

1942—Modern Pattern Design

by Harriet Pepin

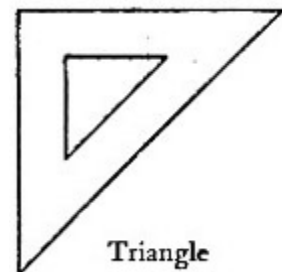
Chapter 1—Pattern Designing

Description of Equipment

As the doctor, sculptor or artist should understand the purpose of various tools and equipment common to his profession, it is equally important that the patternmaker understands the purpose for which his equipment has been designed.

Most of the following articles may be purchased at art supply houses, tailor's supply firms or at the notion departments in retail stores:

1. *Triangle*: The transparent right triangle is useful in pattern making to "square" a corner. The two smaller points will serve to establish a true bias from a vertical or horizontal line. Diagrams in problems which follow illustrate how this is done.

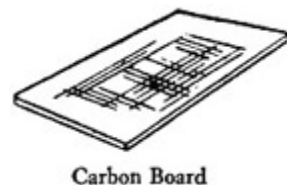


In the study of geometry we learn that a triangle must total 180 degrees. This right triangle has two 45 degree angles and one 90 degree angle.

2. *Tracing Wheel*: This clever instrument saves hours of needless labor of thread marking. It is used to transfer lines or symbols from one pattern to another or from the final pattern to the muslin or fabric. When the test muslins are being made by the designer, ordinary pencil carbon may be used. When actual garments are being cut, white carbon or chalk boards are used. These markings can be easily removed later.



3. *Carbon Boards*: A suitable carbon board can be made by purchasing a 24 × 36 sheet of pencil carbon from an art supply house. This should be laid, face upward, upon a similar size piece of heavy cardboard or ply board. Then a length of cheese cloth is laid over and securely fastened to the back of the board with gum tape or



thumb tacks. The cheese cloth keeps the carbon paper from tearing or wrinkling and will prolong its usefulness.

A chalk board is made by purchasing powdered chalk, moistening it with water and "painting" several coats upon compo, paper surfaced board. This is then covered with cheese cloth. If white carbon is used, the board would be made in the same manner as a muslin carbon board.

4. *Pins*: Various sizes of dressmakers' pins may be purchased by the pound at the tailor's supply houses or notion departments of stores. The designer should have various sizes on hand for varying weights of



Pins

fabrics.

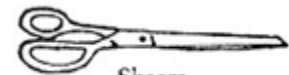
5. *Pencils*: A medium hard lead pencil, a rather soft lead pencil and an eraser should be in your tool kit. A red and blue crayon pencil is also useful for establishing lines of design and for correcting muslins. The blue is



Pencils

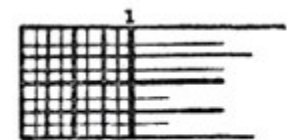
usually used for establishing the line and the red is used for all corrections during a fitting of the muslin. Some designers use various colors of tailor's chalk for the same purpose. Black "graphite" is sometimes used instead of lead pencil. These flat pieces may be sharpened by rubbing across sandpaper.

6. *Shears*: Eight inch paper shears should be kept for cutting light weight paper. Heavy, professional weight shears are used for cardboard patterns. The fabric shears are kept for cutting muslin and will become dull if used for cutting paper.



Shears

7. *Transparent Ruler*: This special ruler is found at art supply stores. It is divided into one-eighth inch squares. As so many measurements in pattern making are based upon eighths of an inch, this ruler comes into use conveniently. It is also valuable when establishing seam allowances on final patterns.



Transparent Ruler

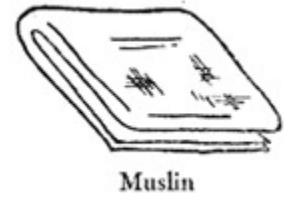
8. *Curve*: The Dietzgen #17 transparent curve is especially valuable for shaping edges of curved collars, armholes and necklines. Additional types of these curves are also valuable to have at the patternmaking table.



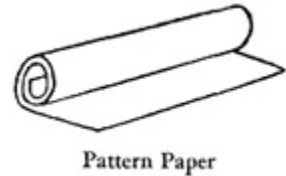
Curve

They may be purchased at most art supply stores.

9. *Muslin*: An unstarched, unbleached muslin is used for muslin proofs for most garments. This may be purchased by the bolt at a saving. The weight and texture varies with garments being designed.

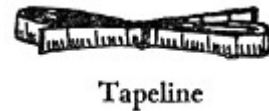


10. *Pattern Paper*: A white, tough paper, such as that used in bakeries may be used for preliminary patterns in manufacturing plants and for even the final patterns in custom studios. This comes by the roll in varying widths at paper supply houses. It is best to use paper not too deeply colored because pencil marks do not show up as well. About a 150 lb. weight cardboard, purchased in sheets or rolls, is used for blocks and the final pattern "markers" in most firms. Such patterns would be used repeatedly.

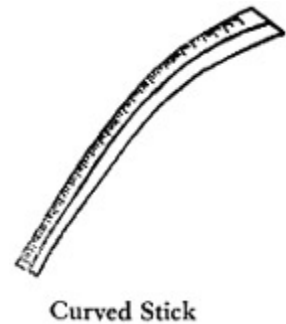


11. *Square*: The tailor's square is purchased at tailor supply houses. It is most useful when drafting the basic block patterns from measurements. It has varying units of measurement, such as fifths, sixths, thirds, as well as the normal measurements of an inch found in an ordinary ruler.

12. *Tapeline*: It is wise to purchase a good tapeline. Cheaper ones may stretch or shrink. Some are even inaccurately marked. It is also wise to check all your measuring instruments before starting to work out the problems presented in this text. As the flexible tapeline is used to measure a figure or a model form and the square and ruler are used to locate similar measurements when completing the pattern, discrepancies would lead to disappointing results.



13. *Curved Stick*: This tool is constantly in use by tailors, and it proves useful at the dress designer's table when establishing curves of revers, or when adding flares to gored skirt sections. It is marked for inches and fractional parts of an inch as a ruler would be.



Model Forms

Some sort of a model form is needed in the designing room. Standard size forms in various sizes are used by designers in manufacturing plants. Custom dressmakers may have several model forms and then pad them up according to the measurements of certain customers. The small scale form is used in many schools to save time and muslin. As long as it is ideally proportioned, it is quite satisfactory for the student who is still studying methods for making patterns. Advanced students who are actually making patterns from which garments are to be cut would naturally need a full size model form. Forms made to personal measurements are particularly useful to hobbyists. However, when one has a carefully fitted foundation block pattern, the model form need not also represent actual personal measurements. It may merely be used as a guide.

A professional, standard size model form represents the SIZE of the finished garment, not the dimensions of the woman who may wear that size. Dress form measurements are garment measurements. It is a "mold" for a shapely dress. If we say, "I wear a size 16," we actually mean that the size 16 dress, made from measurements taken from a size 16 dress form, will fit in such manner as to provide freedom of movement and a trim, smart fit. Twenty women might line up—all of whom might find a standard size 16 dress to fit them comfortably with no apparent need for alterations. But, if you were to carefully measure each of these women, probably none of them would have measurements identical to the standard size 16 model form. Each of them might comfortably wear a size 16 dress, and, in fact, be somewhat flattered by so doing, as the garment would conceal some bad contour lines of the body.



Garment manufacturers purchase new model forms frequently. As years go by, the basic silhouette changes with fashion. Corset manufacturers are creating new silhouettes which mold the figures of women. For example—the silhouette of the "gay nineties" looks not at all like the ideal figure of today. During and shortly after the first world war the "boyish" figure was in vogue. Breasts were confined in brassières which flattened the figure. With the return of the fitted garments we have entered upon the "up-lift" era, with the slender waistline and hips, and the brassières support and emphasize the breasts. Hence, the designer depends upon the model form manufacturers to produce new forms

which reproduce the "modern" silhouette. When a new form is purchased it is measured carefully and an entire new set of basic block patterns are made. All new dress designs will then reveal the latest ideal figure measurements.

There are also special model forms for special types of garments. Dress forms may be purchased in children's sizes, juniors', misses', women's, and stout sizes. Special sizes, called "half sizes" in stores, are also available for the dress industry. Then there are coat and suit forms. A special suspended form is available for slack and bathing suit designers. The designer purchases the model form which is suited to the type of garment which he designs. If a wide variety of garments are created in a single studio, then a wide variety of special forms must be kept on hand.

In this modern day, a plastic material is being used to successfully produce "replica" models of individuals. Hobbyists find these models convenient means to designing their own wardrobes.

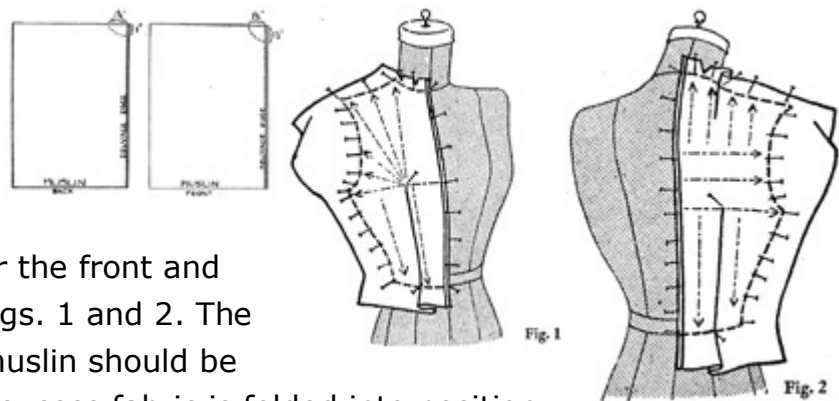
These forms may be quickly draped with muslin and then this muslin may be used as the basis for making a cardboard personal sloper.

Prepare the muslin as shown at right to provide for the neck curve and

then smooth it gently over the front and back as indicated in the Figs. 1 and 2. The arrows indicate how the muslin should be

worked into position. The excess fabric is folded into position to form a basic waistline dart. When the back and front have been draped carefully, with the grain of the fabric placed as indicated, use a red pencil and mark the seams on each section. Also mark the edges of the folded darts. Remove the muslin from the model, cut away excess fabric outside of the red lines, and within the dart areas. Pin the front and back sections firmly to a heavy kraft paper or manila weight cardboard, trace around them and you will have a *personal* block pattern which reproduces the exact curves of the figure.

NOTE: It is important, when making personal slopers, to place the position of the side seams, shoulder seams and darts correctly. [See page 67](#) which shows



the ideal positions for these seams on varying types of figures. This quick method should be used by readers who have had experience in using commercial patterns and who recognize the ideal position for construction seams.

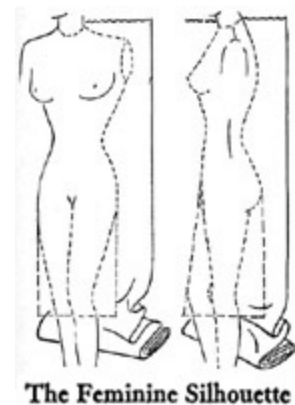
At this writing there are no set measurements for any certain size garment. In time the industry may finally adopt a basic set of measurements which will be based upon a survey made of women's figures—a special governmental project. In the meantime, each designer will continue to believe that his special set of measurements are the only perfect ones in the market!

This text has been written with the assumption that the reader will work out problems with the aid of some kind of model form. It will at least serve as a basis for studying the effect of proportion and line as they would appear when the garment is worn.

Analysis of the Feminine Silhouette

Because the feminine figure is a mass of curves, both convex and concave, the pattern designer becomes aware of the importance of learning how to produce simple patterns which will accomplish two things, namely:

1. Shape and fit the garment to conform to the curves.
2. Introduce additional design interest or drapery which will improve the silhouette, but which will retain a beauty in line and form in any finished silhouette.



The Feminine Silhouette

Study the accompanying sketches carefully. From the front view, notice how the fabric must be shaped to fit the curve at the base of the neck. Observe how the shoulders slope gently *downward* away from the neck towards the arms. Hence, it is essential that the pattern have such shaping.

The arm socket also requires a curved shaping line and then the figure tapers *inward* to the waistline. Then, from the waist downward, the silhouette curves *outward* again to form the width of the side hip.

Although the nude figure tapers inward again to form the thighs, the model forms do not—except those designed for making slacks and bathing suits. As the model form is a mold for a garment, and the skirts must provide walking

room for the limbs, most model forms are designed to fall straight downward or may flare very slightly to the lower edge. Of course, many times, the silhouette of the skirt may not only provide the necessary walking room but considerably more as well, as is naturally the case with flared, pleated or gathered skirts.

Study the feminine figure from a profile, or side view. Again, you will notice that the back neck requires a less intense curve to bring the fabric around smoothly. From the base of the neck, the silhouette curves *outward* gently to form the shoulder curves. This is a high, shallow curve in the ideal figure. In mature figures, additional deposits of flesh may exaggerate this line to form the "dowager's" hump. Then notice that the ideal figure curves into a "*compound curve*" down to the waistline. Like the sides, it again swings *outward* to define the silhouette of the back hip or buttocks. Observe that the back hip is slightly larger than the side hip line.

Now observe the front portion of the figure from the profile view. From the shoulders the silhouette line slopes *outward* and *downward* to form the highest curve of the bust, and then once more dips *inward* in a compound curve to the waist. In mature figures this is another point where flesh may accumulate excessively. From the waistline downward, the silhouette should drop practically straight to the floor. In junior figures, if the waistline is extra small, the abdomen appears more prominent. For such types of figures, certain basic principles of cutting are used to actually provide for a slight shaping at this point. And, likewise, certain styles of skirts will permit such shaping and they prove to be best adaptable for such types of figures. From a profile view, walking room must also be provided in the silhouette.

The three points which divide the figure are the bust level, waist level and hip level. These divisional points are of vital importance to the pattern designer. You will read much about them in this text.

Principles of Pattern Making

Pattern making is an art. It is the art of manipulating and shaping a flat piece of fabric to conform to one or more curves of the feminine figure. Because the figure must be free to assume many different positions, to walk, sit or run, the pattern is designed with that thought in mind also. The perfectly designed garment should be equally beautiful when the wearer is standing or sitting or in motion. Clothing which is designed for some certain purpose, such as skating or

swimming must be "functionally" designed, with its purpose in mind. Such clothing may be so designed as to give the figure greatest beauty while in motion.

The study of pattern making involves a combination of three basic factors, namely:

Technical methods of procedure for making the pattern with the use of the modern block system. These steps of procedure are common to the making of almost every pattern. With a little careful study and practice they are easily mastered and become the foundation of all pattern making.

Craftsmanship is an essential to good pattern designing. It is the ability to do something neatly—the capable use of the hands—to produce any article. To some people this may be a natural trait. In others this desire for perfection must be cultivated. But it may be acquired through constant practice and painstaking effort. Most public schools cultivate craftsmanship ability in young children through classes in wood working, basketry or drawing. The pattern designer must learn to work with speed and accuracy. A perfectly rendered pattern may become the basis for cutting hundreds of garments in one operation. If it has been carelessly rendered, with symbols lacking, seam allowances carelessly measured, it may cost the manufacturer thousands of dollars in returns.

Artistry in pattern designing is clearly revealed in the muslin proof. At that stage the designer sees his paper pattern design actually draped upon the curves of the model form or the individual. His artistic sense will be manifested in well proportioned lines, in carefully placed darts, in the spacing between pleats and tucks. An artistic pattern maker is paid well for his talent. He may take a badly proportioned sketch for a good idea and, through his artistic judgment, he may produce a pattern for a garment which will be a great improvement on the original idea. Or, if he lacks artistic sense, he can make an ugly garment from a beautiful sketch of the idea. It is for this reason that most modern designers today learn pattern making. It gives them a deeper insight into their creative work and, if the pattern maker is lacking in artistic sense, they can advise him regarding the final proportions for the finished garment.

Definitions of Patterns

1. *Blocks*:—sometimes called "slopers," "basic or foundation patterns"— are usually made of 150 lb. weight cardboard. They are generally made by drafting from the measurements which have been carefully taken from an

individual or from a standard size model form. Some designers make their blocks by draping muslin upon the model form and then transferring the outline upon the cardboard. Either method can be used. Directions for measuring and drafting basic patterns are given on [page 56](#) in this text.

2. *Construction Patterns:* are the intervening step between the block and the finished final pattern. They are usually made from light weight, tough, pliable paper. Some designers use muslin for this purpose. In some more complicated designs, two construction patterns are needed before the final pattern is made.

Blocks and construction patterns usually do not have seam allowances.

3. *Final Patterns:* (in factories they are sometimes called "markers") are the finished patterns for a design from which the trial muslin or even the final garment may be cut. When a pattern maker has become experienced in his work, he may, for the sake of speed, use his final pattern without a muslin trial. This fact is especially true when sections of the garment, such as the skirt, sleeve and back bodice are being cut from patterns which have been used previously in other garments. He may make a muslin trial proof of the new design which has been developed in the bodice front section only.

Seam allowances are carefully allowed on all final patterns. Symbols which indicate darts, grain of fabric, et cetera, must also appear. In large plants, once a final pattern has been completed, it leaves the hands of the pattern maker and is put to use in the cutting department. The symbols on the final pattern tell the cutters how to lay the patterns upon the fabric.

Routine Procedure

The steps of procedure given in this text are complete and detailed. Naturally, the dressmaker who is making an individual model gown may employ the use of many short-cuts and time-savers. She may, with experience, even use a construction pattern as the basis for making a muslin proof which will be tried upon the customer. When it has been checked for artistry in proportion, she may cut the final garment directly from the muslin. These time-saving methods come with experience—with a thorough working knowledge of pattern making and designing. They are not recommended to the beginner.

In the first few problems, detailed steps of procedure are given which, with the aid of accompanying diagrams, will show you just how to proceed. When you

have had experience in making several simple patterns for bodice fronts, the instructions are less detailed and the reader can recognize the procedure by reading the diagrams, just as a carpenter learns to read a blue-print from the architect. Sketches and diagrams shown in the back portion of the volume may appear to be complicated but, once the reader has carefully studied the text material previous to those pages, they will be easily understood.

The following problems are devoted to the study of simple functional control darts. *You will learn how they may be shifted from one basic position to another without destroying the original fit.* Following these are others which show you how to employ the use of drapery, shaping seams and tucks instead of darts and yet retain fit in the garment. Without the intelligent use of these first basic principles, your garment designs will not have STYLE.

These first few problems apply to the shaping of the fabric for the curve of the bust. Later, these same cutting principles will be applied to other sections of the garment. Finally, you will use them to produce a wide variety of garments all of which must be cut to flatter the feminine figure and to provide close fitting in certain areas. The position of the grain of the fabric has everything to do with the hang of a garment and its durability with repeated wearing and cleaning. Therefore, throughout the study of pattern designing you will be reminded of the current position for the *grain of the fabric* when the muslin is made. Because the simple dart controls the shaping of the fabric to the curve of the body, it is referred to as "control dart."

All sketches have been made simply, so that you may clearly see the problem at hand. As this study is devoted to the cutting rather than the styling or ornamentation of garments, little trimming is shown in these sketches.

The Shoulder Dart

In this problem, you will study the method used for shifting the control from one location to another. For the sake of beauty in design the designer finds it preferable to place the control dart in one position in one pattern and in another position in the next. This may be accomplished easily.

Original foundation slopers provide for a single dart which extends from waistline to bust point.

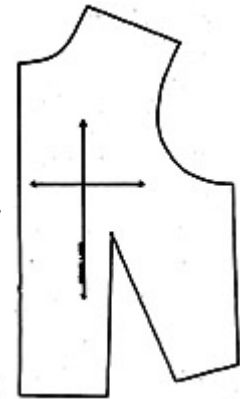
Waistline Control Block (or Sloper)

If the reader wishes to experiment with these pattern cutting principles explained in this first chapter, remove this page from the book, cut out the pattern on the lines. Trace around it on medium weight cardboard so you may produce a practical sloper pattern.

In Fig. 1 the dart extends from the shoulder seam to the bust point. Your problem is to shift the dart from the waistline to the seam and to complete a final pattern and



Fig. 1
The Shoulder Dart



shoulder
muslin.

Read Each Step Carefully Before

1. Lay your cardboard waistline control piece of white construction paper and trace around the pattern with your hard lead pencil.

2. Lift your cardboard sloper away from the tracing. Observe the opening which represents the area of dart at the waistline

3. Draw a dotted line across bottom of this dart as shown in Fig. 2.

4. Use paper shears and cut out this new construction pattern, but do not cut out the dart. Merely cut along the dotted line which you added.

5. Fold over the dart into closed position by bringing two lines together. Your pattern has a bulge at the bust point. Pin dart over temporarily as shown in Fig. 3. Place pattern up over the model form.

6. Pin the pattern up to the model form, starting with the shoulder—the center front and then under the arm. (Don't be afraid to stick pins into the form, that is what it is made for!)

Proceeding

sloper on a



Fig. 2
Construction
Pattern

7. Observe sketch once more. While construction pattern is over model form, lightly sketch, with your blue pencil, a line extending from center of shoulder seam down to bust point. (Fig. 3.)

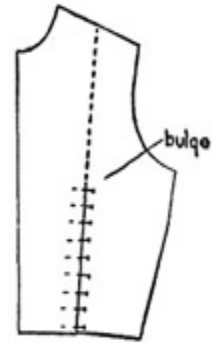


Fig. 3
Position of
New Dart

8. Remove construction pattern and unpin waistline dart momentarily. With your red pencil and ruler, correct your first blue line to a straight, clear line. Note how line appears to tip inward towards point of bust

9. Re-pin waistline dart into closed position permanently.

10. You are now ready to shift dart from its previous position at the waistline into the new shoulder position, as shown in your original sketch. With your shears slash down the new red line, starting from the shoulder seam. (Fig. 4.) Inasmuch as the dart must extend to the point of the bust, you will slash to that point.

11. Flatten your pattern upon the table, leaving the waistline dart pinned. Notice how the new shoulder dart spreads open as the pattern flattens. The provision for the control has been shifted from the original waist line position to the shoulder.

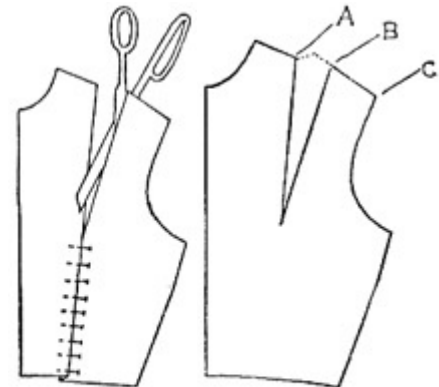


Fig. 4
New Dart
Slashed

Fig. 5
Corrected Edge
of Dart

12. YOU HAVE COMPLETED THE FIRST STEP IN PATTERN MAKING AND ARE NOW READY TO MAKE THE FINAL PATTERN.

Making Final Pattern from Construction Pattern

1. Select another piece of pattern paper.
2. Spread it flat upon the table.
3. Lay the construction pattern upon it and pin them together by sticking the pins vertically into the table.

4. With the aid of your transparent ruler, trace around the construction pattern with your lead pencil. Lift construction pattern and lay it aside.

5. Your tracing represents the new final pattern which provides the control in a shoulder dart. Because it is a final pattern, it still needs completing.

6. Complete the open end of the shoulder dart as shown in Fig. 5. Due to the sloping seam of the shoulder, a jog appears at the opening of the dart. Extend line B-C to a point which is the center of the dart opening. From point A, bring a ruler line up to meet that first line

By completing the edge of the dart in this manner you will find, when you assemble your muslin proof which will be cut from this pattern, that it will provide a perfect edge to the shoulder seam when the dart has been folded over and pinned into position.

Completing Final Pattern

You will recall that no seam allowance was provided in the sloper from which you made your construction pattern. As none was added to that construction pattern, it must be provided at this point. All final patterns should have seam allowances.

Seam allowances are not standardized in the garment industry. They are varied according to the weave of the fabric being used or the selling price of the garment. Higher priced garments usually have generous seams to facilitate alterations. For the sake of uniformity as you study, make these seam allowances on all patterns: 3/4 inch on all seams except the neckline which may be 1/4 inch only.

Seam Allowances

1. With the aid of your transparent ruler, add 3/4 inch seam allowance to all edges except the center front and neckline.
2. Add 1/4 inch allowance at the neckline. (Fig. 6.)

Pattern Symbols

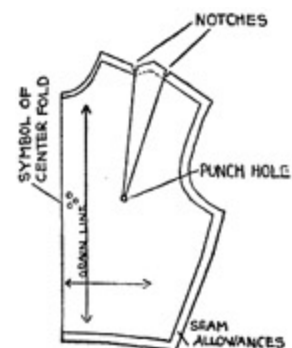
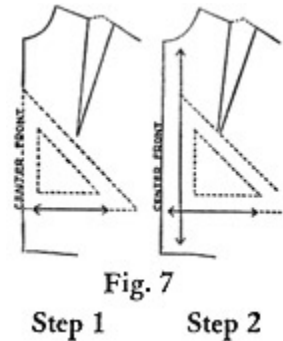


Fig. 6
Final Pattern

- 1. Mark and cut a square notch at the edge of the dart.**
- 2. Mark three circles (punch holes if desired) near the center front edge to indicate that the pattern is to be laid on a fold of fabric at this point.**
- 3. Mark circle or punch hole to show tapering point of dart.**
- 4. With your triangle used as shown in Fig. 7, draw the arrows which will show position of the vertical and horizontal grain of the fabric when using the pattern to cut the muslin trial proof.**



Checking Final Pattern

Any final pattern should include, where needed:

Corrected seam edges at dart openings.

