



SINGER
Sewing Skills
reference book

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Foreword



A FAMILY WELL-CLOTHED and a home well-appointed are responsibilities of every homemaker. To know and to recognize good construction in clothing and fabric furnishings largely determine how much value is bought with every dollar spent. Savings are greatest when sewing is done at home, if done well. The SINGER* Sewing Skills Course is designed to create an awareness of good quality workmanship and to teach the simple procedures for attaining better results in sewing.

A thorough understanding of sewing together with skill in performance create a well-made product whether it be a dress, coat, suit or one of the many fabric furnishings for the home.

There is no component of sewing more important than the stitch itself. When the stitching is flexible and strong, the garment has greater durability. When surface stitching is perfectly blended to the fiber and texture of the fabric it has beauty. Dependable equipment influences the success and quality of every sewing venture.

Owners of new SINGER* Sewing Machines, sewing with the finest equipment, experience many advantages. The smooth operation of the machine and the absolute control of stitching speed enable them to produce better-guided stitching, straighter seams, greater exactness in assembling sections of the garment, and more beautiful buttonholes, pockets and decorative details.

The wide selection of needles enables the Singer owner to quickly adapt the sewing machine from stitching the most filmy weights of fabric to stitching tough, heavy, rugged fabrics. Tension, pressure, and length of stitch are regulated simply and easily to compensate for changes in weights and textures of fabrics. Perhaps no other single sewing machine is called upon to stitch a greater variety of fabrics than one used in the home. Its simple flexibility is the secret of its usefulness and performance.

Skillful, high quality sewing is within the scope of every woman. Once a few simple, basic principles are learned, it is only a matter of practice until the skill is developed that makes sewing a pleasure. Good sewing habits are reflected in everything that one makes and are easily developed when attention is deliberately directed toward them.

The SINGER Sewing Skills Course provides time for both instruction and practice so that good sewing habits are correctly implanted.

The scope of sewing is broad and its rewards are great, both in savings and in the pleasure of achievement. No one knows everything about sewing, nor does one ever learn enough, for there are always new ideas, applications and methods that present a challenge because of the constantly changing fashion picture, the new discoveries and developments in the textile industry, and the advancements in equipment design. The SINGER Sewing Skills Course has as much to offer women who already sew as it offers those who are eager to learn to sew.



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Sewing Machine Principles

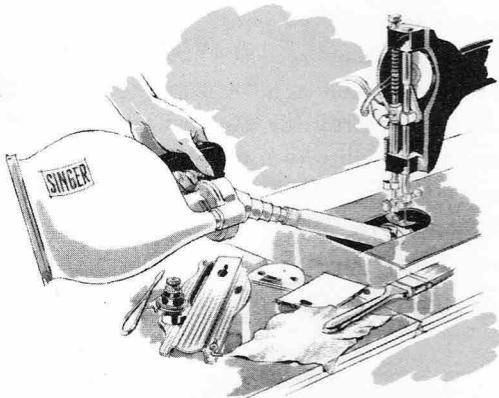
Sewing Machine Care

THE KNOWLEDGE AND CARE with which the sewing machine is handled determines to some extent the pleasure and satisfaction in its use as well as the service that it renders. Many fabrics, when sewed, drop lint and particles of filler. These, with dust and moisture from the air, all work together on the sewing machine to create a film that is best removed from time to time. A good craftsman is meticulous in the care of his tools.

When the sewing machine is used all day and every day, it should be oiled *every day*. When used less continuously, a weekly oiling is usually adequate. Oil is never placed on the machine before the dust and lint are removed. The sewing machine instruction book carries diagrams and procedures for oiling the machine being used. It is best to devote some study to these diagrams while the machine is new to avoid overlooking any of the points indicated. Oil keeps the sewing machine running freely, preventing friction and wear.

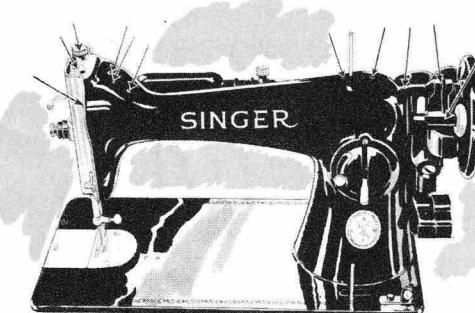


Removal of Dust and Lint



EXPOSE THE MOVING PARTS of the sewing machine by removing the throat plate, the face plate and the slide plate. The lint and dust particles are best removed with a small brush reserved for cleaning purposes. The SINGER* hand vacuum cleaner is invaluable for taking away the dust and lint that eludes the brush or that is merely dislodged by it. The round cover plate at the back of many machines, when turned upward, reveals working parts at the top of the upright arm that require dusting and oiling. Several other machines have cover plates underneath to protect the moving mechanism. To reach these oiling points at the base of the machine, remove this cover plate as well.

General Rules for Oiling



THERE ARE several general rules for oiling all SINGER Sewing Machines. Always use SINGER* oil on SINGER Sewing Machines. The lubricating qualities are right for your machine and there is no harmful residue formed when the machine is idle. Remove dust and lint before oiling. Oil the sewing machine thoroughly following the diagrams in the Instruction Book, point by point, until every oiling point is completely familiar. Do not *drench* the machine with oil. One drop at each oiling point is usually sufficient. However, where there is a wick to hold and dispense the oil several drops are used. Oil holes in the enclosure of the machine are provided for bearings which cannot be reached directly. Arrows indicate oiling points where metal works against metal and where oiling is so important to reduce friction. Oil is placed sparingly on the threads of all adjustable thumb screws to keep them working freely.

Several machines have gears that are lubricated instead of oiled. Such gears are clearly indicated in the Instruction Book diagrams. SINGER* lubricant is furnished with new SINGER Sewing Machines and is available separately at any of the more than 1600 SINGER SEWING CENTERS in the United States and Canada. Here, specially trained men are available to render service. It is often an economy to call for periodic service by a Singer Representative.

Remove Excess Oil

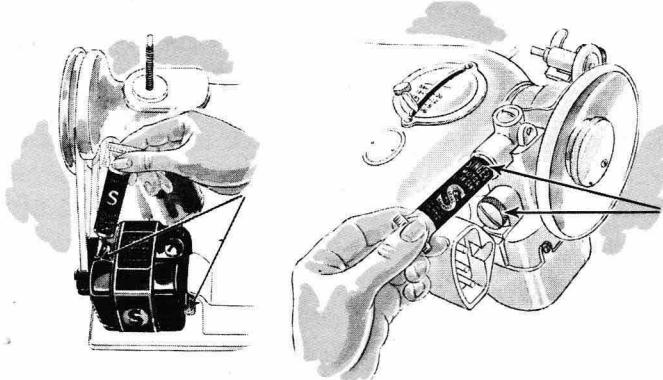
WHEN THE MACHINE has been thoroughly, but sparingly oiled, run it slowly for several minutes to allow the oil to work into the moving parts. Then remove the excess oil with a clean cheese cloth, or a soft lintless fabric. Learn to pass the folds of cloth between the tension discs to polish them and to remove any dust, lint or



oil that might have found its way there. Learn to avoid catching the fine wire take-up spring in the cloth when polishing the tension discs. Each thread guide and the face plate must be polished with clean cheese cloth to remove any accumulated dust, lint or oil. The area around the presser foot and needle where both the presser bar and needle bar leave the heavy enclosure of the arm of the machine are often flowing with excess oil unless care was exercised when oiling. Remove both presser foot and needle and with a clean cheese cloth wipe all the excess oil from this area. Polish the presser foot and needle before replacing. Thread the machine and stitch until the thread is clear of oil.

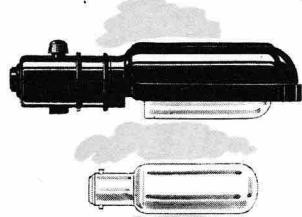
Lubricating Motor

THE MOTOR on the SINGER Sewing Machine is never oiled. SINGER motor lubricant is placed in the tubes or cups that carry the Lubricant to the revolving shaft and gears. Motor



lubricating tubes are to be filled with fresh lubricant twice yearly when the machine is used moderately. Motors equipped with lubricant cups require attention only once yearly. The old lubricant is removed before filling with fresh lubricant. SINGER* motors are especially built for the machines they power and give long trouble-free service with a minimum of attention.

Removal and Replacement of Bulb in SINGER LIGHT



To remove lamp, press the bulb into the SINGER light socket and, at the same time, turn it a quarter turn away as you

THE SINGER* light will focus a soft clear light on the needle point and presser foot, preventing eyestrain and making skillful, careful work easier to produce. While the bulb is of long burning filament, occasionally it must be replaced. The bulb is of a bayonet and socket type and does not unscrew.

To remove lamp, press the bulb into the SINGER light socket and, at the same time, turn it a quarter turn away as you

sit in sewing position. Several models are equipped with a SINGER light on which the lens encloses the bulb. The separate instruction book for each model machine clearly indicates the removal of the lens prior to removing the bulb. The new bulb is replaced by pressing it into the socket and then turning it a quarter turn toward the operator.

Speed Control and Posture

YOUR POSTURE, when seated at the machine, has a direct influence on your comfort as well as on the results in sewing. Sit squarely in front of the machine with both feet flat on the floor.

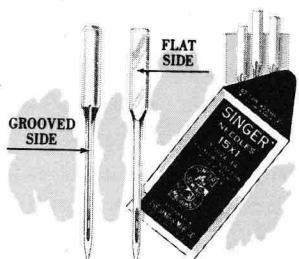
When controlling the machine with the knee lever, sit so the knee comfortably engages the lever. Most cabinet model sewing machines are equipped with an adjustment that permits moving the lever to the right or left to suit the operator. Some prefer to use the foot control and all current machines having a knee lever also permit the alternative of a foot control, as well. The speed control is built to produce steady even stitching that is accelerated or retarded as the pressure on the controller is increased or decreased. In using the foot control, steadiness and evenness of speed is gained through balancing the right side of the shoe on the foot rest and gently tilting the foot inwardly to depress the controller.

A full range of gradual speeds is at the operator's command. The skill of the operator in home sewing is more often judged by her ability to control the machine at even rhythmic *slow* speed than by her ability to stitch rapidly. High speeds are attained by merely depressing the controller and are important only for stitching long straight seams. The fine careful detail of beautiful clothes is most often done at slow rhythmic speeds.



Removal and Replacement of Needle

AMONG the simple sewing machine facts that everyone should know is that of setting a needle correctly. All sewing machine needles are not the same. They differ mainly in length, size of the blade and eye as well as in workmanship and quality. Always purchase SINGER* needles for use in a SINGER Sewing



Machine. SINGER needles are manufactured with the greatest care under strictest manufacturing limits and are superior in quality, durability and performance.

Sewing machine needles characteristically have a shank one side of which is rounded, the other, flat. The blade of the needle carries a long groove on one side and is rounded on the other. The long groove down the blade of the needle, on the opposite side from the flat shank, protects the thread as the needle carries it downward. Therefore, the long groove always faces the side from which the needle is threaded.

If, when setting the needle, the groove is not placed in this position, the machine will not form the stitch. When threading an unfamiliar machine, the direction for threading can be quickly determined by locating the long groove with the finger nail and threading from that direction, and in addition a thread guide is always located above the needle on the side from which the machine is threaded.

Some machines thread from front to back, others from left to right and still others from right to left.

The needle clamp is so designed to hold the needle securely and to control the height to which the needle can be set. It is important to set the needle into the clamp as high as possible and then tighten the thumb screw securely. If set to improper height the machine will skip stitches. A bent needle will cause the fabric to draw to one side feeding in a curve rather than a straight line. A needle too fine for the thread will cause the thread to fray. A blunt needle will cause pulls in the fabric. It is a good practice, when a stitching problem occurs, to check the threading, and then replace the needle, if necessary. It is most convenient, therefore, to have a full supply of all sizes of needles on hand to meet all needs.

Preparation for Stitching

Selection of Needle and Thread

THE SELECTION of both needle and thread is based on the fabric to be stitched. The Fabric, Thread, and Needle Chart given below will be a helpful guide for this selection. The thread must blend with the fabric in color, fiber, and size. Silk is stitched with silk. Wool, an animal fiber, is also stitched with silk, an animal fiber. Cottons are stitched with cotton or mercerized thread. Rayon fabrics with a sheen are most often stitched with silk, while those with a dull surface, or of the spun yarn type are often stitched with mercerized thread.

The synthetic threads now appearing for use in home sewing vary somewhat in properties. Their greatest advantages are found in their fine sizes yet great strength and in their uniformity of diameter. While selections are somewhat limited, colors are becoming more numerous and uses broader.

The size of the thread must blend with the fabric when stitched. A "too-heavy" thread will remain on the surface of the fabric and will give shorter service and less strength than a finer thread that imbeds itself into the texture of the fabric. The thread that is "too-heavy" and remains on the surface, is weakened by the friction and abrasion to which it is subjected when worn.

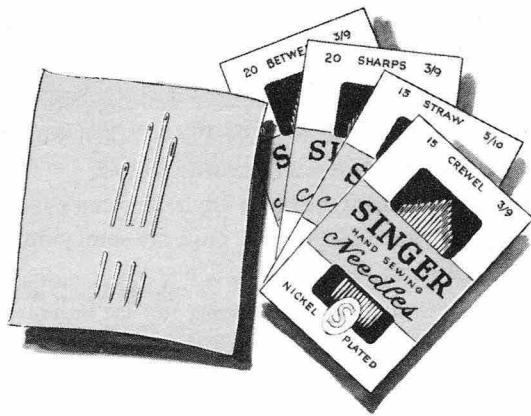
The needle is selected with consideration for both the thread and the fabric. The eye of the needle must be large enough for the thread to pass through it freely. The blade of the needle must be fine enough not to mar the fabric with a large puncture,

FABRIC, THREAD AND NEEDLE CHART

Types of Fabrics	Thread Sizes	Sewing Machine Needle Sizes	Machine Stitches Per Inch Inside Seams	Top Stitching	Hand Needles
Filmy Materials Comparable to Net—Marquisette—Silk Organdy —Chiffon—Ninon—Nylon Sheers—Silk Velvet	100 Cotton 00 & 000 Silk 000 & 0000 Mercerized	9	15-20	20-30	10
Sheer Materials Comparable to Lawn—Dimity—Synthetic Sheers— Paper Taffeta—Pure Silk—Silk or Synthetic Tricots —Synthetic Velvets and Satins—Nylon Crepes.	80-100 Cotton 0 Silk 00 and 0 Mercerized Nylon	11	12-15	15-20	9
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	14	12	15-18	8
Medium Lightweight Materials Comparable to Pique—Poplin—Faille—Bengaline —Wool Jersey—Dress Linen—Featherweight Suitings—Cotton Tweed—Fashion Denim	60-70 Cotton A or B Silk A or 50 Mercerized	14	12	15-18	7 or 8
Medium Heavy Materials Comparable to Crash—Textured Drapery Fabrics —Cotton Velveteen—Heavy Corduroy—Coating —Suiting—Unbleached Muslin and Sheeting.	40-50 Cotton B or C Silk Heavy Duty Mercerized	16	10	12	6
Heavy Materials Comparable to Sailcloth—Sturdy Denim—Ticking —Coatings—Drillcloth.	30-40 Cotton Heavy Duty Mercerized	18 or 19	8	10	4 or 5
Very Heavy Materials Comparable to Canvas—Duck—Overcoating.	40-60 Linen 20-24 Cotton D or E Silk	19 or 21	6	8	3
Plastic Materials	50 Mercerized	11	10	12	—

yet heavy enough to pierce the fabric without being bent or deflected. The Fabric, Thread and Needle Chart is a practical guide to needle selection.

Selection of Hand Sewing Needles



HAND SEWING NEEDLES are selected for size according to the weight and character of the fabric. The type of needle is governed by the stitching to be produced. Where multiple stitches are woven onto the needle as done in basting, hand shirring, overcasting and similar stitching, the **Straw** or **Milliner's** needle is used. This long, slender, round-eyed needle produces better results because of its length, slender shaping and flexibility.

Where fine, short, "invisible" stitches are required a very short needle is used. The "**Between**" is the very short round-eyed needle of the type used by Tailors to produce the short, sturdy, invisible stitches that are a mark of good tailoring.

The all-purpose, or "**Sharp**" needle is of medium length, round eyed and is made for general usage.

Gaining in popularity is the **Crewel** Needle that is similar to the "**Sharp**" needle in length, but is designed with a long oval eye for easy threading and for carrying multiple strands, as used in hand embroidery.

The "**Darners**" are long needles with long oval eyes and are designed to carry multiple strands and permit many stitches to be woven on to the needle with a single stroke.

Upholstery needles are curved and are made to use when stitching into a cushioned surface. The curved needle rises out of the cushion with each stitch, thus accomplishing stitching that would be difficult, if attempted with a straight needle.

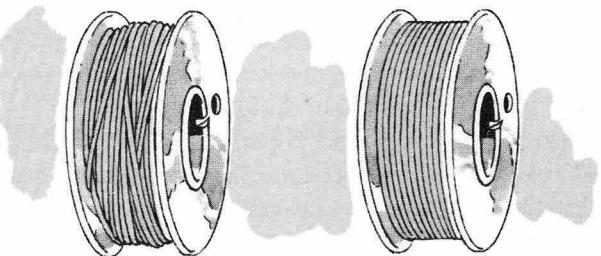
A sewing box supplied with all types of hand sewing needles as well as a full size range of both hand and sewing machine needles is a convenience and a step toward better sewing results.

Selection of Pins

PINS as well as needles deserve attention in their selection. Pins used for sewing always should be kept separate from household pins, since they become burred and blunt from their variety of uses. Pins used for dressmaking should be the fine, slender "silk pins" with needle-like points and smooth blades. Some fabrics are best pinned with needles to avoid marring their

surface. Satin, taffeta, velvet and most of the luxury silks require gentle handling and pinning with needles, or pinning within a seam or dart allowance.

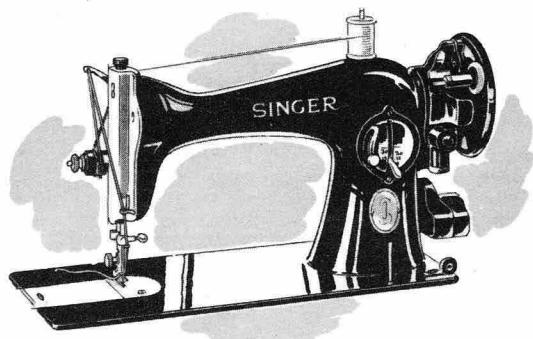
Winding the Bobbin



THERE ARE GENERAL RULES that apply to the threading of all SINGER Sewing Machines. The bobbin is filled with a thread identical to that used for the upper threading. It must fill in level layers and must not "spill" over the sides of the bobbin. Always empty the bobbin of other thread before filling so that the thread can be started on the bobbin by passing the thread end through the eyelet on its side. This method provides even handling of the bobbin thread to the very end, and is important because the quality and regularity of the stitch is influenced by the free flow of the thread from the bobbin. Careful storage of the supply of bobbins prevents them from being bent out of shape. A bobbin with bent sides will unreel with alternate heavy and light tension causing an irregular stitch.

The Sewing Machine Instruction Book outlines specific threading points for threading the bobbin case of each sewing machine.

Threading the Machine

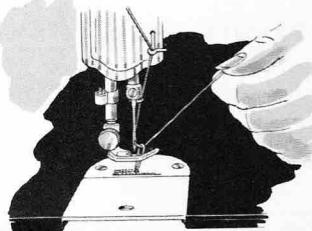


THE UPPER THREADING of the SINGER Sewing Machine is simple and follows a natural sequence. The felt discs on the spool pins (sometimes found in the box of attachments) contribute to the free and even flow of thread from the spool and always should be used under the spool. The threading of the machine is the first point to check, when stitching problems arise. Some threads, especially silk and nylon, in dry weather tend to create static electricity and twist. If a second loop is thrown over a threading point, the usual good performance of

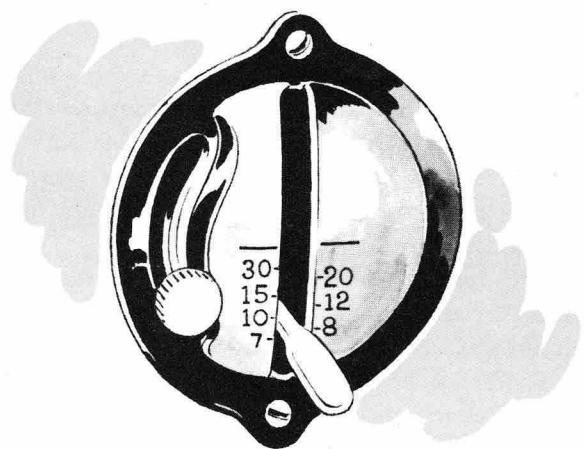
the sewing machine is impaired. Careless threading of tensions leads to non-performance.

The final step in threading is to draw the thread from the bobbin case to the surface. Holding the needle thread loosely with the left hand, turn the balance wheel with the right hand drawing up the lower thread with the loop of the needle thread. Lay these threads back diagonally beneath the presser foot and

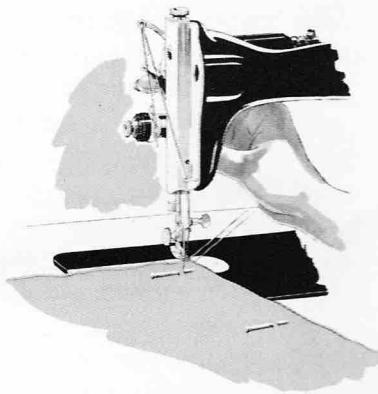
bring the balance wheel forward sufficiently to place the take-up lever at its highest point. This is the correct starting and stopping position in all sewing machine work and should be practiced until it becomes habit.



Regulating the Length of Stitch



How to Start and End a Seam



SUCCESSFUL STITCHING is closely related to the simple principles employed when starting and ending a seam. There are seven steps to observe in this sequence:

- 1—The take-up lever should be at its highest point, the threads brought under the presser foot and drawn back diagonally.
- 2—Position the needle into the fabric where the first stitch is to fall.
- 3—Holding the thread ends, lower the presser foot.
- 4—Stitch, controlling the speed to a slow *rhythmic tempo*.
- 5—When the end of the seam is reached, bring the take-up lever to its highest point by turning the balance wheel forward.
- 6—Raise the presser foot and withdraw the fabric to the back and left.
- 7—Sever the threads by drawing them across the thread cutter.

This procedure should become so "automatic" that it is done without a thought. Although the establishment of such good practice requires deliberate attention in the beginning, it results in a more evenly controlled acceleration of the machine and in a perfectly formed and positioned first stitch. The evidence of such good handling of the sewing machine is revealed in the more exact assembling of seams, collars, facings, pockets and all intricate details of sewing.

THE SEWING MACHINE in the home is called upon to stitch innumerable weights and textures of fabrics and a SINGER is designed and constructed to accommodate this variety through a few simple, understandable adaptations, one of which is stitch length.

Delicate fabrics require a short, fine stitch. Heavy coarse fabrics require a long, heavy stitch to blend with the character of the fabric. Outside stitching is shorter than inside stitching. A short stitch is a mark of quality and beauty. Comparison of economy clothing with high quality clothing reveals that quality garments are stitched with shorter stitches and appropriate weights and types of thread, while economy clothing is often stitched with long stitches and less durable thread. In sewing at home, the greatest saving is experienced when the standards set by the high quality manufacturers, or custom-made establishments, are employed. The Fabric, Thread and Needle Chart tabulates the recommended length of stitch for each weight and texture of fabric for both inside seams and top stitching.

The length of stitch is changed to accomplish many sewing constructions. Basting, stitching curved seams, stitching scallops, stitching to control ease, stitching to produce gathering and Shirring, and stitching bound buttonholes and pockets are only a few of the steps in dress construction where the stitch length must be changed from that suitable for straight stitching.

Basting with the sewing machine requires a long stitch. The stitch regulator is set at No. 6 or No. 8, depending on the weight of the fabric. Heavier fabrics tolerate longer stitches.

Curved seams require a stitch shorter than used for straight stitching. Where a No. 12 stitch is used for straight stitching, a No. 15 stitch is suitable for curves to produce greater elasticity and strength over the bias or semi-bias cut areas that must be more elastic than seams following the lengthwise or crosswise threads of the fabric.

Scallops require an even shorter stitch than curves in order to maintain a smooth, rounded contour and permit close blending of the seams. A No. 20 stitch is usually used for this stitching.

Stitching to control ease, as around a patch pocket or a curved lapped seam, at the sleeve cap, at the elbow of a long

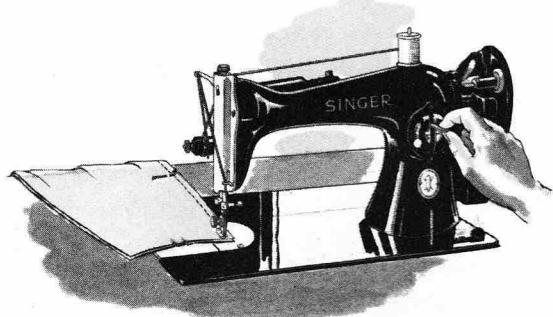
sleeve, at the top of a hem, or wherever one seam edge is eased to another, requires a longer stitch than required for straight stitching. For example, No. 8, No. 10 or No. 12 length stitch might be used, as required by the fabric.

Stitching to produce gathering requires a longer-than-average stitch, the length of which varies with the texture of the fabric.

Bound Buttonholes and Pockets are made with a shorter stitch, to increase strength and durability of construction. A No. 20 length stitch is frequently used on medium light-weight fabrics for stitching buttonholes and pockets.

A stitch regulator that is easy to set, and one that is positively marked, is convenient and contributes to better sewing, as well as to the pleasure and ease with which sewing is accomplished. The Instruction Book that accompanies each sewing machine illustrates clearly the simple procedures for setting the stitch-length control.

Staying a Seam at Beginning and End



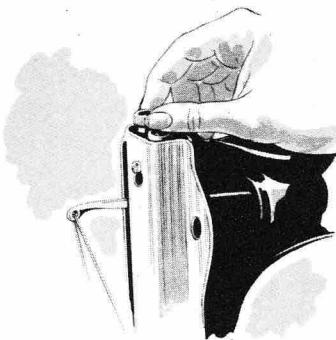
THE DIRECTION in which the fabric moves under the presser foot can be reversed by raising the stitch regulator lever to its highest point. While some SINGER Sewing Machines provide only for back-tacking, others provide for a reverse stitch of the same length as the forward stitch. Several of the economy models have no facilities for reverse stitching. The greatest convenience lies with the machine having the controlled reverse stitch, since almost every seam is finished at both ends by reverse stitching, to produce added strength and non-ravelling qualities so helpful while assembling the garment.

The staying of a seam occurs within the $\frac{5}{8}$ " seam allowance on both the beginning and end. The procedure is to drop the needle into the fabric about $\frac{1}{2}$ " from the edge and so that the full $\frac{5}{8}$ " seam allowance falls to the operator's right of the needle. Lift the stitch regulator lever to its highest point and make four or five stitches in reverse and without necessarily stopping the machine, press the lever down to produce forward stitching to the end of the seam, where again the stitch regulator lever is raised to its highest point to produce four or five stitches in reverse.

In addition to staying the ends of seams, reverse stitching is used to make bar reinforcements, for darning and mending, and in many delicate steps of assembling garment sections where one seam stitching must end at a given point so that it might join smoothly and securely to another. The joining of the tailored

notched collar with the lapel is a typical example. Corded buttonholes and pockets require back stitching at several steps of their construction, as do many other steps in assembling a well-made garment.

Pressure Changes to Accommodate Fabrics of Varying Weights



PRESSURE is the force the presser foot exerts on the fabric when it is being stitched. It is regulated by the thumb screw at the top of the Presser Bar. Turning the thumb screw to the right, increases the pressure. Turning it to the left, decreases the pressure. Reference to the Sewing Machine Instruction Book is helpful in locating this thumb screw.

The fabric determines the amount of pressure needed for smooth, even feeding of the several thicknesses that form a seam. Heavy materials require a heavy pressure and light materials a light pressure. Medium weights of fabric require a pressure midway between the light and heavy extremes. Smooth, even handling results when the pressure is regulated to the correct degree. Too heavy pressure causes the machine to run "heavy" and seam edges to be joined unevenly in soft spongy fabrics, or, the mark of the feed to appear on smooth-surfaced fabrics. Too light pressure results in an irregular stitch length and irregular joining of seam edges.

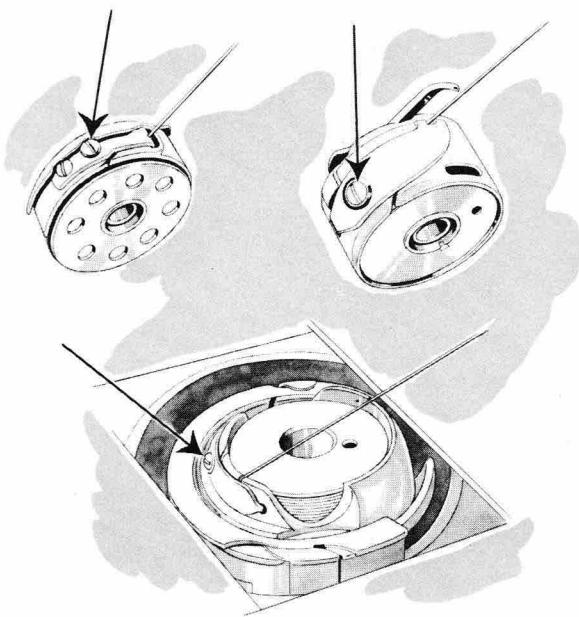
It is advisable to test for pressure adjustment on a lengthwise scrap of fabric by stitching without thread. When all seam edges are handled evenly the correct pressure adjustment has been reached.

Pile fabrics, such as velvet, velveteen and corduroy, require a pressure adjustment somewhat lighter than for a flat woven fabric of the same thickness. The rule for stitching pile fabrics is to use a light pressure and stitch in the direction of the pile. A garment is usually cut with the pile standing up, resulting in seams being stitched from the lower edge upward.

Pressure is often regulated heavier when stitching seams that cross, since they create greater thickness. When SINGER* Fashion Aids and Attachments are used, the regulation of pressure is an important factor in producing good results.

A clear understanding of pressure and its application to weights and textures of fabrics makes it easier to produce smoothly constructed garments from the many fabrics available to the woman sewing at home.

The Function and Adjustment of Tension



TENSIONS control the threads that interlock to form the sewing machine stitch. The lower thread tension is found on the bobbin case where control is exerted by the spring under which the thread passes. The point of adjustment for this tension spring is the small screw nearest the center of the tension spring. By turning the screw right the tension is increased, and by turning it left the tension is decreased. A one-eighth or one-quarter turn of this tension screw changes the weight of the tension adjustment considerably. Therefore this adjustment is always made discreetly.

The upper thread tension is familiar to everyone and can be located by referring to the Instruction Book for the machine. Tension is exerted by the closely fitted discs between which the upper thread passes. The point of adjustment for this tension is the thumb screw on the extreme end of this tension unit. A graduated dial further simplifies the control of the upper tension. Turning the thumb nut right dials a higher number and increases the tension. Turning the thumb nut left dials a lower number, decreasing the tension.



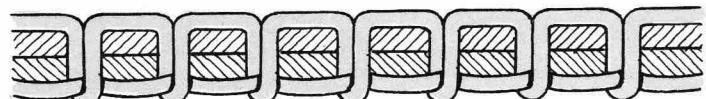
A perfectly locked stitch results when the relationship between the upper and lower tension is such that the threads are drawn into the fabric equally, as illustrated below.



When the upper tension is heavier than the lower tension the needle thread will lie straight along the upper surface of the material, as illustrated below.



When the upper tension is lighter than the lower tension the bobbin thread will lie straight along the under side of the material, as illustrated below.



The perfectly locked stitch is used for all construction seams in garments and fabric furnishings. Unbalanced tensions, used only for decorative effects and SINGER* Fashion Stitches, are presented as a separate subject. The durability of a garment or a slip cover is closely related to the strength of its seams.

A seam stitched with a perfectly locked stitch is doubly strong in comparison with a line of stitching made with an unbalanced stitch. This point is easy to verify by stitching diagonally across a square of material. Holding the stitching tightly at each end between the thumb and finger, pull with an even and gradual force until the thread breaks. The broken thread is always the one with the heavier tension which under strain must carry the whole weight. Where a line of stitching is made with a perfectly locked stitch both threads break together and require more force to break indicating the strength of a balanced stitch.

Inspection of the line of stitching is the only proof of correct tension adjustment. Tensions must be set at a point where the thread is handled lightly enough that the stitching does not draw the fabric, yet heavily enough that the stitch is drawn into the fabric and is regular and constant.

The flexibility of the sewing machine is materially broadened when a practical understanding of tension regulation has been acquired.

It must be remembered that none of the factors that influence the stitch, actually stands alone. All work together to produce an appropriate line of stitching. Based on the fabric, the kind and size of thread is chosen, then the needle size, stitch length, pressure adjustment, and finally the stitch is inspected for its appearance and accuracy of tension.

It is a good practice to test the stitch on a scrap of the fabric to be used, and with the needle and thread with which the garment is to be made.

It is seldom necessary to change the bobbin tension when changing from one kind or size of thread to another. By varying the upper tension slightly a wide variety of weights and types of threads and fabrics are accommodated.

Record the upper tension reading that produces a perfect stitch with 50 Mercerized thread and then return to this number if a change in bobbin tension has been made to accommodate a different thread or fabric, or for SINGER Fashion Stitches. Then readjust the bobbin tension to regain the same perfect stitch.



Stitching for Line

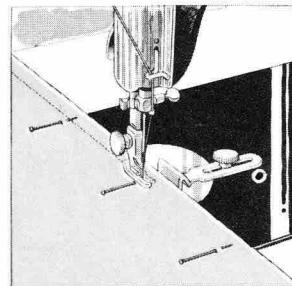


The Straight Seam

LINE IN DRESS CONSTRUCTION is expressed through seams, some of which must be emphasized by special treatment, while others are meant to be almost invisible.

