as they are and be dyed a lovely gray-green or dull blue for the bathroom mats. Save out some for white bands or borders. Or even make the bathroom rugs of the white rags with a little color on the border. They are easily washed, and if not too large will not be too heavy for the home laundry. Where the children run in and out with shoes that are not always clean, such a rug would be a mistake, but where there are only grown-ups or the children are old enough to be careful, they are practical as well as attractive.

Of course, if the underwear is closely gathered in places, it is better to cut this part open before dyeing, so that the color will penetrate easily. But it is not necessary to strive for even dyeing. Indeed, a much more pleasing rug is the result if the color has taken unevenly. Any of the package dyes will give satisfactory results if the directions are carefully followed.

The dark-cotton materials and the black stockings have their renascence in a hit-and-miss rug with black border. There are several kinds of rag rugs, but all require material cut in strips about a half-inch wide. Satisfactory woven rugs can be made of strips as wide as an inch, but they are not so smooth as those woven of narrower strips.

Every woman knows the woven rugs our greatgrandmothers made on their looms. But does she know that there are institutions and schools where they would be glad to weave her material into rugs like them—and for a very small sum, perhaps just enough to cover the cost of the warp which they would furnish? The superintendent of schools or the public library can often furnish addresses of schools or institutions where such work is done. If there is nothing of the kind in the district, one or the other would no doubt gladly get the address of the nearest place where the work may be sent. Parcel post makes the exchange of materials cheap and easy. But it is possible to make the whole rug at home. The next chapters tell about three ways of doing it.

All soiled pieces must be washed before dyeing. If garments have cotton linings they should be ripped out. All the light materials should be kept apart from the dark, so that they may be dyed the lighter colors. Dark goods can be dyed darker only unless they are first put through

a bleaching process.

But before attempting to bleach any goods that has been worn, boil it with plenty of mild soap to free the grease and dirt. Then prepare a bleaching bath by adding one-tenth of an ounce of chloride of lime to every gallon of water. There should be enough water to cover the material. Chloride of lime is a white powder that can be bought from any druggist. Before immersing the goods be sure that all the powder is dissolved (heating the water will hasten that)

and after immersing be sure that all the material remains covered. When the goods are bleaching the temperature of the water should be kept at about 100° Fahr., never higher. The time to leave them in varies from one-half hour to an hour, or even more, depending on the tenacity of the dye in the stuffs. One can easily see whether the color has all been discharged. The bleached stuff will be a muddy gray.

While this process is going on the next bath, or after-treatment, may be got ready. Add one and one-half ounces of concentrated hydrochloric acid (also called muriatic acid) to each gallon of water. Follow the bleaching with an immersion in this acid bath, leaving the goods in until no odor of chlorine remains, usually about fifteen minutes. This stops the action of the chlorine, which would otherwise attack the fiber after the dye was all removed. The stuff is then run through a third bath, made by adding twofifths of an ounce of sodium hyposulphite to each gallon of water, in order to rid the material of any trace of chlorine. If there were some pieces that would not bleach as gray as the rest with chlorine, their color will be reduced in the "hypo" bath. Fabrics to-day are dyed with a variety of chemical dyes, some of which yield more readily to one bleaching treatment and some to another. It is, however, not possible to sort out the different kinds, so all the goods must go

through the two bleaching baths. After the sodium hyposulphite treatment, the material should be boiled in a soap solution made by allowing one-half an ounce of mild soap to each gallon of water. The material should remain in about fifteen minutes, then be rinsed, and either dried or put right into the dye bath

Besides the commercial package dyes that can be got at every drug-store there are dyes that are marketed in bulk, most of them in powder form, and sold by the pound. They are not so commonly kept in stock as the package kind, but the druggist should be able to order them, on the request of a customer, from the large Eastern dealers handling dyestuffs.

Among the several classes of these dyes there are two for which the home dyer would have the most use—i. e., the direct cotton dyes or salt colors, as they are also called, and acid dyes. The latter are for silk and wool. The former dye linen as well as cotton. With a pound of red, blue, and yellow from each of these two classes, the home dye-shelf will be well stocked with dye. In addition to the color there should also be a bag of common table salt, and a pint of dilute sulphuric acid. Have the druggist make up a 40-per-cent. solution rather than keep the concentrated form on the shelf. The latter produces painful burns that take a long time to heal, and accidents might occur with it.

A good plan is to dissolve an eighth of a pound

of each dye powder in a two-quart bottle of water and use from this when doing the dyeing. To complete the equipment for home dyeing there should be at least two tubs—one for the dye bath and the other for rinsing—three or four round sticks about twenty inches long for lifting and stirring the goods in the bath, and a stove. It would be an economy to have also two large dishpans and two smaller pans for small-quantity dyeing. The laundry is a good place to work if there is light enough, and the use of a wringer is a convenience, though it is not a necessity. The dye can be got off of the rubber rollers with sand soap. A pair of rubber gloves may be considered a necessity by some, but they are extremely awkward to work in. Either a clotheshorse or a line will answer for drying purposes. If the dye and small portable equipment are all kept together, many a fabric can be dyed just the required color or shade without much work, and one gets lots of fun out of doing it.

There are a few general directions that apply to the use of both kinds of dye. The material to be dyed must be clean and well wetted before going into the dye-pot. There should be enough dye liquor to completely cover the immersed goods, and while the latter are in they should be kept moving in order to prevent doubling into folds that would not allow the dye to penetrate evenly, and to prevent some parts from settling on the bottom of the pot and getting too hot.

The amount of dye to use depends upon how full and deep a shade is wanted. It is always safe to start with a weak bath and add more color if needed. Be sure to remove the material before adding the color, and then stir the bath well before returning the goods to it.