Seam allowances as specified.

Grain line indicators.

Circles or punch holes indicating fold.

Punch hole or circle indicating end of dart.

Notches indicating edge of darts.

Additional notches showing various sections to be joined together at seams.
(Not required in this problem.)

CUT OUT THIS FINAL PATTERN WITH PAPER SHEARS.

Cutting the Muslin Proof

Architects, sculptors and designers know the value of making a preliminary proof for a design in less expensive media or to a reduced scale. Time and money is saved in so doing. Muslin is the trial medium for the costume designer. It is used extensively in better custom shops and in all manufacturing plants. The muslin should vary in texture according to texture of the actual fabric which will be used. Furriers use a coarse, heavy canvas which drapes much as a fur pelt would. Lingerie designers use a thin, soft muslin which has a similar draping quality to fine silk. Students of costume design use a medium

weight, unsized or unstarched muslin. Most muslin is particularly adaptable for fabrics of average draping qualities.

1. Press the muslin free from wrinkles, pressing with the lengthwise grain of the fabric.

2. Lay the pattern lengthwise on the muslin unless otherwise shown by indicators.

3. Make sure, when laying a center upon a fold of the muslin that the edge of the pattern is up close to the fold of the fabric. Fig. 8.

4. Pin pattern down firmly to muslin while flat upon the table.

5. Cut around pattern closely, with fabric shears resting upon the table. Keep shears sharp! Do not pick up fabric when cutting. Work flat upon table as much as possible.

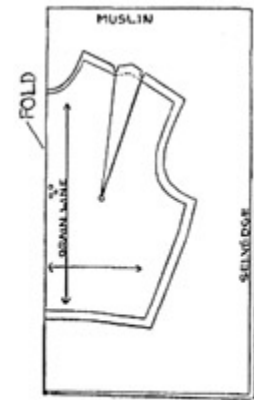


Fig. 8
Pattern on
Folded Muslin

NOTE: A special pattern-making table is an important item of equipment. It should measure at least 36 X 50 inches, of waist height or slightly lower. The top should be two-inch soft unfinished pine with all seams carefully glued. The soft surface may be sandpapered smooth after becoming worn from pins and tracing wheel. Some tables have a replaceable cork covering.

Tracing the Muslin Proof

All symbols appearing on the final pattern should be traced upon the folded muslin in such manner as to have the carbon lines on one side of the muslin proof which will be opened and draped over the model form. *At this point, the muslin has been cut out, but is still pinned to the final pattern.* Proceed as follows:

1. Lay the pattern, with muslin downward, upon the carbon tracing board.

2. Using your tracing wheel, carefully trace along the original edges of pattern (before seam allowance was added).

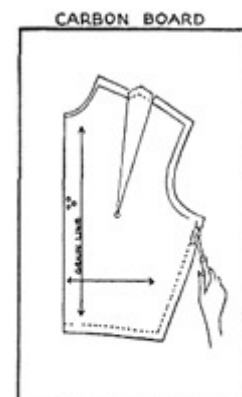


Fig. 9
Tracing the
Muslin Proof

- 3. Trace along both edges of shoulder dart.**
- 4. Trace short indicating lines showing notches.**
- 5. Trace grain indicators.**
- 6. Remove pattern from the double muslin. Keep edges of muslin together carefully by placing a few pins.**
- 7. Place muslin upon tracing board, with traced side upward. Follow these traced lines with tracing wheel. Tracings should now appear on one side of complete bodice front.**

The "visible" method of pinning muslin proofs permits the designer to correct the angle of lines while the muslin remains upon the model form.

YOU ARE NOW READY TO ASSEMBLE MUSLIN PROOF.

Pinning the Muslin Proof

The professional method used for assembling muslin proofs provides speed and accuracy. As far as possible, work with muslin flat upon the table. Otherwise it is easy for the seam edges to slip between the fingers.



Fig. 10
Finished Muslin Proof

- 1. Fold in darts by bringing two traced lines together. Place pins horizontally as indicated in Fig. 10. Note position of pin heads. Place pins 1/2 inch apart.**
- 2. Because the seam allowance added at curved neckline actually reduces the measurement of the neckline, it is necessary to snip tiny slashes at intervals of 1/2 inch as indicated in Fig. 10. They should not extend beyond tracing line. This will permit the muslin to fit snugly around neck of model form.**

You are now ready to observe the results of making your first pattern by draping the muslin proof upon the model form.

Criticizing Your Muslin Proof

Place the muslin up over the model form in such manner as to make the center front fold rest upon the center front of the model form. Because you have allowed seams, fold the shoulder and side seams under on the traced lines and pin these traced lines so that they will coincide with the seam lines on the model form.

Observe the results of your first effort. You may find that both sides of the muslin do not fit equally. This frequently occurs, even in new model forms. One seldom finds a model form in the industry which is entirely perfect. This imperfection is due to the variation of the linen fibres found in the craft linen which is used for the covering. In the process of manufacturing the model forms, the linen is sewed over the foundation and then the entire form is thoroughly sponged with water and allowed to dry. This induces the linen to shrink and eliminates the small wrinkles which might otherwise appear. It is during this process that the linen may shrink a little more in one place than in another and cause the irregularities. Should you find this to be true, in the future, use the side of your model form which showed the best fit as the basis for all your muslin tests whenever possible.

It is at this point that the criticism of an instructor becomes important. The steps used to shift the position of the dart are mechanical but the artistic results of this procedure must be determined. The angle, or position, of the dart should appear to follow the silhouette line of the upper portion of the body *in a parallel position*.

RULE ONE

A simple control dart may be shifted from one position to another position without changing the fit of the final garment. Only the shape of the pattern has been changed.

Making the Shoulder Control Sloper

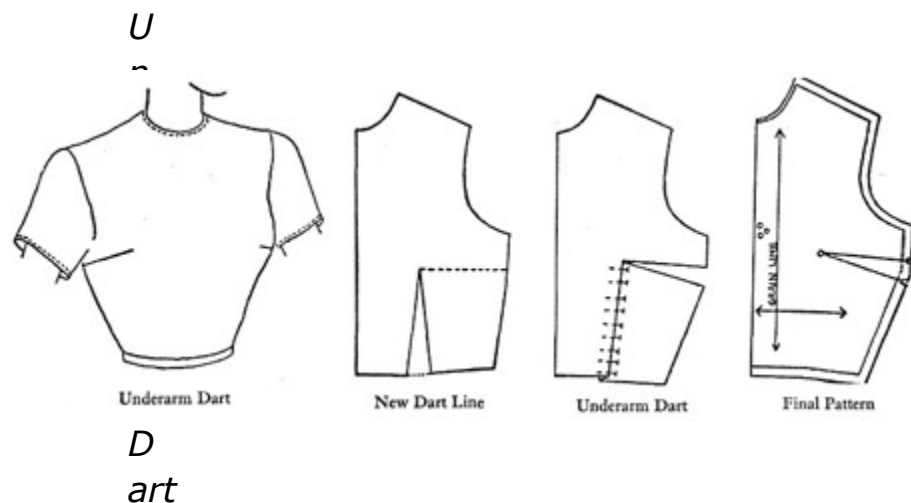
When the muslin has been tested, a cardboard *sloper* should be made. This is easily accomplished by tracing around the construction pattern developed during the completion of this final pattern. When finished, this new cardboard sloper should resemble [Fig. 5, page 9](#), except that the area outlined by the edges of the dart should be cut away. This new sloper can be used as the basis for making many new designs later.

If the angle of the dart was adjusted in the muslin, similar improvements should appear in the sloper.

This new sloper would be called the *shoulder control* sloper. In basic measurements, it should be identical to original waistline control sloper. If the dart areas are closed in each, and one is laid over the other, they should also appear identical in form. Any discrepancies would be the result of careless tracing or cutting of the patterns.

In your first problem you learned one of the most important principles in professional pattern design, namely: *shifting the control*. You learned that the size and fit of the finished garment need not be altered by this process. You learned that the degree of the bulge in the new final pattern remained the same as that provided in the original basic sloper, or block. You also learned that, to shift the control, the new dart must extend to the bust point.

To give you further opportunity to study these facts, you will complete the final patterns and muslins for the following problems, all of which are based upon what you have learned. The same steps are used to complete these new problems. If you become confused, turn back to the instructions given on the foregoing pages and refresh your memory. When you have completed a few of these problems, you will have learned the routine.



This problem places the new dart under the arm. The underarm dart is used when the bodice of the garment is being decorated in such manner as to

prohibit the use of the vertical waistline or shoulder darts without distracting from the design interest.

Note that the sketch shows this dart extending from the underarm seam to the bust point. This unpleasant feature can be remedied, as you will learn in another problem. Study the procedure illustrated in the diagrams, produce your final pattern, complete with symbols and seam allowances and cut your muslin. When the muslin is draped and pinned upon the model form, it is ready for criticism.

Making the Underarm Control Sloper

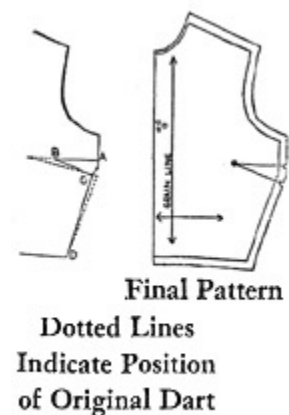
As the underarm dart makes it possible for the designer to have a working area in the center front of the construction pattern, and a basic sloper which provides for the control in that position is convenient, you will now make a cardboard sloper from the construction pattern produced in this problem. It should resemble the waistline and the shoulder control slopers except that the dart will be placed under the arm.

You will then have the three basic slopers which will be used for producing pattern designs presented in subsequent problems. Keep these slopers on hand for use when the diagrams indicate that any certain one is needed.

NOTE: Keep your muslin from this problem so that you may compare it with the muslin from a later problem. Through such comparison can be learned many important facts that result in superior fit in garments.

Shortening a Dart

Although it is necessary to extend the dart to the highest point of the curve to effect the *change in position*, the finished garment is improved by shortening the dart in the finished pattern except in cases where an extra close fitting garment is desired and, in such cases, the long dart is shaped to conform to the actual contour of the figure. The simple shortened dart provides for a little extra "ease" which is desirable in the final garment.



Use the construction pattern from your previous problem and trace out a new final pattern. Shorten the dart as shown in the diagram at right:

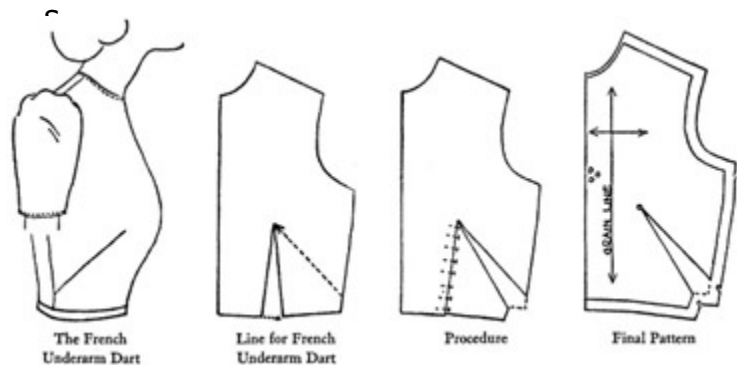
A to B equals 3 inches (new length of dart).

B to C equals A to B.

Correct underarm seam from C to D as indicated in accompanying diagram.

Complete final pattern and muslin and observe the finished result.

NOTE: The appearance of the seam will vary according to the angle of the seam or the dart itself or the degree to which a dart is



shortened.

The French Underarm Dart

In the foregoing problem, you shortened the simple underarm dart to make it less conspicuous. A great many experienced designers place the control dart under the arm, but at an angle, pointing upward towards the bust, rather than across it.

Because this plan was introduced by the French designers, it has been called the French dart. This position makes it less conspicuous and at the same time, from a profile view, it flatters the wearer as it

creates the illusion of her having a higher bust line than she may have. Therefore, this dart is frequently found in women's garments.

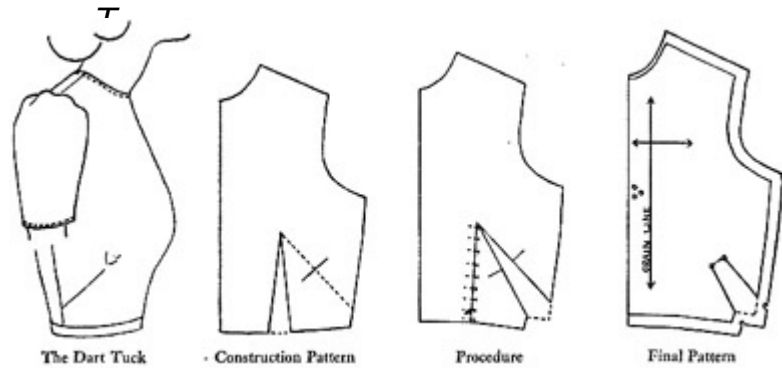
Follow the same procedure which you used in the previous problems to make the final pattern. Notice that the angle of the dart involves a different correction of the final underarm seam. Complete the muslin proof and observe results on the model form.

NOTE: A sloper might also be made from the construction pattern, but this type of dart is seldom used as the basis for a new design. It is a design in itself.

Compare the underarm seams in the muslins made from the simple underarm dart and the French dart. Note the resulting change in the grain of the fabric in the latter. The grain in the French dart muslin proof is straight at side seam. Many designers feel that the garment will retain its shape longer when the French dart is used.

RULE TWO

A dart may be placed in any position as long as it starts from a seam and points to the highest point of the curve being considered at that time.



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Tuck

As a substitute for the simple shortened dart, in some instances, the dart-tuck is used. It is so named because it tapers like a dart but ends abruptly, like a tuck, or pleat. If you will scan the pages of fashion magazines, you will see the dart-tuck used frequently. The soft drape which is produced softens the figure and it is particularly pleasing when used in groups.

Use the sloper indicated and produce this muslin is shown by accompanying diagrams.

NOTE: As a student of pattern designing, it is important that you observe these principles as they are being currently used by professionals. In a separate scrap book, paste clippings showing sketches or photographs of finished garments which illustrate the use of these principles for shaping the fabric to the figure. This additional research will do much to further your appreciation of the varied use of basic, simple principles in high priced garments found in our stores today.

RULE THREE

Basic control darts in finished patterns may be shortened or made to end abruptly in a dart-tuck to soften immediate curve area.

More Information About Patterns

By completing the foregoing problems you mastered an important principle used in the art of producing a pattern, namely: the possibilities for shifting the control to a new position. You learned that this might be done to conceal the simple dart or to place the dart in a position which would harmonize with other lines of design.

The three *basic* positions for the control are: waistline, shoulder and underarm. Therefore, slopers which provide the simple control in these three basic positions have been made for future use. For speed in producing new designs most designers keep such slopers at hand.

Your next few problems will demonstrate the possibility of developing design interest with the use of these basic positions for control. These problems will also teach you the procedure used in such instances.

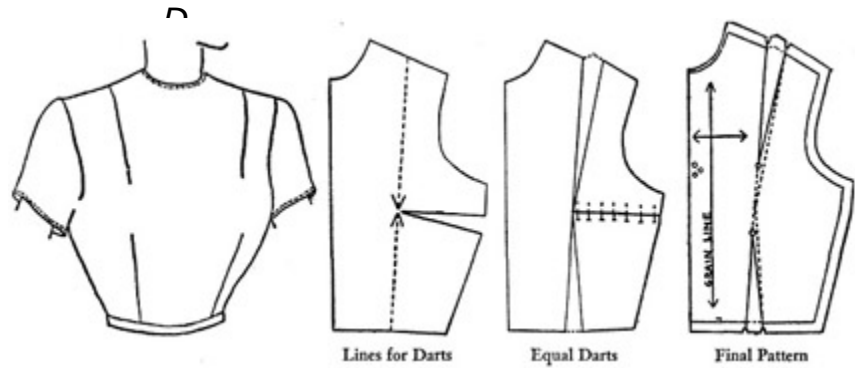
As has been mentioned previously, fabric is the medium of the costume designer. He must have a thorough understanding of the limitations of his medium. Taffeta and tweed are adaptable to certain means of control; jersey and chiffon

another. As a student of Modern Pattern Design, you will soon learn that some principles of cutting offer possibilities for the use of crisp, bulky fabrics, while others will appear appropriate when handling soft fabrics which have fine draping qualities, such as velvet or silk crepe. Hence, a thorough understanding of principles of pattern making will give the designer more breadth and scope in his work.

But the texture of the fabric is not the only point of consideration. As a great many fabrics are printed, stripes or plaids, the designer must manipulate that fabric intelligently. An artist—a fabric designer—has already contributed his talent to the fabric, and the costume designer must carry on from that point. We see many examples of failure on this important point. We see examples of the use of striped fabrics which have been manipulated poorly—so poorly, in fact, that the figure of the wearer is actually distorted when the garment is worn. Hence, a thorough understanding of the adaptability of certain patterns to certain fabrics is equally important. This is particularly true in the case of stripes and plaids. The majority of striped and plaid fabrics are woven in design. By carefully observing the grain of the muslin when the pattern is being tested, you will learn to visualize how such patterns would appear when produced in a stripe or plaid. To illustrate these facts, in some cases, you will be asked to mark up your muslin into an effect of stripe or plaid so you may see the results more clearly.

Never lose sight of the fact that the ideal feminine figure has ideal proportions. It is a work of art in itself. If you are to contribute your artistic talents to furthering this beauty, you must not distort the natural figure. It is quite true, additional drapery of fabric is added to produce a fashionable silhouette which does not actually follow the natural contours of the feminine figure, but this new silhouette must also have pleasing form and line.

As you proceed further in this study, you will learn that control, aside from being a means to shaping the pattern, may be ingeniously introduced as a part of a complete design. The architect learns that doors, though decorative, must serve as a means to entering the building. He learns that although the winding stairway may be a part of the design of the foyer in the building, it must still serve as a means to ascending to the second story. The jewelry designer realizes that the intricate necklace must have a clasp. He may make that clasp the dominant point of interest, or he may make it a part of the design for the entire necklace and thereby reduce its importance. In later problems you will study the possibilities which pattern making offers for concealing the need for control within the design of the garment.



the Control

In the previous muslins the single dart was used to provide the necessary control for shaping the bodice front over the curve of the bust. If you will take the muslins from these finished problems and mark each one with alternating red and blue pencil stripes, re-pin the darts into position and drape them over your model form, you will readily see how each would appear if such a garment were to be made from a prominently striped fabric.

When designing garments for individuals who are not fortunate enough to have perfect proportions, the size of the dart might be unnecessarily increased and the distorting stripes would become increasingly unpleasant. It is for this reason that the experienced designer may see fit to divide the control, placing a portion of it extending from one seam and the remainder from another. When you select your clippings you will see many examples of this fact.

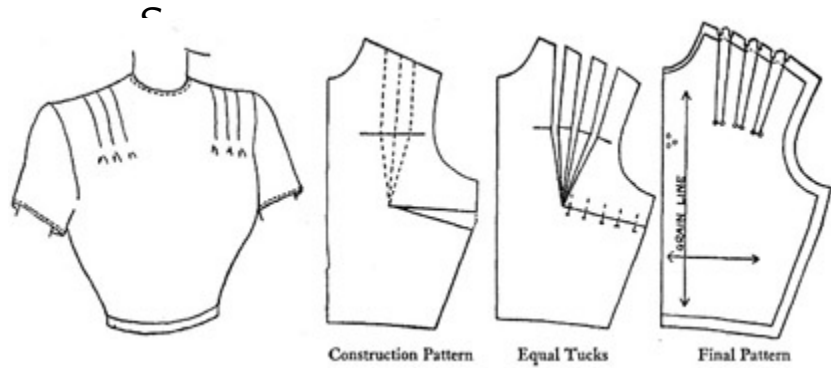
From the following diagrams, produce this pattern which provides for a division of the control between the shoulder and

waistline. Also notice that both darts are then shortened to leave the area immediately over the bust quite plain. Mark up your muslin carefully, placing the lines on the actual grain, and then produce the muslin for trial upon the model form. Observe the improvement gained in the method.

Notice that the underarm control sloper is selected as the basis for this pattern as the new lines are to be introduced at the waistline and the shoulder.

NOTE: Women having extra large bust measurement or exceptionally small waistline for the normal bust would necessarily have a personal sloper providing an abnormally large amount of control. This principle of cutting, with variations which you will soon study, is particularly adaptable to such types of figures. Not only does the fabric manipulate more pleasingly but the lines produced by the darts have a slenderizing effect.

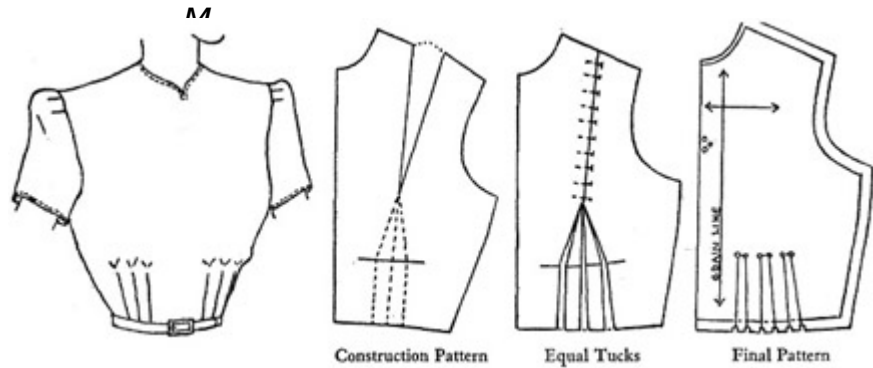
Remember that "control" is merely a term used to refer to the means which are being employed to shape the fabric to conform to the many curves of the body. Once you have become familiar with the many ways in which control may be provided, you will more readily see the possibility for distribution of the control to insure the best "hang" to the fabric.



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ing Single Dart with Multiple Darts

For the sake of design interest, control may be divided into two or more small darts instead of one. This proves satisfactory for individuals having abnormally large bust development. In the above sketch this method is illustrated with the additional use of dart-tucks. If the medium being used lacked draping qualities, a group of shortened, simple darts could be used. Note that the soft drapery which appears at the end of each dart-tuck invites interest. Hence, this design would lessen the importance of an unfavorably low bust line by inviting the eye upward to the drapery.

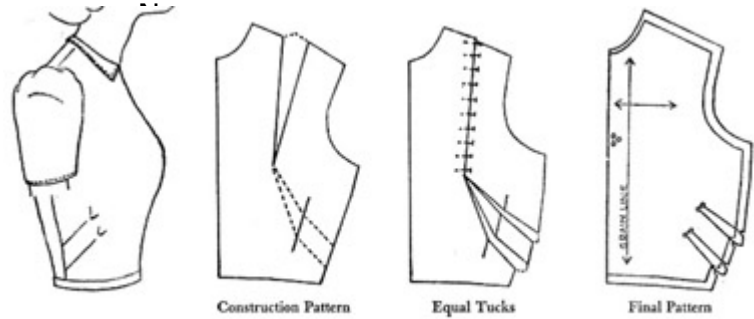
The procedure for rendering these designs is quite familiar to you. Note carefully the appearance of the corrected seam edges in the final patterns.



Darts at the Waistline

The use of dart tucks in this position, extending from the waistline, is best suited to the junior figures having flat diaphragms and firm bust line. When control is used in this position for mature figures it is usually handled as simple gathers.

The spacing between such waistline darts can do much to create illusion in form. If they are placed parallel to the center front and to each other, it will create the impression of a larger waistline. But if the first line is made parallel to the center front and the next two are tipped outward slightly at the top, the effect of a tapering waistline will result. To observe the results, this problem could be worked out for half the front—a left and a right. Make one pattern with the vertical darts and the other with the darts 1/8 inch wider at the top. Place the two halves upon the model figure and observe the difference.



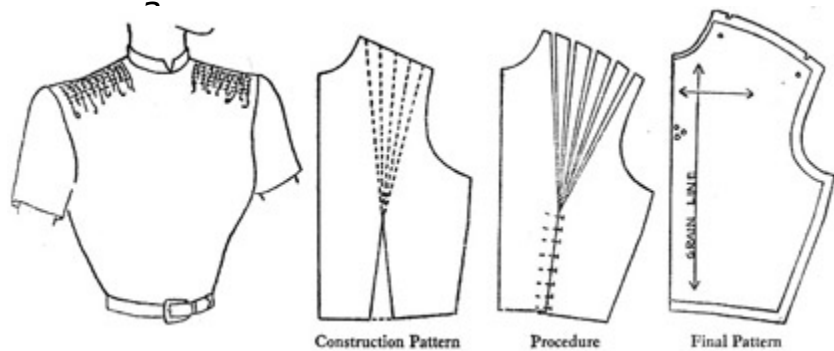
Multiple Darts from Lower Underarm

manufacturing plants patterns are made for ideal figure proportions and the rules of spacing become quite standardized. In custom shops, the pattern designer is constantly endeavoring to correct the appearance of badly proportioned figures and these fine points of spacing are put to constant use. With continued experience he can visualize the need for them by studying his customer's figure.

RULE FOUR

Several darts may be used instead of a single dart to produce more design interest without changing fit of a garment providing darts are so placed as to replace basic control dart.