The established steps for forming seams are to **first** pin seam edges at each end, at notches and at center, finally working toward the edges. The **second** step is to hand baste, the **third**, to stitch, the **fourth**, to pink and the **fifth** to press. Hand basting is often eliminated on easy-to-handle fabrics and when sufficient skill in stitching has been developed. The Seam Guide aids in guiding the seam stitching straight and parallel to the edge. The Hinged Presser Foot rides freely over the pin points. Pins are placed with the points toward the seam edge and nip into the fabric at the stitching line.

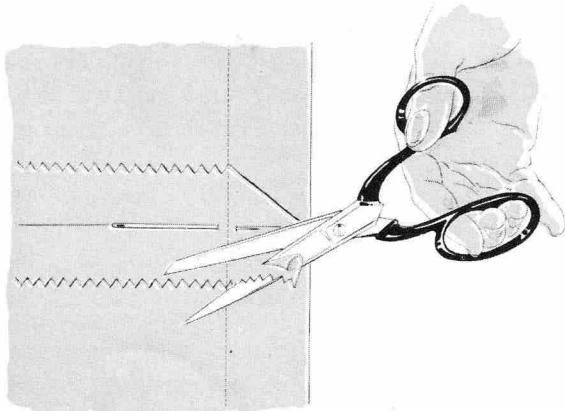
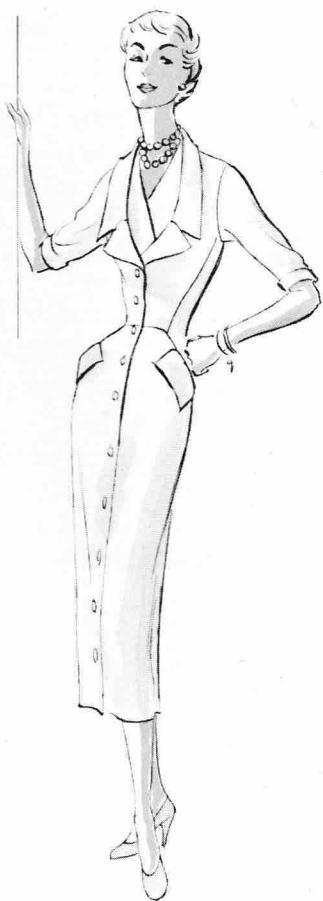
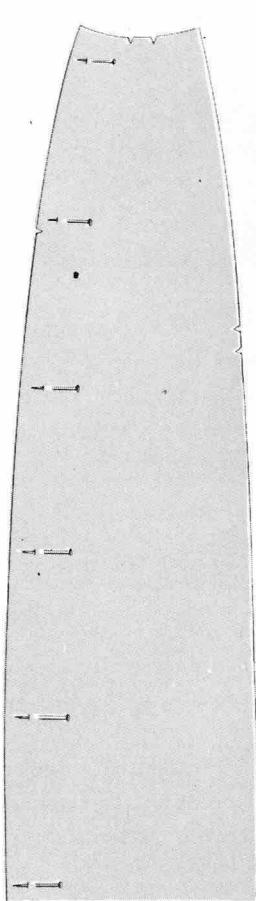
Many cottons, woolens, and spun rayons lend themselves to this handling. However, smooth textured fabrics, pile fabrics, delicate fabrics and fabrics with a surface finish like satin require more careful handling and do not lend themselves to pinning and stitching without hand basting. Neither should they be machine-basted.



The Seam Guide is attached to the sewing machine with the thumb screw in either of the two threaded holes provided and is adjustable for spacing stitching at any distance between an approximate $\frac{1}{8}$ " and $1\frac{3}{8}$ " from an edge.

In addition to its use in guiding the stitching of seams, the Seam Guide is used when stitching the edges of facings, lapels and the like with either single or multiple rows, placing stay stitching where edges might stretch, and in many other stitching steps where exactness is required.

Seams that Cross

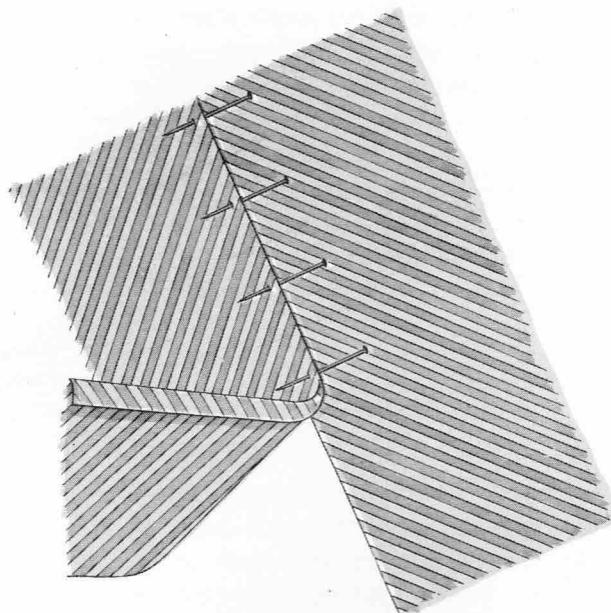


A FINE HAND SEWING NEEDLE placed at the junction of crossing seams ensures accurately crossed seams, that are so indicative of well-made clothing. Perhaps seams that cross are most noticed when they occur on the shoulder line—as in the princess line jacket or dress. When these four seams form a perfect cross, the effect is pleasing; otherwise, the poor workmanship destroys the beauty of the garment.

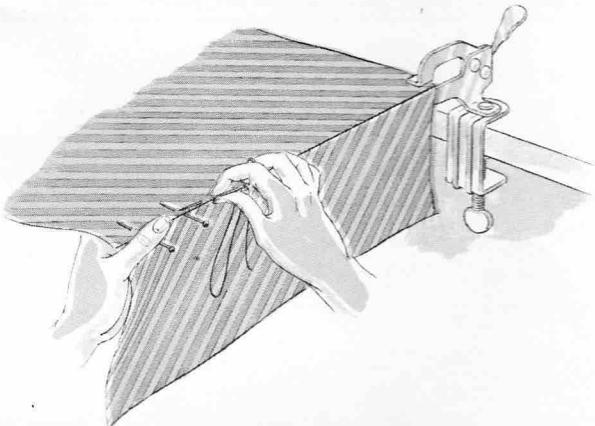
A fine needle is used exactly at the junction of the seams and only its point nips into the fabric at the stitching line. The fine needle does not mar the most delicate fabric and prevents one seam from slipping beyond the other while holding the seam lines exactly as pinned. Where the fabric is heavy, the pressure is increased for stitching over the area where the seams cross.

Further smoothness of fit is accomplished by blending away the excess seam allowance at the point where the seams cross.

Slip-Basting for Stripes, Plaids, Prints

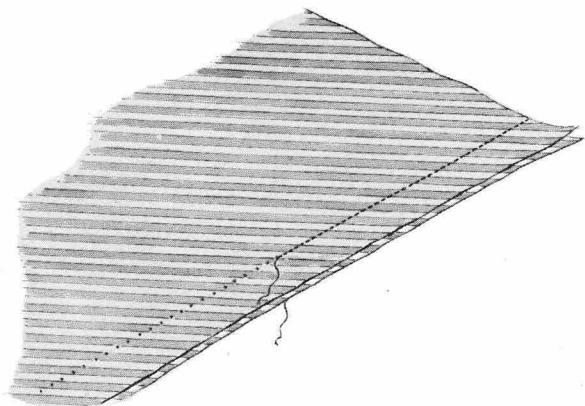


PERFECTLY MATCHED SEAMS for stripes, plaids or prints are simple to achieve if the seam is slip-basted before being stitched. The procedure is to fold under one seam allowance exactly on the seam line. Working from the right side of the fabric, overlap the seam edges, pin, then slip-baste. This method permits careful matching of the details of the fabric and is a mark of expensive clothing. Perfectly matched plaids and stripes are not found among economy garments since they require individual cutting and assembling, which are costly manufacturing processes.



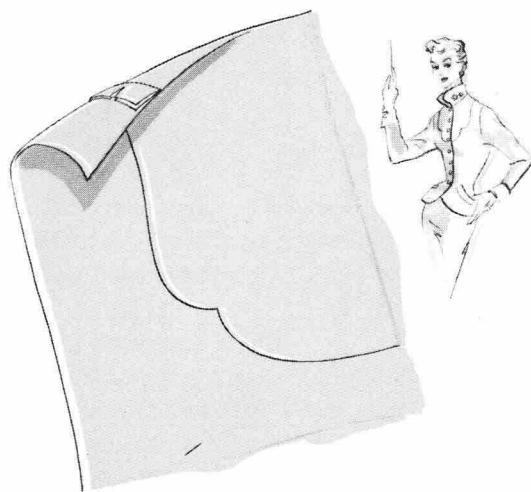
The formation of the stitch in slip-basting is simple and rapid. Using a "Straw" needle, bring the point up through the fold of the seam. The stitch begins from this position. Direct the needle down through the single thickness at the side of the point where the thread now emerges and carry it up through the fold of the seam some distance away to complete the stitch with a single stroke. The length of the stitch may vary with the shape of the

seam and texture of the fabric, but is usually $\frac{1}{4}$ " to $\frac{1}{2}$ " in length. The Material Gripper serves as a third hand in holding the seam firmly while basting.



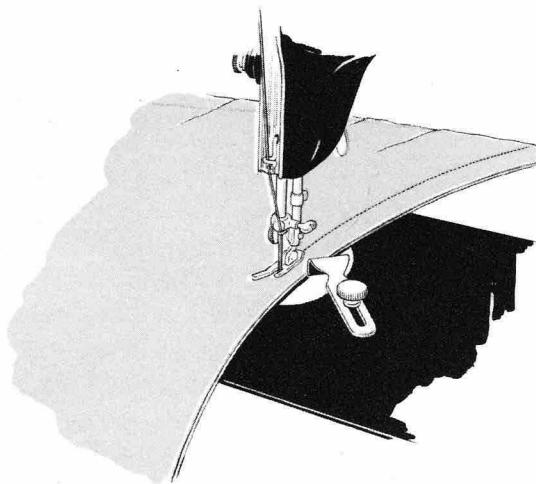
The sewing machine stitching is placed from the inside of the garment just as is done for a plain seam. Slip-basting is especially easy to follow since the exact stitching line is established by the small crosswise stitches that result from basting through the folded seam edge.

Slip-Basting for Decorative Seams



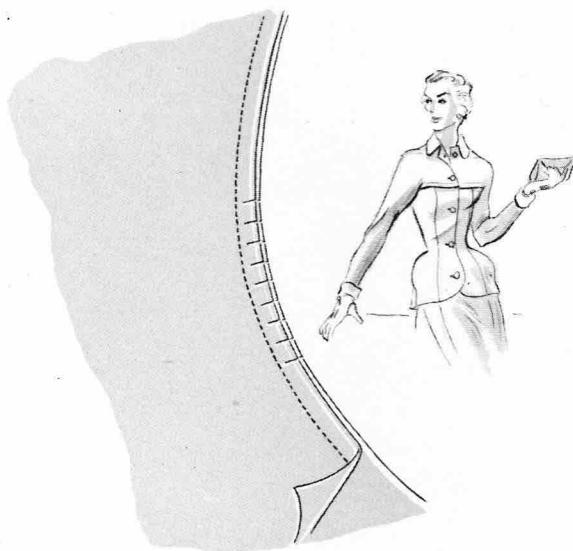
DECORATIVE CURVED SEAMS that carry no top stitching and that are so often found on custom-made dresses and suits are formed in much the same way. The seam allowance is controlled by a line of stitching placed just outside the stitching line and is then folded under and pressed. This section is slip-basted in place to hold the shaping of the seam while it is being stitched on the inside.

Plain Seams with Inside Curve



EVERY GARMENT has curved seams as well as straight seams and these require additional treatment in handling and shaping. The stitch is shortened when stitching curves. A fabric where a No. 12 stitch is used for straight seams requires a No. 15 stitch length for curved seams to provide the added elasticity and strength needed. The Seam Guide is positioned advantageously at an angle for guiding a uniform seam allowance.

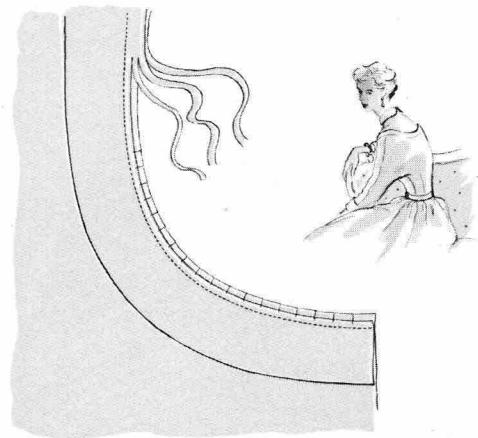
Seam edges support the seam line but must not restrict or restrain its shaping. Seams that curve inwardly have a tendency to draw if the edges are not released by blending.



BLENDING THE INSIDE CURVE on a fitting seam requires slashing into the seam allowance far enough to release the strain imposed by the edges, but never within less than $\frac{1}{4}$ " of the stitching. If the fabric tends to fray these slashes are reinforced by stitching or overcasting. Such seams are usually pressed open, edges are usually pinking or finished as required by the fabric.

The inside curve is found as a fitting seam at the shoulder line where the neckline is built up, at the waistline side seams and at styling seams in overblouses, suit jackets, and princess line bodices as well as in creating all concave effects.

Facing Seams—Inside Curves



THE INSIDE CURVE occurs when applying facings at the neckline, collars, shaped yokes and pockets, and often in decorative details so important in smart clothes. This curve is treated somewhat differently than the fitted curve in that both seam edges are blended to uneven widths, the facing to $\frac{1}{8}$ " and the garment to $\frac{1}{4}$ " so that when they are folded to their inside position the edges are almost indiscernible.

These blended seams are slashed at evenly spaced intervals to within $\frac{1}{8}$ " of the stitching to release the edges and prevent pulling. The seam edges of a heavy fabric or one that frays might be blended to $\frac{1}{4}$ " and $\frac{3}{8}$ " instead of $\frac{1}{8}$ " and $\frac{1}{4}$ ".

Plain Seam with Outside Curve



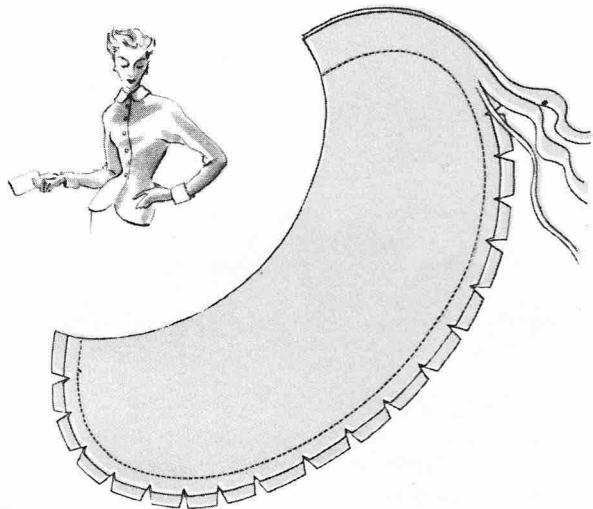
THE OUTSIDE CURVE that occurs in fitting seams over the bustline, hipline and in yoke seams, requires the same shorter stitch length as the inside curve and the same handling of the Seam Guide, but the blending of the edges is different. The seam edges of the outside curve are in excess and unless cut

away, the bulk forms folds that press through, marking the outside of the seam area.

The degree to which an outside curved seam requires blending depends upon the amount of curve and the firmness of the fabric. Where the curve is slight and the fabric flexible, quite often blending is unnecessary. However, on firmly woven fabrics, or where the curve is pronounced, blending is essential.

Blending the outside curve requires cutting narrow wedges from the seam allowance at evenly spaced intervals sufficient only to remove the portion that might overlap when the seam presses open. Avoid cutting out large wedges that might produce a saw-tooth effect since these irregular edges press through to the right side in an unsightly way. The aim is to provide a smooth and even seam edge.

Facing Seams—Outside Curve

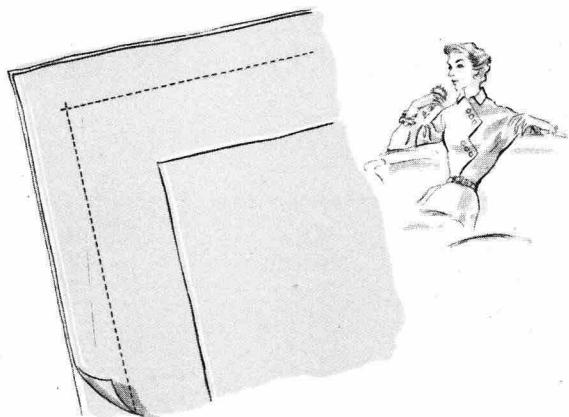


THE OUTSIDE CURVE occurs often on collars, lapels, pockets and decorative seams. The stitching of the seam and blending of the seam edges are the same for the outside curve as for the inside curve, except instead of slashing, wedges are cut at even intervals to remove the bulk that would otherwise fall on the inside when the facing is turned. It is important that only enough is cut away to permit the seam edges to lie evenly and smoothly and that a saw-tooth effect is avoided in the seam edge.

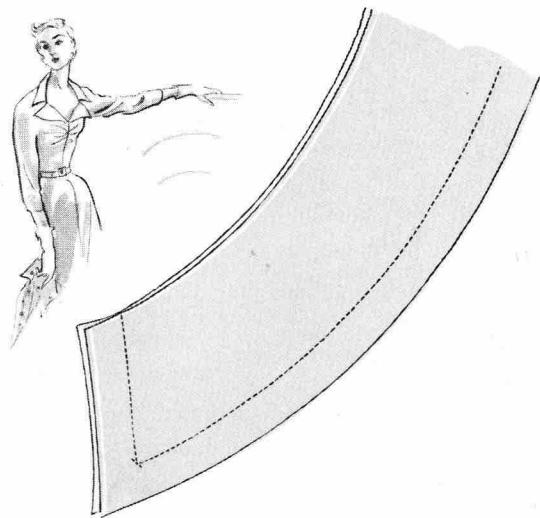
Stitching Square Corners

SQUARE CORNERS occur often in the facing of a neckline, collar, lapel, or pocket and are effectively accomplished in the following way, which reinforces, yet eliminates unattractive bulk at the corner.

Stitch along the seam line to a point one stitch beyond the intersecting seam line at the corner. Then reverse the direction of the stitch and make one stitch backward. Lift the presser

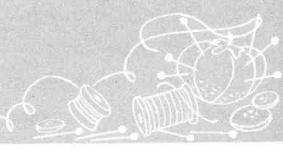
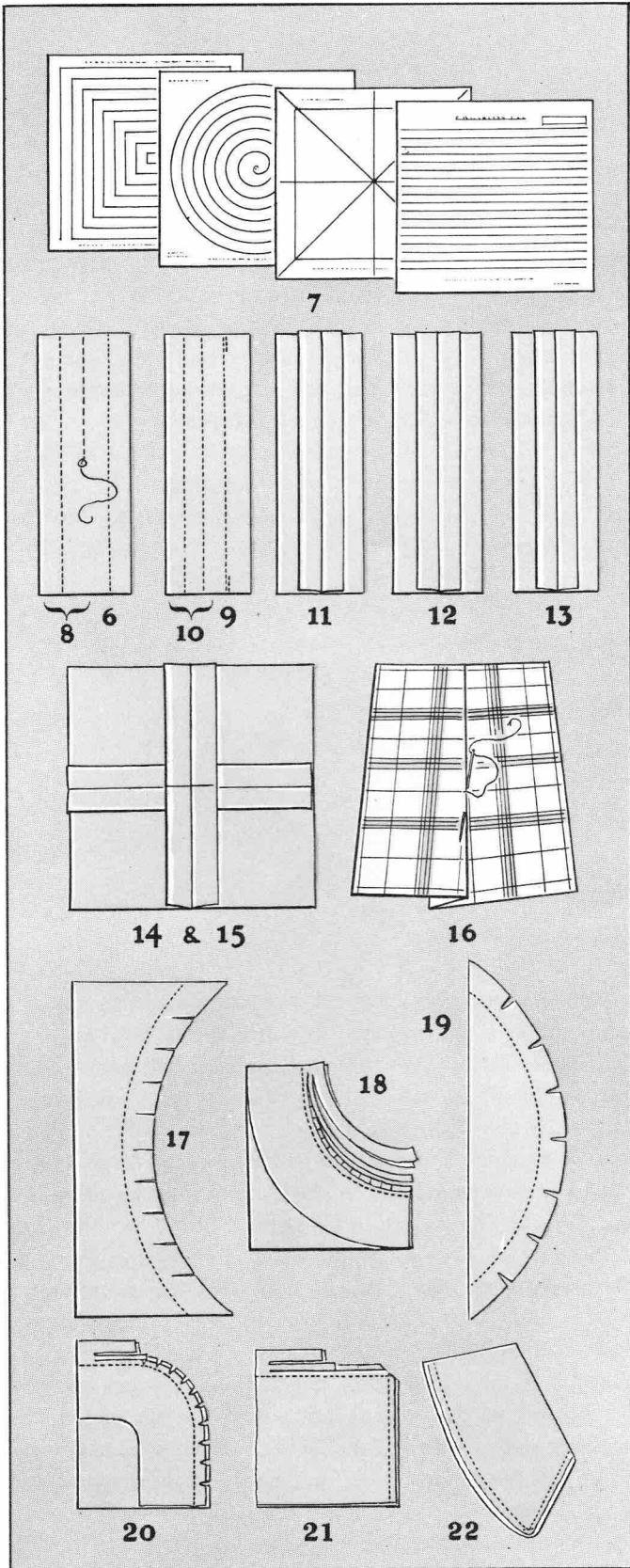


foot after the needle has been brought to its upward stroke and just before the needle point leaves the fabric. Turn the fabric, pivoting on the needle. Take one stitch in reverse and then continue stitching in a forward direction. Blend the seam edges of the facing to $\frac{1}{8}$ " and the garment section to $\frac{1}{4}$ " and cut the corner diagonally very close to the cross stitch at the corner. The square is now ready to press and turn.



Narrow collar points require a diagonal stitching across the point to allow space to smoothly enclose the seam edges that turn to the inside. The number of diagonal stitches varies with the weight of the fabric. Heavy fabrics require more stitches diagonally than light-weight fabrics.

Back stitching is also used at both ends of the diagonal stitching for reinforcement and to permit very close blending of the seam edges. The procedure is to stitch to within about 2 or 3 stitches of the intersection of the seam allowance. Pivot with the needle in the fabric but on its upward stroke and turn the work so that the stitching is directed diagonally across the corner. Then reverse the stitch and make one stitch backward, then three, four, or five stitches forward and another backward. Pivot again on the upward stroke of the needle and continue stitching along the seam line. Blend the seam edges of the facing to $\frac{1}{8}$ " and the garment to $\frac{1}{4}$ " and cut away the seam allowance at the point close to the diagonal stitching. The work is now ready for pressing and turning.

Lesson 1—Sewing Machine Principles**First Practice Session—Sewing Machine Facts**

1. Review oiling points— Refer to the sewing machine instruction book, then locate these oiling points on the sewing machine.
2. Remove and replace face plate and throat plate.
3. Remove and reset needle.

Second Practice Session—Preparation for Stitching

4. Wind bobbin.
5. Thread machine.
6. Stitch a plain seam and practice these steps—(a) take-up lever at its highest point, (b) position needle, (c) lower presser foot, (d) stitch slowly, (e) stop machine and bring take-up lever to its highest point, (f) raise presser foot and remove work, (g) sever threads on the thread cutter.

Third Practice Session—Stitch Length, Pressure and Tension

7. Learn to recognize stitch lengths with machine unthreaded and using Stitching Charts, stitch with No. 10, No. 12 and No. 20 length. Complete charts on your sewing machine.
8. Sewing Machine Basting— Using the same piece of fabric as in Step 6, stitch one row of each No. 6 and No. 8 basting. Then practice removing basting.
9. Stay seams at each end.
10. Study the effect of tension by stitching one row with a heavy upper tension and one with a light upper tension.
11. Stitch a seam on corduroy, using mercerized thread, size 14 needle, No. 12 length stitch, light pressure and stitch in direction with the nap.
12. Stitch a seam on wool fabric using silk thread, size 14 needle and No. 12 length stitch. Pressure is slightly heavier than for average stitching.
13. Stitch a seam on fine cotton using size 90 to 120 six cord cotton thread, a size 9 needle, a No. 20 length stitch and light pressure.

Fourth Practice Session—Stitching for Line

14. Plain seam—Learn to pin and guide stitching with Cloth Guide. Use two pieces of fabric 8 inches x 4 inches.
15. Crossed seam—Learn to press seams open in preparation for crossing seams. Pin to hold position at junction of seams. Blend seams at crossing. Use plain seam from step 14, cut cross-wise, then join to form crossed seam.
16. Slip-baste—Learn to slip-baste seams for matching plaids. Use Straw needle, size 8, for basting.
- 17 and 18. Inside curves—No. 15 stitch length for stitching. Blend according to usage as facing and as a fitted seam. Two projects.
- 19 and 20. Outside Curves—No. 15 stitch length. Blend according to usage as facing and as a fitted seam. Two projects.
- 21 and 22. Corners—pivoting and back-stitching. Two projects.

Stitching for Contour



ALL GARMENTS are given fit and contour through carefully positioned darts, tucks, or gathers. Were it not for the shaping that these constructions afford, our garments would be uncomfortable and bulky. Darts are preferred for shaping smooth firm fabrics, tucks are adapted to smooth drapable fabrics, and gathers to soft sheer fabrics.

These constructions must be carefully formed and positioned since they have a close relationship to the curves of the figure as well as to the beauty of the design. Often a dart is meant to provide shape and fit and yet be nearly invisible, since it, in itself, does not contribute to the beauty of the garment. At other times the dart is intended to be emphasized as a style detail while providing contour and fit. The single thread dart with the fold to the outside is often the means of achieving this emphasis.

The handling of the fabric when forming and stitching a dart has a direct influence on its effect. A dart intended to be invisible must be stitched so that the point tapers so gradually there is no bulge or fold where it terminates. Its position when the garment is worn must be in the proper relationship to the con-

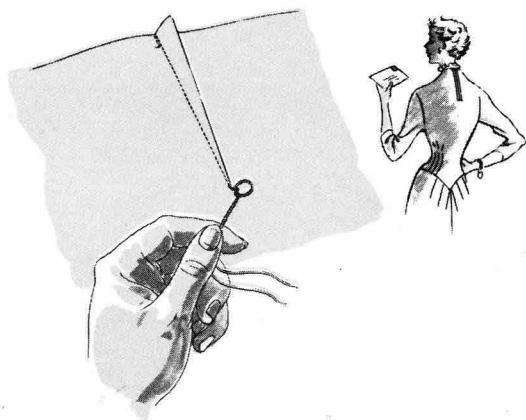
tour of the figure because it creates a curve in the garment that provides ease and fit over a body curve. Fit the pattern and adjust it so the darts are placed to suit the body contour.

An important point to remember in fitting darts is this—darts must point toward the fullest curve of the figure, but never reach quite as far as the curve or extend beyond it. Very often darts extending from waistline to bustline are moved either closer to the center front or are separated more to bring them directly under the fullest part of the bustline. The dart extending toward the bustline from the under arm seam is often adjusted lower than is indicated on the pattern if the figure requires positioning for a lower bustline.

The length of darts in the skirt and blouse back are sometimes shortened to accommodate figure proportions. A dress might appear to be too small when the problem lies only in better fitting and positioning of the contour forming darts.

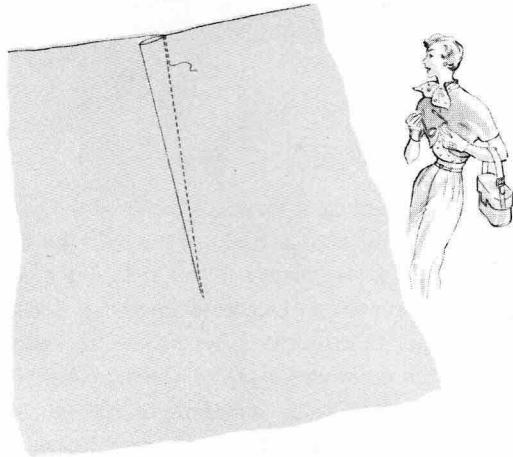
Positioning tucks and gathers is based on exactly the same principles as positioning darts, but because of their softness, fitting is simplified.

How to Stitch a Dart



A DART is usually stitched from the seam edge to the point, and is reinforced with back stitching at the seam edge. The point of the dart is skillfully handled when it tapers gradually and when the final three or four stitches parallel the fold of the dart—*just a thread's width* from the fold and, then, continues off the fabric to form a thread chain $\frac{1}{2}$ to $\frac{3}{4}$ inches in length. This thread chain is tied into a simple single knot that is set close to the end of the dart.

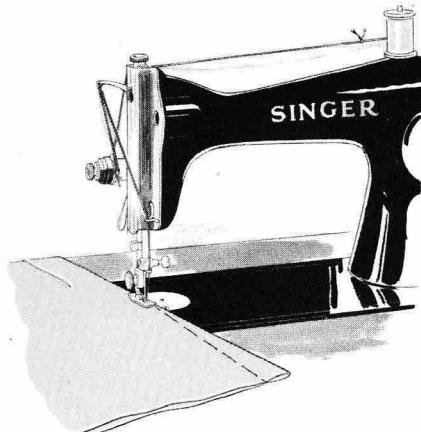
Single Thread Dart



THE SINGLE THREAD DART is always used where the fold of the dart is on the outside of the garment and for inside darts where the fabric is sheer, since there are no thread ends to tie. The stitching begins at the point rather than at the seam edge as in the conventional dart, and the sewing machine is rethreaded for each dart. The thread from the bobbin is threaded through the needle, in the opposite direction from usual threading.

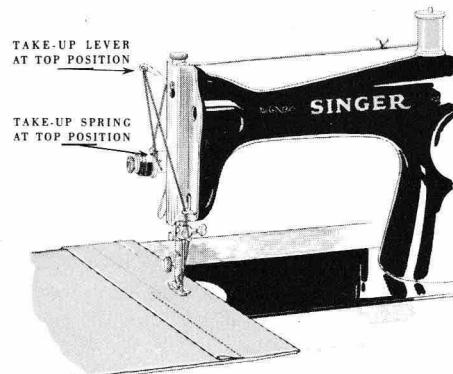
Tie the bobbin and upper threads together and rewind the spool until the knot has passed the last thread guide nearest the spool a sufficient distance to afford thread for stitching the full length of the dart. Position the tip of the needle into the

very edge of the fold at the point of the dart. Take the slack out of the upper threading of the machine by turning the spool, but do not draw the thread so taut as to *raise the take-up spring*.



Then, drop the presser foot and stitch carefully shaping the tapered point of the dart. Back stitch the dart at the seam edge for reinforcement.

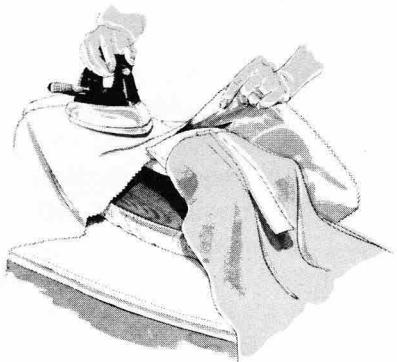
The Single Thread Tuck



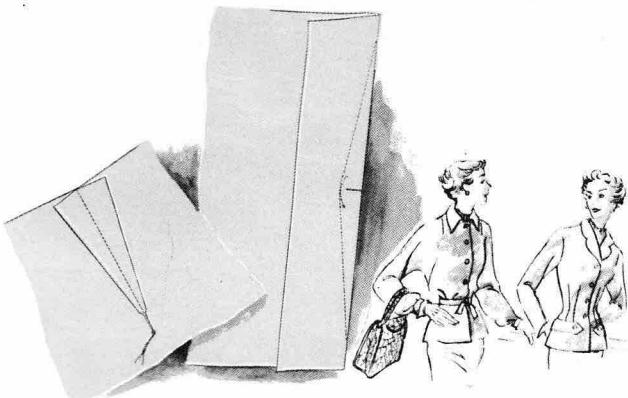
CONTOUR FORMING TUCKS are used as frequently with the fold to the outside as they are with the fold concealed. Where the fold of the tuck is to the outside of the garment, the stitching must be perfectly regulated and show no backstitching. Threads can be drawn to the inside and tied, but the single thread method of stitching is much more durable and attractive.

The stitching begins from within and is finished at the seam edge with backstitching. Position the tuck under the needle and lower the presser foot. With the right hand turning the balance wheel, form a single stitch while holding the needle thread. Draw the bobbin thread up through the fabric and then rethread the needle in the reverse direction with the bobbin thread. Tie the upper and lower threads together and rewind the spool until the knot has passed the last thread guide nearest the spool far enough to provide sufficient thread for stitching the tuck. With the needle up and the take-up lever at its highest point, draw the upper thread *taut enough to raise the take-up spring*. Then begin stitching slowly and continue to the seam edge, where backstitching is used for reinforcement.

Pressing and Blending Darts



PRESSING further shapes darts and tucks when stitching is completed. The curved surface of the press mit is ideal for shaping darts. Press darts first flatly as stitched, carrying the crease only as far as the stitching. Protect the fabric with a press cloth. Steam as required by the fiber content of the fabric. Then press the dart over the press mit, protecting the garment from being marked by placing a paper strip under the dart.



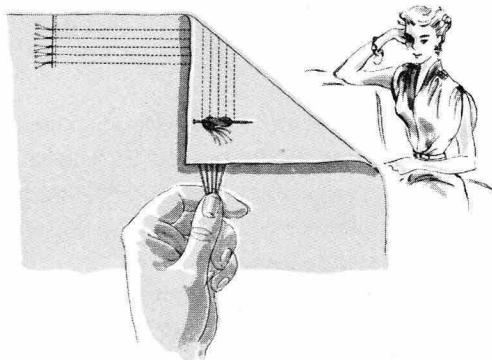
Darts face center in the skirt back, blouse back and front, and on the shoulder and downward at the underarm. Frequently darts are slashed and pressed open to better distribute thickness. A dart that fits the waistline and tapers at both ends is released by slashing from the fold to within $\frac{1}{4}$ inch of the stitching at its deepest point.

