

February, 1923

No. 198-A

SEWING HANDBOOK

FOR USE IN EXTENSION WORK

BY BLANCHE E. HYDE



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EXTENSION SERVICE
FORT COLLINS

FOREWORD

In the preparation of this reference manual to be used in Extension work among the Women's and Girls' Clubs, it has not been the intention of the writer to prepare a full and comprehensive text, but instead, to give in a clear and concise way the more fundamental processes on which all sewing is based.

SEWING HANDBOOK

FOR USE IN EXTENSION WORK

BY BLANCHE E. HYDE
Clothing Specialist

To do good sewing it is necessary to have a good equipment, or assortment of working materials to meet the needs of various qualities of material and kinds of work.

The following list will be found adequate for most work.

Needles.—The needles most useful in home sewing are known as “Sharps,” and come in numbers from 1 to 12. Numbers 6, 7, and 8 are those most commonly used. Papers of needles with sizes assorted from 5 to 10 may be purchased, but if considerable sewing is to be done it is economy to purchase a paper of each number.

Needles longer than sharps are known as “Milliners’” needles. They are not as necessary in millinery as formerly when more elaborate trimming was used on hats than now, but are especially good for basting.

Needles slightly shorter than sharps are called “Betweens,” and although they are not always obtainable, are particularly good when a very fine needle is desired, as they do not bend as easily as the sharps.

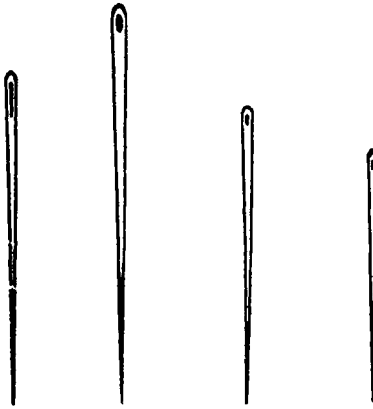
Thimble.—The thimble should be of a size to fit the second finger of the right hand, and no person should attempt to sew by hand without one.

Emery.—This is a small bag filled with emery powder and used to clean and sharpen needles.

Tape Measure or Tape Line.—This is a measure made of single or double cloth with inch, half-inch, fourth-inch and eighth-inch markings.

Tape measures for sewing come in 36-inch and 60-inch lengths and numbered in the same or opposite directions on the two sides. It is well to purchase a 60-inch measure of double cloth, with the numbers running in opposite directions on the two sides.

The ends should be sewed, or finished with flat metal clips riveted on. A tape measure with glued ends, or with metal ends merely pressed on will soon become too frayed at the ends to use for accurate measuring. When not in use keep the tape neatly rolled.



Needles from left to right—crewel, milliner's, sharp, between.

Scissors or Shears.— A pair of sharp scissors or small shears, with good points, is very essential in sewing. A six or eight-inch length is a convenient size. It is economy in the end to purchase scissors or shears of the best quality.

Shears are designed for heavier work than scissors and the style used for cutting cloth are generally made with one blade considerably thicker than the other and with the handle of the larger blade of a size to hold the second, third and fourth fingers

of the right hand and the handle of the smaller blade of a size to hold the right thumb. This brings the smaller blade underneath. The first finger of the right hand should be held just under the smaller blade.

Scissors may have both blades alike, in which case sharp points are possible, or one blade may be slightly heavier than the other. The handles of scissors are generally alike.

Scissors and shears for sewing should not be used for cutting paper, lamp wicks, flowers, or for other household purposes. When dull they should be carefully sharpened by some one who understands the work. If taken care of good scissors and shears will last a lifetime.

Pins.—Smooth, sharp pointed pins should be used so that the material will in no way be injured. Pins may be purchased by the paper, or loose in boxes by the quarter or half pound. The latter which are sold as "Bank" or "Dressmaker's" pins, are better pins and more economical.

Care of Equipment.—All sewing equipment should be kept together in a basket or drawer when at home. When necessary to carry the equipment, a box or a bag should be provided to hold nothing but the sewing supplies.

Position in Hand Sewing.—Learn to sit erect, the lower part of the body against the back of the chair, the feet placed squarely on the floor. If the chair is too high for a comfortable position with the feet on the floor use a foot stool. Hold the work high enough so that there will be no eye strain. If the material is heavy or the garment large it will probably be more convenient to let it rest on a table in front of you.

Practice in Measuring and Cutting.—Materials necessary:—
1. Paper eight inches by ten inches. 2. Tape measure, pins, shears.

Measurements.—Study the tape measure until you know which marks stand for the inch, which for the one-half inch, one-quarter inch and one-eighth inch.

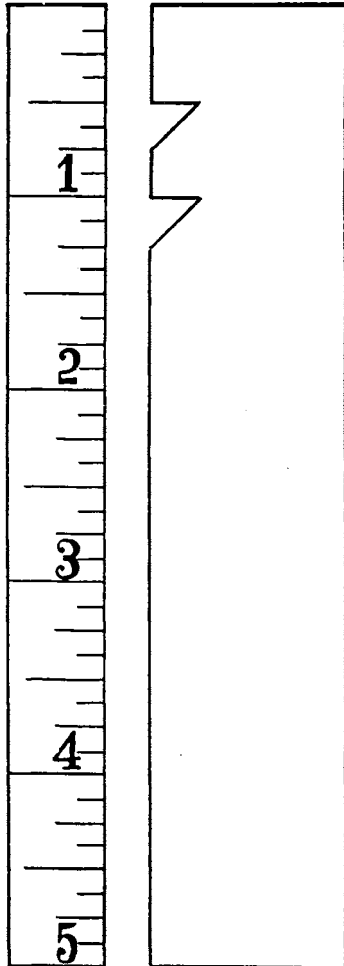
Find one inch on the tape measure. On the left hand side of the paper, measure down one inch and mark by making a pin hole at this point. On the right hand side, measure and mark one inch from the top. Make all measurements accurately. Take hold of the top of the paper, bring it toward you and fold on line of pin holes. Cut on the line of fold, making a strip one inch wide.

Cutting.—Hold the scissors or shears in the right hand and take long even strokes so the edge will be straight and even rather than ragged.

Repeat the directions given for marking and cutting until you have cut two one-inch strips, two two-inch strips, two three-inch strips. Find one-half inch on your tape measure, study until you become familiar with the one-half inch. Without the tape measure fold down one-half inch on the two-inch strip. Test with the tape measure to see how accurate the eye has been. Cut off the end. Repeat from six to ten times.

Take the second two-inch strip and fringe by making cuts one-inch deep and one-half inch apart. Test for accuracy with tape measure for depth and width. Study the one-quarter inch in the same way, using the three-inch strips.

Turning a Hem.—Place the paper on the table in front of you, having the lower edge parallel with the front edge of the table. Mark down from the upper edge one-half inch at each side and several places between, using the eye as a guide. Test this with the tape measure and make corrections. Take hold of the upper edge and fold toward you, creasing on line of marks. Be sure you have a good, even edge, as the evenness of the hem is



determined by the first turn. Make the second turn one inch wide.

Marker.—Cut a strip five inches long and one inch wide from a card or a piece of stiff paper. Measure down one-half inch from the end, using the tape measure. At this point cut in one-quarter inch, cutting at right angles to the edge of the card. One quarter inch below this make a diagonal cut which will meet the straight cut. Measure down one inch from the end, again make the cut at right angles to the edge and the diagonal cut. Use this marker for measuring the first and second folds of a hem. A marker made in this way should be used in measuring all hems and tucks.

Turn a second hem, using the marker. Place the end of the marker against the upper edge of the paper at the right. Place the pin against the straight edge of the notch and press through the paper. Move the marker to the left one inch. Again place the pin against the straight edge and press it into the paper. When the half-inch has been marked across the paper, and the first turn made the second turn is marked and made.

Cutting a Square.—Place a piece of paper which has two edges at right angles to each other on the table with the bottom edge parallel with the front edge of the table and the right angle at the left. Starting at the lower left-hand corner measure seven inches along the bottom edge and mark with a pin hole. Starting at the same point, measure up along the left-hand side seven inches and mark. Take hold of the lower left-hand corner, bring it up and to the right, folding the paper on the diagonal line connecting the two pin holes. Mark the point where the corner comes. Unfold the paper. Rule a pencil line connecting the pin holes and cut. This should give a perfect square seven inches on each side.

SEWING

The process of sewing consists of pulling thread through cloth by means of a needle, either for the purpose of joining one or more pieces of material, or for the purpose of ornamentation.

Thread is a small twist made of cotton, flax, wool or silk, and comes in various sizes and colors. The size and color should be chosen with regard to the quality and color of the material in which it is to be used, and whether the sewing is to be decorative or not.

Cloth is a woven material made from cotton, flax, wool, silk or rayon. The weaving is done on a loom by means of two sets of threads, the lengthwise called the warp, and the crosswise called the woof or filling.

The manner in which these threads intersect gives us the different varieties of weaves, as plain, diagonal, etc.

Cloth is spoken of as "material," "fabric," "goods," "textile material," "cotton," "linen," "wool," "silk," or by the common trade names or brands.

The finished edge of cloth is called the "selvedge," and the lengthwise threads of cloth are parallel with the selvedge.

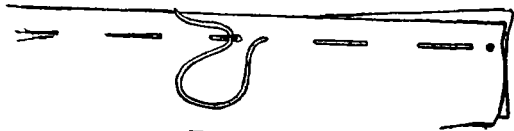
A lengthwise fold is a fold parallel, or even with, the selvedge.

A crosswise fold is a fold made straight across the material even with the woof or filling threads, or at right angles to the selvedge.

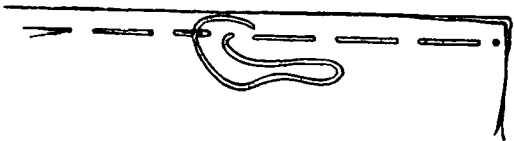
A bias fold is made by folding the selvedge or the lengthwise threads over so that they are even with the woof or filling threads. The fold thus obtained is on the true bias of the material. In measuring for the width of a bias fold or strip measure at right angles to this fold.

Threading the Needle.—The thread may be cut or broken as it is unwound from the spool. A diagonal cut will enable the end of the thread to pass into the eye of the needle easily. If the needle is threaded with the end of the thread which first comes from the spool as it is unwound the thread is not so apt to knot or tangle.

To Make a Knot.—Wrap the thread once around the first finger of the left hand, and with the left thumb roll it off the end of the finger, then with the first finger and thumb draw the knot to the end of the thread. A good knot should be small and close.



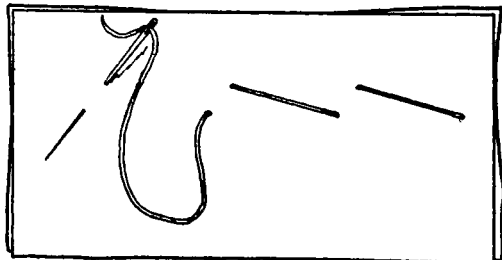
Even basting



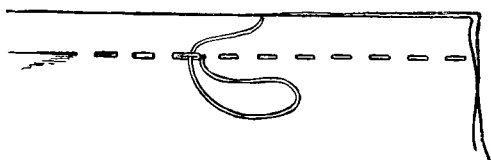
Uneven basting

STITCHES

Basting Stitch.—Sew from right to left. Start with a knot on the right side of the goods and when finishing take one back stitch before cutting the thread. Keep the work smooth and flat and take two or more stitches before pulling the thread through.



Diagonal basting



Running stitch

Even Basting. — Take stitches of even length on both sides of the material. Use where strength is required in holding material together.

Uneven Basting.—Take stitches two or three times as long on the top as on the under side. A milliner's needle is good for this kind of basting. Uneven basting is a rapid way of holding material together.

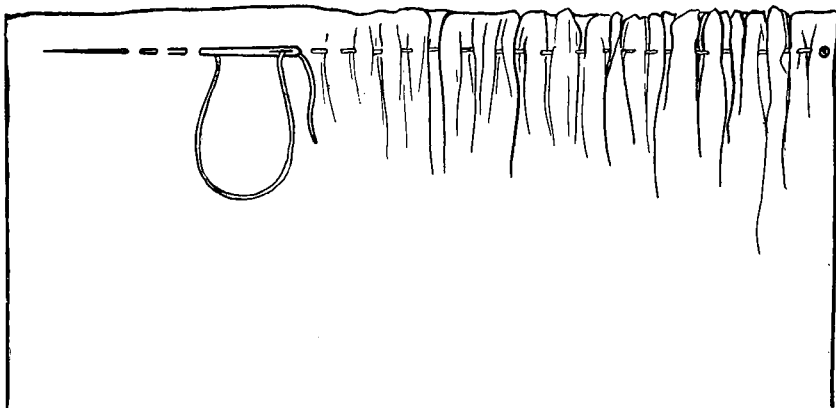
Diagonal Basting.—This is uneven basting with the long stitch on the right side, slanting up from right to left and the stitches on the wrong side vertical or nearly so.

Running Stitch.—Start with a knot on the wrong side of the goods and work as in even basting, making the stitches as small as is advisable with the quality of the material and effect desired, and the same size on both right and wrong sides of the material.

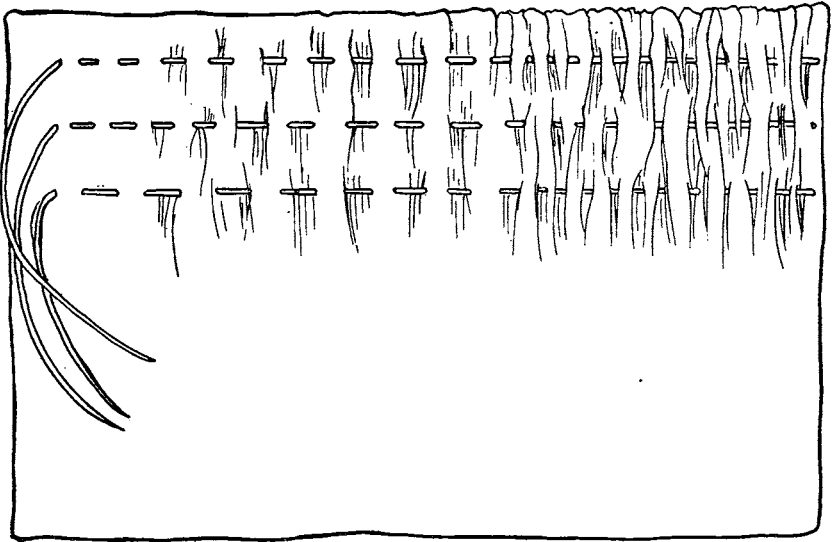
Gathering Stitch.—This is the same as the running stitch. It is permissible in gathering to have the stitch on the wrong side a little longer than on the right side, especially if a large amount of material is to be gathered into a small space. In gathering a long strip of thin soft material do not remove the needle, but push the goods off the head of the needle and along the thread.

Shirring.—Several rows of gathering, drawn up with the fullness distributed evenly is called shirring.