Shirring or Smocking Replacing Single D



er way to vary basic control darts is by using drapery or gathers. These may be styled further with ornamental shirring, smocking etc. If lines for slashing are kept 1 inch from neckline and armscye, a smoother fit will result around those areas in the finished garment. Plan muslin for 2 inches of shirring. Use needle and thread.

RULE FIVE

Gathers, shirring, smocking or drapery may be used instead of a basic dart providing the fabric is pliable enough to give good results.

Spacing in Design

When the design for a garment provides for the use of divisional lines, artistic proportions are essential to beauty. First, it is necessary to establish beauty of form. Then this form must be divided into beauty of proportion. A picture, to be beautiful, must have a frame of proportionate width. A door may have excellent proportions, but if it is divided into smaller areas for the sake of further beauty, these divisional lines must be proportionately spaced to the dimension of the door itself.

In costume designing the silhouette represents the basic form being divided. Yokes, plastrons, panels, pleats and other sections are produced by divisional lines which must be artistically spaced. Once the divisional lines have been established

proportionately, they may be ornamented further to complete the design interest in the garment. Color is another factor to be considered, but that is not included in this text.

A study of your model form will be helpful at this point ([see page 56](#)). From a front view, notice that the vertical divisional lines on either side of the center front fall directly over the highest curve of the bust. When the figure is of perfect proportions, this placement of the vertical divisional seams proves pleasing. But, if one is designing for the imperfect figure, then slight adjustments would be necessary to create an illusion of beauty. Observe the model form from the back view. Note that the vertical divisional lines fall directly over the highest curve of the shoulders and over the highest curve of the back hip.

Study your model form to mentally visualize horizontal lines. Think of a horizontal line being placed directly across the highest curve of the bust. Better still, pin a narrow piece of muslin across the figure at this point. Pin another across the hip, on a level with the highest curve of the hip. Study the result. Now measure, with your tapeline, from the center of the shoulder seam down to the tape. Measure from the tape down to the waistline. How do they compare? Measure from the waistline to the table. Measure the distance from the waistline to the hip level. What fractional part of the whole (an evening length skirt) is this smaller area?

From the center front, measure the width of the front panel across to the bust point. Measure the side area on the same level. What are their relative proportions to half the entire front width?

If you will figure out these proportions with pencil and paper, you will probably see that simple divisional measurements, such as halves, quarters or thirds are not used. Instead, you will more likely find fifths, sixths, sevenths or eighths. The simple proportions are avoided because they are quickly apparent to the eye and would distract from the beauty of spacing.

Although, in a general sense, the body may be likened to a cylinder, when you view the model form from the front, or back, your eye does not see the entire half of the figure which is represented in our pattern of a bodice front or back. Near the side seam is an area which is lost to the eye. Hence, when you are establishing divisional lines, it is important to work directly over the figure at first. As you become familiar with the divisional lines, when they are on the pattern, flat upon the table, this should not be necessary. Horizontal lines, however, are seen clearly. Therefore, when using the horizontal lines for dividing the silhouette, proportions become increasingly important.

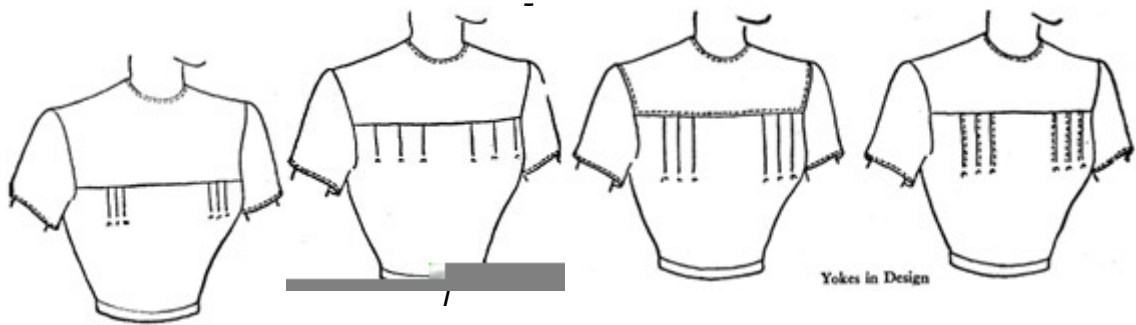
Note, too, that a true perpendicular line, drawn parallel to the center front will make the waistline look larger. This is because of the inward curve of the figure under the arm. Such divisional lines should

be tilted very slightly toward the waistline to conform with this silhouette.

The printer soon learns that, to produce an artistic page, he must know something about space and mass. He learns that, when a bold face type is used, he must allow sufficient space around it to make it easy to read. It is the point of interest and the remaining smaller areas of smaller type must be proportioned to the first area. Hence, when you have divided the bodice into a yoke design, the tucks, trimming and other secondary points of interest which further divide that, or some other area, must be in accordance with the first proportions established.

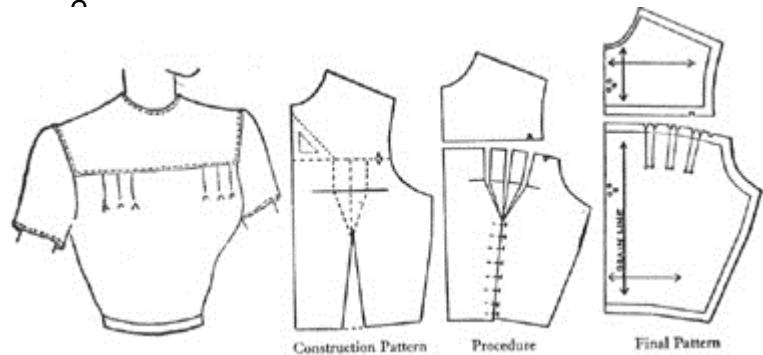
Likewise, when you plan a series of seams which will divide a given area, and each of these seams is to be further emphasized by rows of stitching, or piping, for example, they must be set far enough apart to allow for the additional lines which will be produced from the added emphasis, or trimming itself.

RULE SIX



ding a given area, elementary fractional parts should be avoided—such as halves, thirds or fourths.

The following sketches illustrate a study in bad proportions. Study them over and then decide the reason why none of them is p

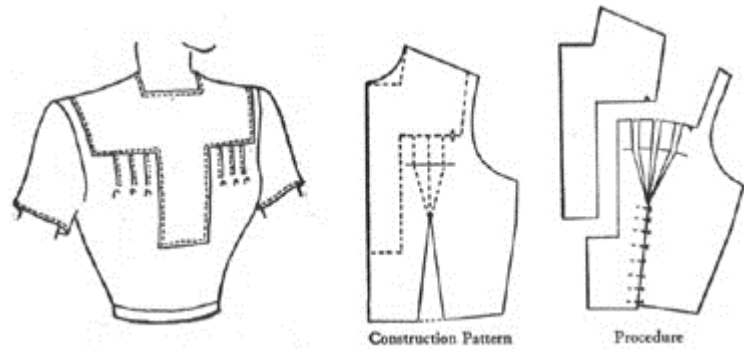


C *ontrol Under Yoke*

This sketch shows the same design with the proportions corrected. Compare it with the sketches on the previous page. Your problem will be to render a pattern which has equally nice proportions. When the construction pattern has been pinned over your model form, establish the horizontal line which will form the yoke. Then establish the position of the center dart-tuck to determine the proper length which must be governed by the yoke line. Then decide the position of the two other dart-tucks which

will be a problem in proper spacing. The group of dart tucks are then considered as a single unit of proportion. The procedure for making the pattern is shown in the

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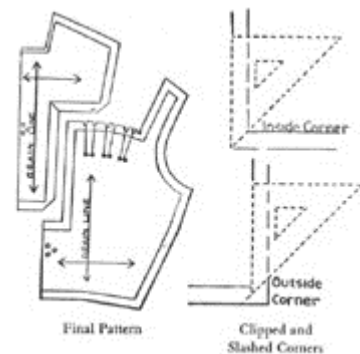


Unity in Arrangement

In the above problem, because the yoke was styled with a row of visible stitching, it became the dominant part of your whole design. The dart-tucks became the secondary interest. In this sketch, both have been equally emphasized through styling and both have equal importance.

When several lines are being given equal importance in a design, it is essential that a feeling of *unity* be created between them. Otherwise, the design becomes a confusion of meaningless lines.

Study the accompanying sketch carefully. As the panel portion falls over the center of the body, it is not influenced by the



silhouette of the body. It is therefore given vertical lines. To bring relationship between the upper section and the panel, the horizontal line is squared to this panel. But, the outer edges of the upper yoke *do* approach the edge of the silhouette and they are therefore tilted slightly to conform to the silhouette. This creates the feeling of *unity* between form and line.

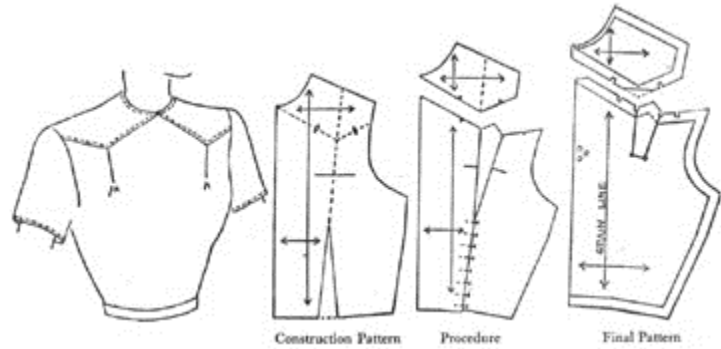
Notice that the neckline has been made square. This gives greater emphasis to the panel portion through *repetition*. Now the *focal point of interest* has been brought to the center of the garment. By placing the dart tucks parallel to the edges of the panel we are bringing still greater *emphasis* to the center panel. And we have established a feeling of *unity* between the panel, the neckline and the dart-tucks. Together, they dominate the design. The upper edges of the yoke are lessened in importance but they serve to bring a feeling of unity between the design and the actual form of the figure.

Keep all these artistic fundamentals in mind as you sketch in your design while the construction pattern is upon the model form. They are essential to good designing!

RULE SEVEN

Unity in design may be achieved by giving each part of a design a relative importance to the whole.

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hip in Design

In this problem, you will show relationship between the dart and the yoke. Because the dart is functional, it may be established first. Start line of yoke from the dart and work each way. Note that diagonal lines are more flattering than simple horizontal and vertical lines.

PRACTICE PROBLEMS IN YOKE DESIGN

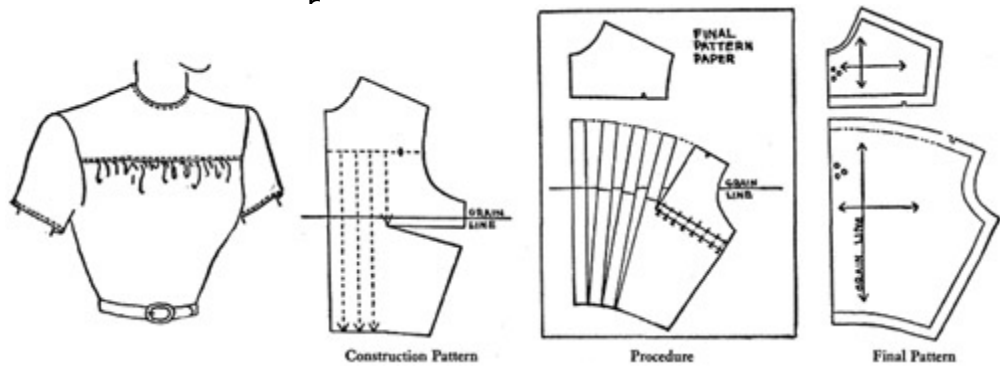


e problems illustrate variations in pattern making principles you have studied thus far. They also offer opportunity for further study in unity and relationship in design. If you see opportunity to improve them, do so. The diagrams will suggest your first step in the procedure.

Draperly in Design

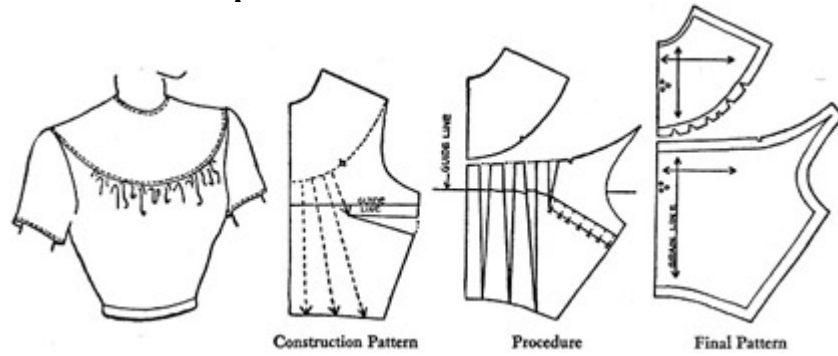
In the foregoing problems you learned that gathers, or draperly might be used instead of a single dart to maintain control of the fit of the garment. You also learned that, when a yoke is employed, the control

can be provided in the area between the yoke and the bust point. This control might take the form of a single dart, groups of darts, etc. In this problem, you will not only provide the necessary control in the form of drapery, but you will add additional bulk to the silhouette by increasing the amount of d

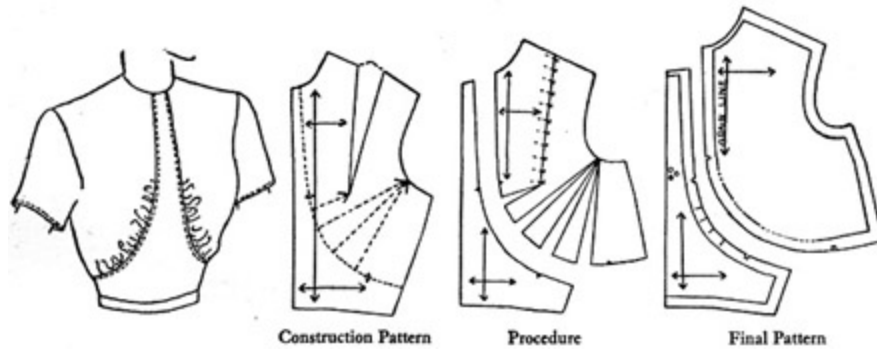


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yond that provided by control.

Naturally, when additional bulk is added to the silhouette, the fabric being used must have the proper texture to permit this. The amount of additional fullness must depend upon the texture of the fabric. Therefore, we encounter a new problem in proportion. That is—the proportion of drapery which may be added to any portion of a garment.



amount of added drapery may soften the excessively large bust through the vertical lines which are created in the soft folds of the fabric itself. In other instances, a greater amount of drapery might be used to create the impression of a greater bust curve for
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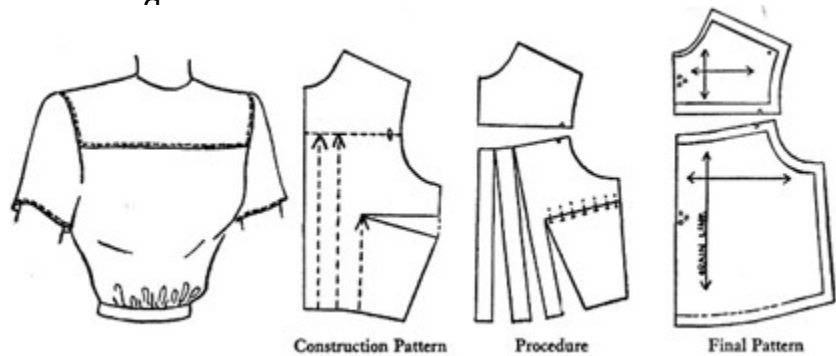
who is angular.

In this problem the drapery is added at the yoke seam and the lower edge, or the waistline, is not draped. First, the control is shifted from the underarm to the yoke seam edge. Then the additional slashes are made to produce the extra drapery *where it is desired* in the finished garment. Note that in so doing, the armscye, shoulder seam and waistline have been in no way altered. When you have gathered up this drapery which was provided by spreading the sections, you

have a garment which still fits the model form in all the basic seams. The added drapery changes the silhouette but does not change the dimensions of the pattern itself, as far as *basic* figure measurements are concerned. Whenever convenient, the basic control is first shifted to the position of the drapery and then the additional fullness is

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s is one of the most important principles of cutting used by designers. Mark your muslin into a plaid design so that you may visualize how this principle of cutting will affect the fabric grain.

By drawing a horizontal grain line on the construction pattern and then on the final pattern paper, you can observe what happens to the grain of the fabric. Note how notches are inserted to indicate where gathers will start.

The following problems will give you further practice in the use of this important principle in pattern designing.

Observe that the lines which have been drawn upon the construction pattern to locate position of the slashes have been

drawn at *right angles* to the line of the curved yoke. Observe the result which is produced in the finished muslin. Such *folds of fabric*, produced by gathered areas, actually *create lines* which become a part of a design. If the slashes can be placed at right angles to the basic line, usually the results are pleasing.

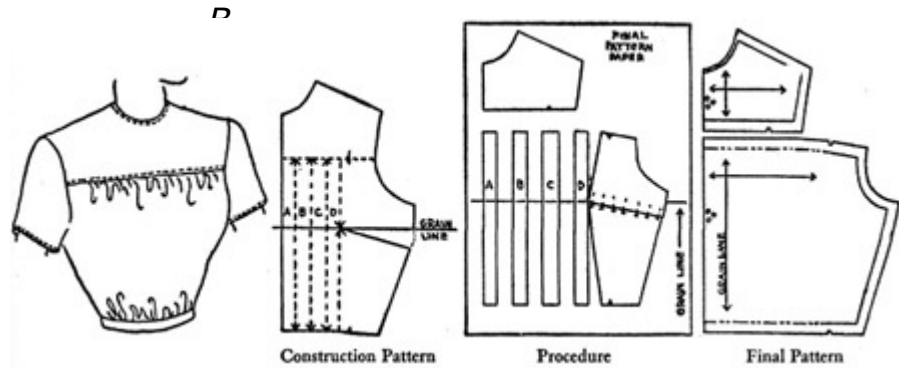
Note how final pattern is notched to aid in turning the edge of the curved yoke seam allowance. This should be done in all such cases.

Note position of lines indicating added drapery. Also slashes in plastron section which aid in turning that edge for lapped seam.

RULE EIGHT

Additional fullness may be added to one side of a section of a pattern without affecting the dimension of the opposite side. Only the shape will be altered.

Compare this sketch with those previously illustrated. From appearances, it would seem equally feasible. Work out this problem. Mark your muslin for a plaid or vertical stripe. Observe results. A "pen and ink" design can be most disappointing when rendered in form!



Drapery

In the foregoing problems you added fullness to one side of the area only, and at the same time shifted the control to that same position. Many designs provide for drapery on both sides of some given area. In such cases the control may be divided first, and then the additional slashes made to give the extra fullness desired.

In order that you may observe the effect this method has upon the grain of the fabric, the muslin should be marked into a plaid design. The above diagrams will show procedure for completing the patterns.

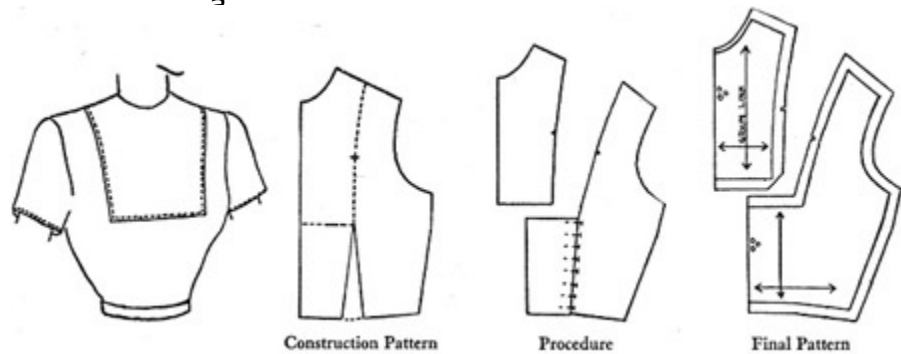
Same method would be used for vertical pleats. Area between sections would be folded out of sight. Control would be laid under the last pleat.

RULE NINE

When adding an equal amount of fullness to opposite edges of an area, the grain line in the final garment will not be affected.

RULE TEN

When fullness has been added to any certain area, this fullness must be arranged and distributed in the final garment in exactly the same position as that used in the



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insure good fit.

Control in Yoke Seam

The foregoing problems have taught you that control may be provided through the use of simple darts, dart-tucks, gathers or drapery, multiple darts and dart-tucks. This problem will teach you a new principle of cutting—the provision for the necessary control in seams which are a part of the design itself.

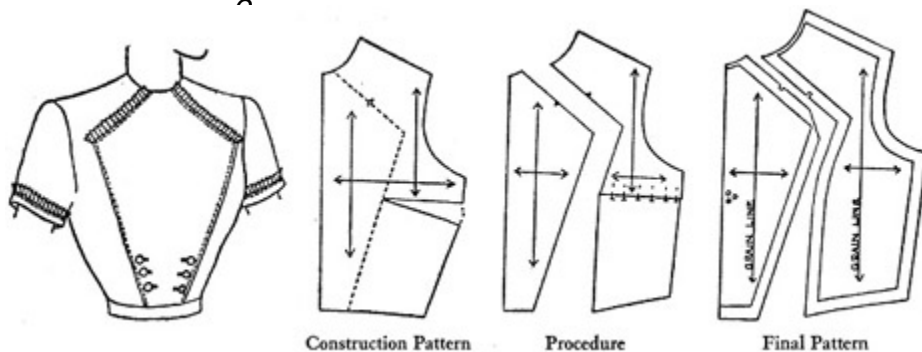
This method of cutting is employed when garments are to be made from bulky or stiff fabrics which are not adapted to the foregoing principles. It is frequently used when the designer wishes to introduce a focal point of interest in the garment and he does not wish basic control darts to distract from the design itself. When creating designs for individuals, rather than for the

manufacturer, this principle is employed because the designer need not consider the possible need for alterations.

In order that you may observe how the basic control is shifted to the seam which extends from the shoulder seam to corner of yoke, *cut down that line first*, flatten the pattern and then completely cut yoke away from body of the pattern. Observe the shape of yoke closely. Note that it extends to *the*

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he bust to effect this method.

Control in Plastron Seam

In this case, control shifts from underarm dart to *lower* plastron seam. Note that grain indicators are marked in construction pattern. Mark muslin into a vertical stripe. Cut plastron crosswise and remainder lengthwise. Observe results.

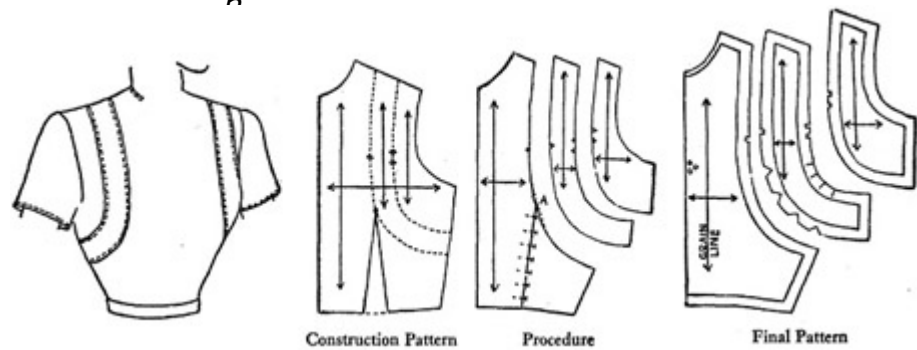
RULE ELEVEN

In order for a seam to substitute for a basic control dart, it must fall across the highest point of the curve being fitted.

RULE TWELVE

When designing patterns which provide control through seams, it is advisable to plan that the straight grain in both sections will fall across the highest point of the curve of

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Control with Secondary Seam

This problem illustrates the use of one seam which serves to provide the control while the second seam is merely decorative. Watch your proportions! A slight correction may be needed to blend the curved line at point A.

Mark your muslin with horizontal stripes to study results. Can you suggest an interesting layout which might add further design interest? Trace over the sketch above and work out these preliminary ideas.

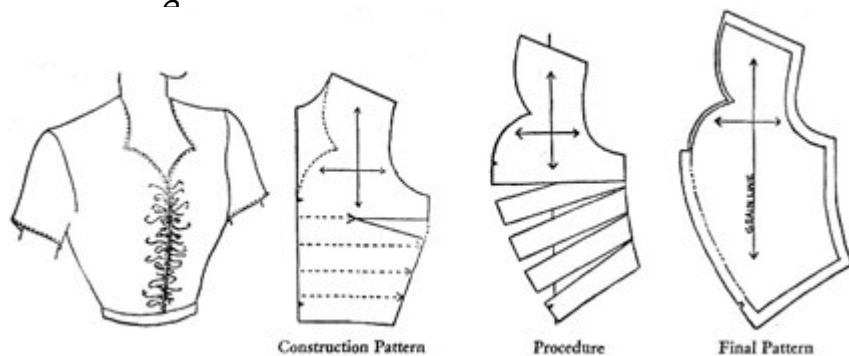
Lay the sections on this muslin as you would if cutting a dress of striped material. Observe what happens to the stripes in the area where the control is provided in the seam. Try your pattern with the center front

and upper side sections crossways of the fabric and the strap portions on the bias. Again study your results. Can you work out a still better plan of lay-out ?

Observe that the *lines of the design* are based upon a curve. Hence, it becomes more difficult to use such a pattern for material which is designed on the basis of a stripe or plaid, because the design and the fabric lack *relationship*. This design would be satisfactory for using a three-way color combination of plain fabrics or a printed silk of floral design.