Gathering to Control Fullness

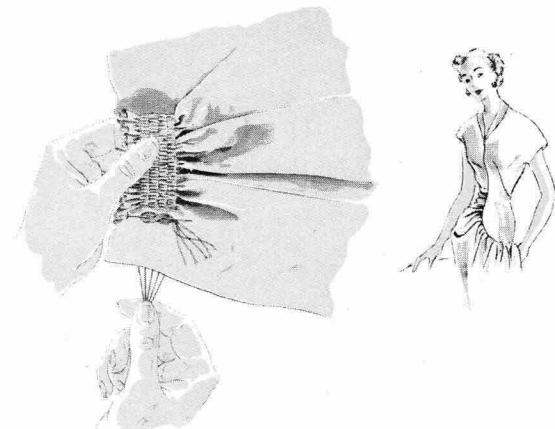
MANY PATTERNS for soft or sheer fabrics indicate gathering to control fullness at the shoulder, waistline—at yoke joinings in skirts and at styling points. The styling of the garment and personal preference influence how many rows of stitching are used. A No. 8 or No. 10 length stitch is used for medium weight fabrics, but a No. 12 or No. 15 stitch is often more suitable for a fine or filmy fabric.

Place the first row of stitching just outside the seam line, usually slightly less than $\frac{5}{8}$ inch from the seam edge. Place a second row of stitching slightly less than $\frac{1}{2}$ inch from seam

edge. Neither of these rows of stitching will be visible in the finished garment. Then place as many rows, $\frac{1}{8}$ or $\frac{1}{4}$ inch apart, as are desired.



Draw the threads through to the inside at only one end. Tie by forming a single loop of the two strands of thread and set the knot tightly against the fabric. Holding these thread ends, form a fold at the end of the rows of stitching. Then stitch a pin tuck using a No. 20 stitch, starting at the seam edge and extending to the last row of stitching. Reverse the stitch to reinforce. Cut off ends of gathering threads to $\frac{1}{2}$ inch. Anchor the threads at the second end of the stitching on the right side of the garment by forming a figure 8 around a pin.



There remains one thread for each row of stitching on the inside of the garment. Lightly twist these threads together and pull, working the fabric back on the stitches (at the same time) forming uniform gathers. Adjust the amount of fullness to the requirements of the pattern and finish this second end by drawing all threads through to the inside and tying. Then cross with a pin tuck.

The gathering should now fall into uniform channels, stitch by stitch, especially if care were exercised in placing the rows one under the other at the first stitch. When joining this type construction to its corresponding seam, the first two rows of stitching are concealed.

Often one or two rows of stitching are used to control eased fullness in the cap of a sleeve, at the top of a hem in a flared or circular skirt, in the sleeve seam for elbow fullness, around a patch pocket, curved applied bands, lapped decorative seams and elsewhere. The pin tuck is eliminated in these applications.

Fashion Details

Decorative Tucking

NO OTHER FASHION DETAIL has better sustained fashion interest than tucking. While interest in tucking for dress detail fluctuates, tucks are always fashion right and lovely for blouses, lingerie and children's clothes.

The opportunity for self-expression is unlimited since tucks may be made as narrow as the stitching itself or bold and heavy. Spacing between tucks allows for a variety of effects. Tucks lend themselves to cross tucking, to smocked effects, pineapple tucking, Shirred tucking and many other interesting and original applications in combination with insertions.

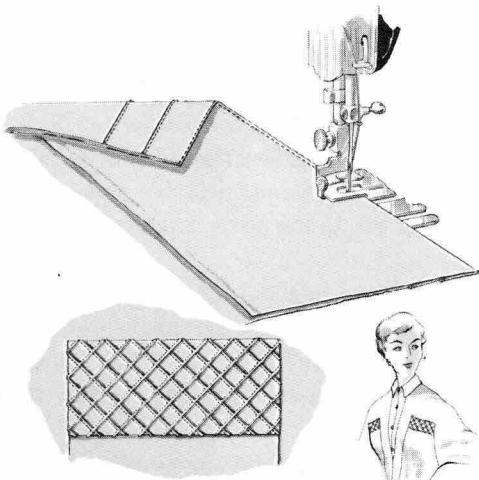
There are two aids for tucking, one the SINGER Tucker, and the other, the SINGER Edgestitcher. The Tucker guides both the spacing and width for tucks up to 1 inch, while the Edgestitcher guides only the width for tucks up to $\frac{1}{4}$ inch.

When stitching tucks perfect tension adjustment is essential, as well as a short stitch as designated for top stitching. Refer to the Fabric, Thread and Needle Chart on page 3. The thread should blend perfectly with the fabric in color and texture, or should be in decided contrast.

Tucks are usually made along the lengthwise thread of the fabric, but occasionally a design calls for crosswise tucking to emphasize style lines. The lengthwise grain of the fabric is always more firm and for that reason lends itself to tucking.



Pin Tucks



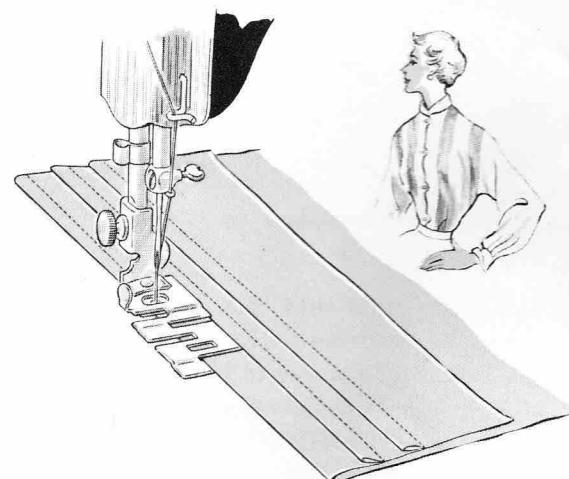
THE SINGER Tucker or Edgestitcher may be used in making pin tucks. A single thread is drawn from the fabric to locate the first tuck straight with the grain of the fabric.

Measuring from a selvage or straight edge, at several points, is another method sometimes used.

Press the fold before stitching. Test the stitch and the setting of the Edgestitcher or Tucker on a scrap of the same material before proceeding. A pin tuck is very narrow and is only "as wide as a pin." If the Tucker is used, a mark will appear for the fold of the second tuck. When the Edgestitcher is used, threads are usually drawn to position each tuck.

Pin tucks are often used for crossed tucking and in combination with lace insertion. When making crossed pin tucks, stitch first on the lengthwise grain, then on the crosswise grain. The pin tucking is then cut into bias strips for bands or insertion, or it may form a whole yoke or collar sections. Further details regarding the Edgestitcher are given on pages 22 and 23, and in the Instruction Book accompanying your sewing machine.

Straight Tucks of Varying Width and Spacing

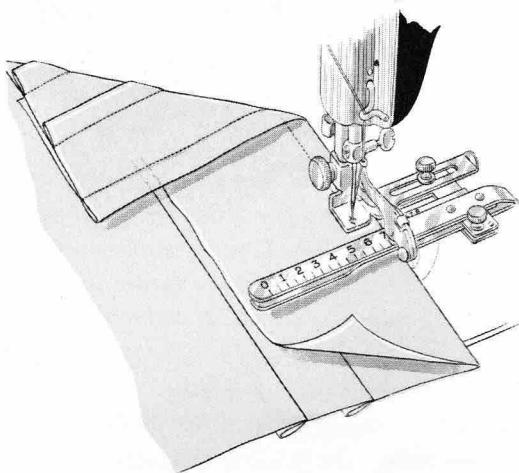


QUARTER-INCH TUCKS with quarter-inch spacing are typical of good proportion in tucking. The Edgestitcher guides a quarter-inch tuck best through Slot No. 5. When the lug of the attachment is drawn to the left, and the fabric is in Slot No. 5 the attachment is set for its deepest tuck, approximately $\frac{1}{4}$ ". Slots Nos. 1 and 5 are used most frequently for tucking, but the others can be used as well. Select a pattern designed for tucking detail, or use a plain pattern, cutting the section after the tucking detail has been completed.

Where tucks and spaces are equal, fabric of twice the finished width is required. Where the fold of the tuck touches the stitching of the previous tuck, as in blind tucking, three times the finished width is required. Tucks are always stitched so that the stitching uppermost under the needle is visible when the garment

is worn. Since the beauty of tucking lies in its being done exactly on the woven thread of the fabric and in its explicit accuracy, the Edgestitcher and Tucker contribute greatly to the attractiveness of the work.

The SINGER Tucker is a time-saver for making half-inch tucks as well as tucks of other widths. It carries two scales, the smaller, nearest the needle, is numbered from 1 to 8, expressing in eighths of an inch the width of the tuck. The larger scale expresses in quarters of an inch the spacing between tucks. The tucking scale is set by loosening the tuck guide adjusting screw, which releases the guide for setting to any width tuck up to one inch. The setting for a half-inch tuck is at No. 4.



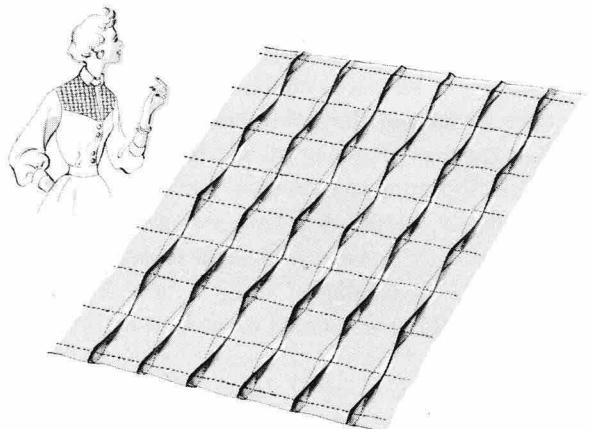
The space scale is set after the width of the tuck has been established by loosening the space scale adjusting screw and moving the space scale to align at the same number the tuck scale is set for with the needle point. This setting makes blind tucks where the fold of one tuck touches the stitching of the previous tuck. When space between tucks is desired, add the space in quarter inches to this number. Thus half-inch tucks spaced a half inch apart require the tuck scale to be set at 4 and the space scale at 6. The 6 is in line with the needle point. The rule is to match the tuck scale setting and add the space.

When making the final tuck of a series, release the lever that contacts the needle clamp by merely bringing it forward out of contact with the needle clamp. Return the lever to its original position after the final tuck has been made.

Smocked Tucking

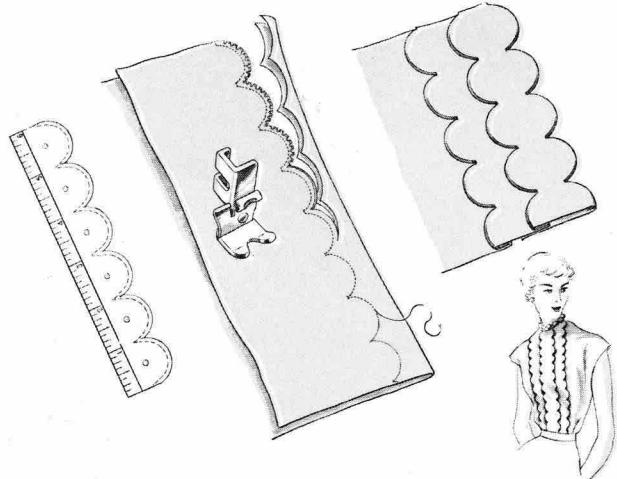
SMOCKED TUCKING is a simple variation of straight tucking that is especially suited to yoke treatments for dresses and blouses of plain fabrics. It provides a texture contrast that, in itself, is rich and smart. Tuck the fabric on the lengthwise grain making $\frac{1}{8}$ inch tucks spaced $\frac{1}{4}$ inch apart. The SINGER Tucker is set with the tuck scale at No. 1 and the space scale at No. 2.

The crosswise stitching is made with the Edgestitcher adjusted so that the distance from the needle point to each side of



the attachment is equal. Rows of stitching are made across the tucks from alternate directions and the exact width apart as indicated by the distance from the needle point to the edge of the attachment. When the stitching is completed and the work pressed with steam from the wrong side, the shaped garment section is then cut according to the plain pattern.

Scalloped Tucking



INTERESTING VARIATION to plain tucking is achieved by giving a design to the edge of the tuck in the form of points or scallops. Plastic rulers are available for such markings, or interesting scalloped, curved, or pointed patterns can be cut from cardboard. Trace the design to the fabric, folded right sides together, allowing a seam of not less than $\frac{1}{4}$ inch from the fold.

Stitch with a very short stitch, No. 20 on medium weight fabrics. The Quilting Foot facilitates stitching small scallops due to its open construction and its short toes.

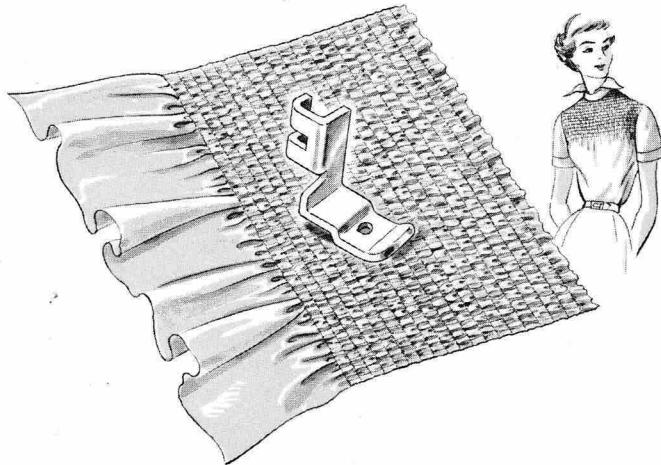
A lighter than regular pressure adjustment enables the operator to turn the fabric more freely.

To prevent pulling at the point between scallops in the finished work, when stitching allow one stitch for width between each scallop. This spacing provides the width needed when cutting and produces a smoothly turned seam. Seams are blended

to a scant $\frac{1}{8}$ inch on small scallops and a generous $\frac{1}{8}$ inch on larger scallops. One edge is blended shorter than the other on all scallops except the very small. Wedges are cut from the seam edges at evenly spaced intervals when blending. Then the scallops are turned and the seam edges are worked between the thumb and the finger to bring the stitching to the very edge.

A silk thread basting is often used to retain the shaping until after pressing. If the finished scallop is not smoothly shaped, inspect the stitching for exactness, and review the blending of seam edges and the cutting of wedges. Smooth, even scallops are lovely and expensive looking when used with tucking or as an edge finish.

Decorative Shirring

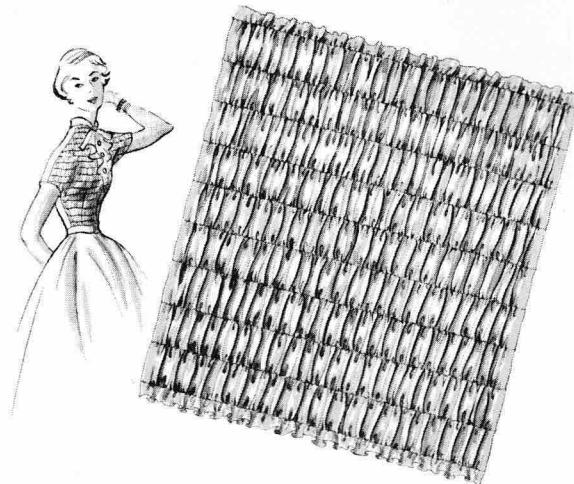


THE SINGER Gathering Foot produces a variety of fashion details. The foot is designed to lock fullness into each stitch. Therefore, a long stitch produces more fullness than a short stitch. Balanced tensions are always required, but heavy tensions, both upper and lower, produce more fullness than light, balanced tensions.

Shirring is usually done on the crosswise grain of the fabric. Soft fabrics lend themselves to shirring better than firm fabrics. Crisp sheer fabrics are often steam pressed and stitched while still damp to soften the finish enough for shirring. Matching thread is usually used, but if a bold decorative effect is wanted, contrasting thread or heavy embroidery type threads are used in the bobbin.

Many lovely effects are accomplished with simple rows of evenly spaced shirring. A yoke section, insert, or trimming band of self fabric affords an interesting contrast of texture when stitched with the Gathering Foot in rows $\frac{1}{4}$ " apart. The groove at the front of the Gathering Foot is a guide for stitching.

Soft sheer fabrics, voile, batiste, silk georgette and others of similar texture lend themselves to all-over shirring for the whole bodice section or for a blouse front.

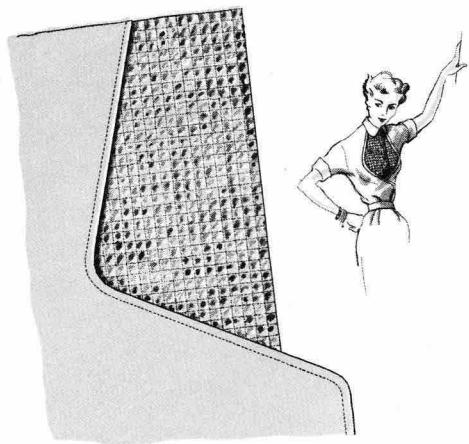


Threads are drawn on the crosswise of the fabric at 1 inch intervals, or at whatever spacing is selected. Shirring, using the Gathering Foot, is placed on each of these lines where the thread has been drawn. The fabric is then pinned closely together on all edges to a slightly damp sheet and is allowed to dry thoroughly. This procedure blocks the shirred fabric so that the soft fullness falls in graceful lines and prepares it for cutting according to a plain pattern.



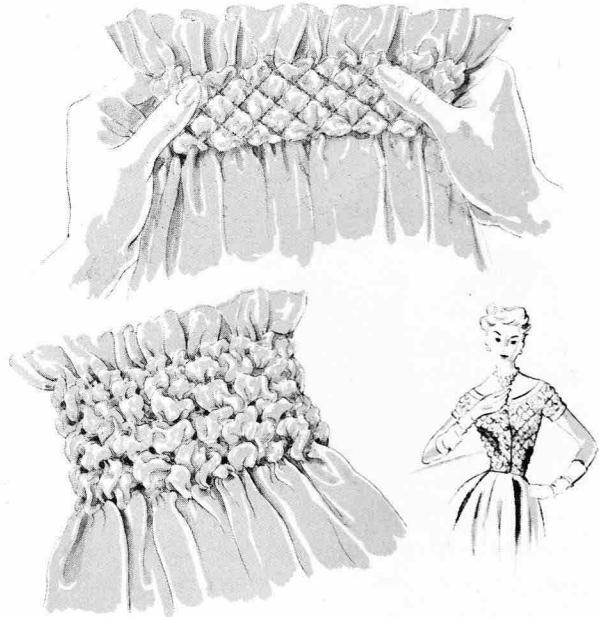
The Gathering Foot is used to produce machine smocking by following a design when stitching and by using heavy duty thread for both bobbin and upper threading or by using pearl cotton or an equivalent thread on the bobbin and regular sewing thread on top. Machine smocking is most attractive when made separately and applied as a band to the skirt that has been gathered very full.

Waffle Shirring



SMOOTH SURFACED FABRICS are given texture interest by stitching with the Gathering Foot first on the crosswise and then on the lengthwise grain of the fabric, with the stitch length adjusted short enough to give only slight fullness. The edge of the Gathering Foot serves as a convenient guide for width between rows of stitching. Waffle shirring has a broad application on cottons, silks, woolens or rayons and is particularly interesting for details on children's dresses, girls' dresses, blouses, and lingerie.

Elastic Shirring



ELASTIC THREAD affords a flexible shirring. It is applied in a way similar to the shirring effects produced by the Gather-

ing Foot. Often the Gathering Foot and elastic thread are used together to produce more fullness than elastic thread gives with the regular presser foot.

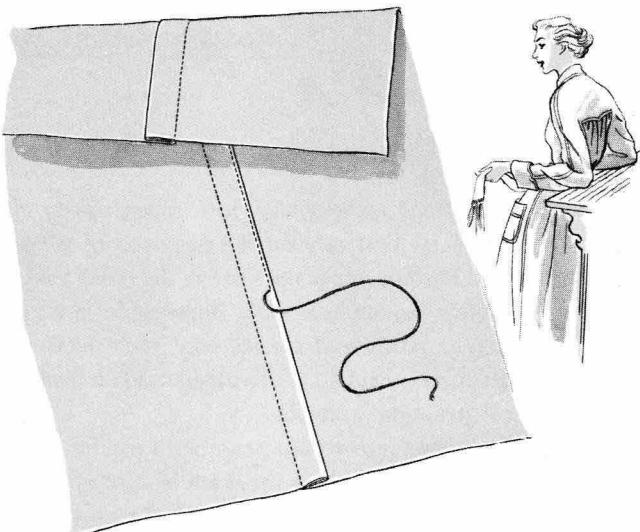
Elastic thread is a *Bobbin Thread* and is wound on the bobbin without stretching, which usually requires the thread to be held loosely in the hand while being wound. It is not carried between the discs of the bobbin winder tension.

It is advisable to test the stitching with elastic thread on a scrap of the same fabric before any tension changes are made. Quite often no tension changes are required. Inspect the stitch. If the upper thread loops, tighten the upper tension until the stitch locks tightly into the fabric. If the elastic thread breaks or frays, the lower tension must be loosened. The length of stitch regulates the amount of fullness. A long stitch gives more fullness than a short stitch.

A whole bodice section, or girdle section of a garment is sometimes elasticized by multiple rows of stitching or by waffle stitching. Shell Puffing is accomplished by stitching in a scallop design, the point between each scallop overlaps just one stitch into the center of the scallop of the row above.

Appropriate Seams

Flat Felled Seams



MEN'S WEAR usually calls for Flat Felled Seams accurately formed and stitched to produce the tailored appearance characteristic of men's clothing. It is a matter of preference which side of the seam is made to the right side. The conventional method affords an inside seam paralleled by stitching. The

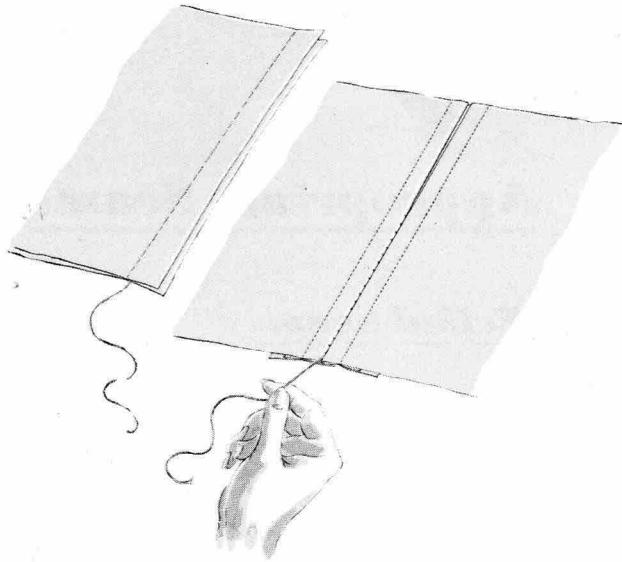
reverse side reveals a top-stitched seam edge, paralleled by a row of stitching.

The full seam allowance is taken with the first stitching. The seam is pressed flatly as stitched, pressed open and then pressed with both seam edges together.

The inside seam edge is blended to slightly less than the width of the finished seam, the upper seam edge is turned evenly and is top stitched.

Manufacturers differ in their handling of Flat Felled Seams, but usually the seam edges that are blended are the back seam edge on side seams, the back seam edge on sleeve seams, the sleeve seam edge on armhole seams, the garment section on yoke seams and the front seam edge on shoulder seams.

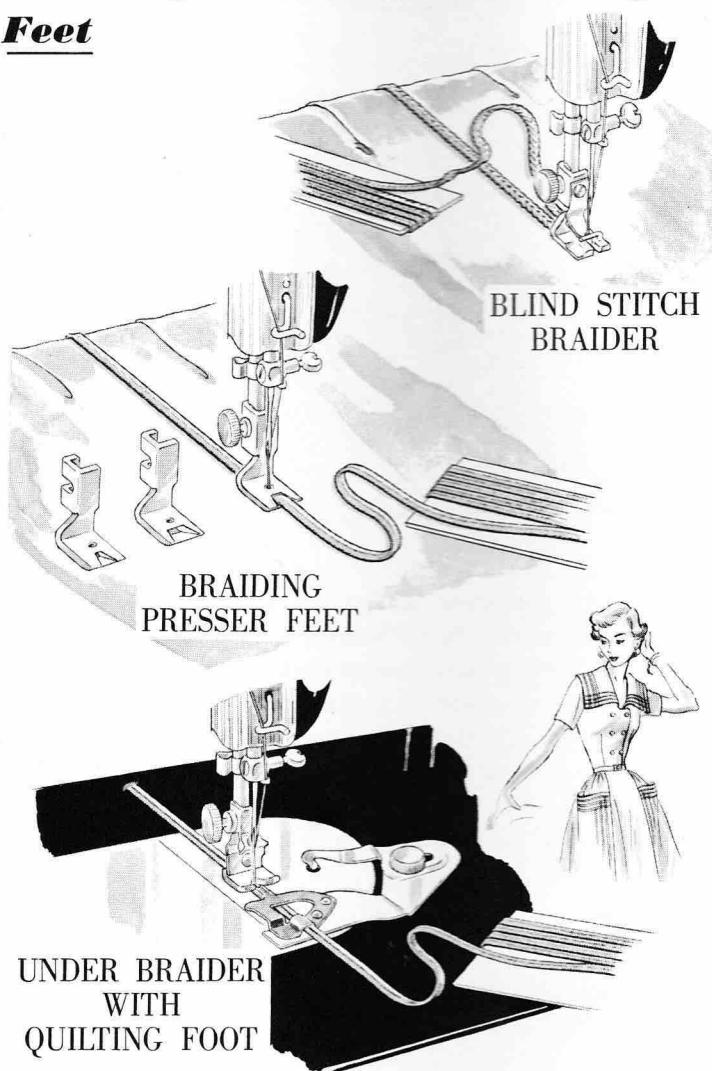
The Slotted Seam



THE SLOTTED SEAM adds quality and smartness to simple dresses and suits that rely on the emphasis of good style lines for interest. Fashion Magazines prove the point that often the expensive dress is simple in line, impeccable in fit, made of the best quality fabric and carries only such detail as the slotted seam for accent. Seldom is this detail used on inexpensive dresses. The construction is simple.

The seam is stitched into a plain seam with machine basting. Pressing is carefully done first as the seam is stitched, then the seam is pressed open sharply. All except one thread end are cut away close to the fabric. The opposite thread is then clipped **every four or five stitches apart along the length of the seam**. An underlay of the same or contrasting fabric is carefully positioned under the seam and is basted securely before stitching is done on each side of the seam. The basting is quickly removed by pulling the single thread end left un-cut.

Braiding with Singer Braiding Feet

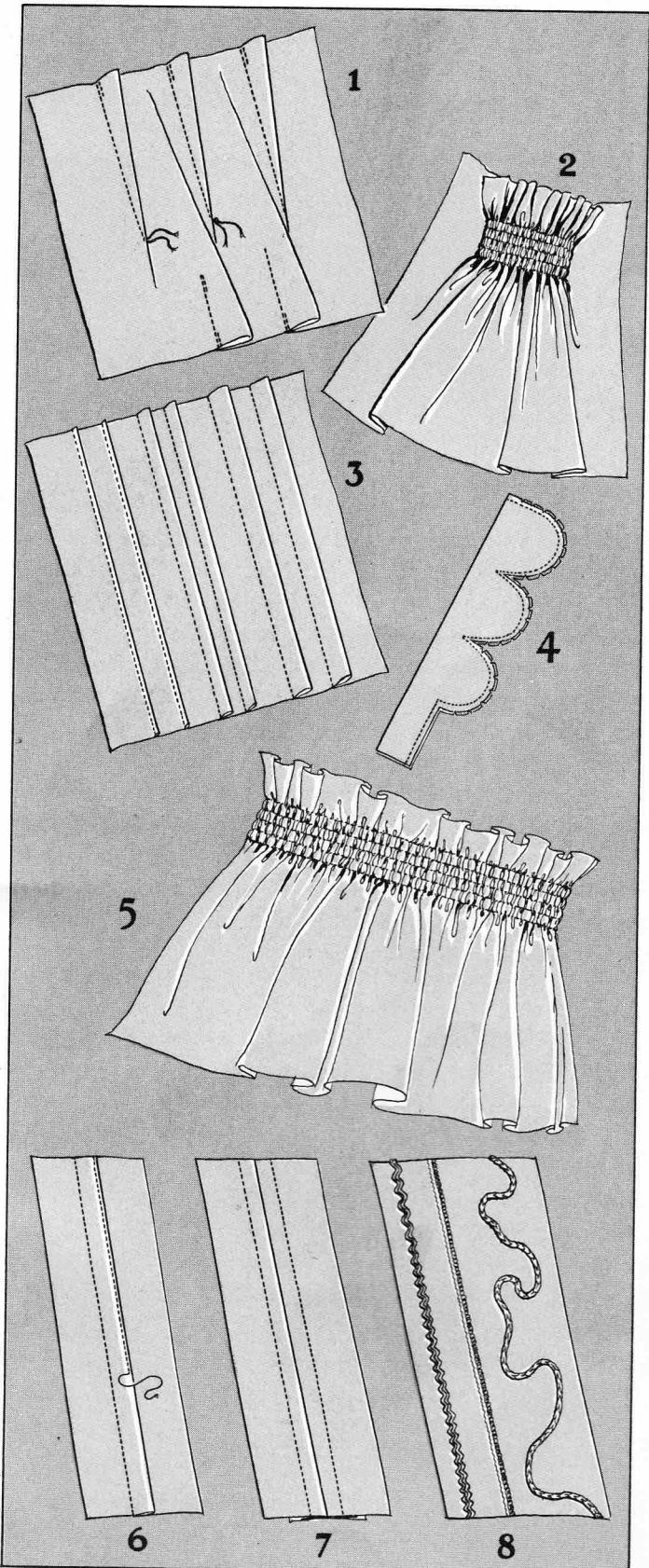


BRAID is quickly applied with any of the SINGER Braiding Feet. There is a variety of Braiding Feet available to accommodate different kinds and thicknesses of braid. The Braiding Presser Foot is designed to carry the braid to the needle point so that the needle stitches directly through its center. The Braiding Presser Foot is available in widths $\frac{1}{16}$ ", $\frac{1}{8}$ ", and $\frac{3}{16}$ ".

The Blind Stitch Braider carries the braid so that the needle catches only the underneath threads of the braid, blindstitching it to the fabric.

The Underbraider is a plate that is attached to the bed of the machine and has a channel through which the braid is fed to the needle point. The Quilting Foot is used with this plate. The needle stitches entirely through the braid and unlike any of the other braiders, the braid appears on the underneath. The right side of the garment faces downward and the design is traced on the wrong side of the fabric.

Due to the harshness and denseness of some types of braid in comparison to the fabric, paper or tarlatan must be used while stitching to prevent puckering. Continuous designs are best for braiding. Where an end occurs within a design, it is drawn through to the under side, carried back against the braiding pattern, and caught invisibly by several hand stitches.

Lesson 2 — Stitching Methods and Fashion Details**First Practice Session—Sewing for Contour**

1. Darts and Tucks. Stitch to illustrate an incorrect dart with a heavy point, stitch one dart correctly following teacher's instruction and stitch one single-thread dart.
Stitch two tucks, one with back-stitching for reinforcement and one employing the single-thread principle.
2. Gathering to control fullness. Place 5 rows of No. 10 length stitch and proceed as instructed.

Second Practice Session—Fashion Details

3. Tucks—Using a 10 inch square of fabric, make pin tuck and $\frac{1}{4}$ inch tucks on lengthwise grain with Edgestitcher. The Tucker is required for the $\frac{1}{2}$ inch tucks with $\frac{1}{2}$ inch spacing.
4. Scallops—Mark with $1\frac{1}{2}$ inch scallop ruler, stitch with No. 20 stitch length using the Quilting Foot. Notch and blend seams before turning.
5. Multiple Shirring with the Gathering Foot on white batiste will provide practice in stitching and guiding fabric when shirring.
6. Flat Felled Seam.
7. The Slotted Seam.
8. Braiding with Braiding Presser Foot, the Underbraider and the Blindstitch Braider.

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Sewing Machine Attachments

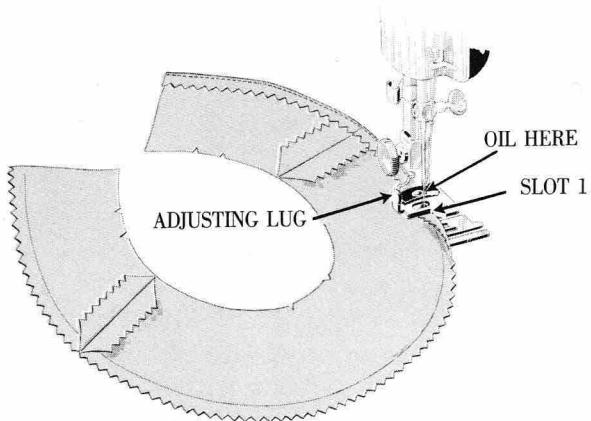
THE SEWING MACHINE ATTACHMENTS are designed to accomplish many otherwise time-consuming steps in sewing that would demand careful basting or hand manipulation. Learn what each attachment is intended to accomplish, where the fabric is inserted, and how to hold the fabric as it enters the attachment. Let the attachment do the work for you.

Too often attachments are used with a heavy hand resulting in inaccurate performance. It is as easy as it looks when your Singer Sewing Teacher demonstrates each of these to you. In addition to the attachments that accompany your machine, there are many available separately. These devices cut down your sewing time, vastly enlarge the scope of your accomplishment and produce more "professional-looking" results.



