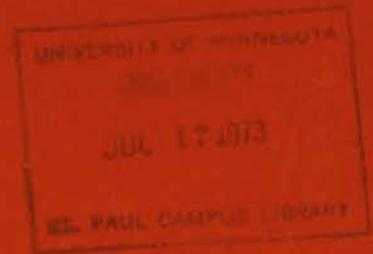


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ATHELENE SCHEID
junior clothing

University of Minnesota
Agricultural Extension Service
U. S. Department of Agriculture

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4-H junior clothing

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Use this bulletin —

- To increase your sewing know-how. The methods outlined here are basic to successful sewing. Learn these techniques well, and you'll be ready to tackle more difficult ones.
- To help you establish high sewing standards. The standards for each construction detail are given near the beginning of each section.
- To guide you through your years in junior clothing and into advanced clothing. You may not need to know some of the techniques included here until later in your sewing career.

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Tools

As a junior clothing member, you will want to add to your sewing tools, and you may need to replace some. This list and "Your Sewing Tools" section of your beginner's clothing bulletin will help you.

Check (✓) those in good condition. Replace others.

- | | |
|---------------|------------------------|
| ____ Needles | ____ Tape measure |
| ____ Pins | ____ Tailor's chalk |
| ____ Thimble | ____ Tracing wheel |
| ____ Ruler | ____ Tracing paper |
| ____ Hem gage | ____ Wrist pin cushion |

Do you keep your sewing tools together in a box, basket, or small suitcase? Are they neatly and conveniently arranged?

If you can answer "yes" to these two questions, you have learned to be a good housekeeper. Keep trying! Good habits are slow to acquire.

More Tools And Their Uses

Needles — You have learned about "sharps." Another kind of needle for hand sewing is a "crewel." Crewels have larger and longer eyes than sharps and are especially good for use with heavy thread.

Consider thread, fabric, and type of stitch when selecting needle size. The eye must be large enough for the thread to pass through easily. The needle must be fine enough to go through the fabric without leaving a hole, yet coarse enough so that it does not bend. Fine stitches require a fine needle.

Emery bag — An emery bag (figure 1) is used to sharpen needles. It is often strawberry shaped. Do

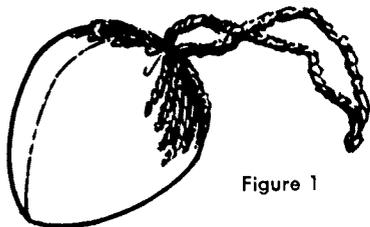


Figure 1

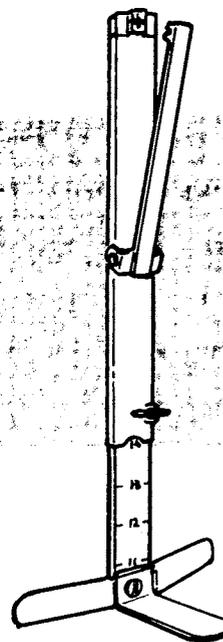


Figure 2

not keep needles in your emery bag or they will rust. Keep them in the package.

Yardstick — A yardstick is an aid in straightening fabric edges and checking grainline. A lightweight one with smooth finish and clear numbers is best.

Skirt marker — The pin type skirt marker (figure 2) gives an accurate measurement. Choose one that adjusts easily and has clear markings and a small sturdy base.

Shears and scissors — You may need better ones than you have.

The best quality scissors and shears are hot hammer-forged ones. This means the steel is heated before it is hammered into shape. Be sure those you buy are fastened with a screw or bolt. Rivets loosen easily and cannot be tightened again. Loose blades do not cut cleanly — they "chew" the fabric edge. Try out several pair before you buy. Make sure they cut clear to the points and that they feel comfortable in your hand. If you are left handed, consider buying shears made especially for you.

Good quality shears and scissors will give many years of service if you give them proper care. Keep them dry and oil the screw occasionally. For smooth operation, run your finger along the inside of each blade now and then. This will remove lint and add a bit of natural oil from your fingers. To keep them sharp, use scissors and shears only for sewing. Be careful not to drop them.

Pinking shears are used to finish seams and edges of fabrics that do not ravel easily. They are not recommended for cutting out garments because it is difficult to cut and sew a pinked edge accurately.

Keep your shears and scissors sharp. Take them to a good repairman for sharpening. Pinking shears must be sent back to the manufacturer.

Pressing Equipment—What To Have

Good pressing requires good equipment. It is needed for both clothing care and construction. Here is some equipment you'll want to purchase or make:

Iron—You can use either a steam or a regular iron. The steam iron eliminates the need for a moist pressing cloth. Both kinds of irons require a dry cloth to protect the fabric when you're pressing on the right side.

Ironing board—Your ironing board should have a firm base and a level, well padded surface. Old wool or cotton blankets make a firm surface. Lay the padding so there are no seams or ridges. For smooth ironing, the pad should be about $\frac{1}{2}$ inch thick.

For the cover, use material that is as nearly lintless as possible. Medium quality unbleached muslin or cotton drill from which the sizing has been washed is best. You can use sheets, but they wear out quickly. You can also purchase fitted pads and covers. Remove and wash the cover often.

Press cloths—Press cloths are used to prevent scorch and shine and to provide moisture. Different kinds of press cloths are needed for different fabrics.

For pressing wool, a double press cloth (figure 3) is best because wool pressed against wool preserves fabric texture. To make a double press cloth, use one thickness of thoroughly washed cotton material—drill or muslin is suitable—and one thickness of a colorfast nappy wool fabric. Cut the wool 1 inch smaller than the cotton in each direction. Machine baste the two together on one end only. Then, when additional moisture is needed, you can wet the muslin and wring it out.

Two sizes of pressing cloths are convenient to have

—15 by 36 inches and 12 by 18 inches. You will use the large one for pressing slacks and skirts or as a wool ironing board cover. Make this one using a heavy-weight muslin. You will use the small size cloth for pressing details where you need to see as much of the garment as possible. Here, use a lightweight muslin—it is more flexible. For other fabrics that need protection, you can use cheesecloth, muslin, drill, or a paper press cloth. A good size for general use is about 18 by 24 inches. Launder all pressing cloths made of new cotton before you use them to remove starch and sizing.

Pressing mitt—Pressing mitts can be purchased in a number of sizes. They are placed on the hand and used for pressing small curved surfaces.

Pressing cushion—You can use a pressing cushion (figure 4) for pressing curved seams; shoulder, neck, and armseye areas of bodices and jackets; and hip-line areas of skirts and trousers. The case is made of firm fabric such as ticking or drill, then filled with clean dry sawdust "beaten in" to give a firm smooth surface. The cover is made with nappy wool on one side and sizing-free muslin on the other.

To sew the cushion, use a $\frac{3}{8}$ inch seam, small machine stitches, and size 40 thread. Sew the two ticking pieces together, leaving an opening about 10 inches across the top. Staystitch these open edges the depth of the seam. Turn right side out and fill with sawdust. Put in a little sawdust at a time and pack very hard—a large wooden spoon will help you pack it. When filled, turn seam allowance of the opening inside and whip the two edges together. Take small stitches. Go across one way and come back the opposite way.

Use the same pattern but make the cover separate so it can be removed for washing. For ease of slip-

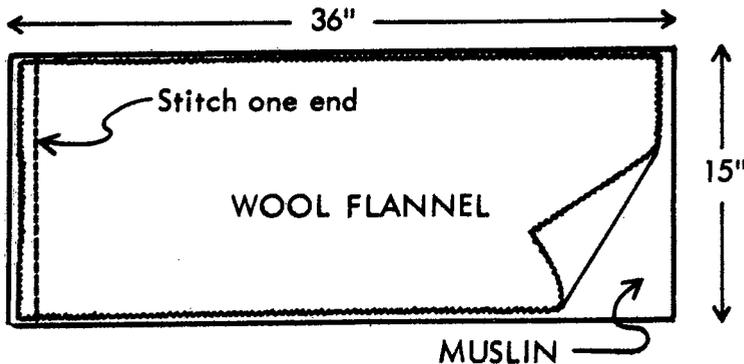


Figure 3

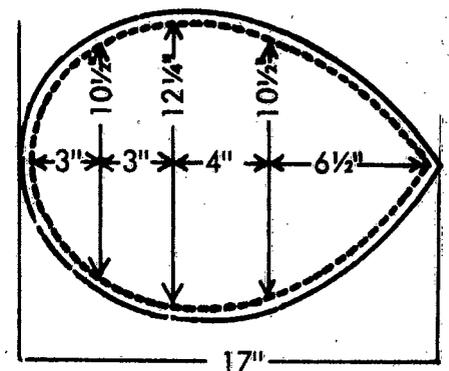


Figure 4

ping, make the opening about 14 inches and the seam $\frac{1}{4}$ inch wide.

Seam roll—The seam roll permits you to press seams so the pressure of the iron is placed only on the stitching line. This way the seam edge does not leave a mark on the fabric. You can also use it when the garment area is too small to fit over the ironing board, such as on sleeves.

Choose a magazine about $\frac{3}{8}$ to $\frac{1}{2}$ inch thick. Roll the magazine very tight and secure it with gummed tape. Cover with drill, muslin, denim, or wool.

It would be fun to get together with other clothing girls in your club and make the things listed above. Your leader can help you.

Tailor's beater—A beater (figure 5) is used to obtain sharp edges on pleats, hems, collars, and enclosed seams on fabrics that are difficult to press. It is made from unfinished hardwood, has rounded edges, and is sanded very smooth. The groove on each side is placed and sized so you can grasp it firmly. You should have someone—your father, brother, or a cabinetmaker—make the beater for you.

Pressing—How And When

Pressing is as important as accurate cutting and stitching. A good rule to follow is: press each step as you go. Begin by pressing your pattern and fabric before cutting out the garment. Then press each machine stitching you make before crossing it with another stitching.

There is a difference between pressing and ironing. When you press, you lift and lower the iron. In ironing, you push the weight of the iron across the fabric.

For both pressing and ironing, moisture, heat, and

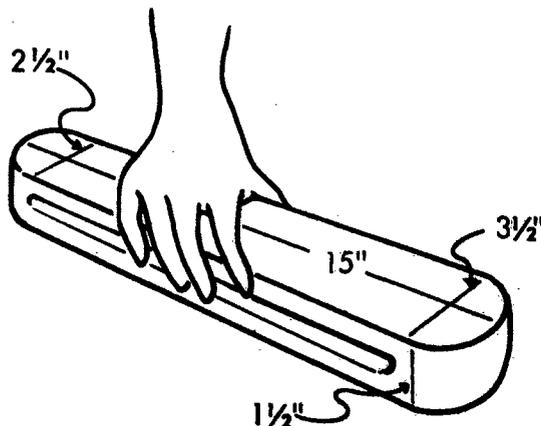
pressure are used. The amount to use varies with different fabrics.

To learn to press well, follow these suggestions:

1. For each new fabric you sew, make a sample test. Press one-half of a 5-inch square and compare it with the unpressed part. Note any change in appearance. This will help you decide upon iron temperature, the amount of moisture and pressure to use, and whether or not you need a press cloth.
2. Press from the wrong side first. When using a steam iron, a press cloth is not usually needed.
3. Press from the right side only as a finishing touch. Always use a press cloth.
4. Place flat sections on a smooth flat surface.
5. Use pressing mitt or cushion to shape rounded areas such as skirt, bodice, and sleeve darts, side skirt seam above notch, shoulder seam, and sleeve cap.
6. Take time to place the part you are pressing so grainline is in the desired position.
7. Press in direction of lengthwise or crosswise yarns.
8. Allow some moisture to remain in the fabric. This is especially important for wool fabrics.
9. Prevent pressing imprints from showing on the right side by placing strips of paper under the edges of seams, darts, and hems.
10. Use a tailor's beater to flatten bulky edges and to set creases. Spank the fabric hard while it is still steaming.

Many times, pressing a part of a garment takes longer than stitching it.

Figure 5



Machine

6

The more you know about your sewing machine the more it will do for you. Become well acquainted with your sewing machine book and what is written here.

How Stitch Is Made

Knowing how a stitch is made helps you become a better machine operator. Each stitch begins with the needle and takeup at their highest points. For each stitch:

- The takeup travels down and up, pulling from the spool the amount of thread needed for the stitch.
- The needle carries the thread down to interlock with the bobbin thread and returns to the starting position.
- The feed dogs move back, drop down, move forward, and rise again. They carry the fabric back the distance of a stitch.

Watch each of these things happen as you slowly make a stitch. Remove slide plate to see the route the upper thread takes to interlock with bobbin thread.

Now you understand why it is so important:

- To complete the stitch cycle before removing fabric from under the presser foot. (When you don't, the thread tangles and breaks and the needle comes unthreaded.)
- To keep bobbin case area free from lint.
- To run your machine at low speed.

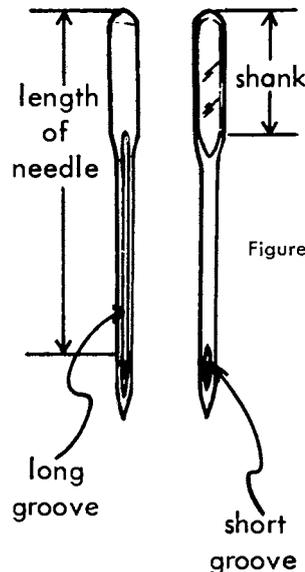
Set Needle Properly

Your machine may skip stitches or the needle may break if it is not properly set. The machine needle (figure 6) has a long groove on one side and a short groove on the other. The long groove is always

placed toward the side from which you thread the needle. This way the thread lies in the long groove and is protected as the needle goes through the hole of the needle plate. Machines are different and may thread from the right, left, or front.

To set the needle, have takeup at its highest point, loosen needle clamp screw, place long groove on correct side, insert needle until it touches end of bar, and screw clamp tightly.

For best results in sewing, change the needle and thread to suit fabric weight (see figure 14, page 8). Be sure to use the same thread for both needle and bobbin.



1 inch	6 stitches
1 inch	8 stitches
1 inch	12 stitches
1 inch	15 stitches

Figure 7

Use Correct Length Stitch

The stitch length should suit the thread and material you are sewing. On fine material, use a fine needle, fine thread, and short stitch; on coarse material, use a coarse needle, heavy thread, and long stitch. Regulation size is 12 to 15 stitches to the inch. This number is correct for many fabrics.

When stitch length is not given on the stitch regulator, mark off 1-inch lengths on a plain sheet of paper. With your needle unthreaded, practice changing stitch length and counting stitches until you can set the regulator for 6, 8, 12, and 15 stitches per inch (figure 7).

You will have to change stitch length for:

- Gathering — about eight stitches to an inch. Make two or more rows of stitching $\frac{1}{8}$ or $\frac{1}{4}$ inch apart. To make gathers, pull all bobbin threads at the same time.
- Ease line — six to eight stitches to an inch. The ease line is used to hold the grainline on an edge that is slightly longer than the one to which it is to be joined.
- Machine basting — six to eight stitches to an inch. Used to sew garment together to check fit. Is easy to remove.
- Increased strength — 16 to 20 stitches to an inch. Used for seams that are narrow or trimmed very close such as bound buttonholes, belts, gussets, scallops, points on collars, etc.
- Fastening thread — 16 to 20 stitches to an inch. Used the last $\frac{1}{4}$ inch at ends of darts, tucks, pleats, seams.

Learn To Adjust Tension

You will want the stitches on your sewing to look the same on both sides. For your machine to make this kind of stitch, there must be the same amount of tension (tightness) on both upper and lower thread (figure 8). When the needle thread lies straight along the upper surface of the fabric, the upper tension is tighter than the lower tension (figure 9). When the bobbin thread lies straight along the underside of the fabric, the upper tension is looser than the lower tension (figure 10).

From time to time, the tension on your machine will need adjusting — they all do! When adjusting either upper (figure 11) or lower (figure 12) tension, turn screw a marking at a time. Then stitch a row and check to see if further adjustment is needed.

One dial number on upper tension equals one-eighth turn of screw on lower tension (figure 13).

Figure 8



Figure 9



Figure 10



Figure 11

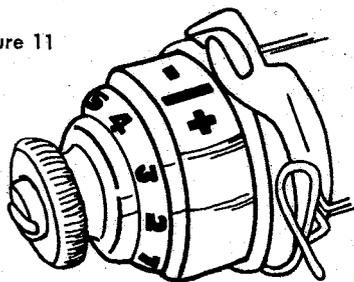


Figure 12

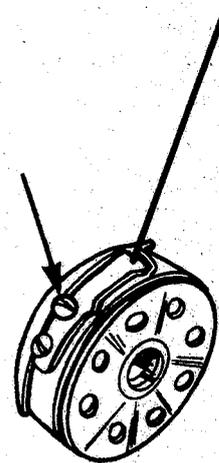


Figure 13

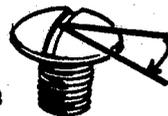


Figure 14. Fabric, thread, and needle chart

Types of fabric	Thread sizes	Sewing machine needle sizes	Machine stitches per inch	
			Inside seams	Top stitching
Filmy materials Comparable to net — marquisette, silk organdy, chiffon, ninon, nylon sheers, silk velvet	100 Cotton 00 & 000 Silk 000 & 0000 Mercerized	Extra fine	12 - 16	16 - 20
Sheer materials Comparable to lawn — dimity, synthetic sheer, paper taffeta, pure silk, silk or synthetic tricots, synthetic velvets and satins, nylon crepes	80-100 Cotton 0 Silk Nylon 00 or 0 Mercerized	Very fine	12 - 15	15 - 18
Lightweight materials Comparable to gingham — chambray, percale, broadcloth, sheer linen, synthetic dress crepe, sheer wool crepe, taffeta, silk surah	60-80 Cotton A and B Silk A or 50 Mercerized	Fine	12	14 - 16
Medium lightweight materials Comparable to piqué — poplin, faille, bengaline, wool jersey, dress linen, featherweight suiting, cotton tweed, fashion denim	60-70 Cotton A or 50 Mercerized	Fine	12	14 - 16
Medium heavy materials Comparable to crash — textured drapery fabrics, cotton velveteen, heavy corduroy, coating, suiting, unbleached muslin and sheeting	40-50 Cotton Heavy duty mercerized	Medium	10	12
Heavy materials Comparable to sailcloth — sturdy denim, ticking, coating, drillecloth	30-40 Cotton Heavy duty mercerized	Heavy	8	10
Very heavy materials Comparable to canvas — duck, overcoating	40-60 Linen 20-24 Cotton	Very heavy	6	8
Plastic materials	50 Mercerized	Very fine	10	12

To adjust tensions, fold an 8-inch square of muslin diagonally. Stitch across on bias. Pull gently on bias stitching until thread breaks.