To dye cotton goods with the salt dyes mentioned above, start the water for the bath heating, and in the mean time strain the dye from the stock bottle, if even dyeing is desired, through a cheese-cloth. Add the dye to the water, and when the bath is hot immerse the wetted cotton in it and stir. If only a light shade is required leave the stuff in until the color is obtained, but if dyeing for a dark color, table salt (one-half cupful to every gallon of water) should be added to the bath and the goods boiled at least twenty minutes. After the dyeing is complete the goods need only be rinsed in cold water, shaken out, and dried.

All the velvet, as well as silk and wool pieces, may be dyed in a bath made with the other class of colors, the acid dyes. Velveteen is a cotton stuff and must be sorted from the velvets and go into the first-described dye-pot.

Into the water for the acid bath pour the dye from the stock bottle, and for each gallon of water add a teaspoonful of the 40-per-cent. solution of sulphuric acid. Stir the bath well to mix the ingredients and then immerse the wetted goods. Allow it to heat slowly, but never boil.

During the heating stir and change the position of the material constantly until it is the shade desired. Then rinse free every trace of acid, and the goods are ready to be dried. The acid is added in the first place to assist the dye in uniting with the fiber of the material.

The three cotton dyes may be mixed to produce other colors, and so may the three acid dyes, but the two classes do not mix. To make green mix the blue and yellow. The dominance of one or the other will make the green either a bluegreen or a yellow-green. Red and yellow will make orange, and red and blue violet. In order to dull the color resulting from any of these combinations, add just a very little of the third color; for instance, to make a dull orange add a little blue to the red and yellow—not too much, though, else brown will be the result. If one of the original three colors needs dulling add just a little of each of the other two.

In this way, out of red, blue, and yellow, one can get a whole gamut of color. Most of the package and tube dyes may be mixed to get other colors. When mixing the latter it is safest to mix only the primary colors, red, blue, and yellow. It is not necessary to do all the dyeing at one time. Not even all the material that is to be dyed the same color need be done in one operation. If dye liquor is left over it can be saved, so the process is neither long and tiring nor time-consuming.

Sharp contrasts of dark and light or brilliant and dull color should be avoided in a rug. Rugs containing them seem to leap up from the floor. A lovely rug was woven entirely of old velvet. It was six feet long and nearly four feet wide. The ends, for just a little over a foot, were striped, starting with a very deep green-blue about three inches wide at the ends, and from there varying in bands of different hues of blue, with an occasional streak of green until the body part was reached. This body was a dull green-blue somewhat lighter than the bands at the ends.

The warp of the rug was mercerized cotton dyed a full brilliant green. It gave a sparkle of color over the entire rug and "drew together" the blue and green of the weave. As much of the original material was dark, it was bleached and then dyed to the right green or blue.

Another velvet rug somewhat livelier in color was planned for a room that got very little sunlight. So the pieces of velvet were dyed orange—a deep, dull orange for the larger mass, with all hues and shades of orange for stripes. In weaving this rug care was taken to avoid having the light stripes of rose-orange and yellow-orange come next to a stripe of the darkest color. The gradations of hue and tone were most gradual.

The warp was mercerized cotton dyed in the same bath with the middle tone of orange used in the weaving. The material for that color was an old velveteen sport skirt—a cotton material, so, of course, the same kind of dye would do. To fasten the warp ends they were knotted in with the five-inch-deep fringe that finished the rug.

Just a word about warp for these rugs. Mercerized cotton is quite as strong as linen of the same size and much cheaper. The chemical process of mercerizing gives the cotton additional strength, and its soft luster adds life to the appearance of the textile. It must, however, be of good quality and strong, as when the warp gives way the rug is gone.

## XIV

#### RUGS BRAIDED, CROCHETED AND HOOKED

PERHAPS the most possible rug for every one to make at home is the braided rug, because the work requires no special tools or equipment. Just a large coarse needle and some very strong thread are all that is needed. Regular linen carpet-thread can be purchased in any notion department or from a carpet-store.

Select the heavier wools and the velvets for this kind of rug-making, so that your finished mat will have body. In the woven rug the warp gave additional weight, and in the hooked rug, told about later on, the canvas backing gives it firmness. But whether a braided rug will lie flat on the floor without wrinkling depends entirely upon the kind of material selected.

So choose firm materials, preferably wools or velvets, bleach and dye where necessary, and cut them into one-inch-wide strips. They may be cut either on the bias or straight of the material. The latter is preferable because the strips will have less stretch. However, if the material

is of the kind that ravels readily, cutting it on the bias would be the better way. In any case, the two ways of cutting the strips will not work well in the same rug because the "give" or stretch will be too uneven; either all bias or all straight strips for the whole rug. If it is to be of velveteen the strips should be cut one and a half inches wide and folded through the center so that the cotton back will not show and the rug will be reversible.

The joining of the strips can be accomplished by simply overlapping. But it is much easier to braid them if they are all sewed together and each color rolled into a separate ball. The joining will be least thick if the two ends are cut on long biases and one lapped over the other for half an inch and sewed flat. They should be sewed by machine, of course. It is quicker.

The braid itself is either the simple threeor four-strand kind. And usually the effect is more pleasing if the strands are all the same color. Different colors can be introduced as bands or stripes when sewing the braid together.

It is easier to make round or elliptical rugs than it is to make those of rectangular shape. A paper pattern just the size and shape that the rug is to be when finished is a great help in keeping the work symmetrical. And the widths of the stripes can be marked off on this, too.

The sewing starts with the center and the beginning end must be securely sewed. If the rug is to be elliptical this "end" is a foot or more long, and acts as a foundation for the rest of the braid to coil about. It is a good plan to lay out a length of braid on the floor and wind about it several times in order to be sure of just what beginning length is needed for the proportions of the desired ellipse. An elliptical rug has a tendency to approach a circle as its size increases, so be sure to take a long foundation.

As to the color schemes of braided rugs—the suggestions that were made for the woven rugs apply as well to the braided kind, with this addition—a color at least as dark as the darkest tone in the body of the rug is more effective for the outer finishing border than a light color would be.