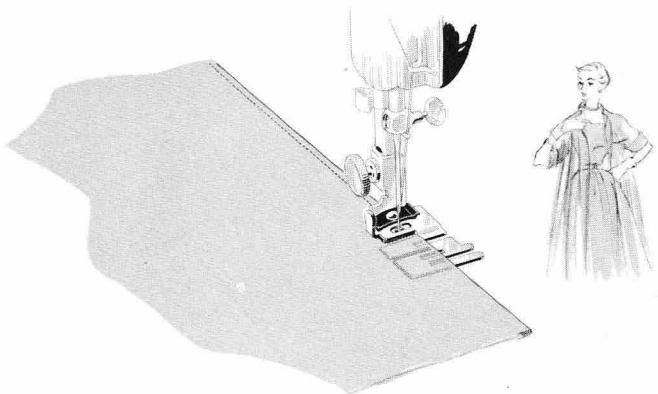
The Edgestitcher

IN ADDITION to its use for making tucks as presented in a previous chapter, the Edgestitcher is used for many construction and decorative applications in sewing, among which are finishing facing and seam edges, making French seams, making seams with piping, joining lace insertion or edging, and in joining alternate bands of fabric and lace insertion.



Edgestitched Facings and Seams

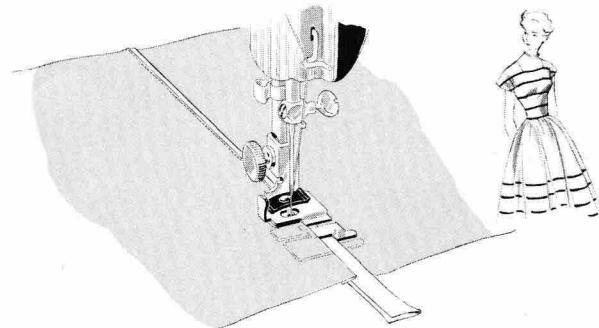
A sturdy finish for facing edges, seams and hems is made after preparing the edge by pinking and then pressing under $\frac{1}{8}$ to $\frac{1}{4}$ inch. Guide the folded edge into Slot 1 and adjust the Edgestitcher by moving the lug slightly to the left, so that the stitching falls very near the fold. The Edgestitcher regulates the stitching a uniform distance from the edge. If the lug does not move freely place a drop of oil under the blue steel spring as indicated by the arrow in the illustration.



French Seams

The Edgestitcher makes fine French seams. Lay seam edges together, right sides outward after seam allowances have been trimmed away to $\frac{1}{4}$ inch. Pull the lug of the Edgestitcher to the left so that when the seam edges are guided into Slot 1, the stitching is placed a scant $\frac{1}{8}$ inch from the edge.

Since a fine seam of this kind is suitable only for fine fabrics, the stitch length will be regulated for No. 15 or less. Press this seam open and then fold with right sides together, keeping the fold exactly on the seam. Move the lug to the extreme left and insert the seam into Slot 1, allowing just enough margin to conceal raw edges. This fine French seam is well adapted to sheer blouses, slips, negligees and nightgowns, as well as to joining lengths of glass curtain fabrics, panels in blanket covers and in any construction where the raw seam edges must be concealed and the seaming kept fine and delicate.

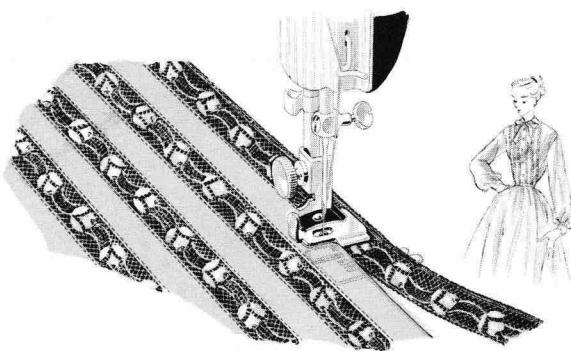


Seams with Piping

A seam with piping is quickly made on the Edgestitcher by cutting a fold of bias the exact width of Slot 3 and inserting it into Slot 3, folded edge to the right. Then fold under one seam

allowance, press and insert in Slot 1. The second seam edge is guided by Slot 5. Adjust the Edgestitcher by grasping the lug and moving it to the right until the folded edge in Slot 1 is caught very close to the fold by the line of stitching.

When guiding the fabric give attention to keeping the fold against the edge of Slot 1. Hold the seam edge and bias edges together and against Slot 5. Give attention to the adjustment of sewing machine pressure, if uneven feeding results. Heavy pressure may cause uneven handling of seam edges, too light pressure, irregular stitch length. Long, even, piped seams are accomplished quickly and accurately.



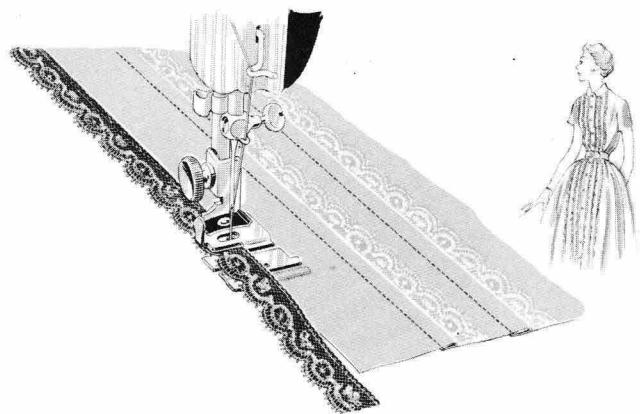
Joining Lace and Insertion

Lovely lingerie detail is simple to accomplish with the Edgestitcher by joining Valenciennes lace insertion or alternate bands of fabric and lace. Slots 1 and 4 are employed for this work. Since Slot 1 overlaps Slot 4, the edge inserted into 1 will be the top stitched edge. Prepare the fabric bands by cutting double the width of the finished bands on the lengthwise grain of the fabric. Turn the edges to meet at center and press. The lace is guided by Slot 4, the fabric bands by Slot 1. Even feeding results when the sewing machine pressure is adjusted to the right degree of lightness. A short, fine stitch is appropriate, and it should fall very close to the folded edge. Adjusting the lug, positions the stitching.

Great variety is possible in making details of this kind. Bands of fabric with tiny pin tucks may be joined to lace insertion for blouses. Ribbon and lace joined makes delicate detail for negligees and nighties. Children's dresses are given an expensive touch when lace and self-fabric form yokes, sleeves or collars.

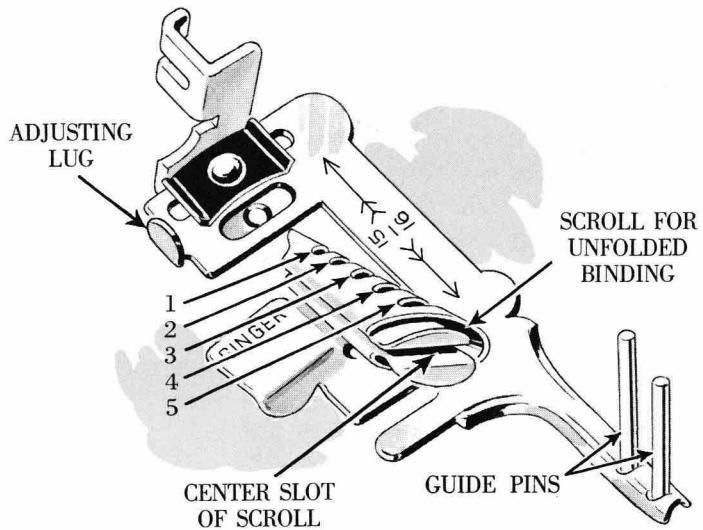
Tucking and Lace

Tucking with lace applied underneath is effective and easily done with a single line of stitching by inserting the fold into



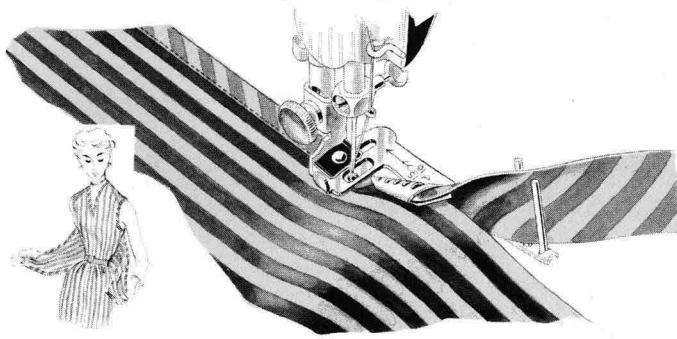
Slot 5 and the lace edging into Slot 1. The lug is adjusted to make the stitching fall on the selvage of the lace. If $\frac{1}{8}$ inch or narrower tucks are desired, Slot 1 can be used for tucking while the lace is guided into Slot 4.

Multi-Slotted Binder



THE MULTI-SLOTTED BINDER is one of the easiest attachments to master. Compare the attachment with the illustration and learn its parts by name. Self-cut, unfolded bias $1\frac{5}{16}$ inch in width may be applied by inserting it into the opening at the end of the scroll.

Commercially folded bias in sizes 1, 2, 3, 4 or 5 may be applied by inserting the binding from the right into the appropriate slot. The edge to be bound is inserted into the center slot of the scroll. The adjusting lug is grasped to move the scroll portion of the attachment left or right and is the means of positioning the stitching on the very edge of the binding, regardless of the width of binding used. The guide pins hold the binding and eliminate manual guiding of the binding.



Simple Binding

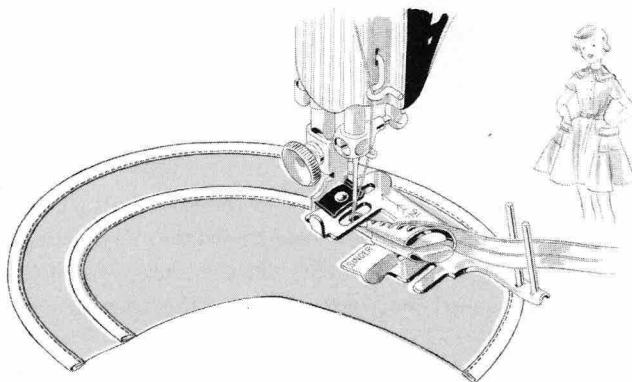
Cotton bias binding is available in a large variety of colors and in five widths—1, 2, 3, 4, 5. The most popular width is number 5, measuring $\frac{1}{2}$ inch. This binding has wide appeal for children's apparel, household accessories, house dresses, aprons, and from time to time is important as a fashion accent on cotton dresses.

Cut the binding to a long narrow point and if $\frac{1}{2}$ inch binding is used, insert into Slot 5. If self-bias is used, cut $1\frac{5}{16}$ inch wide and insert it into the opening in the front of the scroll. Stitch a few inches to test position of scroll, length of stitch and pressure.

Guide the edge to be bound into the center of the scroll. Allow the attachment to do the work, merely guide the fabric from pulling out of the scroll. Do not touch the binding since the upright guide posts control it very well.

Plain seams are often bound when a fabric ravelles. Rayon seam binding handles nicely in Slot 4 for this purpose.

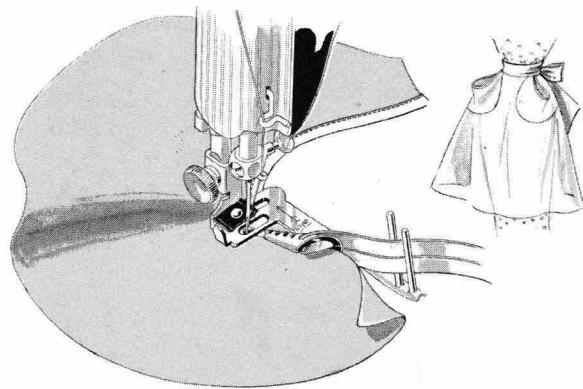
Two seam edges may be bound together to form a bound seam that is especially useful in household articles, such as cushions, or simple slip-on covers of fabric or plastic. If added seam strength is desired the seam edges can be joined with straight stitching, the seam trimmed to a scant $\frac{1}{4}$ inch, and then bound as if a single edge.



French Fold

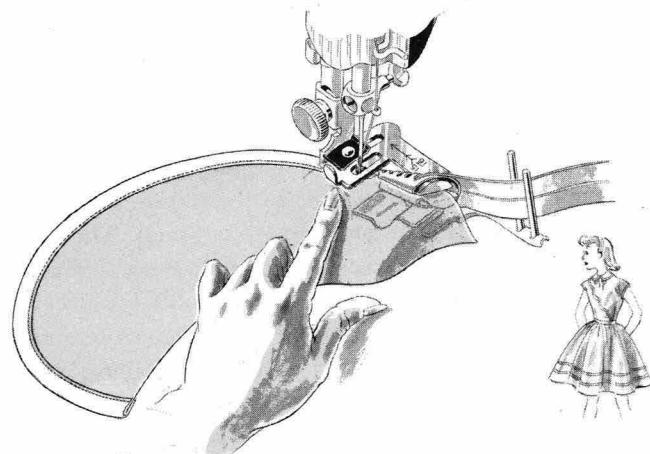
The French Fold is often applied for colorful accent. The fold may be of any one of the widths accommodated by the Binder.

The binding is handled in exactly the same way as when binding an edge. However, the garment section is guided underneath the attachment. A fold, basting line, or chalk mark is usually used to indicate the exact positioning of the French Fold.



Inside Curves

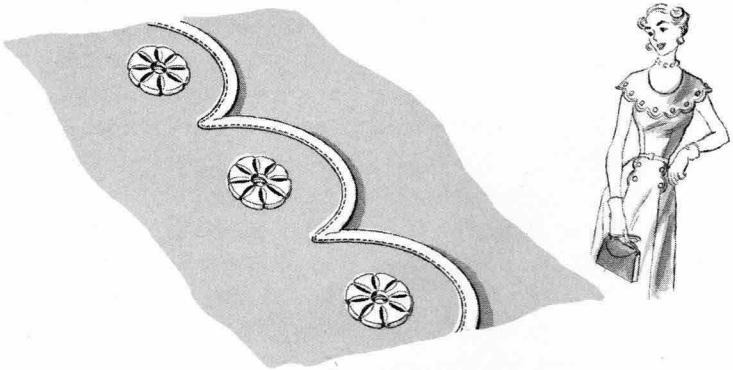
To bind an inside curve requires slightly different handling of the material than when binding a straight edge. The inside curve is straightened out to avoid curling too far into the center slot of the scroll. If the fabric is soft and tends to stretch, reinforce the edge with a single row of stitching before applying the binding.



Outside Curves

The outside curve naturally tends to lead away from the center slot of the scroll. Guide the edge so that a full seam width is taken at the needle point and do not attempt to pull or straighten the edge into the full length of the scroll. The fabric is best controlled at the left and in a line even with the needle. The outside curve consumes some of the width of the binding, making it necessary to adjust the lug to the left to bring the stitching into accurate position on the curve.

The Narrow Hemmer

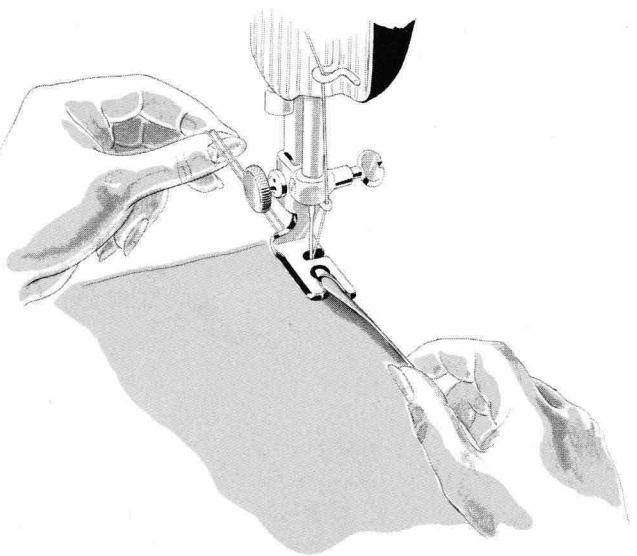


Scallops

Binding scallops is easily accomplished if the acute curve between the scallops is held into a straight line. There are a number of ways to successfully handle the excess fabric that forms into a fold when a scalloped edge is straightened. An effective procedure is to fold adjoining scallops, wrong sides together forming a crease at the point between the scallops. Separate, allowing the crease to remain, at the same time forming the inside edges of the two scallops into a straight line. A bias fold, as well as the crease just made, will radiate from the point between the scallops, and will taper to nothing at the seam edge.

Bind the scallop in the same manner as the outside curve and, when several inches from the point, lay the edge into a straight line re-forming the folds in the same creases. Lay the straight grain fold back on the diagonal fold to divide the bulk of material at the point to avoid catching pleats in the seam when applying the binding. Stitch carefully over the point making sure the folds taper to single thickness at the stitching line.

A slash or placket is handled in the same manner.



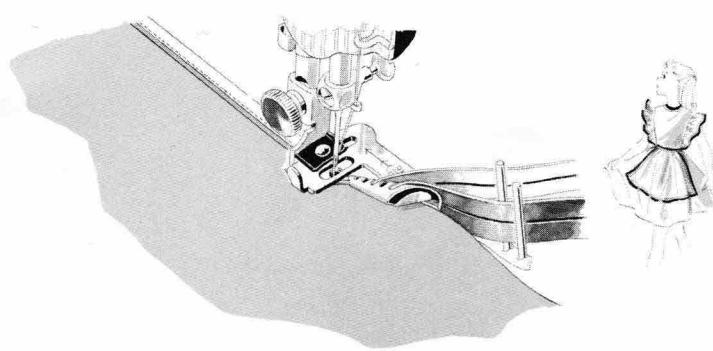
ONE OF THE GREATEST time savers of all is the Narrow Hemmer that forms and stitches a perfectly turned hem without basting or pressing. Especially suited to hemming ruffles, the Narrow Hemmer will finish many yards as quickly as stitching a straight seam. A metal scroll forms two fine folds of the raw edge and stitches the hem without assistance other than the gentle control of the fabric as it enters the Hemmer.

There are several good ways of starting a hem at the edge. One of the most effective is to fold the edge of the material twice, creasing for a short distance not exceeding two inches. The secret lies in keeping these folds to the narrow widths the Hemmer forms by itself. Place this creased edge under the foot and make several stitches. Then grasp the thread ends and the single folded edge in front of the Hemmer and lift the single fold into the scroll of the Hemmer.

Soft fabrics will enter the scroll best with the foot down, firm crisp materials will enter best with the foot raised. Stitch slowly for several inches, holding the thread ends in back of the foot with the left hand and the raw edge into the mouth of the scroll with the right hand. The hem will be evenly formed as long as the material is directed evenly into the Hemmer.

If a raw edge appears the material has been fed into the Hemmer too sparingly, if a bulky edge results, too much material has been fed into the Hemmer. Stitch rhythmically only as fast as the material can be controlled. Stop the machine, straighten the bulk of the material whenever necessary, then continue without interrupting the position of the edge in the Hemmer scroll.

Seams are crossed without hesitation if they are blended for a quarter inch to nothing at the edge to be hemmed. A bias edge is hemmed easily if it is *stayed* with a single line of straight stitching, then trimmed $\frac{1}{16}$ inch from stitching before hemming is attempted.

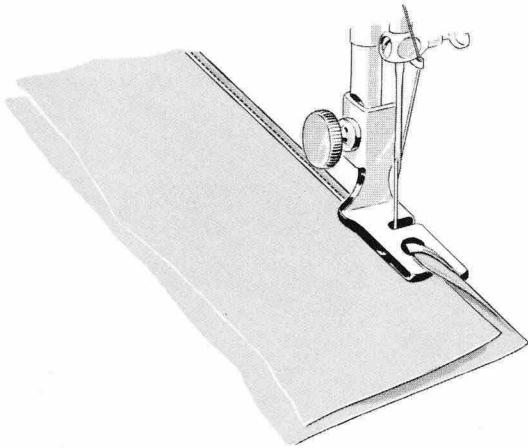


Binding and Piping

The Multi-Slotted Binder may be used with two widths of binding at one time forming interesting color contrast in a bound and piped edge. Always select alternate widths of binding, widths 3 and 5 or 2 and 4, inserting the narrower width first, and guiding the wider binding between the posts.

Many pretty variations are possible with the Multi-Slotted Binder, once you have learned the few fundamental uses of this effective attachment.

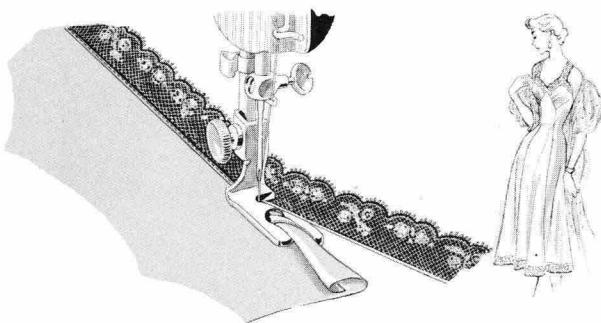
Hemmed Seams



HEMMED SEAMS are often substituted for French seams where a fine narrow seam is appropriate. The procedure is nearly the same as when making a plain hem except that the upper layer of fabric is held a scant eighth inch to the left of the lower layer to avoid bulk.

The hemmed seam may be started in the same manner as when starting a hem. The seam may be stitched flatly to the garment, if a flat seam is desired. Open the work out flat, then insert hem into the scroll. The Hemmer will regulate the stitching uniformly from the edge of the hemmed seam.

Hem with Lace



LACE IS OFTEN APPLIED on top of the hem if the selvage is fine or part of its design. Start the hem in the usual way. Place the selvage of the lace under the needle and lower the needle until it holds the lace firmly. While lifting the presser foot slightly slip the lace under the back portion of the hemmer without disturbing the position of the edge in the hemmer. Guide the hem with the right hand, the lace with the left, while stitching slowly and taking care not to stretch the lace.

Most of the popular kinds of lace edging and insertion can be applied in this way. Either side may be used as the right side, depending somewhat on the regularity of the lace selvage and where it is to be used. This is an excellent way to attach lace to the hems of lingerie.

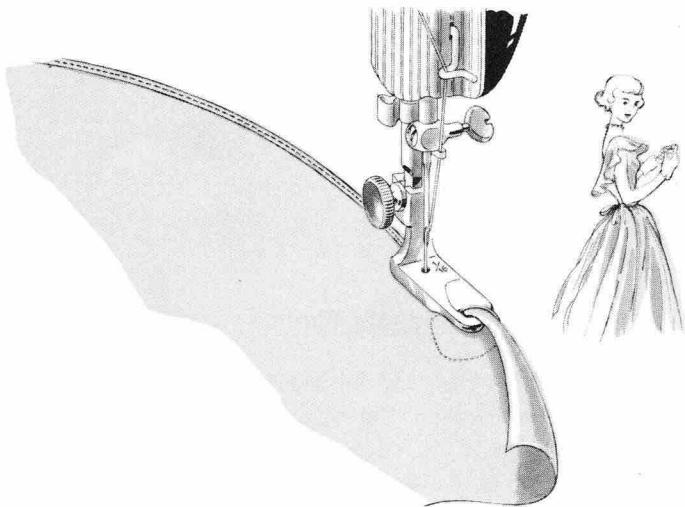
French Method of Applying Lace



WHEN LACE IS APPLIED underneath the fold of the hem the procedure is exactly the same as when making a hemmed seam. The delicate texture of the lace requires light handling.

This method of joining lace is especially appropriate when lace insertion or edging is used on an article that is reversible or where both sides must be neatly finished, as when lace is used on the edge of a ruffle for curtains, dressing tables or bed spreads, or when lace insertion is used on such furnishings. Children's dresses, blouses, and slips often call for this method of joining lace, due to its durability and delicacy.

The Flange Hemmer



WHEN A VERY FINE HEM is required on delicate fabrics the Flange Hemmer, available separately at SINGER SEWING

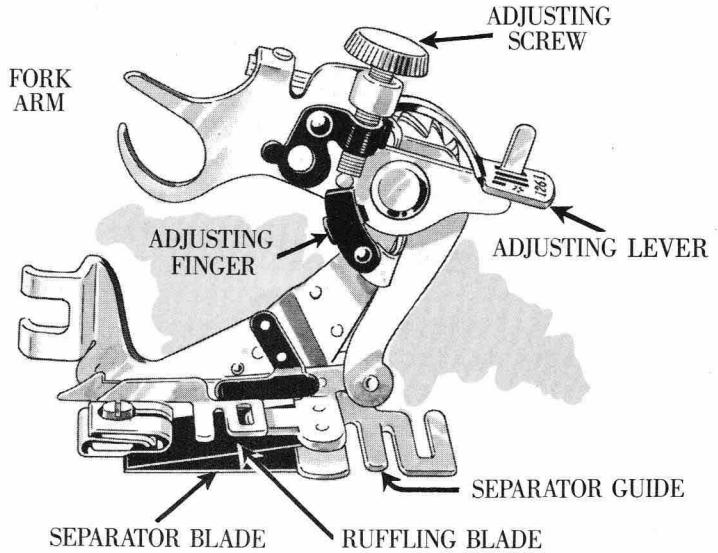
CENTERS, is wonderful to use. The hem is nearly half the width of that made with the narrow hemmer supplied with SINGER Sewing Machines. The flange and scroll of this special hemmer control the most delicate fabrics into beautiful fine hems. Suitable for chiffon, silk organdy, and fine cottons, the flange hemmer is especially appropriate for finishing edges on evening gowns, delicate ruffling on children's dresses and babies' wear, as well as for a multitude of other articles, where delicacy is important.

Attach a thread to the corner where the hem is to begin. Holding the thread ends in the left hand, the edge of the material in the right, bring the material into the scroll so that the needle will penetrate the very end of the fabric. Hold the threads at the back and guide the starting of the hem from both the front and back of the Hemmer for a few inches. It is amazing to see such a perfectly formed hem accomplished with such ease.

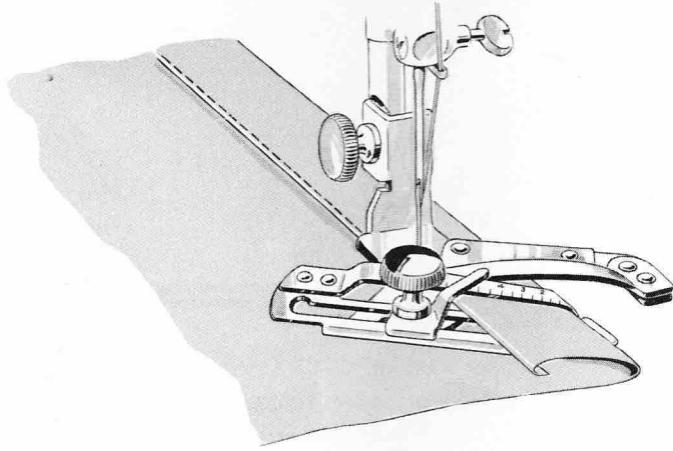
evenly, being certain that the grain of the fabric through the hem is in a straight line with the general grain in the fabric. Hold the threads at the back and guide the hem into the scroll stitching carefully until the hem is well started. The Adjustable Hemmer is used more often for household furnishings than for wearing apparel, since it is not suitable for hemming curves.



The Ruffler



The Adjustable Hemmer



WHEN HEMS on straight edges wider than $\frac{1}{8}$ inch are required, the Adjustable Hemmer will be helpful. The adjustable guide that forms the folds of the hem is regulated after releasing the thumb screw and moving the scale until the pointer indicates the width of hem desired. Number 1 indicates the narrowest hem, and 8 the widest hem of one inch.

Form a scant $\frac{1}{8}$ inch creased fold for not more than 2 inches in the edge to be hemmed and form a second soft fold the approximate width of the hem. Bring the single fold into the scroll and underneath the numbered scale as far as the pointer used to gauge the setting of the scale. Draw the fabric toward you until the needle, when positioned, will catch the folds of the hem

THE RUFFLER is a fascinating attachment, effective and simple to operate. Gathered as well as pleated ruffles can be made by merely regulating the attachment. Ruffles may be made separately, or made and applied at the same time. Locate the Ruffler on the machine in place of the presser foot, at the same time fitting the *fork arm* over the needle clamp screw. Make sure the presser bar screw is tightened securely as well as the needle clamp screw.

There are three points for adjusting the attachment. The *adjusting lever* spaces the fullness of the ruffle. Number 1 is the space setting for gathered ruffles and when set at 1, the Ruffler places fullness at every stitch. Numbers 6 and 12 are space settings for pleats, placing pleats either 6 or 12 stitches apart. The star is for straight stitching, and is used when grouping gathers or pleats.

The *adjusting finger* is used only for pleating and effects the width of the pleat. It is thrown out of action by bringing it out of contact with the adjusting screw located directly above it.

The *adjusting screw* regulates the fullness of gathers. When turned down to its limit and when the adjusting finger is in use,

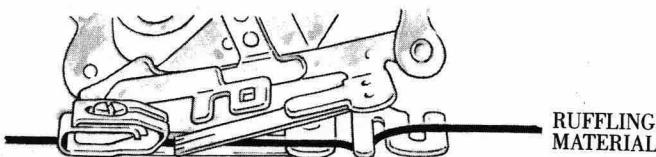
the attachment is set for its deepest pleat. When turned upward to its limit and the adjusting finger is out of action, the Ruffler makes only a hint of fullness.

The *ruffling blade* and the *separator blade* are of blue steel and hold the material to be gathered or pleated between them. The Ruffler blade forms the gathers or pleats in the ruffle by carrying the fabric to the needle according to the spacing and fullness for which the Ruffler is adjusted.

The *separator guide* has slots into which the edge of the material is placed for the purpose of separating material to be ruffled from material to which the ruffle is attached.

Become Familiar with the Ruffler

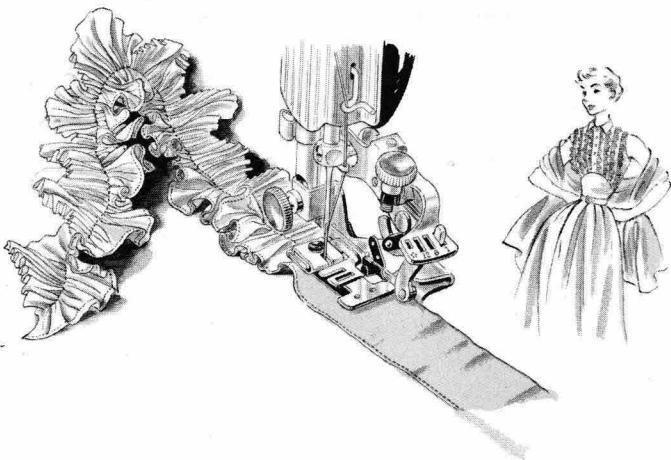
The best way to become familiar with the Ruffler is to place a long piece of fabric into the Ruffler passing it between the separator blade and the Ruffler blade and through the first separator



guide. Set the *adjusting lever* on 1, the adjusting finger out of contact and turn the adjusting screw upward. Lower the presser bar lifter and begin to stitch. Gradually increase the amount of fullness by turning the adjusting screw downward. When a moderate amount of fullness is apparent, change the stitch length on the stitch regulator.

Shortening the sewing machine stitch makes the ruffle more full, lengthening the stitch makes it less full, since an equal amount of fullness is put into each stitch regardless of its length at a given attachment setting. Continue to turn the *adjusting screw* downward and finally small pleats at every stitch result.

Shell Trimming

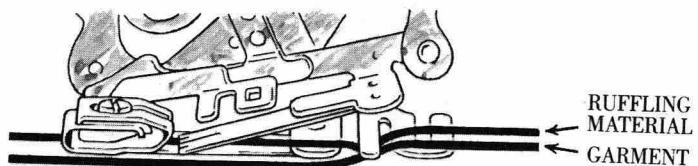
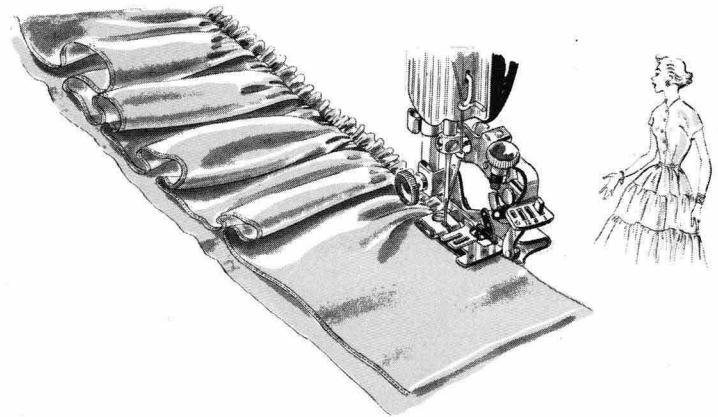


Shell trimming is made at the above adjustment by merely taking the fabric out of the separator guide and while operating the speed of the machine rhythmically, the material is held first

to one side and then to the other. It is often made from a $\frac{3}{4}$ inch strip that has been hemmed on one edge with the Flange Hemmer. Shell trimming is a dainty trimming for blouses, collars, children's clothes and lingerie.

Continue to stitch, but change the position of the *adjusting finger* by placing it in action, and set the *adjusting lever* on 6. The attachment is now set for the deepest pleat. Again vary the stitch length on the sewing machine. A short stitch places the pleats more closely together, a long stitch separates the pleats a greater distance. With the *adjusting lever* set on 12 the pleats are placed 12 stitches apart. When the 6 or 12 spacing is used alternately with the star setting, pleats are formed in groups. Even spacing between groups is accomplished by counting the stitches between groups of pleats.

Attaching Ruffle

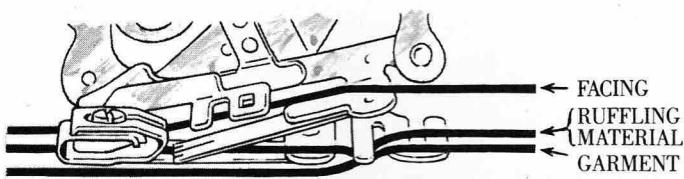


The ruffle may be attached while being formed by placing the fabric between the *separator blade* and the feed of the machine while the ruffle is held between the two blades. Right sides of fabric are placed together when the seam is to fall to the inside as on a plain seam.