If the top thread breaks, the upper tension is tighter than the lower. To correct: Loosen upper tension (if top thread looks pulled or fabric puckers) or tighten lower tension (if loops of thread appear on the top side).

If the lower thread breaks, the lower tension is tighter than the upper. To correct: Tighten upper tension (if loops of thread appear on under side) or loosen lower tension (if bobbin thread is pulled and tight).

If both threads break, the tension is even top and bottom, but if the muslin puckers, both tensions are too tight. If neither thread breaks, tension is even top and bottom but both threads are too loose.

Turn screw left to loosen tension, right to tighten tension. Remember this jingle when turning screws

— left is loose, right is tight. Work until you have a perfectly balanced stitch. It takes patience!

Adjust Pressure On Presser Foot

Another part of the machine you have to adjust is the screw on top of the pressure bar. It regulates the amount of pressure the presser foot places upon the fabric as it moves between the feed dogs and presser foot.

When the pressure is too light, the pull upon the fabric is irregular. This causes uneven stitches and a shaky line of stitching. When the pressure is too heavy, the top fabric moves under the presser foot more slowly than the bottom fabric. This stretches the top fabric and causes ends to be uneven. Heavy pressure can also mark a fabric with imprints from the presser foot and feed dogs.

Fabric finish, texture, and weight determine the amount of pressure to use. Light weight fabrics require light pressure, heavyweight fabrics heavy pressure, and mediumweight fabrics a pressure between light and heavy.

Machine And Fabric Check

Each time you sew a new kind of fabric, check the chart (figure 14) on the opposite page for needle size, thread size, and length of stitch to use.

Next, check the machine stitching on the fabric you are sewing. Use two strips cut exactly the same length and width. Stitch along the lengthwise grain for 12 to 15 inches.

If there is no slippage in length or width, the pressure on the presser foot is correct (figure 15). If the stitching line is free from puckers and stitches look the same on both sides, the tension is correct.

With all these checks made and correct, you and your machine are ready to sew.

Keep Machine Clean And Oiled

Sewing machines run easy and stitch well when they are kept clean and oiled. Each time you sew, brush away any lint you see around feed dogs and

bobbin case. Oil the machine about once a month, but more often when you use it every day. Use a lightweight oil especially refined for sewing machines. General purpose household oils are too heavy and cause parts to become gummy.

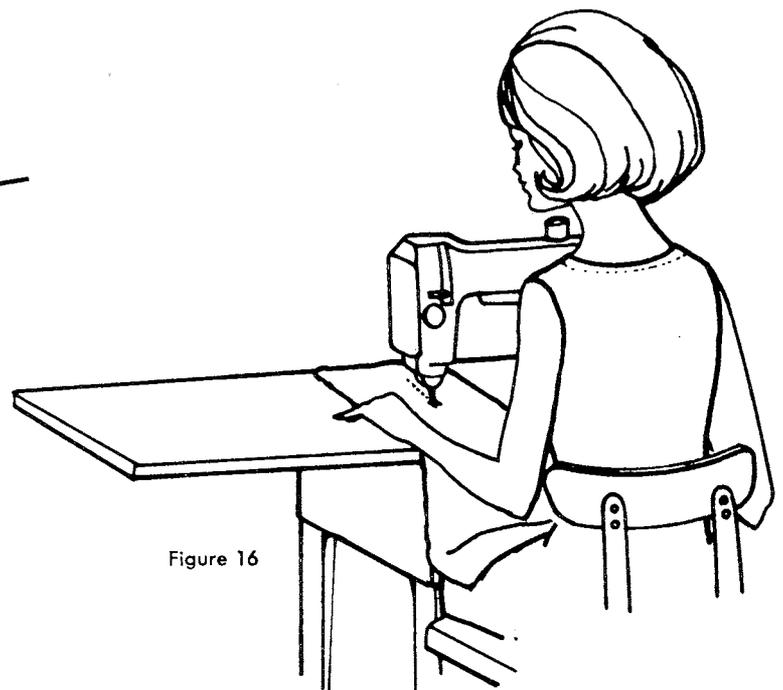
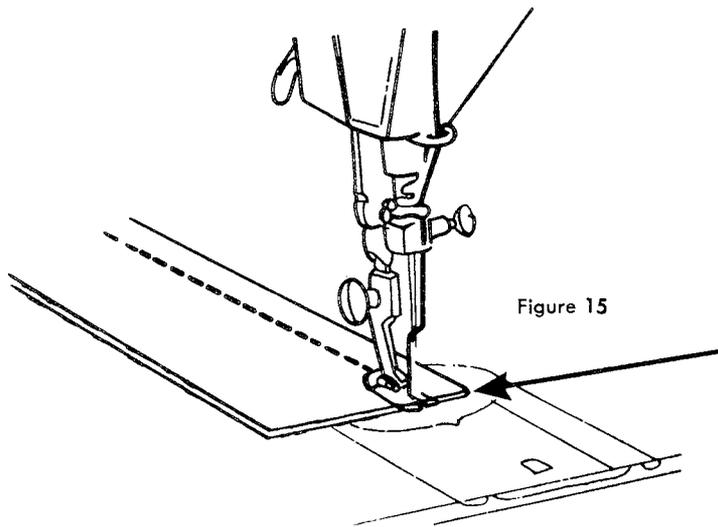
Always remove dust, lint, etc. before oiling any part. Use a single drop of oil in each oil hole and where moving parts join. As you oil, turn the hand-wheel slowly to spread the oil. Tilt the machine head back and oil the underside first. Then lower the head into sewing position and oil the top. Follow your instruction book for places to oil your machine.

Oil your machine after you complete your sewing rather than before you start. The needle can then be put down through a scrap of cloth and the presser foot lowered on it. This way, excess oil from the presser bar and needle will drain away before you use your machine again.

Sit In Good Posture

The more places you practice good posture the better posture you'll have. For good posture at the machine (figure 16):

- Bring the chair or stool close to machine.
- Have the center of your body in line with the needle.



- Place your feet side by side under the machine. See the "Stop and Go" section of your beginner's bulletin for exact placement with your type machine.
- Sit tall, bending forward slightly from the hips.
- Rest arms lightly on the machine. (Do not lean on them!)
- Spread fabric out to the left of the needle. Hold the rest in your lap so there is no strain on the edges you're stitching.

In this position, you can sew well – sewing will be easy and go fast.

As you sew, keep as much fabric as you can

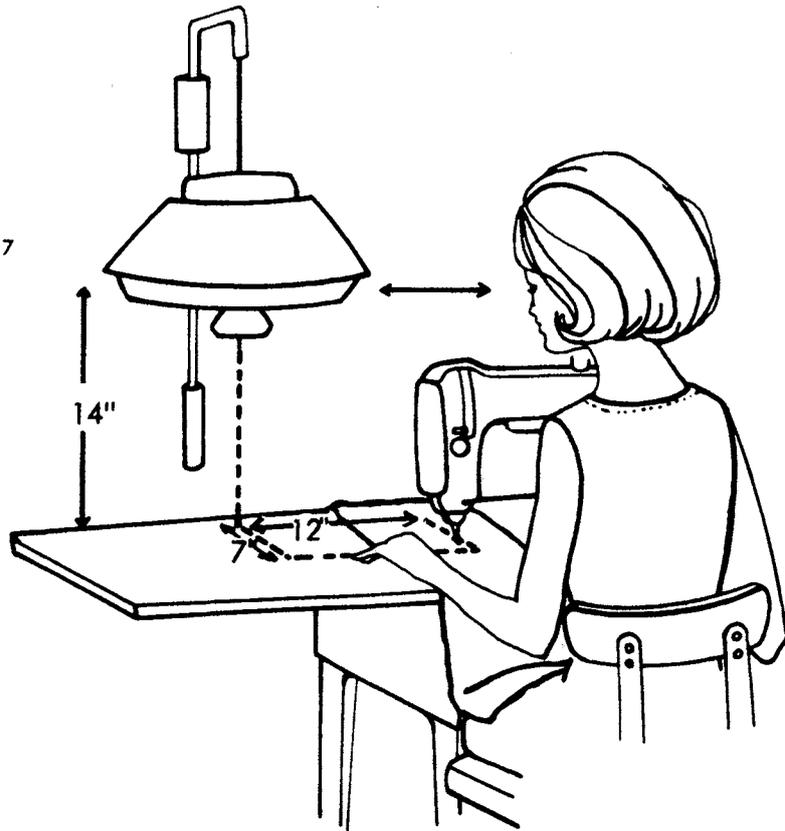
resting on top of the machine. As it falls off the back, your work will be pulled out of line and edges will stretch.

Have Good Lighting

Good light means placing the right light source (a floor or wall lamp) at the right distance and in the right direction from the place where light is needed.

Figure 17 shows the ideal position of a light source at the sewing machine. The lower edge of the shade is 14 inches from the work surface; the center of the shade is 12 inches to the left of the needle and 7 inches behind the needle.

Figure 17



Fabric

Learn To Know Fabrics

If you learned your fabric lesson well in the beginner's clothing bulletin:

- You check the grainline when you purchase material and buy only those fabrics printed or finished on the grainline.
- You straighten all fabric to grainline perfection before you lay your pattern for cutting.

Here is some information to help you enjoy fabric shopping and be satisfied with your purchases.

Read Labels

When you shop, read the label or hang tag on the end of the bolt. A federal law requires fabric manufacturers to tell you:

- The kind of fiber from which the fabric is made – cotton, rayon, wool, nylon, etc.
- The percentage of each fiber present – 100 percent cotton or 65 percent cotton and 35 percent Dacron polyester, for instance. A list of fiber content is required so that you can judge whether or not the cost is in line with the kind of fiber used.
- The generic (je-ner'-ik) family to which manufactured fibers (not cotton, wool, silk, or linen – natural fibers) belong. Fibers belonging to the same family are more alike than fibers belonging to different families. Knowing what fibers a fabric contains will help you in judging its performance and knowing how to care for it.

In all, there are only 17 generic families to learn, but there are hundreds of fiber names. Begin looking for generic family names. Here are the more common ones and a few of the fibers belonging to each one.

Generic family name

Fiber name

Polyester	Dacron (Day'-cron) Kodel
Acrylic	Orlon Acrilan
Nylon -- same --	Nylon
Rayon -- same --	Rayon Bemberg Cupioni
Acetate	Celanese Estron
Spandex	Lycra Vyrene

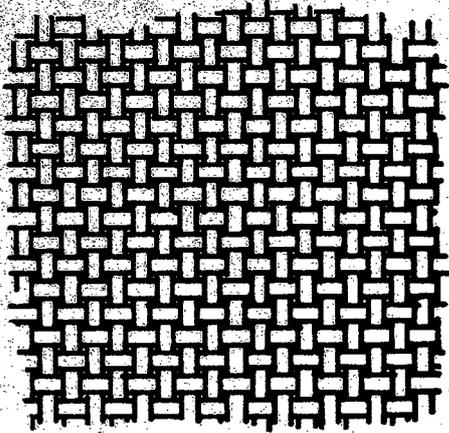
Here is some other information to look for as you read labels:

- Amount of shrinkage – be sure it is given as a percentage. If the fabric is labeled over 1 percent, shrink it before cutting out the garment. Otherwise it may not fit you after it has been washed.
- Colorfastness – is it fast to washing – to sunlight? Sometimes both qualities are important (in a bathing suit, for instance), sometimes only one.
- Special finish – note what it is, what it does, and if it is “permanent.”
- Directions for care – how to wash, iron temperature to use, etc.

Every label does not have all this information. Ask a salesclerk about missing information so that you can make a wise fabric choice. Your mother and 4-H leader can help you too.

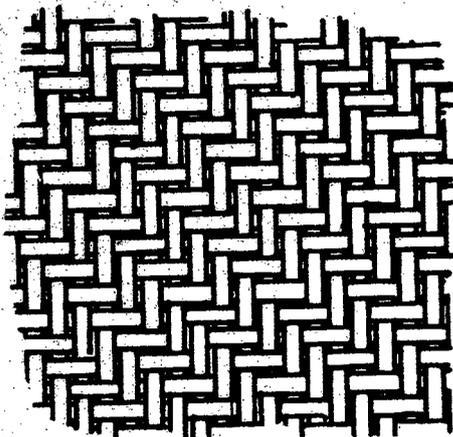
Visit fabric departments in stores even when you are not going to buy. Read labels and learn fabric names.

Figure 18



Plain weave

Figure 19



Twill weave

Call Fabrics By Name

Learn to call fabrics by name. Many do not have names, but certain important ones do. Study these fabrics at your favorite counter:

Percalé — A mediumweight cotton fabric with a firm plain weave and a dull finish. It may be a plain color or have a printed design.

Broadcloth — A tightly woven fabric with crosswise yarns that are heavier than lengthwise yarns, giving a ribbed effect. It has a slight luster and may be plain or printed.

Chambray — A plain weave fabric with colored lengthwise yarns and white crosswise yarns. It usually has a white selvage. Chambray may be plain in color or woven in stripes.

Gingham — A plain weave fabric with colored lengthwise and crosswise yarns. The colored yarns are woven into check and plaid designs. Gingham is alike on both sides.

Seersucker — A plain weave fabric with colored and crinkled stripes. The crinkle is made by weaving some lengthwise yarns loose and others tight. The crinkles are permanent.

Crepe — A fabric with an all-over crinkled surface made by twisting yarns hard and in different directions. It is usually a plain weave, but can be twill. It may be made of any fiber.

Denim — A firm twill weave fabric, often with white crosswise yarns that give the fabric a whitish tinge. Sports denim is lightweight and has a soft finish. It is made in a variety of colors, stripes, and prints.

Gabardine — A firm, closely woven twill fabric with a high gloss or sheen on the right side. There are cotton, rayon, and wool gabardines.

Corduroy — A fabric with a plain and pile weave combination. The lengthwise stripe can be narrow, wide, shallow, or deep and is called a wale. An extra set of yarns comprise the wale, giving the fabric a napped surface.

Tweed — A rough surfaced fabric with a background of two or more colored yarns and tiny flecks of color in the yarns. Any fiber can be used to make tweed.

Figures 18 and 19 show the difference between a plain and twill weave. Twill weaves usually make heavy, strong fabrics. Twills do not show dirt as quickly as plain weaves but once soiled they are harder to clean.

Learn about these other fabrics in your clothing books at school:

sailcloth	poplin	flannel	dimité
Indian head	plissé crepe	taffeta	batiste
organdy	jersey	satin	lawn
piqué	shantung	velveteen	chintz

Pattern

The wardrobe worth having has the answer to "What Shall I Wear?" It has the clothes you want for:

- the places you go.
- the seasons of the year.
- the things you do.
- your personal style.

First decide what you need. Then select a pattern appropriate for that need — one that is suited to the season, is in style, and is becoming to you. Next, choose the fabric. Both pattern and fabric should be in keeping with your sewing ability.

Selecting Pattern Style

As you look at a pattern, think of the lines it makes.

1. The most important lines are those that silhouette or outline the garment against a background (figure 20).

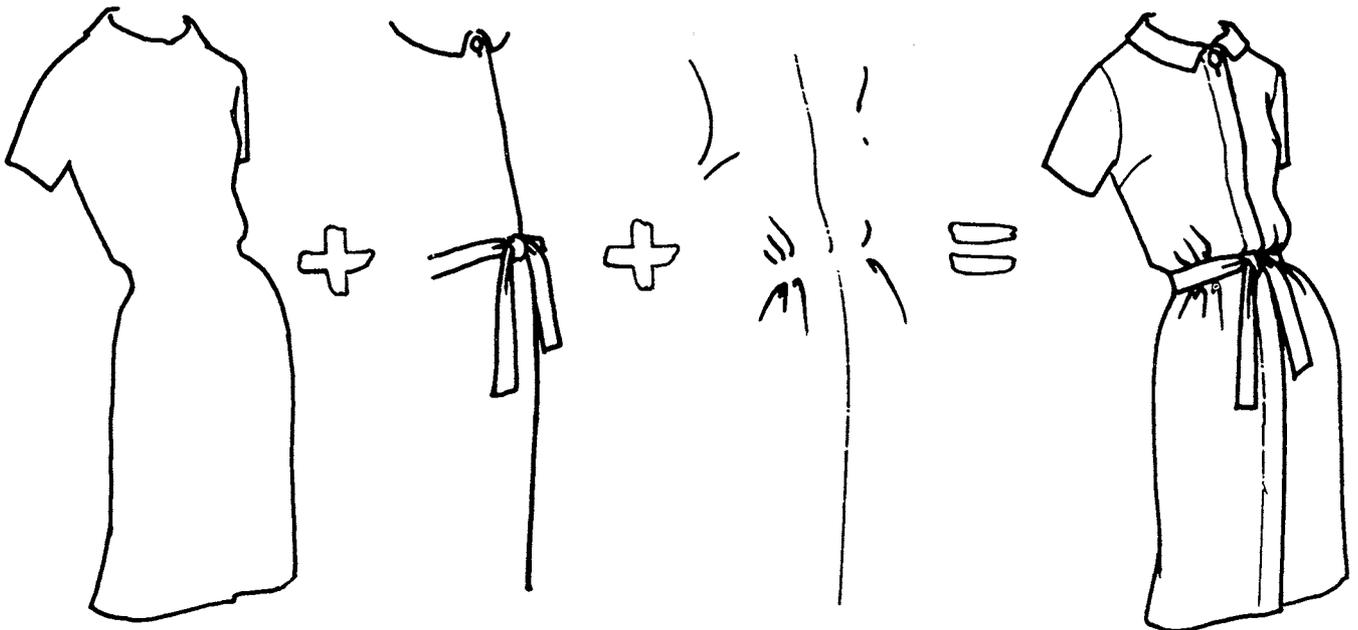
2. Next in importance are those lines that form the edges of collars, cuffs, pockets, belts, buttons, and other details within the silhouette (figure 21).