Gauging.—Several rows of gathering with a longer stitch on the right side and the stitches directly under each other so that the folds of the gathers hang even and straight is called gauging. It is used when the material is thick or when it is necessary to gather a large amount of material into a small space,

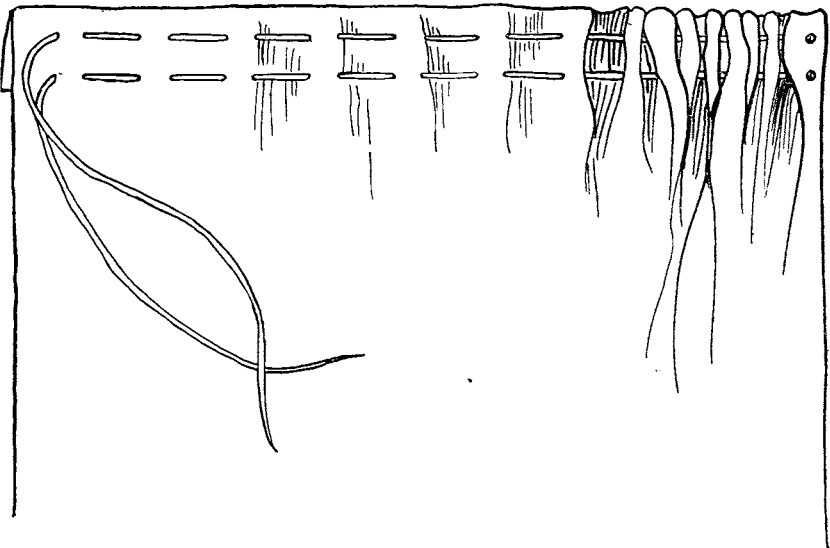


Gathering

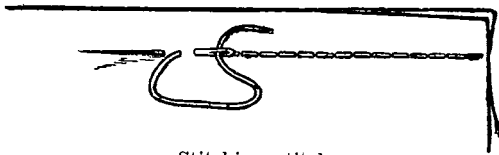


Shirring

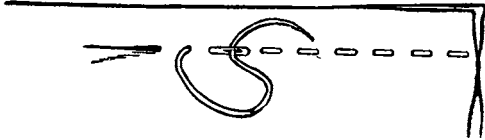
Stitching Stitch (Sometimes called back stitch).—Start with a knot on the wrong side and progress from right to left. Take a short stitch back on the right side, passing the needle through onto the wrong side and out again on the right side twice the length of the first stitch to the left. Take the next stitch back to meet the first stitch, and in this way a continuous line of even stitches will be formed. This stitch when well made closely



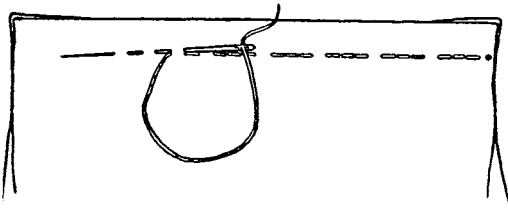
Gauging



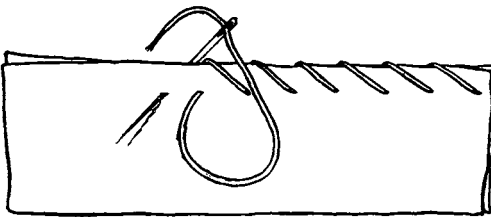
Stitching stitch



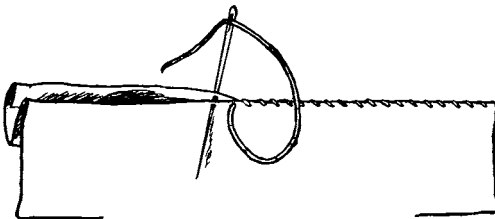
Half back stitch



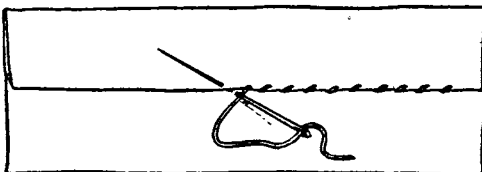
Combination stitch



Overcasting stitch



Overhanding stitch



Hemming stitch

simulates machine stitching, and is only used when a machine is not available and when great strength is necessary.

Half Back Stitch.—

Proceed as in stitching, except make the stitch on the wrong side three times the length of that on the right side, and when taking the stitch back on the right side, take it half the length of the space. In appearance on the right side the half back stitch looks like the running stitch, while on the wrong side the stitches are long with the ends overlapping.

Combination Stitch.

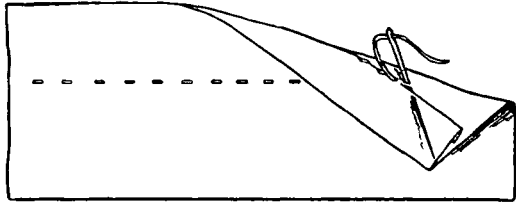
—This is worked similar to the running and back stitches. Take two running stitches on the right side of the material then a back stitch meeting the last running stitch. Bring the needle out again on the right side in the same place that it came through in making the last running stitch. Make two more running stitches and proceed as before. This will make groups of three stitches with the ends meeting on the right side, and with a space the length of one stitch between each group.

Overcasting Stitch.—Overcasting may be worked from right to left or from left to right. The former is preferable, there being less danger of looping the thread. Start with a knot and bring the needle out just far enough from the edge to prevent the stitch from causing the material to fray. Make a loose, slanting stitch over the edge, holding the edges over the first finger of the left hand, and pointing the needle towards the left arm. The stitches should lie smoothly over the raw edge, each stitch having the same slant. Fasten with a back stitch.

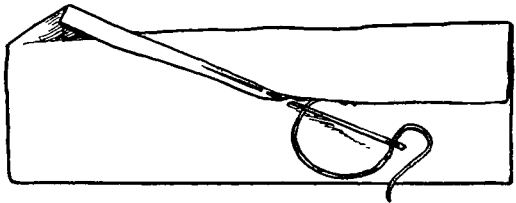
Double Overcasting.—This is used to finish edges of loosely woven material more carefully, or to obtain a decorative effect. Occasionally edges which have been overcast from right to left are finished still further by repeating the overcasting from left to right. When a decorative effect is desired threads of contrasting color may be used.

Overhanding Stitch.—As in overcasting this stitch may be worked from right to left or from left to right. No knot is used, instead the end of the thread is held back along the edges to be overhanded and thus held firmly. Bring the needle out on the edge towards you, close to the finished edge or fold, and take a stitch over the edges, inserting the needle from the back, pointing straight towards you, or at right angles to the edges of the material. The stitches should be taken close enough to the edge so that when creased open the overhanded seam will lie perfectly flat. Overhanding is used in joining selv-edge or folded edges, for sewing on lace, and in hemming table linen.

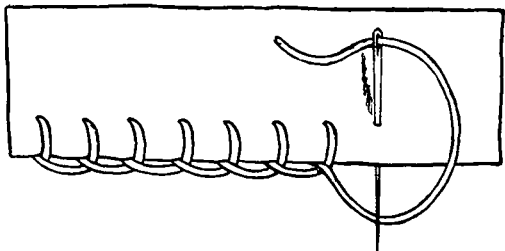
Hemming Stitch.—Start with a small knot concealed under the folded edge of the hem, and work from right to left, holding the folded edge to be hemmed towards you, over the fingers of the left hand. Bring the needle out on top and close to, the folded



Straight hemming



Blind stitch



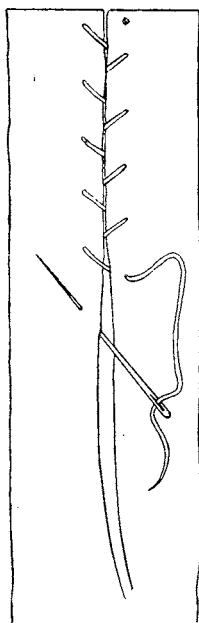
Blanket stitch

edge, and take a small stitch into the material even with the folded edge of the hem bringing the needle out again through the folded edge.

Some authorities give directions for a small slanting stitch. This would doubtless add strength, but the hemming stitch when made parallel to the edge of the hem, particularly when the hem has been made on the straight of the material, will present a much more pleasing appearance.

Blind Stitch.—This is similar to hemming except that instead of bringing the needle out through the fold of the hem it is caught into the under part of the fold, therefore no stitch is visible on the folded edge. As small an amount of material as will hold is taken up thus making this method of holding a hem in position a very good one for delicate materials, where strength is not necessary.

Blanket Stitch.—This stitch is worked from left to right. Start without a knot taking a tiny back stitch to hold the thread bringing the needle out through this stitch on to the right side about one-fourth inch from the edge. In making the stitches the needle is put through from the top and is brought out at the edge from under the material the needle being held at right angles to the near edge of the garment. The thread is then pulled through keeping the stitch smooth and easy and at right angles to the edge. Holding the thread along the edge of the material under the left thumb the needle is inserted again in the same manner one-eighth inch or one-fourth inch to the right, even in depth and parallel with the first stitch. In turning a square or round corner spread the stitches fan-like.



Grafting stitch

There are many possible variations of the blanket stitch but the stitches are always at right angles to an edge or line and parallel to each other. They may however vary in depth but always in a regular order or pattern.

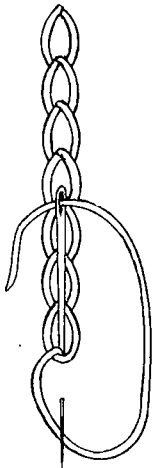
Originally the blanket stitch was merely a finish for raw edges, but now it is frequently used as a means of holding narrow hems, facings or appliques in position.

The Grafting Stitch.—This is sometimes called the base-ball stitch and is a very quick method of drawing raw edges together. It is useful in repairing torn places in woolen materials, and in knitted garments and hosiery. The grafting stitch is worked towards you. Start with a small back stitch or knot, and holding the two edges of the material together and flat against the inside of the fingers of the left hand, bring the needle through onto the right side of the

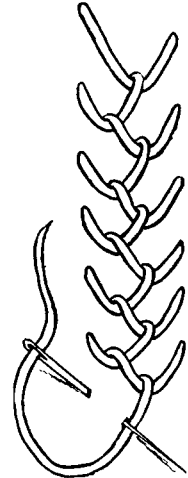
goods on the left hand edge close to one end of the tear and just far enough from the edge to prevent the material fraying out. Pointing the needle away from you insert it under the raw edge bringing it out on the right hand edge opposite the first stitch. Make similar stitches one-eighth inch apart on the left and right hand edges, gradually drawing them together.

Over and Over Stitch.—This is used in sewing on hooks and eyes or snap fastenings. Strong thread or double strands of thread are used. To make, start with a knot on the wrong side and take several stitches through and through over the edge or fastening. Care should be taken that the sewing is not lumpy and does not pull or tear the material. If possible spread the stitches slightly so that the strain on the material will not all come on the same thread of the weave.

Chain Stitch.—The principle of making the chain stitch is quite similar to the blanket stitch. Hold the work over the fingers of the left hand and work towards you. Start with a knot on the wrong side and bring the needle through onto the right side. Hold the thread under the left thumb to the left of the line or folded edge on which the chain stitching is to be done. Insert the needle close beside where the thread comes out bringing it through on the line one-eighth inch in front, lifting the thumb as the thread is pulled through, thus making a loop. Always insert the needle inside the loop close beside the thread which has just been pulled through.



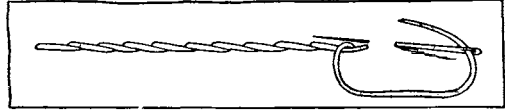
Chain stitch



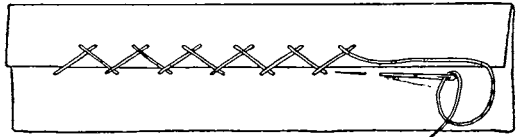
Feather stitch

The Feather Stitch.—The principle of this is very like the blanket stitch and chain stitch. Proceed towards you, holding the goods over the fingers of the left hand and keeping the size of the feather stitching the same along its entire length, conforming evenly in direction to a line or edge on which the feather stitching is being worked. Start with a knot on the wrong side, holding the thread to the left, under the left thumb. Insert the needle one-eighth inch to the right of where it came out, pointing it towards you and bringing it out over the thread one-eighth inch below, lifting the thumb to allow the thread to form a loop. Hold the thread to the left as before and insert the needle one-sixteenth inch to the left bringing it out one-eighth inch below where the thread last came out. Proceed next to the right in the same way. This makes a single feather stitch, but double or treble may be made, increasing the number of stitches on the left then making the same number on the right. The size of the stitches may vary also.

Outline Stitch.—Start with a knot on the wrong side and work from left to right holding the material over the fingers of the left hand. Bring the needle through onto the right side on the line or fold on which it is desired to work the outline stitch, then insert the needle one-eighth inch to the right of where the thread comes out and take a short stitch to the left back along the line close beside the forward stitch keeping the thread to the right of the needle.



Outline stitch



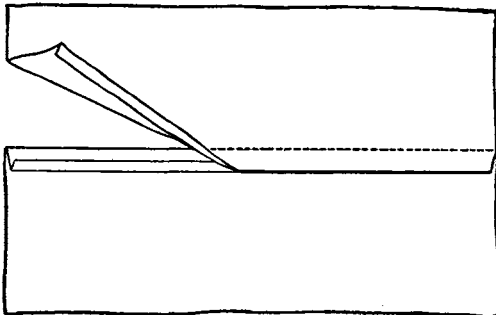
Catch stitch

Catch Stitch.—Work from left to right holding the work over the fingers of the left hand. Start with a small knot on the wrong side or concealed between two thicknesses of material. Bring the needle up on the right side, and insert it again one-eighth inch above and one-eighth inch to the right bringing it out one-sixteenth inch to the left. Insert the needle again one-eighth inch below and one-eighth inch to the right, bringing it out one-sixteenth inch to the left, and continue in this way. This stitch is generally used to hold the raw edges of woolen material smooth and flat, as in seams or hems, or down the center of a seam to hold it open and flat in a garment requiring frequent laundering. When the raw edge of a seam or hem is finished with catch stitching the stitch is taken over the raw edge but through only one thickness of the material.

SEAMS

A seam is the joining of two or more pieces of cloth.

Plain Seam.—To make the plain seam place the right sides of the material together and baste. Sew by hand using the stitching, back stitch, combination or running stitch according to the strength required, or stitch by machine.



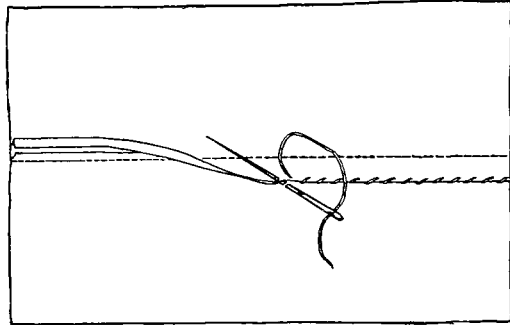
French seam

French Seam.—Place the wrong sides of the material together and make a plain seam, using a combination or running stitch, if done by hand, or stitch by machine. Trim off the raw edges to one-eighth inch, or less if the material is very fine, then turn and

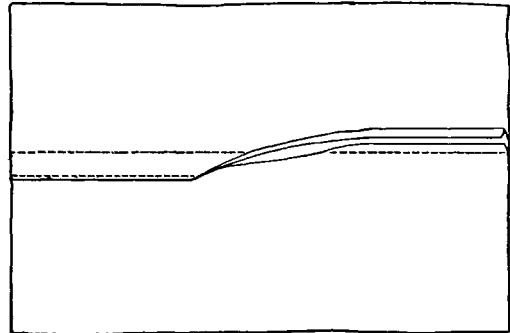
crease so the line of sewing comes on the edge. Baste or press. Sew a second time with a combination or back stitch, or stitch by machine, being sure the stitching is far enough from the first sewing to prevent the raw edges from working through.

Flat Felled Seam.—Make a plain seam and press to one side. Trim off the under edge to one-eighth inch, and upper edge to one-fourth inch. Fold the wider edge over the narrow edge and baste flat to the material. Sew by hand with the hemming stitch, or stitch by machine.

French Felled Seam.—Prepare as for the flat fell, except that it is not necessary to press the seam to one side. Trim off one edge to one-eighth inch and the other edge to about three-eighths inch. Turn in the wider edge one-eighth inch and fold over the narrow edge, hemming by hand to the first line of sewing. If desired to do this by machine baste but do not sew the plain seam. Stitch the folded edge by machine to the first line of basting, which will hold the material sufficiently.



Flat felled seam finished by hand



Flat felled seam finished by machine

FINISH OF SEAMS

A finished seam indicates one in which the raw edges are kept from fraying by a second sewing. French seams, flat fells and French fells are already finished, but it is the raw edges of the plain seam which frequently require consideration and careful work. Among methods of finishing plain seams are:

1. By overcasting. The raw edges may be overcasted together or separately.
2. By binding the edges with silk or cotton seam binding which is generally put on by hand with a running stitch.
3. By binding the edges with bias tape, which should be put on by machine. See instructions for use of bias tape.
4. The edges of the seam may also be turned in towards each other and run together by hand or stitched by machine.

5. The seam may be pressed open, and the raw edges folded back on themselves and stitched through the folded edge, but not to the garment.

6. In garments of wool the raw edges of the seams may be catch stitched down to the garment.

7. By notching or pinking. This is done with sharp pointed scissors by folding the material loosely over the finger and snipping little V's from the edge.

HEMS

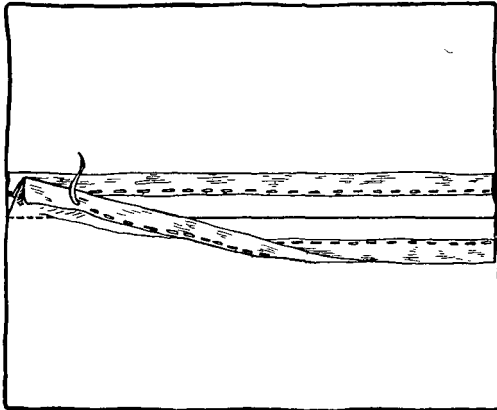
Turning Hems.—Decide on the width of hem desired and add to this one-fourth or three-eighths inch for turning in on wide hems and one-eighth inch or less for turning hems.