The texture of the fabric influences the performance of the Ruffler as well as the results. Soft fabrics cut on the crosswise grain are best adapted to gathered ruffles. Crisp fabrics cut on the crosswise grain form the sharpest pleats. However, crisp fabrics like organdy can be gathered into a uniform ruffle if dampened with a small, moist sponge as the fabric enters the Ruffler.

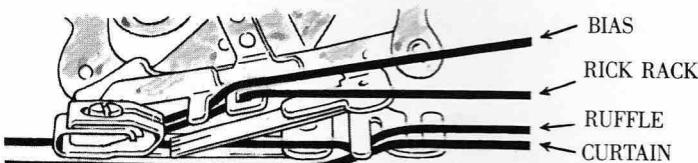
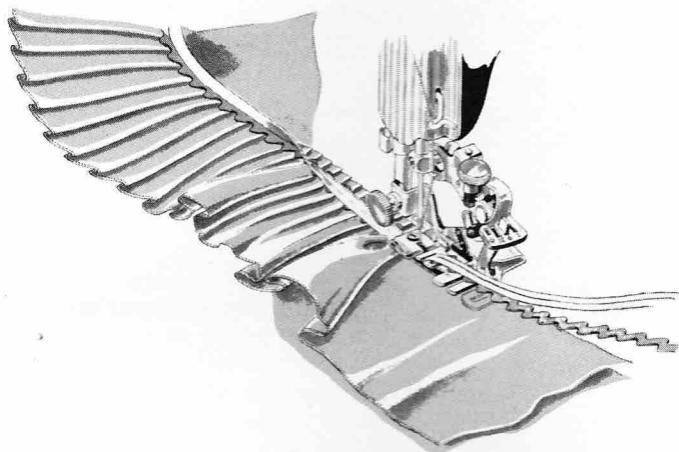
Glazed surfaced fabrics will ruffle and pleat best if the glazed side is downward and the soft backing is next to the Ruffler blade. There are many stiff heavy fabrics that are not suitable for gathered ruffles but work up attractively into softly pleated ruffles. Always test the setting of the Ruffler on a scrap of self fabric, before proceeding with the work.

The Ruffler is equipped with several additional guides making it possible to ruffle, attach and face in one operation.



Attaching Ruffle with Piping

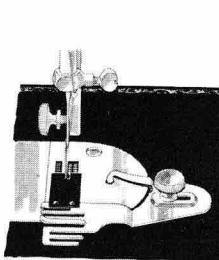
A very pretty treatment is to pleat or gather a ruffle, attach it, and use both piping and a bias tape facing in one operation. The piping can be rick rack, or a folded bias strip cut double the width of the piping slot.



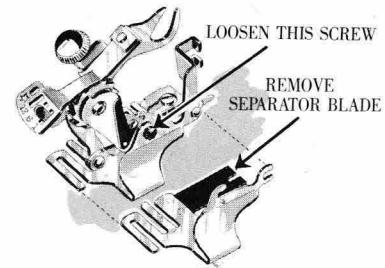
Place the piping or rick rack into the slot indicated "rick rack" in above illustration, finished edge to the left. Then, before passing the piping under the foot, place a piece of bias, folded edges upward, on top of the piping. Underneath it place the ruffle right side upward and positioned between the blades. The material to which the ruffle is joined is placed underneath the separator blade, right side downward. Draw all of these under the foot. Turn the balance wheel until the needle catches the layers of fabric, then place the seam edges into the separator guide and the bias in the guide nearest the piping slot.

Lower the presser bar lifter before stitching. Guide the ruffle separately from all other pieces since it feeds into the attachment more rapidly than the other materials. Finish after pressing with top stitching along the edge of the bias at the same time concealing all unfinished edges.

Shirring Plate with Ruffler



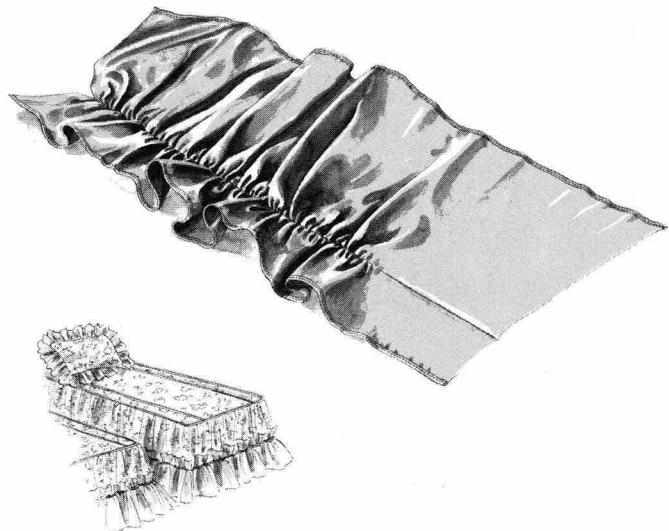
THE SHIRRING PLATE IN POSITION



A separate shirring plate is available for use with the Ruffler when it is expedient to stitch at a distance greater than $1\frac{1}{4}$ inches from the edge. Wide headings on ruffles and rows of shirring within a wide piece of material are typical examples of where the shirring plate is helpful.

Remove the separator blade from the Ruffler by loosening the screw on the right side of the attachment sufficiently to release the separator blade holder.

Attach the shirring plate to the bed of the machine with its thumb screw. The prong of the shirring plate fits into the hole in the throat plate, and the center of the blue blade should be in line with the needle. Then attach the Ruffler in the usual way. It is now possible to extend the material as far to the right as the treatment demands.



From time to time new devices are developed to do many of the sewing operations mechanically that would otherwise require dexterity and skill on the part of the operator. Keep in touch with your SINGER SEWING CENTER to learn of such new equipment and to see how easy each of these time savers is to use.

Lesson 3—Sewing Machine Attachments**First Practice Session—Edgestitcher and Multi-Slotted Binder**

1. Edgestitcher—Divide a 7 inch by 8 inch piece of fabric into thirds. Pink and Edgestitch one edge. Join this section to another with a French Seam. Join the third section with a piped seam.
2. Edgestitcher—Joining Lace and Fabric Bands—Divide an 8 inch by 4 inch piece into thirds. Fold cut edges to center and press. Join alternate bands of lace and fabric using Slot 4 for lace and Slot 1 for fabric.
3. Multi-Slotted Binder—Bind one edge of an 8 inch by 4 inch piece with No. 5 Bias Binding. Fold sample in thirds and cut on only one fold. Form a bound seam. Apply a French Fold of No. 5 Bias Binding following the remaining crease. Use both binding and piping on remaining edge.

Second Practice Session—Hemmers and Ruffler

4. Foot Hemmer—Hem one edge of $1\frac{1}{2}$ inch crisp lawn.
5. Foot Hemmer—Divide an 8 inch by 4 inch piece in two, join with a hemmed seam. Apply lace on each edge, one edge French Method, the other the domestic method.
6. Adjustable Hemmer—Hem one edge of 8 inch by 4 inch fabric with a $\frac{3}{8}$ inch hem.
7. Ruffler—Become familiar with the adjustments on the Ruffler by using narrow piece of soft lawn. Begin with Ruffler set for scant gathering, increase setting until full gathering is obtained. Adjust for pleating and make group pleating.
8. Apply both gathered ruffle and pleated ruffle to 8 inch by 4 inch fabric used in step 6.
9. Ruffler—Join ruffle to fabric with facing of Bias Tape and pipe seam with rick rack in a single operation.

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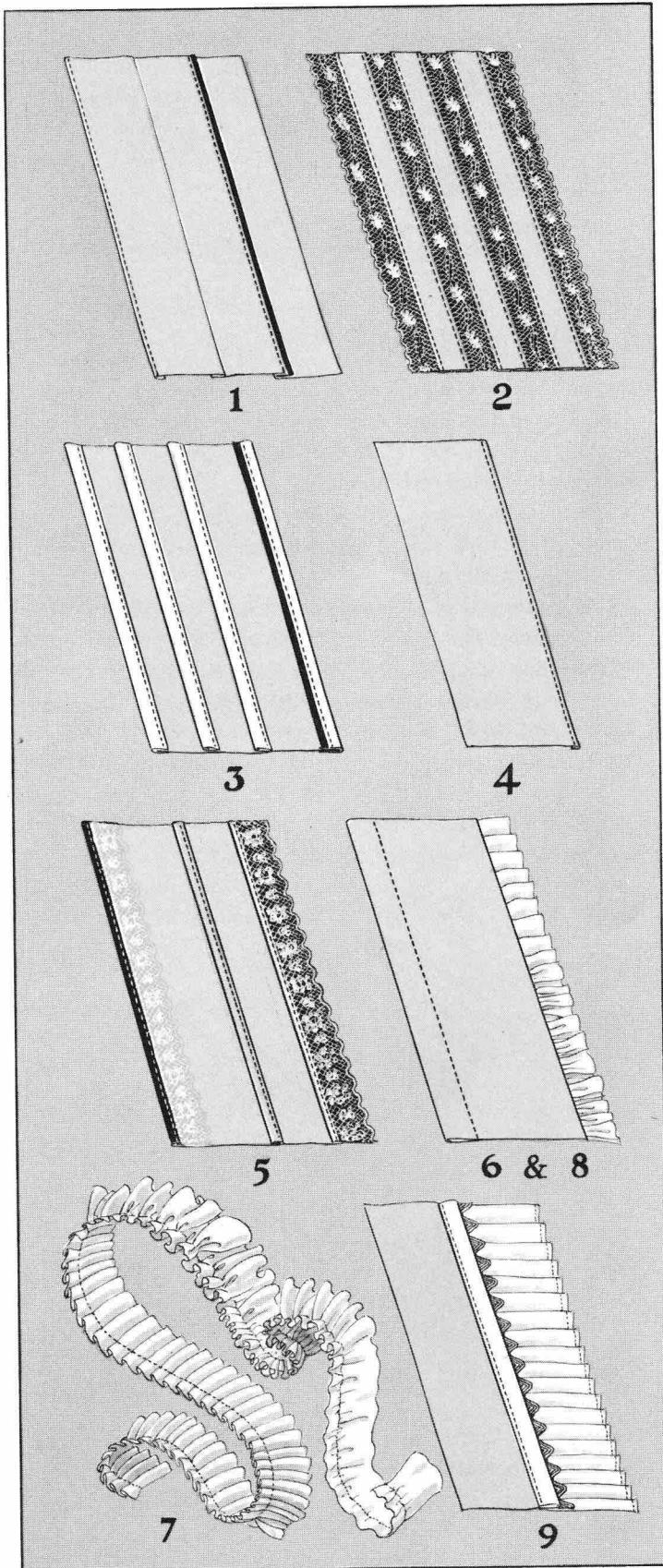
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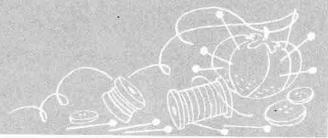
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Fashion Stitches

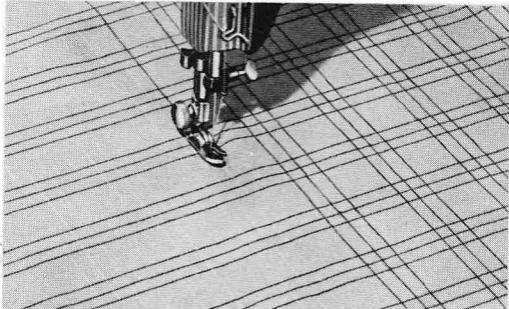


MANY LOVELY AND FASCINATING STITCHES are made on SINGER Sewing Machines without attachments. Their scope is as unlimited as your imagination and ingenuity. Practice the few simple, basic methods presented in this chapter until you have gained understanding and skill, then set to work on the most interesting phase of sewing yet experienced.

Of special interest to those with artistic ability, the Fashion Stitches offer unlimited expression on clothing, linens, and furnishings for the home. Ready-planned designs are plentiful among art needlework designs for those who prefer to follow patterns. Many have cleverly drawn on jewelry, wall paper, paintings, textiles and magazine illustrations for designs that are quickly adapted to stitching. For greater individuality investigate threads and yarns that are available. Many of these are quite suitable to sewing machine usage in addition to the regular threads spooled for home sewing.



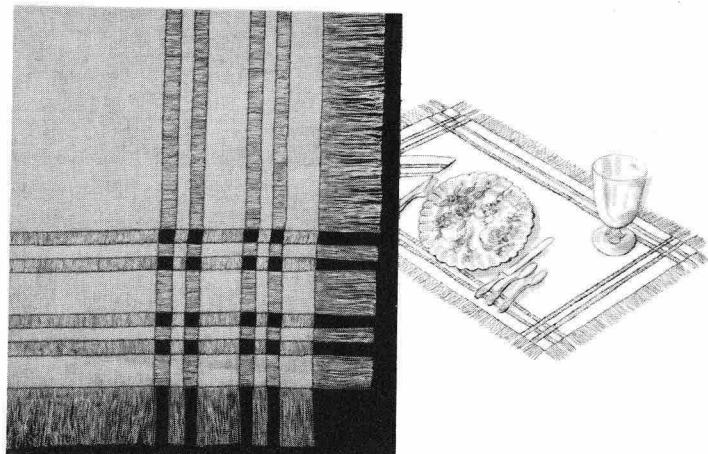
The Ornamental Stitch



ONE OF THE SIMPLEST and most effective of the Fashion Stitches, the Ornamental Stitch is accomplished with the stitch regulator set at No. 30. Size A sewing silk or mercerized sewing thread is used through a needle of appropriate size. If No. 0000 mercerized thread is used a size 9 needle is best. Size A silk or No. 00 mercerized thread requires a size 11 needle. If regular 50 mercerized thread is used, a size 14 needle is necessary.

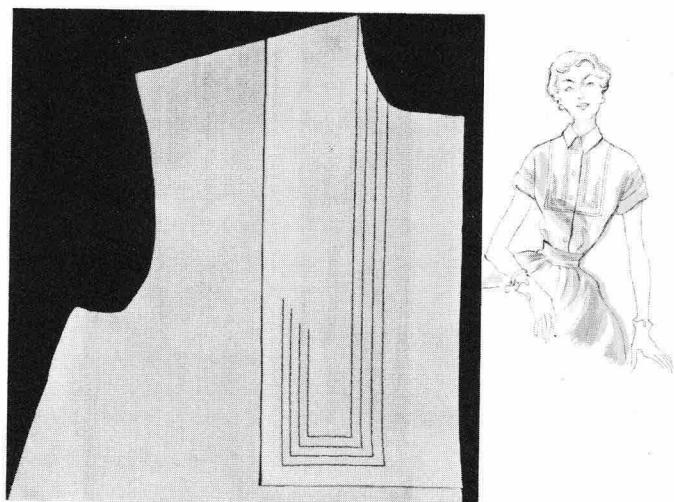
The bobbin thread is always identical to the needle thread. The Ornamental Stitch is made after a single thread has been drawn from the weave of the fabric, following the exact path of the opening created by the withdrawn thread. The appearance is that of the Ornamental Stitch being part of the woven fabric. No change in tension is made, Tensions remain the same as for regular stitching. Do not remove the presser foot.

A fabric of plain weave where lengthwise and crosswise threads are of the same weight is best adapted to this treatment. The stitching always follows the lengthwise or crosswise thread, or both. Striped, plaid, or checked effects may be created. Fringed edges or drawn effects are combined with this stitching to produce variation and interest.



Designs of geometric type, where stitching lines terminate at points within the fabric, are accomplished with no thread ends to tie or conceal if the single thread principle is employed.

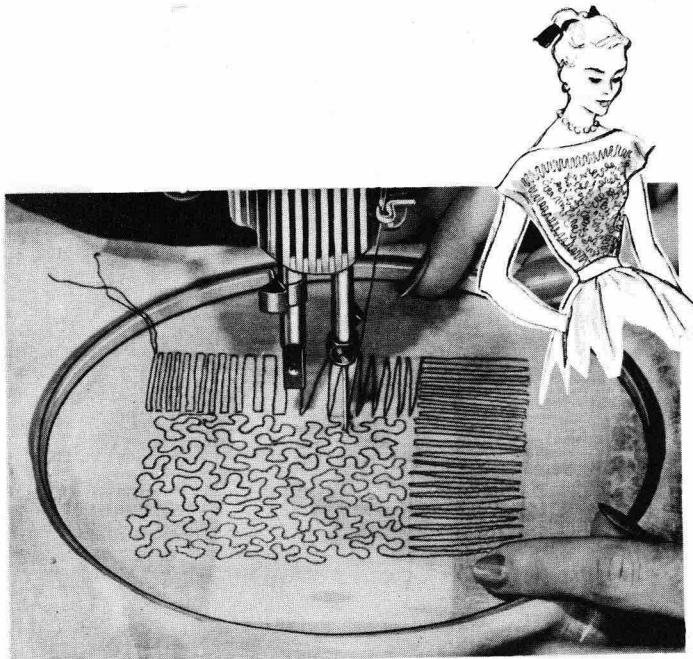
The stitching is begun from the point within the fabric after the bobbin thread is drawn through the fabric and threaded into the needle in reverse, and through the other upper threading points as is done for the single thread tuck. Each line of stitching requires re-threading the needle and upper threading points.



The Ornamental Stitch is especially well suited to table linens, place mats, luncheon sets, cocktail napkins, guest towels and delicate linens, but is equally important for giving accent and interest to plain fabrics in dresses, blouses and children's clothes.

favor the direction in which the needle is threaded. The 301, 201, 15-91 and 221 machines thread from right to left. Therefore the most effective motion is toward the left.

The Etching Stitch

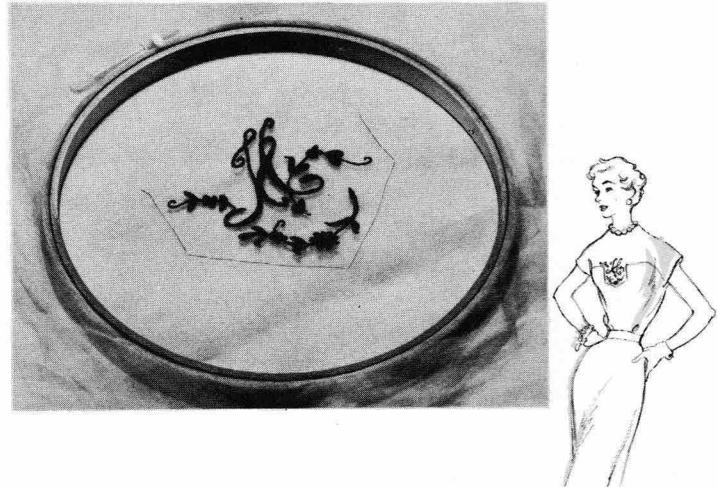


THE ETCHING STITCH employs silk or mercerized thread and a needle of appropriate size. A size 11 needle is used with size "A" silk, a size 14 needle with 50 mercerized thread. Two- and three-cord embroidery threads are becoming more widely distributed and are fine and soft, giving added luster to this type stitching. These threads require a size 9 or 11 needle, depending on their fineness.

A heavier thread is often used in the bobbin when very fine thread is used in the needle. No tension change is required for the Etching Stitch. The upper and lower tensions should be regulated to form an evenly balanced stitch.

The Etching Stitch is a "free-motion" stitch and is always done with the design in embroidery hoops. The presser foot and screw are removed and the feed is dropped. The stitch regulator is set at neutral. A feed cover plate is used on machines not equipped with a drop feed adjustment.

The ability to maintain even stitches requires practice on the part of anyone. Control the speed of the sewing machine smoothly and rhythmically and coordinate with it the even movement of the hoops. While stitching is possible now in any direction, greater accuracy of detail results when the hoops are moved away from the operator. When moving hoops sidewise,



On a test piece of firm fabric, practice moving the hoops to maintain a short even stitch, pivot on the needle and turn hoops a quarter turn, then take one stitch. Pivot again and continue on the second line, always moving the hoops away.

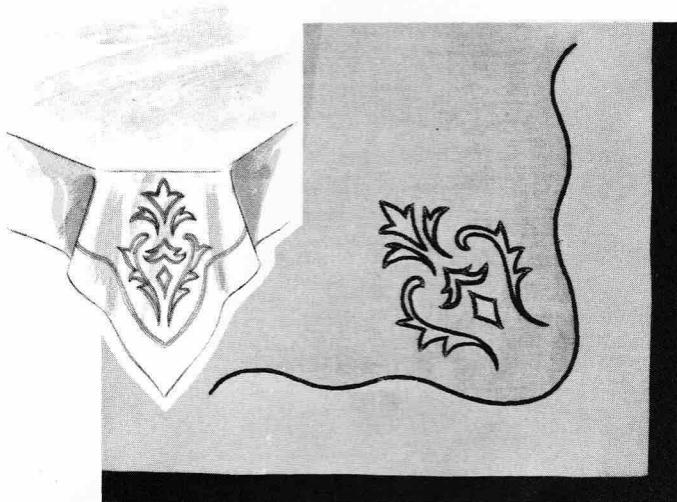


Next practice a back and forth motion of the hoops as might be used in darning, or filling in a design solidly with long stitches. Practice sideward movement by repeating the above exercise, but with side to side movement. Practice curved motion by following a pattern of alternate curves producing a decorative heel and toe design.

Script initials and names may be written with the Etching Stitch, either free hand or following a light pencil or chalk tracing. When beginning the work, pull the bobbin thread to the surface. Holding both threads, begin stitching after positioning the needle in the fabric. Remember the presser bar lifter lever must be down, just as when stitching with the presser foot, otherwise there is no tension on the needle thread. These basic principles apply to all work done in hoops.

Floral, geometric, and silhouette designs may be executed with the Etching Stitch. Often several rows of stitching are used closely together to make the design stand out. The Etching Stitch is suitable for an entire design or for delicate portions of a design in combination with other Fashion Stitches.

Cable Stitch



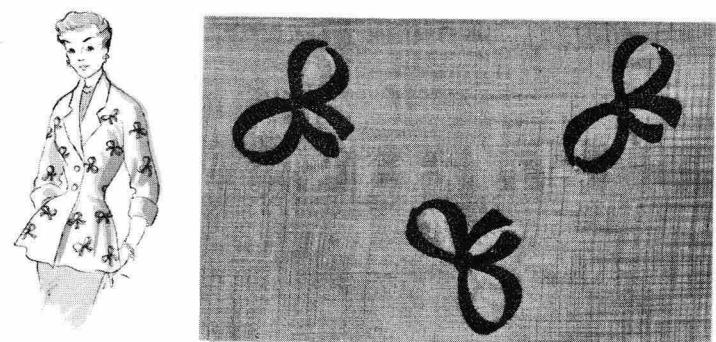
THE CABLE STITCH employs the addition of heavy thread in the bobbin and may be done with the presser foot or quilting foot if the design has intricate curves to follow. The stitch length is usually as long as No. 8 to No. 10 for straight lines and as short as No. 12 to No. 15 for curved lines.

The bobbin tension must be loosened slightly to accommodate the heavy thread. Release the bobbin tension screw an eighth turn, then test. If still too heavy, release another eighth turn and so on, each time testing on a scrap of fabric. It is seldom necessary to loosen the bobbin tension screw more than a half turn for any thread suitable for Cable Stitching.

Threads most popular for the Cable Stitch are No. 8 and No. 5 Pearl Cotton, cable silk, embroidery floss, fine metallic gimp, two-ply sock yarn and metallic yarn mixtures. The upper threading is always of a regular sewing silk or mercerized thread that blends or contrasts with the heavy thread of the bobbin. It is not always necessary to change the upper tension, but it may be increased as much as two or three points if necessary to set the stitch tightly.

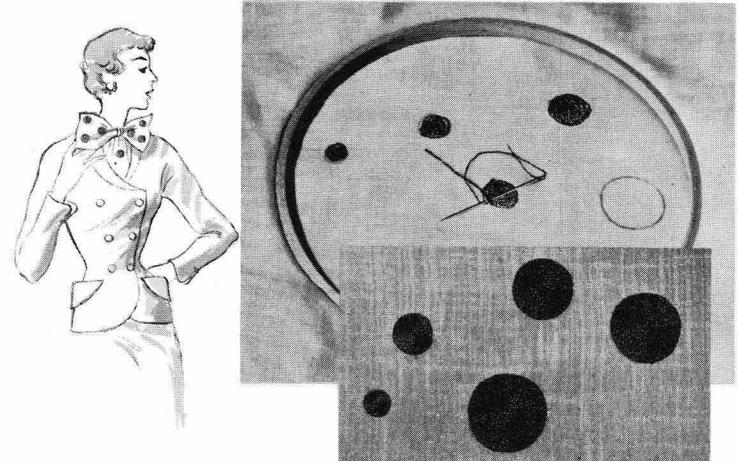
If the lower thread stitches into the fabric with a nubby irregular appearance, the bobbin tension has been loosened too much. If it pulls too taut, the bobbin tension screw must be further released.

Free Motion Cable Stitch



WITH THE PRESSER FOOT and screw removed, stitch regulator set at neutral, the feed dropped and the design in hoops, free-motion Cable Stitching is accomplished, and designs followed with greater facility. Tensions are adjusted the same as for Cable Stitching done with the presser foot.

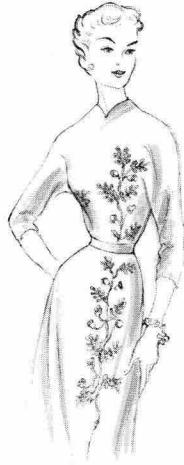
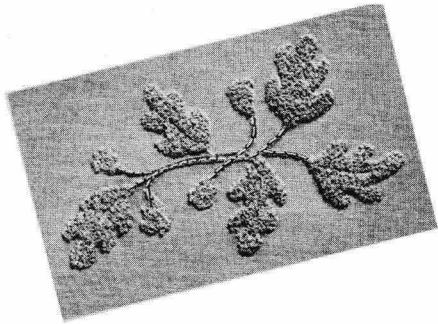
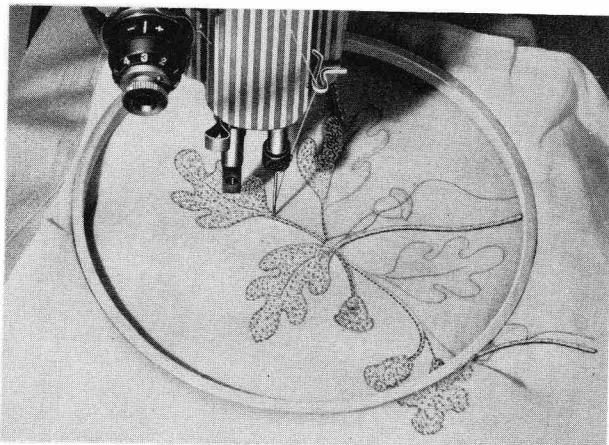
Spiral Stitch



THE SPIRAL STITCH is a variation of the free-motion Cable Stitch and usually requires a slightly tighter bobbin tension. Start in the center of the design by pulling the bobbin thread through to the surface. Move the hoops, forming a small circle slowly, so that stitches are very short. With each circle placed against the preceding circle, gradually increase stitch length by more rapid movement of the hoops until the circle is filled solidly. Crowd the last several stitches against the previous row of stitching and cut threads about 4 inches long.

Draw the cable thread through to the surface by pulling up a loop with the needle thread or by carrying it through with a large eyed hand embroidery needle. Secure the cable thread by stitching over it with a hand sewing needle, making three buttonhole stitches.

Bouclé Stitch



YARN, yarn mixed with metallic, or No. 5 or No. 8 Pearl Cotton are best suited to the Bouclé Stitch. The presser foot and screw are removed, the feed is dropped, or covered with a feed cover plate, the stitch regulator is set at neutral, and the design is placed in embroidery hoops.

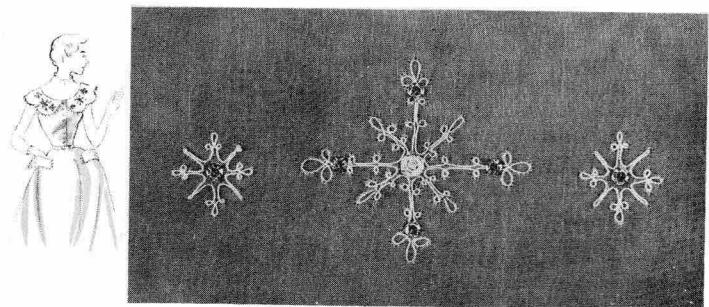
The bobbin tension is loosened slightly more than for cable stitching. The needle thread is of matching silk or mercerized sewing thread and the needle, size 11 or 14, is selected to accommodate the upper thread. It is not always necessary to change the upper tension but it may be increased as much as 2 points.

The Bouclé Stitch is a dense, solid stitch. If applied to jersey or crêpe fabric an underlay of organdy, which carries the design, is recommended.

The Bouclé Stitch is a series of small circles placed closely together producing a nubby textured solid design. Control the speed of the machine slowly, so that the stitch length is long enough for the needle thread not to be apparent on the right side of the design.

The Bouclé Stitch is especially pretty for designs on sweaters and jersey blouses which are often accented with seed pearls or rhinestones. It is equally popular for solid designs on linens, luncheon sets and place mats as well as for monograms on linen guest towels and turkish towels.

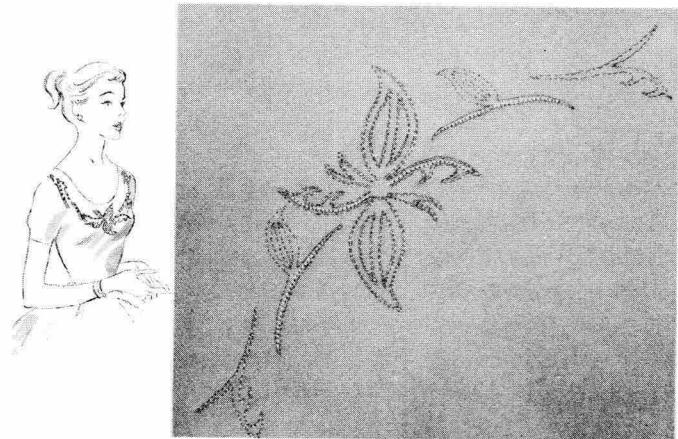
Cordonnet Stitch



THE CORDONNET STITCH takes its name from that of the fine French Gimp thread used in the bobbin. Sewing silk is always used as the needle thread with a size 11 or 14 needle. The bobbin tension is loosened only enough to allow the cordonnet thread to pass freely. Too loose a lower tension will cause stitching with kinks. The needle thread tension ranges from normal to two points tighter.

Any continuous design is appropriate for the Cordonnet Stitch. This stitch, combined with lace, net, rhinestones or pearls is smart and lovely. Especially pretty on sheer fabrics, it gives a frosty appearance.

Metallic Stitch



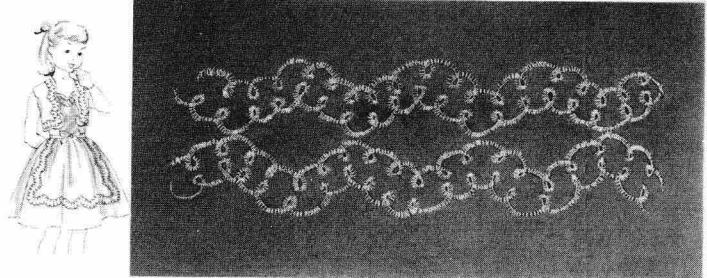
FINE METALLIC GIMP may be used in the bobbin and is a variation of cable stitching. Silk thread of matching color is used in a No. 11 or No. 14 needle. The bobbin tension is loosened just enough to allow the metallic thread to pass without scuffing,

while remaining tight enough to prevent kinking. The needle thread tension is normal to two points tighter.

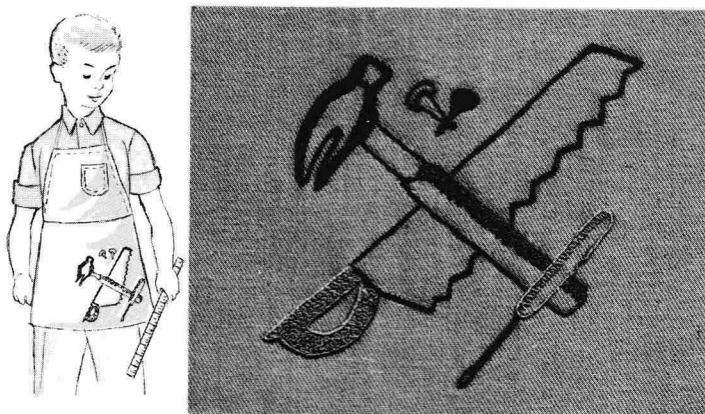
Metallic accents for all-over designs, or as motif designs are high fashion and are often combined with sequins, jewels or pearls to give added sparkle. Monograms and solid motifs are accomplished with long back and forth stitching to produce a solid design.

Thread ends are always pulled to the underside and anchored with several buttonhole stitches made with a hand sewing needle.

Spark Stitch



Signature Stitch



THE SIGNATURE STITCH is named for its application to script initials or names. Regular sewing threads are used for both the needle and bobbin. Heavy duty or size 50 mercerized or silk thread are appropriate. The lower tension is loosened sufficiently to allow the bobbin thread to rise to the surface on the right side of the work. The needle thread tension is tightened two to three points.

Remove the presser foot and screw, drop the feed, and set the stitch regulator at neutral. The hoops are moved very slowly and the machine is run at moderate speed so that the bobbin thread completely covers the needle thread in a gimp-like fashion.

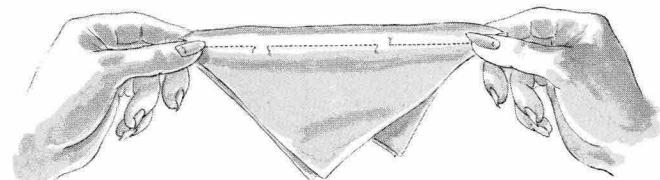
If the stitch is not smooth it is usually because of unsteady movement of the hoops. If, after practicing hoop movement, the stitch remains irregular the bobbin tension has quite likely been loosened too much and lacks any tension control. Tightening the bobbin tension, and perhaps the needle thread tension as well, will bring the tensions into adjustment where a smooth, even stitch results.