## THE CROCHETED RUG

Another rug that is similar to the braided rug is one crocheted with a heavy needle. A crochet-needle that is a quarter of an inch thick just above the hook should be used. With this the strips are "worked up" in tight single crochet. Cotton or silk cut into inch-wide strips on the bias are the easiest to manipulate. And small mats are usually more satisfactory than large, because neither material nor manner of working produces a textile with much body.

#### THE OLD-TIME HOOKED RUG

The old-fashioned hooked rug has been brought down from its attic prison, and is even lovelier now with its faded colors than it was fifty years ago, when its place was usurped by that hideous impostor, the large-figured Brussels carpet. These rugs were made by the thrifty New England housekeeper on the coarse cotton sugar-bag after it had been soaked and boiled to shrink the material and get out all the dressing. For the top of the rug worsted yarns were used, as well as cloth strips. But, of course, the latter made the rug economical. The cloth strips are cut three-quarters of an inch wide on the bias, but need not be sewed together.

The making process is simply hooking a loop, about one-half inch long, of the cut strips through canvas or some other loosely woven cotton or linen fabric. A short awl with its point turned up makes a fine hooking-tool. Each loop is hooked through close to the last one until the whole surface of the canvas is covered. Then the loops are shorn to form a piled surface on the right side. And the wrong side of the rug is backed with another piece of canvas to prevent the work from pulling out. Some makers give the wrong side a thin coat of sizing, but that seems unhygienic and quite unnecessary if the work is backed. And, too, the glue is apt to make the rug stiff.

This kind of rug admits a wider range of design than the others. Pattern is quite possible, but only large masses work out with good effect. Small patterns or those with much delicacy of detail lose that quality, and their form as well, in the making. The pattern should be drawn on the canvas with black crayon as a guide for working. But to be sure of color effects a cartoon should be made on which the colors of the material to be hooked have been rendered as near as possible in crayon. This will be a help in working, and to have one is the only sure way of avoiding mistakes.

## XV

HOW TO MAKE SIMPLE LOOMS AND WHAT TO WEAVE ON THEM

THE next time you think of making a bag, whether it is to be a small, dainty affair just large enough to carry a handkerchief and vanity-case, or a larger bag to hold pick-up sewing, or even a school-bag, try weaving it on a loom that you can make yourself out of cardboard.

The cardboard must be very stiff. Stein-bock board is the name of one kind. Book-binder's board is good, too; in fact, any card-board so heavy that it will not bend. Cut a strip the exact width that the bag is to be when finished, and twice as long, plus two more inches. The cutting should be done with a sharp knife against a ruler's edge, because cardboard that is heavy enough for a bag loom could not be cut with the necessary clean edge if scissors were used.

After the strip is cut, rule a line one inch below and parallel to each end. The threads over which the weaving is to be done (the warp) are

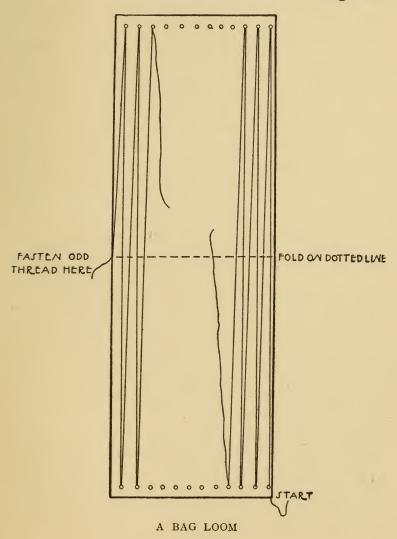
to be stretched between these two lines. So holes must be punched through the cardboard on the lines, in order to fasten the warp. A thumb-tack is a good hole-puncher. Their distance apart depends upon how close together the warp threads must be, and that in turn depends upon the kind of material to be used for weaving. Various kinds of materials and combinations for bags will be talked over a little later. For this particular loom, suppose the warp threads need to be one-eighth of an inch apart. The holes must then be punched one-fourth of an inch apart, because two warp threads will be held at each hole.

To fasten the warp into the hole, take two heavy needles threaded with strong thread. The kind used to sew on shoe-buttons is good. Fasten the end of the warp thread into the first hole on one end of the cardboard by means of a knot or pin. Then carry the warp across to the first hole on the opposite end. Stick one of the threaded needles up through this hole, cross the warp thread, and stick the needle back through the same hole. In this way the warp is held by a loop of the needle thread. Carry it again to the opposite side, and here the second needle should secure the warp to the second hole. Continue warping the loom until each hole holds a warp loop. It is more convenient to roll the warp in a ball or have it on a spool when warping. When the last hole is reached, do not cut off the

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warp, but fasten the threads of both needles and cut these.

The loom must now be doubled through the



middle, with the warp threads on the outside. Very heavy cardboard bends with a cleaner edge if it is scored first with a sharp knife. The scoring of the loom through the center must, of course, be done before it is warped.

Here is an important detail—often there is not enough elasticity to the warp threads to stretch over the turn when the loom is bent double. An allowance for this can be made by placing a half-inch-thick block of wood across the loom and warping over it. Just before bending the cardboard the block is removed and the slack that follows will be taken up in the turn of the cardboard. The two halves of the cardboard must be fastened together at the top, so that they will not shift after the weaving begins.

When the loom has reached this stage there will always be an even number of warp threads, and it is necessary to have an odd number in order to weave around over and under each warp thread without skipping. The odd thread is added by carrying the ball of warp from the last hole in which it was secured down to the bend of the loom. It should be fastened there, and the remainder cut off. This finishes the loom.

It is easier to begin weaving near the bottom of the loom. A long bodkin makes a convenient tool to carry the weft and for picking up the alternate warp threads. There are just two points to be very particular about when weaving. The first is to be sure the warp threads are parallel when the first two rounds of weft are woven in. After this there is no danger of the warp twisting. The second point is to weave loosely enough. The weft must do the undulating, never the warp. But if the weft is pulled too tight the warp is pulled out of place. Bags are more attractive if the weft is packed close together, so that the warp does not show.