RULE THIRTEEN

Secondary seams may be used with basic seams which provide the basic control. They may be used to create emphasis by repetition or they intersect to complete a



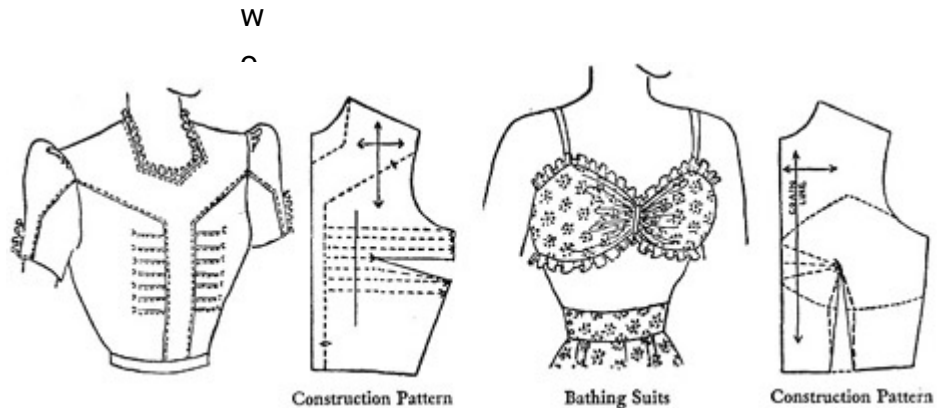
Horizontal Center Front Control

In previous problems the control was placed at the shoulder, underarm or waistline seams and was shown as a dart, dart-tucks, gathers etc. On some occasions, the control is thrown to the center front in a

seam placed in that position. As was the case in previous problems, additional drapery may be added if desired.

There are two types of center front control. First, the horizontal and second, the vertical. Each has its usefulness to the pattern designer.

The foregoing design shows the control shifted from the underarm seam to the center front seam and then drapery is added all the way down the front of the garment. If drapery is desired only through the immediate bust area and the diaphragm area left plain, the construction pattern

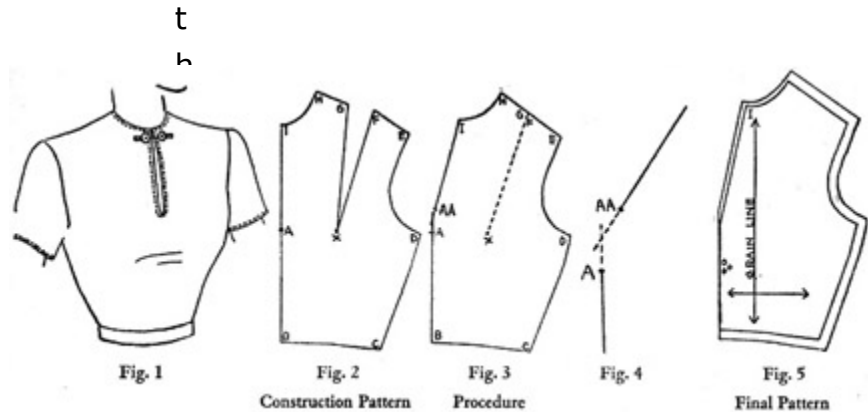


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arked for slashing accordingly.

PRACTICE PROBLEMS

The above designs illustrate further use of this principle. Notice the relationship shown in the blouse design through repetition of line in the neckline and sleeves. Because the darts complete the design, the width of the center front panel is narrowed.

The "bra" top for the bathing suit merely shifts the waistline control to the center front where it is distributed into gathers. The upper and lower areas of the bodice are discarded. The little strap hides



and shirring.

Vertical Center Front Control

You have learned through previous problems that one may shift the control to a horizontal position at the center front, on a level with the bust, and acquire a perfectly fitted garment. You have also learned that one may use gathers, tucks or darts as a means to design interest.

Another form is known as *Vertical Center Front Control*. It is seldom used in its simple form, such as the others, except in cases where the model is being made for an individual who has a flat bust and larger waistline in which the slopers would have much less area in the darts.

In this case, by using a model form of a youthful figure, you will readily observe that it would appear quite impractical to use it in

this simple form. However, this problem is being presented in order to teach you how to make a Center Front Control Block which will be the basis of following designs.

The shoulder control sloper is used to make this pattern.

Read Each Step Carefully:

1. Label your shoulder control block as illustrated in Fig. 2.

2. Select a piece of pattern paper. Starting with point A, trace around this sloper as follows: A to B; B to C; C to D; D to E; E to F.

3. Keep your sloper flat down upon the tracing. When you reach point F, without moving your sloper, place point of pencil in point of the dart (Point X). Pivot sloper to the right until you have closed the dart by shifting point G over to point F which was the point where you discontinued tracing.

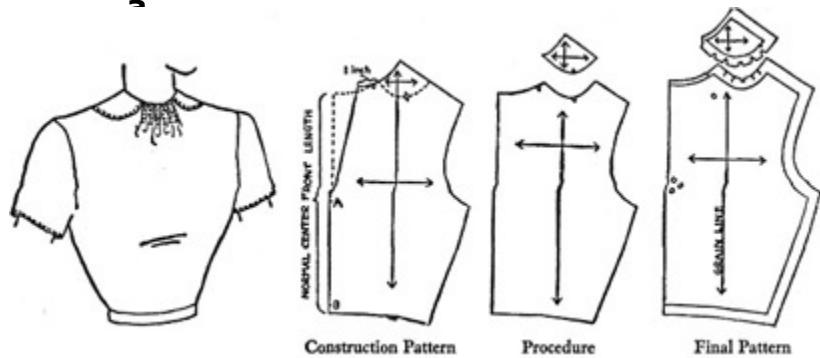
4. Complete tracing: G to H; H to I; I to A.

5. Lift sloper. Extend lines from A and AA so they intersect. Space between these points is length which has been added to center front. See Fig. 4.

6. Make seam allowances as shown in Fig. 5. Cut muslin proof and observe result. It becomes obvious that, in this simple form, there would be little

beauty in this pattern. In a few cases, when a person has a flat bust and large waistline, it might be used. Following problems will show adaptations of this

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ciple.

Adaptation of Center Front Control

In this design, the yoke resembles a collar, the control is placed in the center front and shirring is used to add interest to the design. These vertical shirrings or unpressed pleats are nicely adaptable to costume suits. Study the diagrams carefully before proceeding.

Read Each Step Carefully:

1. Make construction pattern by following procedure used in previous problem.

2. Sketch in the design for the yoke. Mark notches and establish grain lines.

3. Extend the line A-B as shown by dotted line equal to center front length of your *shoulder control* sloper. Extend

the dotted line over to the notch in neckline which indicates the start of shirring, making a shallow curve.

4. Complete final pattern with usual seam allowances. Note notches and slashes necessary where yoke joins the body of pattern.

5. With needle and thread, gather up neckline until it is reduced to size of neckline on sloper. Attach the yoke by lapping and pinning.

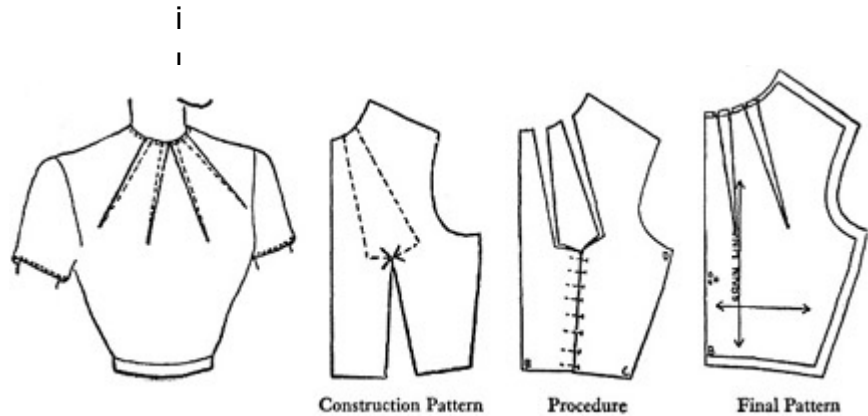
6. Assemble patterns and drape muslin upon model form to criticize results.

NOTE: You may readily observe that this simple method of providing control might be employed in many variations. A simple band around the neck, a yoke with this fullness extending from it, or one of many other ideas might be used.

Likewise, additional drapery could be added for the sake of a fuller silhouette. In such cases, the method used would resemble that used in problems presented in previous lessons where the control is shifted into position and then, through the use of slashes to the waistline additional fullness is added. Watch for examples of variation of this principle shown in fashion magazines.

The woman with the highly curved chest will find variations of this style quite becoming. The soft folds of the fabric hide her defect and, if a collar is becoming to her

also, the bodice may be cut from this principle and a collar attached at the neckline in the normal way. If the closing is also placed at the center front and a row of small buttons added, it will further the



Distribution of Center Front Control

The two designs illustrated on this page show variation of the use of a partial center front control which has been provided by the darts which extend from the neckline and are arranged in a pleasing fashion.

In some cases, you may find that instead of confining the fabric securely into darts, the designer may merely fold the fabric over to create soft folds. When the shape of the neckline varies, the darts should be arranged to bring harmony between the line of the neckline, or yoke, and the darts, which will be a secondary point of interest and should contribute towards the feeling of unity.

When you have completed these muslins, compare them with the muslin which you just made from instructions on the previous page. In the previous instance,

the gathers are vertical, while in these designs, they radiate outward to the bust and are less slenderizing. In fact, these designs might have a tendency to emphasize the bust curve. Both reduce width of neck—they are generally flattering.

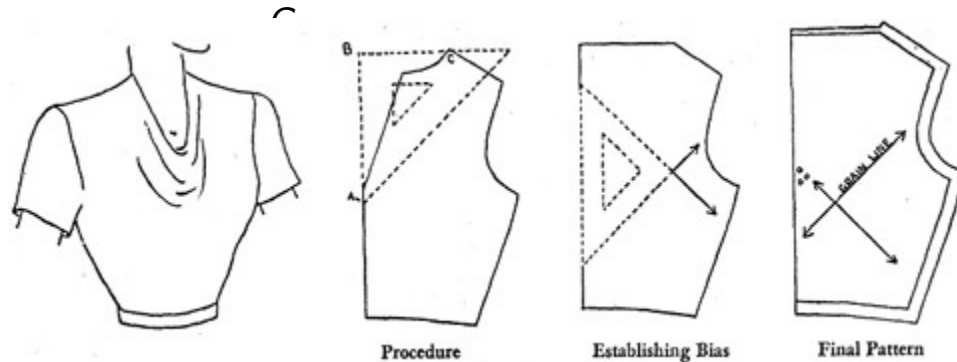
NOTE: If a design provided for a center front dart and two side darts, the portion which would be used for the center front dart would be pivoted to that position. The remaining unused portion of the control would be

shifted by the slashing process.

PRACTICE
PROBLEM



This design shows the possibilities for a variation in the use of darts extending from the neckline. If this blouse were to be a part of a costume suit, only the decorative portion of the neckline would be visible to the eye when the coat would be worn. When the coat was removed, the dart tucks would give added interest to the simple dress. Note simple method of producing this style of garment.



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Simple Center Front Control

The modern cowl neckline may be recognized as having been inspired from the clothing worn by the early Greeks. Their clothing was not cut and shaped to the body but their garments were merely several large pieces of cloth draped about the body. They were masters in the art of draping and created beautiful garments through this method.

Modern fashion has adapted this flattering means of draping the body. It is usually combined with fitted areas. Unless the medium being used is of such texture as to fall into definite natural folds, this principle of cutting should be avoided. Also, if the individual being fitted has an excess of curved lines in the body, it should be avoided. It is best suited to the tall angular woman.

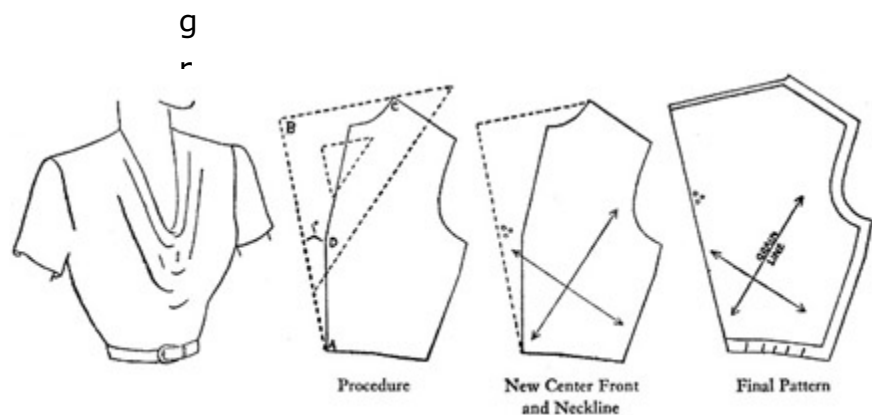
There are two factors to be considered when using this principle of cutting, namely: The depth of the neckline, which results in the length of line produced



by the folds of fabric and, second, the bulk of fabric which will fall into folds. As fabric drapes more easily on the bias, usually the cowl bodice is cut on the true bias of the fabric.

The first step is to produce a construction pattern which has the basic control moved to the center front. This procedure has been learned in the previous problems. The free-hand slashing method is not employed in this principle. The final pattern is developed from the construction pattern tracing.

In the above sketch, the drapery is produced by merely using the normal control which has been shifted to the *center front*. A-B represents the amount of fabric which will collapse into drapery. B-C represents the depth of the neckline. Observe the method for marking grain indicators and the position of the pattern on the fabric when indicators call for the center front to fall on a true bias



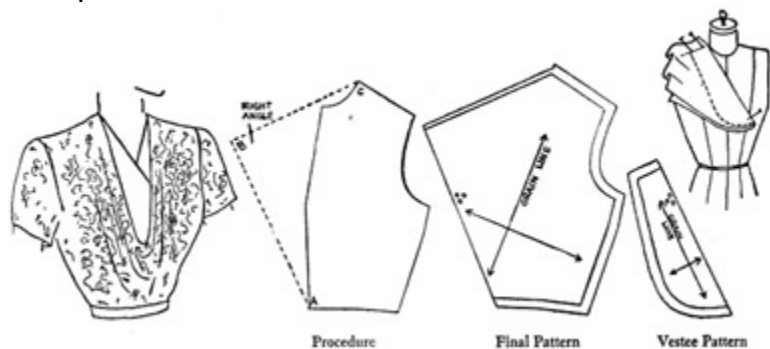
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Large Cowl Drapery

In the previous problem, the squared line A-B-C produced a straight neckline

which formed a rather high neckline. The area from the bust to the waist remained fitted and the drapery fell between the base of the neck and the bust level.

The problem illustrated above produces a lower neckline with the drapery falling at the bust level and below. Compare the diagrams. The new center front line A-B is located one inch away from point D in a normal size pattern.

In the final pattern, the center front waistline will appear distorted. When the muslin is cut, if slashes are placed in the seam allowance at waist, the muslin will adjust at the waist line and in so doing, will



drapery into better position.

Deep Cowl Neckline with Vestee

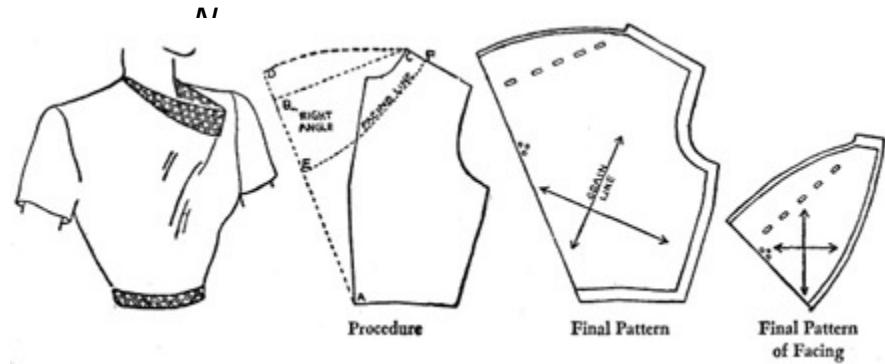
In this design, a vestee has been used to permit the neckline of the garment to extend down below the bust level. If a garment is to be made of lace or sheer chiffon, a fitted sheer lining would be used to which the vestee would be attached. The

actual cowl front of the garment would be permitted to fall loose at the neckline.

If a contrast in texture and color were to be used, the oval neckline of the cowl would be further emphasized. As the lines of the drapery naturally repeat the first line of the neckline, you can readily visualize how such a garment might be used for the mature woman having a low, pronounced bust line and prominent abdomen. When you have finished your muslin proof, study these cowl necklines from the profile view. Compare them. It will help you to see which type is best suited to certain figures. Before attempting to produce the pattern, use your tapeline and measure an estimated neckline depth on your model form. That measurement should determine length of line B-C, which in turn (because it is squared at B) determines amount of added fabric which will produce drapery.

RULE FOURTEEN

When drapery is to be added to an area, it is usually advisable to shift the control to that position first and add desired amount. This method reduces operations necessary to complete garment by eliminating darts.



C *owl Neckline*

When current fashions favor bodice front drapery, designers originate many interesting variations for the use of a simple cowl. These are usually developed by cutting many muslins which provide extra fabric in the center front and these are then draped into position on a model form. The origination becomes a matter of experimental manipulation with excess fabric and then a new design emerges.

The above design employs the use of a contrasting shaped facing together with a cuff-like arrangement cut in one with the bodice front. This contrasting cuff might be attached by means of a seam, but wherever possible this should be avoided so that operations may be reduced in assembling a finished garment without loss of design interest.

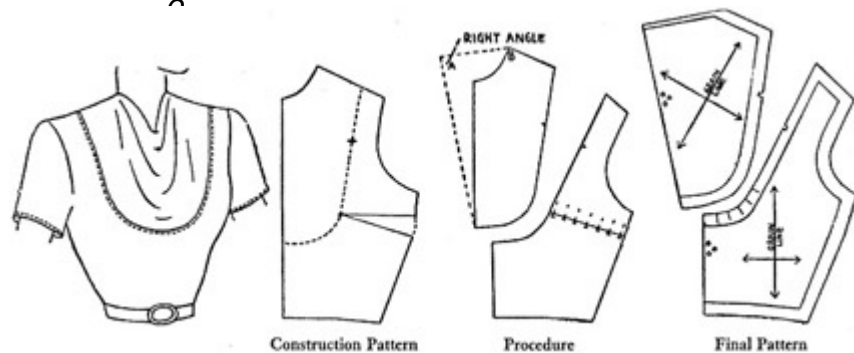
When final pattern for the bodice is finished, a pattern for the facing is traced off. This eliminates chance of variations, insuring a perfect facing.

When you search through fashion literature for examples of the use of cowls, you may notice that the cowl principle appears in the back bodice section, sleeve or even the skirts. You will study the application of this principle in other sections of garments so it would be well to save those examples for that time. You will also notice that many seemingly complicated designs which might be developed from this same principle are also to be found. Save them for practice work.

RULE FIFTEEN

Shaped facings are identical in shape with area to be faced. Patterns for shaped facings should be made from final pattern of garment whenever possible. Grain markings should be identical with body of garment if

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Cowl Yoke

In the study of the previous problems it becomes apparent that unless the cowl is placed above the bust, the area through the bust must be enlarged. The high cowl is adaptable to the "hollow chested" woman but it does nothing for the woman whose

face might be flattered with soft drapery at the neckline but whose bust is prominent, and divisional lines are needed to reduce the appearance of the bust. The cowl drapery may be placed in a yoke and the line which attaches the yoke to the garment may serve to divide the bust area. Naturally, the shape of the yoke would vary, and the level of the drapery in the yoke might also vary. Your problem becomes one of proper proportions between the yoke and the remainder of the bodice plus the proportionate adding of the drapery to the yoke area itself. If the yoke area is cut on the bias, it will drape more softly. The garment itself may be made of fabric which would not be suitable to the cowl principle.

The basic control, if the shape of the yoke permits, might be shifted to the yoke seam. The cowl is then added to the simple normal neckline. If this is done, you will be employing two basic pattern making principles. This frequently happens in more complicated designs.

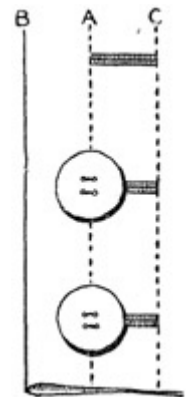
If the reader will test one pattern in several weights and textures of fabric to observe the silhouette which results in each, it will do much to further the knowledge in the use of the cowl in designing.

While discussing the use of the cowl, it might also be well to mention that the graceful folds produced by the fabric manipulated in this manner gives a certain dignity to the wearer. Hence, this cut is chosen for formal gowns, wedding gowns,

negligee and other garments in the wardrobe that have glamour and unusual feminine feeling. It is quite out of place when used in gingham, taffetas and other fabrics used as the media for creating sports or casual clothing. In the study of design, the student should attempt to grasp the "feeling" which is produced by certain principles in cutting and also to recognize fabrics as having relationship to the cut. For example: linen might be used as the medium for making a wedding dress, but, were the design to include a cowl, the texture of the fabric would produce clumsy drapery, while soft lace, especially designed for luxury articles in the wardrobe, *would* be further enhanced through the use of the cowl cut.

Planning Laps

Because some following problems include the study of planning for the lap needed for button closings, it is practical that you study the proportions used in such instances.



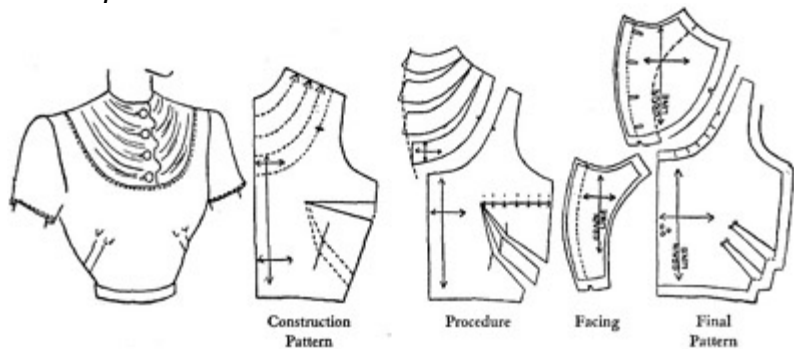
The diagram refers to the normal, conventional buttoned closing. This gives you the minimum amount of extension which must be provided. This extension is dependent upon the size of the button and buttonhole. It is the functional requirement. When the designer wishes to provide design interest in a novelty closing, the lap width may be increased and the size of the buttonhole also.

A is normal center front of garment. If both sides are cut alike, the underlap extends to end of buttonhole and prevents lingerie showing.

RULE SIXTEEN

The minimum amount which is allowable for the extension for a buttoned closing equals the diameter of button to be used. Standard buttonholes for flat buttons

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the diameter of the button.

Simulated Cowl Yoke

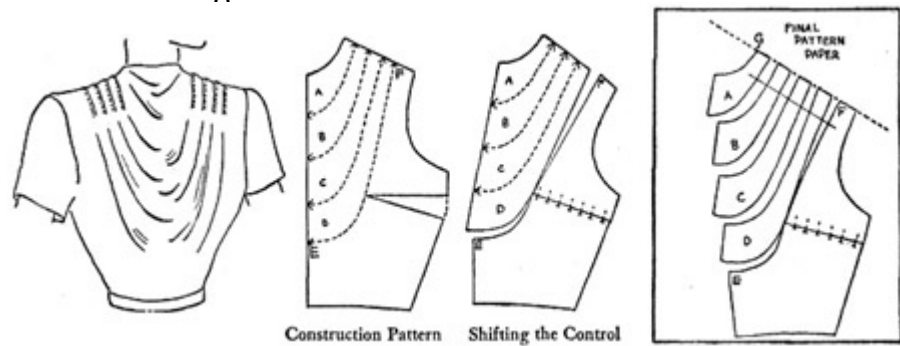
Study this sketch carefully. In the previous designs, the shape of the neckline was changed. In this design the original round neckline has been retained. In the previous problems, the cowl drapery fell from one single point—the shoulder neck point. In this design, the folds fall from the shoulder seam. Also notice that the control has been handled by darts in the main portion of the pattern. This is necessary unless the yoke has been so shaped as to fall over the highest curve of the bust.

When the pattern for the yoke has been completed, the pattern for the facing is traced from it and the one necessary seam is provided to turn the edge of the facing.

Because the slashing principle is used to distribute the drapery, the center front of the yoke assumes a curved line. It is, therefore, necessary that it be closed in the center front. Your previous instructions on establishing laps will guide you in the completion of the yoke closing. Note need

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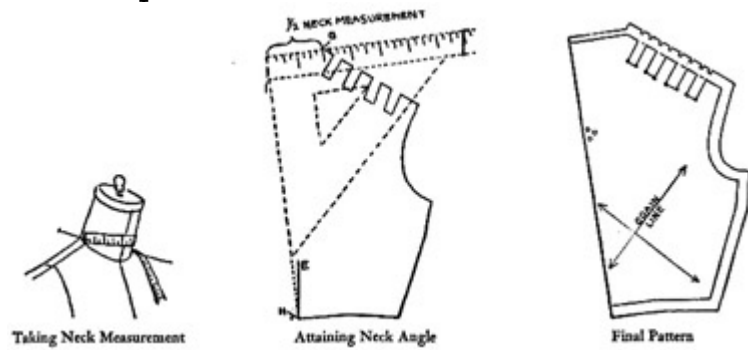
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seam allowance beyond the lap.