The Signature Stitch is most versatile, and is used for designs in outline or solid. Several rows placed very closely together give more emphasis to a design in outline, solid designs are produced by following a miniature heel and toe curved pattern allowing no space between. Tiny loops placed with edges touching give still another effect for solid portions of a design. When finished, all threads are drawn to the reverse side and concealed by tying or working back with a hand needle.

SPARK STITCH is delicate and pretty, and employs regular sewing threads. Heavier thread is frequently used in the needle while a fine thread of the same type is used on the bobbin. The needle must be selected to accommodate the needle thread. Silk or mercerized threads are appropriate, depending upon the fabric and its use.

The presser foot and screw are removed, the feed dropped, and the stitch regulator is set at neutral. The work is done in hoops, right side upward. The bobbin tension is loosened slightly more than for Signature Stitch and the upper tension is tightened three or four points above normal. The hoops are always moved in circles, resulting in the bobbin thread being drawn through the fabric spoke-fashion, producing tiny radiating sparks.

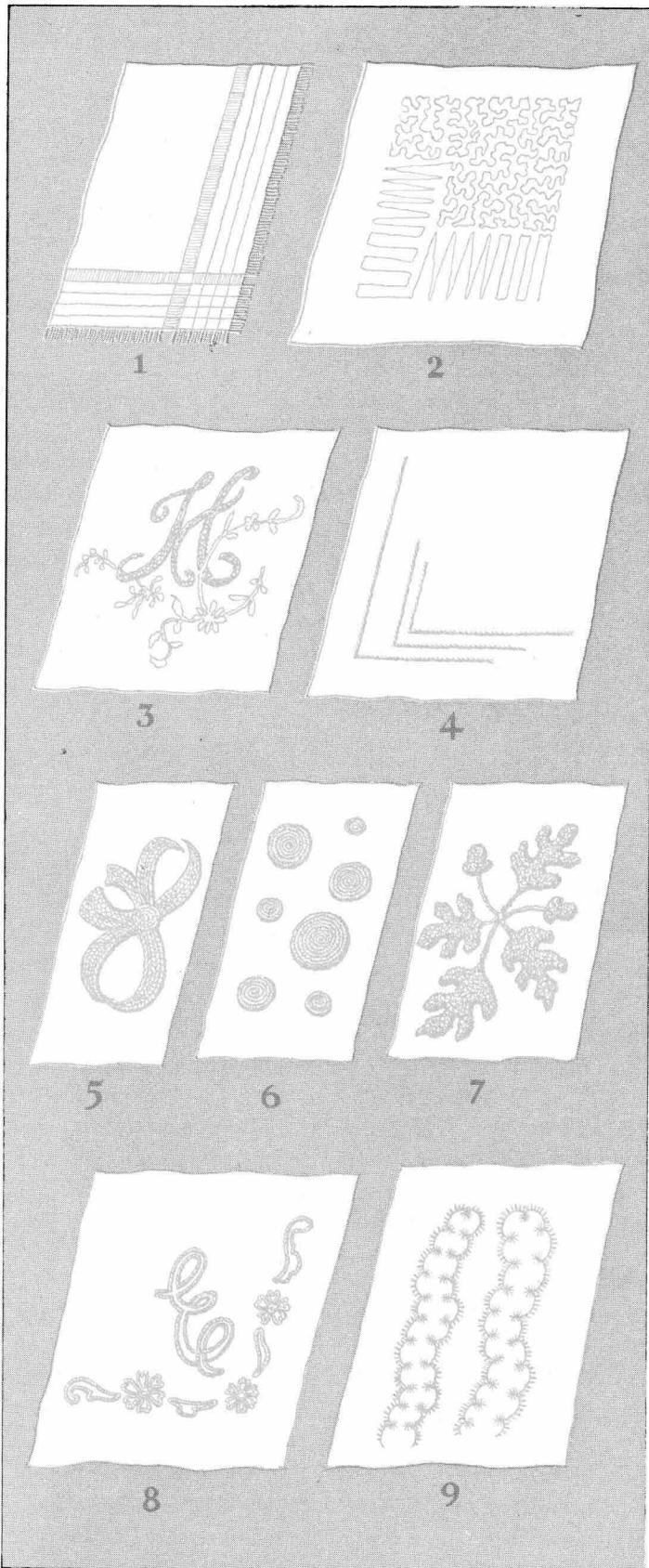
The Spark Stitch is used for outlining a design with either a single or double row of small circles, or to fill an area solidly with a frosty mass of stitches. Thread ends are drawn to the underside and fastened invisibly by working them back with a hand needle.



Return Tensions to Normal

A notation should always be kept of the upper tension reading that produces a good stitch with size 50 mercerized thread. Thread both needle and bobbin with size 50 mercerized thread when Fashion Stitching has been completed. Return upper tension to this reading. Then set bobbin tension so that the stitch appears exactly the same on both sides when two thicknesses of muslin are stitched.

To further prove the correctness of this adjustment, stitch diagonally across a square of two thicknesses of muslin and grasp each end of the stitching firmly between the thumbs and fingers. Pull, snapping the line of stitching. Both threads should break approximately at the same place. If only the bobbin thread breaks, the bobbin tension is too tight. If only the upper thread breaks, the bobbin tension is too loose. When the correct upper tension reading has been noted and recorded before doing Fashion Stitches, only a few moments are required to regain a good normal tension.

Lesson 4—Fashion Stitches**First Practice Session—Ornamental and Etching Stitches**

1. Ornamental Short Stitch—Draw a single thread from the weave of the fabric at $\frac{1}{4}$ inch intervals along one side and one end of the fabric. Stitch with No. 30 stitch following the drawn thread. Edges may be fringed or drawn work may be done between alternate lines of stitching.
2. Etching Stitch—Remove presser foot, set stitch regulator at neutral, and drop or cover the feed. Place fabric in hoops and practice “free-motion” by stitching forward, pivoting and turning hoops. Then practice moving hoops forward and backward. Practice side to side motion and finally curved heel and toe motion.
3. Etching Stitch—Follow monogram and floral design in outline or solidly with short, even stitches.

Second Practice Session—Cable, Spiral and Bouclé Stitches

4. Plain Cable Stitch.
5. Free-Motion Cable Stitch.
6. Spiral Stitch.
7. Bouclé Stitch.

Third Practice Session—Signature and Spark Stitches

8. Signature Stitch.
9. Spark Stitch.

Return tensions to normal and test on a double layer of muslin.

Fashion Stitches are effective and easy to accomplish but require practice in the beginning. Continue to practice a few minutes at a time for several days to develop a smooth, even handling of the hoops and a coordinated control of stitching speed.

Your Memoranda

Zipper Closures

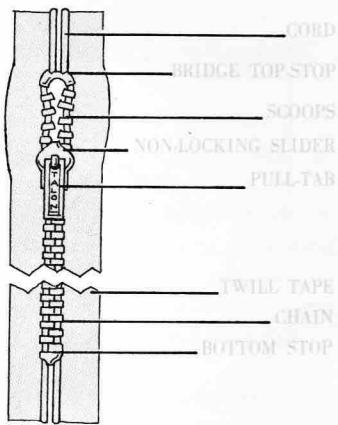


Dress Zipper Application

SMOOTHLY-FITTED, inconspicuous plackets are important to well styled garments. Zippers answer this need by supplying a secure and flat closure. Through simplified and speedy sewing techniques, a perfect zipper application can be made by anyone who sews. First select a dress placket zipper of the correct length, 9", 10" or 12", then follow step-by-step instructions to insure a neat, professional application.

CHECK THESE POINTS:

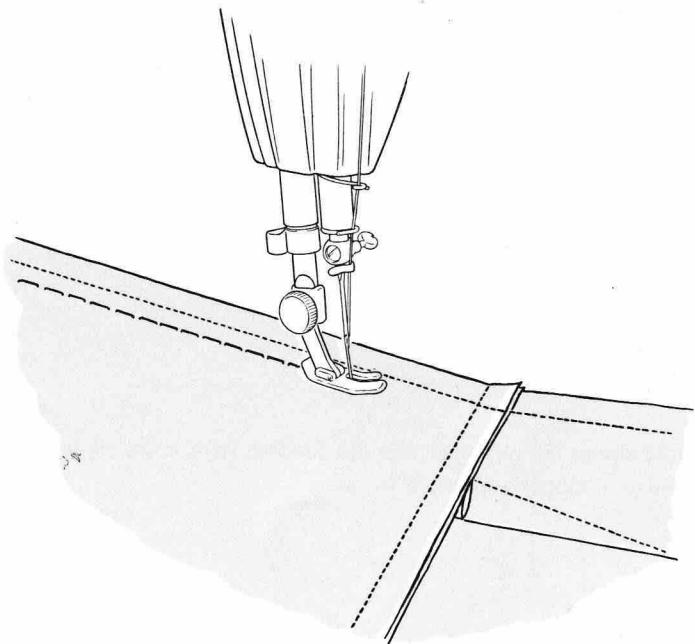
- Place zipper in left side seam for convenience when opening and closing a placket.
- Fit dress before applying zipper. Seams are more accurately adjusted before zipper is stitched in place.
- Refer to back of pattern envelope to learn length of zipper recommended for style and cut of dress.



BEFORE SEWING IN A DRESS ZIPPER

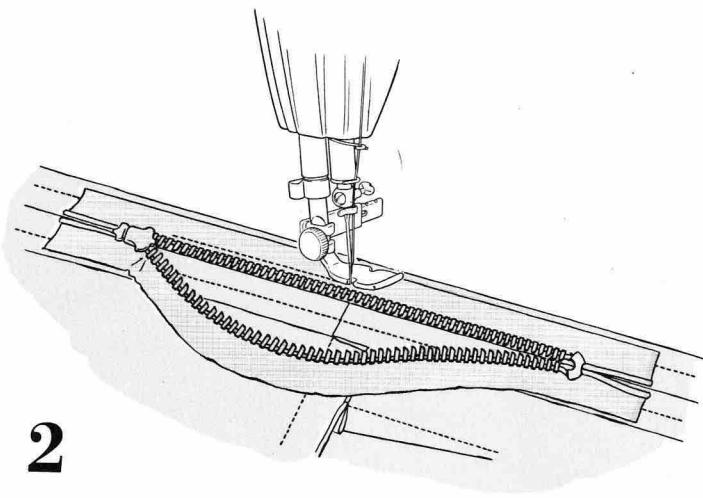
- Determine placket length from zipper (metal portion) with pull-tab up.
- Place stay-stitching (a line of regular length machine stitching used to prevent stretching) $\frac{3}{8}$ " from seam-edge on each side of placket opening.
- Stitch from bottom to top in order to preserve the grain of fabric.

- Check placket seam allowance which should be $\frac{5}{8}$ " to $\frac{3}{4}$ " wide. If narrower, stitch seam binding to each edge of seam.



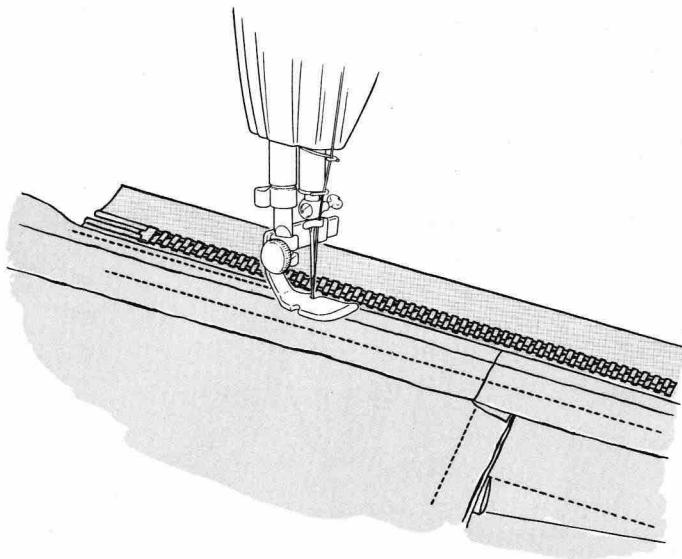
1

Machine-baste (long stitch) placket opening. Press seam open.



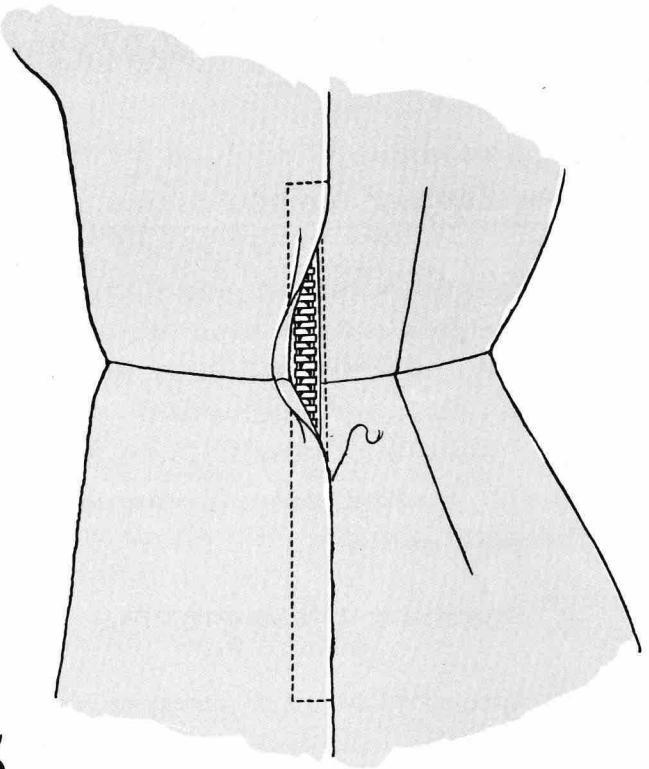
2

Attach zipper foot to machine. Open zipper. Place face-down on back seam allowance with edge of teeth at seamline and bottom stop at end of basting. Stitch to seam allowance alongside of zipper.



3

Close zipper. Turn zipper face-up. Smooth back seam allowance at edge of zipper and stitch to tape.



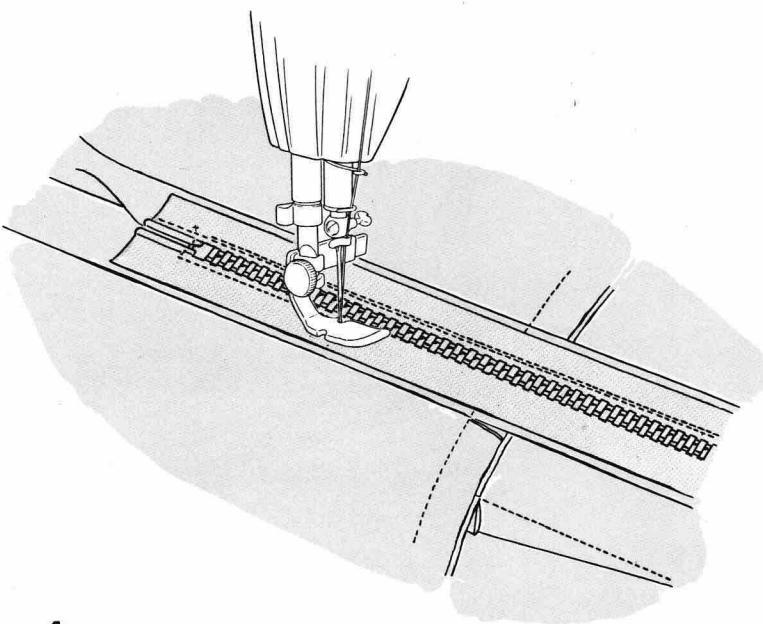
5

Press application. Remove machine-basting from seamlne.

FINE POINTS ON:

Dress Zipper Applications

- Keep zipper taut when measuring for placket length.
- Release stitches in waistline seam from outside edges to seamlne. This allows seam to spread at waistline and prevents a bumpy or buckling placket.
- Turn zipper pull-tab up when stitching.
- To turn sharp corners, place needle in fabric, raise presser foot, and pivot on needle. Lower presser foot and continue stitching.
- Allow stitching line to fan out slightly around slider.
- Tie loose thread ends on final stitching outlining placket. Clip all loose thread ends short.
- Work from inside of garment when removing machine-basting from seamlne.
- Press placket on inside of garment. Place velvet press pad beneath placket and moistened press cloth over zipper. Hold iron lightly over placket. Allow steam to penetrate cloth.



4

Turn zipper face-down, flat on seam. Stitch across lower end, up front alongside zipper, and across top.

Skirt Zipper Application

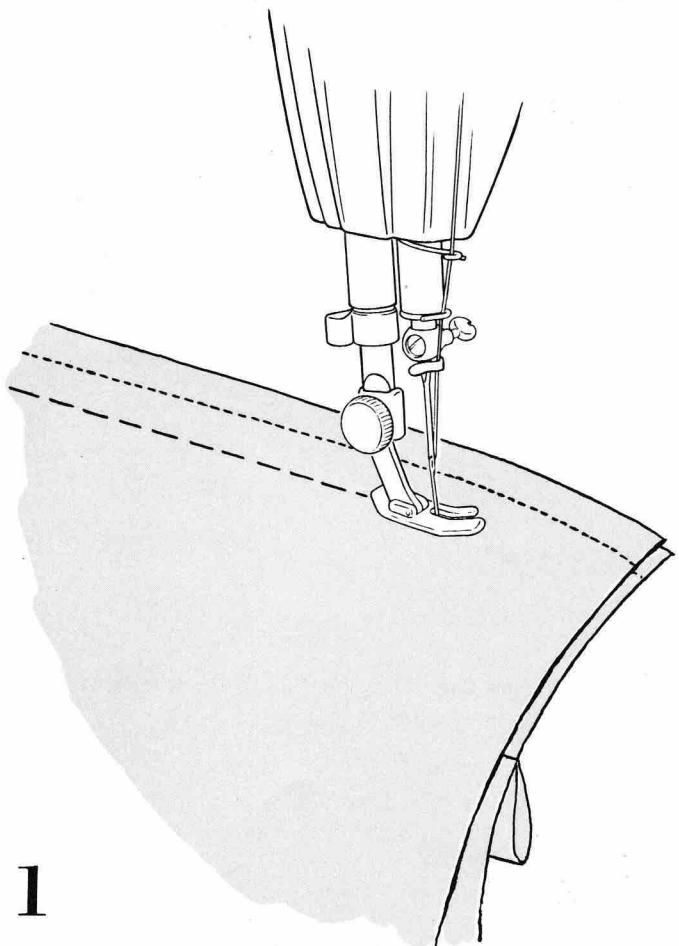
WELL STYLED "SEPARATES" demand snugly fitted, smoothly closed waistlines. The use of the correct zipper assures a neat, securely fitted waist and hipline. A correctly placed and applied skirt zipper results in a reliable, flat, inconspicuous placket. The method of zipper application used in skirts also applies to zipper plackets for shorts and slacks. Use a regulation 7" length skirt zipper.

CHECK THESE POINTS:

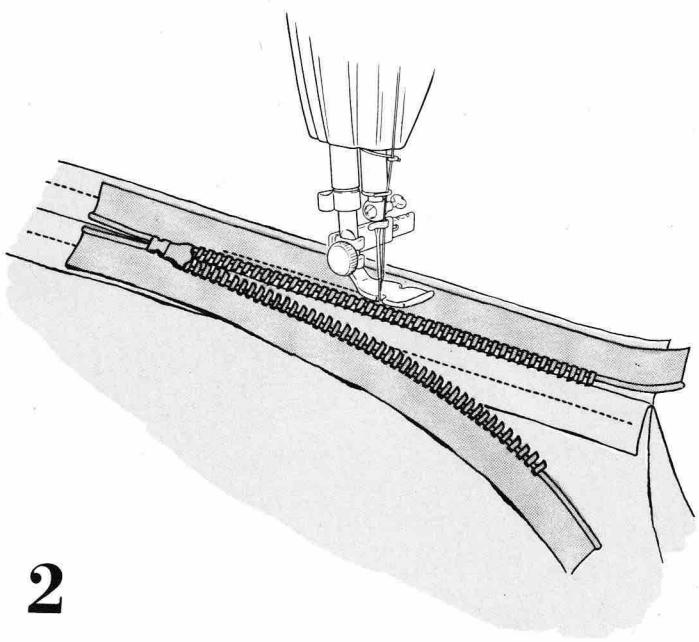
- Place zipper in left side seam or center back seam.
- Fit skirt before applying zipper. Seams are more accurately adjusted before zipper is stitched in place.
- Leave enough seam allowance above top of zipper to attach skirt waistband.

BEFORE SEWING IN A SKIRT ZIPPER

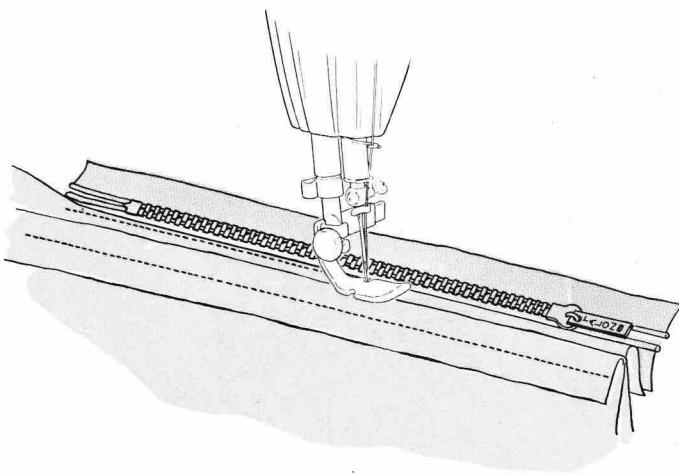
- Determine length of the placket from zipper (metal portion) plus waistline seam allowance.
- Place stay-stitching (a line of regular length machine stitching used to prevent stretching) $\frac{3}{8}$ " from seam-edge on each side of placket opening.
- Stitch from bottom to top in order to preserve the grain of fabric.
- Check placket seam allowance which should be $\frac{5}{8}$ " to $\frac{3}{4}$ " wide. If narrower, stitch seam binding to each edge of seam.



Machine-baste (long stitch) placket opening. Press seam open.

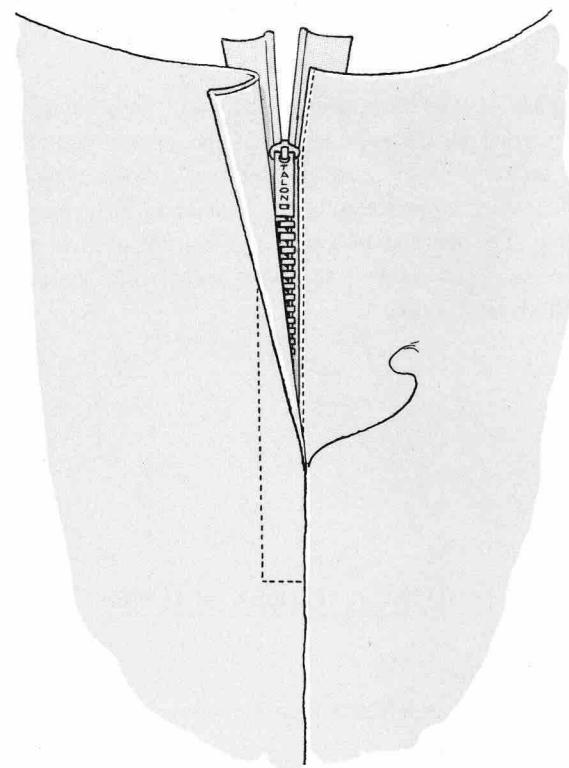


Attach zipper foot to machine. Open zipper. Place face-down on seam allowance with edge of teeth at seamlne, and bottom stop at end of basting. Stitch to seam allowance alongside zipper.



3

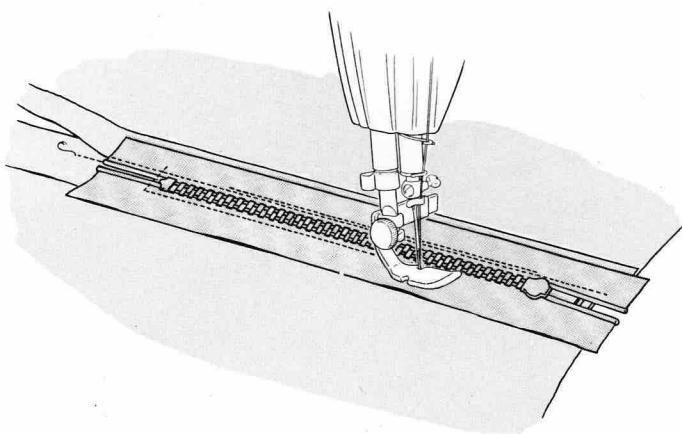
Close zipper. Turn zipper face-up. Smooth back seam allowance at edge of zipper and stitch to tape.



5



Press application. Remove machine-basting from seamlne.



4

Turn zipper face-down, flat on seam. Stitch across lower end, up front alongside of chain.

FINE POINTS ON:

Skirt Zipper Application

- Keep zipper taut when measuring for placket length.
- Turn zipper pull-tab up when stitching.
- To turn sharp corners, place needle in fabric, raise presser foot, and pivot on needle. Lower presser foot and continue stitching.
- Allow stitching line to fan out slightly around slider. Tie loose thread ends on final stitching outlining placket. Clip all loose thread ends short.
- Trim tape ends flush with top of skirt before attaching waistband.
- Work from inside of garment when removing machine-basting from seamlne.
- Press placket on inside of garment. Place towel or velvet press pad beneath placket and moistened press cloth over zipper. Hold iron lightly over placket. Allow steam to penetrate cloth.

Neckline Zipper Application

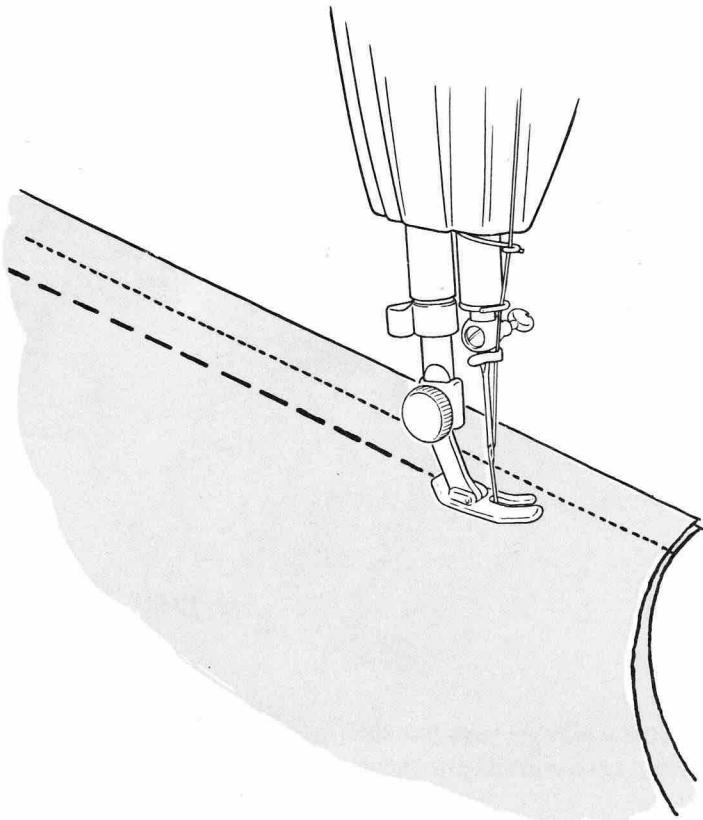
ZIPPERS ARE OFTEN SET into a center front or back seam at the neckline, down the back or front of a dress, housecoat, or blouse, or into a sleeve seam at the wrist, in much the same way as the slotted seam is made. The zipper takes the place of the underlay of fabric characteristic of the slotted seam. An extra fine zipper, both flexible and sturdy, is available for this closure. The zipper tape is of a corresponding fine texture making the closure appropriate for fine, supple fabrics.

CHECK THESE POINTS:

- Refer to back of pattern envelope for length zipper suggested for placket closure.
- Fit garment before applying zipper if placket seam is a side bodice or wrist application. Seams are more accurately adjusted before zipper is stitched in place.
- Apply zipper to center back or front placket before sewing shoulder and side seams. Garments are more accurately fitted when the neckline application is in place.

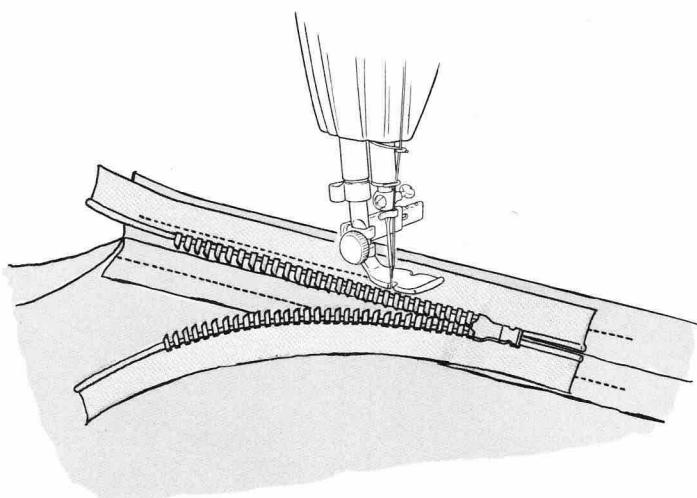
BEFORE SEWING IN A NECKLINE ZIPPER

- Determine length of the placket from zipper (metal portion) plus neckline seam allowance.
- Place stay-stitching (a line of regular length machine stitching) $\frac{3}{8}$ " from seam-edge on each side of placket opening, if edges of opening are off-grain.
- Check seam allowances of placket which should be at least $\frac{5}{8}$ " wide. If narrower, stitch seam binding to each edge of seam.



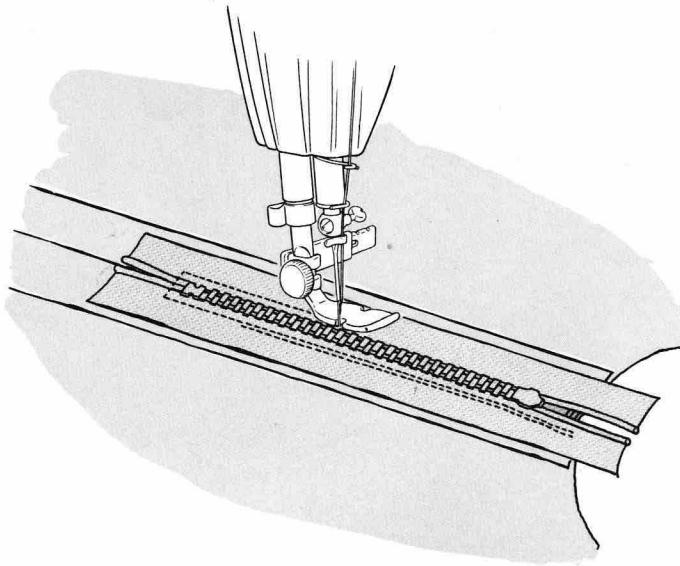
1

Machine-baste (long stitch) placket opening. Press seam open.



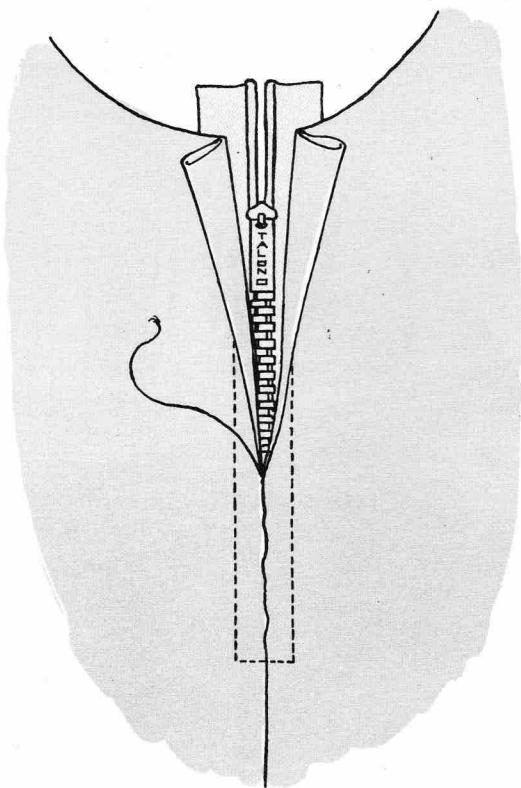
2

Attach zipper foot to machine. Open zipper. Place face-down on seam allowance with edge of teeth at seamline, and bottom stop at end of basting. Stitch to seam allowance, from neck-edge to slider, alongside zipper.



3

Close zipper—center rests face down on seamline. Stitch down one side, across end and up other side.



4

Press application. Remove machine-basting from seamline.

FINE POINTS ON:

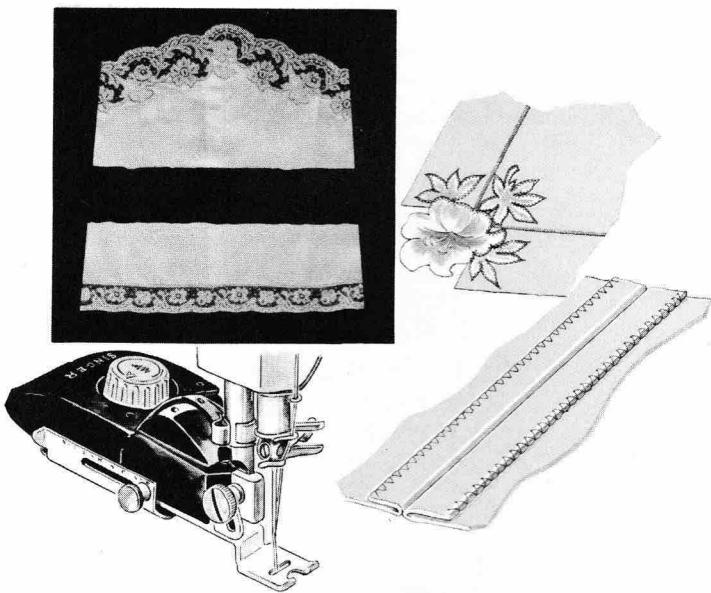
Neckline Zipper Applications

- Keep zipper taut when measuring for placket length.
- Turn zipper pull-tab up when stitching.
- To turn sharp corners, place needle in fabric, raise presser foot, and pivot on needle. Lower presser foot and continue stitching.
- Allow stitching line to fan out slightly around slider.
- Clip all loose thread ends short.
- Trim tape ends flush with neck edge before finishing neckline.
- Press placket on inside of garment. Place towel or velvet press pad beneath placket and moistened press cloth over zipper. Hold iron lightly over placket. Allow steam to penetrate cloth.