3. Of lesser importance, but still very important, are seam lines, darts, and fabric folds (figure 22).

Figure 20

Figure 21

Figure 22



As you think about line and apply it to your pattern selections, consider how designers use line direction to add height or width to a figure (figures 23 and 24).

Designers use other lines too, but these will introduce you to the selection of becoming clothes through line. Begin now to train yourself to see the lines of a pattern and the directions they go. It is so intriguing that once you get started you will do it each time you see a pattern.

Selecting Fabric

As you look at a fabric, think about its weight and texture as well as its design and color. These four factors together determine the suitability of a fabric for a pattern.

Here are some ways fabric and pattern style are related. You will learn others as you gain experience in selecting fabric for pattern.

Weight:

- Heavy fabrics are bulky and make up best in styles requiring little yardage.
- Lightweight, soft fabrics fall prettily into gathers and fullness.

Texture:

- Stiff fabrics are for styles without ease, close fit, or many darts.
- Firmly woven fabrics give shape to straight skirts and styles designed to stand slightly away from the body.
- Firm and fairly crisp fabrics are needed for sharp pleats and tailored details.
- Rough surface and deep pile fabrics are suitable for styles without bound buttonholes or other small details.

Design:

- Plain fabrics give emphasis to pattern lines.
- Plaid or striped fabrics need simple styles with few pattern pieces and no fussy detail.

As you shop, you will see many beautiful fabrics. To determine which are most becoming for you, consider your physical appearance as well as the fabric characteristics we've just discussed. Here are some guidelines to follow.

If you're tall: Wear tops and skirts of different colors or fabrics — they break the height line. Large plaids, checks, and prints are for you since your height offers a chance for ample repeat. Since they absorb light, dull fabrics will seem to reduce your size.

If you're short: Wear one piece and one color dresses — they keep the height line unbroken. Stripes running up and down usually will give you height. Small plaids and figures are right for you.

If you're heavy for your height: Wear colors that are not too vivid — they are slenderizing. Smooth surfaced and hard finished fabrics will minimize inches since they have little depth. Small designs against a dark background will reduce apparent size. Lightweight fabric will not add bulk to your figure.

If you're thin for your height: Wear shiny, crisp fabrics — they'll make you look larger. Bulky, napped, and pile fabrics will add inches because of their thickness. Prints that lead the eye in a circle or swirl will give roundness to your body. Soft fabrics in heavy folds will add weight.

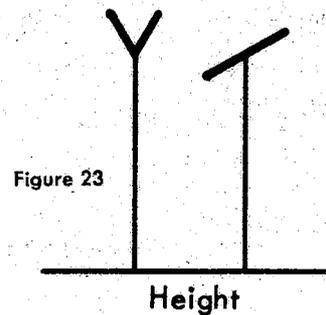


Figure 23

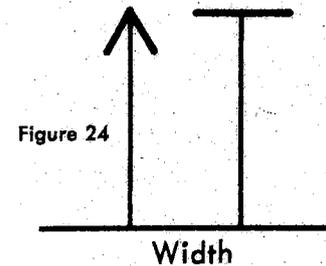


Figure 24

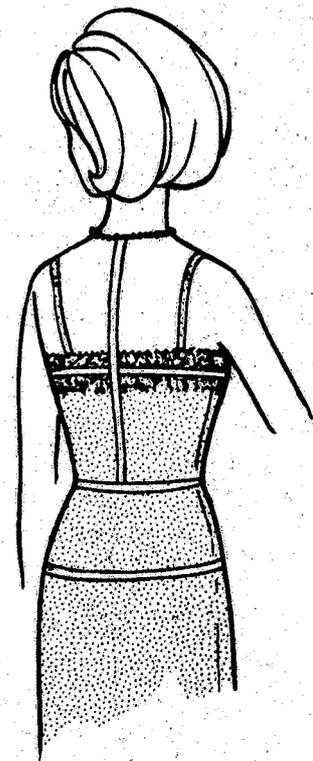


Figure 25

If you're average, you will want to read all the suggestions and use those that apply to you.

KNOW YOUR FIGURE TYPE

In the beginner's clothing project, you learned that patterns are made to fit different figure types and sizes (see the "Know Your Pattern" section of your beginner's bulletin). To know the right size and type pattern to buy, have someone take these measurements for you (figure 25):

Bust — Take a snug measurement over the fullest part of your bust. Have the tape measure parallel with the floor all the way around your body.

Waist — Take a snug measurement at your natural waistline. Tie a string around your waist, then bend over. The string will locate the correct position.

Hips — Take this measurement 7 inches below your waist and parallel to the floor around your body.

Back waist length — Measure from the most prominent bone at the base of your neck to your natural waistline. Wearing a fine chain around your neck will aid in locating the bone.

Compare your measurements with those in the pattern book and select the size and type that most nearly fit your measurements and body contour:

<u>Figure type</u>	<u>Description</u>	<u>Height</u>
Young Junior/Teen	Young figure with small high bust, short waist, and slim hips	5'1" to 5'3"
Junior petite	Short shapely figure with small waist	About 5'1"
Junior	Fully developed figure with high small bust, small short waist	About 5'5"
Misses	Fully developed figure with average proportions, taller than others	About 5'6"

Because your body changes as you grow, you need to take your measurements each time you buy a new pattern. Your size or figure type or both may have changed. Remember that measurements — not age — determine figure type and pattern size.

MAKING A PATTERN YOURS

Even though you start with the correct size pattern for your figure, alterations are usually needed to make it yours. Here are a few to know:

To shorten a pattern: Draw a pencil line parallel to the printed "lengthen-shorten" line and the distance from it that your pattern needs shortening. Crease on printed line and bring this fold to pencil line to form a crosswise pleat.

To lengthen a pattern: Cut on printed line. Spread cut edges apart until the pattern is the length you need. Pin or tape edges to another piece of paper.

To shorten skirt: Cutting off at bottom changes skirt fullness (figure 26). Usually, cutting off 1 to 1½ inches is okay. A fold does not change skirt fullness (figure 27). Place fold 3 to 5 inches below the dart.

Figure 26

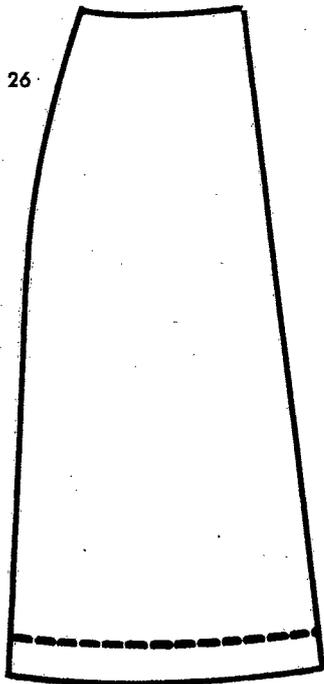


Figure 27

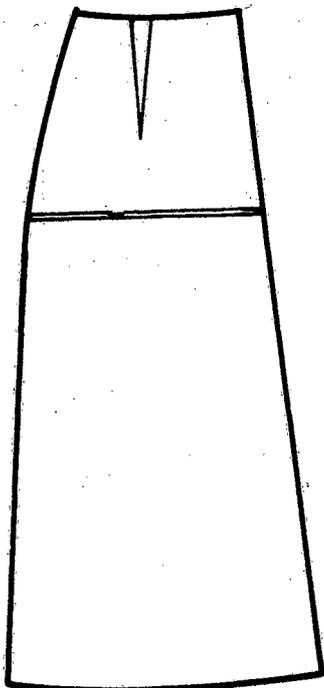


Figure 29

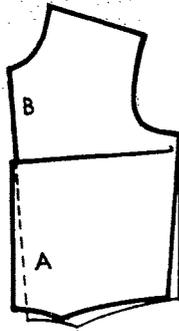


Figure 30



Figure 28

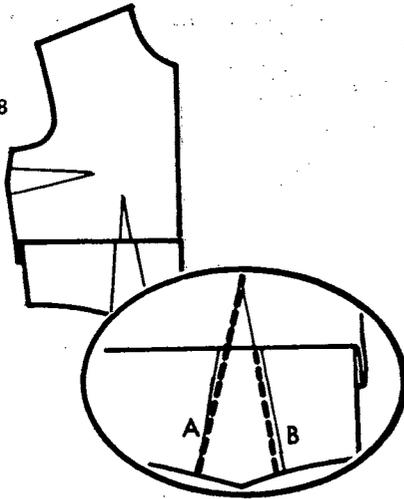


Figure 31

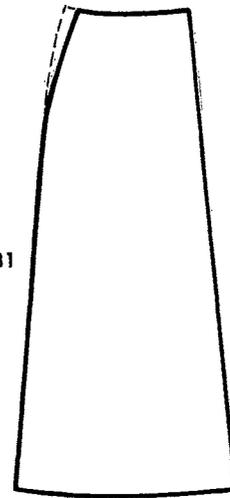
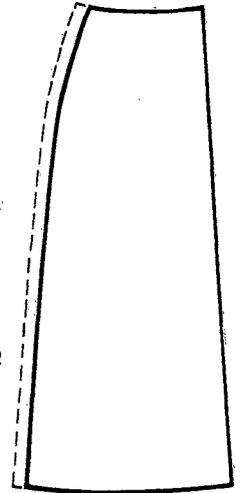


Figure 32



To shorten bodice with a fold (figure 28): To keep waistline measurement same as pattern, correct dart as shown at A. To enlarge waistline slightly, correct as shown at B.

To lengthen a skirt or bodice pattern, do these same processes in reverse.

When only the center back needs shortening (figure 29): Draw a pencil line across the back 1 inch below the armhole and parallel to the "lengthen-shorten" line. Crease and fold out the amount needed at center back. Taper to nothing at underarm seam line. Straighten center back as shown. If you need to shorten more than $\frac{1}{2}$ inch, make a second fold at either point A or B, depending on your body contour.

To enlarge waistline: Add on one-fourth the needed amount at side seams both front and back. A 1-inch add-on is the limit for this alteration.

See figure 30 for tapering bodice to armhole and figure 31 for tapering skirt to notch.

To enlarge hipline: For a straight skirt with center front and center back on straight grainline (figure 32) — Add on one-fourth the needed amount at side seams both front and back. At waistline, add extra dart or ease out excess. For a gored skirt with all seams on the bias (figure 33) — Draw a line through the center of the pattern parallel to the grain marking. Cut along this line to waistline seam. Spread sections apart in equal amounts. Make a new grainline marking in the center of the slash.

For broad shoulders (figure 34): Draw a line $1\frac{1}{2}$ inches from the armhole and parallel to the grainline to a point even with the armhole notch. Make a second line at a right angle to the armhole seam. Cut and spread pattern the needed amount on both back and front bodice. Adjust shoulder line.

For narrow shoulders (figure 35): Draw and cut same as for broad shoulders. Lap pattern the needed amount and adjust shoulder line.

Darts Are Important

Darts are used to shape a flat piece of fabric to the body contour. They both give fullness where it is needed and take out fullness where it isn't needed. Darts can:

- Be moved to achieve correct location on your body.
- Be shortened or lengthened.
- Be added to keep fabric grainline in position on your body.

When darts are correctly placed, they point toward the full part of the body but stop at least 1 inch away from the highest point of the curve.

Figures 36 and 37 show a correctly and incorrectly placed underarm dart, respectively. Figure 38 shows a waistline dart of the correct length; figure 39 shows a waistline dart that is too long.

The deeper a dart, the more fullness it gives. So:

- You can take a deep waistline dart for a smaller waistline only if more fabric is desired at bust.
- You can let out a waistline dart for a large waistline only if there is fabric to spare across the bust.
- You can apply these directions to back skirt darts too.

When figure fullness is high across back hips, two short shallow darts are better than the one long dart given on a pattern (figure 40).

Figure 33

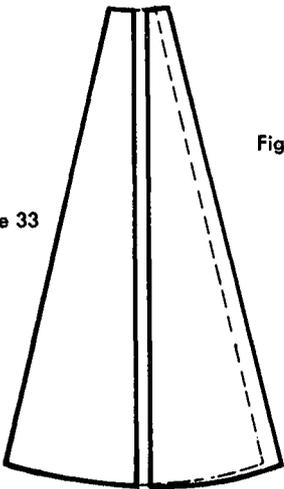


Figure 34



Figure 35



Figure 36

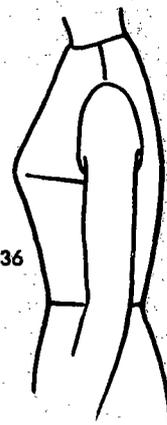


Figure 37

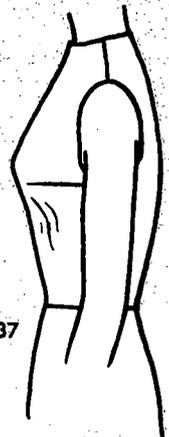


Figure 40

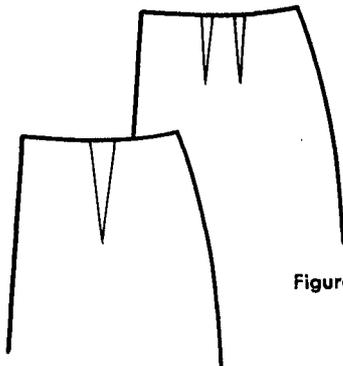


Figure 39

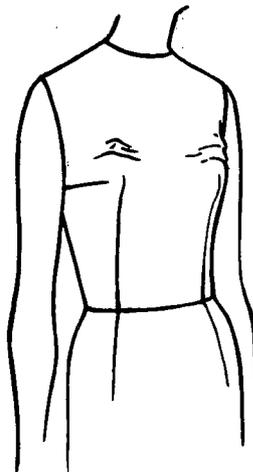
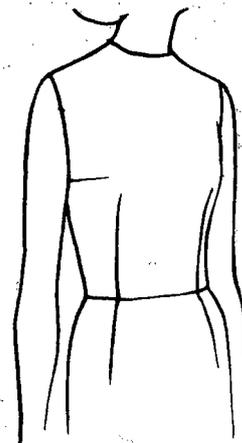


Figure 38



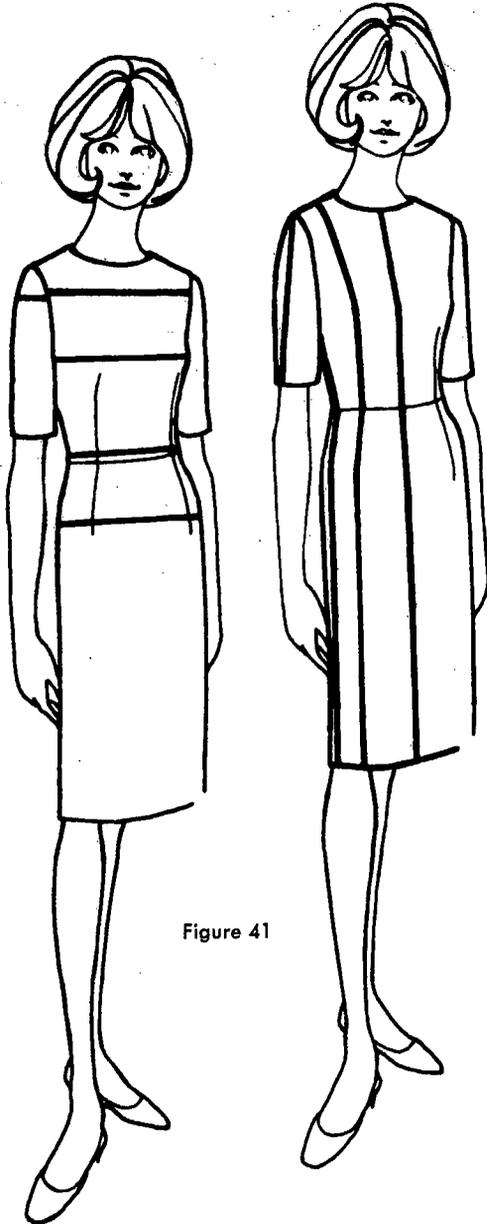


Figure 41

A correctly altered pattern gives a good fit. A garment that fits well feels comfortable. It is snug where fashion demands, but never feels tight or strained when you move around. It is smooth except where folds form as you move.

You will know a good fit by:

Fabric grainline – it will go straight around or up and down on your figure at these points (figure 41):

Bust (front and back)	Across crown of bust
Chest and shoulders	Over shoulder blades
One and one-half inches above waistline	Length of sleeve
Sleeve cap	Center front and back
Hipline	Halfway between center and side seams of skirt

Direction of seam lines:

- Neckline will pass over the middle of the bone at the base of the neck in the back and the middle of the hollow at the front. It will lie flat and smooth.
- Shoulder seam will fall exactly on top of shoulder. It will not be visible from the front or back when the shoulder is at eye level.
- Armseye will be straight in front and back for about 5 inches, then follow the body curve. The underarm seam will be about $\frac{1}{2}$ inch below the armpit when the arm is down.
- Waistline will fall at the natural waistline, the smallest part of the body. It will appear straight around the figure.
- Side seams will fall straight from the armhole seam to the floor.
- Darts will point to, but stop short of, the fullest part of the body.
- Hemline will be a uniform distance from the floor.