Three methods are allowable for turning hems.

1. This is used when the finished edge of the garment or article has already been determined and indicated by folding the material. Baste this fold then measure from the folded edge the width of the hem plus the allowance for turning in and trim off any extra material. Turn under the extra allowance and baste flat to the garment. Finish with the hemming stitch or stitch by machine. This second fold is often basted to itself instead of flat to the garment, the fold stitched by machine and afterwards hemmed to the garment by hand.

2. The second method is used when the garment or article has been trimmed to the desired size. Measure from the raw edge the width of the hem plus the allowance for the turned-in portion. Fold and pin in position then proceed as in the first method.

3. The third method is used in narrow hems. The allowance for turning in on narrow hems varies from one-fourth to one-eighth inch or less according to the quality of the material and width of the hem. The garment or article should be cut or trimmed off allowing for the desired width of hem plus the



Seam bound with silk seam binding put on by hand

turned-in portion. In making the hem, turn under and crease lightly or press the narrow allowance for turning in. Then fold over once more to the desired width for hem, basting or pressing.

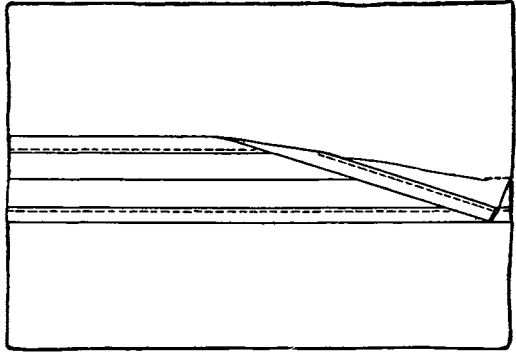
Finishing Hems.

Hems may be held in position by the hemming stitch, blind stitch, occasionally in very thin materials the running stitch, machine stitching,

machine hemstitching or by some decorative stitch.

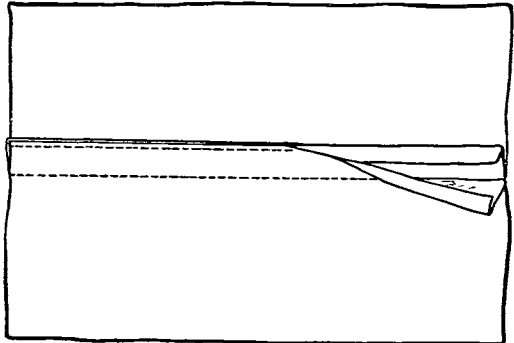
Quite frequently it is advisable to have the finish of the hem especially flat hence in thick or heavy materials the edge of the hem may be finished as follows:

1. If the material is of a finish similar to broadcloth and does not fray, the edge may be trimmed even and left raw, then catch stitched or hemmed by hand, or machine stitched to position.



Seam bound with bias tape stitched on by machine

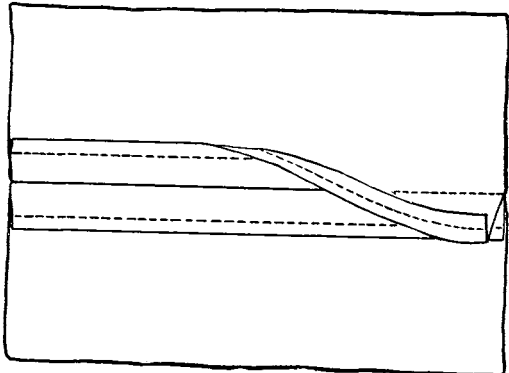
2. The raw edge may be notched and the hem then machine stitched.



Edges of seam turned in towards each other and stitched by machine

3. The edge may be bound by bias tape stitched on by machine and the folded edge of the tape hemmed to the garment by hand.

4. The edge may be bound with silk seam binding put on by hand or machine and the folded edge of the binding hemmed down by hand.

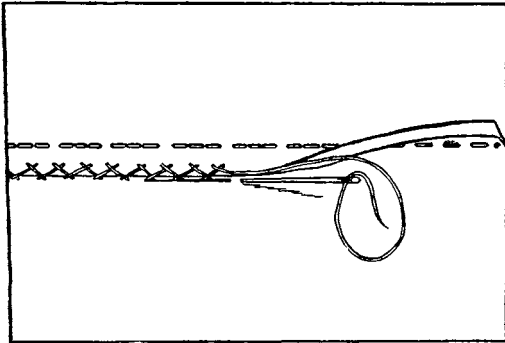


Edges folded back on themselves and stitched

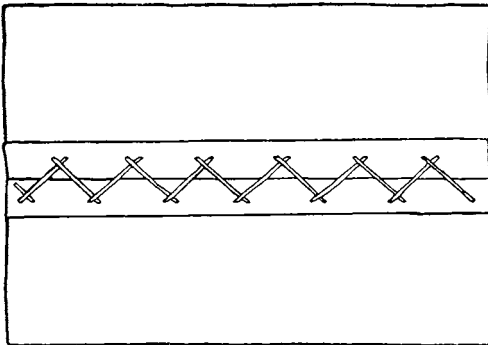
5. Bias tape may be lapped flat over the raw edge of the hem and stitched by machine. The other folded edge of the tape may be hemmed by hand or stitched by machine.

6. Silk seam binding may be lapped flat over the raw edge and run by hand or stitched by machine. The

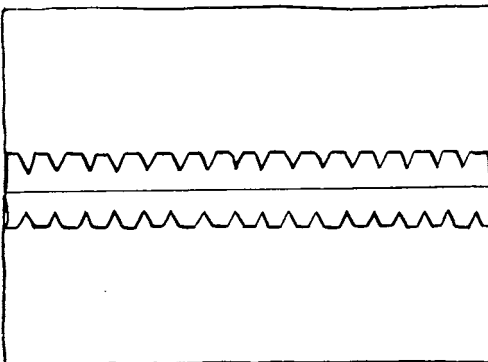
other edge may be hemmed or run by hand or stitched by machine. Silk seam binding is generally used in this way when an especially soft finish is desired, hence hand sewing is better than machine.



A flannel felled seam catch stitched



A seam catch stitched open



A notched seam

French Hem. — A French hem is generally used where lace is to be overhanded on at the same time.

Follow the directions for the making of a narrow hem, turning the hem onto the right side of the garment or article then creasing back even with the first fold. The hem is held to position and lace sewed on at the same time by the overhanding stitch, holding the lace next to you in sewing, against the right side of the garment or article. After the sewing is completed the line of overhanding is creased or pressed flat, allowing the lace to stand away from the material.

Napery Hem.—This is similar to the French hem except that it is turned onto the wrong side of the material. It is then creased back, overhanded and pressed flat. It is used on table linen and towels.

Rolled Hem. — The edge of the material to be rolled must be trimmed clean (free from ravellings with a smooth edge) before attempting to roll.

Hold the wrong side of the material towards you with the raw edge up. There are two methods of rolling a hem.

1. Moisten the thumb and first finger of the left hand slightly and beginning at the right hand end of the edge with the moistened fingers roll the edge toward you.

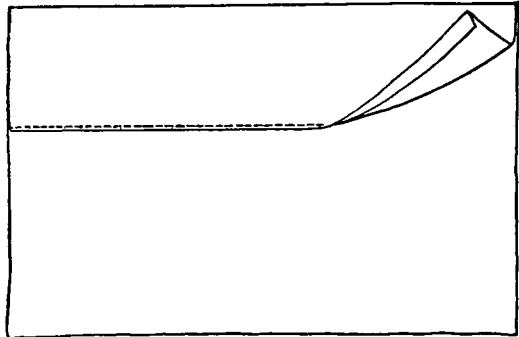
2. Moisten both thumbs slightly holding the edge tight, and the thumbs close together with the fingers of each hand back of the material, then roll the edge towards you.

Rolled hems may be finished with the overcasting or hemming stitch.

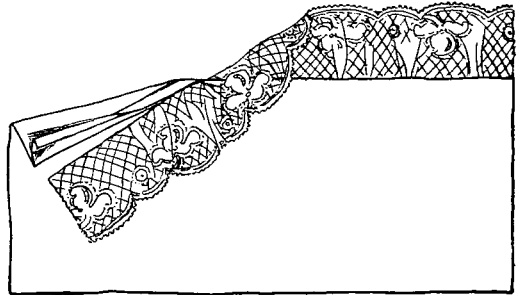
Take the overcasting stitch just over, but not into, the roll and use a fine needle and appropriate thread. The slant of the stitches must be regular and the depth uniform to look well.

If the hemming stitch is used, the stitch is taken under, but not into, the roll. Rolled hems are only suitable on fine cotton or linen materials or on silks or velvets. When used on silks and velvets they are generally finished with the blind stitch.

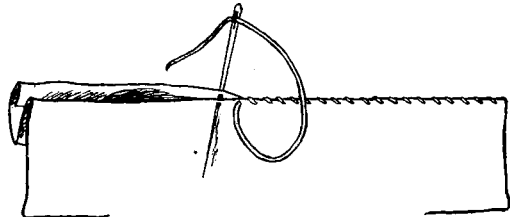
When the thread of the overcasting stitch is drawn up gathering the material it is called "whipping," hence the term "rolling and whipping." This is used on infants' clothing.



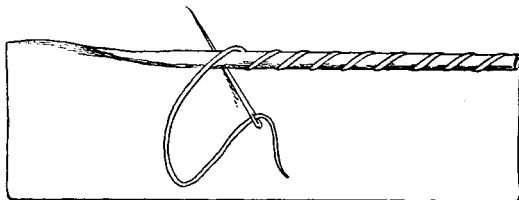
A hem finished by machine stitching



A French hem finished with the overhanding stitch which also holds lace to position



Napery hem



Rolled hem

BINDINGS AND FACINGS

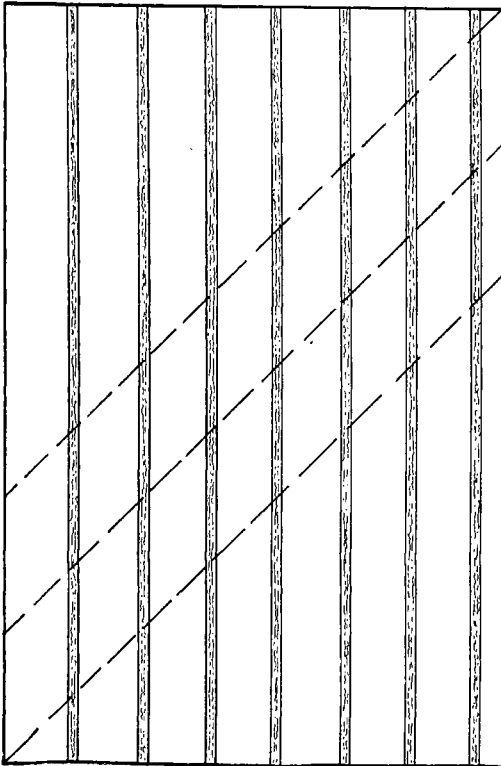
Both of these serve as finishes for raw edges and in addition are often a decoration.

Bindings and facings may be cut straight lengthwise or crosswise, and bias. In addition facings may be cut shaped. A straight binding or facing should only be used on a straight edge of the goods.

A binding is visible from both right and wrong sides of the garment, while a true facing is generally visible from one side only. Occasionally there is a combination of the two in which the facing serves as binding also, or projects slightly beyond the edge, as a piping.

Bindings and facings may be put on from the right side, either by hand or machine, and finished on the wrong side by hemming by hand, or stitching by machine. Or they may be put on from the wrong side and finished on the right side by machine stitching or by sewing by hand with a blind stitch or some decorative stitch.

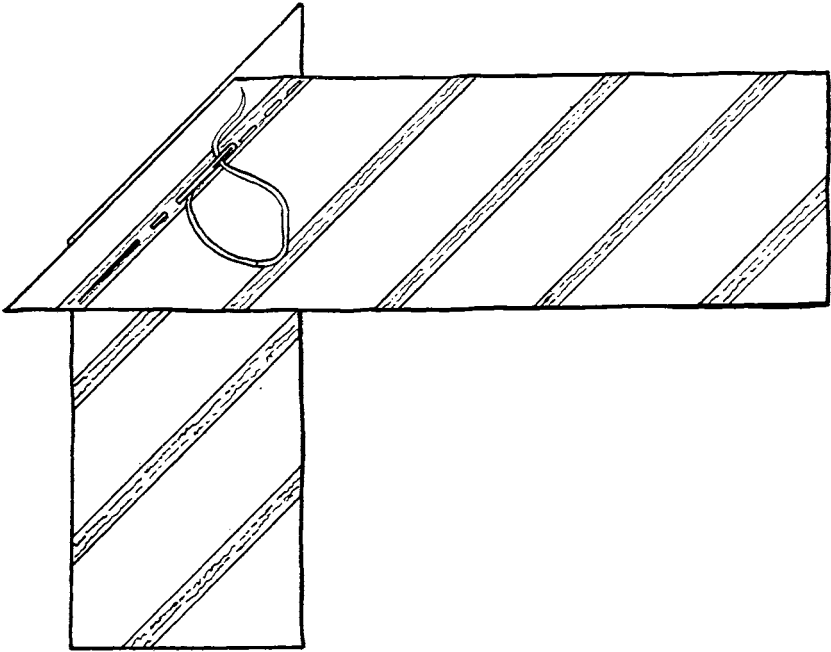
A binding is turned over the edges of the seam joining it to the material, and the raw edge of the binding is then turned in even with the first line of sewing and fastened to position with



Method of cutting bias strips

hand or machine sewing.

In turning a facing the seam line should come directly on the outside edge of the turn. This is accomplished better if the seam is pressed open or creased open with the finger nail before turning. After a facing is turned it should be basted or pressed around the edge before basting flat onto the wrong or right side. In narrow facings pressing around the edge will answer instead of basting. It is much more satisfactory to do the first sewing of bindings and facings by machine than by hand. A bias binding or facing may be used on almost any curved edge.

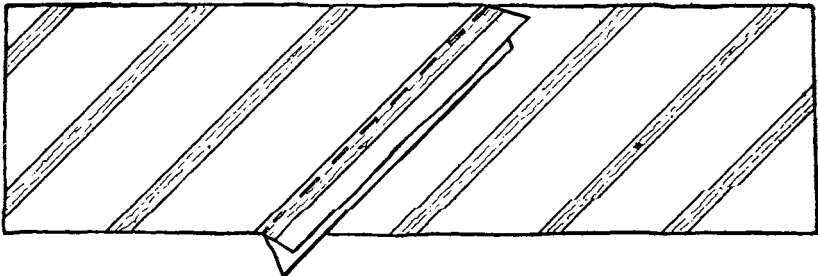


Bias strips joined

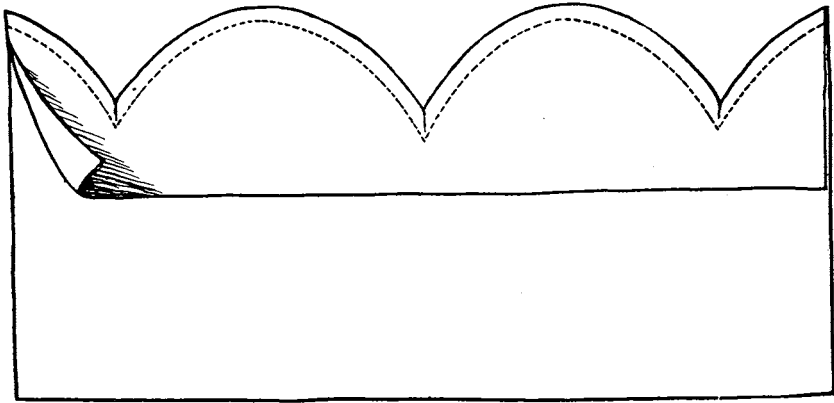
CUTTING BIAS STRIPS

To cut bias strips for binding or facing it is necessary to obtain a bias edge or fold of the material. This is done by folding the goods so that the selvedge edges or warp threads are laid on a line with the woof or filling threads. Cut on this fold and in measuring for the width of bias strips measure at right angles to this edge.