Zigzag Stitching

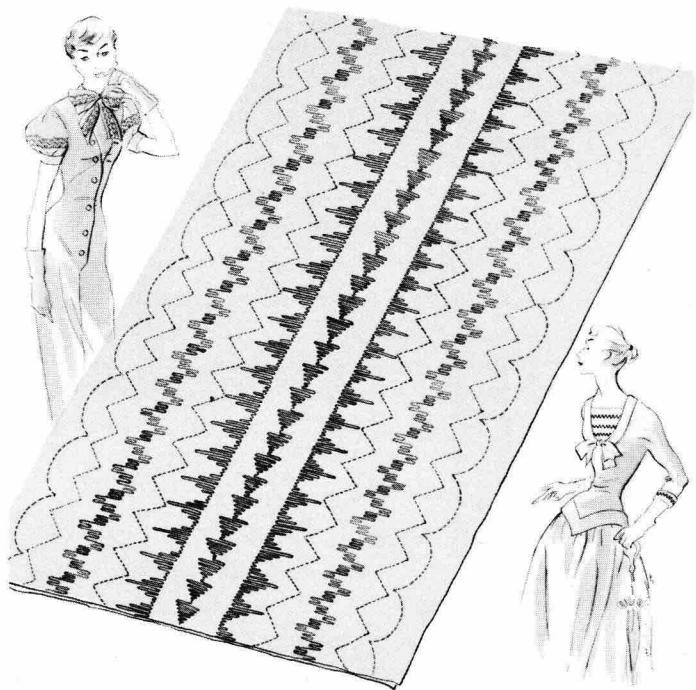
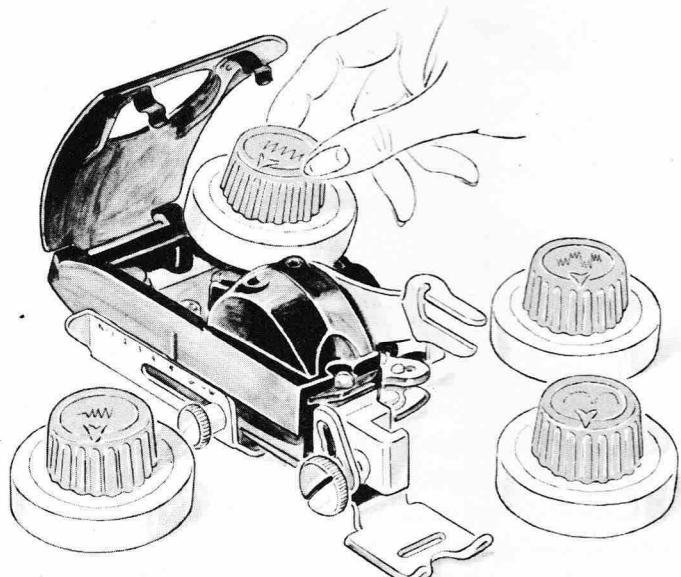
ZIGZAG STITCHING has many applications in home sewing for decorative as well as utilitarian purposes. The stitch is flexible, making it well suited for knitted fabrics, for mending, for reinforcing, and for finishing seams in fabrics that tend to fray



Many interesting stitch patterns for border designs are simple to accomplish. Lace applications are lovely and durable. Accomplished with the SINGER Automatic Zigzagger on Straight Needle or Slant Needle machines, or with the SINGER Swing Needle Machine, zigzag stitching is broad in its application, effective to use and simple to accomplish.

Border Designs

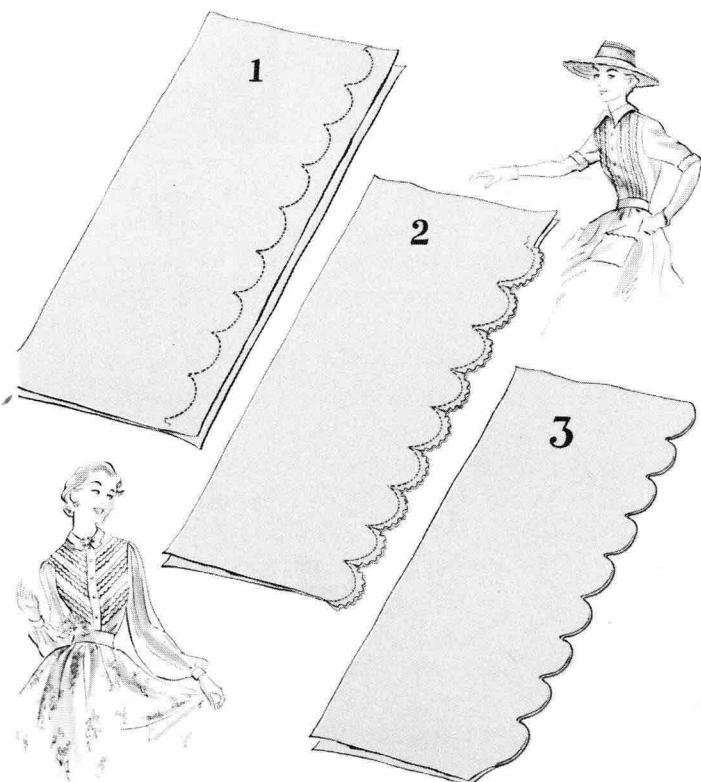
Beautiful design stitching is accomplished automatically with the Automatic Zigzagger. The Stitch Pattern is lifted out and



replaced with another to make an entirely different design. Exciting for borders or geometric designs, the variety of stitch patterns is more than ample.

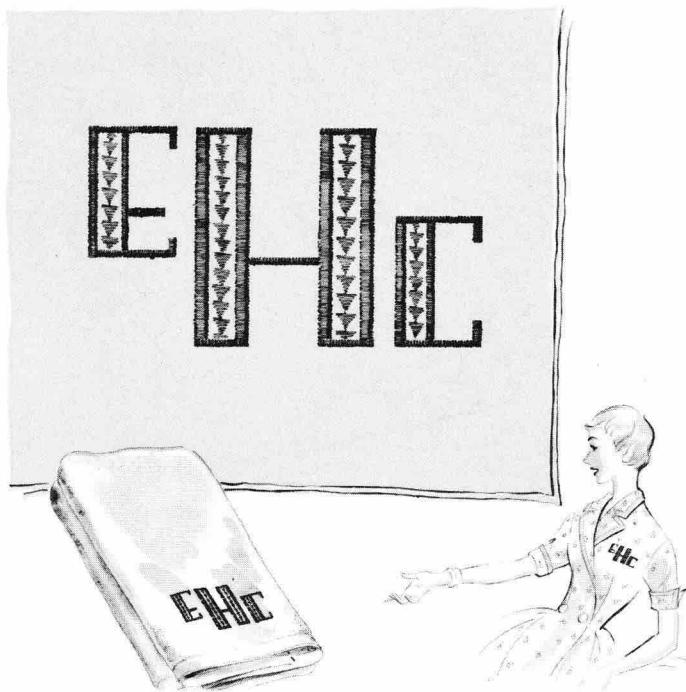
Scallop Edges

Automatically the Zigzagger stitches tiny scallops as easily as stitching a straight seam. For faced edges or tucks, use the Scallop Stitch Pattern, then cut seam allowance to an eighth inch, blend and turn.

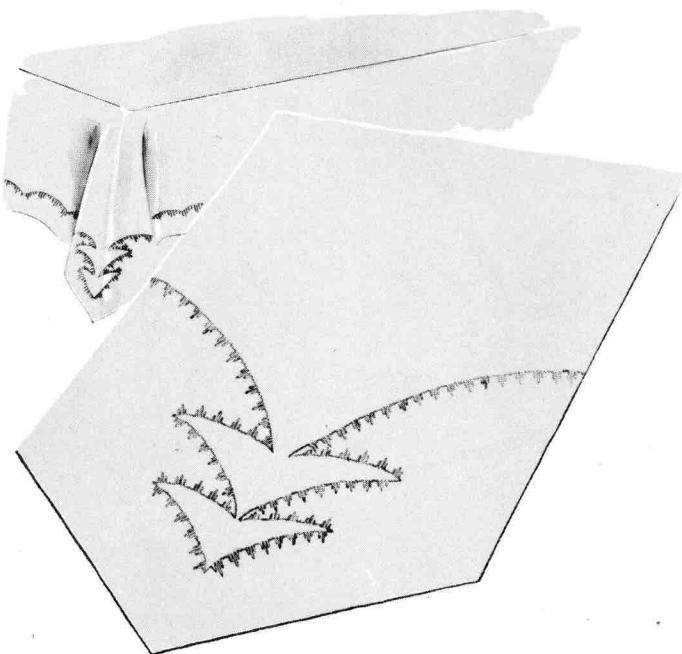


Monograms and Shadow Hems

Geometric monograms for linens, towels, dresses and blouses are quickly and attractively made using the Zigzagger. When fabric is light weight, use several layers of lawn on the underside then cut away close to the stitching.



Shadow hems are turned, pressed and marked before stitching with one of the many suitable Stitch Patterns. Trim edge on under side along design stitching.



Buttonholes

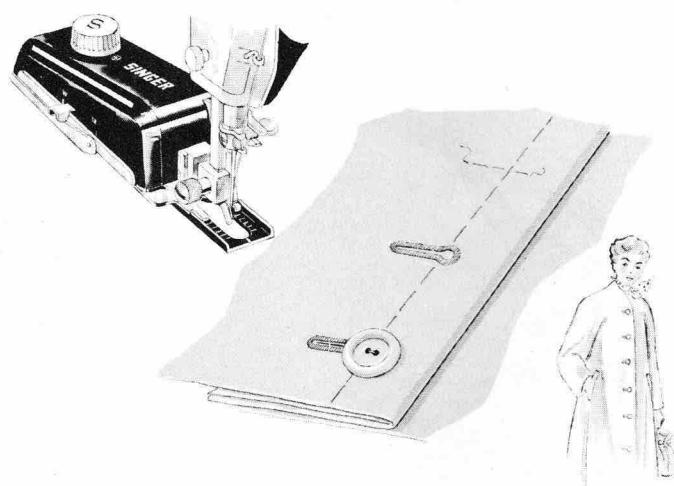
DECORATIVE as well as durable, buttonholes may be bound, corded, or of the tailored type so quickly accomplished with the SINGER Buttonholer. Bound and corded buttonholes are taught in the SINGER* Home Dressmaking Courses.

The general rules for correctly positioning buttonholes are the same regardless of type. The length of a buttonhole is determined by measuring the diameter of the button and adding to it the thickness. Buttonholes are positioned in relation to center basting lines for horizontal positioning, and to figure proportion and figure contour for vertical positioning.

Relationship to Center Bastings

Careful planning is required when positioning buttons and buttonholes on center front and back closings. Usually the pattern will indicate the size button the pattern was designed to carry. If any deviation from this size is contemplated, the decision must be made before the garment is cut, so that proper allowances can be made in the measurement from the center to the facing edge, as well as in the facing width. The facing must be wide enough to accommodate the buttonhole plus an ample margin beyond it. The space from the center front basting to the facing edge must be from three-quarters to once the diameter of the button.

Buttons are sewn to the left side of the garment so that the center of the button falls exactly on the center basting line. The buttonholes in the right side are set about $\frac{1}{8}$ inch to the left of the center basting, so that when buttoned, the center basting lines of the right and left sides of the garment coincide.



When a buttoned closing is designed for other than a centered closing, planning is similar. Instead of attention being given to a center front or back basting, the line designed as center of the overlap is considered. Should a closing be overlapped more or less than called for by the pattern, the fit of the garment is altered.

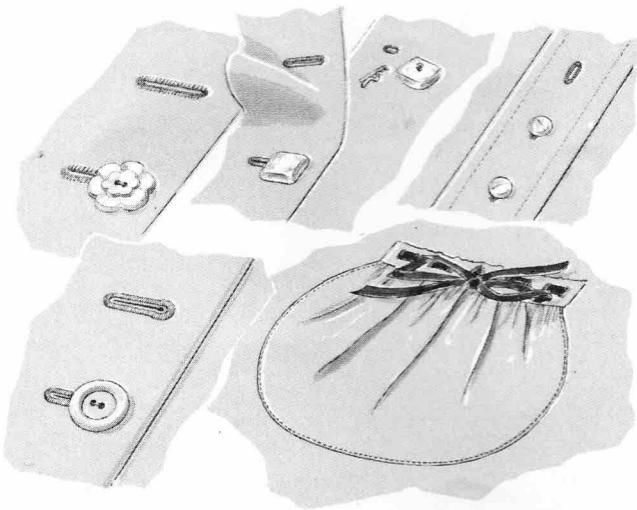
Relationship to Figure Contour and Proportion

Buttonholes spaced harmoniously with the figure contribute to the comfort of the garment when it is being worn, as well as to its fit. Incorrectly spaced buttonholes will cause the garment to appear poorly fitted. Gaps may occur in the closing, where strain of movement has not been accommodated.

A buttonhole is always located to take care of the pull across the front at the fullest part of the bustline. On a coat, jacket or overblouse a buttonhole is placed at the waistline. The top buttonhole is located at a point in relationship to figure requirements and neckline treatment. The number of buttonholes and the spacing between them are determined after these three strategic points have been located.

Therefore, pattern markings cannot always be followed. If any change in the length of the bodice has been made the buttonholes obviously must be repositioned. When fitting the pattern, determine the approximate positioning of buttonholes. At the first fitting prove the accuracy of this planning.

Before making buttonholes, care should be taken in marking not only the end of the buttonhole, but also the line of the buttonhole along the thread of the fabric. Thread or chalk markings are quite adequate and ensure well-positioned buttonholes. Then proceed to make the buttonholes.



The SINGER Buttonholer makes both eyelet-end and straight buttonholes, guiding them to perfect size and shape. Simply insert the size template and regulate the bight for wide or narrow stitching according to the fabric.

Templates in the following sizes are furnished with the Buttonholer for straight buttonholes— $\frac{5}{16}$ inch, $\frac{5}{8}$ inch, $\frac{13}{16}$ inch and $1\frac{1}{16}$ inch—as well as a template for a keyhole buttonhole of $1\frac{1}{16}$ inches.

Extra straight templates of $\frac{3}{8}$ inch, $\frac{1}{2}$ inch and $\frac{15}{16}$ inch and a keyhole template $\frac{5}{8}$ inch in length are available. Buttonholes longer than $1\frac{1}{16}$ inch in length may be made by extending the stitching when using the $1\frac{1}{16}$ inch template. A hand-stitched effect may be created by stitching around the buttonhole twice, first with a wide bight, then with a narrow bight.

Eyelets for studs and lacings are quickly made with the $\frac{3}{16}$

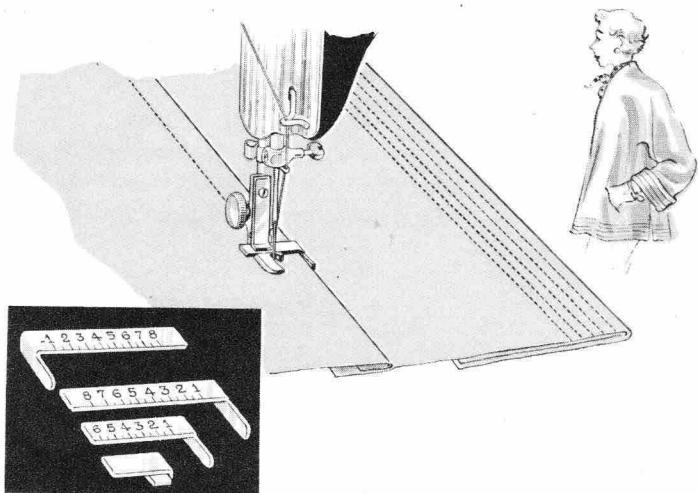
inch template, while beading effects are attractively accomplished by lacing ribbon through buttonholes of various sizes. Especially suggested for beading on children's clothes and dainty blouses is the $\frac{5}{8}$ inch template.

Interfacing improves the durability of buttonholes in most fabrics. The interfacing must be light in weight and of the same color as the garment. Light weight silk, jersey, sheer wool and similar fabrics react beautifully with such handling.

Children's clothes, men's wear and house dresses usually require many buttonholes. In a few minutes' time buttonholes in an entire garment can be completed with a minimum of effort or skill.

The Gauge Presser Foot

EXPERT AND BEAUTIFUL STITCHING is accomplished with a minimum of skill and preparation through use of the SINGER Gauge Presser Foot. Single or multiple rows of stitching may be gauged evenly along lapel and facing edges, welt seams, or hems. An accurate set of gauges, lined at $\frac{1}{8}$ inch and



numbered at $\frac{1}{4}$ inch intervals, one for use to the left of the needle and three for use to the right of the needle, accompany the Gauge Presser Foot in addition to the small removable toe.

The side walls of the three right gauges vary in depth to accommodate fabrics and constructions of different thickness.

The Gauge Presser Foot replaces the regular presser foot. The gauges and small toe are easily released and replaced by pressing downward on the lever at the back of the foot.

Regulate the gauge line to the needle point. The first row of stitching is applied with the gauge, selected according to the thickness of the fabric, riding over the edge of the garment. Subsequent rows are placed, using the removable toe, or the gauge with the shallow side wall guided to a previous row of stitching.

Welt seams are stitched using the gauge with the shallow side wall guided into the seam's depression.

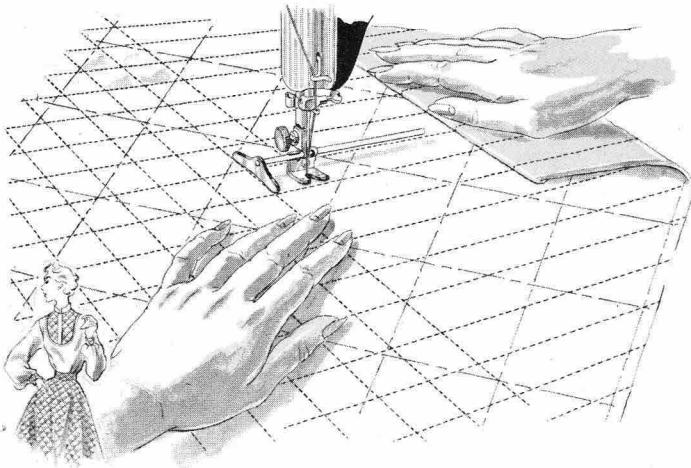
Smart, even stitching accents are effectively placed with the Gauge Presser Foot.

Quilting

Diagonal Quilting

QUILTING STITCHED to form diagonal blocks is attractive for self-fabric accent on many garments as well as for fabric furnishings. The light padding basted to the under side of the fabric may be of outing flannel, canton flannel, sheet wadding or light weight wool interlining.

Baste the layers of fabric together, on both lengthwise and crosswise grains of the fabric, at intervals sufficiently close to prevent the plies from shifting. Mark a diagonal chalk, or basting line, to establish the position of the first line of stitching in each direction.



Select the thread, needle and stitch length according to the fabric being stitched. Do not use a long stitch, as a long stitch is characteristic of cheaper qualities of ready quilted fabrics. Use a medium length stitch for the fabric. Regulate the pressure on the presser bar slightly heavier than for medium weight fabrics. Cable type threads may be used on the bobbin for bold quilting effects.

The Quilter, designed with a short, open foot and an adjustable and removable space guide, is especially adapted to stitching lightly padded materials.

Replace the presser foot with the Quilter. Adjust the space guide for the width between stitching lines. Stitch, placing the quilting, right side next to the feed, along the marked line.

Space each successive row by guiding the edge of the space guide to the previous row of stitching. The space guide may be placed to the right or left of the needle in order to handle the bulk of the work in the most convenient manner.

In general, work from the center to the edges, if a very large piece is being quilted. Guide the fabric with both hands placed on the fabric so that the lengthwise grain forms a straight line between the hands. Smooth, even quilting with a characteristic soft puff results when this method is followed.

Patterned Quilting

The Quilter is equally well suited to quilting in a floral or scroll pattern. The short open foot permits following curved lines with ease and accuracy.

Trapunto Quilting

Padded with yarn after the design is stitched, trapunto quilting is lovely for dresses, blouses, and robes, as well as for fabric furnishings. The fabric is backed with soft lawn, net or organdy onto which the design has been traced. The quilting foot, space guide removed, is used when stitching the design. Thread is chosen to match or contrast with the fabric and a short stitch is used.



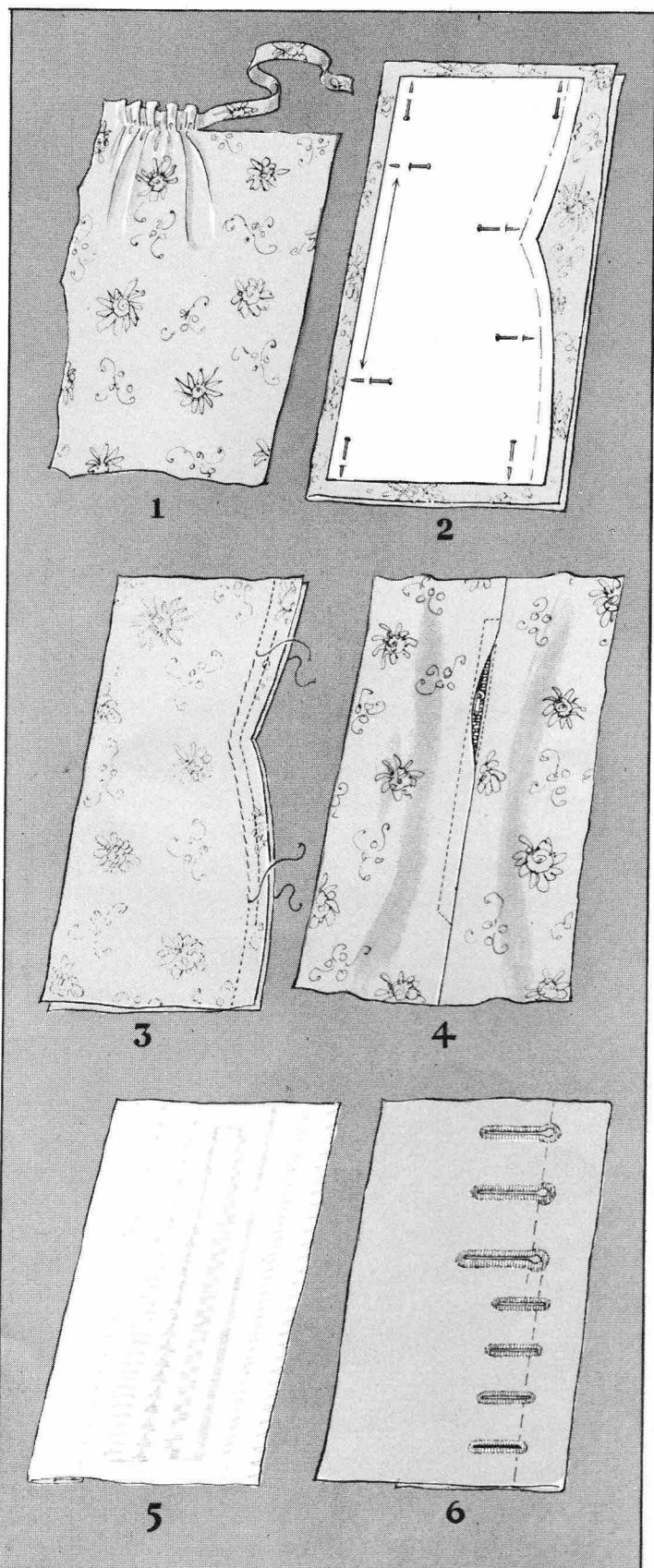
The short open construction of the quilting foot together with a short stitch permits accurate expression of curved designs.

When the stitching has been completed, and all thread ends have been drawn to the back and secured, the design is padded with strands of yarn carried by a tapestry needle, darning needle, or large embroidery needle. The needle is passed through the backing from one stitching line to another. Both yarn ends are clipped very closely.

This step is repeated until each portion of the design is filled. Gently stretch each portion of the design on the bias to conceal the ends of the yarn on the inside of the backing.

Crêpe weaves, jersey, light-weight woolens and smooth-surfaced rayons lend themselves to Trapunto Quilting. Transparent materials are often backed with satin or taffeta and filled with silk yarn to produce delicately-tinted patterns.

Drapery and curtain floral fabrics are often quilted with cable stitching to outline the motif, which is later filled with yarn to give a dimensional effect. Chintz and drapery satins are often treated in this way for valances, chair covers or cushions.

Lesson 5—Zipper Closures***First Practice Session—Dress Placket Zipper***

1. Straighten a square of fabric.
2. Fold on lengthwise grain, right sides together, lay out pattern for dress placket zipper project and cut.
3. Close upper and lower portions of side seam with permanent stitching terminated with back stitching. Allow opening for zipper equal to the metal portion of the zipper. Then close with machine basting.
4. Proceed to apply dress placket zipper to this shaped seam.

Second Practice Session—ZigZag Stitching and Buttonholes

5. The Automatic Zigzagger is used to reinforce the lingerie seam, for satin stitching, decorative pattern stitching, blind stitching and overedging seams.
6. The Buttonhole Attachment makes both keyhole and straight-end buttonholes with uniformity. Make several keyhole buttonholes and several short straight-end buttonholes properly positioned from edge of facing.

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Hems and Hem Finishes

Preparation

THE HEM OF A GARMENT gives it smoothness and grace when carefully handled in its construction. The hem must never be obvious, but should be sufficiently wide to cause the skirt to hang in graceful lines. Slim skirts usually carry hems of greater width than do full skirts.

The skirt length is decided upon during individual fitting. While fashion dictates to some extent whether skirts are long or short, it must always be an individual choice based on figure proportions, as well as the general fashion picture.

When the dress is being tried on for this final fitting, it is always well to wear the foundation garment, slip and shoes that will be worn with the garment and to review its general fitting before taking the length. Be certain the garment is on the figure with center front and back basting lines in place and hanging perpendicular to the floor. The waistline joining should be comfortably positioned. Should any fitting be in question, correct it before taking the skirt length.

With a pin or chalk skirt marker carefully indicate the skirt length an even distance from the floor. The one taking the skirt length moves around the person to avoid any shifting of posture or position. Skirt lengths for evening dresses are taken with the person standing on a level stool or platform that will allow the dress to hang freely over the edge.

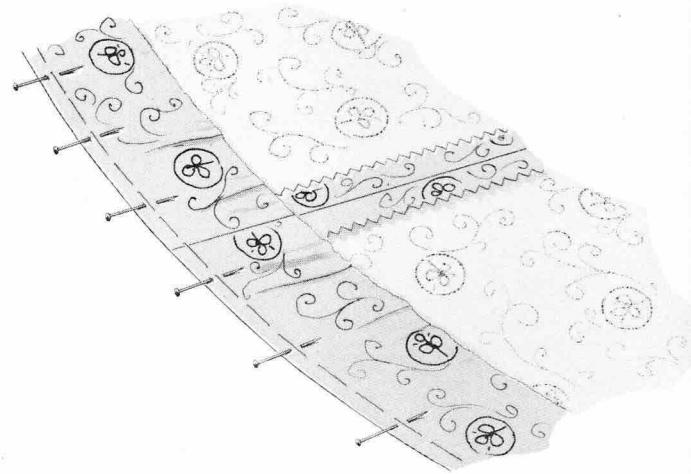
If the hem allowance is fairly uniform it is indication of good fitting. However, if the hem allowance is appreciably greater on one side than on the other, it is quite likely that the center front and back basting lines are not hanging perpendicular to the floor and the differences in figure proportions in the right and left sides have not been accommodated in the fitting of the waistline joining and side seams. The skirt is probably off grain at the hipline.

If the center back hem allowance is markedly greater than the hem allowance elsewhere the figure is probably smaller in hip development than the average and the skirt requires lifting at the waistline seam across the back. This adjustment should be incorporated as a pattern adjustment in the next dress made.

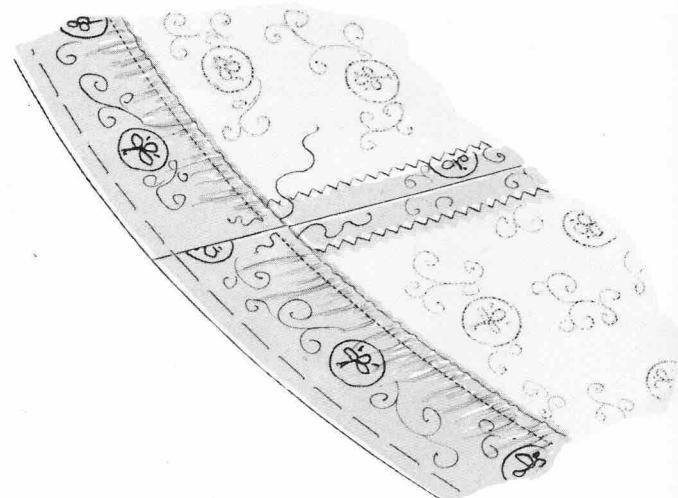
Where the front hem allowance is narrow in comparison with the allowances elsewhere, it is likely that the figure is fuller in the waistline than the average and requires added length from the hipline to waistline in the skirt front. This figure difference should be accommodated in the adjustment of the pattern.

A bias or semi-bias skirt will often have an irregular hem allowance because of sagging at the points where the true bias occurs. A bias skirt should always hang with the side seams hand basted, threads loose at ends, before any seams are stitched. Then, when the skirt is assembled it should hang again overnight

so that all of the sag is evident. The draping qualities of the fabric will govern how much or how little a bias skirt will sag. This irregularity in hem allowance is not associated with the accuracy of fitting.

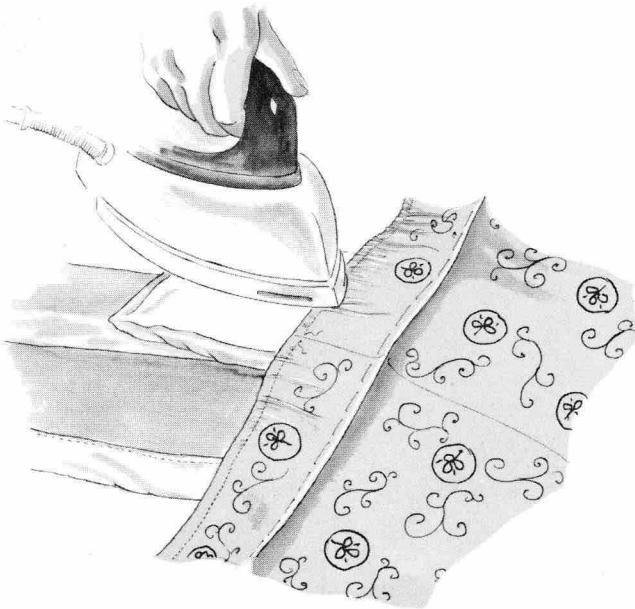


Turn the hem on the chalk, or pin line. Should slight irregularities occur, they can be attributed to the sway of the body or irregularity in the floor and the fold of the hem should follow an even line. Pin, then baste the hem with silk thread one-quarter inch from the fold. Press to sharpen this crease with the point of the iron directed toward the top of the hem. This pressing step, besides sharpening the crease, tends to shape the hem to the skirt.

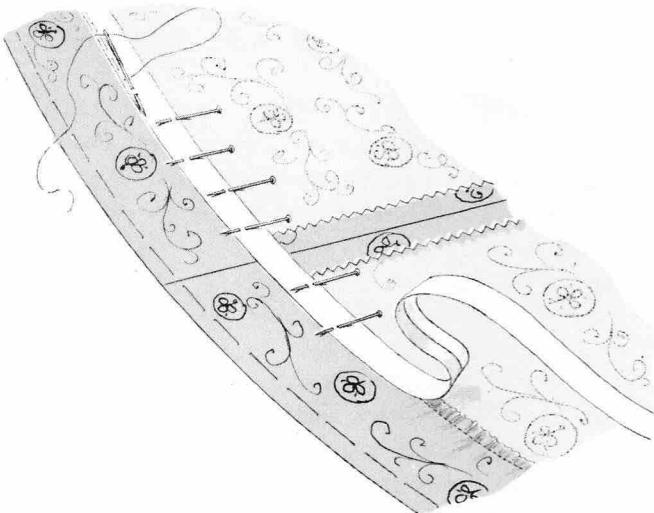


Measure and chalk the hem width. Then cut away the excess width. Blend side seams and gore seams to one-half their width from fold to hem edge. Control the fullness that exists in all

skirts hems, except the severe pencil-slim skirt, with a control thread placed exactly a quarter inch from the cut edge and extending from seam to seam. Draw the under thread controlling the fullness between seams. Caution is necessary to avoid drawing in the top of the hem too much. The hem must conform exactly to the body of the skirt. In most fabrics this fullness can be shrunken by pressing with steam over a press mit.

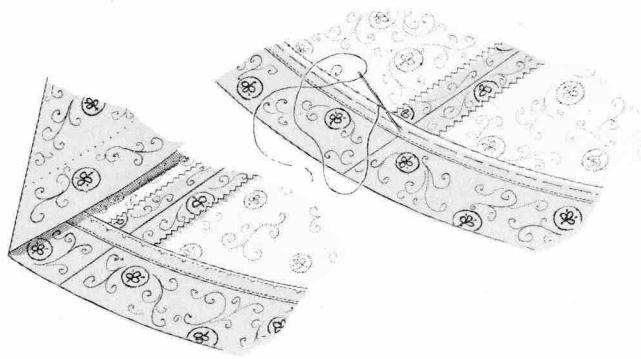


Hems are finished in a number of ways. Straight or bias seam binding is often used. Shrink straight seam binding before applying. Pin seam binding to the body of the skirt at the exact position of the top of the hem. Then pin the seam binding to the hem. The edge of the seam binding follows the control thread.