Construction

TAILOR'S TACKS

For most of your sewing, you will use a tracing wheel and carbon to transfer pattern markings. However, some fabrics with man-made fibers grease spot when marked with carbon. On thick fabrics, markings will not show; on sheer fabrics, they may come through to the right side. For these fabrics, you are wise to use tailor's tacks.

Tailor's tacks are more time consuming and less accurate (unless carefully made), so use carbon paper whenever possible. Remember to test carbon first on scrap of fabric.

Use a double thread and no knot when making tailor's tacks. Take a small stitch on the pattern marking and through the two thicknesses of fabric. Leave a 1-inch end. Take a second small stitch in the same place. Leave a 1-inch loop and a second 1-inch end (figure 42). For closely spaced markings, you can make the tailor's tacks in a series (figure 43).

When you are ready to remove the pattern, cut the top of each loop and between the loops. Then carefully separate the two fabrics and cut each tailor's tack in half, leaving equal thread ends on both layers.

Figure 42

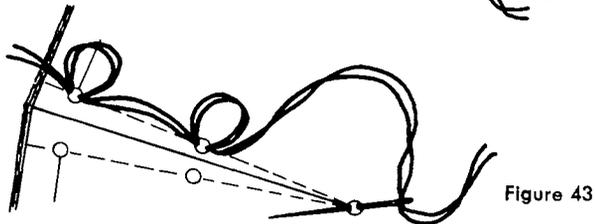
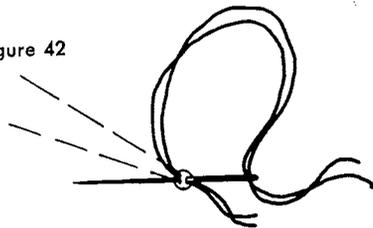


Figure 43

DARTS

Darts are used so often that all your future sewing will profit if you learn to make them well now.

You have well made darts when they:

- Look like a smooth, well shaped seam.
- Taper gradually to a point.
- Are in line with and end 1 inch from the fullest part of the body.

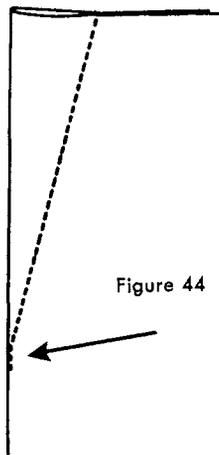
Darts and a good fit are closely related. They are discussed together on page 17. Be sure to read that section before you stitch your darts permanently.

Construction

1. Fold dart in center. Match marked lines. Pin at each end, then in center. Pin enough times to hold marks exactly together.

2. Stitch from outer edge to point. At point, make the last three stitches only one yarn from the fold. This will taper the end (figure 44).

Figure 44



3. Secure ends of darts by one of these methods: tying threads, using 20 stitches per inch for the last $\frac{1}{4}$ inch, retracing about $\frac{1}{2}$ inch, or locking the machine stitch — ask your project leader to show you how.

4. Clip thread ends not more than $\frac{1}{4}$ inch.

Pressing

1. Press line of stitching on wrong side.

2. Place dart in correct position on pressing cushion. Turn bodice and skirt darts toward center front and center back. Turn underarm and elbow darts downward.

3. Press across dart, pulling garment away from line of stitching. This will prevent a right side crease (figure 45).

4. Press lightly on right side. Use press cloth as needed. If imprint shows, press under edge of dart.

Additional Pointers

- Stitch a curved dart to match the curve of your body (figure 46).
- Curved darts are usually found on the front of skirts and slacks.
- Stitch double-pointed darts from center to point and then from center to other point. Be sure to reinforce the center area. Before pressing it, clip the widest part of the dart to within $\frac{1}{4}$ inch of stitching (figure 47).
- On bulky fabrics, you may need to slash and press open darts to reduce bulk. Before you do this, be certain darts are in the right location as they cannot be changed after slashing. If the fabric ravels, overcast cut edges.
- You can press unslashed darts open over a steel knitting needle (figure 48).
- Trim wide darts to $\frac{1}{2}$ inch, but do not split them to the end (figure 49).
- Sometimes you can eliminate bulk from a garment by pressing darts in the lining in the opposite direction from those in the garment.

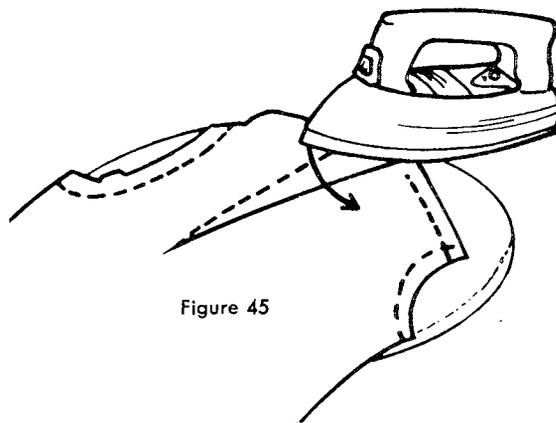


Figure 45

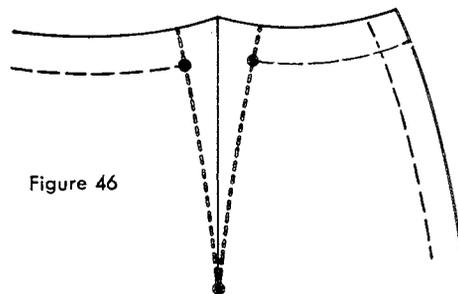


Figure 46

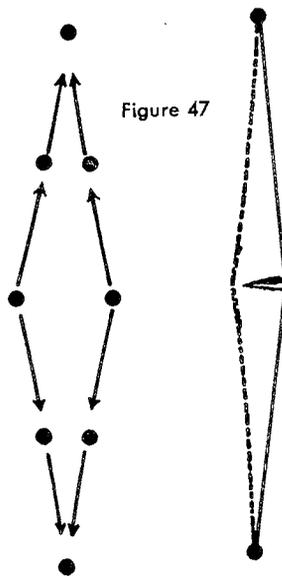


Figure 47

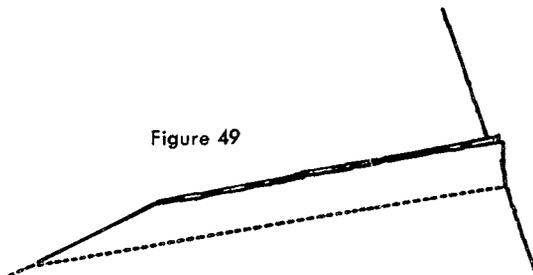


Figure 49

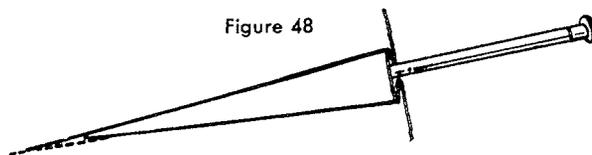


Figure 48

SEAMS AND FINISHES

Which seam finish, if any, should I use? Find your own answer to this question by considering:

- Fabric – the amount it ravel, its weight, and its transparency.
- Cut of pattern – a straight grain of fabric may ravel more than a bias cut.
- Location of the seam – a $\frac{3}{8}$ -inch seam width at waistline and armhole may need a finish; a $\frac{5}{8}$ -inch skirt seam may not.
- Care of finished garment – whether it is to be drycleaned or washed and how frequently.

Figure 50



Figure 51

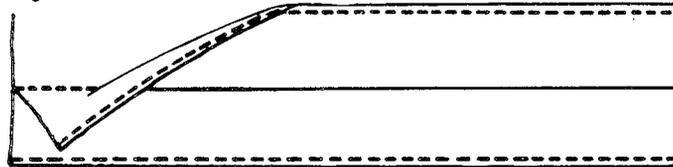


Figure 52

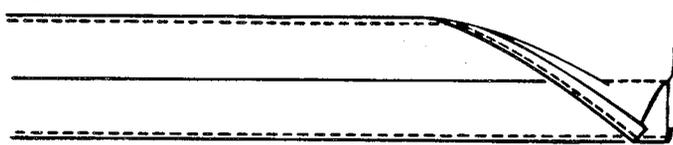


Figure 53

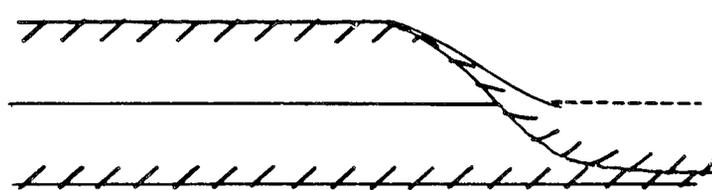
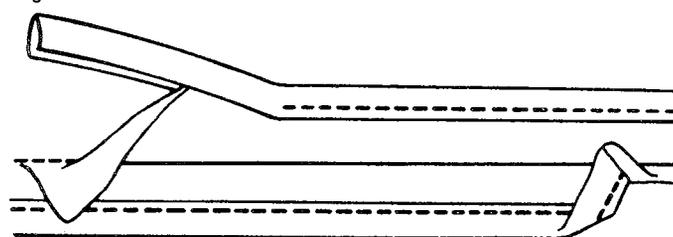


Figure 54



Plain Seam

You will use a plain seam pressed open, either with or without a finish, for most of your sewing. A seam is opened to achieve flatness and needs to be pressed open again after each washing or drycleaning.

The direction you stitch, press, and apply a finish to the raw edge of a seam is the same as for stay-stitching. Always remember to stitch with the grain.

Here is a guide to help you decide what finish to use and how to make it.

1. **Pinked finish** – for closely woven wash fabrics or garments that must be drycleaned. Pink near the edge after you stitch the seam and before you press it open (figure 50).

2. **Machine stitched edge** – for fabrics that ravel slightly. Stitch $\frac{3}{8}$ inch from raw edge. Use a stitch slightly longer than regulation size to prevent puckering (figure 51).

3. **Edge turned and stitched** – for fabrics that do not press mark through to the right side. Turn edge under $\frac{1}{8}$ inch and stitch near fold (figure 52).

4. **Overcast finish** – for fabrics that ravel easily. Use a single thread and work from right to left when hand overcasting. Make stitches $\frac{3}{8}$ inch deep and $\frac{1}{4}$ inch apart (figure 53). Do not pull thread tight. For machine overcasting, adjust zigzag stitch to fabric weight and texture (see your instruction book). Stitch near edge of seam allowance. Cut away any excess.

5. **Bound edge** – for fabrics that ravel very easily and for unlined jackets and coats. Encase raw edge with bias tape and stitch on edge (figure 54). You can use straight rayon seam tape on straight seams. Pre-shrink, fold, and press straight tape in half before applying it.

6. **Unfinished edge** – for fabrics that do not ravel or for garments that can be drycleaned only.

A plain seam is not pressed open at armhole, waistline, or yoke seams. Finish it by stitching raw edges together $\frac{1}{4}$ inch from seam line. This seam is also suitable for use on light to mediumweight fabrics where flatness is not highly desired. Take care to see that the seam turns in the same direction throughout its length (figure 55).

French Seam

You will use a French seam on lightweight and transparent fabrics where seams show through to the right side. Its finished width is between $\frac{1}{8}$ and $\frac{1}{4}$ inch (figure 56). To make a French seam, place wrong sides together and stitch $\frac{3}{8}$ to $\frac{1}{2}$ inch from raw edge. Trim to $\frac{1}{8}$ inch or less and press edges to one side. Turn and crease exactly on seam line. Stitch

a second time just deep enough to enclose the seam. [Plan the depth of your stitchings so it equals $\frac{3}{8}$ inch ($\frac{3}{8}$ inch + $\frac{1}{4}$ inch or $\frac{1}{2}$ inch + $\frac{1}{8}$ inch).] The combination to use will vary with different fabrics.

Flat Fell Seam

You will use a flat fell seam to give a tailored look to your blouses, skirts, shorts, and pajamas. Its finished width is $\frac{1}{4}$ inch. To make a flat fell seam, place wrong sides together and stitch a $\frac{3}{8}$ -inch seam. Press across both seam allowances at the same time in the direction the seam is to be turned. Trim lower seam allowance to $\frac{1}{8}$ inch and upper seam allowance to $\frac{3}{8}$ inch. Turn upper edge under $\frac{1}{8}$ inch and pin or baste carefully in place (figure 57). Topstitch close to the edge.

22

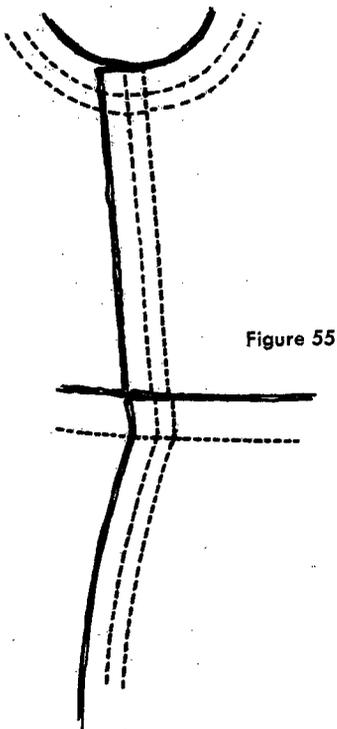


Figure 55

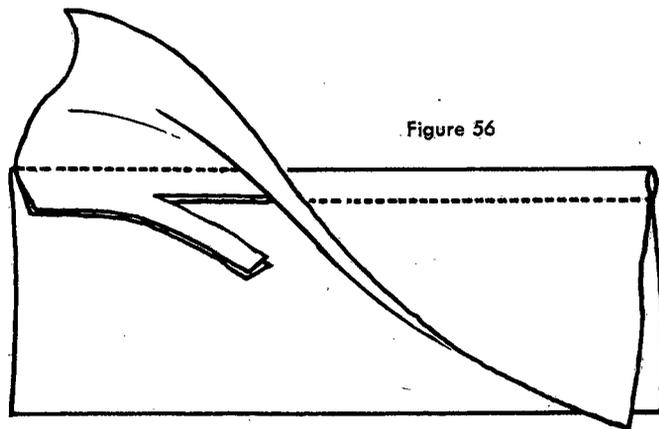


Figure 56

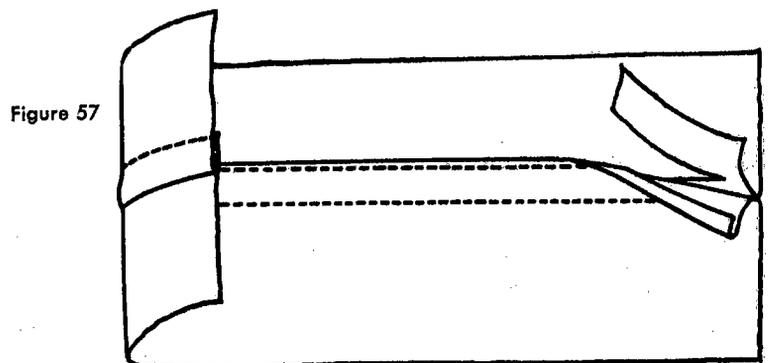


Figure 57

Well Made Seams

Look at some seams you have made and decide if you need to improve your seam making ability.

Well made seams are stitched straight with matching thread and are an even width throughout their length. Correctly chosen stitch size and seam finish give them needed strength. There are no puckers along seam line due to tight tension or a stretched edge. Seam line looks pressed but no press marks show.

AS YOU SEW, CLIP AND TRIM

The more you sew the more you'll recognize the appearance value you gain by clipping seam edges and trimming away bulk. Here are some places that

always need help from your shears. You will discover others yourself.

1. On inside curves, clip to within $\frac{1}{8}$ inch of stitching line. Clipping relieves strain on seam allowances that must spread (figure 58). When seam is turned to inside, clips become wedge shaped (figure 59).

2. On outside curves, clip out small (less than $\frac{1}{4}$ inch wide) wedge-shaped pieces. Extra seam allowance is cut away to prevent it from folding over (figure 60). When seam is turned, wedge-shaped edges touch to form a smooth seam (figure 61).