The amount of bias material necessary for a binding or a facing should be estimated and the strips joined together. This joining must be carefully done even with either the lengthwise or crosswise threads of the material. When the seams are



Method of joining bias strips



Facing a scalloped edge

pressed open the edges of the bias strip should present one straight continuous line. If joined even with the lengthwise threads the seam will be less prominent. To do this unless the ends of the strips are selvedge, cut the ends even with the lengthwise or crosswise threads and lap at right angles to each other with the right sides together. Allow the corners of the strips to project very slightly beyond the straight edges, on account of the seam. All seams in bias strips should be pressed open.

BIAS TAPE

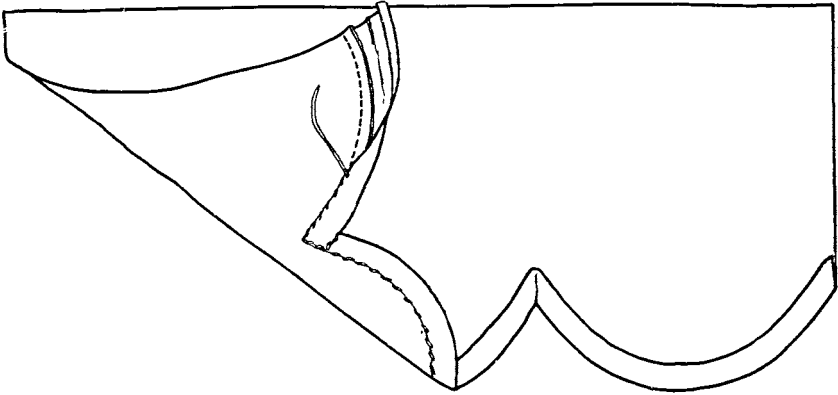
Strips of material cut on the bias, joined together and with the edges turned and folded, may be purchased at notion counters in nearly all stores under the name of "bias tape" or "bias binding." It comes in various qualities of white material and in different widths, sold by numbers, number one being the narrowest. It may also be had in plain colors and frequently in checked or striped designs. When possible to use bias tape it will be found a great time saver.

FACING AND BINDING CURVED EDGES

When it is necessary to face a full or convex curve the bias edge must be stretched slightly in the first basting and sewing, then drawn in when basting flat.

Conversely, in facing concave or hollow curves with bias strips of the material it will be necessary to "hold in" and sometimes gather the bias edge in the first basting so that when stitched and turned it will lie perfectly flat.

When binding a curved edge with a bias strip, if the edge is a hollow or concave curve it will be necessary to stretch the edge of the strip very slightly in the first basting and sewing so that it will lie smoothly over the outside edge of the curve.



Binding a scalloped edge

When binding the edge of a full or convex curve it is necessary to “hold in” the edge of the strip very slightly in the first basting and sewing so that it will “give” enough to lie smoothly over the edge of the seam.

In binding scallops in which the curves meet each other in a sharp point it will be necessary to stretch the bias binding at the point in the first basting and sewing, and after the second sewing, to lap a pleat of the extra fullness on the wrong side of each scallop.

SHAPED OR FITTED FACINGS

These are cut to exactly fit the portion of the garment for which they are intended. They may be cut with the garment itself as a guide or from the pattern by which the garment was made.

To cut a shaped facing for the garment, place the portion of the garment to be faced right side up on the table, and lay the facing material on this with the right sides together and the lengthwise threads of both pieces of material running the same way. Pin carefully and cut around the outer edge. Remove the facing material from the garment and measure from the outer edge the desired width of the facing plus allowance for two seams. If necessary to piece, cut the needed amount from the facing material with the lengthwise threads conforming as closely as possible to the lengthwise threads of the material in the garment. Facings of this type may be applied to the right or wrong side of a garment.

In facing scallops in which the curves meet each other in sharp points, after the first sewing, if the material is snipped at each point from the outside edge almost to the line of sewing, the facing will turn and lie smoothly.

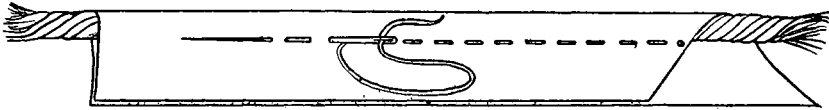
BANDS

When material is gathered into a band, the gathered edge is really bound with a straight piece of the material. A band should be cut straight lengthwise of the goods. Bands may be sewed on from the right side of the garment, preferably by machine, then folded over and basted onto the wrong side. The long edge is then hemmed by hand and the ends overhanded. The method quite generally in use where machine sewing is to be used is to put the band on from the wrong side of the garment with a small basting or running stitch, and fold it over onto the right side. When done in this way it is generally stitched all around by machine.

Collars and cuffs when cut straight lengthwise of the material are frequently applied as a band.

CORDING

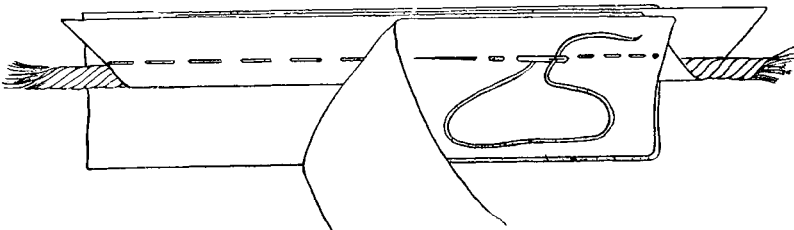
When cording is desired, cover the cord with a bias strip of the material, folding the casing or strip over the cord and sew-



Method of covering cord with material

ing with small basting or running stitches, close to the cord, and if the material is colored using cotton or silk thread to match. Then baste or sew into the desired position on the garment. On account of the cord pushing the foot of the machine out of line it is possible to sew closer to the cord by hand than by machine, and cording to have a good firm effect should be sewed close to the cord. The cord used should be soft and pliable and may be purchased at the notion counters under the name of "piping cord." It comes in different sizes in black and white.

When cording is used as a finish on the edge of a garment, a facing is generally required also. This is sometimes cut of bias material in one piece with the covering of the cord. In that case the cord is basted along one edge of the bias strip, and the whole piece applied as a facing. In finishing it will be found



Method of cording a seam

necessary to stitch or sew invisibly by hand, in, or close to, the seam line which joins the cording to the material.

TUCKING

A tuck is a fold consisting of two thicknesses of the material sewed together along its entire length. Tucks are used to take out extra material or as a decoration. They may be sewed by hand with a running or some decorative stitch, or by machine.

Horizontal tucks in garments are generally even in width along their entire length.

Vertical tucks may be even in width along their entire length, or graduated in width, sloping to a point.

Tucks may be exactly parallel to each other along their entire length, or they may spread fan-like.

Tucks made on the straight of the material either lengthwise or crosswise are most satisfactory. Such tucks may be done by the tucker of the sewing machine.

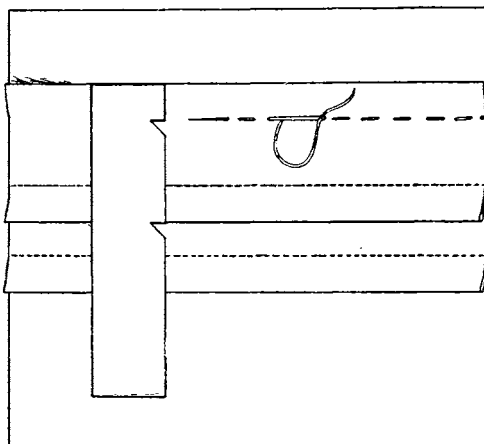
When no tucker is available and it is necessary to mark or baste the tucks the edge should be indicated by pins, or by creasing along the thread of the material. If the tuck is to be wider than one-half inch, fold and baste on this line, then measure for the width of the tuck and baste a second time.

If a tuck one-half inch wide or narrower is to be sewed by machine, the foot or gauge of the machine can be used as a guide without a second basting.

In measuring for a second tuck of the same width as one already made, measure from the edge of the first tuck, not from the stitching. Allow three times the width of the tuck plus the distance between the fold of the tuck as it is to lie in position, and the stitching of the previous tuck, and measure this amount from the folded edge of the finished tuck.

If the tucks differ in width, take the width of the last tuck made, add to it double the width of the tuck to be made, plus the distance between the fold and the stitching.

When tucks are not parallel the marking indicating the size and direction are generally taken from patterns.



Method of measuring for a tuck

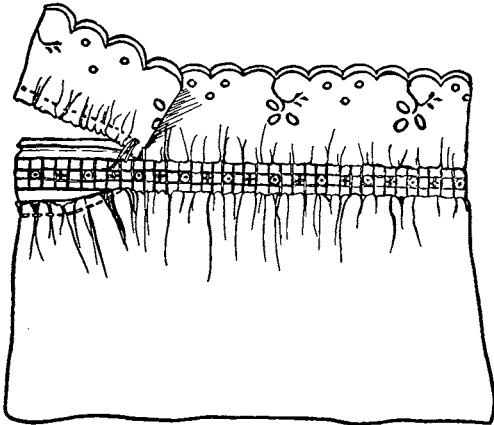
Pin tucks are the narrowest tucks which it is possible to take up in the material. These can be made on sewing machines by the tucker attachment or without the tucker by stitching close to a creased fold of the material.

Allowance must be made for the tucking in all garments or the material must be tucked before it is cut.

RUFFLES

A ruffle is a strip of material, cut on the straight (either lengthwise or crosswise) or on the bias, and gathered along one edge to fit a desired space.

In planning for the amount of ruffling, allowance is made for the space to be filled plus a certain proportion more for fullness, as once and a quarter, once and a third, once and a half.



Embroidered edge gathered and French seamed onto insertion

The latter amount makes quite a full ruffle. It is not necessary to make a bias ruffle quite as full as a straight ruffle. If a ruffle is very full, two rows of gathering will help to hold the fullness in place, until after the ruffle is sewed to position. When a ruffle is sewed in position the line of sewing should be through the outside line of gathering. If a second line

of gathering has been used, remove this after the ruffle is correctly placed and sewed.

A flounce is a wide ruffle. Circular or shaped ruffles and flounces are cut to give fullness at the outside edge with none at the edge on which they are stitched to the garment.

Ruffles and flounces are joined to garments in various ways. When the gathered edge of the ruffle or flounce is raw, it may be covered with bias tape, other trimming, or a tuck.

In a straight ruffle or flounce the upper edge is sometimes folded back and the gathering done through the two thicknesses of the material at an even distance from the folded edge. The ruffle is then sewed to the garment through the line of gathering, allowing the double portion to stand up above. This is called a heading.

APPLICATION OF TRIMMINGS TO GARMENT

Trimmings of embroidery and lace, both edges and insertions, offer a distinct problem in sewing, as their method of application may enhance the beauty of the garment very much or mar it exceedingly. The trimmings should be purchased with careful regard to the quality of the material on which they are to be used. In embroideries, particularly, the quality of the ground on which the machine embroidery is done should correspond in some measure to the garment material.

USE OF EMBROIDERED EDGES AND INSERTIONS

An embroidered edge may be put on full or plain. When put on full, three methods of joining may be used.

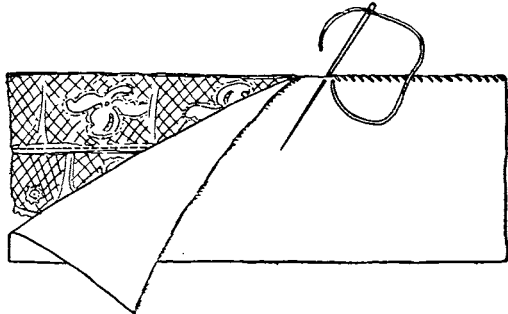
1. The plain edge of the embroidery may be rolled and whipped, gathering the trimming up to the desired amount of fullness, and this may then be overhanded onto a hemmed, faced, or another rolled and whipped edge, or to insertion or beading having a finished edge.

In overhanding a ruffle with a rolled and whipped edge onto a garment the ruffle should be held towards you. In that way the spreading or spacing of the fullness can be controlled.

2. An embroidered edge may be gathered and the gathering stitches spread evenly, then the trimming joined to the garment, to insertion or to beading with a French seam.

A French seam should only be used for joining gathered trimming to a garment when the material of both trimming and garment is fine enough to make a very narrow seam.

3. An embroidered edge may be gathered and joined to a plain edge, by a French fell. After stitching, the raw edge of the gathered material should be trimmed off close to the seam and the plain edge turned over the seam and hemmed to the line of stitching, in a French fell.



Lace overhanded onto raw edge of material

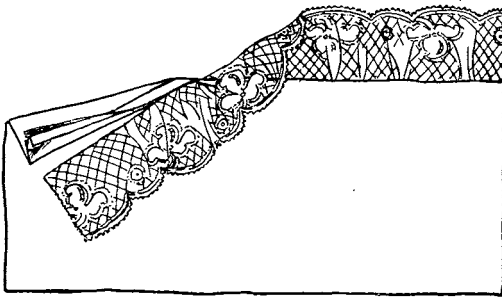
When an embroidered edge is used without any fullness, or when an embroidered insertion with plain material on each side of the embroidered portion is used the joining to the material may be done by a French seam, a flat fell or a French fell.

Quite frequently the plain portion of the embroidered edge is utilized as a facing on the garment itself or as a casing to run ribbon through. In such a case the facing is really a flat fell of exaggerated size.

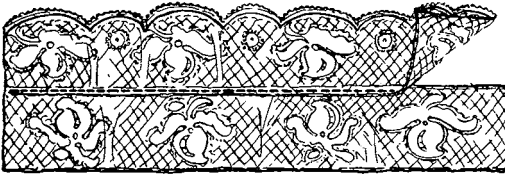
USE OF LACE EDGES AND INSERTIONS

Lace edges may be put on full or plain. If full, instead of using a gathering thread, draw up the heavy finishing thread at the straight edge gathering the lace to the desired amount of fullness.

Gathered lace edges are generally overhanded onto the garment and in doing so the lace edge should be held towards you so that the fullness may be pushed along on the thread and held firmly until sewed in position.



Lace edge overhanded onto French hem



Lace edge and insertion joined by machine stitching

Lace insertion is generally put on without fullness. It may be overhanded onto selvedge, rolled, plain-hemmed or French-hemmed edges or to faced or bound edges, or it may be stitched by machine.

When lace insertion or lace edges, used without fullness, are stitched to the garment by machine, the edge of the lace insertion or edge is lapped very slightly over a selvedge, a plain-hemmed, faced or a bound edge, and then stitched close to the edge of the lace. The lapping should be sufficient to hold the machine stitching but no more.

Lace insertion and lace edges are not sewed to rolled edges or rolled hems by machine, as the foot of the machine would tend to flatten the roll.

Lace insertion and lace edges are frequently sewed to raw edges by machine, after which a hem is turned in the raw edge and stitched by machine, or hemmed by hand. To do this if a narrow hem is desired lap the edge or insertion about one-fourth inch over the raw edge on the right side of the garment and baste, or hold carefully when stitching by machine. If the edge is at all curved it will be best to baste in order that the fullness around the curves may be "held in."

Stitch close to the edge of the lace. Remove basting, then crease the raw edge of the material back against the garment and baste in a narrow hem.

When a wide hem is desired, estimate the width of the hem, plus the allowance for turning in, and measure this amount from the raw edge. Baste the lace or insertion on at this marking.

JOINING EMBROIDERY AND LACE

The joining of embroidery may be done by:

1. A plain seam in which the edge and design of the embroidery is carefully matched. The edges of the seam should be overcast.

2. A flat felled seam. Make a plain seam with the edge and pattern of the embroidery carefully matching, then finish with a flat fell.

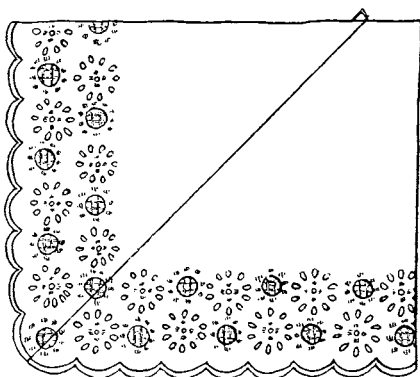
3. A French seam may be used if the pattern and edge are small and inconspicuous.