The seam binding is usually top-stitched to the hem. Some prefer to apply the bias seam binding as an inside seam.

Hand baste the hem to the skirt $\frac{1}{4}$ inch from the edge of the seam binding. The hem is now ready for its final stitching.

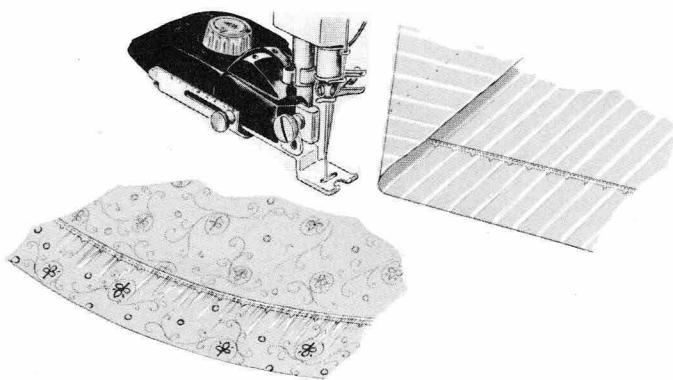


Blindstitching is done on the sewing machine with the SINGER Automatic Zigagger, or by hand. Machine blindstitching is effective, durable and quickly accomplished. Blindstitching by hand requires catching a single lengthwise thread of the skirt and then allowing the needle to pick up the edge of the seam binding. A knot at frequent intervals prevents the hem from pulling out, should the thread break when wearing. Avoid drawing stitches too tightly.

Additional Hem Finishes

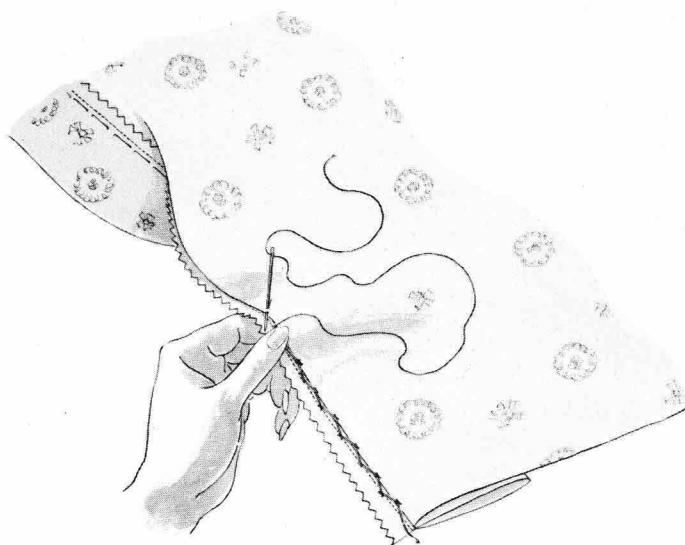
Edgestitched Hem

COTTONS require a sturdy finish to withstand laundering. The Edgestitched finish is equally well suited to circular hems or straight hems. The ease that occurs in the top of the hem is



controlled by drawing up the under thread of the edgestitching in the same way the control thread is used in the preparation of a hem where seam binding is used. The Edgestitched Hem is often blindstitched with the sewing machine.

Pinked Hem



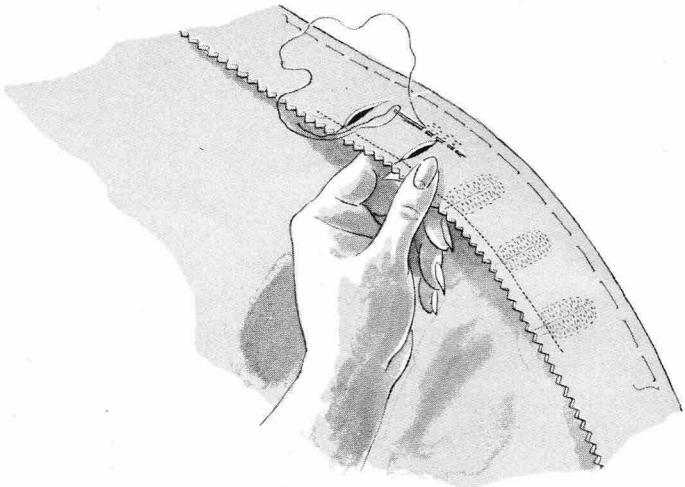
THE PINKED HEM is most often used for fabrics that do not fray readily and where other hem finishes are likely to show a line or ridge on the outside of the skirt. Silk crêpe, wool crêpe, jersey, and firmly woven woolens are typical fabrics.

All preparation steps are followed to the point of applying the seam binding, instead of which the edge is pinked. The hand basting is placed a quarter inch from the pinking edge. Blind catch stitching between the hem and the inside of the skirt holds the hem securely without strain. This stitching is conveniently accomplished when the garment is resting on a table right side out. Work on the inside portion next to the table. Fold the hem under along the $\frac{1}{4}$ inch basting line and allow it to roll over the fingers of left hand. The catch stitching is done by pointing the needle toward you and progressing away from you.

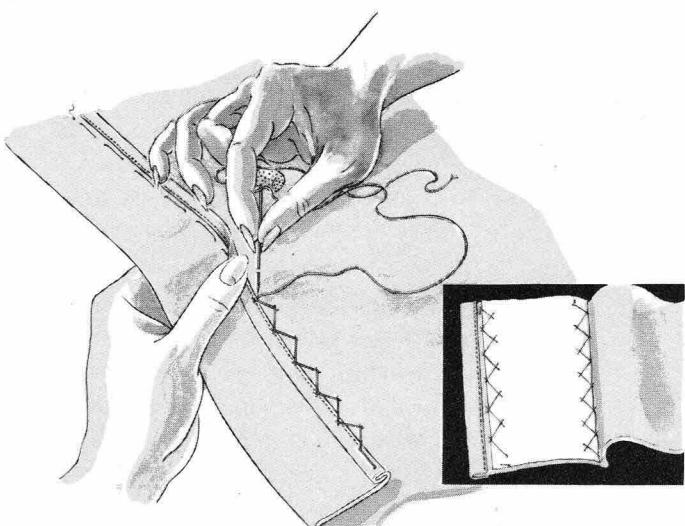
the hem are the same as outlined for other hems to the point of applying the seam binding. Rayon bias seam binding is applied with the Multi-slotted Binder. An interfacing of bias unbleached muslin or tailor's linen will give the hem body and weight.

Remove all bastings and catch stitch the interfacing to the hem near the fold and top edge. Baste hem against garment near binding. Finish with a blind catch stitch, knotted every few inches. Avoid pulling this hand stitching tightly enough to dent the outside of the garment. Press this hem from the right side, over a Velvet Press Pad and protect with a pressing cloth. A hem, in heavy or napped woolens, made according to this method will not be obvious when worn.

Spliced Hem



Bound Hem



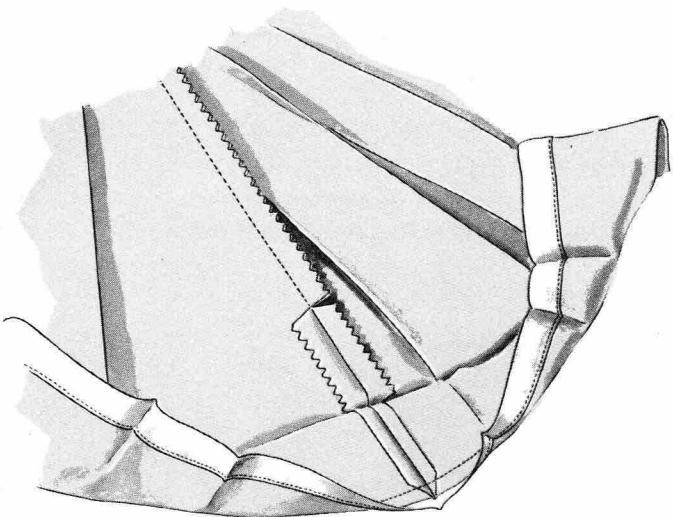
HEAVY WOOLENS OR FABRICS that fray are often finished with a bound edge. Again, the preparation steps in forming

HEAVY, FIRMLY WOVEN WOOLENS sometimes resist the shaping and easing required in circular hems. Should this occur, narrow wedges are cut at regular intervals several inches apart. These wedges must not extend beyond one inch from the fold of the hem. The steps in forming this hem are to mark, then pin and baste one-quarter inch from the fold and press.

Measure the hem width evenly and cut away the excess. Then cut wedges so that the hem fits smoothly to garment. Bring the edges of the cut-outs together with a line of machine stitching. Darn these slashes together, using a matching silk or a thread drawn from the weave of the fabric.

A pinked edge is often used to finish this hem, and depending upon the purpose of the garment, the hem might carry an interfacing as well. A garment of this kind is usually lined, the lining extending to within an inch of the fold of the hem. Should it be necessary to lengthen the garment the hem can be dropped about one inch.

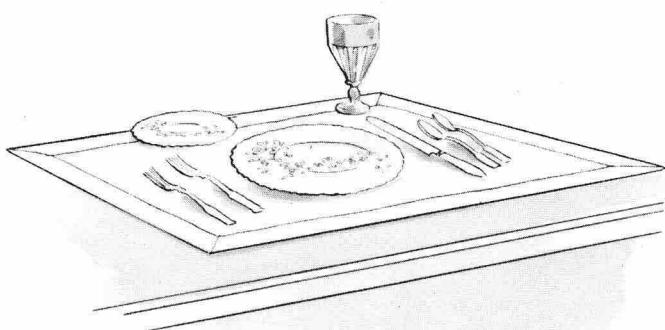
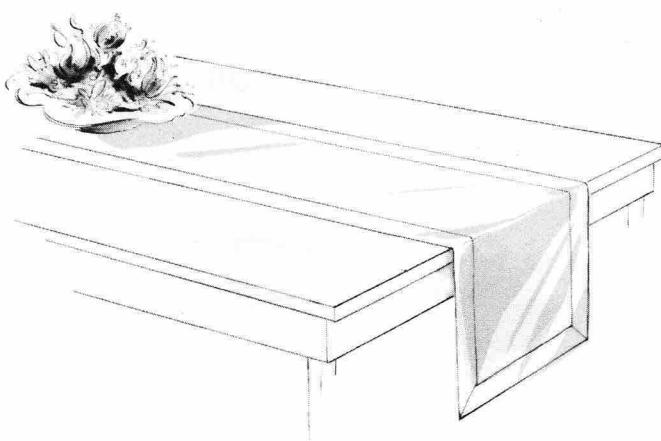
Hem Across Pleats



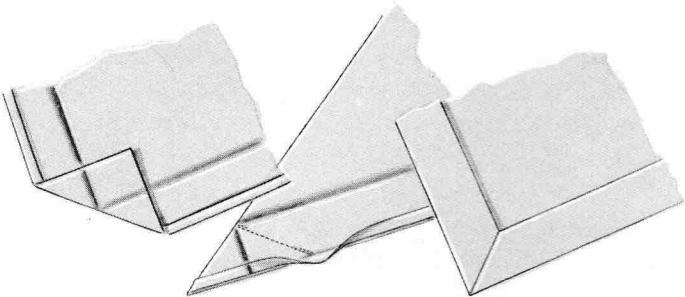
A SEAM often occurs on the inside fold of a pleat in an overblouse, jacket or skirt. This seam must be blended and opened at the hem to eliminate bulk.

After the hem has been marked, press the seam open to the point where the top of the hem will be stitched to the skirt. Blend the seam in the hem from the fold to the hem edge to one-half its width. Proceed to form the hem and finish it according to the method best suited to the fabric. Then clip through the seam allowance to within a few threads of the stitching at the top of the hem. All bulk is eliminated inside the hem and the pleat will press sharply.

exactly at the junction of the lengthwise and crosswise folds of the hem. The diagonal fold indicates the exact position for stitching the miter. Extend the stitching as far as the first fold of the hem and backstitch carefully to stay the end of the stitching. Blend this seam and press open. Carefully baste the hem to follow the grain of the material and stitch with straight or pattern stitching.



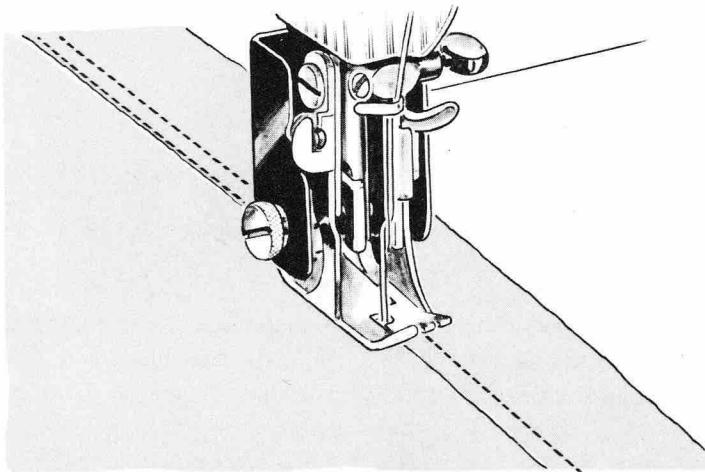
Mitering the Corner



Hems on linen are usually mitered at the corners. Form the folds for hems along all edges following the grain of the fabric. Then turn the corner toward the inside, allowing the lengthwise fold to fall over the crosswise fold and the diagonal fold to cross

The Walking Presser Foot

FABRICS that usually require skillful handling or careful pinning and basting, can be stitched with more expert results with even less preparation when the Walking Presser Foot is used. This new Presser Foot is an essential for the woman who demands perfection in her work, yet is interested in time-saving methods.



The Walking Presser Foot affords the gentle handling of seams that you might give in careful hand work. It neither stretches nor eases the seam edges. Its action is to firmly hold the seam while the needle enters and rises out of the fabric and, then to gently carry the seam along with an upper feed motion in unison with the feed of the machine, to form a seam exactly smooth.

Use The Walking Presser Foot to Stitch These Fabrics

- Plaid
- Napped
- Pile
- Rough Textured
- Polished
- Smooth Crisp
- Plastic
- Supple Leather

Use The Walking Presser Foot to Stitch These Constructions

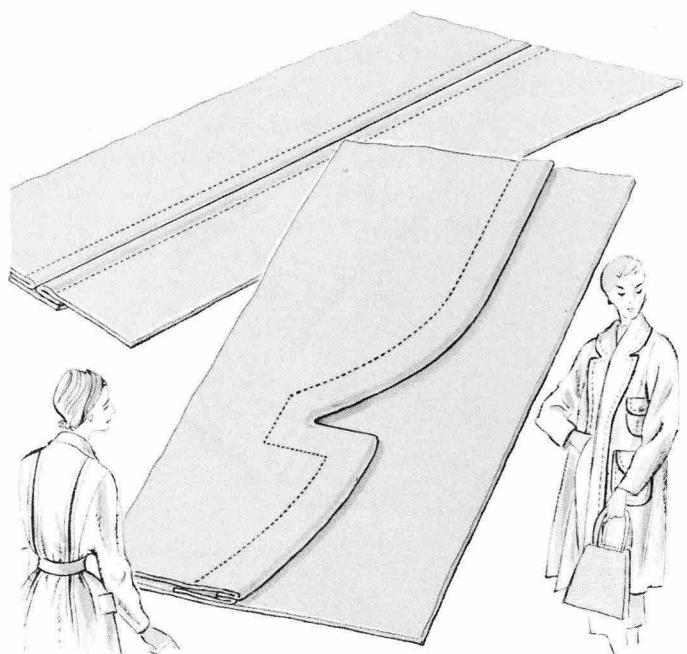
- Joining Different Textures
- Stitching Multiple Layers
- Hemming
- Stay Stitching
- Curved and Bias Seams

Velvet, Corduroy or Velveteen

Pile fabrics when seamed tend to show slight fullness along the seam edge that is held against the feed. The gentle top feeding stroke of the Walking Presser Foot prevents such easing and expert results are as easy for the novice to achieve as for the more experienced sewer.

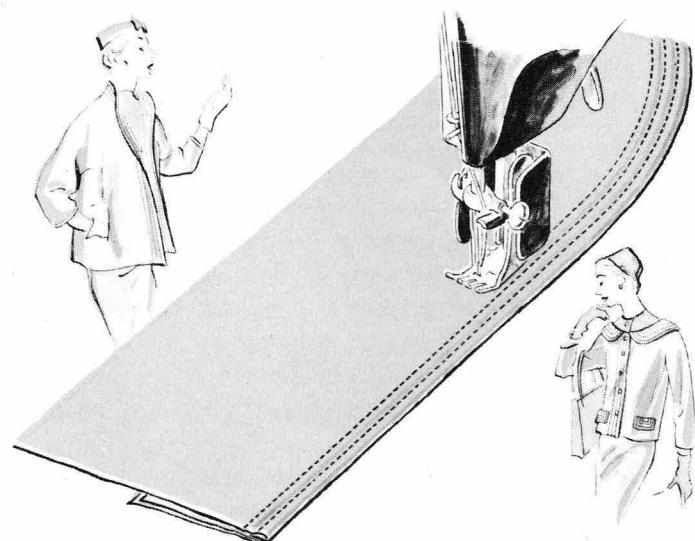
Lapped and Decorative Seams

The lapped or decorative seams that are found so frequently in expensive smartly tailored dresses and soft suits are beautifully stitched with the Walking Presser Foot.



Facing Edges

Top stitching is effectively done on toppers, suits and coats through the several layers—garment, interfacing and facing—with the Walking Presser Foot. All layers are carried along equally, resulting in perfect handling of the upper and lower sections.



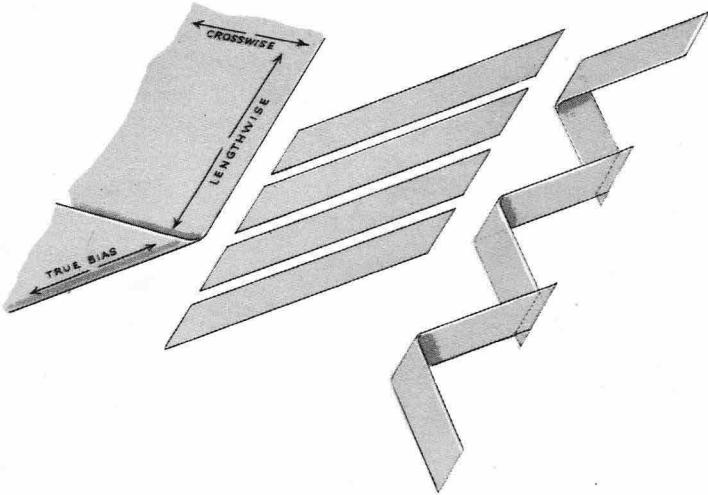
The Walking Presser Foot requires no adjustment. Keep free from lint and oil it frequently, but lightly, wherever there is movement between two pieces of metal. Wipe off any obvious oil after oiling.

Cording and Corded Seams

CORDED SEAMS are delicate or bold, depending upon the size of the filler cord that is used. Delicate, fine corded seams are found in expensive blouses, lingerie and dresses. Children's dresses and coats often carry corded accents. The corded seam is a typical seam treatment for slip covers, cushions, bed spreads, and fabric furnishings.

The SINGER Right and Left Corders are essential when stitching all corded details and permit seams to be stitched in the correct direction producing exactness and beauty. Corded buttonholes, tubular cording and corded button loops are made with the corders as well.

The corded welting is prepared in advance and is then stitched into the seam. A true bias cut to $1\frac{1}{4}$ inches plus three times the width of the cord of either self or contrasting fabric is used to cover the cord.



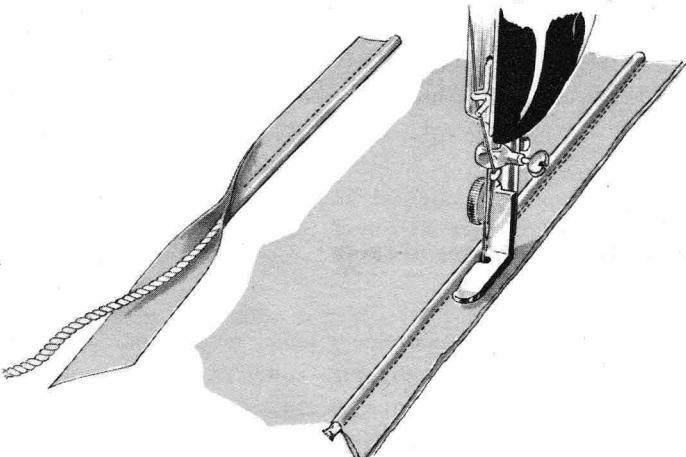
The true bias is the diagonal of a square of fabric. Bring the crosswise grain of the fabric to the lengthwise grain. The fold resulting is a true bias. Cut along this fold and continue to cut as many strips as are needed. If the corded seam is not a long seam, unpieced welting is preferred. However, it is often necessary to join bias strips in order to have a long continuous welting.

Always join bias strips on the lengthwise grain, since the seam will be less apparent. Match the weave, stripe, or design if material has prominence in any of these respects. When joining bias strips, their evenness is maintained if the lengthwise ends are offset the width of the joining seam. These seams are always narrow and pressed open.

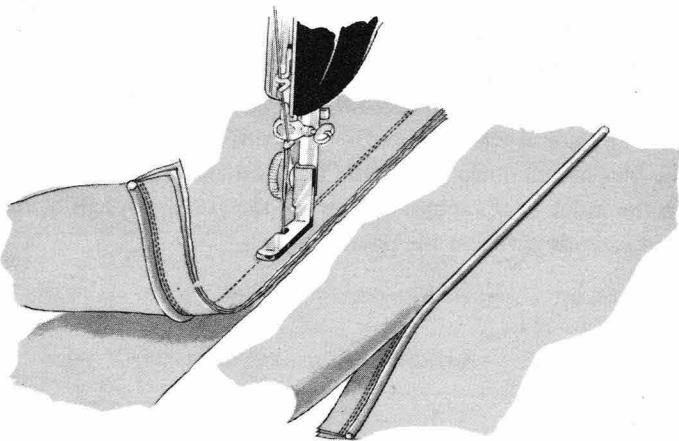
The Left Corder is ordinarily used to stitch the cording inside the folded bias strip to produce welting. Stitch close to the cord with a stitch length slightly longer than for seaming the weight of fabric being stitched. Do not crowd the stitching against the cord.

Attach the corded welting to the right side of the single seam

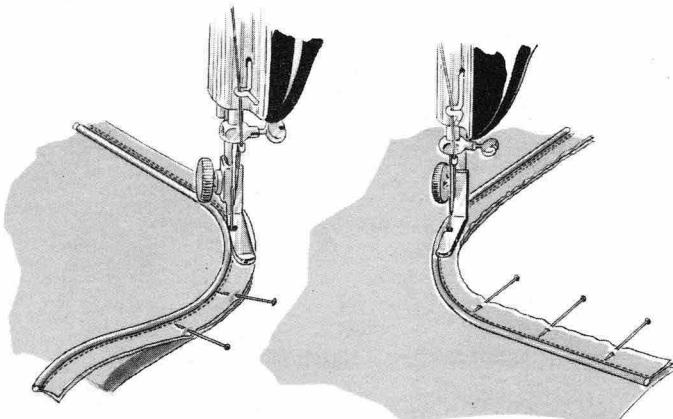
edge, with the same stitch length used when making the welting. The right or left corder can be used for this step if the garment



section is small, if large the right corder is essential if the bulk of the fabric is to be supported on the leaf of the machine.



Lay the second seam edge on top of the attached corded welting and pin or baste. Then turn the work so that the first stitching is uppermost. Stitch, this time crowding the stitching between the cord and the previous stitching. This method produces evenly joined seam edges and tightly set cording.



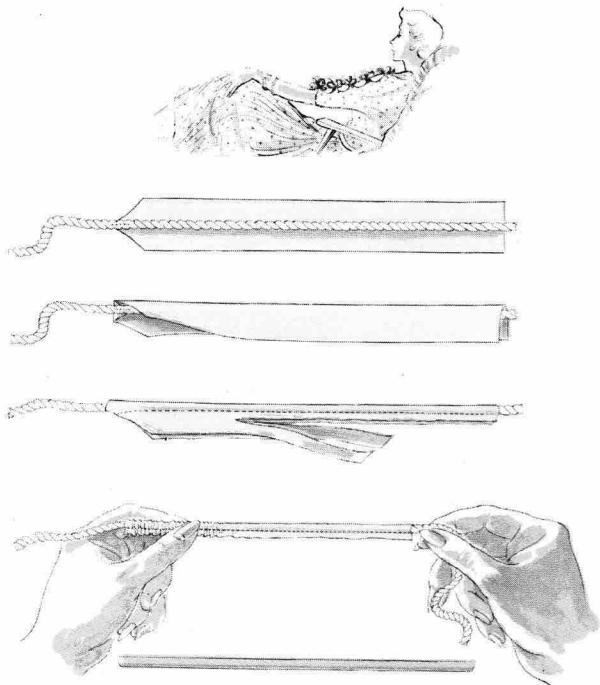
Curved seams are corded as easily as straight seams. The length of stitch used for the first stitching that attaches the cord to the seam is somewhat shorter than for the straight seam because of the curve. It will be found that on inside curves the seam allowance of the corded welting is full and requires easing. The cord must lie smoothly onto the curve. On an outside curve, the seam allowance must be stretched.

Since the seam allowance of the welting is bias, it is not difficult to shape to the line of the seam. Blending is important on these seams. The garment and facing blend to a quarter inch while the welting seam blends to an eighth inch. The seam of the inside curve is slashed at regularly spaced intervals, and the outside curve is notched.

Tubular Cording

TUBULAR CORDING is seldom found on any but expensive garments in ready-to-wear. However, it is simple and effective to make and enhances apparel made at home. The secret of making it well lies in two simple factors, stretching the bias covering and the use of a short stitch.

To cover a fine filler cord with bias, cut to a width of one inch plus three times the thickness of the cord, use a filler cord double the length of the bias strip. Attach the center of the filler cord with machine stitching to the wrong side of the pointed end of the bias strip, turn the pointed end and the continuous piece of filler cord to the right side of the bias, then fold the bias in half along its length. The cord and turned point fall on the inside of the folded strip while the remaining half of the cord extends out from the point.



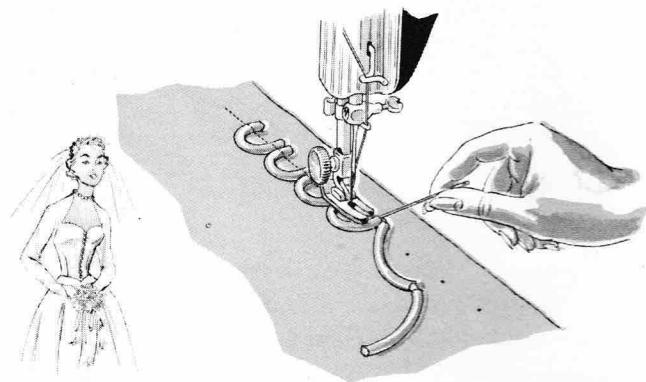
Stitch, using the left corder and a short stitch, forming a funnel shape at the turned point and catching only the two seam edges of the bias. Taper the funnel for about one inch, then crowd the stitching against the cord, at the same time stretching the bias to its fullest length. One-half the filler cord is now inside the bias covering and one-half extends from the funneled end. Trim seam allowances to $\frac{1}{8}$ inch. Work the bias back over

the extended cord while pulling the end of the encased cord. The tubular cording turns in a moment into a smooth tightly covered cord. Stitches will not break if a short stitch has been used and if the bias has been properly stretched as described.

Tubular cording is used for applied trimming in the same ways that braid might be used, for spaghetti trimming in knots or bows, for frogs, loop-type edging, fagoting and button loops. Large filler cords are often covered with velvet for dress belts and ties.

Button Loops

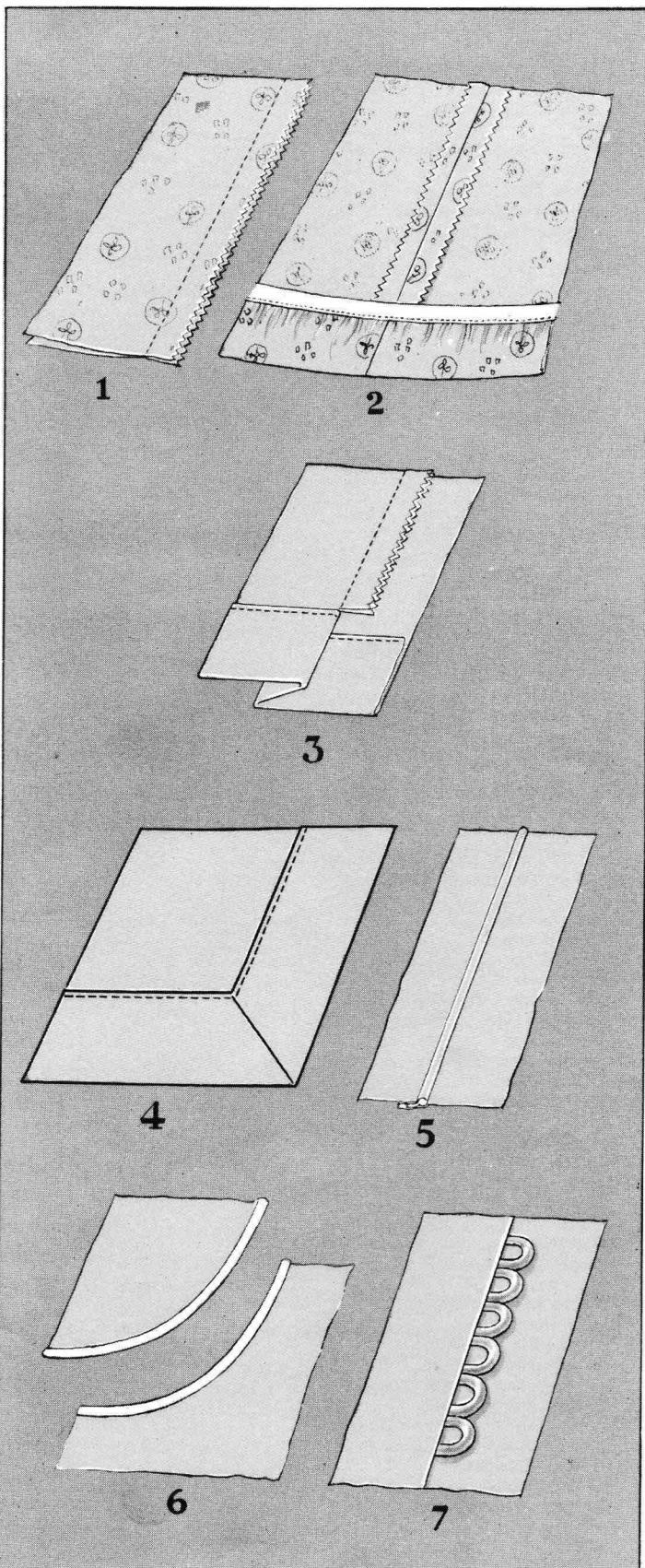
BUTTON LOOPS are easy to apply, once the tubular cording has been prepared. Mark with chalk dots the points between the loops. A spacing of $\frac{3}{4}$ inch is attractive, but spacing varies with the diameter and thickness of the button to be used. The spacing may be slightly greater than the diameter of the button but never less than its diameter.



Measure the amount of cording to be allotted to each loop. A $1\frac{1}{2}$ inch length is suitable when spacing is $\frac{3}{4}$ inch apart. Clip through the stitching of the cording, but not far enough to entirely separate the segments. The seam of the cording always falls to the inside of the loop. The spacing mark indicates the outside of the loop. The outside edges of each loop touch. A quarter inch seam across the ends of the cording is sufficient but a full seam allowance must be taken from the garment.

Using the hinged presser foot and a darning needle to hold the cording in exact position stitch over one cord at a time. Stop the machine when the needle reaches a point the width of the cording from the mark. Shape the loop. Pierce the end of the loop with a darning needle and hold the loop firmly against the sewing machine needle. Lower the foot and stitch into the cord. Remove the darning needle and pierce the end of the next loop. Position the loop tightly against the cord being held under the machine needle. Drop the presser foot and stitch on until the needle is the width of the cord away from the next mark.

Repeat until all loops are attached to the garment. Then apply the facing, being certain the facing seam is slightly deeper than the row of stitching that attaches the loops to the garment.

Lesson 6—Hems and Hem Finishes***First Practice Session—Preparation of Hems***

Prepare material for cutting by straightening the ends according to the grain of the fabric. Fold right sides together and cut out hem project.

1. Stitch seam and press open.
2. Form a two inch hem according to procedure presented. Blindstitch hem with Automatic Zigagger.

Second Practice Session—Additional Hem Finishes, Hemstitching and Cording

3. The square of yellow fabric is provided in the practice package for students to make one additional hem finish as they might select.
4. Learn to fold mitered corners for hems on linen.
5. Cord a plain seam.
6. Cord an inside curved seam and an outside curved seam.
7. Form button loops from tubular cording.

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for your sewing satisfaction . . .



THE CONTENTS OF THIS BOOK,

as represented by the Index on the facing page, were carefully prepared to serve your reference purposes and thus extend your sewing satisfaction. The various procedures covered coincide with those taught in the SINGER Sewing Skills Course, which is given, without charge, to all new Singer owners.

This is but one of the many services offered by your local SINGER SEWING CENTER to assist and accommodate women who sew. In addition to a wide variety of the world's finest sewing machines and vacuum cleaners, you will find there a generous store of parts, accessories, sewing notions and other sewing supplies. Best of all whenever you have a need or problem, whether it be repairs or just a little advice, or friendly suggestion, you will find your SINGER SEWING CENTER ready to serve you in a manner that has made SINGER Service world-famous.

SINGER SEWING MACHINE COMPANY