3. The number and placement of clips are determined by the amount of curve — the more curve the more clips.

4. Inside corners must be slashed to the stitching line before they will lie flat. Reinforce the slashed area

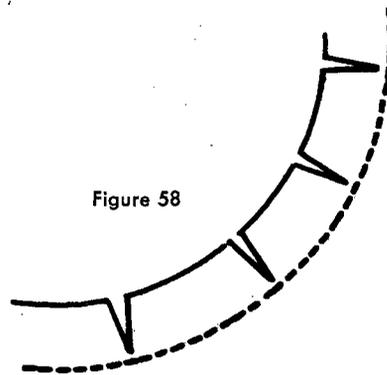


Figure 58

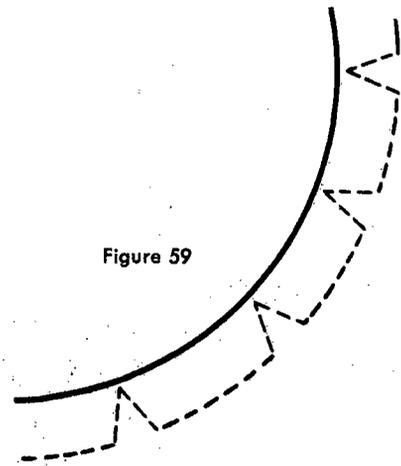


Figure 59

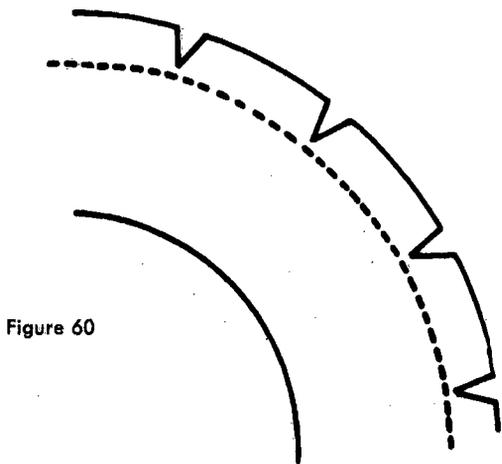


Figure 60

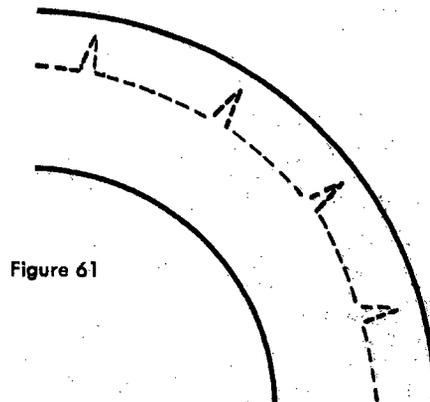


Figure 61

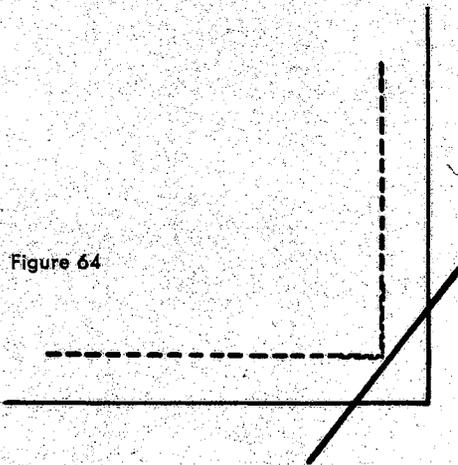


Figure 64

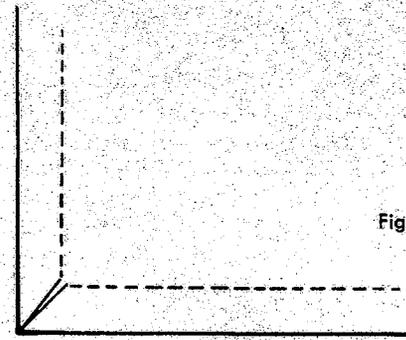


Figure 65

by stitching a second time exactly on seam line (figure 62). Stitch $\frac{1}{2}$ inch in both directions (figure 63).

5. Outside corners of seam allowances should be cut away to prevent bulky turned corners (figures 64 and 65).

6. On heavy fabrics, cut ends of seams diagonally. Cut off the same amount as the seam allowance (figure 66).

7. Clip a pleat seam at the top of the hem to make it lie flat (figure 67). Open pleat seam within the hem (figure 68).

8. Trim the seam allowance inside a hem to $\frac{1}{4}$ inch between crease for hemline and bottom of skirt (figure 69).

9. Trimming each seam allowance a different width is known as "grading." Use it when seam allowances are turned in the same direction or are enclosed. The seam nearer the outside of the garment should be the wider one (figure 70).

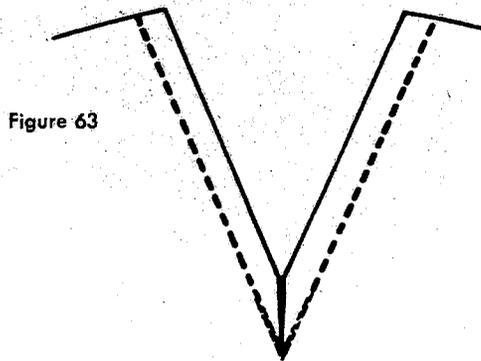


Figure 63

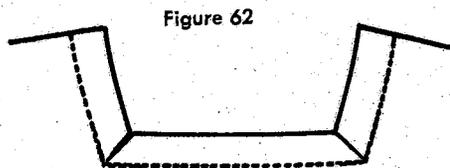
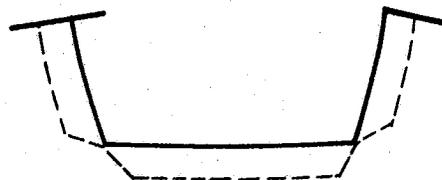


Figure 62



INTERFACINGS

Your pattern will tell you where to use interfacing. If it says interfacing is "optional," it is usually wise to use it because interfacings give body, add strength, and help hold the garment shape.

Interfacings are used where buttons and button-holes are placed, at front and back openings, necklines, collars, cuffs, sleeve and jacket hems, pockets, pocket flaps, yokes, waistbands, and belts.

An interfacing should:

Match garment in color as nearly as possible.

Be slightly lighter in weight than garment fabric.

Either flex or hold garment shape as design indicates.

Figure 66

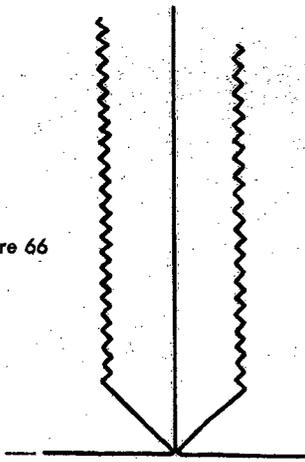


Figure 67

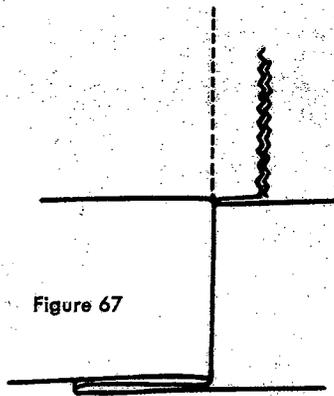
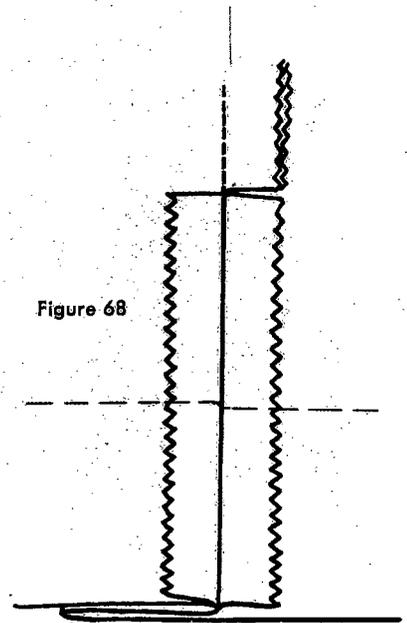


Figure 68



- Launder or dryclean the same as the garment.

Interfacing Fabrics

There are many types of interfacing fabrics. Start acquainting yourself with them by studying those listed below.

1. **Woven fabrics:** (a) Made especially for interfacings: Armo hair canvas, Formite, Si bonne, Sta-Shape, Super-siri, Veriform; (b) Other fabrics often used: batiste, broadcloth, lawn, muslin, nurse's cloth, organdy, resin-treated cottons. These fabrics mold and can be shaped to roll. Cut interfacings on the same grain as the garment piece.

2. **Nonwoven interfacing fabrics:** Interlon, Keybak, Pellon. These fabrics have no grain and can be cut in any direction. Because they have little flexibility, their use is limited to straight grain areas where no roll is needed.

3. **Iron-on interfacing fabrics:** Keybak, Pelomite, Staflex. Fabrics in this group can be woven or nonwoven. Make a trial sample before you use them — they often appear heavy after they're applied. These interfacings are best used for belts and detail work such as on bound buttonholes, gusset seams, etc.

Figure 69

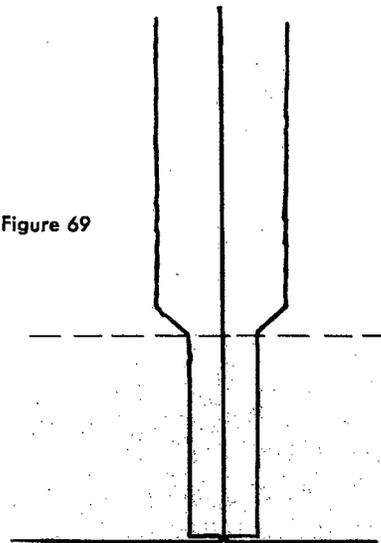
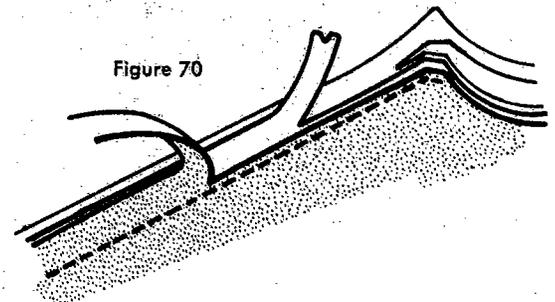


Figure 70



Selection Of Interfacing

There is no hard and fast rule to guide you. The interfacing you select will be determined by your pattern, the weight of your fabric, and the effect you desire.

To determine which one to use, fold your garment fabric over different weights and types of interfacing and note how each looks and feels. A correct interfacing will give the degree of firmness or softness you desire without your being aware it is there at all.

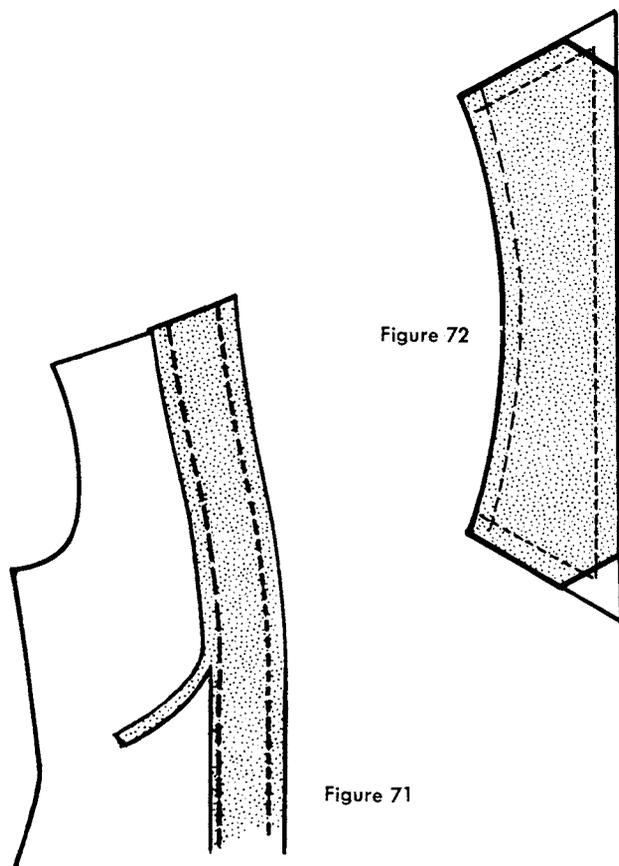


Figure 71

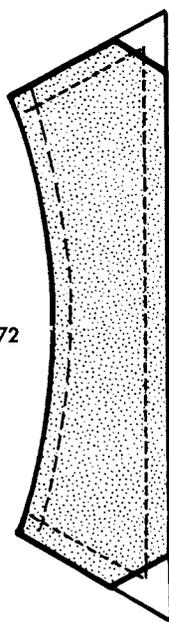


Figure 72

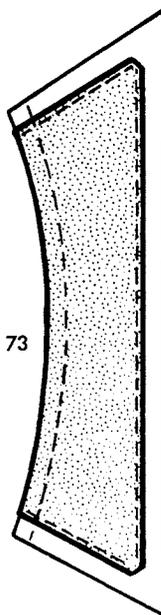


Figure 73

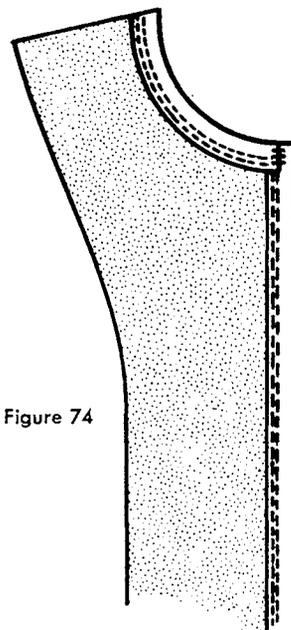


Figure 74

Suggestions For Use

1. Interfacing fabric for a washable garment should be shrunk before use. Soak it thoroughly in lukewarm water. Iron dry, ironing with the grain to keep yarns at right angles.

2. Usually, you should cut an interfacing on the same grainline as the part of the garment it interfaces. Exceptions are interfacings for jacket sleeves and hems where a true bias interfacing is desired for flexibility.

3. To prevent interfacing from extending beyond the facing, trim $\frac{3}{8}$ inch off the unattached edge. If interfacing ravel easily, make line of stitching $\frac{1}{4}$ inch from trimmed edge (figure 71).

4. Trim interfacing diagonally at corners about 1 inch inside the seam line to reduce bulk (figure 72).

5. A lightweight interfacing is stitched in the seam and the seam allowance trimmed close to the stitching line (figure 73).

6. When interfacing is heavy, bulk is reduced by replacing the interfacing seam allowance with either

a muslin strip or seam tape. This edge may then be stitched into the seam (figure 74).

7. If your pattern indicates a dart in the interfacing, slash on dart line, lap and bring cut edge to second dart line. Stitch close to the edge and then stitch a second row for reinforcement (figure 75). Trim.

8. At zipper edge of neckline interfacing, trim $\frac{5}{8}$ inch off the two edges near the opening (figure 76).

See these sections for more help with interfacings: This bulletin, pages 24-6, and the "Interfacing" section of your beginner's bulletin.

BOUND BUTTONHOLES

The two keys to making good buttonholes are measuring accurately and following the grainline. As you sew, work for buttonholes that:

- Are in line with one another
- Are the same length

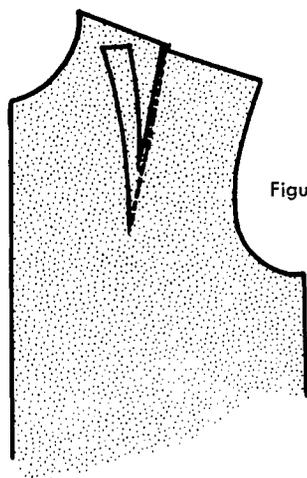


Figure 75

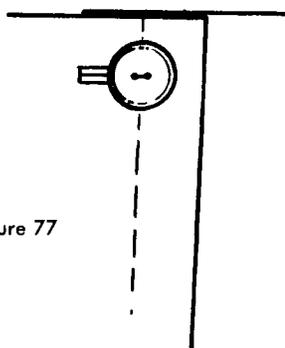


Figure 77

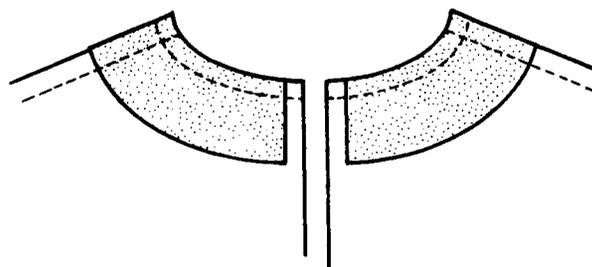


Figure 76

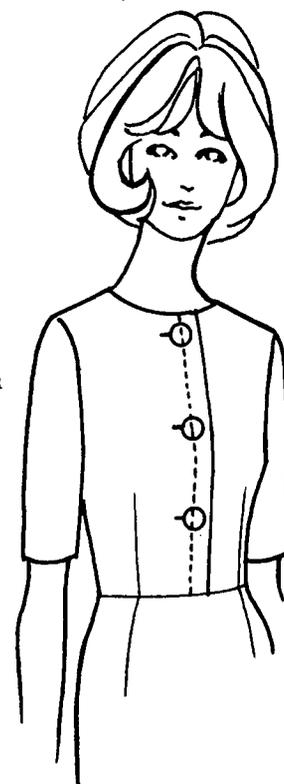


Figure 78

- Have a finished width of $\frac{3}{16}$ inch or less
- Have lips equal in width, $\frac{1}{2}$ of $\frac{3}{16}$ inch
- Have lips that meet in center of opening
- Have lips and machine stitching on grainline
- Have square, firm corners
- Have ends stitched securely on wrong side

The directions given below will help you achieve these standards.

Placement

Follow the markings on your pattern unless you alter the pattern length or change the button size.

When you change button size, you must increase the width of the garment lap for larger buttons and decrease it for smaller ones. Adjust your pattern so that the finished width of the extension beyond the center line measures half the diameter of the button plus $\frac{1}{4}$ to $\frac{1}{2}$ inch (figure 77). This amount will provide the needed garment underlap to completely

back the buttoned buttonhole.

Use this same measurement — half the diameter of the button plus $\frac{1}{4}$ to $\frac{1}{2}$ inch — as the distance from your neck seam line to the top buttonhole. Then the button will not extend beyond the neck edge (figure 78).

Buttons and buttonholes need an interfacing to give strength. See page 25 for help in selecting your interfacing fabric.

Construction

There are several ways to make bound buttonholes. The method given here is a good one. You can also achieve satisfactory results with a purchased buttonhole binder. Always make a test buttonhole on your fabric before you begin. Follow these directions:

1. **Marking location and size** — On the interfacing fabric, mark two lines parallel to the center marking. The outer marking should be $\frac{1}{8}$ inch beyond the center. The distance for the second marking will depend on button size. Make a crosswise marking ex-

actly on the grainline for each buttonhole (figure 79).

2. **Applying interfacing to garment** — Place interfacing against the wrong side of the garment. Match center front markings and pin. From the interfacing side, insert a pin at each end of the buttonhole. Check on the right side to see that the same fabric yarn runs from one pin point to the other. Adjust as needed. When exactly in place, use contrasting threads to machine baste the two long parallel lines.