The joining of lace may be done by:

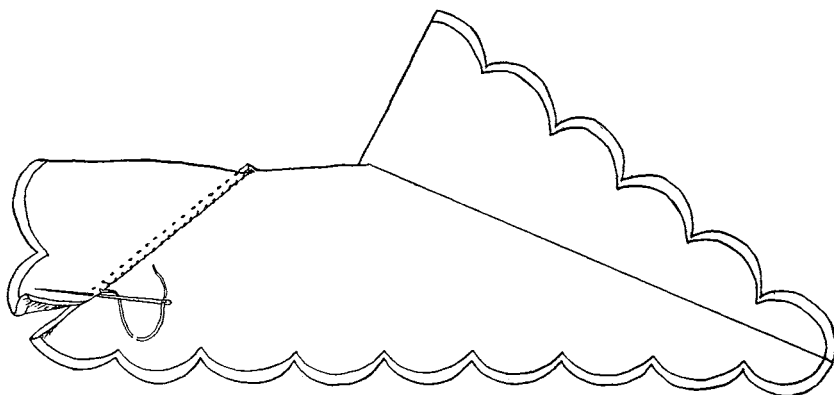
1. Lapping the ends, so that the pattern in one end laps over a corresponding pattern in the other end, then overhanding the meshes of lace and edges of the pattern in an irregular line, using a very fine thread, then trimming off all raw edges.

2. By a French seam.

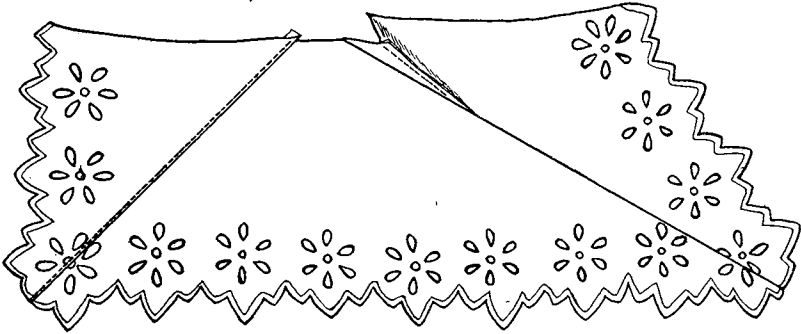
3. By a flat felled seam.



Embroidery joined in a plain seam, showing a mitered corner



Embroidery joined with a flat felled seam and mitered corners

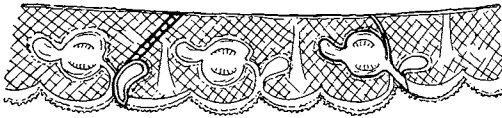


Embroidery joined in a French seam and by machine stitching on the outside

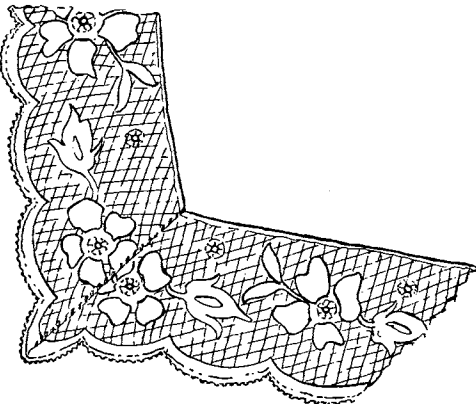
TO MITER EMBROIDERY AND LACE

When embroidery or lace is joined at an angle, as is necessary in turning a corner without fullness, we speak of the joining as a "mitered corner."

If the corner is a right angle, lap the embroidery or lace in a slanting line so that the outer edges will form a right angle also. If the angle is not a right angle fold under enough fullness so that the slanting line of the seam would, if continued, divide the corner into equal parts.



Method of piecing or joining lace



Method of mitering lace

Embroidery is mitered by folding under the fullness and finishing by:

1. A plain seam, with the raw edges overcast or cut close and overhanded.
2. A flat fell.
3. If the embroidery is very open, the embroidered portion may be joined by buttonholing and the plain material in a plain seam.
4. Stitching by machine on the right side close to the folded edge.

In all of these methods it may be necessary to buttonhole the

outer edge of the embroidery over the seam to preserve the pattern and also strengthen the edge.

Lace is mitered by folding under the fullness and then:

1. Stitching by machine on the right side close to the folded edge.

2. By overhanding this folded edge down and then cutting away the extra amount underneath, overhanding the raw edges still further.

3. By basting along the folded edges and cutting away the extra amount, then buttonholing over the joining.

4. A close lace may sometimes be joined in a plain seam, and the edges then trimmed and overhanded down.

Quite frequently in heavy laces and embroideries, or those with conspicuous edges or designs it is well to consider the corner finish before deciding on the starting point in applying to the garment.

BUTTONHOLES

A worked buttonhole is to some people more or less of a bug-bear but if we think of a buttonhole as a piece of embroidery it may help to make it more of a pleasure.

Buttonholes should be cut, if possible, on the straight of the goods, and through two thicknesses of the material. If it is necessary to cut on the bias or on a slant of the goods, or only through one thickness baste a piece of straight material under the place where the buttonhole is to be cut.

Mark the position and size of the buttonhole with basting thread, chalk, or pencil marks. The size should be the same as the diameter of the button which is to be used.

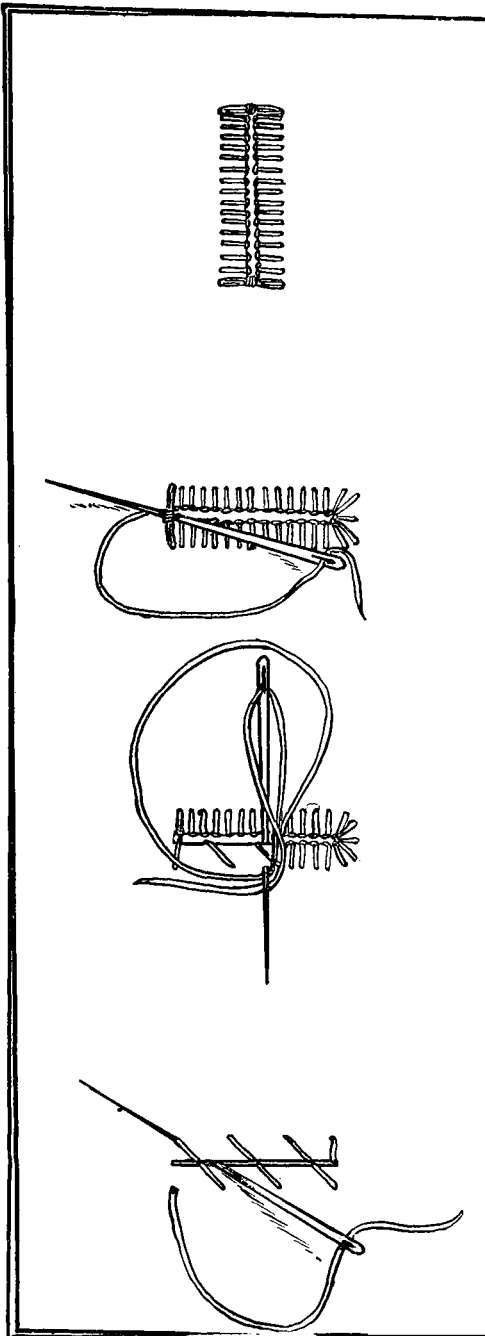
Use buttonhole scissors if you have them, if not, any sharp scissors with good points will answer. When cutting with ordinary scissors the material may be carefully folded in the center of the indicating marks and the buttonhole cut through the four thicknesses of the goods.

Buttonholes are generally placed horizontally or vertically, the deciding factor being the position on the garment, and where the pull or strain is to come. If there is to be pull or strain the button should pull into the end of the buttonhole next the edge of the garment. If the button pulls against one of the long sides of the buttonhole it will soon stretch it so far out of shape that the garment will not stay fastened.

The finish usually given to the end of a buttonhole on which the button is likely to pull is known as the "rounded end."

The other end of such a buttonhole is generally barred.

Buttonholes on which there is no strain, as vertical buttonholes in the front of a full waist, may have both ends barred or both ends rounded. The former way is preferable. A worked buttonhole should be inconspicuous when the button is in the buttonhole.



Methods of making buttonholes

To Work the Buttonhole.—Start at the end away from the fold of the goods, or in a vertical buttonhole start at the bottom. Hold the buttonhole over the first finger of the left hand, with the raw edges close together. Work from right to left. Take a thread of sufficient length to finish the buttonhole and make a small knot to be concealed between the two thicknesses of the material. Overcast around the buttonhole taking the stitches in just deep enough to prevent fraying, about one-fourth inch apart and an even depth, being careful that they lie loosely over the edges of the buttonhole. When back at the starting point insert the needle under the raw edge and bring the point out close beside the first overcasting stitch. Take a stitch under the raw edge bringing the point of the needle through onto the right side close to the loose thread.

Take the thread from the eye of the needle, bring it towards you, down under the point of the needle and away from you, or towards the right, parallel with the needle. Then pull the needle through and taking hold of the thread a few inches from the

edge of the buttonhole, pull it straight out from the edge until it lies smooth and flat and the little knot or "purl" comes on the edge. Continue in this way with the stitches close together and of even depth until you reach the end of one side, then spread the stitches in fan-shape around the end. Finish the other side as before. When the last buttonhole stitch is made on the second side, take three single over and over stitches across the end the width of the buttonholing. Hold these together by a few overhanding stitches taken over the longer stitches and catching lightly into the material. These overhanding stitches at the barred end will give a neater and less conspicuous finish than buttonhole stitches, though that method may be used if desired. For vertical buttonholes on which there is no strain use the barred finish instead of the fan-shaped end.

EYELETS AND SLITS

Eyelets are round holes made in a garment for cord to pass through or to hold the metal shank of a button.

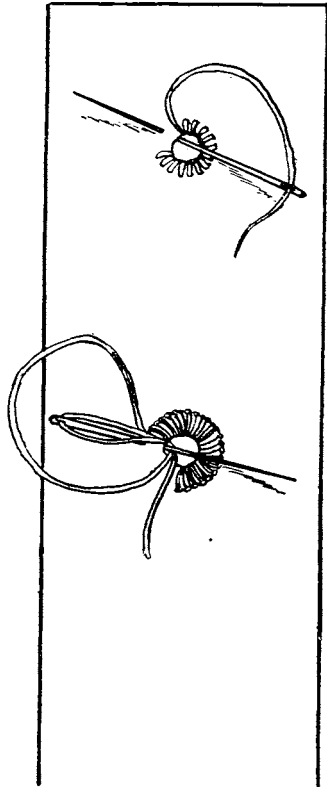
The method of working may be the same as for a buttonhole, by overcasting and then finishing with the buttonhole stitch, but if the eyelet is very small the overhanding stitch is frequently substituted for the buttonhole stitch. When finishing in this way the stitches should be even and close.

Slits for ribbon to pass through are worked exactly like a buttonhole with the buttonhole stitch, and are finished with bars at both ends.

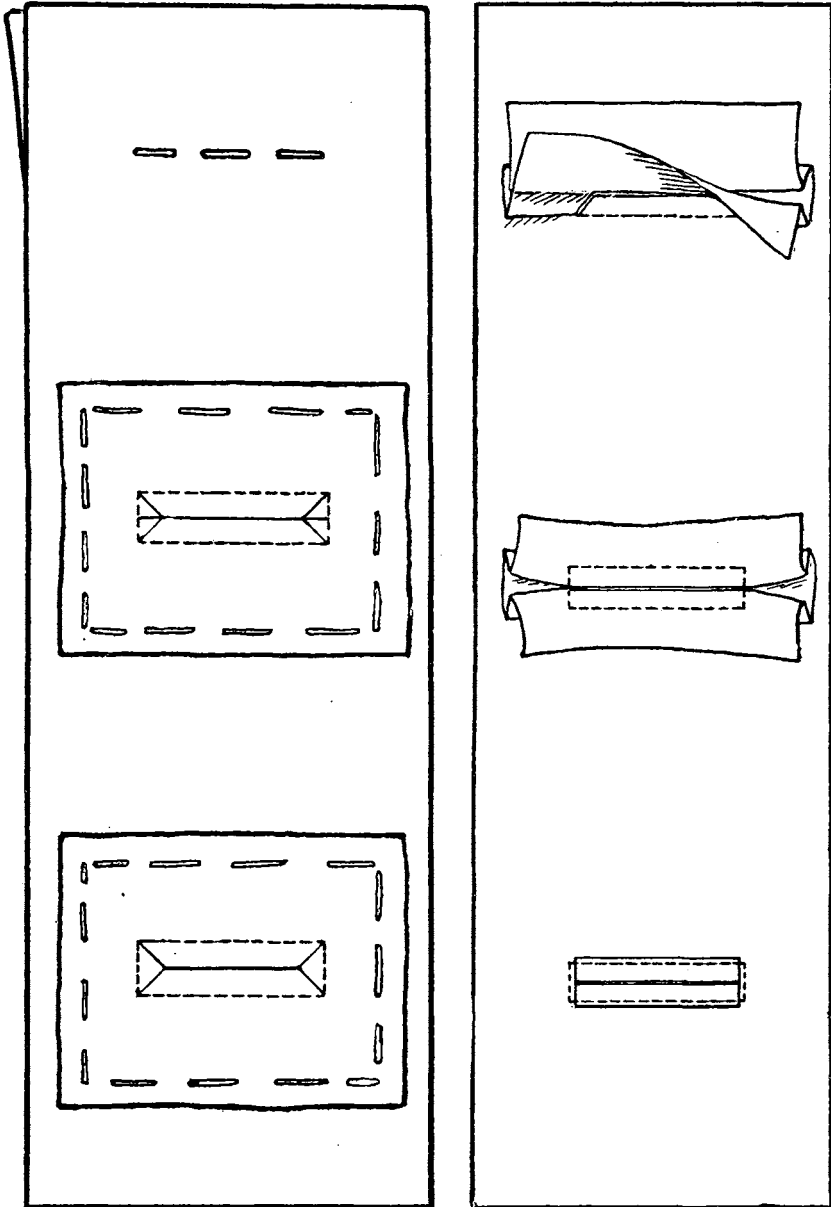
BOUND BUTTONHOLES

A bound buttonhole is one of the quickest and most attractive ways of finishing a buttonhole. Openings finished in this way are also used for passing belts through, and sometimes purely as a decoration.

The process of making a bound buttonhole is exceedingly simple, but great care in cutting, stitching and finishing is necessary, else the buttonhole will have a clumsy appearance.



Method of making eyelets



Method of making buttonhole No. 1

Bound buttonholes may be divided into four classes:

1. Those bound with a piece of materials cut straight, or on the bias.
2. Those bound with bias tape.
3. Those bound with a narrow strip of material cut straight or on the bias.
4. Those made in heavy material.

Method of Making No. 1.—Decide on the position of the buttonhole and mark with a basting thread as in illustration. The binding piece should be two inches wider than the length of the buttonhole, and should also measure about two and a half or three inches from top to bottom. It may be cut on the straight of the material, that is, even with the lengthwise and crosswise threads of the goods, or on the bias.

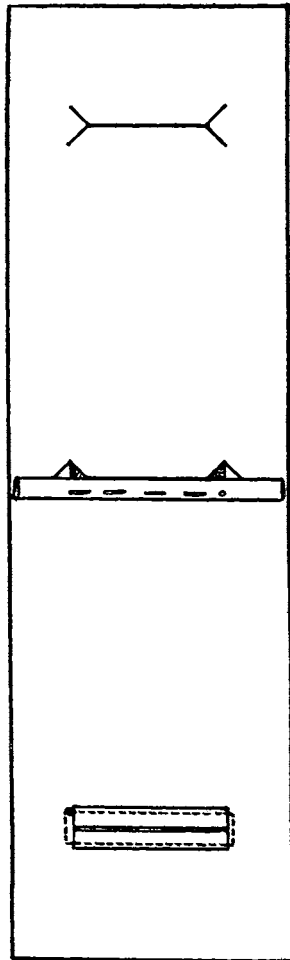
Cease the binding piece through the center (from side to side) and place this crease over the basting line which marks the position of the buttonhole.

Baste around the edge, then mark through from the wrong side with a pin at each end of the basting, and draw a pencil line between these pins.

Mark in at each end one-eighth inch, and also one-eighth inch straight up and down from the ends of the pencil line, and draw slanting lines connecting these points. Connect the ends by dotted lines. Stitch by machine on the dotted lines then cut on the solid lines as in illustration.

Remove basting, turn binding material through onto the wrong side, and baste keeping the binding material smooth over the cut edges and turning in the triangular ends square at each end of the buttonhole. Note that the width of the binding depends on the distance of the stitching from the center or cutting line of the buttonhole. The bound edges should just meet in the center without overlapping.