Novelty Simulated Cowl

Compare this sketch with others previously rendered. Note that the drapery extends from a series of dart tucks. Appearance of heavy drapery through bust area indicates extra fabric was provided for that purpose. Guide line is an extension of F. The sections are cut apart and moved against that line. Control is first divided between E and F or shifted all to F.



ill refer to your sketch, you will notice that the design provides for drapery which extends up to the horizontal neckline. Take the neck measurement as shown in the accompanying diagram. With the aid of your triangle and ruler complete the front of the pattern so that it may be cut on the bias fold. (The sections A, B, C and D merely served to maintain the angle of the shoulder line and to produce dart tucks by estimating the desired amount of drapery.)

The original round neckline might be retained by extending the center front from point E up to center front point of the neck. Lay your ruler on the diagram in center of page and observe the procedure if the round neck were to remain a part of the design. A small amount of width of the bodice would be lost at point E. Because the garment would be cut on the bias, this small amount would be offset by the elasticity of the bias fabric. Otherwise, a proportionate amount would have to be added to the side seam and that would lead into possible difficulties.

Whenever fashion favors the return of the cowl necklines, there are many variations of the simple cowl seen in the designers' collections for that season.

Remember that folds of fabric produce distinct lines of design and drapery also adds bulk to the silhouette. The fabric being used must be the restraining factor when such designs are being created.

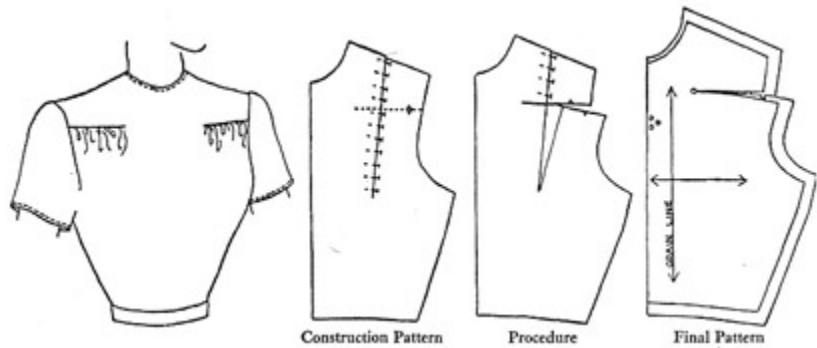
This problem illustrates a basic theory of cutting this and other similar designs. The darts might be replaced with shirring and might also be used in conjunction with a shaped yoke. Remember that the bias fabric produces more pleasing drapery of this sort and the addition of weights sewed in the proper places will help to hold the fabric in position permanently.

Possibly the best method for originating variations of cowl designs is to actually drape the fabric upon the model form until the idea begins to take form. Then the pattern may be started and adjustments made in the muslin and then that muslin can be marked, flattened and a paper pattern made from it. This is a slower method of course, but some designers find it easier to work in such a manner on certain occasions.

A cowl design must be carefully worked out. It is much more than a haphazard drapery thrown to the front of the garment. A well cut cowl should produce pleasing lines and form in the finished garment. The best method of studying the possibilities for the use of cowl necklines is to clip many of them and then actually work out the pattern from the sketch. In so doing, original ideas will come more easily.

At this point, you might stop and originate a design for a cowl neckline which might be based upon any one of the basic

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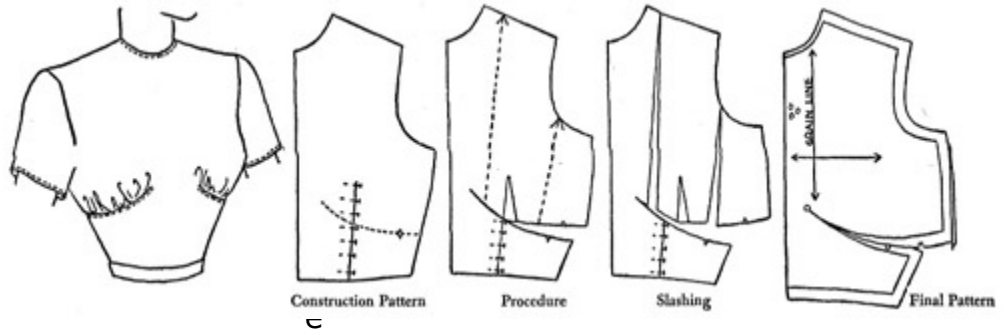
just studied.

Simulated Yoke

In addition to simulated cowls, we may have simulated yokes, plastrons, etc. This involves a combination of basic cutting principles which you have already studied. In this case, however, we make an exception to the rule and we use a sloper which has the control located in the area where design will be introduced. Experiment has shown that this method is the most accurate.

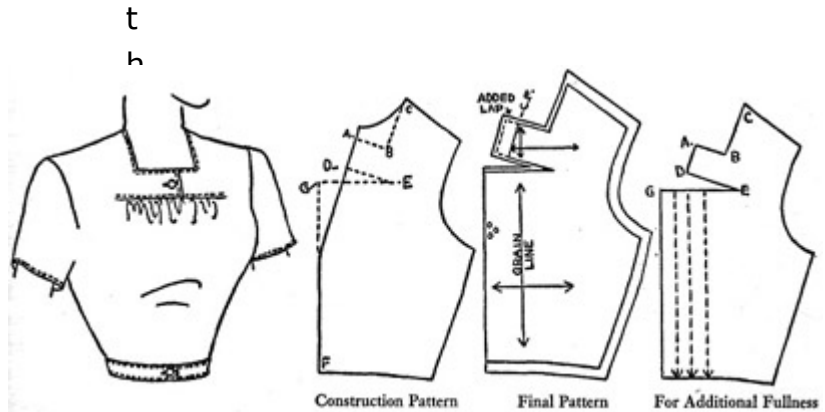
The larger amount of control provided in the pattern, the more adaptable this one principle will be. Although this problem shows gathers being substituted for simple control, additional fullness might be added to the lower area by the usual slashing method.

Simulated Plastron



above, the same principle is employed. Diagrams show method for adding extra fullness.

When adding fullness, it will produce a more pleasing effect if slashes are kept towards the front. It will produce a trim side line with the appearance of a full bust. Note that the curved plastron line falls just below



curve.

Simulated Yoke

Here you have a third variation of this same principle. In this case, the control is first shifted to the vertical center front position. A-D plus F-G are equal to the original center front length of the sloper less the amount the neckline has been lowered. At A-D there is opportunity for establishing

the normal lap for simulating a closing. When the basic pattern has been made, by slashing down from the line G-E, additional fullness could be added.

PRACTICE PROBLEMS

The following sketches show two variations of design based upon the principle used in the



principle used in the foregoing problems. The first is a variation in line on the preceding problem.

Instead of using vertical and horizontal lines, a curved line was used in the first sketch, and repeated in the shape of the neckline—just another example of the possibilities in the use of a single cutting principle varied only in the elementary lines of the design itself. Although the diagram shows only the fullness that was furnished from the basic center front control, it would be possible to add more if desired.

The second sketch illustrates the use of a combination of pattern making principles previously studied in this text. After the simulated yoke line has been established and the horizontal slash made, additional drapery has been added to the yoke portion only. In spreading the sections, the lower edge of each should rest upon a guide line in order to preserve original yoke line in the final pattern.

Because such a design suggests difficulty in assembling the two sections neatly in a seam, use of the decorative strap is ingenious. Variations of this design have appeared in soft crepe dresses in past years. Additional fullness could be added to lower portion if desired.

Zippers

Because modern manufacturing has given us the zipper, you should be familiar with the methods of preparing the pattern for a garment which will employ this ingenious device for fastening.

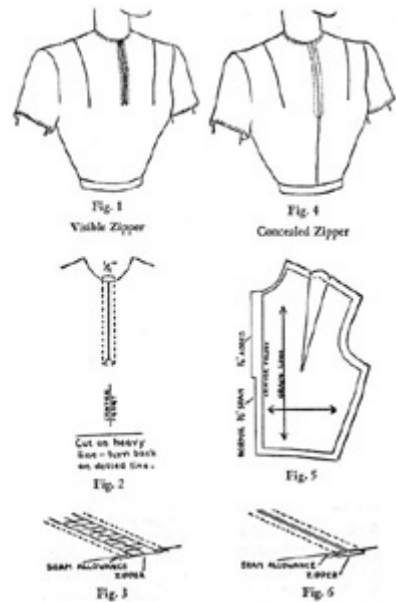


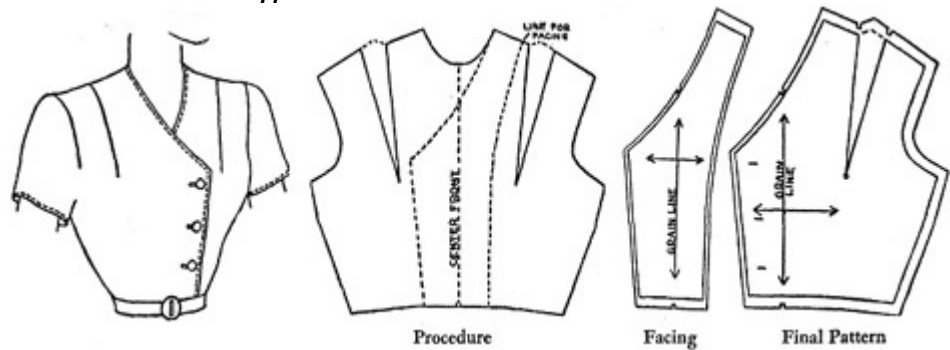
Figure 1 shows the visible method. A straight slash is made in the pattern to a point one fourth inch less than the zipper length. Dotted lines indicate space taken by the mechanism of the zipper. In this illustration, we have a similar garment closed with a concealed zipper. To set a zipper in in this manner, the design must call for a seam into which the zipper will be set. Taking the same dimensions used for the above pattern, make a pattern.

NOTE: Underarm zippers set in side seams of garments do not require extra

allowance if pattern provides inch seams or over except in tweeds or in cases where fabric ravel. In such cases, this method would be used.

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losing

Up to this point in your study of patterns, designs have had either no closing in the front or have been simple lapped closings. You are now ready to study the method used to produce surplice or double breasted designs.

Because the surplice design illustrated above has the simple, oval neckline, it will give the wearer an appearance of being dignified. Similar necklines, in variation are frequently to be found in mature women's apparel. However, one may design the double breasted garment which has more youthful lines so they are not used exclusively for the mature woman. It is the shape of the resulting neckline which classifies the garment's appropriateness. When revers are employed also, there is

ample opportunity for producing very youthful garments when shaping the revers.

As the design for half the front bodice extends past the center front, it is necessary to make the construction pattern of a complete bodice front. It is wise to fold in the darts on the pattern and put it over the model form to study the effect you will be getting in the neckline.

The above illustration, obviously, is a very simple version of a surplice cut. Yet the artistry needed to produce garments of simple cut equals that used for more complicated designs. As the few lines that are employed have great importance to the whole, they must have proportion, grace and beauty.

When the construction pattern is upon the model form, study your sketch. Locate the position of the angle, where the neckline joins the vertical closing line. Lightly sketch in the shape of the neckline. (Because it has a shallow, sweeping line, use long strokes as you draw.) Although the vertical closing line *might* be made vertical to the center front, you have learned, when placing vertical waistline darts, that if they tip gently inward at the base, they will give greater beauty to the finished garment. Notice that the diagram of the construction pattern shows this closing line tapering inward gently at the waistline. Taper your line likewise.

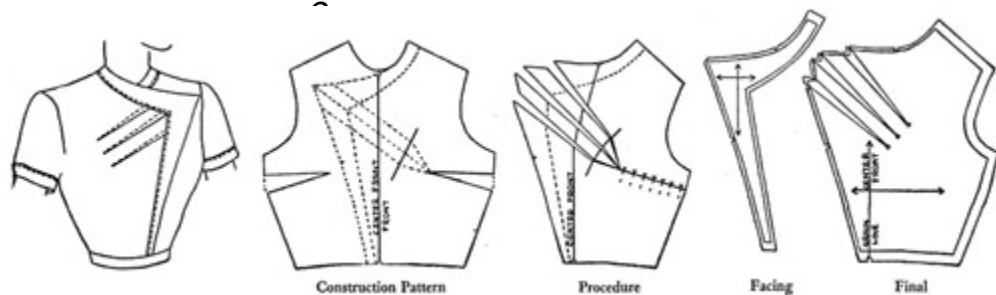
Remove the pattern from the model form after you have located the exact

buttonhole positions. They, too, are a part of the design and should be carefully spaced.

Lay the construction pattern flat upon the table and correct your roughly sketched lines, using the curved stick. Establish the width of the facing which also will require a pattern taken from the *final* pattern of the bodice front. Notice that a small notch is recorded to show position of true center front. The buttons on the under portion would be sewed the same distance from the center front as the buttonhole.

NOTE: Look through fashion magazines and find several variations of the simple surplice closing. Notice how the designers decorate them to give further style appeal to the dresses.

D
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reasted Closing

In this problem the design requires procedure in shifting the dart into three smaller darts and the making of a shaped facing which is applied on the outside and becomes a part of the design of the garment. At the same time, the darts

maintain the required fit and the facing provides a method of finishing the garment.

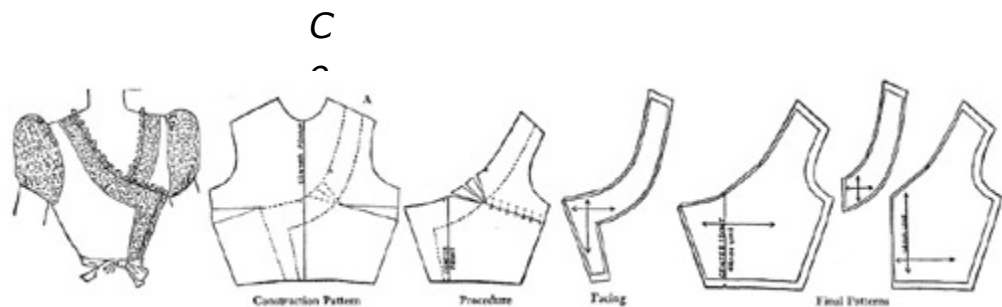
If you will compare this design with that on the previous page you will see that the use of a higher closing, the round neckline and upward sweep to the closing edge give this surplice closing a more youthful feeling. Variation in width of facing provides more interest. This sketch was inspired by a simple garment originated by an internationally known designer. The lapped closing was exaggerated to extend beyond the armhole; the facing was mink. Result—a smart, interesting bodice for an otherwise untrimmed dress.

Study your sketch closely to visualize the proportions and the angle of the darts. Observe that the center dart points directly to the bust point and the other two darts run parallel to it. Also observe the variation in width of the facing, the widest part being in the area of the darts, thereby giving greater emphasis to the darts.

Note the diagrams showing method used to take pattern for facing from *construction pattern first* before slashing for tucks.

If areas to be faced have bulk (such as that produced by tucks in this design) facing pattern is taken from construction pattern before any slashing is done. Seam allowance on facing would be identical with that provided in final pattern.

NOTE: If you were making a similar pattern in a manufacturing plant, the decorative side would be produced as shown above. The under side would have the decorative facing but would reach to the center front with a single dart, placed diagonally to provide control which would hold the grain of the fabric identically on both sides of the garment. Obviously, to make these two sides identical would use more material and would cost more in fabric and labor. To provide this economy, it is necessary to extend the lap over sufficiently to insure hiding the unimportant under side.



ed Control

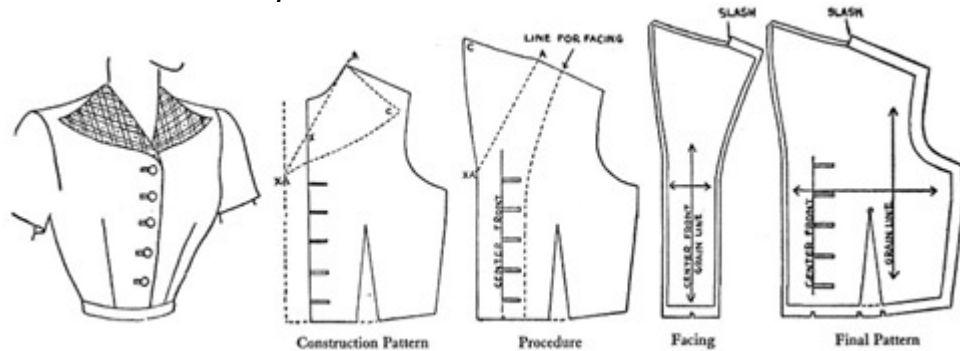
This problem shows the method used in concealing remaining control under decorative facing which outlines a low neckline on evening gowns, negligee or nightgown. Pattern for the facing is taken off before control is shifted. Note importance for the notches to insure gathers being in correct position under facing.

Because the decorative lace facing extends over close to the point of the bust, the finished garment appears to have no

provision for control. As long as the fabric being used for the main portion of the garment is not bulky, but in the original was made of chiffon, the control which was shifted to the low neck edge was "eased in" between the notches. Such clever tricks are frequently employed by expert pattern designers, but are confusing to amateurs not familiar with the many clever methods which may be employed to conceal the tiny bit of shaping that was necessary to make this garment fit smartly at the low neckline. Notice how but a half bodice is used for the under side.

If the same design were produced as a yoke, control could be provided in seam extending from shoulder seam A to bust point as studied previously. [See page 28.](#)

S
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V
er

In the previous lesson, by using a full bodice front construction pattern, you made a pattern for a lapped or surplice design.

Instead of shaped facings, revers may be used to create interest in design. A rever, in the true sense, is actually a part of the bodice front and merely folds back to give the appearance of a collar. A separate piece of fabric, attached to the neckline, becomes a collar. Sometimes the rever forms a portion of the design and a collar is added to go around the back of the neck.

Sloping lines, low placed revers, give a feeling of maturity to a design. Revers having an upward sweep, set high, give the feeling of youthfulness.

Angular lines give the plump figure a trim appearance. Curved lines will soften the angular woman.

The first step in making a pattern for a garment which is to have a rever is to locate the desired amount of lap for the closing. When this is accomplished, the rever is built from that point. The point where the rever starts folding back from the lap edge is usually called the "break" of the rever.

As the rever actually breaks from edge of the lap which must be provided for the buttoned closing, this lap should be established first. Point X represents the actual point of the V neck when garment is worn. Take this desired neckline depth measurement from model form and then locate X on pattern in a like manner.

Connect shoulder point A with X and extend line down to intersect with edge of

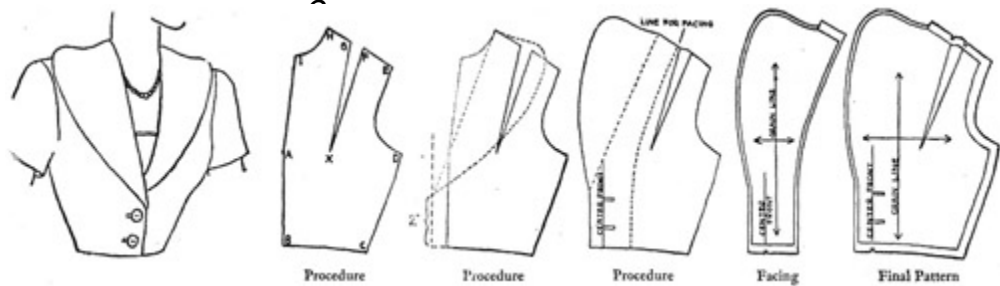
the lap to locate point X-A. Shape of rever may then be sketched in.

If you fold the pattern paper under along the line A-XA and trace off shape of the rever, you produce pattern for bodice and rever in one piece. After seam allowances have been added, the rever and bodice facing can be traced off in the usual manner.

NOTE: When rever edge XA-C is merely an extension of the lap edge and is not curved as it is in this case, facing may be cut in one with garment and a fold will appear along the edge instead of the usual seam. This is frequently the case in simple wash dresses having small, straight revers.

Rever with Vertical Center Front

C



In some cases, when a jacket or coat pattern is being designed, if some of the control is shifted from the shoulder to the center front, the extra length in the front of the garment will let it fit smartly over dresses which may have bulk at the front.

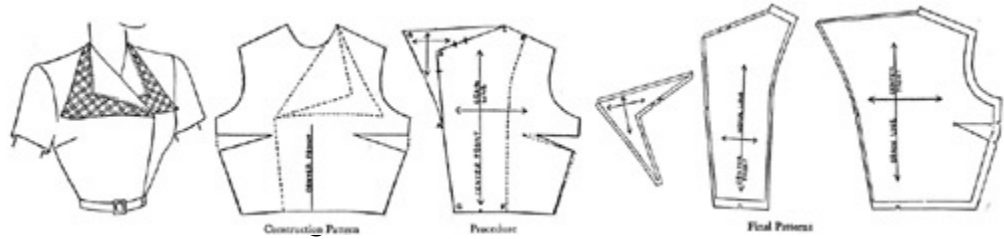
The method would be similar to that given on [page 31](#), except that the shoulder dart area would only partially be shifted.

If a third of the shoulder control is pivoted to the center front first, the necessary lap added, the procedure then becomes the same as for the previous problem. When the muslin is completed and pinned into position upon the model, you will note that the folded edge of the jacket front will stand away from the figure slightly. You will have further study of this procedure when drafting the man tailored collars where such procedure is essential.

To throw this extra length at the folding line of the rever avoids the possibility of the garment "hiking" up in front. If the garment closes at a point above the bust line, extra length may be less. If it closes at the waistline, the amount pivoted should be increased slightly. The average amount for a size 14 figure is one inch.

When you have worked out the procedure for making this type of pattern, for artistic experiment, try making several designs with varying heights of closings and varying shapes of revers. Study shapes of revers shown in high priced garments.

Double-Breasted Novelty Rever



e revers being located above bust level, with contrasting fabrics and contrasting lines being used, this rever produces the youthful character also achieved in above design. Although bodice and rever are cut in one piece, facing is cut on line A-D-C with seam allowances provided. When two sections of facing have been assembled, facing would be attached to bodice in usual manner. Note effect of double rever collar achieved. Commercial designers utilize scraps this way.

Balance in Design

All design, whether it be in architecture, sculpture, interior decoration, ornamentation or the design for the cut of a garment, should represent one of two basic principles of design, namely: formal or informal balance.

A feeling of balance may be achieved through the intelligent use of line, form or color. It is not difficult to understand after a little careful study.

Formal, or symmetric balance, as it is sometimes called, is achieved through an equal division of the design interest. For instance, if both sides of the bodice are identical, the design is said to have *formal*

balance. If it has a surplice closing, and the eye is invited to one side of the garment, it would have *informal balance*.

Likewise, if a hat has identical trimming on each side of the crown, or the trimming has been placed in exactly the center front or back, leaving the two sides without any trimming, and therefore identical to each other, it would have formal balance. If the shape has been designed in such a manner that the brim has been attached evenly to the crown, with both sides identical, we would say the *shape* has formal balance. However, if the brim is tilted, and possibly rolled more on one side than the other, then the hat has *informal* or asymmetric balance.

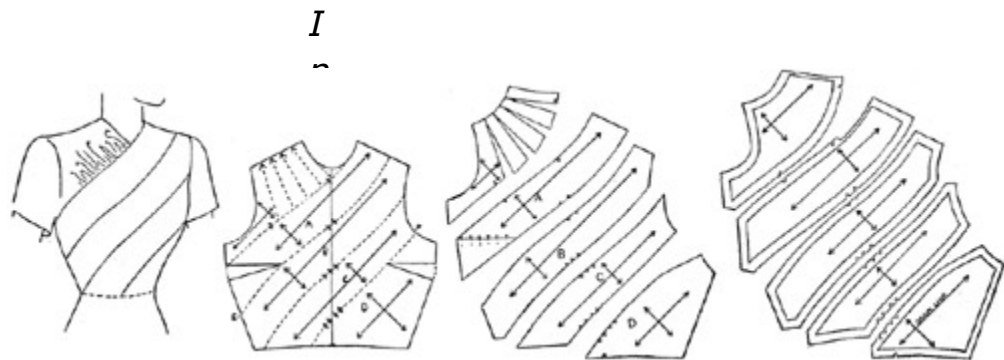
You can readily see that formal balance in design is the more simple of the two. Likewise, it is used more frequently in all forms of design. However, with a little study and thought, you can soon learn to intelligently employ informal, or asymmetric balance in your designs for clothing.

With the exception of the surplice designs in the previous lessons, all problems in cutting so far have employed the use of formal balance. Turn back the pages of your text and study the sketches of the bodices which you have cut. Turn to the pages on the surplice designs and notice how the eye is invited to the point of closing, which appears on one side of the bodice front only.

For practical reasons, the majority of designs shown in commercial pattern books

employ formal balance. The reason for this is obvious. When designing a garment which will have informal balance, diagonal lines are frequently employed. It is difficult to alter a finished garment, or the pattern for a garment, which employs diagonal lines. Hence, the majority of ready-to-wear garments, and commercial patterns, do not employ informal balance throughout a garment. It is frequently employed in the design of a bodice front only, however. Therefore, the student of Modern Pattern Design, who is cutting designs for individual customers, to measure, may produce unusual, complicated designs usually produced only by the exclusive designers.