3. **Preparing buttonhole strip** — On the lengthwise of the fabric, cut a strip $1\frac{1}{2}$ inches wider than the buttonholes and 2 inches longer than the total buttonhole area. (Buttonholes can also be made of patches or the strip can be cut crosswise or on the bias for a decorative effect.) With right side against right side, place center of strip over center of buttonholes. Be sure crosswise grain of strip matches crosswise grain of garment at buttonhole positions.

4. **Stitching and cutting** — From the underside, stitch on the exact buttonhole line using 20 stitches per inch. Stitching should follow a fabric yarn on both garment and interfacing side (figure 80).

- Machine baste $\frac{3}{16}$ inch on each side of the buttonhole. Extend this stitching line $\frac{1}{2}$ inch longer at ends (figure 81).
- With a sharp pencil, mark buttonhole length halfway between stitching and bastings (figure 82).
- From the upper side, cut strip between buttonholes. Fold patches back over basting line and press (figure 83).
- Turn to underside and stitch on pencil line using 20 stitches per inch. Tie threads leaving $\frac{1}{2}$ inch ends (figure 84).
- From underside, cut through the center to $\frac{1}{4}$ inch from each end. Cut diagonally to each corner. Remove machine bastings (figure 85).
- Draw strip through opening to underside. Carefully pull ends of strip to square the corners. Overcast lip edges together to hold firmly (figure 86).
- Fold garment back over buttonhole, stitch across end and through base of the triangle. Use 20 stitches per inch (figure 87).

This is as far as you go now. Later you will finish the back of the buttonhole.

5. **Finishing** — With facing in place, insert a pin in each corner from the front side through to the underside. Cut the same as buttonhole — through the center and diagonally to the corners. Tuck under raw edges and finish with tiny hand stitches. Remove overcasting and press buttonhole in direction of strip (figure 88).

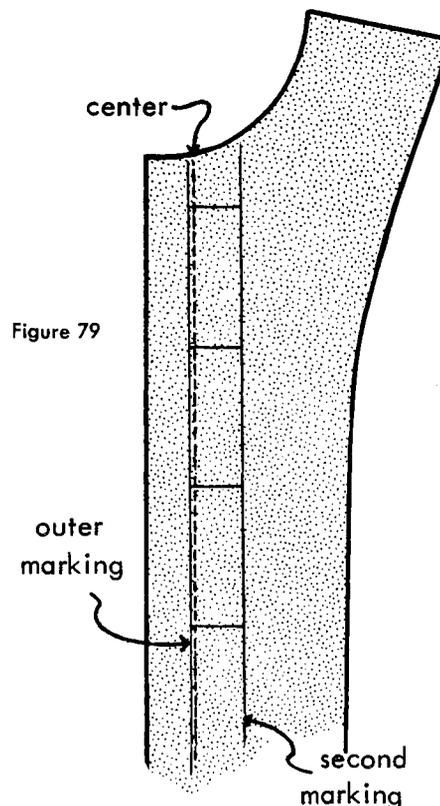


Figure 79

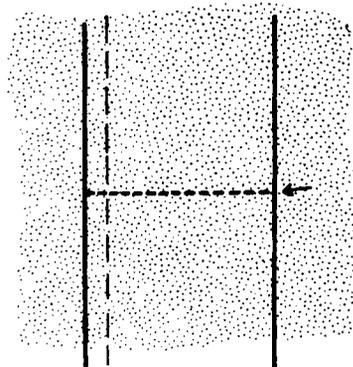


Figure 80

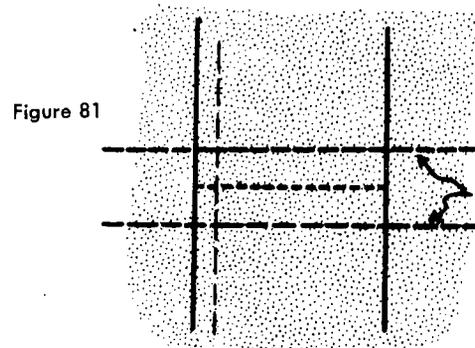


Figure 81

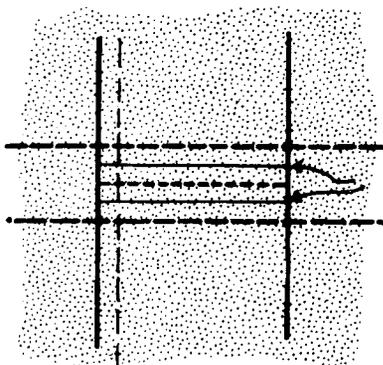


Figure 82

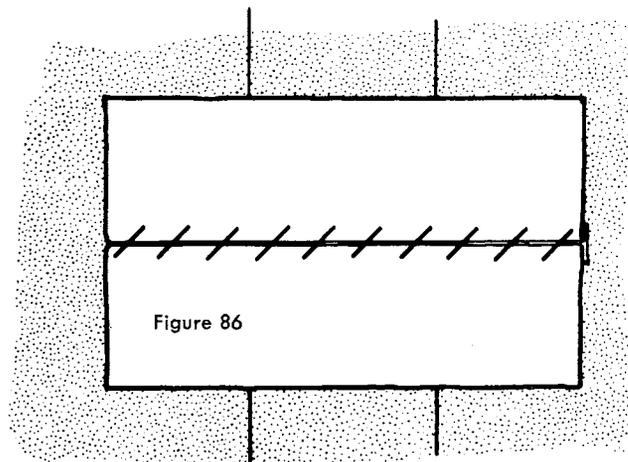


Figure 86

Figure 83

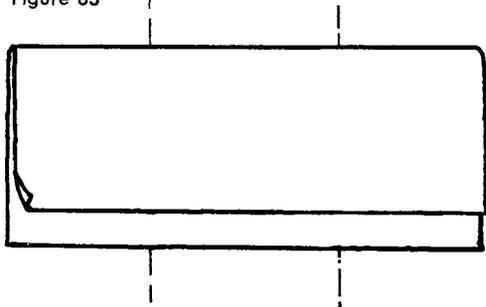


Figure 87

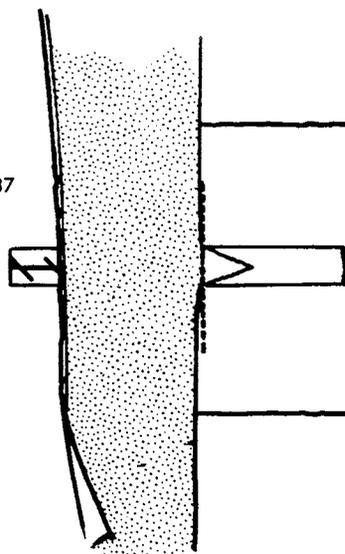


Figure 84

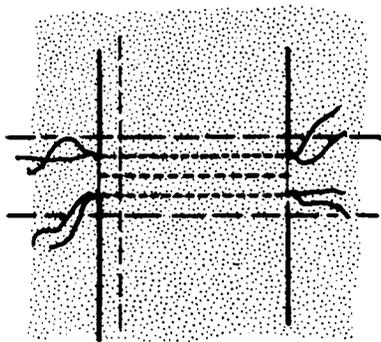


Figure 85

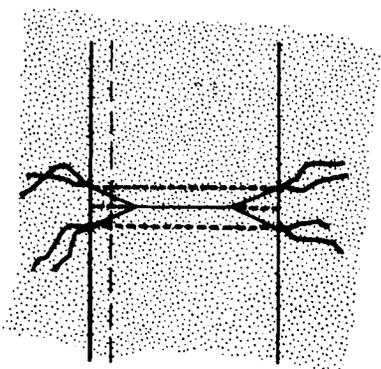
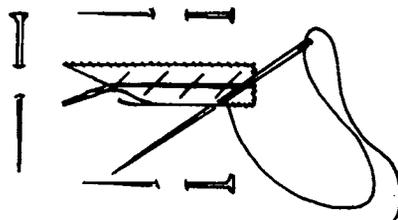


Figure 88



COLLARS

There are many types of collars and many ways of making and attaching them. The methods given here are for collars you'll use most often.

A good collar meets these standards:

- Both ends are identical in size, shape, and placement.
- Neither the under collar nor the seam shows at the outer edge.
- The set of the collar on your body looks like it does on the pattern.

Making The Collar

Cutting — Few patterns have both an under collar and an upper collar. When they do, the upper collar is slightly larger to allow for the roll and to help keep the seam at the outer edge from showing after the collar is made. If the pattern you are using does not show a difference, you may cut the outer edges of the under collar $\frac{1}{8}$ inch smaller than the upper collar. Do not change the neckline edge. Accuracy within a fraction of an inch is very important here.

Interfacing — Cut the interfacing on the same grain and the same shape as the collar.

Some directions will tell you to place the interfacing against the upper collar; others will say to place it against the under collar. To decide which direction to follow, consider your fabric weight. If you're using a lightweight fabric, cushion the collar seam by placing the interfacing against the upper collar. If your fabric is heavy, eliminate bulk at the seam line by staystitching the interfacing to the under collar and trimming it close.

Directions for interfacing an under collar are given in the "Collar Unit" section of your beginner's bulletin. To interface an upper collar, follow the same steps but staystitch $\frac{1}{2}$ inch from the outer edge instead of $\frac{3}{4}$ inch. This will allow the interfacing to be stitched into the seam line.

Stitching

1. Place right sides of upper and under collar together. Match center, notches, and ends. Pin and stitch all edges on seam line except at neckline.

2. Use directional stitching to maintain collar shape and prevent stretching.

3. At each side of a corner, use 20 stitches per inch for $\frac{1}{2}$ inch. Take two stitches across the corner. The small stitches permit close seam trimming; the two

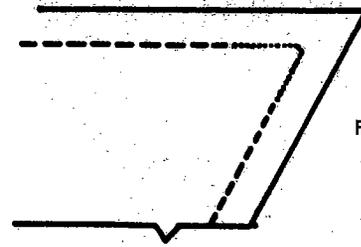


Figure 89

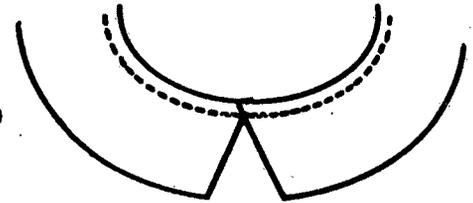


Figure 90

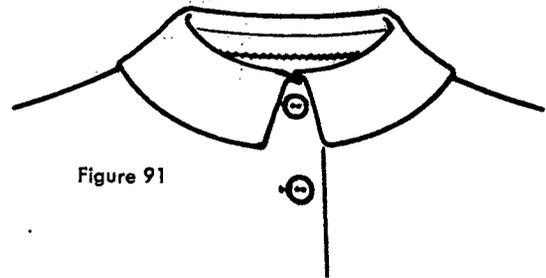


Figure 91

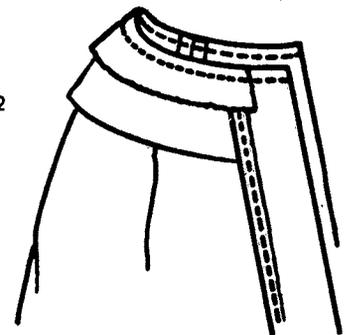


Figure 92

stitches allow space so the corner is less bulky (figure 89).

Finishing

1. Clip and trim seam allowances (see pages 23-4). Enclosed seams should be trimmed to $\frac{1}{4}$ inch or less.

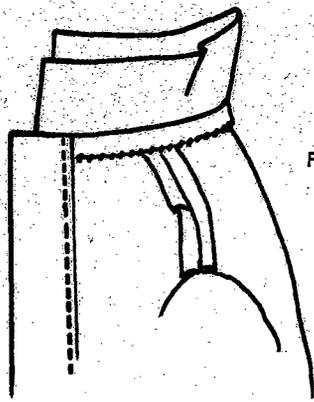


Figure 93

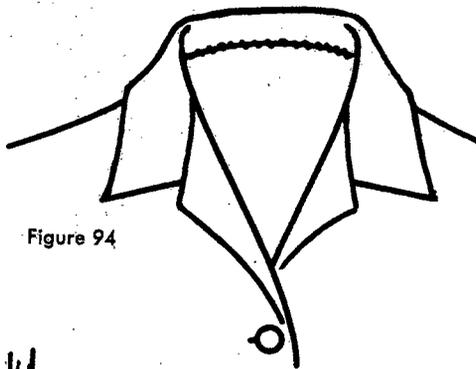


Figure 94

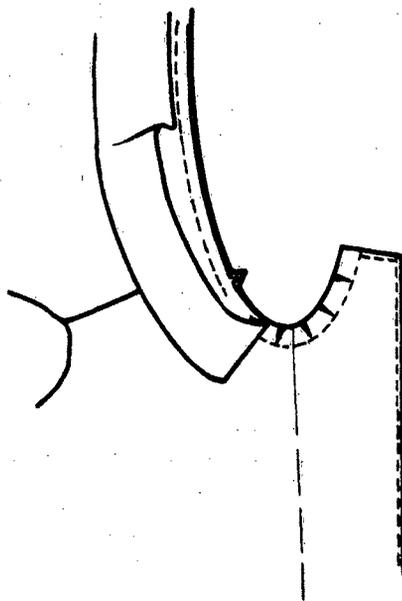


Figure 95

2. Understitch through the under collar and the seam allowances very close to the seam line.

3. Press the collar, gently rolling the seam line to the wrong side of the collar.

4. On a round collar, staystitch neck edges together and then slash to stay line.

5. On a two piece collar, pin at seam line and over-stitch for 1 inch (figure 90).

Attaching The Collar

Nonconvertible collar — You can use a bias facing for a flat collar since the collar will cover the hand stitches used in attaching the facing (figure 91).

1. Cut a 1½ inch bias strip the length of the neckline from facing edge to facing edge plus 1½ inches. Gently press bias in a curve to fit the neckline.

2. Staystitch the collar and garment neckline. Clip to stay line so that you can handle the neckline seam like a straight seam.

3. Finish the garment facing by edge stitching or turning and stitching. The weight and texture of your fabric will determine the type of finish you use.

4. Join collar to garment, matching notches, center back, shoulder, and end of collar markings.

5. Machine baste using regular seam allowance.

6. Turn garment facings to the right side over the collar ends.

7. Place right side of bias facing over the collar. This bias strip should extend ¾ inch beyond the facing edge (figure 92).

8. Stitch on seam line using regulation length stitches.

9. Trim and grade neckline.

10. Turn outer bias edge under and hand hem to garment (figure 93).

Convertible collar — A convertible collar can be worn closed or open at the neck (figure 94). The pattern is straight or slightly curved at the neckline, so the collar rolls up against the neck. Since it does not cover the blouse back, a convertible collar is not attached by a bias facing. If it is, the stitches show.

Attaching without a fitted facing at back neckline:

1. Staystitch the garment and facing at neckline. Clip to stay line.

2. Finish outer edge of front facing including the shoulder edge.

3. Join the under collar to the neck edge, matching center, notches, and end markings.

4. Stitch the under collar to the back section of the garment to about 1 inch beyond each shoulder seam (figure 95).

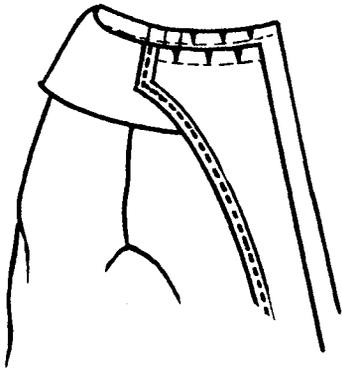


Figure 96

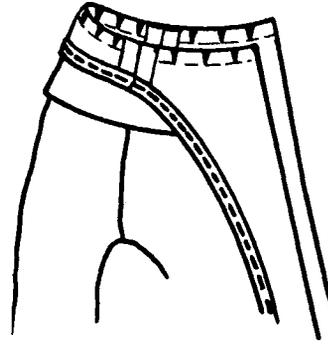


Figure 98

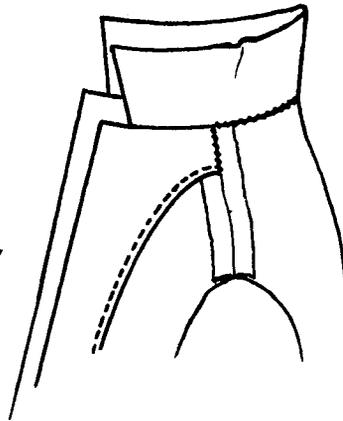


Figure 97

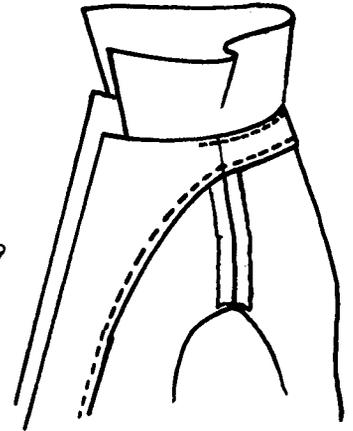


Figure 99

5. Pin the entire collar in place and fold the front facings over the collar. The end of the facing will then be in line with the shoulder seam.

6. Stitch on seam line from front edge to shoulder seam (figure 96).

7. Trim and grade seam.

8. Clip seam at shoulder so seam can be turned down in front sections and up into collar across the back. Turn corners and press.

9. Turn under seam allowance on back of upper collar and machine or hand stitch to garment at neck edge (figure 97).

Attaching with fitted facing at back:

1. Staystitch neckline of garment and facings.
2. Join back facing to front facing at shoulder seam line.
3. Finish outer edge of entire front and back facings.
4. Clip to stay line of garment and facing.
5. Join the collar to neckline of garment. Match all markings. Machine baste.