If the weaving is to have pattern, this must be outlined on a paper and parallel lines representing warp threads ruled through it. These lines would, of course, be the same distance apart as the warp on the loom. All curves in the pattern become straight lines and right angles when woven. Patterns for weaving look much like the cross-stitch patterns one can buy; indeed, cross-stitch patterns can be used for weaving.

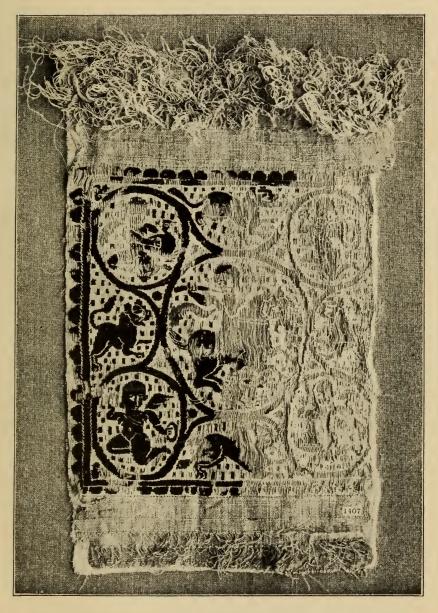
Pattern must be woven in first. Find where its position in the loom is to be and how many warp threads it covers, and then weave it in, simply turning when the edge warp thread of the pattern is reached and weaving across to the edge warp thread on the other side of the pattern. The background is woven up to the pattern edge, turned and woven the other direction until another pattern edge is met. Slits will be formed in the weaving between pattern and background. It is well to plan a pattern with an irregular outline so as to avoid long slits. However, these can be sewed up when the weaving is finished. This

was often done on the old tapestries one finds in museums.

Now about materials for weaving. Use silk floss loosely twisted for small bags, and weave it over a fine linen warp. The warp threads will have to be as close as a sixteenth of an inch apart for a bag of fine silk. The linen for the warp comes on spools, and is sold at either the notion-counter or in the needlework department of any large shop. No. 20 or 25 is a suitable size for small bags.

A bag woven of wools over coarse warp has quite an old-tapestry look about it if the wool is harsh and loosely twisted. The regular tapestry wool is carried by some needlework departments, but if they do not have it, try an Orientalrug shop. One where rugs are made over and mended would be sure to have a supply of coarse wool and usually a wide range of colors. Bags made of this material must be at least nine inches wide and eleven inches long. Either a coarse linen warp or a firmly twisted cotton will answer. The space between warp threads can range from an eighth of an inch to about a quarter, depending on how coarse the wool is. The pattern, too, controls the spacing. One with much detail would require a closer warp than a simple flat pattern. The simple pattern is easier and usually more effective in coarse wools.

A bag with a body of dull yellow irregularly dyed had a four-inch-wide band around the lower



A PIECE OF COPTIC WEAVING THAT SHOWS CLEARLY HOW A PATTERN MAY BE WOVEN IN AND THE BACKGROUND WOVEN AROUND IT



part, patterned in large, gay flowers. The largest of the flowers were the width of the band in diameter and their few simple petals were flat masses of dull violets and blues. Here again the wool was irregularly dyed. The weaver did the dyeing herself with the commercial dyes that come in tubes. For a bit of red she used some left-over cakes of Easter-egg dye, a perfectly satisfactory dye for animal fiber that will not have to be washed. Small masses of blues and greens were woven into the band with a dull-silk floss. A silk of high luster would have dominated unpleasantly if used with the comparatively lusterless wool.

The loom for this bag was warped one-eighth of an inch apart because the pattern was somewhat detailed in the small spots of color. So to save work the dull-yellow body above the border was woven over two and under two warp threads at a time. This also added a variation in the texture of the weave.

Another bag was woven of fine, undyed jute. This material can be bought in twine-and-paper-supply houses or shops where rope is sold. This bag was made of four-ply jute slightly less than one-eighth of an inch in diameter. The loom was warped with the jute one-fourth of an inch apart and the weft had that same space between each weaving. A lattice, or open, weave was the result. Color introduced in close-woven bands of varying widths made a stripe design across the

bottom and a single band of close weaving finished the top. Cords of twisted jute, three strands for a cord, drew the bag together. The cords were slipped through rings sewed to the top of the bag. The most attractive rings for this purpose can be found in a first-class saddler's shop. Small ones, the kind that will do for a bag, are called martingale rings.

Another simple way of making a slip for bag cords is to lay several foundation threads and buttonhole over them. This would hardly be possible with thick jute. The closely woven bags of fine material can be made with slits around the top for the drawing-cords. The slits are made in the same way as they were along the edges of the pattern.

Flat pieces of weaving can be done on cardboard looms constructed like bag looms. For a flat piece, however, the cardboard need be only two inches longer in one direction than the finished piece of weaving. These two extra inches allow for an inch margin on each end for the holes that hold the warp. The latter is fastened to the cardboard in the same way as in the bag loom.

Pieces of wool tapestry for foot-stool covers, fire-screens, and hall benches or chairs, ends for table runners woven of linen floss, and wide bands of linen or wool for portières, are among the useful furnishing stuffs that can be woven on these simple cardboard looms. If the band of weaving is long,

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it usually is necessary to brace the loom on the wrong side with thin strips of wood to prevent bending.

The process sounds complicated in the description, but is simple in execution, and the results obtainable will repay effort spent in selecting designs, colors, and materials.