At this time the problems will include bodice fronts in which informal balance has been used. You will study the means of shifting control into the seams which form the design of the garment. Later, you will employ these principles in entire garments. When you have mastered your fundamentals, you will find complicated designs amazingly easy to render.



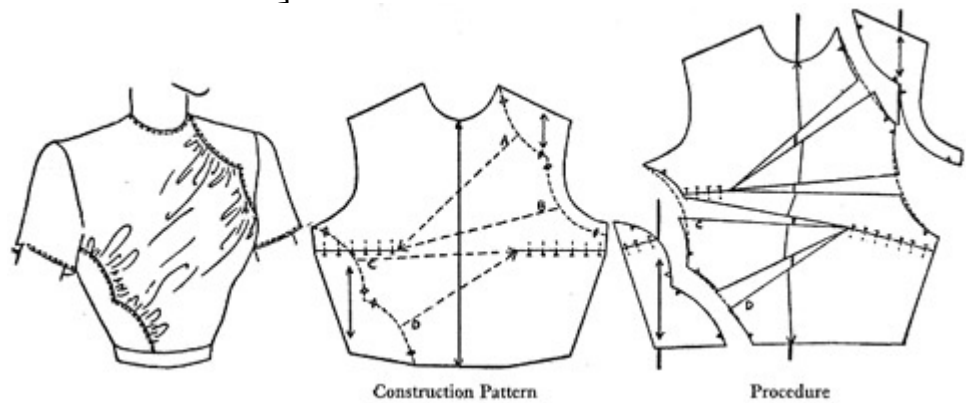
Balance

Here we have asymmetric balance employed in a bodice front and the seams not only provide the design, but they have been so placed as to provide the necessary control for the shaping of the garment.

Experiments have proved that, due to the diagonal position of these seams, the garment has a better fit when cut on the bias of the fabric.

Were you to design an entire garment employing similar lines, they would extend on down into the skirt in such a manner as to give a feeling of unity to the entire garment.

Before attempting to cut this pattern, read through the instructions carefully and mentally complete it. Study your diagrams and anticipate the results of each step to be



h
e completion of the pattern.

The first step is to establish the position of the divisional lines which provide control with asymmetric design. This should be done

by placing the construction pattern upon the model. Sections should then be lettered, notches placed and the grain indicators marked. The procedure from that point is routine.

Observe, in the above design, that the center front of the construction pattern is marked with a blue line. Points A and B, C and D shift the control into position for gathers. When making the final pattern, draw a red guide line on the pattern paper. From this, the bias indicators may be established later.

Upon further study of the use of asymmetric design in clothing, you will observe that, in many instances, the diagonal line which is used will continue around the entire figure to show relationship to some other divisional line of the design. In later problems, you will produce patterns for such complete designs for the entire garment.

Notice also that lines which appear to be straight—to the untrained eye at least—when worn, are actually slightly curved in the pattern to conform to the many convex and concave curves of the feminine body. As an artistic pattern designer, you must be aware of the fact. There are no truly straight lines in the silhouette of the human body. Artists spend years sketching the feminine figure. As the painter and sculptor works, so must you. Your finished designs show the use of both line and form. The form is the finished silhouette of the gown. The lines are

the seams which you may use to divide the silhouette. Supplementary study in life drawing or sculpturing, or both, will contribute to your ultimate ability as a costume designer.

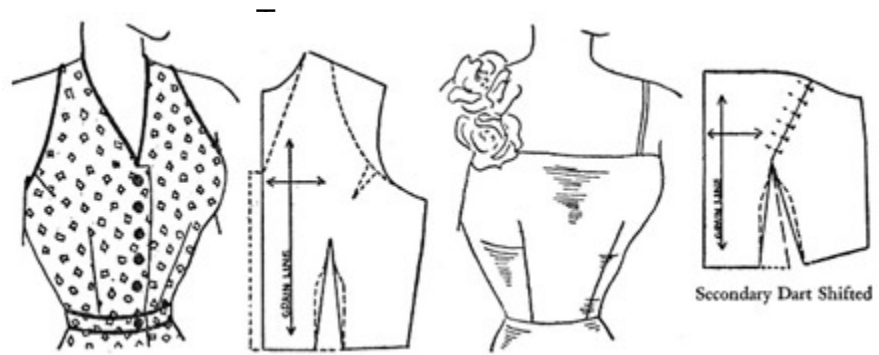
Décolleté Garments, Brassières and Bathing Suits

The bodice sloper may be used as the basis for making patterns for sleeveless garments, swim-suits, brassières, décollete gowns, et cetera.

As such types of garments require extra close fitting around the breast area, a dart is introduced at that point as shown in the accompanying illustration. This method is used in less expensive garments or in bathing suits, lingerie slips, etc.

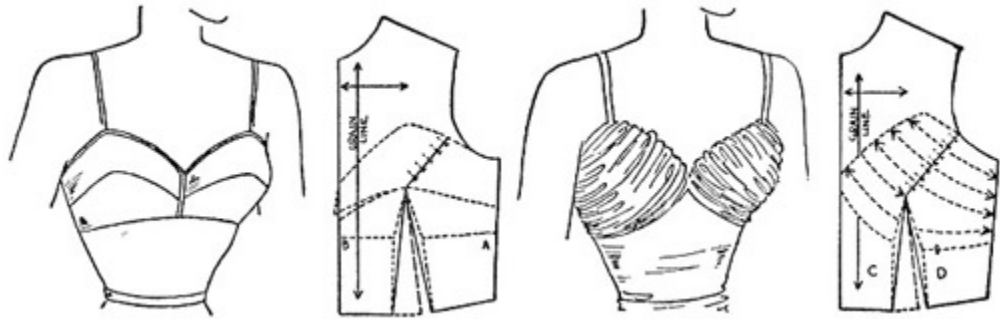
To make the garment more shapely, the waistline dart may be curved slightly to closely conform to the diaphragm. Designers of bathing suits, evening dresses and other similar types of apparel usually use a special model form for that purpose.

The breast development of the figure is closely molded in the normal dress form. These special forms represent the uncorseted figure and patterns made over such a model form are more figure revealing.



t sketch shows simple bodice top which might be used for an evening gown. In order to eliminate the secondary dart it is pinched in down to the bust point and then shifted over into the basic dart at the waistline as shown in the diagram. This shapes the upper edge of the bodice into a closer fit when the enlarged waistline dart has been sewed up. This too, could be corrected to conform to the diaphragm and produce a more literal fit to the figure.

The second has two secondary darts, one to maintain close fit near the arm, and the other to cup the fabric at the center front to establish the separation between the breasts at the center front. The basic waistline dart is also intensified to insure a closer fit at the lower edge. When you experiment with these problems, it is advisable that you either pad the normal dress form or use one which has a more pronounced bust to demonstrate this method more clearly.



aped top to the evening gown would probably be attached to the closely fitted foundation top. Make the foundation first and then trace off the portion of the pattern which will be draped. Pin in the darts and slash the shift control into gathers and add more fullness as desired.

In a later problem you will again study the method for shaping darts to produce a form fitting garment. As is shown here, the "rib" measurement is taken to determine just how much the basic dart may be increased to insure a perfect fit.



these subtle, shapely fittings that superior silhouettes in expensive clothing are created. In the sloper, which is but a record of individual basic measurements or a standard size, the basic dart is kept straight in line. But, as the designer becomes more experienced and works up his muslins from patterns, he visualizes the opportunities for minute changes, where edges may be softly but slightly curved. As a result of this desire

for the greatest beauty in the most simple garment, he becomes an artist while his associates may still remain mechanics in the field. A truly well cut garment actually gives the wearer beauty of figure that she may not possess.

PRACTICE PROBLEMS

The above sketches show a few variations of some of the basic cutting principles which you have been studying. Once you have determined how the garment is to be shaped, the design may be elaborated in detail. If time permits, some of these may be cut for practice work. Diagrams show procedure for providing control.

1942—Modern Pattern Design

by Harriet Pepin

Chapter 2—Slopers

You may select a topic from this lesson



Slopers in the Industry

While studying the foregoing problems you learned how the foundation pattern may be the means of cutting new designs. This "block system" of pattern designing is being generally used in the garment manufacturing industry. You have also learned that although additional drapery or "fullness" may be inserted, the basic measurements in the garment will not change and the new garment will remain the same "size." Now that you have discovered the advantages of this system, you are probably eager to learn how to take body measurements so that a sloper may be made for an individual.

The next step will be to study the way to take these measurements used to draft a sloper. These measurements are furnished for your convenience. When you have completed a standard, full size sloper draft, you will then measure up your own model form and from your own set of measurements, you will draft a model size sloper which must become the basis for producing the remaining pattern designs.

The foundation pattern, or sloper, is used by designers who work in manufacturing plants where standard size garments are created. It is now being used by the people who originate the designs for commercial patterns. And it may also be used by the custom designers who produce wardrobes for customers who do not have proportionate figures. It is an American made system and its development has come in recent years.

As mentioned before, it is important that you realize that, up to this time, there is no "perfect" set of measurements which represent any certain size ready-to-wear garment found in our retail stores and produced in our many garment manufacturing plants. At this time, each manufacturer's designer perfects what he believes to be the ideal size 16 sloper, for example, and all new designs are produced from that sloper. Whatever changes may be made from year to year are brought about because of complaints from store buyers who are selling his designs to the public. If he receives numerous complaints

that all his designs require alterations in the waistline, for example, then he may make a new sloper for the new season which has a half inch change in the size of the waist.

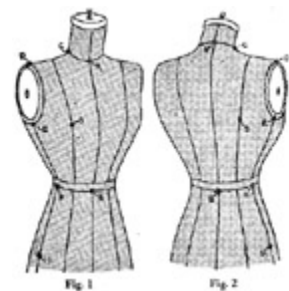
But there is another important governing factor which the designer must recognize. The basic silhouette of the corseted feminine figure changes gradually from year to year. Corset designers watch the trends also and one year the ideal feminine figure may have a small waistline with rounded hips. The next year the fashionable silhouette may be the narrow hip line and lifted bust. Fashionable women buy good foundation garments and these garments aid in giving them the ideal silhouette to wear the clothes of that season. Hence, the designer of high quality apparel may change the shape of his basic slopers slightly from year to year to make sure that all of his finished garments will fit nicely over the newly designed foundation garments. Obviously, low price garment manufacturers do not observe these slight changes as do the manufacturers of high style clothing. Women who purchase inexpensive clothing are not as keenly fashion conscious and maintain a "normal" silhouette by wearing just average girdles.

As there is no standard set of measurements, you might buy a size 16 dress in one store and find that no alteration would be needed. But you might buy another same size dress in the same department and that would require several adjustments. The second garment had come from a manufacturing plant where a different set of slopers were used. As all retail stores purchase their stock from many manufacturers, this varies the stock enough to please more women.

You are now ready to learn to draft a sloper. Study the following diagrams and instructions carefully.

How to Take Measurements Correctly

Before attempting to measure a figure, take time to check your tapeline against your ruler for accuracy. Due to possible imperfections, you may find a minute difference. As the square is used in making the drafts and the tapeline used in getting the measurements, if there is a difference, you can make allowances accordingly.



Black dots on diagrams represent points at which measurements are to be taken. Note that vertical bodice measurements are taken to the bottom of the waistline tape. When taking vertical hip measurements, start with the bottom of the tape and measure downward.

Measurement Points

- A Center Base of Neck.
- B Center Waist Point.
- C Neck Shoulder Point.
- D Shoulder Tip Point.
- E Armpit.
- F Side Waist Point.
- G Bust Point (Shoulder Blade in back.)
- H Side Hip Point.

Note that all points except A, G and B are common to both back and front of figure. Point G aids in determining length of basic control dart in back and front.

Where Measurements are Taken

On the following pages is a detailed description of each measurement. In preparation for the time when you will make a draft from measurements which you will take yourself, go through the procedure, using your tapeline. This will help you to visualize each measurement as it is used in drafting the sloper. Tailors soon learn the convenience of memorizing measurements and the order of taking them. You should do the same. As you rehearse this procedure, repeat the name of each measurement you are taking. You will have memorized them, in order, with this repeated practice.

Measurements should be taken with the tapeline smooth, but not stretched. Every individual has a slightly different "touch" with the tapeline. Several people could take measurements of a single person or dress form and the results would vary one eighth of an inch at certain spots. Before starting to make a draft from your own measurements of the figure, check your results a second time to make certain you are right.

Take all *vertical* measurements on the same half of the figure, both back and front. Then, if the dress form or individual being measured is not identical on each side, the variation will be immediately noted when fitting the completed muslin.

1. *Center Bodice Length*: Taken from Center Base of Neck to Center Waist Point. Fig 1. (Take this measurement slightly loose, dependent upon depth of the division between the breasts.)

2. *Full Bodice Length*: Taken from Shoulder Neck Point to Waistline. Fig. 1. (This measurement should fall over the point of the bust.)

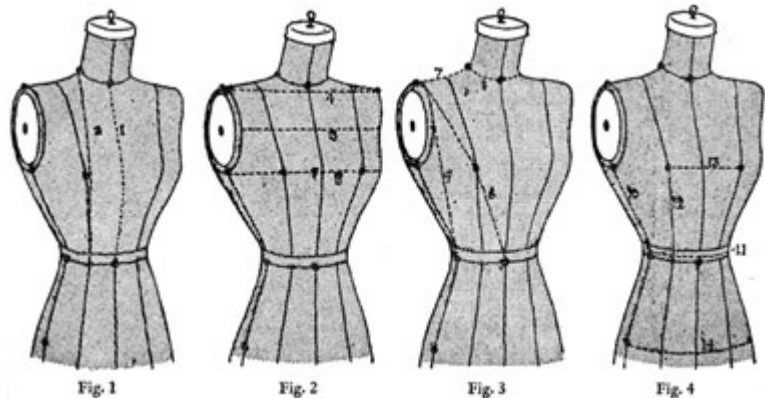
3. *Across Measurement*: Taken across the dress form at a point 4 inches below Center Base of Neck. (This measurement is sometimes referred to as the "chest" and "shoulder" measurement. It aids in shaping the armscye of the draft.) Fig. 2.

4. *Shoulder Point Width*: Taken from Shoulder Tip Point to Shoulder Tip Point, with the tapeline falling upon the Center Base of the Neck. Fig. 2. (This measurement also aids in shaping the armscye of the draft.)

5. *Full Bodice Width*: Taken across the dress form, from side to side, at a position on a level with the point of the bust. Fig. 2. (On individuals this position may vary somewhat. If customer has very low, heavy bustline, allow an extra half inch to measurement.)

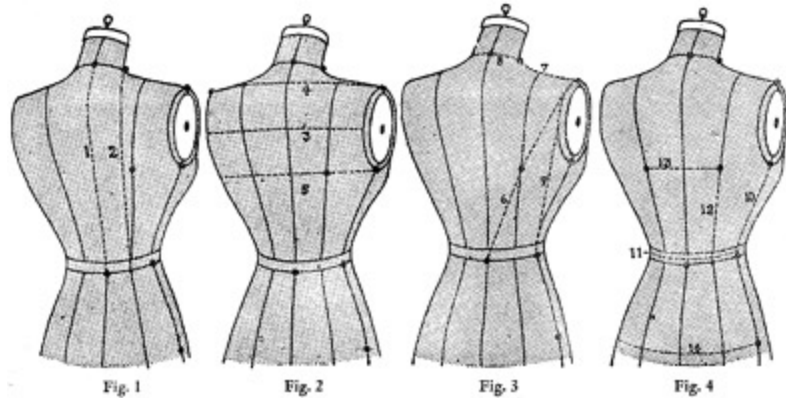
6. *Shoulder Pitch*: Taken from Shoulder Tip Point, down across the point of the bust to Center Waist Point. Fig. 3. (Although a person may have broad shoulders, they may still be sloped. This measurement records the posture of the figure.)

7. *Shoulder Width*: Taken from Shoulder Tip Point to Shoulder Neck Point. Fig. 3. (Individuals may have broad shoulders but a small neck. This measurement aids in determining the size of the neckline in the draft.)



8. *Neck Measurement:* Shoulder Neck Point to Shoulder Neck Point on opposite side. Fig. 3. (Sizes and shapes of necklines are dependent upon the manner with which the head and shoulders are carried.)

9. *Shoulder Height:* Start at Shoulder Tip, follow armscye line down 4 inches and then drop down to Side Waist Point. Fig. 3. (Observe that this measurement does not fall over the bust. It aids in determining the size of dart which will be needed to control bust.)



10. *Side Bodice Length:* From armscye down to Side Waist Point. Fig. 4. (When measuring individual figures, the armscye is located about 1/2 inch below actual armpit. On heavier figures, it may be located an inch below, dependent upon how customer likes close fit of garments.)

11. *Waist Measurement:* Side Waist Point to Side Waist Point on opposite side. Fig. 4. (This measurement varies in proportion to the similar measurement of the back half of the body, dependent upon posture of figure.)

12. *Bust Point Height:* Taken from Bust Point to Waistline. Fig. 4. (Individual figures vary greatly in bust height. By determining the position of the bust in this measurement, you can plan length of dart.)

13. *Bust Point Width:* Taken from Bust Point to Bust Point. Fig. 4. (Likewise, the width between breasts and also the shoulder blades varies in women. This measurement also aids in placing the point of dart in correct position in draft.)

14. *Hip Measurement:* From Side Hip Point to Side Hip Point on opposite side. Fig. 4. (Side Hip Point is located 7 inches down from the waistline in all sizes of most factory made garments. However, when measuring an individual, it should be located in a position which is in line with the largest curve of the buttocks. This may vary from 6 to 10 inches from the waistline.)

Observe, in the above diagrams, that relative measurements are taken of the back of the figure. As measurements number 7 and number 10 are common to both back and front, they may be noted in the back measurement chart at the same time they are recorded for the front.

Measurement number 5, which measures the bodice width in front should fall in a horizontal line, directly across the highest point of the bust. The position of this measurement, therefore, will be dependent upon the height of the bust. However, when taking that same measurement of the back half of the body, it should be taken from armpit to armpit, as that area is the widest portion of the back.

Chart of Garment Measurements

In the following chart are listed the back and front bodice measurements for the size 16 and 14 model forms. Space has also been provided where you may insert the measurements which you will take from your model form in a problem a little further on.

Do not forget that these measurements, although the most modern available, may not conform in every respect, to other similar sets of measurements you may some day use. Nor do they represent the measurements of a person who may wear a size 14 or 16 garment. Few people can wear garments which fit as closely as your muslins do on your model form. Therefore, we should expect that the person who finds a size 14 dress a comfortable fit may actually be slightly smaller in all of the horizontal measurements in this chart.

Bodice Measurements		Front		Back	
		Size 16	Size 14	Size 16	Size 14
1	Center bodice length	15	14 1/4	16	15 1/2
2	Full bodice length	18	17 1/2	16 3/4	16 1/4
3	Across measurement	12	11 1/2	13 1/4	12 3/4
4	Shoulder point width	14 3/4	14 1/2	14 1/4	13 3/4
5	Full bodice width	20 1/4	19 1/2	18 1/4	17 1/2
6	Shoulder pitch	18	17 1/2	16	15 1/2
7	Shoulder width	4 5/8	4 1/2	4 5/8	4 1/2

8	Neck measurement	9 1/4	9	6 1/4	6
9	Shoulder height	16	15 1/2	15 1/2	15
10	Side bodice length	7 1/2	7 1/4	7 1/2	7 1/4
11	Waist measurement	14 1/4	13 1/2	13 1/4	12 1/2
12	Bust point height	6 3/4	6 1/2	6 3/4	6 1/2
13	Bust point width	7 5/8	7 1/4	6 1/8	5 3/4
14	Hip measurement	17 3/4	17	17 1/4	16 1/2
Sleeve Measurements		Size 16	Size 14		
1	Overarm length	23 3/4	23		
2	Underarm length	17	16 1/2		
3	Biceps measurement	13	12 1/2		
4	Wrist measurement	6 3/4	6 1/2		

A Few Instructions Always Apply

Before attempting to make your draft, have all your tools in readiness. You will need your French curve, your square and a well-sharpened lead pencil.

Your *Curve* will aid in describing the curves of the neckline and armhole.

Your *Square* will be used to establish right angles and at the same time aid in measuring distances and drawing straight lines. Examine your square carefully. Notice that the inches are divided into halves, quarters and eighths on one side. Turn it over and on the long arm you will see the areas marked thirds, sixths etc. The areas that are marked thirds and sixths are the same—the larger numbered areas being each one third of an inch and the smaller areas, marked by shorter lines, being one-sixth of an inch. The still smaller areas, marked by still shorter lines are each one-twelfth inch. Study the similar markings which appear on the short arm of the square.

Although most measurements taken involve the use of halves, quarters, or eighths of an inch, there are occasions, when some measurement is being divided or added to, that thirds or fifths may be required. If such a measurement might total four and two-thirds inches, the four inches would be measured off and then, by counting off two of the sections marked as thirds, the measurement would be recorded. Without these divisional points given to

you on the square, it would be necessary to estimate that fractional amount and would lead to inaccuracies.

Your *Pencil* should be sharpened to a long point. All lines must be drawn against the square with the pencil point held closely under the edge of the square and the eraser end tilted away from the square. Should the pencil be held vertically, the pencil line could stand away from the square fully a sixteenth of an inch.

Precision in using your instruments will result in precise work. There should be little excuse for carelessness on this point.

Drafting a Front Bodice Sloper

In the old days, tailors and dressmakers drafted patterns for all tailored clothes for each individual. Designs which involved the use of drapery were attached to a closely fitted lining which had been drafted to measurements. Then the pattern for the draped portion was created by working directly over this lining, attaching the drapery here and there.

You have learned that, through the use of the modern free-hand slashing method, the basic sloper block can be the basis for countless designs. This modern block system is a combination of the two old-fashioned methods. The only occasion for the use of technical drafting nowadays is to produce the sloper. Tailors still employ drafting methods for men's clothing because such clothing is architectural in character. However, time may be when much of men's softer apparel may also be produced through the use of foundation slopers.

You can follow the procedure on the following pages to produce a front bodice draft. Turn to the measurement chart and use the measurements for a size 16. Before starting to work, check over each step carefully, mentally tracing each line shown in the diagram. You will notice that the measurements are used in the order that they were taken on the figure. When your draft is completed, it should closely resemble the diagram. When you have completed it, re-check each measurement for errors.

NOTE: When the tailor measures one for a suit he calls out the measurements in a certain sequence while his assistant jots them down. He has

B-6—From point B, measure a diagonal line equal to *Shoulder Pitch Measurement* to a point somewhere on guide line extending downward from point 4. Label point 6.

6-7—From point 6, measure off a line equal to the *Shoulder Width Measurement* to a point somewhere on line 2-3. (The corner at point 6 is not squared. The angle at this point will vary with measurements being used to produce any draft.) Label point 7.

A-8—With the short arm of the square along line A-B, square a guide line 6 inches long from point A. Do not label point 8 yet.

7-8—From point 7, square a line downward from the line 6-7. This line should be extended to intersect with the horizontal guide line from A. Mark intersection point of these two guide lines 8

6-C—From point 6, measure off a line 4 inches long to locate point C to fall somewhere on guide line 3. (This proportion is standard on all full size patterns.) Label point C.

C-9—From point C, measure off a line to fall somewhere on guide line 5 equal to the *Shoulder Height Measurement* less the 4 inch amount just used in locating point C. Mark point 9.

9-10—Starting from point 9, measure upward along line 5 a distance equal to the *Side Bodice Length measurement* given in the chart. Mark that point 10.

10-D—With the long arm of the square extending downward from point 10 and the short arm extending inward on your paper, square a line from line 10-9 which will intersect with guide line 4. Mark intersection point D. This aids in making armscye.

B-E—From point B, measure upward along line B-A a distance equal to *Bust Point Height*. Label this point E.

E-F—From point E, square a line from line B-E equal to *one-half* the *Bust Point Width* in your chart. Label point F and connect E and F.

B-G—From point B, square a line from line E-B equal in length to line E-F less one-half inch. Label point G. Connect points G and B. Connect points G and

F. (The line G-F represents the position of the basic waistline dart extending to the bust point. If lines G-B and E-F were identical, the dart would be truly vertical. This would make waistline appear large. When making individual drafts, the suitable angle for the dart should be noted. When measuring a model form, the proportion could be determined with the tapeline.)

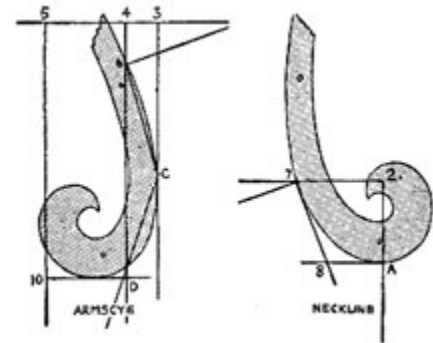
B-G-9—Draw a guide line connecting points G and 9. (Line B-G-9 represents a loose, unfitted waistline with the amount of dart yet undetermined. The dart must now be established to reduce the line B-G-9 down to actual front waist measurement.)

Measure the line B-G-9. Jot that measurement down. Take *one-half* the *Waist Measurement* given in the chart and subtract it from the measurement of B-G-9. The difference gives you the amount to be put into dart.

G-H—From point G, measure off a distance on the line G-9 equal to that difference. Label point H.

F-H—Connect points F and H.

Check lines F-G and F-H, making line F-H equal in length to F-G. Make correction as shown by dotted line in diagram. (This correction varies with various sizes.)