6. With right sides together, join completed facing to neckline, matching all markings (figure 98). Stitch.

7. Trim and grade seams, turn, and press. Understitch where possible. Tack facing at shoulder seam (figure 99).

SET-IN SLEEVES

Because so many clothes have set-in sleeves, you should know how to sew them easily and well.

A good set-in sleeve meets these standards:

- ⊛ Cap is smooth and rounded with no pleats or gathers.
- ⊛ Armhole line is well shaped because stitching is even.
- ⊛ Sleeve is located in armhole so crosswise grain is parallel to the floor and lengthwise grain is perpendicular to the floor.

Here are a few facts that will help you in making good set-in sleeves. The sleeve is always larger than the armhole. This difference in size is needed for arm movement and for a smooth, good fitting sleeve.

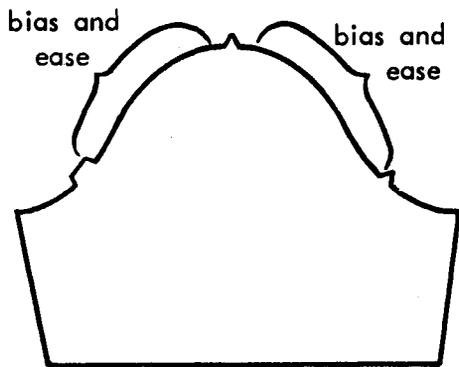


Figure 100

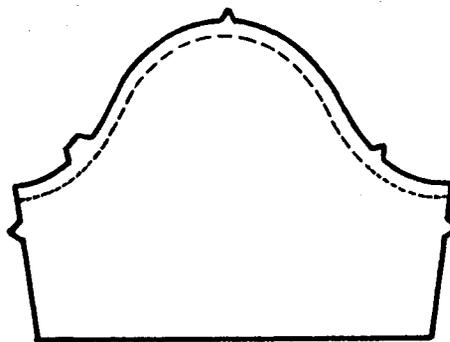


Figure 102

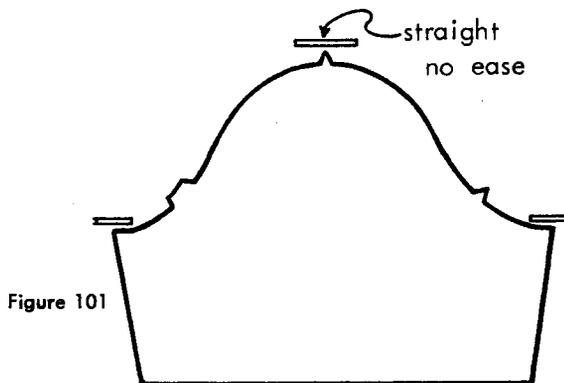


Figure 101

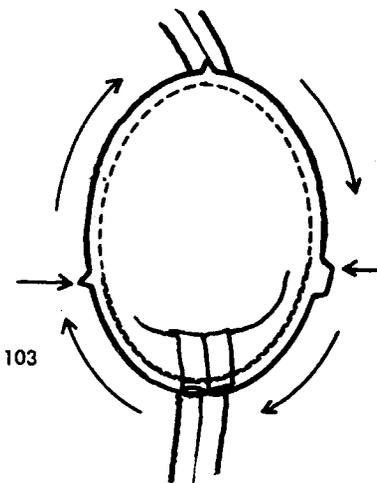


Figure 103

Figure 100 shows where the sleeve is bias and eased to fit the armhole. Figure 101 shows where the bodice and sleeve are on a straight grain. These points will be joined without ease.

2. Finish the bottom of the sleeve according to pattern directions.

Ease Cap Fullness

The "one row ease line" method explained below (figure 102) is widely used and satisfactory for most fabrics.

1. With matching thread and exactly on the $\frac{5}{8}$ inch seam line, staystitch the cap of the sleeve. Have the right side of the sleeve up as it goes under the presser foot.

2. Use a regulation length stitch from underarm seam to notch. Do not cut thread.

3. Lengthen stitch to about eight stitches per inch and continue around top of sleeve to last notch.

4. Shorten your stitch and continue to the underarm seam.

Determine Amount Of Ease

1. Place sleeve in armhole with right side of sleeve to right side of bodice.

2. Working from sleeve side, match single and double notches. Pin. Place pins at right angles to the seam line with heads out. Pin across the ease line stitches taking up very little fabric— $\frac{1}{16}$ inch is enough. Match underarm seams and top of sleeve to shoulder seam (figure 103). Pin in same manner.

3. Clip the first and last long stitch of the ease line. Pick up this thread and gently ease the fullness from each notch to the top of the sleeve. Remember that the very top is straight grain and without ease and that the greatest amount of ease should be where the cap is most bias.

4. At this point, you can remove the sleeve and block the cap (see directions below), or you can continue pinning the sleeve into the armhole. What you do will depend on how much fullness you see—fabrics act differently.

Complete Sleeve Unit

1. Stitch the underarm seam and press it open.

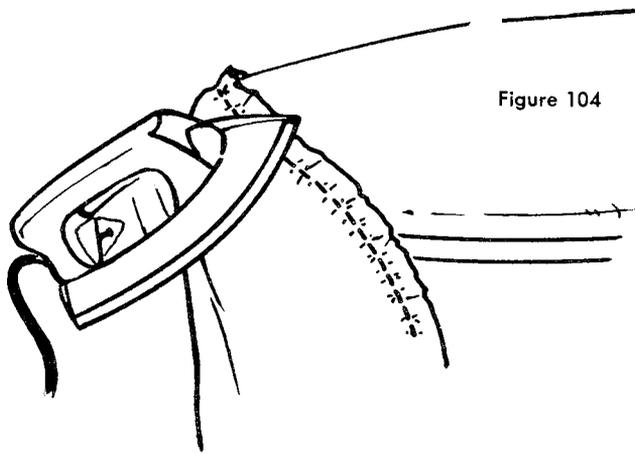


Figure 104

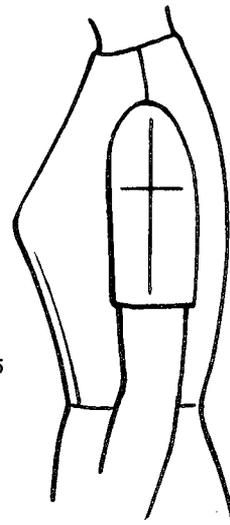


Figure 105

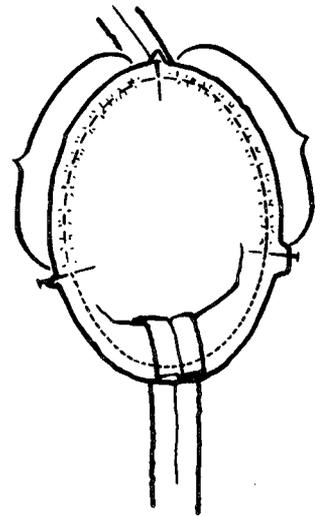


Figure 106

Block Cap

With sleeve turned wrong side out, place ease line just $\frac{3}{4}$ inch over the end of the ironing board. Use steam and press with light pats, pointing the iron toward the armhole edge (figure 104). This action will help you achieve a rounded cap free from pleats or gathers.

Return sleeve to armhole and pin the same as you did before.

Stitch And Press

1. Working from the inside, machine or hand baste one thread outside the stay line.
2. Try on and check both the crosswise and lengthwise grainlines (figure 105).
3. After the final fitting, stitch the sleeve. This time, stitch one thread inside the staystitch line.
4. Begin the stitching at one of the notches. Stitch down and across the underarm seam and around the top of the sleeve (figure 106). End by double stitching

under the arm from notch to notch. This will add strength to your sleeve. Sew exactly on the first stitching line. Remember to work with the sleeve side up.

5. Finish the seam allowance according to the fabric you're using:

- If the fabric is firm – pink edges.
- If the fabric ravels – hold the seams together and stitch $\frac{1}{4}$ inch from the armhole edge before pinking; or machine or hand overcast the edges together.
- If the fabric is heavy – from notch to notch at the underarm, stitch $\frac{1}{4}$ inch from the seam line and trim close to the stitching.

Keep the seam allowance at the top of your sleeve $\frac{1}{2}$ to $\frac{5}{8}$ inch wide to form a little shelf so the sleeve will fall straight over your arm.

6. Place the armhole seam on the end of the ironing board. Press across the seam line, using the point of your iron for a depth of not more than $\frac{1}{2}$ inch. The seam allowances will turn naturally into the sleeve when the garment is right side out.

ZIPPER PLACKETS

Zippers are popular garment closures because they are strong, easy to fasten, smooth fitting, and nearly inconspicuous when carefully selected and inserted.

As you sew, work for zipper plackets that meet the standards below.

When selecting a zipper, see that:

- The color matches or blends with the color of your fabric.
- The weight is similar to your fabric weight.
- Its length and type are correct for placket location.

In placket construction, see that:

- Both metal and tape are completely concealed by overlap.
- The width of the overlap is in proportion to the weight and bulk of your fabric. (Usually, the total width should be $\frac{1}{2}$ inch.)
- The horizontal seams line up straight across at the neck edge, waistline, or waistband.
- The fabric lies smooth across the zipper.

Kinds Of Zippers

Zippers are made with metal teeth and with nylon or polyester coils. There are three general types:

- The dress zipper – tape is closed at top and bottom.
- The neck and skirt zipper – tape is open at top, closed at bottom.
- The coat or jacket zipper – tape is open at top and separates at bottom.

Length Of Zippers

The length of a closed zipper is measured from the top of the slider or bar tack to the lower edge of the bottom stop. Pattern envelopes usually carry suggestions for the length and type of zipper needed for the pattern inside. However, you may wish to use a different length zipper more suited to your figure. For example, if you are short and small, you may choose to use a 10-inch zipper rather than the 12-inch one called for by your pattern.

Zippers come in these lengths:

- Dress – 10-, 12-, and 14-inch lengths
- Skirt – 7- and 9-inch lengths
- Neck – every inch from 4 to 10 inches, every 2 inches from 12 to 24 inches, 30- and 36-inch lengths

If you use a different length zipper than one specified on your pattern, be sure to adjust the markings on your garment to match the zipper length. For a dress placket, the top of the zipper should not come closer than 2 inches from the armhole seam.

Length Of Opening

For a neck or skirt placket, have your opening the length of the zipper with the tab turned up plus a $\frac{5}{8}$ -inch seam allowance.

For a dress placket, have your opening the length of the zipper with tab turned up.

Zipper Placket By Machine

Good directions for putting in a zipper by machine are enclosed with each zipper you buy. Directions will vary slightly with the company, but any of the methods is satisfactory. Choose the one that is easiest for you and gives the best results.

Zipper Placket Finished By Hand

If you do the stitching that shows on the outside of your placket by hand, it will be less conspicuous. Handstitching is especially appropriate for:

- Pile fabrics – corduroy, velveteen, fleece, etc.
- Sheer or delicate fabrics – lace, crepe, taffeta, etc.
- Fabrics with prominent designs and/or color combinations – checks, tweeds, etc.

Since machine stitching is stronger, do all stitching except that on top by machine. To finish a zipper by hand:

1. Sew from the right side of the garment, beginning at the bottom. Use pins or basting as a guideline if necessary.
2. Use a small needle and matching thread, and don't pull the thread tight.
3. Use a small backstitch for the entire length of the zipper. To make this stitch, insert your needle into the fabric in back of your thread to form a small backstitch. Bring your needle out in front of the

Figure 107

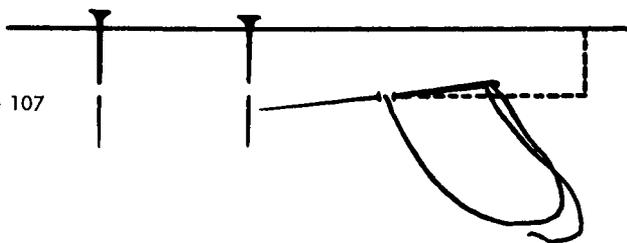


Figure 109

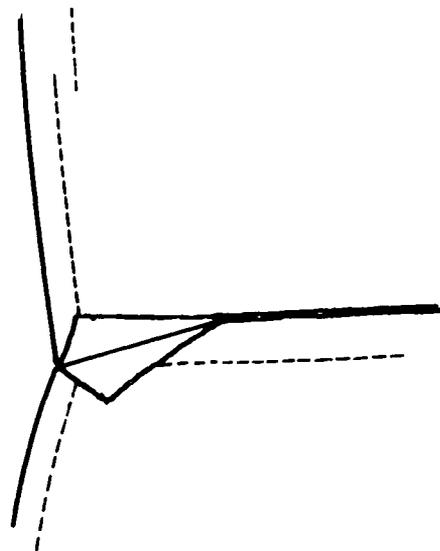


Figure 108

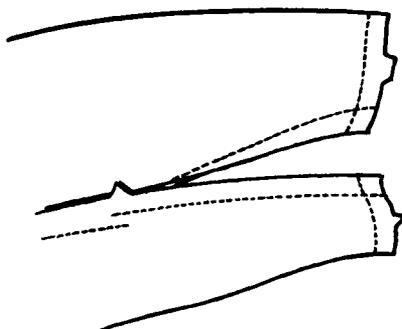
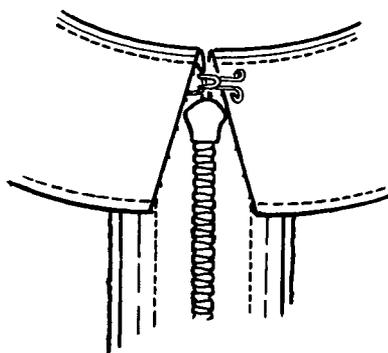


Figure 110



thread. Keep your stitches evenly spaced – about $\frac{1}{4}$ inch apart (figure 107).

Suggestions

1. Check the fit of a garment before putting in the zipper.

2. Staystitch each side of the placket opening $\frac{1}{4}$ inch from the seam line to prevent stretching and to give firmness (figure 108).

3. If your seam allowance is less than $\frac{5}{8}$ inch, make it wider with seam tape. Stitch close to the edge of the tape.

4. Reduce bulk at the waistline of a dress placket by trimming seam allowances and pressing the seam open for $1\frac{1}{2}$ inches (figure 109).

5. Use an adjustable zipper foot and make all stitchings from bottom to top of zipper.

6. You can make your final zipper stitching from the right side if it is easier for you to stitch straight that way.

7. Press your finished placket on the wrong side,

then on the right. Press out the crease under the lap. Use a low iron setting and a press cloth on nonmetal zippers.

8. Generally speaking, a lapped seam placket is used at side skirt, underarm dress, and sometimes for a back neck opening (depending on pattern style). A slot seam placket is used at back neck, center back skirt, and sometimes for underarm dress (depending on fabric).

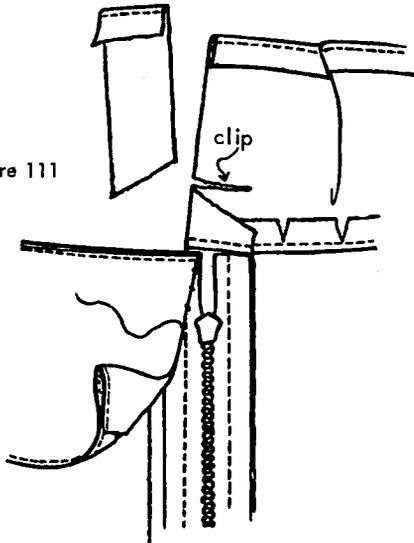
Finishes At Neck Opening

There are several ways to finish the facing at zipper closures. But whatever method you use, the top of the closure should be smooth and flat and both zipper and tab should be completely covered. Close the top with hook and eye.

Figure 110 shows how to finish the slot seam application.

Figure 111 shows how to clip and turn the lapped side of a placket. To locate the clip point, mark the facing with a pin at the top and side of the zipper. Turn edges under and finish with tiny hand stitches.

Figure 111



WAISTBANDS

We will consider two methods of interfacing a waistband here. See "An Interfaced Band" section of your beginner's bulletin for information on making an interfacing from your garment fabric.

What you learned about cutting apron ties and belts on a lengthwise grain of fabric also applies to waistbands. When cut on the lengthwise grain they are easier to handle in sewing and stretch less in wearing. Interfacing adds firmness to waistbands. On bulky fabric, you may use the selvage on the inside to eliminate turning under a seam allowance.

When you sew waistbands, work for these standards:

- Even width.
- A snug fit without a tight appearance.
- No lap or gap at top of placket opening.
- Fastening secure and flat.

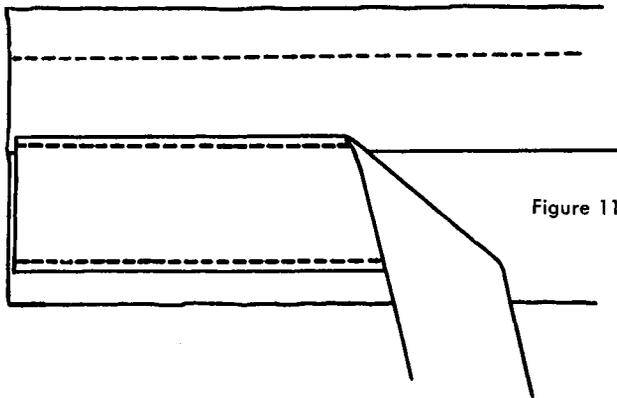


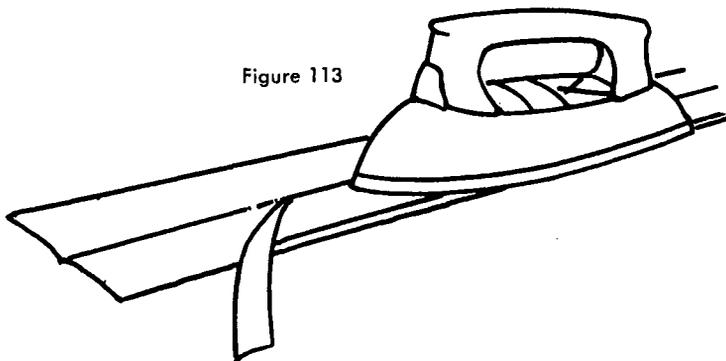
Figure 112

Waistband With Muslin Interfacing

Your waistband should be the length of your waist measure plus two seam allowances and 2 inches for an underlap. Interfacing should be cut on the lengthwise grain from preshrunk muslin. Make it half the width of the waistband plus $\frac{1}{4}$ inch.