## XVI

#### WITH BRUSH AND PAINT

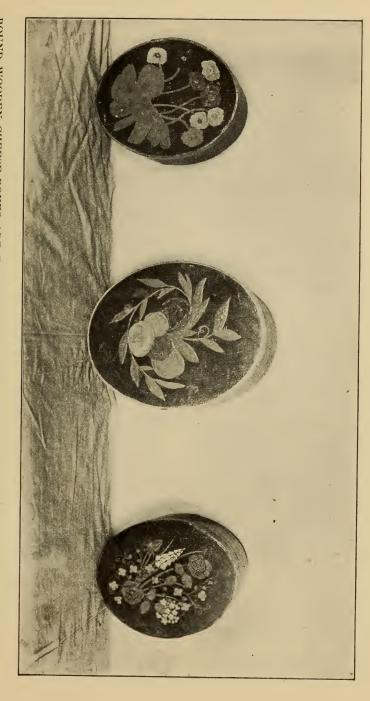
HERE is a chance for color—just as varied and as gay as possible. And when once you are deep in the paint-cups no end of things about the house will present themselves for reclaiming or turning into something new by the magic of a fearlessly wielded brush. Many of them will be the things you have always hesitated to throw away, but knew would accumulate beyond the storage capacity of the attic or top shelf in the closet. Candy-boxes, hat-boxes, the big and little boxes that once held pills, fruit boxes and baskets; in fact, every well-proportioned and neatly made box of cardboard, wood, or tin may be transferred into an acceptable gift or a charming and useful appurtenance to some room in the household. For instance, make the guest-room dressing-table a powder-puff box out of a large pill-box or a small, round candy-box. Paint it a fresh apple-green with a wide violet band around the edge of the cover; inside the band add two finer lines of yellow. Glue to the center of the cover, for a knob and to please your fancy, one of those strange fruits that may be made out of a scrap of silk stretched over a ball of cotton. Use a bit of taffeta the color of the violet band, touch it with a brush dipped in red water-color, thrust a clove deep into its cotton filling to make the blossom end, and then add a dash of leaves from last summer's hat trimmings. When fruit and leaves are glued in place, paint the inside of the box yellow or torquoise blue, and finish both inside and outside—including the fruit—with several coats of shellac.

But now to begin in the very beginning, at the paint-shop getting a supply of materials. For painting on paper or cardboard buy tempera water-colors, sold also under the name of showcard colors. Those prepared with sizing are more permanent. They are simply opaque water-color and may be washed off. That is why one may be so fearless and dash on any colors one's imagination prompts. Of course, washing cardboard boxes must be done with care, not allowing them to become soaked, else they will blister. The show-card colors may be had in black, white, and a variety of hues, and they come in two-ounce bottles or larger quantities. These colors are for the small things or for picking out a pattern on furniture.

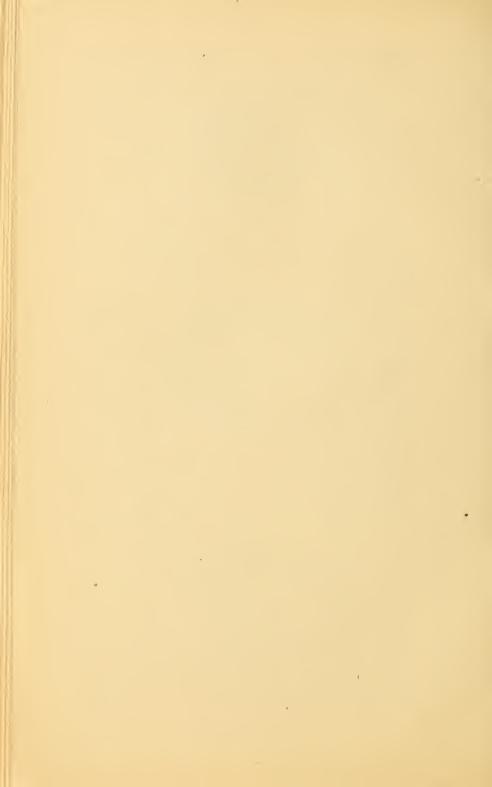
For painting furniture or large surfaces use automobile paint. It is put up either in paste or in liquid form. The former needs thinning with oil and turpentine. These make two more items to be added to the stock-shelf of the home decorator. Boiled linseed oil will also be needed for "rubbing down" in a later stage of the painting. No definite proportions can be given for the thinning of the paste, because the required quantity varies with the condition of the paint. Begin with a little color, pour in about a teaspoonful of oil, rub it in and then thin down gradually with turpentine. More turpentine than oil is required. If too much of the latter is used the paint remains sticky for days. Turpentine will also cut the gloss of any liquid oil paint in case it has too much.

There are several reasons for advising automobile paint instead of the ordinary kind: it is smoother, is mixed with a "drier" that shortens the time needed for drying after its application, and the paste form is a condensed way of keeping it—a way that not only takes up less space on the shelf, but is economical, since just the required amounts may be mixed as needed.

Ordinary paint, even a good quality, is cheaper than automobile paint and will do very well for garden and porch furniture or even with more critical work. This, too, comes in a condensed form—i. e., ground in oil—and needs thinning with turpentine. Add Japan drier, in the proportions of one ounce to a quart of paint, if you wish to hurry the drying so that the next coat of paint may go on.



ROUND WOODEN CHEESE-BOXES ARE EASIER TO PROCURE AND QUITE AS ATTRACTIVE AS THESE WHEN DECORATED



A Japanned paint must be applied with a camel's-hair brush—not bristle—and spread lightly. A rubber-set brush costs more to begin with, but does not shed its hairs or bristles in a short time, as will one set with glue or cement. Bristle brushes are suitable for a paint without drier and cost less than the hair brushes.

The best size to get depends upon the nature of the painting. Small boxes may be done rapidly and easily with a three-quarter-inch brush that is not too thick. Of course, pattern must go on with a smaller one. The Japanese brushes, the kind they use with their ink stones, are good for decorative work and are so inexpensive that one can well afford a generous supply—one for each of the show-card colors. This saves time and the trouble of cleaning a brush for every new color.

Larger surfaces require a wider brush—one about one and a quarter inches wide for the work of average size; that is, chairs, tables, chests, and window-boxes. By the way, one of those most useful "cedar chests" may be made of a wooden shoe-box—the kind that shoes come packed in from the factory. Paint and decorate it outside. Sandpaper the inside smooth and then treat it to sprinklings of cedar oil at intervals of a week until it is strongly aromatic. This makes a most satisfactory substitute for a real cedar chest.