The wrong side of the buttonhole will look something like illustration. The binding material is held in position by hand or machine sewing. If done by hand, sew from the right side in



Method of making bound buttonhole No. 2

the seam line of the first stitching, over-handing the ends. If done by machine, stitch on the binding close to the seam line which joins the binding to the goods, and also stitch across the ends, turning square corners.

Method of Making No. 2.—The making of buttonholes bound with bias tape is given before the making of those bound with cut strips of material, as the process is accomplished more easily with the commercial bias tape.

Mark the size, position and sewing lines of the buttonhole with lead pencil or chalk on the right side of the garment. See illustration. Cut on the solid lines as in making No. 1.

Cut two pieces of bias tape, each one inch longer than the finished size of buttonhole and baste over each long edge of the buttonhole as in illustration.

Push the ends of the tape through to the wrong side and fold under the triangular shaped ends of the buttonhole.

Stitch by machine as in illustration. It is generally a saving of time to baste the tape on instead of trying to stitch it without basting, as it is apt to slip at the corners.

It may be necessary to slash the corners of the buttonhole in slightly more to make the tape lie perfectly flat with the edges just meeting in the center of the buttonhole.

Method of Making No. 3. When the edges of the buttonhole are to be bound with pieces of the material cut straight or on the bias, the buttonhole should be cut first as in illustration. The strips should be one and one-fourth inches wide and each strip one inch longer than the finished buttonhole. One raw edge of the strip may be pressed over, similar to an edge of bias tape, and the material held over the edge of the buttonhole and basted, following the procedure given for the finish of buttonholes with bias tape. The difference will be that there will be raw edges on the wrong side.

Another method of using these strips of material is to seam them on from the right side, as in illustration, folding them over the edge of the buttonhole onto the wrong side and finishing with hand or machine on the right side.

Method of Making No. 4. In making bound buttonholes in very heavy material it is generally a good plan to finish them with a binding of the same material as the garment. In this case the buttonhole is cut first as in No. 3. The edges are then turned onto the wrong side and catch stitched or overhanded down and the buttonhole is carefully pressed on the wrong side.

Cut strips of the buttonhole material one and a half inches wide and each one inch longer than the size of the finished buttonhole. Fold these strips through the center lengthwise and press. Baste these on the wrong side of the buttonhole with the edges just meeting in the center. Stitch by machine on right

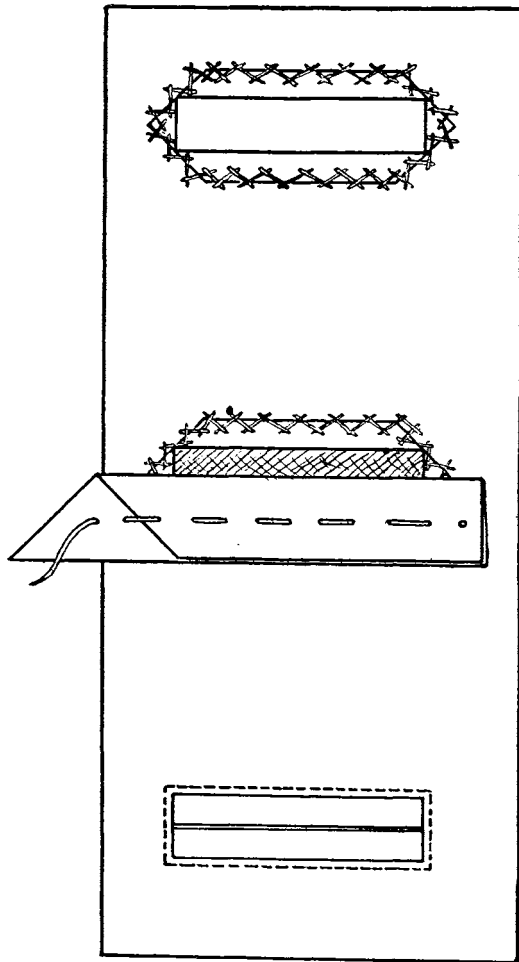
side as in illustration. Note that in a buttonhole of this kind it is better not to slash in too far at the ends, so to keep the opening as small as possible.

When bound buttonholes of this kind are made through an interlining in the front of a coat, the buttonhole is made through the outside and interlining, then the facing is basted into position and slashed over the buttonhole. The raw edges of the slash are then turned in and overhanded or hemmed down onto the binding of the buttonhole.

In wash materials where there is a facing, it is better to bind through both the material and the facing, as there is less danger of the shape of the binding piece showing through in ironing. The edges of the binding section are then catch stitched to the facing. This difficulty is not as serious when bias tape or narrow strips of the material are used.

When it is necessary to make a bound buttonhole on a piece of thin goods, one of the above methods may be followed, or the binding material may be basted on and the buttonhole marked without the triangular ends, then stitched quite close to the marking sloping to a point at each end. When this is turned and stitched the edges will look like a fine cording or piping.

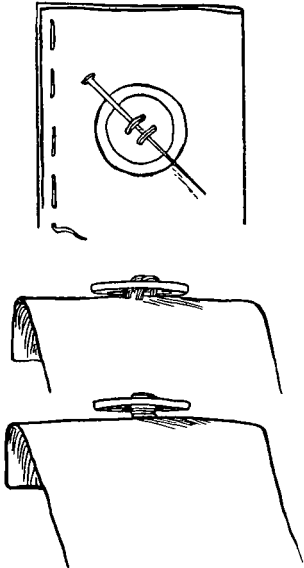
The ends of bound buttonholes are frequently finished with buttonholed bars, or with small arrow tacks.



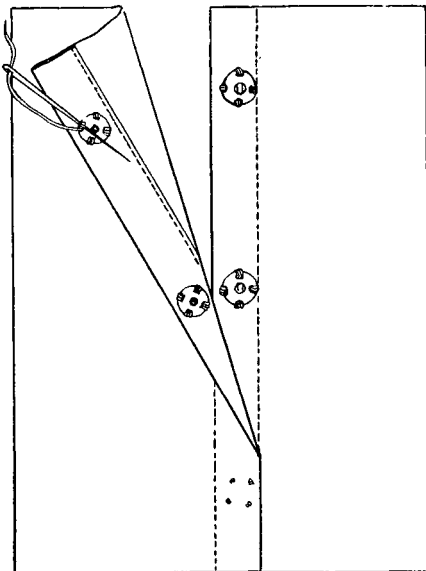
Method of making bound buttonhole No. 4

SEWING ON BUTTONS

Buttons are made with holes perforated entirely through from top to bottom or with shanks. When a button with holes is to be used as a fastening it is necessary to provide a shank of



Method of sewing on buttons



Method of sewing on snap fasteners

thread to rest in the end of the buttonhole. Use a strong or double thread and a knot concealed under the button. Start on the right side, bringing the needle through to the wrong side, then onto the right side again, close to the knot. Place the button in position and holding a pin across the top sew back and forth over the pin and through the eyes of the button and the cloth. After the last stitch bring the needle up through the cloth only. Remove the pin, and holding the button away from the cloth wind the thread from the needle around the thread shank, then carry the thread to the wrong side and fasten.

Shank buttons are sewed on by bringing the thread through from the wrong side, passing through the metal or bone loop, and again to the wrong side. Sometimes in buttons in which the shank consists of a metal loop the cloth is folded over the loop, and the sewing is done entirely from the wrong side of the material. This method is satisfactory if care is taken that the cloth does not pucker.

SNAP FASTENERS

Snap fasteners are sewed on through the holes with small over and over stitches preferably passing the

thread under the fastener or between the thicknesses of material in progressing from one hole to another.

Sew the ball section of the fastener onto the outside or more conspicuous part of the garment.

HOOKS AND EYES

Although hooks and eyes have in a large measure been superseded by snap fastenings, there are certain places on garments where the hook and eye is more satisfactory, particularly on belts, or where there is much strain.

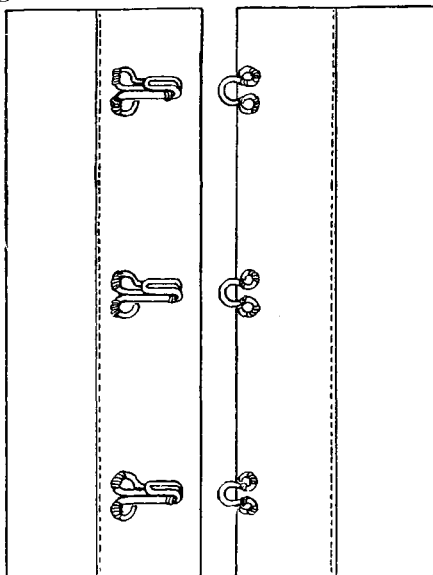
Hooks and eyes may be sewed on with the button-hole stitch, but the over and over is quite generally used and is permissible if done neatly. The hook should always be held firmly at the end of the hook portion, and if the regular loop eyes are used, projecting beyond the ends of a belt, these should be sewed at each side where the loop comes beyond the end of the belt.

In sewing on the straight wire eyes, place the open side of the wire loops towards the hook. In that way the eye will not pull out of shape.

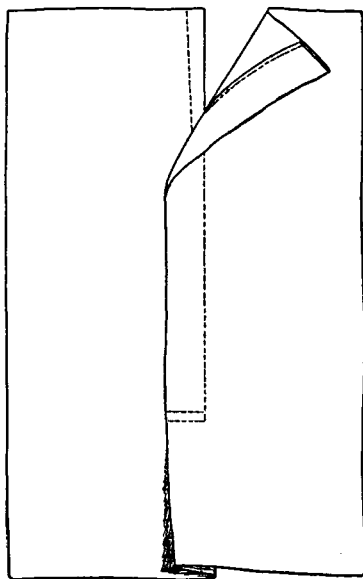
PLACKETS

A placket is a finished opening made for the purpose of ease in adjusting a garment or convenience in laundering.

Placket finishes are much more simple now than formerly as skirts are more generally straight in cut, and the openings are frequently in seams. As little extra sewing as pos-



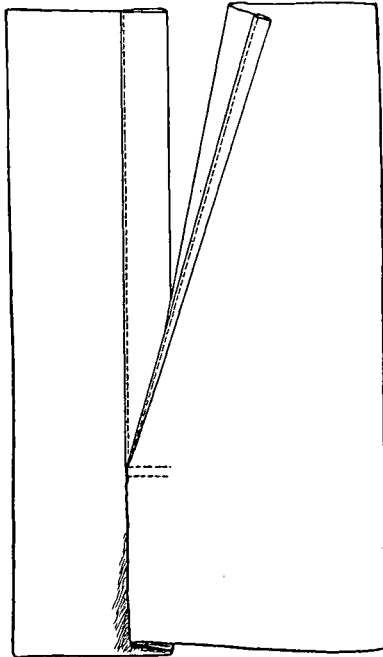
Method of sewing on hooks and eyes



Flannel skirt placket—right side

sible is done, as the extra material used in the finishing often destroys the soft effect of the garment. However, it is well to consider a few of the standard methods of finishing plackets.

Hemmed Placket.—The simplest form of a placket is the hemmed, sometimes called the flannel skirt placket.



Flannel skirt placket—wrong side

This is preferably cut in the goods, or made in a plain seam. Hem the left hand side in a narrow hem sloping to a point at the bottom. Hem the right hand side in a hem even in width along its entire length. Then lap the wide hem its full width over the narrow hem, staying it at the bottom with two rows of stitching.

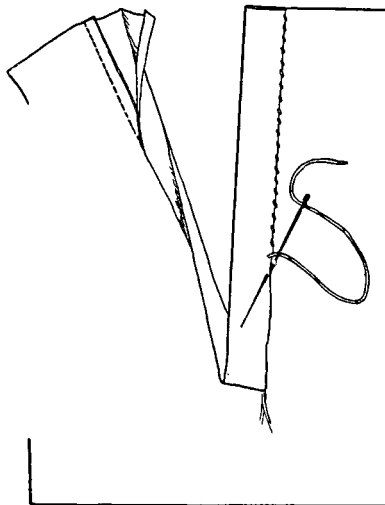
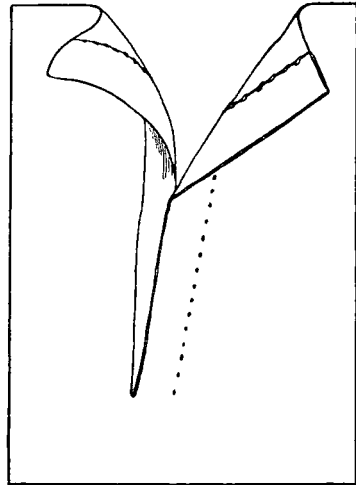
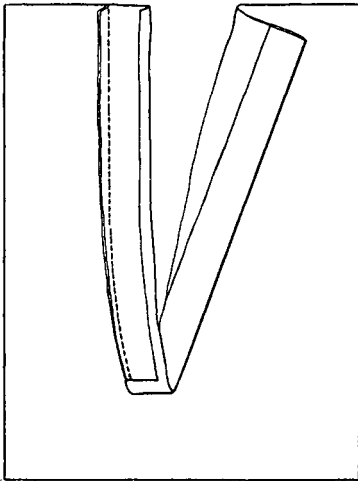
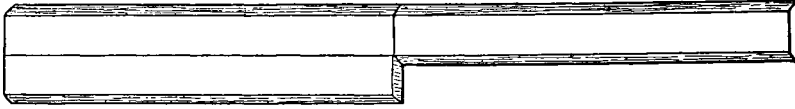
Bound Placket.—There are two methods of making bound plackets.

1. Cut a piece of material straight lengthwise of the material one inch longer than twice the depth of the placket, and twice the finished width of the placket, plus a one-half inch allowance for two seams. Bind the edges of the opening with this strip, and when completed fold back the front half onto the wrong side allowing the other half to extend out as an underlap. This is sometimes called a continuous facing.

2. The second method is a combination of binding and facing and is advisable where the material is at all thick. Cut the material according to the directions for a bound placket, and apply in the same manner as for the first sewing. Crease the binding in the center along its entire length and cut away the under portion of the front half one-eighth inch beyond the center crease and one-fourth inch above the bottom. Baste the front half down and finish as a facing and the other half finish as a binding to serve as an extension or an underlap. This is sometimes called a drawers' placket.

Seam Placket.—In some garments the width of the seam is sufficient for facing and extension especially if the edges are selvages and if it is possible to use small snap fastenings for closing. In such a placket, the top or outside edge of the seam is caught down to the goods with small invisible stitches, and the

under side allowed to extend out as an underlap. If the seam or placket has raw edges it is frequently bound with a narrow binding. Often no snap fastenings are used, but the opening is concealed under a sash or tie of some sort.



Methods of finishing plackets

Use of the Sewing Machine

Sewing machines of the present day are such an improvement over those made even fifteen or twenty years ago, that children may be taught the principles of operating the family sewing machine almost as soon as their feet can reach the treadle, or as soon as they can be trusted to control the motor, if the machine runs by electricity. Many schools now have machine sewing in the fifth grade and children are delighted when permitted to make a dress by machine.

Instruction Book.—The first thing is to learn the names of the different parts of the machine, and notice the connections between the different parts. As machines differ somewhat in operation it is best to study the instruction book which comes with the machine. This book should be carefully preserved. If no book of instruction is available the following directions will be helpful.

All home sewing machines are of two types, lock stitch or double thread, and chain stitch or single thread, and are run by foot power, hand power or motor power.

In the lock-stitch machine the underthread is wound on a bobbin.

In the chain-stitch machine the thread is operated over a looper making a loop or chain.

Each type has its advantages and disadvantages.

The lock-stitch machines may be further divided into those having long bobbins in a shuttle, and those having round bobbins fitting into a bobbin case.

Important Parts of the Sewing Machine.—The spool of thread is held in position on the machine by a **Spool Pin**.

The **Needle** is set in the lower end of the **Needle-Bar**.

The **Foot** which holds the work firmly is called the **Presser-Foot**, and is attached to the lower end of a bar similar to the **Needle-Bar** and called the **Presser-Foot Bar**.

The **Feed** is the toothed metal surface under the **Presser-Foot** which grips the cloth and pushes it toward the needle.

The **Bed** of the machine is the place on which the work rests when stitching.

The **Bobbin** is the spool or spindle which holds the under thread in a double-thread machine, and may be long or round.

The **Shuttle** or **Bobbin Case**, in which the bobbin rests, is either removable or a permanent part of the machine.

On double-thread machines the passing of the thread is regulated by a **Tension-Spring**. The adjustment of this is by a screw, which, according to the way it is turned, gives a tight or loose appearance to the stitch.