Use your curve as illustrated as an aid in shaping the armscye and neckline.

With your blue pencil, trace around your final draft as follows:

B-A-7-6-C-10-9-H-F-G-B

Set this draft aside and proceed to complete the draft for the back section of the bodice from instructions appearing on the following pages.

Drafting a Back Bodice Sloper

Study this diagram of the back bodice draft with that of the front bodice and note the similarity and variations between the two. Study your model form.

2-5—From point 2, measure off a distance on this guide line equal to *one-half* the *Full Bodice Width Measurement*. Label this point 5.

Square guide lines extending downward from points 3, 4 and 5.

B-6—Starting at point B, measure a diagonal line which will fall somewhere on guide line 4 which is equal to the *Shoulder Pitch Measurement*. Label this point 6.

6-7—From point 6, measure a line equal to the *Shoulder Width Measurement* to a point located somewhere on the line 2-3. Label this point 7.

A-8—From point A, measure a line equal to *one-half* the *Back Neck Measurement*, less 1/8 inch to a point somewhere on the line 2-3. Mark this point 8. The remaining distance between points 8 and 7 represents the amount to be used for the control dart for the curve of the shoulders. Because a curved line will be made to substitute for the guide neckline 8-A, the 1/8 inch is deducted to make allowance for that fact.

6-C—From point 6, measure downward 4 inches to a point somewhere on guide line 3. Label this point C. Connect points 6 and C with a straight guide line.

C-9—From point C, measure off a line equal to the *Shoulder Height Measurement*, less the 4 inches just used to locate point C, to a point somewhere on line 5. Label 9.

9-10—From point 9, measure upward along the guide line 5 a distance equal to the *Side Bodice Length*. Label this point 10.

10-D—From point 10, square a line which will intersect with guide line 4. Mark the intersection point D.

B-E—From point B, measure upward on line B-A a distance equal to *Shoulder Blade Height*. (This is measurement number 12 which corresponds to bust height taken for front.) Mark point E.

E-F—Square a line from point E equal to *one-half* the *Shoulder Blade Width*. (This is measurement number 13 which corresponds to bust point width in front.) Label point F.

B-G—B-G is equal in length to E-F *less* one-half inch and is squared from line B-A at point B. Label point G. (This determines angle of back waistline dart. When an individual is being measured, this should be determined with the tapeline. The one-half inch is satisfactory for standard sizes.)

G-9—From point G, draw a line to connect points G and 9. (Line B-G-9 represents the unfitted waistline. Some of this excess will be used in the dart, the remainder will be taken off at the side seam.)

Measure line B-G-9. Jot that amount down. Subtract *one-half* the *Back Waist Measurement* from this amount. The difference represents the amount which must be thrown into a dart and taken off the side seam.

Divide this difference in half. (Should minute fractions be involved, you can take a strip of paper equal to the difference and fold it in half as a measuring agent.)

9-H—From point 9, measure off a distance on the line B-G-9 equal to one-half the strip of paper. Label that point H.

H-10—Draw a connecting line between points H and 10.

G-I—From point G, measure to the right a distance equal to the remaining unused portion of the difference. Label point I.

F-G—Connect points F and G.

F-I—Connect points F and I.

Check the length of lines F-G and F-I to be sure they are of equal length. Make the required correction as shown by dotted line.

Because the side bodice length measurement was used to establish point 10 and the new side seam H-10 was later established, it is important to check the line H-10 to make sure it equals the original side bodice length measurement. Such correction should be made at point H. (As the side seam will meet the side seam of the bodice front, it must be identical in length.)

J—Locate this point 3 1/2 inches downward from point 8 in a position which is parallel to the center back line A-B. Label point J.

J-8—Connect points J and 8.

J-7—Connect points J and 7.

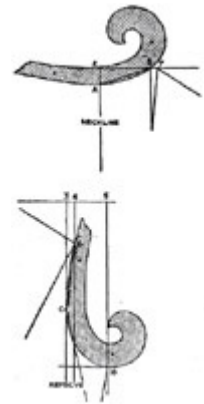
With the aid of the curve as shown in accompanying diagram, complete the back neckline and the armscye of the draft. Curve may have to be adjusted to complete armscye. It is merely a *guide*.

With blue pencil, trace around your finished draft as follows:

A-B-G-F-I-H-10-C-6-7-J-8-A

Check your draft carefully and check it against the bodice front draft at the shoulder seams and side seams. It should resemble the diagram in general proportions.

With this practice in the use of measurements, you are ready to measure your model form, record the measurements in the space provided in the chart and then use them to produce the draft and the muslin proof.



When drafts for the front and back bodices are finished, check them carefully. Allow seams at shoulder seam, underarm, waistline and the center back.

If the muslin doesn't show a good fit, it will be either an error in taking the measurements or in the use of them.

When a satisfactory muslin has been produced, cut away seam allowances on the draft and make front and back cardboard slopers. They will supplement those which you have been using.

It is quite possible for two individuals to measure up the same model, produce drafts for well fitting muslins and still not produce drafts which are identical. These are "human" variations but they should not exceed one sixteenth of an inch. Anything more than that would show up in the fit of the muslins.

Individual Measurements

Because many readers may wish to put this portion of their training into immediate use, these instructions are being given at this time.

There are three methods which might be used for making individual slopers, namely:

1. Altering a muslin made from a standard size draft to fit the individual and then making a card board sloper from this corrected muslin.
2. Taking measurements of the individual and making a draft from these measurements and testing results with a muslin proof.
3. Using muslin and draping a basic block directly upon the individual.

There are disadvantages as well as advantages to each method. Professional designers report a variation of opinions and generally agree that, with practice and care, the second method is preferred.

METHOD 1: is quicker when the customer doesn't vary much from standard dimensions. By using the perfectly proportioned pattern, some defects are lessened in importance and are better left unaltered.

METHOD 2: is the most direct and scientific approach to the problem. It includes the faults in posture as well as measurements. Care must be taken, though, in placing the points of measurements to give the best line to the construction seams. When using this method in business, many students draft directly upon muslin, with blue pencil.

METHOD 3: is offered as a possible substitute for method 2. Designers agree that it requires a good "eye" for line and a good "hand" for handling cloth and that errors can easily be made. It offers a good opportunity, however, for distribution of the basic control according to the curves of the figure. People who have done draping may find it a convenient method.

Because this text is primarily devoted to making drafts from measurements, such instructions will be applied to the making of personal slopers. The other two methods involve the training in alterations and draping. Method 1 involves alterations described on [page 69](#). Method 3 is diagramed on [page 4](#).

Students are demonstrating how successfully personal drafts may be made from individual measurements by taking great care in the placement of measurement points. As the human figure is not rigid, like the dress form, curves are intensely defined and not modified. Allowances for this fact should be made when taking measurements.

Make sure that the customer stands with weight distributed evenly on both feet. When being measured or fitted, many people have a tendency to straighten up more than usual, or lift the shoulders into a tense position. Watch to see that she maintains a relaxed, normal posture through her shoulders.

Use colored chalk for marking the points. It will rub off easily. Tie a tape around the waist to place the waistline, which will vary with different postures.

Keep this in mind: Take measurements number 1 in front and back *loosely*. This will make allowance for the indentation between breasts and shoulder blades.

Check these points of measurement with diagrams:

A—Should be placed in the hollow at the base of the neck in front and just above the bone in the back of the neck.

B—Should fall in a direct vertical line with A.

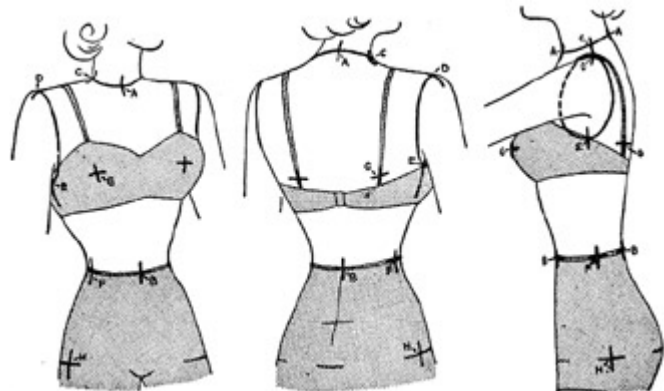
C—Should be placed slightly less than halfway on the normal neck silhouette. Observe the position on your model form.

D—This point should be placed at the point where the wrinkle appears when the customer raises her arm.

E—Should be placed about 1 inch below the armpit and slightly forward.

F—Should fall directly in line with point E except in heavy figures. Charts on next page will explain this point.

G—Points the actual bust point.

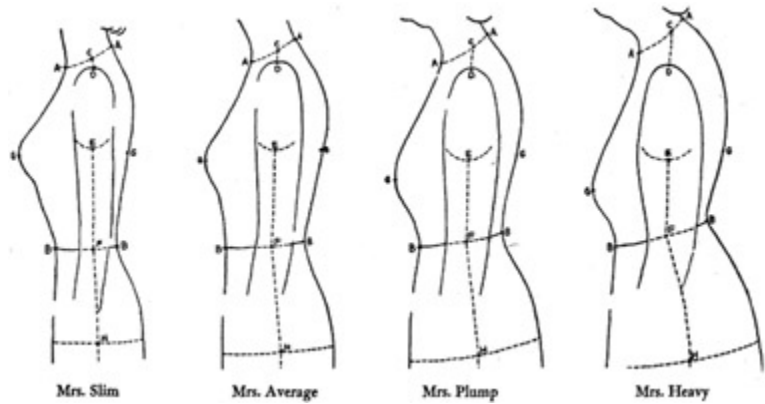


H—Divides the silhouette of the figure in half at the largest point of the hip.

If you will connect these points with lines drawn into your figures, you will observe the position of the seams which would result from the proper placing of these points.

PRACTICE PROBLEMS

It is suggested that you try and find some willing subjects for practice in taking individual measurements and making personal drafts. If you do not find that convenient, you can pad up your model form to have a heavier bust, set lower on the figure and take measurements off that. Leave the pads in place so that you may judge your results.

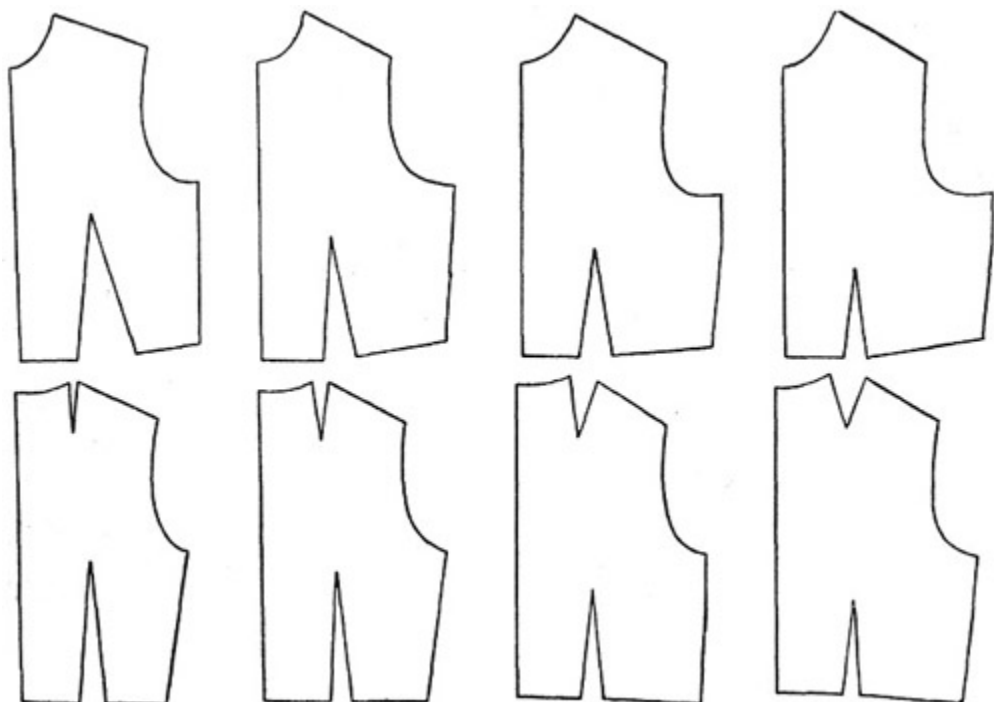


Before attempting to work out these practice problems, it would be advisable for you to study the comparison figure charts on the following page.

Observe shifting of points C, F and H with change of posture and flesh contours.

Notice that side seam lines E-F-H should change to conform to changing contours caused by flesh deposits on the heavier, mature figure. If side seam on Mrs. Heavy were to be made vertical as it was for Mrs. Slim, it would fail to divide her silhouette vertically and would reveal her bad figure lines.

The following diagrams



reveal the changes which take place for the four type figures illustrated on the previous page. Note changes in size and length of bust darts with the increasing size of waistline. Note shape of the armhole in larger sizes to accommodate fullness under the arm. In the back sloper, the shoulder dart widens to accommodate greater curve in the shoulder area. The shoulders slope more in the mature figures also and the waistline dart shortens.

The muslin fitting of the individual draft is necessary for the same reason that it is when measuring a dress form. It reveals inaccuracies in taking measurements and permits minor corrections which may develop because of posture. It also gives the designer an opportunity to correct the position of basic construction seams, or darts, to overcome faulty appearance due to bad proportions of the individual.

If the muslin does not fit in several places, then you should retake the measurements and make a new attempt. If there is some single point which is unsatisfactory, an adjustment may be made to make the muslin fit and then the paper pattern may be corrected in an identical manner, thereby saving the necessity of repeating the procedure on the same subject.

Your work will improve with each new person you measure. It is a matter of practice and discovery of errors. Following are given a few defects which have appeared in classroom projects, each one of which requires but a simple adjustment to make the muslin a correct fit. On the left side of the drawing the error is shown and the right side of the drawing shows the method used to remedy the fault.

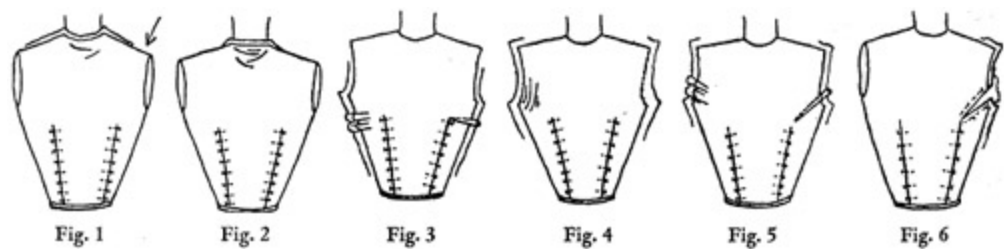


FIG. 1—
Neckline does
not set down

around base of neck. Release shoulder seams near armhole. Number 6 measurement taken too short.

FIG. 2—Wrinkles across base of neck. Cut down neckline until it fits smoothly. Caused by number 1 measurement taken too long.

FIG. 3—Droopiness under the arm. Pinch in tiny dart in front section, extending to bust point. Leave corrective dart pinned in when muslin is returned to table. Slash up the basic waistline dart to shift this added control into basic dart. Lower side waistline an amount equal to that pinched out in corrective dart. Number 9 measurement was taken too long.

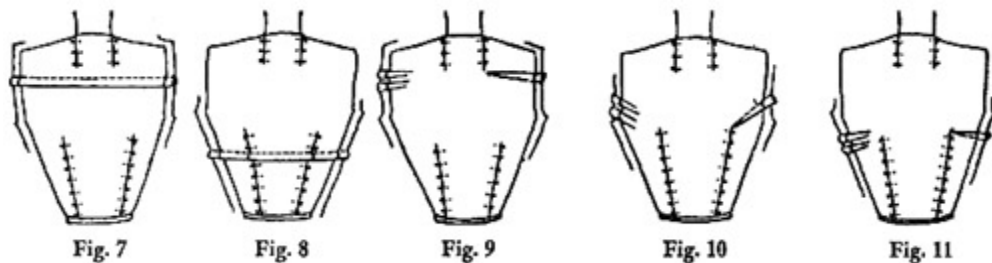
FIG. 4—Wrinkles at front of arm. Cut out armscye slightly. Shapes of armscyees must vary with muscular development around armpits of individuals.

FIG. 5—Excessive gaping at lower armscye. Pinch tiny diagonal dart to point of bust. Leave corrective dart pinned in as explained for Fig. 3. *Do not overfit here!* It is quite possible to pinch out too much at this point which will result in an ugly depression in garment when sleeve has been set in. Observe that a model form is so designed as to fill in the natural depression here. For that reason, the muslin on the model form may be fitted *closely* at this point.

FIG. 6—Excessive binding at front armscye. Activity in certain sports will develop extra muscle at this point. Make slash from armscye to bust point at the point where muslin binds. Permit the muslin to spread to relieve condition. Insert a small patch of muslin behind the slash and pin into position. This enlarges armscye exactly where needed. When muslin is flattened upon the table this adjustment will prove to reduce the amount of waistline control slightly as a result.

NOTE: This is a common adjustment when making boxy-type coats or heavily padded shoulders. It eliminates the "break" which may result from excessively close fitting at the front of the armscye in such silhouettes. When such an adjustment has been made, the sleeve cap may be broadened slightly at a relative position.

FIGS. 7 and 8—Muslin seems to be too long



throughout. Do not follow the impulse to pull it down and cut it off at the waistline! Place the bustline of the muslin in the correct position on the figure

and then take a small tuck straight across the chest area, if it seems to bulge with extra length there. Or a tuck taken in the area below the bust may make the proper adjustment.

If the customer stands too rigid and erect when measurements are taken, and then slumps into her true posture during the test fitting, the garment frequently needs such an adjustment across the chest. If the garment is too short in one of these areas, lengthen the pattern by slashing straight across it and setting in a piece of muslin wide enough to make the alteration. These alterations are common to both front and back.

FIG. 9—Armscye gaps in shoulder area. Pinch corrective dart in and then shift it into the basic shoulder dart when muslin is on the table. This will make a larger size shoulder dart.

FIG. 10—Armscye gaps near point of waist dart. Pinch in diagonal dart to point of waistline dart and shift this corrective dart into waistline dart later. Do not overfit here! It will tend to emphasize too rounded shoulders.

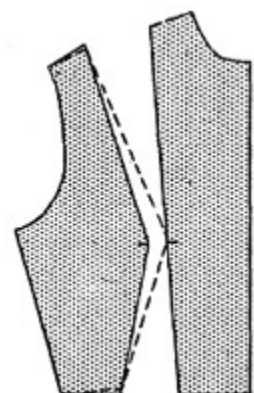
FIG. 11—Droopiness under the arm. Pinch in corrective dart in the back portion only and shift corrective dart into the basic waistline dart as in Fig. 3. This is an important fitting area. Smart, clean lines under the arm give the wearer a "trim" fit.

Your experience in the fitting of muslins to your model form should have given you an appreciation of a good fit. Muslin proofs for personal blocks should fit smoothly, but not skin tight. Some designers take the number 5 measurement on their customer with a tight tapeline and then add 1 inch for ease.

If you will mentally divide your bodice down the center front and horizontally through the bust, you can analyze the true seat of the trouble, if there is any. Any faults which appear *above* the bust line should be remedied without disturbing the area *below* the bust line.

Adding Ease in Front Bodice

When a muslin is fitted over a standard size model form, it is fitted closely. This is because it is assumed that the

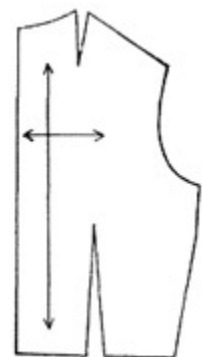


individual who purchases the garment will buy the size which provides sufficient room to provide an "easy" fit. When using a basic sloper which has been closely fitted to an individual, some designers find it convenient to have a supplementary bodice sloper which has an extra amount of room in the front. This is used when making blouses or other garments which require a softer fit around the bust. The accompanying diagram shows how this case may be added. The dotted lines must be made to equal the original dart length in the sloper. Note the slight corrections required at the shoulder and waistline. Such a pattern would be reserved for special use when making certain garments. It should be labeled to show the amount of added ease provided.

THE BACK SLOPER

Analysis for Need of Control

In the foregoing problems you studied the need for a control to be provided in the front bodice pattern. By drafting the back sloper you have seen the need for providing similar control for the curves which appear in that portion of the body.



Back Sloper

The dart placed at the shoulder neck point in this pattern may be moved to the shoulder seam or the back neckline. The first and second positions are preferred for garments designed for younger women. The third is best suited to the mature woman's garments because, as women grow older, the highest point of the shoulder curve becomes more pronounced in the center back.

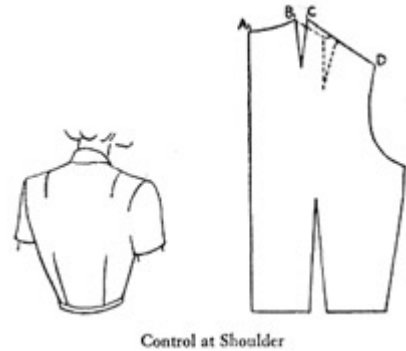
Notice that the fabric grain is placed on a true horizontal in the shoulder curve area. This insures strength where the strain on the garment is the greatest. If a garment is properly cut, the back may be very closely fitted without restraining movement of the arms. Garments designed for active sports wear are usually provided with extra means of expansion, such as pleats or fullness. After the golf swing, the garment falls back into position and a trim appearance is maintained.

From this point on, you will notice that the problems merely show a repeated use of some principle which you have previously studied. There are only a few basic principles common to pattern making. The student soon learns to use these same principles in many different ways.

Shifting Control from Shoulder Neck Point

1—To Center of Shoulder

Trace around original back bodice sloper on light weight paper to start this new pattern. Dotted lines show method for shifting the original control into the new position.



Before making any corrections in shoulder seam, establish position of left side of new dart parallel to center back. Make the width of new dart same as B-C. Make left edge of dart same length as right edge. Then connect it with point B. Area below point C is discarded in new pattern and original dart tracing is ignored. As new shoulder control dart is opening on an angle seam, it should be completed as diagramed in first bodice front problem.

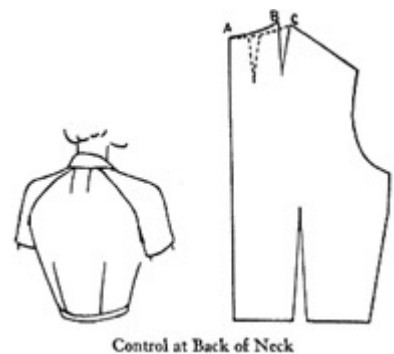
Seams should be added to the pattern and a muslin test made. When new dart has been pinned into position, shoulder seam width should be identical with C-D in the sloper. After testing and approving results on a model form, seam allowance can be cut away from pattern and a cardboard sloper made in usual manner.

Remember that a dart produces a line in a garment. Therefore, to produce harmony in the back bodice, the position of the shoulder dart should continue the line of the waistline darts

If occasion demands, any such single dart may be substituted by using gathers, multiple darts, etc. Method would be identical with that diagramed for bodice front darts.

2—To Two Darts at Back of Neck

In some cases, a bodice is being designed in such a manner as to prevent the placing of the dart at the shoulder seam or shoulder neck. In such instances it must be shifted over to the center back neckline. This is particularly true when the shoulder seam has been moved as in the case of shirt waist blouses,



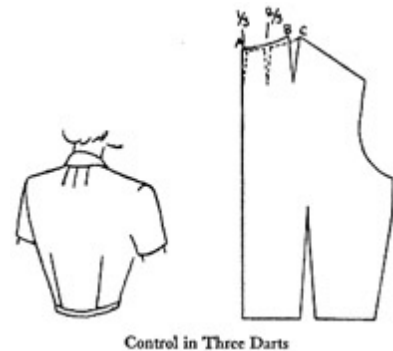
diagramed later in this text.

The angle of the dart may vary as desired. If it is kept parallel to the center back, it will give the wearer a more erect appearance. If the points of the darts are spread apart too far, it may give the wearer the appearance of being round-shouldered. If the woman has a broad, thick neck, spreading the points slightly will make her neck appear more slender.

When the dotted line from A to C has been drawn, the final position of the dart is determined with relation to the center back. The new neckline dart should equal the distance from B to C. By folding the pattern paper over to close the new neckline dart, you can use your tracing wheel to complete the shape of the normal neckline. When the paper has been flattened, the dart opening has been automatically completed and seam allowance is then added.

3—To Multiple Darts at Back of Neck

When a dress is to close at the center back with loops and buttons or a zipper, a portion of the shoulder control may be shifted to the center back and the remainder either left at the shoulder neck point, or placed in the neckline.



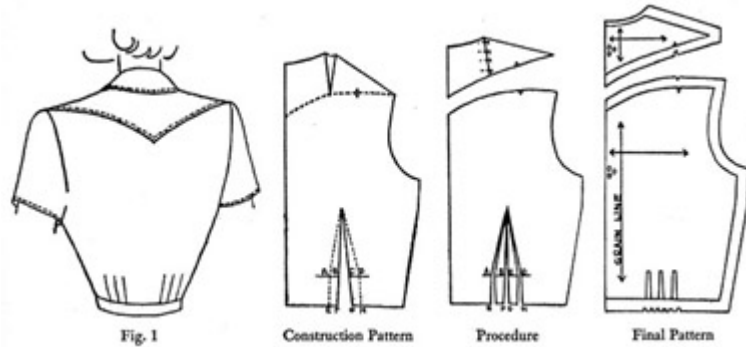
The dart labeled A represents one-third of B-C. This may be used as a simple dart as shown in the sketch, or it may be cut away and a facing made which will permit the use of loops. The second dart would be completed in the manner given in previous problem.