Add two sizes of sandpaper to the stock-shelf

if any wood-painting is to be done, No. 1 for the first rubbing down and No. 00 for finishing. Always rub with the grain and wipe off the powder that collects from the rubbing. It fills up the crevices, deceiving one into thinking the article is perfectly smooth, and the truth is not discovered until a first coat of paint washes the sandpaper dust free.

There are two very good final finishes. One is prepared wax. It comes dark and light, but the latter is usable for either kind of paint. Only a little need be rubbed into the surface of the wood with a cloth after the last painting is done. It must be allowed to dry for at least an hour; overnight is better. Then the surface is polished by rubbing with a soft cloth—old linen is excellent.

Wax cannot be used over tempera colors. These should be finished with shellac. And be sure to get white shellac, for the whole color scheme would be changed upon the application of the amber kind. If it is too thick, thin down with denatured alcohol. The consistency of thin cream is about right. Apply it on a dry day, if possible, else it will go on "clouded." That effect disappears in time, to be sure, but is annoying while it lasts, because the colors do not show through true. Some of the color in a pattern usually gets dim or rubbed off with the first application of shellac, but this may be touched up before the next coat goes on.

A real English lacquer finish may be got by

-well, almost an indefinite number of shellac coats. The more that are put on the deeper will be the color effect and the harder the surface a paper box becomes quite like wood when treated in this way. So it is entirely practical to spend time and effort on paper foundations. After the first two coats of shellac, a rubbing down with powdered pumice and boiled linseed oil must be given the surface before another coat is spread. Simply saturate a soft cloth with oil, dip it in the pumice powder, and rub the surface gently. The object is to get off any small irregularities and rough places. Wipe away the powder with oil and then dry the surface before shellacing again.

You see there are a number of items besides color to be got at the paint-shop, and for convenience in reference they have been listed at the end of the chapter. When it seemed possible, quantities were suggested. However, the amount of paint could not be estimated because that depends upon how much surface is to be covered. The salesman in the paint-shop should be able to advise there.

Two more items are mucilage and talcum both for the lacquer-work, to raise some of the pattern above the rest. Upon close examination of old work one frequently finds this treatment on details of the design. To reproduce the effect mix talcum and mucilage to a consistency where a tiny bead of it dropped from the end of the mixing match-stick will retain its shape. Then

apply it on the pattern to be raised, let it dry, and after this it is ready for the color. One must be careful in shellacing a surface that has been raised. Shellac is apt to collect in the crevices as it runs off the promontories. Use a fairly dry brush.

The things of tin to be painted are not quite so numerous as those of paper and wood. However, a most attractive row of flower-pots for an indoor window-garden may be painted out of small tin pails after the handles are removed. And a watering-pot, the kind with a very long spout for reaching the farthest plants, may be painted and decorated to go with them. Then there are the pails for outdoor gardening—there is no reason why they should not add to the gaiety of the garden their own sparkle of color instead of going about as plain and practical galvanized iron or tin.

Paint will preserve the latter from rust as well as make them more pleasant to look at. The old-time tin candlestick with reflectors that direct the light and protect the flame from gusts of wind, make a candlestick more practical, and gay paint in pleasing pattern makes it more cheerful. Paint a case for safety-match boxes to go with it. And the old-time tin tray is returning to favor, or perhaps it is that we are beginning to appreciate its decorative possibilities in a room. No doubt many a household has one of these castaways in the attic or barn. If enough

of the original design remains to follow, by all means restore it. But if not, decorate it anew after the old-time pattern. One of these on an oblong tray with wide, rolling rim and rounded corners had a center panel of buff. The background of the rim was black, with polychrome flower and fruit decoration laid on it in primitive simplicity. An old Colonial tray had a serpentine rim, black, and banded with gold. On the center panel was a large basket of fruit, flowers, and birds arranged from it in the stiffest, primmest fashion and the gayest colors.

A decorated tin muffin-cover might accompany this tray to the breakfast-table. Make it of a deep tin pan inverted, and repeat the pattern of the breakfast china for its decoration. A wooden knob, gilded or painted, is the finishing touch on the center of the top.

Small book ends of lacquered tin are a convenience on the study table or desk. They come, undecorated, just large enough to hold a few reference-books—the French-English dictionary, a book of synonyms, city-street directory, and any other small volumes that one needs for quick and ready reference.

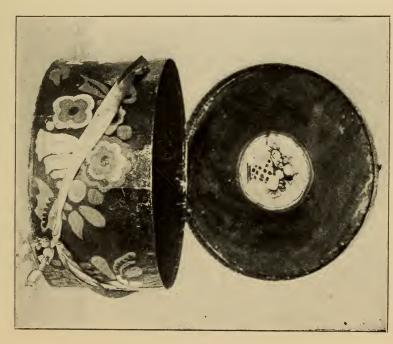
And then, of course, the tin box for candy. Nothing is quite so nice in which to send homemade confections as one of these lacquered boxes. But inside leave the shining tin unpainted, or the contents may become flavored with turpentine and shellac.

The automobile paint mentioned above does for tin also. It must have plenty of turpentine in it and very little oil, else it will creep together when applied. In case the right consistency cannot be got without adding so much oil that the paint will not spread on tin, start with a metal prime coat. It may be got of any dealer, but is put up in a limited line of colors. A mediumlight, neutral tone would be the best ground coat for a majority of over-colors. The tempera paints will spread on tin after a primer, so that eliminates the stock of oil-colors one would otherwise have to get for laying on the patterns.

Painted trays may be finished with several coats of shellac if they are to be carefully used in service. But on a tray that is to carry hot things, and one that may get wet, spar varnish is a better finish. It is a very hard-drying kind of varnish, made for outside use, principally ship work. It is, however, just a trifle amber and that changes the colors over which it is applied. For garden utensils only a spar finish is practical.