On chain-stitch machines the tension is automatic.

All machines have a **Stitch-Regulator** also, which makes it possible to alter the size of the stitch to suit different materials.

Most machines have an engraved table on the metal bed of the machine giving the correct size of needle to use with different numbers of thread.

The large wheel at the right of the arm, which is given a turn in starting the machine is the **Balance Wheel**.

The small wheel next to it is the **Band-Wheel** over which the leather **Belt** of the machine passes to the large wheel under the table.

This large wheel is operated by the **Treadle** and connected with it by a rod.

Operating Foot Power Machines.—It is generally an easy matter to learn the operation of the treadle, particularly if the band wheel is loosened. The loosening of the band wheel locks the needle-bar.

To start the machine turn the hand or balance wheel forward or back, according to the directions given in the instruction book, and operate the treadle at the same time. Keep the feet moving constantly so the balance wheel will not reverse.

If there is any difficulty in teaching this, it will be obviated by the teacher sitting close beside the pupil, keeping one foot on the treadle until the pupil has become accustomed to the movement, and gradually lifting her foot until the pupil is unconsciously operating the machine herself. When this step has been accomplished use folded or ruled paper, unthreading the needle, and treadling slowly until it is possible to keep the needle continuously on the lines.

Machines Operated by Hand.—Hand machines have the advantage of being somewhat portable. Considerable care and experience is necessary to guide and handle the work with one hand while the other is turning the wheel, but it can be done very satisfactorily.

Machine Practice.—After learning to thread the machine practice stitching first on paper, then on cloth. Follow the directions in the Instruction Book carefully as to method of starting the work and also removing the work from the machine. Learn to change the needle.

With different materials, numbers of thread and needles, practice stitching, changing the length of the stitch, and altering the tension to suit the materials. Practice stitching close to folded edges and turning square and round corners.

The former idea of never altering the stitch and tension is entirely exploded, except with regard to the chain stitch machine in which the tension operates automatically.

Every machine of modern make has a set of attachments: hemmers, tuckers, rufflers, gauges, binders, quilters, etc. Much

time can be saved in sewing by the use of these attachments, although practice is required to use them satisfactorily and rapidly.

For narrow tucks the machine tucker is a great time saver and tucking done by machine is fully as attractive as most hand tucking and much more so than some. While machine tuckers differ in their construction they all have methods of adjustment for the width of the tuck and the distance apart, or space between, the tucks.

The rufflers can be regulated to allow the material, being gathered or ruffled, to be scant or full.

Hemmers of different widths come with machines but the narrow ones are more satisfactory than the wider ones.

The gauge and quilter are very useful in making parallel rows of stitching, or stitching an even distance from a fold, as in making tucks which are too wide to pass through the tucker.

Gathering Without the Ruffler.—On any lock-stitch machine it is quite possible to do satisfactory gathering without any attachment by lengthening the stitch slightly and loosening the tension of the upper thread. Practice first on a small piece of material, until it is possible to draw up the under thread. It is apt to be more satisfactory when the under thread or both threads are of silk.

Decorative Stitching.—Very effective decorative stitching may be done on a lock-stitch machine by winding heavy twisted embroidery silk or cotton on the bobbin and using a fine thread or silk to match the material for the upper thread. As the bobbin winder is apt to rough up embroidery silk and especially cotton, thus causing it to split, it is advisable to wind the heavy thread onto the bobbin by hand. The stitching, of course, must be done on the wrong side of the garment or article in order to throw the heavy thread onto the right side of the garment.

A trial on a small piece of material will show whether it is necessary to lengthen the stitch and loosen the tension, but a long stitch is generally more effective with the heavy thread.

Care of the Machine.—The machine must be kept clean and well oiled. All parts of the machine should be wiped frequently, and the machine kept closed when not in use.

In oiling consult the Instruction Book as to places especially needing oil. Before giving a general oiling unthread the machine, then oil and run for a few moments to spread the oil, and wipe any extra oil away carefully.

Always keep on hand a supply of needles suited to different materials and thread. The Instruction Book gives a list of the proper sizes.

Learn to shorten the machine belt when necessary, as a loose belt makes the machine run badly. An extra belt should be kept on hand in case of an accident.

Garment Repairing

The term Repairing seems to include Darning, Mending and Patching, each of which has come to have its own special meaning in the sewing field.

Darning.—Although darning is a much maligned art it is, nevertheless, a very necessary one and no sewing book would be complete without some reference to it.

As a rule darning is done more on knitted materials than on cloth and the word has come to be popularly associated with the repair of hosiery.

The material used for darning knitted goods, as hosiery and underwear, should be a regular darning thread, either of cotton, wool or silk, the same fiber and color as the article to be repaired. This thread is loosely twisted and of a soft finish.

The darning stitch is practically the same as the running stitch, and is used to repair holes and strengthen worn places.

The hole or worn place should be held flat over the fingers of the left hand, or over a "darning ball."

Start without a knot running the threads back and forth for a few stitches at one end of the hole and about one-fourth to one-half inch away from it, depending whether the material is worn or not.

Darn across the hole lengthwise, first taking a stitch into every loose loop of the knitted material. Do not pull the sewing threads tight but allow them to be loose enough so that in any stretching of the knitted material there will be no strain.

After the lengthwise or foundation threads are in place weave in and out across them close enough to fill the spaces.

Runs in Hosiery.—In silk or fine lisle-thread hosiery frequently a broken thread will unravel or run the entire length of the stocking before it can be stopped. Very obviously darning would be too conspicuous for this sort of a damaged place, and the picking up of the threads by means of a fine crochet hook is too lengthy and laborious a process. A run of this sort can be repaired very satisfactorily by the use of the grafting or baseball stitch, being careful to catch the loops of the knitted material at each end of the run and catching into one thread only on each side of the run. The stitches should not be drawn tight but allowed to lie loosely enough so that there will be no strain in the stretching of the knitted material.

Mending.—This term is used largely in reference to the repairing of torn or worn places in woolen materials, but includes as well the repairing of all woven materials. It sometimes includes the use of the darning stitch.

In mending torn or worn places in woolen materials or table linen the method used will depend largely on the quality and finish of the goods and upon the closeness and character of the weave. If the tear is fresh and the edges have not been stretched out of shape it will be possible to repair it much more neatly. The mending thread used should be ravellings of the same material or a fine thread or silk to match, and the needle selected should be as fine as can be used with the thread.

If the threads are broken, but not worn away, the grafting stitch is an excellent method of holding the edges together, providing the material does not fray, and if the goods has a slight nap the line of sewing will be almost invisible.

If the goods is of a very firm and close weave it is sometimes possible to take up a tiny seam sloping it to a point at each end, and then pressing carefully. The edges of the seam should then be overcast or overhanded to add strength.

If the darning stitch seems better to use, hold the torn edges together flat, or if it is necessary to strengthen the material around the torn place, more than would be possible by the darning stitches, baste a piece of the same material on the under side of the tear or worn place, taking care that the threads of the goods run the same way. Darn the edges of the tear down to the foundation section, running the stitches in the same direction as the threads of the material. Take very small stitches on the right side and slightly longer ones on the wrong side. The stitches should not be pulled tight.

The edges of the foundation section may be held in position by catch stitching, or they may be left free and loose and finished by overcasting. The latter method is less conspicuous but is not advisable if the repaired article is to be laundered.

Patching.—The important point to be considered in both the hemmed and the overhanded patch is the matching of the material used for the patch as to lengthwise threads and design in the portion of the garment to be patched.

In preparing a hole for either of these patches trim it to a good shape and such that the edges can be turned in neatly. As a rule a square or oblong hole when finished presents a neater appearance than one cut round or oval in shape.

Hemmed Patch.—Place a piece of material over the hole and matching the lengthwise threads and design of the material carefully cut the patching section, making it from one to one and a half inches larger all around than the hole to be repaired. Thus if the hole is one inch square, cut the patching section from three to four inches square, according to the condition of the material surrounding the hole.

Place this on the under side of the garment with the right side of the patch against the wrong side of the goods and the design and threads matching exactly. Baste to position.

From the right side of the garment, or article, turn in the edges of the hole and baste down to the patching section. Turn in the edges of the patch on the wrong side and baste to position. Hem all the basted edges, remove the bastings, and press.

Overhanded Patch.—When neatly done, with the threads and design of the material matching, this patch is sometimes almost invisible.

In preparing the hole for this patch it is almost a necessity to have it square or oblong. Trim the edges of the hole and turn under one-eighth to one-fourth inch, according to the quality of the material, being careful not to stretch the edges out of shape. Basting or pressing will be better than creasing as the latter method tends to stretch the edges of the hole.

Measure the exact size of the hole, place a piece of the patching material under it, match the threads and pattern, and then from the right side place pins on the patch even with the four sides of the hole.

Remove the section and fold to the wrong side on the lines of the pins, and compare the measurement of the folded piece with the size of the hole. It should measure exactly the same. Cut one-fourth inch outside the folded edge and overhand the patch into the hole. The overhanding is done on the wrong side and the stitches taken through the folded edges should be small enough to allow the seam to lie flat when the seam is pressed open on the wrong side. Overcast the raw edges of the seams.

Patterns—Their Selection, Use and Alteration

The commercial pattern long ago superseded drafting as the basis for successful sewing, and when a person learns to use a commercial pattern intelligently, and how to modify it to suit individual requirements she will have gained considerable in the way of self confidence.

Selecting a Pattern.—This should be no hit or miss proceeding but a carefully thought out process. If the material is not on hand it may be well to decide on the pattern first, and then consult the pattern envelope as to the amount of material required.

The material when purchased must then be suited to the style of the pattern, as, for instance, a pattern with a soft draped effect would not look well made in a stiff, heavy material.

When the goods is already on hand the style of the pattern selected must not only be suited to the type of material but it must be suited to the amount on hand. This is especially true in

remodeling garments. It is necessary then to know the shape of the pieces on hand, and to mentally compare those with the shape of the pattern sections as shown on the guide chart or back of the pattern envelope.

In selecting a pattern for a scanty amount of material with which it will be necessary to combine some other goods, have in mind this necessary combination when deciding on the pattern, and choose one which will permit of the joining of the two materials in some attractive and decorative way.

While the two above practical details enter into the choice of every pattern, one should never lose sight of the choice of the pattern in relation to the person who is to wear it. Better than trying to follow blindly any set rule as to a particular type of pattern for a short person, tall person, or a stout person to wear, is for the person herself to study her own figure, and if the prevailing style seems unbecoming to try and adapt it so that it will meet her own particular needs.

Little things often have more to do than we think with the becomingness of a certain type of garment to different figures. The amount of fullness in a skirt, the length of the skirt, the shape of the neck line, the fit of the sleeves at the shoulders, and the finish of the sleeves at the lower edge, the height of the waist line and its tightness or "easiness" are some of the principal points which make a garment becoming or unbecoming.

Pattern Sizes.—For women, waists and dresses are generally purchased by bust size. Separate skirts are purchased by hip measurement. When the figure is out of proportion it is best to compare the measurements of the person for whom the pattern is intended with the measurements on the pattern envelope and decide which measurement it will be easiest to alter. Buy a pattern of the correct size for that portion of the body which is most difficult to fit, then alter the other parts.

Patterns for young girls and children are listed in age sizes but the actual measurements are also given on the envelope and should be considered.

Pattern Markings.—All commercial patterns are marked in some way to indicate the method of placing on the material, and making the garment. These markings may be in the form of perforations, printing on the pattern section, and notchings.

The perforations and printing generally indicate:

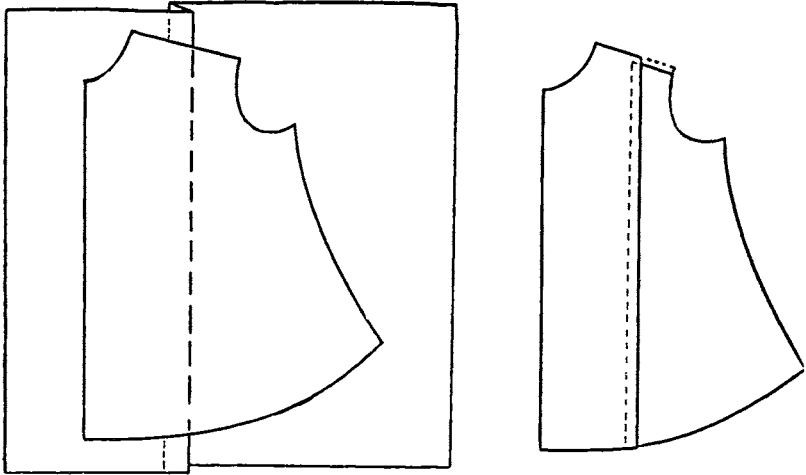
The method of placing the pattern on the material.

The seam allowance.

Tucks, pleats, gathers, pockets, etc.

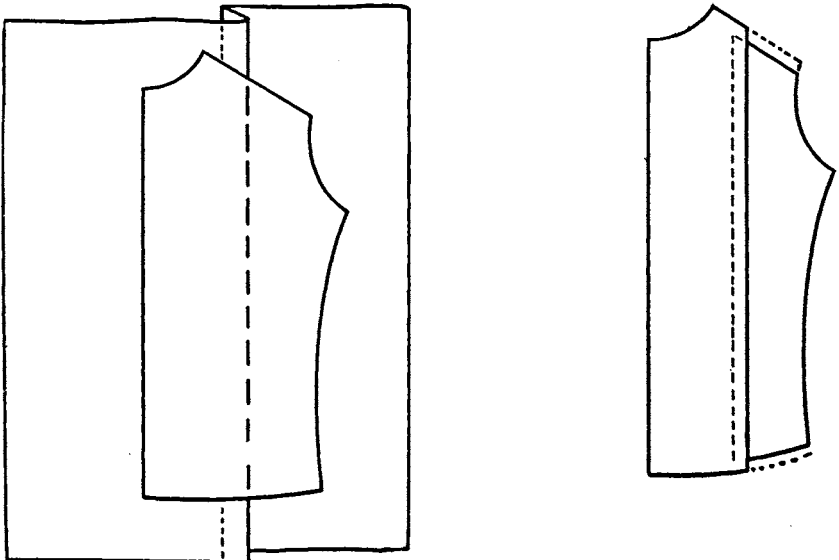
Notches generally indicate the putting of the garment together, as in seams where edges notched alike are joined.

Many of the commercial patterns now have complete directions printed on each one of the sections of the pattern.



Methods of altering fronts of patterns

Use of Patterns.—After the pattern is purchased study both the pictures and the guide chart. Decide on the picture or view which you wish to copy and see which pattern sections will be necessary for this. Keep all other sections in the envelope. Study also the sheet of directions which is to be found in almost every pattern envelope or the printed directions on the envelope or pattern sections. Observe carefully the perforations indicating the lengthwise fold, and lengthwise of material.



Methods of altering backs of patterns

Hold the pattern sections up to the person and see where alteration of the pattern is necessary or whether a slight extra allowance of material at the seam edges will be sufficient.

With a loose, straight type of dress, it is not necessary or satisfactory, to test the figure and the pattern, measure for measure.

In waist patterns requiring considerable alteration it may be necessary to cut the pattern where it seems too small and placing the sections apart on paper cut a new pattern section. To avoid destroying the original pattern, however, it is better to mark on the pattern the places where it needs enlarging, then lay pleats in a paper directly under these markings and cut around the pattern. After opening out the pleats in the new pattern it will be found necessary to trim off the outside edges of the pattern, where the pleat has made the edge irregular.

Sometimes it is not necessary to make the allowance entirely across the pattern but only part way. In this case a V shaped pleat is necessary.

Since sleeves have become easy and comfortable in style, sleeve patterns require less alteration. If, however, the waist has been altered increasing or decreasing the size of the arms-eye it will be necessary to consider carefully the size of the sleeve at the top. Set-in sleeves, with no apparent fullness, are always from three-fourths inch to one and a half inches larger than the armseye. This fullness is "eased in" when the sleeve is put into the waist.

When skirts are straight instead of gored, it is a much more simple matter to alter them. It is generally a matter of adding or subtracting material in length or width.

FREE PATTERN CUTTING

The term, Free Pattern Cutting, indicates the making of simple patterns from newspaper, without the aid of drafting.

Drafting has many valuable points to recommend it, for the leader and student who are constantly keeping in touch with new ideas, lines and proportions, and who, through constant practice, are able to grasp quickly any necessary changes which should be made in a draft in order to make it conform to the new style features of the season.