Pin the interfacing to the wrong side of the band with the lower edges even. Stitch $\frac{1}{2}$ inch from this edge. Trim interfacing $\frac{1}{8}$ inch from stitching. Now stitch $\frac{1}{8}$ inch from the other edge of the interfacing. This stitching will be on the inside of the band and will not show when your skirt is finished. Put a line of stitching on the seam line along the other edge of the band, and your waistband is ready to attach (figure 112).

Figure 113



Band With Iron-On Interfacing

1. Fold waistband in half with wrong sides together and edges even. Press on fold line.
2. Cut iron-on interfacing the width of the finished band. Measure accurately and mark with a ruler so edges will be straight.
3. Place treated side of interfacing against wrong side of the back waistband. The edge of the interfacing should come to the creased fold (figure 113).

4. Press the interfacing into place by lifting and lowering the iron.

Attaching The Band

If you wish to finish your band with top stitching, place the right side of the under band against the wrong side of the skirt (figure 114). If you wish to finish your band with hand stitches on the inside, place the right side of the upper band against the right side of the skirt (figure 115).

1. Pin skirt and band together at center front and back and at side seams. Match notches. The band should extend $\frac{5}{8}$ inch at front edge of placket and 2 inches or more at back edge.

2. Distribute the fullness evenly in the sections you have pinned first. Ease is needed for a smooth fit.

3. Pin and stitch the band to the skirt, working with the skirt side up.

4. To close the ends, fold the band double with right sides together.

5. At front edge of placket, stitch from the fold to the waistline seam. Backstitch or fasten thread securely (figure 116).

6. At back edges, stitch from the fold across the end to the seam line. Turn and stitch to waistline seam. Fasten ends securely. Use small stitches at corner (figure 117).

7. On bands finished with hand stitches, trim $\frac{1}{4}$ inch off skirt seam and $\frac{1}{8}$ inch off loose edge of band (figure 118). On top stitched bands, trim $\frac{1}{8}$ inch off the waistband seam.

8. Turn under loose edge of band on seam line and press. Press closed ends.

9. At the center front, the center back, and seam lines, match the grainlines of both upper and under waistband (figure 119). Pin in place.

10. Finish either by hand or machine.

The following sections in your beginner's bulletin will be of help to you as you work with waistbands: "Putting on the Band," "Waistline Unit," and "Fastenings."

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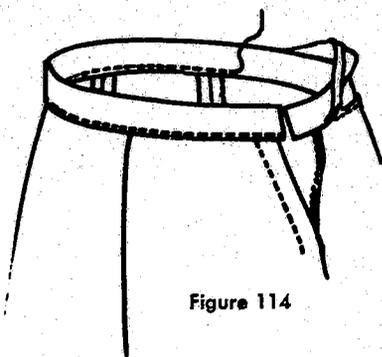


Figure 114

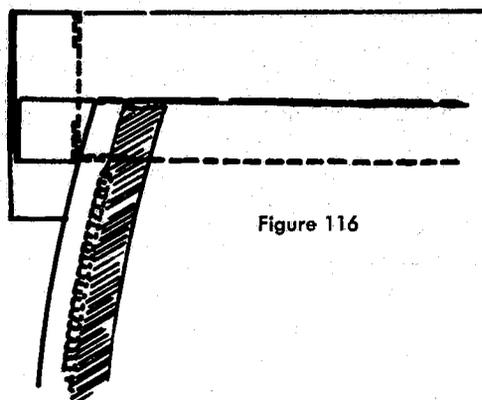


Figure 116

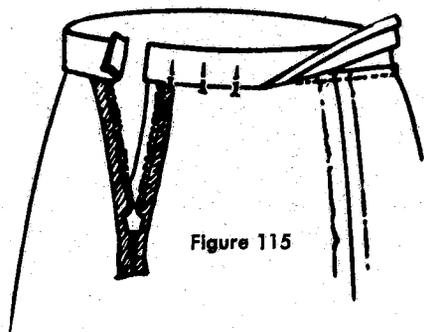


Figure 115

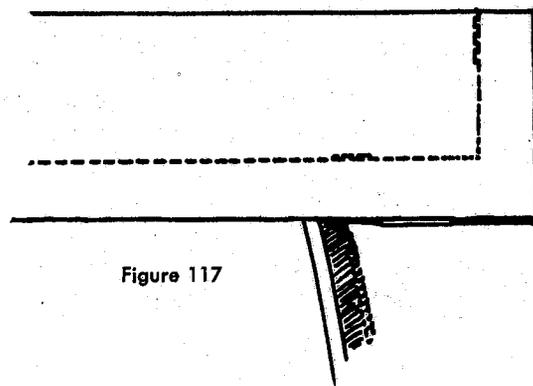


Figure 117

BELT METHOD

In this section you will learn how to make a belt using purchased belting. The "Belt and Belt Loops" section of your beginner's bulletin contains directions on two other methods and information on why you should cut belts on a lengthwise grain, where to place eyelets, how to attach a buckle, and how to make belt loops.

Choose from these three methods the one that gives the firmness appropriate for the fabric and belt width you are using. As you select your belt width, remember that the 1-inch belt is standard and becoming to most everyone.

Belt With Belting Inserted

Cut belt fabric twice the width of belting plus $\frac{3}{4}$ inch for two $\frac{3}{8}$ -inch seam allowances. With right sides together, fold fabric lengthwise exactly on the grainline. Do not press. Place belting between fabric layers along fold and stitch in either of these ways.

1. Place pins about 2 inches apart in a straight line outside the belting where the seam is to be stitched. Remove belting and stitch on pin line.

2. With zipper foot, stitch close to belting edge without catching it (figure 120). Remove belting.

Next, place seam in center of belt and press open. Mark one end of belt following shaped end of belting. Stitch using 15 to 18 stitches per inch. Tie thread ends securely and trim seam $\frac{1}{8}$ inch.

Turn belt right side out. Keep seam open and centered as you insert belting. Bring shaped end of belting right up to shaped end of belt. This belt needs no top stitching.

HEM FINISHES

See the "Hems" section of your beginner's bulletin for information on establishing, turning, and pressing a hemline. Directions on making a slipstitch are given in the "Hemming" section of that bulletin.

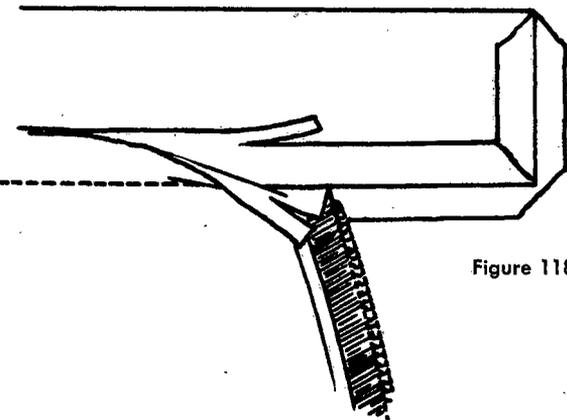


Figure 118

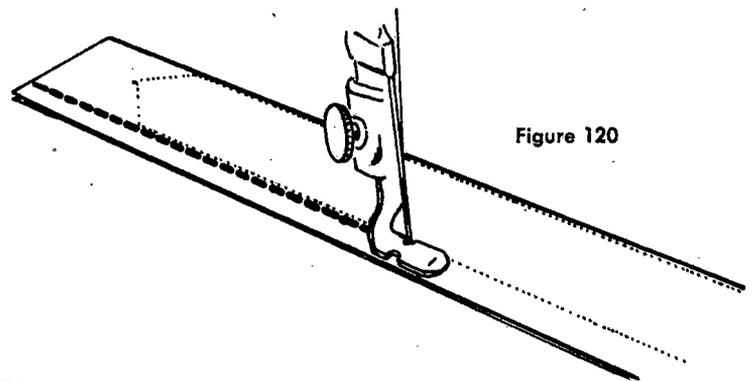


Figure 120

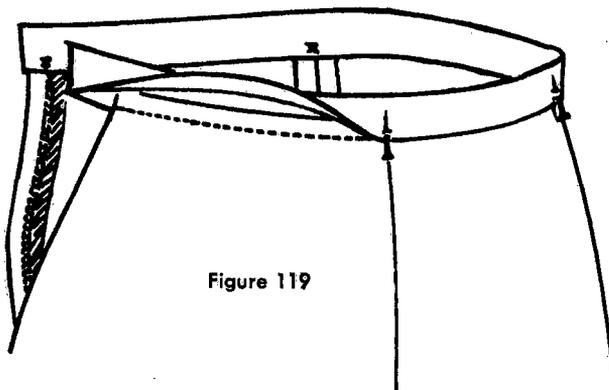


Figure 119

Well made hems have enough width to hang right for the garment style. The width is even throughout. Hand stitches are about $\frac{1}{2}$ inch apart. The bottom edge has a sharp crease with no visible stitch or press line at the upper edge. The total appearance is flat and smooth and when the garment is worn the hem is an equal distance from the floor.

Four hem finishing methods and three hemming stitches are described here. Your choice of finish will depend on your fabric weight, its tendency to ravel, and the depth and amount of hem fullness.

Turned-And-Edge-Stitched

The turned-and-edge-stitched hem is desirable for washable cottons and fabrics that ravel. It is not suitable for heavy fabrics or fabrics that show pressing imprints on the right side. Use this hem on straight or slightly flared skirts.

Edge stitch through single thickness of fabric $\frac{1}{8}$ inch from cut edge. Be careful not to stretch the edges. Turn edge under on stitching line and stitch $\frac{1}{16}$ inch from fold. Slipstitch in place (figure 121).

Seam Tape

Straight seam tape is desirable for fabrics that are too heavy to turn under. Use it on both straight and slightly flared skirts.

Stitch $\frac{1}{8}$ inch from cut edge. Ease fullness as needed. Shrink and shape tape to fit the upper hemline curve. Place tape edge on ease line and stitch close to the edge (figure 122). Allow sufficient ease in applying tape so that a 12-inch length can be stretched $\frac{1}{2}$ inch. Too little ease will make the hemline appear tight on the right side; too much ease will add bulk. Finish the hem with a vertical hemming stitch or a lockstitch.

To make a lockstitch, have the hem toward you. Fasten the thread through both garment and tape. Lay thread forward over the tape and hold it in place with your left thumb. With needle pointed toward yourself, take a small stitch into garment and tape passing your needle over the looped thread (figure 123). Continue around the hem placing stitches $\frac{1}{2}$ inch apart.

The vertical hemming stitch is made like the slipstitch except the thread is not concealed in hem

Figure 121

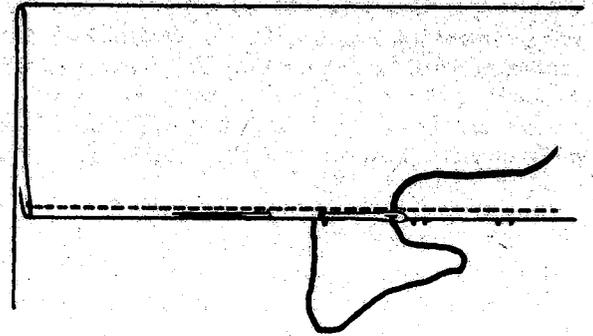


Figure 122

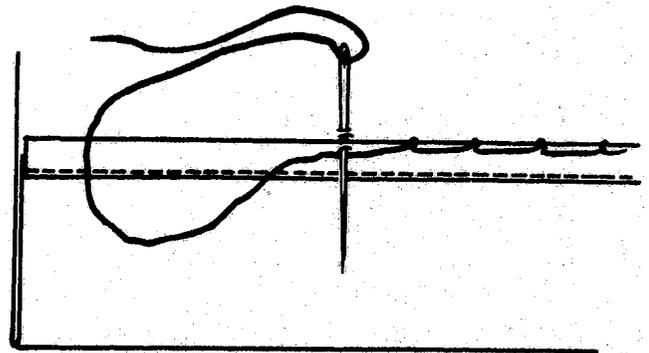
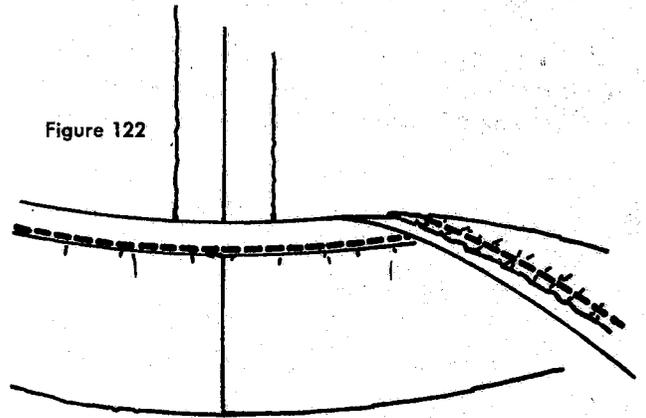
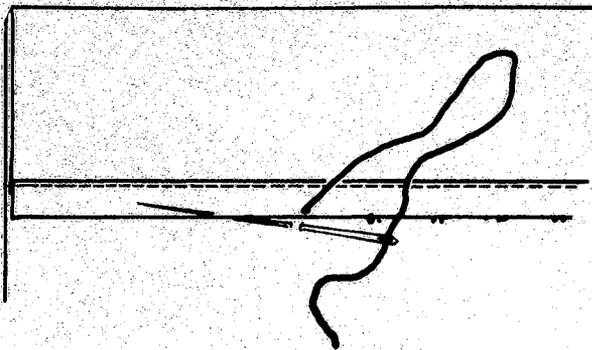


Figure 123

Figure 124

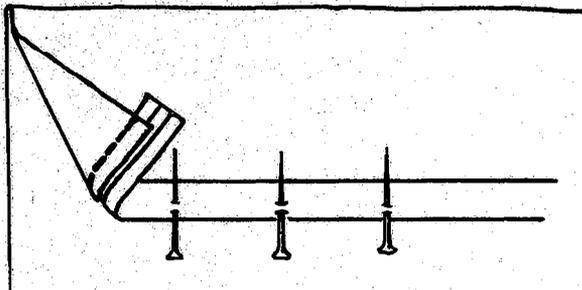


fold. Instead, it lies between the tape and the garment (figure 124).

Bias Tape

Bias tape is used on skirts with a lot of flare. Select cotton, rayon, or silk tape, depending on the fabric you're using. Unfold one edge of single fold tape. Sew the crease line of the tape to the ease line of the hem with a plain seam (figure 125). Slipstitch tape in position.

Figure 125



Edge-Stitched

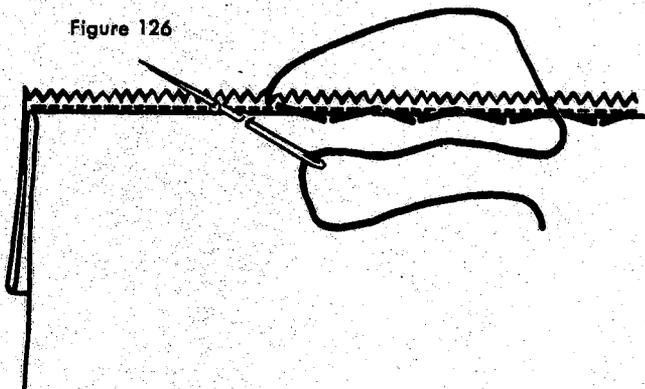
An edge-stitched hem is desirable for heavy fabrics that do not ravel. Use it on garments that require lining or drycleaning.

Sew a machine or zigzag stitch $\frac{1}{4}$ inch from cut edge. Pink edge if desired. Hem to garment with running hemming stitch.

To make the running hemming stitch, fold hem under leaving $\frac{1}{8}$ inch of hem edge standing. Take a stitch in the hem at the ease line, then in the skirt. Space your stitches about $\frac{1}{2}$ inch apart. Catch only a thread or two with the skirt stitch (figure 126). Pull thread tight enough to hold two fabrics together but not so tight that pulling shows on the right side.

Seams within the hem line should be pressed open and trimmed to $\frac{1}{4}$ inch to reduce thickness. To open pleat seams, clip both seam allowances at the top of the finished hem width.

Figure 126



IN CONCLUSION

- Always think through each construction step before you begin sewing.
- Be accurate in everything you do, handle your fabric with respect for grainline, and press each piece between construction steps.
- When your garment is finished, check it against the standards you have learned. You should be able to recognize what you have done well and determine in what areas you must improve.
- Enjoy sewing — it can be a joyful art.



As a wearer of clothes —

You should strive for —

- Good posture and graceful movements
- Personal cleanliness and good health
- A becoming hair style
- Proper weight control

Your clothes should be —

- Clean, neat, and well-fitted
- Becoming in line, color, and texture
- Appropriate and coordinated for your activities

As a buyer of clothes —

- Read labels carefully
- Know the standards of good fit
- Check workmanship on garments
- Know fabric quality
- Select garments for becomingness, coordination, and fashion
- Study previous purchases to note wear, fabric, brand, and size
- Stay within the budget allotted to you for clothing

As a possessor of clothes —

- Hang or fold clothes worn every day
- Make repairs as needed
- Air and brush clothes between drycleanings
- Read and follow care instructions on labels
- Learn to remove stains
- Learn the functions of different laundry agents
- Learn ironing and pressing techniques
- Reorganize existing storage to meet your needs

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