A lamp-shade that is just right in shape, color, and design for the room is really difficult to find among the shops of even large cities. And to get one for over some particular bowl that needs only the right shade to turn it into a wonderful lamp is next to impossible. But when one can make the shade at home, not only wonderful lamps, but shields for side lights, and all manner of light-screens are possible.

THIS PAPER SHADE HAS A CUT-OUT PATTERN, AND THE SILK LINING THAT SHOWS THROUGH IS TOUCHED WITH COLOR



THIS IS WHAT MAY BE DONE WITH AN ORDINARY CARDBOARD HAT BOX



Any tough paper makes a good foundation—heavy water-color paper and paper parchment are the two kinds frequently used. The former has a rough surface that is a better texture for some effects than the smooth parchment finish. Mark out the panels or shape of the shade and outline the design very lightly with pencil. Then apply a background color, using water-color for it, and later for the design, too. To do this, slip a large blotter between drawing-board and paper. Mix plenty of color and apply it freely, beginning at the top and working down and across the paper. The blotter absorbs any moisture that soaks through.

Let the background dry until the shine disappears from its surface, and in the mean time get ready the colors for the pattern. These should be put in as rapidly as possible. Then allow the work to remain on the blotter until it is perfectly dry, but during this time keep the entire surface weighted to prevent buckling.

The next thing is to cut out the panels or the circular shade and fasten it over the wrapped-wire foundation that has been made to measurements. Details about the latter are given in Chapter XI in the part about cane candle-shades. If the paper shade is in panels each section may be sewed to its neighbor with heavy thread, catching into the wrapping of the foundation wires at the same time. These seams will be hidden with the finishing gimp. If the shade

has only one seam it should be lapped and glued, making the join as inconspicuous as possible. Then the paper may be slipped over the wire foundation and held in place by sewing it to the top and bottom circle wires.

When the shade is in place give it a number of shellac coats to protect the color and finish the surface. They may be applied before the shade is fastened over the frame, but in the first way the shellac helps mold the paper over the wire. When the shellac is dry remove the bright surface polish with oil and pumice—just enough oil to bind the powder.

Additional interest may be given a pattern by cutting out parts of it, introducing in this way the texture of the lining into the design, and also giving intense spots of light to those parts. They may, of course, be tinted. A stencil-knife is the best tool for the cut-work. Whole designs punched out in spots of three or four diameters are effective with little work. A punch made with six different-sized diameters may be bought in any large hardware-store. The problem of what to do for the high center hall light would be solved by an inverted shade with "punch-work" design.

Plain gilt or antique silver gimp is suitable for finishing the seams and edges of paper shades; or the narrow beaded and embroidered gimps one finds among the dress trimmings may repeat a feature of the design in a pleasing way.

If at all uncertain about the kind of shade for a particular place or when stranded for ideas as to shape and design, look over a dozen or more numbers of the best magazines that have the home and its furnishings as their subject. Back numbers are always kept in the reference files of the library. And although you may not find exactly what you would care to reproduce, the illustrations are always suggestive.

The list of supplies for the home decorator's paint-closet follows:

Automobile paint—paste form advised.

Tempera colors—sized.

I pint boiled linseed oil.

I quart turpentine.

I pint white shellac.

I quart denatured alcohol.

I pint spar varnish, as light as possible.

I camel's-hair brush \ width depends upon size of

6 Japanese ink-brushes—small.

I pound powdered pumice.

I pint prepared wax—white.

I box containing small bottle of gilt, mixing oil, and brush.

## XVII

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## BATIK DYEING

HUNDREDS of years ago in the Far East workers of textiles painted and dyed with results that to-day are still an inspiration in design, color, and workmanship. The story of how they did their work and some of the simple tools have passed down the years to us with the stuffs, so that the craftsman to-day can do the same kind of thing in his home that those craftsmen of long ago did in theirs.

The modern chemist has smoothed the way by shortening the dyeing process from days and weeks to minutes and hours. He has made synthetically the same dyes that years ago were brewed so long and patiently from vegetables. Not only is the dyeing process quicker now, but results are surer and, for the trained person, entirely under control of the worker. To achieve the same soft colors that the ancient dyer got becomes a challenge to the skill and nice color sense of the modern dyer. The former worker got them in great part, not through his volition,

but owing to impurities that were naturally in the vegetable source of his dyes.

Among the dvers of old times were the Javanese, who did a kind of patterned dyeing which the Dutch explorers of their island later introduced into Europe by the Javanese name batik, a term meaning painting in wax. And that is what part of the process really is. The pattern is drawn on the fabric with molten wax, and after it hardens the cloth is dipped to dye it a darker color. The wax is then boiled out, leaving a light pattern on a dark ground. The process does not, however, limit the textile to two tone effects only. A skilled worker can dye and redye any number of colors on the fabric, always waxing the part that must remain untouched by the next bath. The process is also known as resist dueing, because the wax resists the penetrating power of the dye.

A mixture of beeswax and paraffin, marketed under the name of impure beeswax, adheres to cloth better than pure wax does; or resin melted with the wax will also prevent its flaking. A piece the size of a walnut with each half-pound of wax is about the proportion to use. There are various ways of applying the pattern in molten wax to the cloth. And the choice of these depends largely on the weight of the fabric and the size or detail of the pattern.

Large simple masses like those in the batikpatterned hanging illustrated in the frontispiece can be outlined on the material in pencil and then waxed in with a brush. One unit of the design for this textile was cut out of stiff paper and used as a pattern to trace around. By shifting the pattern down a space the design could be easily repeated. Of course, the spacing of the entire piece was carefully planned before any outlining at all was done. The material is a heavy quality of unbleached muslin, an inexpensive material that can be utilized with good effect in house-furnishing. Blue and white batik-patterned bedspreads made of heavy muslin have charm and individuality. It also makes most satisfactory over curtains for the bungalow or country house that can be tubbed every week if necessary. Washing seems to improve the texture of muslin sheeting. If a very heavy quality is used the curtains may be drawn together at night, dispensing with the roller that is ugly even at its best. A couch-cover of this same useful material with gaily dyed cushions might be a way of introducing a color note into a dull room.