For the home woman, however, even simple drafting seems a complicated proceeding. In the first place it is necessary to have smooth brown paper, pencils, yardstick or ruler, and table space large enough to lay out the paper. Moreover, to do drafting which is even fairly satisfactory, some knowledge of freehand and mechanical drawing or geometry is almost a necessity, as much of the success of drafting is based upon drawing good curves and lines at right angles to each other.

Very obviously too, free pattern cutting does not take the place of the commercial pattern, where highly skilled workers develop the latest ideas of the fashion artists. Neither is it possible nor advisable in handling paper of the thickness, weight, and often poor quality of newspapers to make any but the simplest patterns.

To that end, therefore, the following simple directions will generally prove enough to enable most women to grasp the method of making these patterns.

Newspaper is especially recommended because it is generally available and also because of the column lines which can be used to indicate the straight lengthwise of the material, and are a great help in "balancing" the pattern on the figure.

Children's patterns are cut most easily; waists, blouses, sleeves, and underwear.

To cut the waist for a child's dress, similar to illustration, measure with a tape from the shoulder-neck (the place on the top of the shoulder where the neck joins the body) straight down the front, the desired length of waist. This will be the longest measure as a waist generally curves down a little in front. Cut a piece of smooth newspaper this length with the columns running on the length. To obtain the width, measure from the center front to the underarm seam at the bottom of the waist, taking the measure easy and adding at least one inch. Make the paper which has been cut the desired length, this width.

Hold the paper up to the figure with one long edge of the paper even with the center front of the figure. Move up or down until the upper edge of the paper comes even with the point of measurement at shoulder-neck. See illustration. Notch at this point, and keeping the paper still in his position, notch at center front of neck. Cut the curve of the neck, making sure that the curve forms a good line.

Place the pattern in position on the figure again and pin. Fold over the top edge in a good line for a shoulder seam. (Note that there are no seam allowances in this first pattern.) Make a notch for the length of the shoulder seam.

Note the depth of the underarm and also the width across chest, indicating each with pins. Cut the curve for the armseye,



Simple type of dress for which free pattern cutting might be used

cutting outside the measurement of chest. The curve should be shaped something like illustration. Fold the paper at the under-

arm so that the seam will slant to the center of the armseye, under the arm.

Proceed in the same manner for the back pattern. The shape of the neck on the back pattern will be something like illustration. The armseye will be similar to illustration.

Fold the paper at the underarm in the same way as for the front. Having cut the front and back, place them on fresh newspaper with the column lines running in the same way and cut, allowing one inch seams at shoulders and underarm. Pin up the pattern and try on, making any necessary alterations by trimming off or adding paper as required. Note that the underarm seams of front and back, also the shoulder seams, must tally.

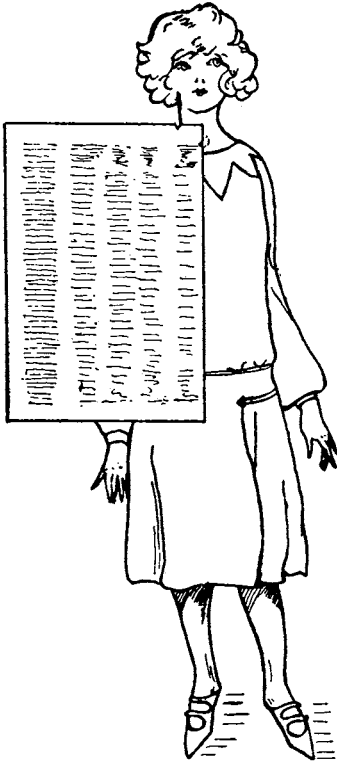
In making patterns in this way, care should be taken that the shoulder seam comes exactly on top the shoulder, and the underarm seam, directly under the center of the underarm.

For a low neck effect, chalk or mark lightly when on the figure, the desired depth at intervals, then remove and cut in a good curve. With a little practice it will be fully as easy to cut a good curve with scissors as though the curved line was carefully drawn.

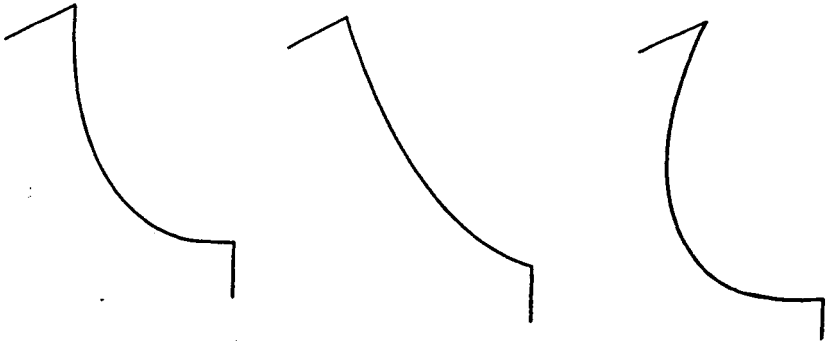
In a waist of this kind where a straight skirt is to be fastened on, no pattern is needed for the skirt.

In a one-piece dress the underarm seam often continues its slant to the bottom of the skirt. In some one-piece patterns the waist pattern is extended down several inches below the waist and is then slashed in at the depth of the hips, both front and back, for about four inches. Extra paper is then pinned on at the sides to add extra fullness in the skirt portion.

This makes it possible to join the selvedge edges at the sides, and also gives a straight lower edge to the skirt.



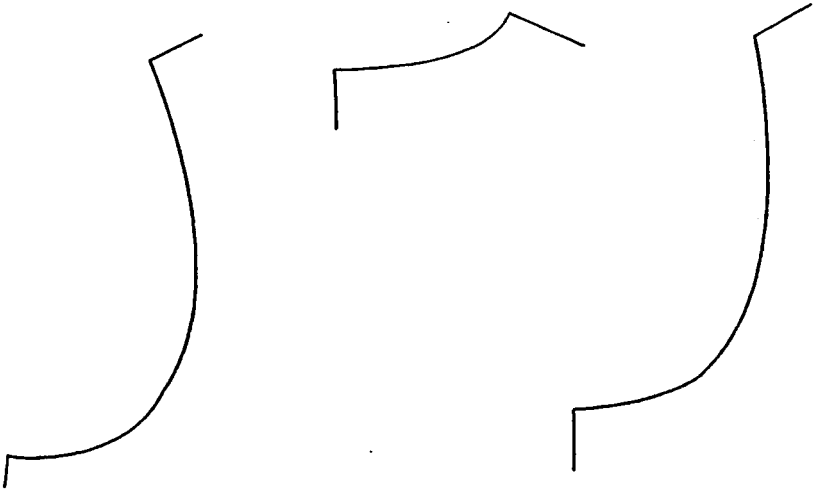
Method of cutting pattern for waist front



Curve at left is a good line for front of neck. Other curves do not conform to neck line

In cutting sleeve patterns it is a good plan to measure the armseye of the waist into which the sleeve is to be put. Add one and one-half inches to this, as a sleeve should measure from three-fourths to one and a half inches larger than the armseye into which it is to be sewed.

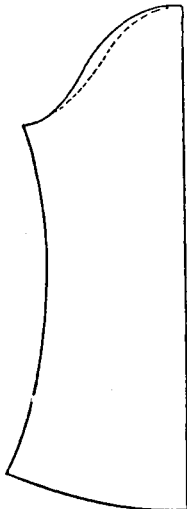
Measure the length of sleeve desired on the arm from the top of the shoulder with the elbow bent at right angles. Cut a piece of newspaper the length of this measure and the width of the armseye plus the one and one-half inches. If the bottom of the sleeve is to be very large it will be necessary to cut the paper the sleeve-width desired instead of the armseye width. With the paper folded, cut the top of the sleeve in a good curve, sloping in or out at the inside seam and curving at the bottom if desired. Trim off one-half the curve at the top as indicated by



Armseye curve at right conforms to loose and easy style of waist better than one at left. Center curve is a good curve for back of neck

the dotted lines in the illustration. This part goes to the front of the waist as the front of the armseye is cut much more straight than formerly and any extra curve on the sleeve would be apt to bulge forward.

Allow seams when cutting. If the sleeve is too large for the armseye so that the fullness will not "ease in," slip the curved part of the top of the sleeve slightly up into the armseye.



Method of making
sleeve pattern

In cutting collar patterns for a perfectly flat collar fitting closely about the neck, obtain the shape of the neck by cutting a plain waist pattern and pinning it together at the shoulder seam. Place the center back of the pattern on a fold of paper and cut even with the neck line. Remove the waist pattern and measure down from the neck line the desired width and shape of the collar pattern.

Other shapes of collars may be obtained by starting with a straight strip of material, pinning up darts until something like the desired shape is obtained, then placing on fresh paper and cutting, making any necessary alterations.

It has not been the intention of the writer to give detailed directions for every kind of pattern, but instead merely suggestions as to ways of beginning the work.

Fitting Garments

For the first fitting of a garment try it on with the seams pinned on the outside. If the garment is a waist, fastening in front or back, adjust it on the figure and allow it to hang from the neck and shoulders. Note the position of the shoulder and underarm seams. The shoulder seam should come directly on top the shoulder and the underarm seam under the center of the arm, and extend straight down to the waist line.

In fitting it may be necessary to alter the entire seam, that is, take up or let out both front and back equally, or it may be necessary to alter either the front or back alone, leaving the seam line on the other section the same.

The general style of the garment will determine whether the fitting should be snug, easy or loose. Most garments are fitted easy or loose. If French seams are to be used a slight allowance must be made. In deciding on the position of the waist line, consider not only the picture on the pattern envelope but also the effect on the figure, raising or lowering the waist line as necessary.

The fit and general effect of the waist will depend considerably on the snugness of the waist line.

If the waist is to be slipped over the head the waist line or lower edge will either have to fasten to position when adjusted on the figure, or be loose enough to pass over the shoulders.

When considering the fit or hang of sleeves, in addition to placing correctly in the garment according to the notches or perforations of the pattern, see that the sleeve hangs straight without twisting, from the shoulder seam.

The sleeve should be cut with this portion straight lengthwise of the material.

Fitting a One-Piece Dress.—The convenience of the one-piece dress has made its fitting an important problem. In adjusting the one-piece dress on the figure the first point to be considered is the fitting about the shoulders, neck and underarm, next the adjustment of the waist line to the proper position, and the amount of fullness if a blouse effect is desired.

It will be necessary to hold the blouse in position by an improvised belt while fitting the skirt.

After stitching the seams, adjust the blouse, if necessary, onto an inside belt, and then proceed to get the length of the dress in the same way as for a skirt.

The use of elastic to hold the one-piece dress in place is not satisfactory except when used at the normal waist line. When used below a normal waist line or at the hip depth the tendency is for the elastic to crawl up, thus drawing the garment out of correct balance and line.

Fitting Skirts.—The problem of fitting skirts is generally spoken of as "hanging the skirt." Contrary to the usual idea among amateurs, a skirt should first be hung from the hips and then adjusted correctly to the belt.

In fitting a skirt adjust it about the hips and see that it hangs straight down without tipping towards the front or back. A skirt which "hangs forward" presents a very ugly appearance, besides being very awkward and uncomfortable to walk in. This fault is due to its being dropped too far on the sides and back for the position of the front and can be remedied by raising the skirt on the belt sloping up from the sides to the back. A skirt which tips towards the back does not present quite as awkward an appearance as one that hangs forward, but is more uncomfortable in walking and sitting.

Straight Skirts.—Skirts cut on the straight of the material even if fitting quite smoothly over the hips, have more or less fullness to be gathered in to the waist. It is necessary that this fullness hang straight down from the waist line and not spread fan-like at any place. The amount of fullness in a skirt, particularly in a straight skirt, needs to be carefully considered. Unless a sufficient amount of material is allowed to swing down

from the hips the skirt will have the appearance of "cupping in" or "cutting in" below the hips. This effect is most apparent in the side view and is due to the stretching of the material over the hips and body when sitting down.

When in doubt as to whether a skirt pattern is full enough pin the pattern sections together and hold up to the figure. In this way it will be a simple matter to determine the additional amount of material necessary if there appears to be insufficient allowance in the pattern.

Local living conditions have a great deal to do with the amount of fullness necessary in skirts and should be considered when purchasing a skirt pattern. Very often the general effect may still be retained, and a little extra fullness added where necessary to give freedom of movement.

Skirts which are cut straight, and all skirts with a straight lower edge should have the lower edge finished before being hung, and any adjustment of length made at the belt. In planning for a straight skirt without a pattern, take the measures from the waist to the floor, at front, side, and back, and work with the longest measure (usually the back or side). This is called the floor length. Decide on the distance from the floor which it is desired to have the skirt, and subtract this from the floor length. This gives the finished length. To obtain the cutting length, add to the desired finished length the width of the hem, plus the allowance for turning in. Cut all breadths the same length and join. The skirt is then ready for finishing around the lower edge.

In plaid material allowance must be made for the plaids to match at the seams and the lower edge of the skirt must be planned in relation to the plaids also.

To Make and Fit a Straight Pleated Skirt.—The term "pleated skirt" generally means a side-pleated skirt with a box pleat in the center front.

Follow the directions for planning and joining the breadths of a straight skirt. Mark the center front with a line of bastings and decide on the width for the box pleat, taking up a straight fold of the material from waist to hem, at an equal distance on each side of the center front. A pleated skirt will hang well if the outer edge of all the pleats is a straight fold.

If the material is plaid, special treatment will probably be necessary to obtain the desired color effect, but on plain material it will be possible to measure from the box pleat, at each side, a certain number of inches, four to six, according to the depth of the pleat, and mark with pins at both top and bottom, all around the skirt. Then, beginning at one side of the box pleat fold from pin to pin and baste on these folds.

Before lapping the pleats press on the under side of each fold. Lap the pleats at the top to the required waist measure

and try on adjusting the pleats evenly and pinning at hip depth. Baste and stitch onto a belt or waist. After mounting on the belt, press the under fold of each pleat. Note that the pleats are not pressed down onto the material but the pressing is done on the under portion of the folds. The pleats may be stitched down to hip depth or the under fold of each pleat may be tacked to a tape to assist in holding in position.

Gored Skirts.—Gored skirts are cut in sections shaped to take out extra fullness at the waist line, and yet give ample fullness at the lower edge. The number of gores may vary from two to fifteen but with the tendency for a more simple and suitable type of dress the number of sections in skirts has steadily decreased, and the shape of these sections has become more nearly straight.

In hanging a gored skirt planned to fit smoothly about the hips, put on the figure with the seams on the outside, pinning to the petticoat about the hips, and note that the center of each gore should hang straight down from the hips.

Alter the seams, if necessary, taking up the entire seam or slipping one edge forward or back on the other to get the right line or direction and the correct position on the figure. If the skirt has several gores the seams should be well spaced about the hips, and sloped into the waist at a good angle. In a two-gored skirt the seams should come straight down from the underarm. After fitting remove from the figure and baste. Try on right side out, first adjusting a belt, which has been previously fitted to the correct waist measure. Pin the skirt to the belt and note the position and slope of the seams. Remove from the figure, stitch and finish the seams and placket, then fasten to the belt. The skirt is then ready for turning up around the bottom. In a skirt with considerable fullness, it is well to mark with chalk or pins the desired distance from the floor, turning up on this line. This is generally more accurate than measuring down from the belt, but requires the help of a second person.

It is quite possible, however, for a woman to obtain the correct length of a skirt entirely alone. This may be done by the aid of a yard stick, holding it in a vertical position, at right angles to the floor. If the person is tall enough so that the top of the yardstick comes below the curve of the hips, a row of pins may be put around the figure at the hip line even with the top of the yard stick as it is moved about. If however, the top of the yard stick comes above the curve of the hips, hold it against the figure and tie a string around it just below the fullest part of the hips. Holding the string carefully move the yardstick placing pins on the skirt even with the string. If the measure at which the pins are placed is less than thirty-six inches, note the exact number of inches from the floor and from this subtract the distance from the floor which it is desired to have the skirt.

The number of inches thus obtained must then be measured down from the indicating row of pins after the skirt is removed from the figure, and when turned up on this line, if the work has been carefully done, the skirt should be an even distance from the floor all around.

If no yard stick is available, another way is to chalk the edge of a table of a sufficient height to reach a point just below the hip line in the figure, then as one turns gradually the skirt will be marked with a chalk line. This is not satisfactory unless the edge of the table is square with the top, so that a sharp edge can be chalked. If the edge is rounded the chalk line will be too broad to be accurate.

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