But to continue with batik-work—another way in which wax and pattern can be applied to the material is to brush the wax into the cloth through a stencil. This should be cut from the heaviest stencil paper and then varnished after cutting; or better still, but hard to make—a stencil of thinnest sheet metal. With either kind of stencil care must be taken not to wax beyond the pattern on to the frame, otherwise a ragged edge is

left along the waxed pattern on the cloth when the stencil is lifted. If the stencil is delicate or of thin paper, a safer way is to trace around it with pencil and then wax within the traced outline. A brush with rather stiff bristles not more than one-quarter of an inch long gets the wax into the fiber better than the usual stencil-brush.

Either of these methods of patterning the wax works well with large, massed designs and thick fabrics. But for delicate patterns or small details a little wax pipe similar to those used by the Javanese, called a tjantings, must be used. It consists of a tiny cup, about the size of half an egg-shell, with a short-tubed spout containing a capillary opening from which the melted wax can be poured in a fine stream. The cup is fastened to a short handle so that it can be comfortably manipulated when the design is traced on the cloth with the melted wax as it flows from the spout.

The wax must be kept at just the right temperature. If it is too hot it will spread beyond the pattern, and if too cool it will not penetrate the fiber through to the under side. And it is most important that it does penetrate, else the wax may flake off in the dyeing or the pattern will be blurred on one side. Some fabrics require the wax hotter than others, so a good plan is to have a piece of the same material that is to be decorated as a sample on which to try out the wax. A small alcohol-stove or a can of "solid"

alcohol" is a convenient way to heat the wax, because it can be moved so near the place of application, saving both heat and time. A large table or board covered with blotting-paper, and thumb - tacks to keep the material stretched smooth while waxing, complete the list of necessary tools.

Now about dveing the waxed material. In the first place, it must be entirely freed from its sizing or starch, or the dye will not take evenly. The easiest way to get out all the dressing is to boil the goods in soapy water. If it cannot bear such severe treatment, soaking in hot suds and then squeezing the fabric under water will remove the dressing. This must be done before putting on the pattern, or the wax would be boiled out. And for the same reason it is necessary to dye the waxed textile in a cold or lukewarm bath. There are several makes of dyes on the market that can be used cold. Those that claim to be fast to washing do wash fairly well if the directions are carefully followed when the fabric is dyed and if the laundering is done quickly. For furnishing-stuffs that receive hard service and must get equally hard tubbings, the sulphur dyes, a comparatively new class, are the best. They are fast to light as well as water, and their naturally soft tones make them particularly suitable for dveing house-furnishing textiles.

These sulphur dyes are retailed in large or small quantities by the importers, but usually without directions for their use. From a quarter to a half pound each of red, blue, and yellow will be sufficient stock for the home dyer to begin with. The different colors in these dyes cannot be mixed with the same success as the red, blues, and yellows of the acid and direct salt dyes mentioned in Chapter XIII. The result is apt to be muddy. But they are naturally grayed and soft in tone, so really require no further treatment.

Dissolve the dye powder in hot water. The amount to use can be determined only by experimenting with scraps of material. This applies to any kind of dye. Most of the commercial package dyes state on the package the quantity of material that the inclosed amount will color; but it is always economical as well as safe to begin with a weak bath, adding more dye if necessary after testing with the scraps. And often a better piece of work results from two or three dippings in a weak bath, allowing the stuff to dry after each immersion, rather than dipping once in a heavy dye. In the former case the dye has a chance to penetrate the fiber thoroughly without fear of the color becoming too dark, and the result will not only be more even, but also more permanent. The quantity of hot water need be just enough to dissolve the dye easily, about a quart for two tablespoonfuls of the powder. To the hot water add also twice as much sodium sulphide (crystals) as dye powder. While these are dissolving prepare the lukewarm water for

the dye bath. There should be enough to cover the goods, and the containing vessel must be large, so that the material will not be crowded or lie in packed folds while dyeing. Add to the water twice as much washing-soda as the amount of dye powder that was used, and when it has dissolved pour the quart of dye solution into the bath. Stir it well. Be sure the dve bath is thoroughly mixed, and then immerse the previously wetted material. When using any dves the material must always be completely saturated with water before dipping it. Stir and turn the goods constantly while it is in the bath, and avoid having any of it stay above the surface. Part of the dyeing process, when using sulphur dyes, takes place after the goods have been removed from the bath and come in contact with the air. It is then that the color oxidizes and "sets." But this must not happen to any part of it while the goods are still in the bath, or dyeing may be uneven.

When the desired shade is obtained (the color is always much darker as the stuff comes from the bath than it will finally be, so allowance must be made), quickly wring out all the liquid possible, shake it, and allow it to hang in the air for half an hour. Then boil it in a weak solution of some mild soap until all the excess color has been removed. To make the weak soap solution shave a small cake of soap into a quart of hot water and allow it to boil slowly until the soap is

dissolved. Then pour it into about three gallons of water for the after-boiling. If more water is needed increase the quantity of soap proportionately. The wax will also boil out, but it may be necessary to change the water several times as the wax is discharged. The used wax can be collected again by saving the water of the after-boiling, allowing it to cool, and straining off the wax that collects on top.

When dyeing silk with sulphur dyes, the fiber can be protected against the alkaline in the bath if some glucose or syrup is added to the liquid, about one cup of syrup to a gallon of water that contains one tablespoonful of washing-soda in solution. Alkalines are apt to impair animal fiber and make them tender.

Wool does not dye well in a cold bath because the oil in it will not allow the dye to penetrate its fibers thoroughly except when hot. However, the majority of textiles that one wishes to dye in batik are cotton, linen, or silk, or a mixture of two of these.



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