The entire control *might* be shifted to the center back, but, as you learned when studying the vertical center front control in the front bodice, it would tend to sag in the center back unless the basic control dart was originally very shallow.

For the sake of convenience, designers sometimes keep several back bodice slopers on hand, each one of which provides the shoulder control in a different position. You should recognize the importance of moving this functional dart to add a feeling of unity to the back of the most simple garment, as occasion may offer.

Shifting Control into Yoke Seam

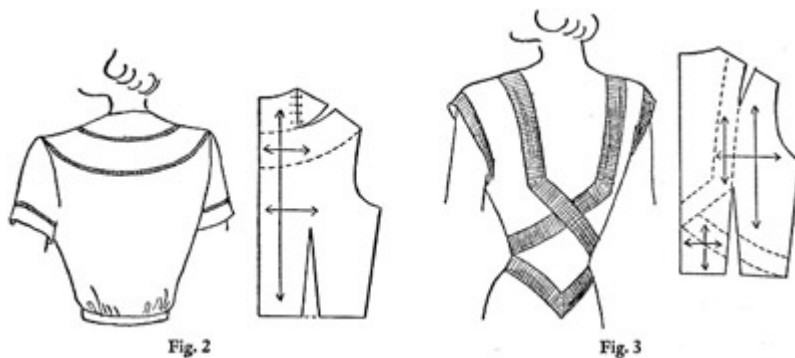
Basic shoulder darts may be shifted into yoke seams in the back, if the yoke line falls over the point of the shoulder dart. Otherwise, the control must be provided through gathers below a shallow yoke or at the neckline in the deeper yoke.



Notice the "flat" method for changing the single waistline dart into three small darts. As long as the position of the control is unchanged, this method may be used in any similar instance in any section of a pattern. The horizontal guide line shows the length of the new darts and the lines are drawn on either side of the original dart. By slashing up to the point the sections may be separated to form three darts.

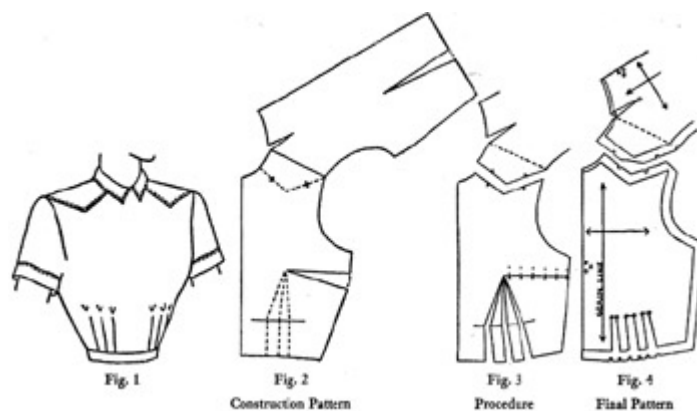
NOTE: Because the points of the shoulder and waistline darts do not meet, they cannot be combined into one dart without adding extra width across back of garment. When

extra fullness is being added this could be done. Use caution when adding gathers across the back—it may make the wearer appear round-shouldered



Moving Fundamental Seams for Sake of Design

To the person who has not studied the fundamentals of pattern making, many designs for garments may appear to be



complicated and difficult. Usually, those designs employ the principle of moving or eliminating fundamental seams in certain portions of a garment for the sake of design interest.

When you have experimented with several such problems, you will find the procedure quite simple and the opportunity for interesting designs almost limitless. It is important that you observe what happens to the grain of the fabric in such cases. By using your ruler and blue pencil, you can mark your muslin to appear to be a striped fabric. When the muslin proof is on the figure, the results become quite obvious to you. In the following problems, if you will do this, you may learn some very interesting facts which will help you in cutting garments involving this principle. This problem eliminates the basic shoulder seam, making the yoke and back into one piece.

Read Each Step Carefully

- 1. Trace around your front bodice sloper which has the underarm control.**
- 2. Place the shoulder seam of the back sloper against the shoulder seam of your front bodice, tracing as shown in Fig. 2. See drawing.**
- 3. Cut out the two sections, but do not cut at the shoulder line. Fold in underarm dart temporarily and place over model form. Sketch in desired yoke design.**
- 4. Remove pattern and flatten upon table. Prepare for shifting underarm control to waistline dart tucks. Mark notches in yoke line. Cut back and front apart on yoke line. See Fig. 3**
- 5. Make final pattern for each section. Trace the original shoulder seam with tracing wheel so that notches can be made in final pattern, Fig. 4, to aid in setting in sleeve and the collar as you would do in making a complete garment**
- 6. Lay out the pattern on your muslin so the center back and center front fall on fold. Assemble sections, leaving left underarm seam open to permit testing muslin on your model form. Observe the results of the striped fabric, showing the yoke appearing on the bias in the front.**

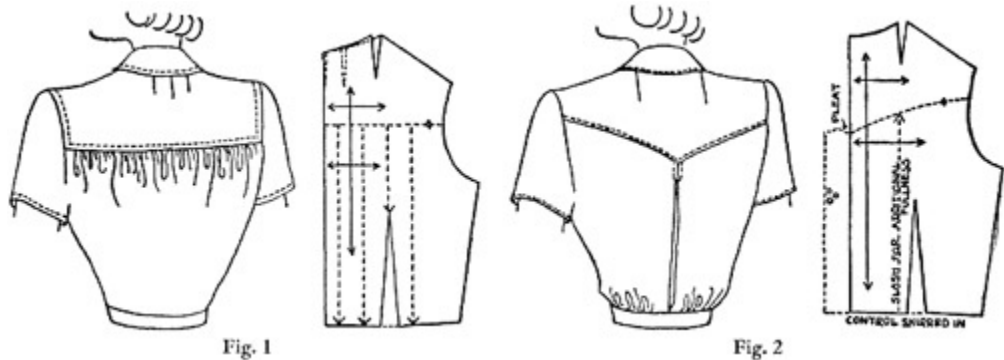
NOTE: Through experiment on your part, you can learn ways of developing interesting designs for garments from fabrics having checks and stripes. This is called "fabric manipulation" and is an inexpensive way to get smart effects. It is used frequently by designers.

PRACTICE PROBLEMS

Variations of Designs for Backs

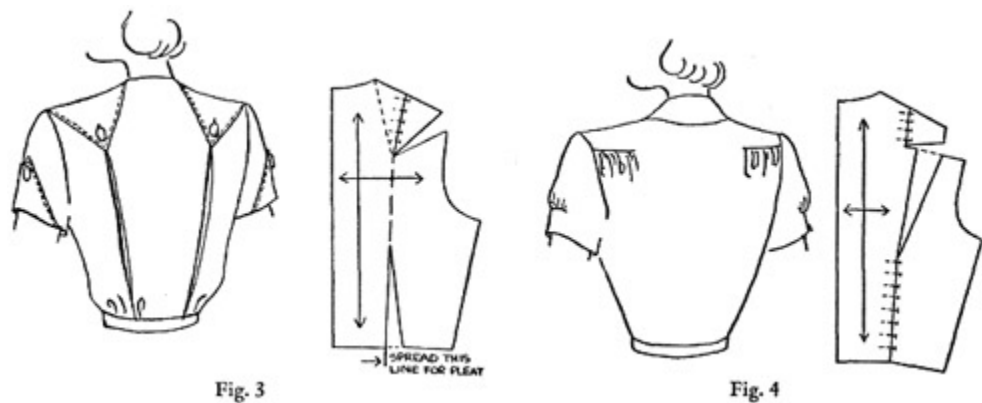
Yokes in active sports garments should be shallow to

insure the extra ease through the middle of the armscye. These designs show deep yokes which retain the shoulder control. Change the proportions and correct them to absorb the shoulder dart and insure freedom of action in the armscye.



The above sketches show the use of three pattern cutting principles: Control at shoulder has

been shifted into yoke seam. Bodice portion is slashed and spread to provide material for a pleat. The normal waistline dart has been retained but gathers have been substituted to fall at either side, beside the pleat, which is purely decorative.



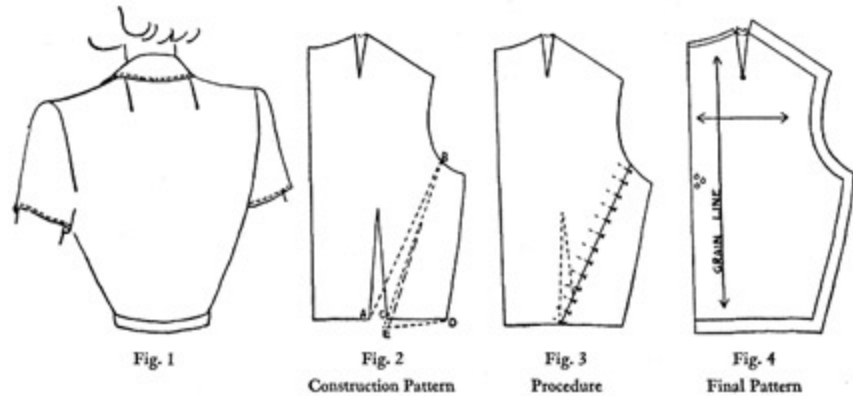
When using this simulated yoke in the back ([see page 40](#)), it is usually a good plan to locate the horizontal line at a level slightly higher than that used

for the front bodice. If the line is placed too low, it will give the wearer an unpleasingly thick appearance just below the shoulder blade. This is also true when designing full yokes.

Eliminating Waistline Control

In this problem, you will learn the most satisfactory method for eliminating the waistline dart in the back of the bodice.

This is only possible because of the shape of the curve which is being fitted. It would not prove satisfactory for the bust curve.



When designing low-cut evening gowns, where the basic dart would appear to be too obvious, this adjustment is made before the making of the pattern for the design. Likewise, this principle is used for some basque fitted waists.

Although it does eliminate the functional dart, seemingly, it merely shifts the work done by the dart to the waistline seam and the underarm seam. Garments so fitted are not as comfortable, and, due to the extra fitting which is shifted to the side seam, the grain of the fabric is changed and the garment will not hold its shape as well. For this reason, most garments appearing in the shops today provide a basic waistline control or provide seams for that purpose.

Read Each Step Carefully

- 1. Make construction pattern from back sloper.**
- 2. Locate point B one inch from underarm seam point. (Fig. 2.)
Draw line A-B.**
- 3. Draw preliminary line E-B through point C, making it equal in length to line A-B.**
- 4. Draw in preliminary line E-D**

5. Due to the equalizing of the two lines A-B and E-B, to make the two sides of equal length, we now find that the distance from A to E, or the width of the dart is slightly less than the basic dart on our sloper shown as A-C in Fig. 2.

6. In order to be sure that the waistline of our pattern will be exactly the same size of our sloper, we must shift the line E-B until we have made the distance from E to D identical with C to D. Draw this final line.

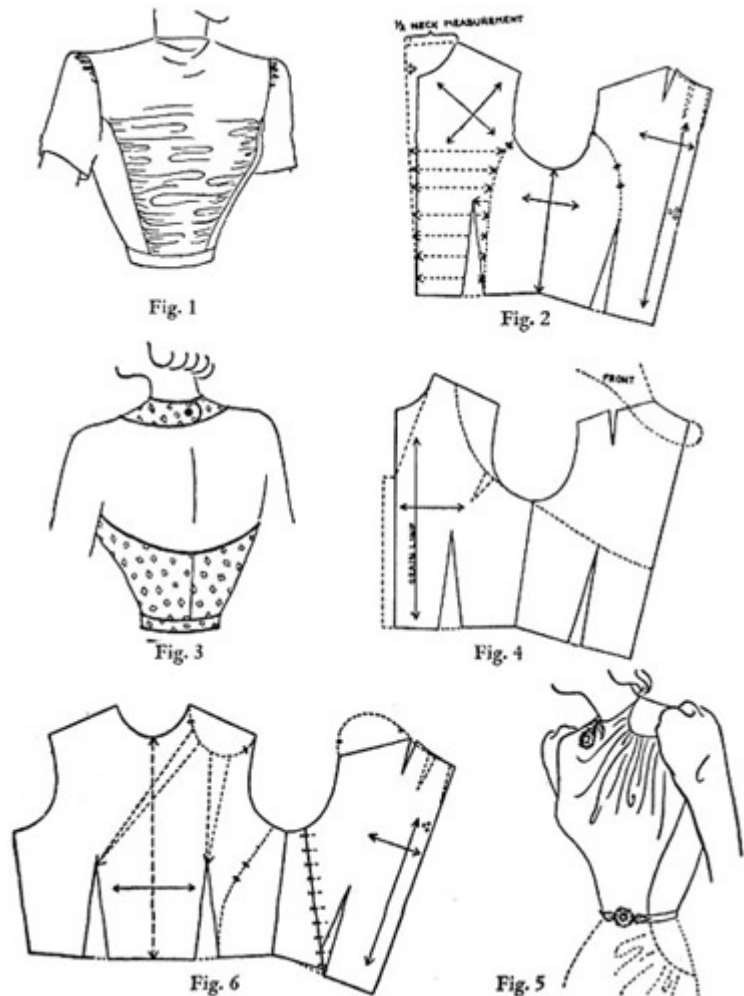
7. Fold in this new dart. Because it extends to an outer edge on the pattern it can be folded in but the pattern will remain flat. Observe that you now have a slight curve in the waistline seam and the remaining portion of the fitting, appears to have been shifted to the underarm seam. The armscye curve straightens slightly.

8. Complete final pattern and muslin and test over your model form.

NOTE: An old method used was to attempt to take an amount equal to the dart off the side seam. Although used for many years, it resulted in a very uncomfortable garment. This new method has been developed which changes shape of armscye, and has proven to be more satisfactory in the finished garment.

Additional Practice Problems for Bodices

Shown above are illustrations of garments which are so designed as to employ the principle of shifting basic sloper seams for the sake of



further interest in design. Study the diagrams carefully and then produce your patterns accordingly. Note that in Fig. 1, the small amount of control which remains after the position of the new seam has been established is shifted. Then the lines indicating the position for slashes which produce the balanced fullness are added.

The strap extending around to the back of the neck shown in Fig. 3 is first taken from the back bodice construction pattern. In the final pattern, it is moved over to the front to make a continuous strap cut in one piece with the front. Note the method used to eliminate the normal underarm seam in Fig. 6.



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1942—Modern Pattern Design

by Harriet Pepin

Chapter 3—Hip Length Patterns

Drafting a Front Hip-Length Sloper

Up to this time, you have been making patterns which have extended only to the waistline. You have learned that the sloper can be the means to producing an almost limitless number of new designs, all of which are based upon but a few principles common to the block system of pattern making. The sloper, when made for an individual, is a pattern of that certain person's body contours. If the individual has a small waist and large bust, then her sloper will have an extra large basic dart because, for the size of her bust measurement, the fabric must be brought down to the size of her waist measurement. If she has sloping shoulders and a pronounced curve through the shoulders, the pattern must be carefully made to record such a fact. Then, as it will be used as the basis for creating designs for her, the designer may choose lines that will aid in concealing her bad proportions.



Fig. 1

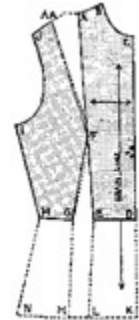
People who have ideal or nearly ideal bodily proportions can wear garments that may be so very simple in form and line that they may be cut directly from a sloper. But if the customer has a body which is not one to be so revealed, her sloper pattern remains only a functional means to creating designs that involve drapery, divisional lines, etc. which will aid in hiding her bad proportions. The information set forth in these pages was originally based on normal figures. But it is now being successfully adapted to the designing for women of all sizes and shapes. It is to be assumed that the reader will use his judgment with each new customer.

Your basic waistline control sloper may be the basis for making a hip-length jacket sloper.

Designs which provide for *vertical* fitting around the waistline, without any seam at the waist, are adaptable to normally proportioned figures. Women who have too intense curves about the waistline must be fitted with garments which have:

1. Partial waistline seams.
2. Semi-fitted silhouette (to conceal irregular curves).
3. Several vertical seams, or seams with additional vertical darts to provide opportunity for more shaping to the curves.

The first step in making the front hip-length sloper is to divide the bust control between the waistline and the shoulder. On some occasions, this simple hip-length sloper may be used in this simple form, but, you will find through the study of following problems, it is the basis for many other styles which produce a superior fit in finished garments.



Label your *waistline* sloper as indicated above, making point A the center of the shoulder seam. Lay your sloper upon pattern paper and trace around it in the following manner:

A to B; B to C; C to D; D to E.

Holding the waistline sloper firmly in this position, place a dot halfway between points G and E. Trace along the side of dart E-F.

Keep pencil point in position at the point of waistline dart and pivot your sloper to the *right* until the left side of the waistline dart falls upon the dot. With sloper in this position, trace:

F to G; G to H; H to I; I to J; J to AA.

Lift your sloper. The space between AA and A is the opening of the shoulder dart which has been shifted by partially closing the waistline dart. Connect A and A A with F. (Shorten both shoulder and waistline darts as indicated when using this pattern for an actual garment.)

D-K—Extend line C-D downward equal to hip length (7 inches).

K-L—Square a guide-line from D-K; K-L equals D-E plus 3/8 inch. Draw L-E.

L-M—Extend K-L a distance equal to G-E. Label point M. Connect M and G.

N is your side hip point. Use *one-half front Hip Measurement* of model form. From that, subtract length of K-L. Amount remaining must be M-N.

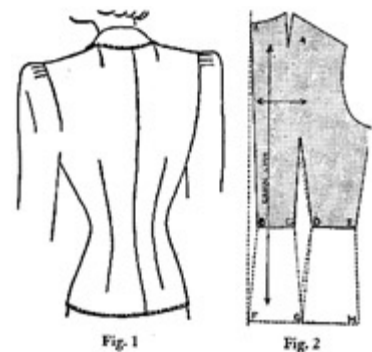
Using tapeline and square, locate point N, 7 inches down from point H, the proper distance from M determined above. Curve lines H-N and M-N very slightly.

The area enclosed by M-G-F-E-L is an "open end" dart extending to hip. Allow usual seam allowances and complete the pattern. Mark in position of normal waistline H-G-E-D on muslin as well as pattern as a guide when judging results. Front will be attached to back hip-length muslin produced in next page of instructions.

NOTE: In standard sizes, Point N should be slightly higher than the level of point M as shown in the diagram. When making this hip-length jacket sloper for individuals, the heavier figures will require about two-thirds of the basic waistline control shifted up to the shoulder position. The extra slender figures may require only one-third shifted to the shoulder. This should then produce a finished jacket length sloper which will more closely resemble the standard sizes in the hip and waistline areas. The sloper will then be more adaptable for making the following styles of jackets.

Drafting a Back Hip-Length Sloper

The back hip-length sloper is used in its original form as the basis for many jacket designs and full length garments. It is simple to construct and, if the darts are properly spaced for the individual wearer, it is becoming to most figure types.



In order to keep the grain of the fabric on a true horizontal across the shoulders, a seam is thrown into the center back which might be handled like a dart if desired. This seam is shaped to conform to the curve of the back and then shapes outward again to accommodate the curve of the hips.

Observe that the control is not changed at the waistline or the shoulders. The procedure merely includes the provision for a center back seam which will shape the fabric as needed at that point, and changes the position of the grain.

1. Draw a vertical guide line at the left edge of paper.
2. Place back bodice sloper in such a position as to make A rest upon guide line and B $\frac{5}{8}$ inch from it.
3. With sloper in that position, trace around it, including the darts. For convenience, label points B-C-D-E as shown.

The hip section should be built on as follows:

F—From point B, measure off a straight line 7 inches long to somewhere on the vertical guide line. Mark point F. Square a line right from guide line A-F. This is the tentative hip line.

F-G—Along the hip guide line, measure off a distance equal to distance from B to C plus one inch. Label point G. Connect G and C; G and D to complete dart.

G-H—Use *half* of back hip measurement. Subtract from that the distance from F to G. The remainder will be length of G-H. With aid of tape-line and square, locate point H 7 inches down from point E. Curve E-H slightly.

Shorten both ends of dart slightly. If possible, make sides of dart equal. As waistline is abandoned in this type of garment, position of line D-E may be shifted if necessary to equalize sides of dart. (When this pattern is made for individuals having more than normal curves, this step may be impossible. Such figures would be fitted with aid of seam on line D-E and use panel effect down center back of jacket only.) [See page 87.](#)

Allow seams in usual manner including the center back, A-B-F. Cut muslin proof. Trace in position of waistline B-C-D-E. Pin this section with front section and test upon the model form.

NOTE: As the grain of fabric is no longer parallel to center back seam A-B, but parallel to guide line, this means that the shaped center back seam does not follow grain of fabric. This change in grain of fabric straightens grain at underarm seam slightly. Mark final muslin for plaid before cutting to observe this fact closely.

The position of the hip dart was established by measuring a standard size 14 model form. When making personal slopers, this would vary according to the relative hip and waist measurements of the individual. The best plan is to plan the dart for a figure having ideal proportions, such as those used in a model form, and then correct the position of the dart slightly while the muslin is upon the customer, if necessary.

Making Front and Back Hip-Length Slopers

Most designers, making full length garments or jackets, like to have slopers on hand of the two patterns made in the foregoing problems. In later problems, when you will use them for making various jacket designs and full length garments, you too will find it convenient.

Cut away all seam allowances on the foregoing patterns and cut out the complete dart section, extending to the bust. Using brown cardboard, trace around the patterns and label them as shown in the diagrams below.

The notches are placed in the waistline area to mark the exact position of the waistline as that aids in placing other horizontal lines which might be a part of a design.

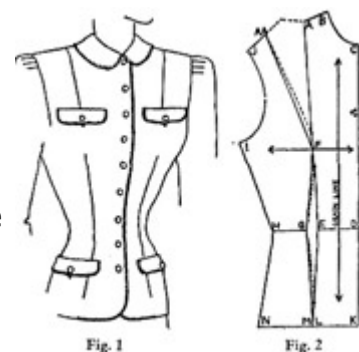
Notice that the darts are squared off again in the finished sloper to hold the sections together. Make a hole, with your scissors, on the bust point as a means to pivoting the front section.



Check the sloper to make sure that M-G and E-L are still in the original parallel position of the original draft.

Semi-Fitted Jacket

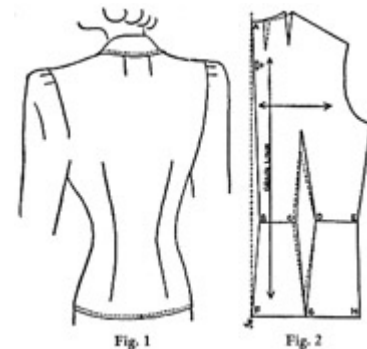
This style of jacket is extremely popular because the front may be fitted as closely as desired and it is generally becoming to many women. It is made from the hip-length sloper. By closing the open-end dart at the hip-line, through pivoting, still more control is shifted to



the shoulder area. This produces a jacket which has the grain of the fabric on the line of the bust *and hip lines*.

1. Starting with shoulder seam point A, trace A-B-C-D-K-L-E-F.
2. Hold pencil in point of dart, pivot pattern to right until point M meets L. Continue tracing F-G-M-N-H-I-J-AA.
3. Connect points A and AA with bust point F.
4. Shorten darts as desired. Mark notches as for basic sloper to show waistline.
5. Allow usual seams on the pattern, mark muslin for a plaid. It can be attached to the following back section for testing.

In this design for the jacket back, the vertical shaped seam A-B-F is abandoned for the straight line A-F which will lay upon the fold of the fabric when garment is cut. Because this straight line is shorter than the original shaped fitting line, this will cause the garment to only partially fit the back waistline.



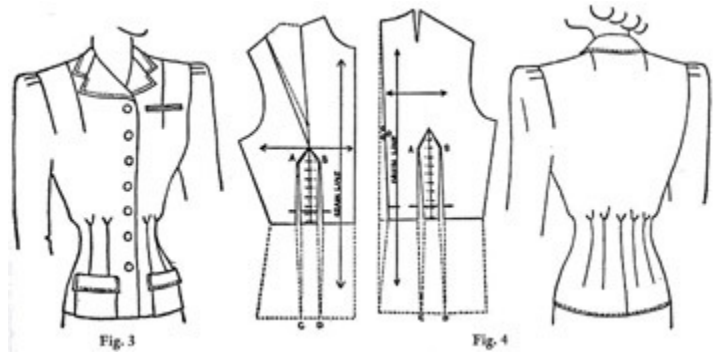
To modify this, the side darts may be increased at point C one-fourth inch, but if an attempt is made to establish a *close fit* through the use of darts only, horizontal wrinkles will appear at the center back of the garment.

The semi-fitted silhouette is flattering to those who have abnormal proportions. It modifies the bad curves. The exact depth of the fitting must be decided by fitting directly upon the individual. The pattern can be cut and the muslin adjusted to suit and then the pattern proportions established from the muslin. The only women who should wear closely fitted clothes are those who have ideal figure proportions!

NOTE: These various designs for vertically fitted jackets may be used interchangeably. The same patterns can be used for dresses which may be designed to have a sash or belt. Wash dresses, maids uniforms and other such types of apparel frequently are found to have the back section cut from this pattern.

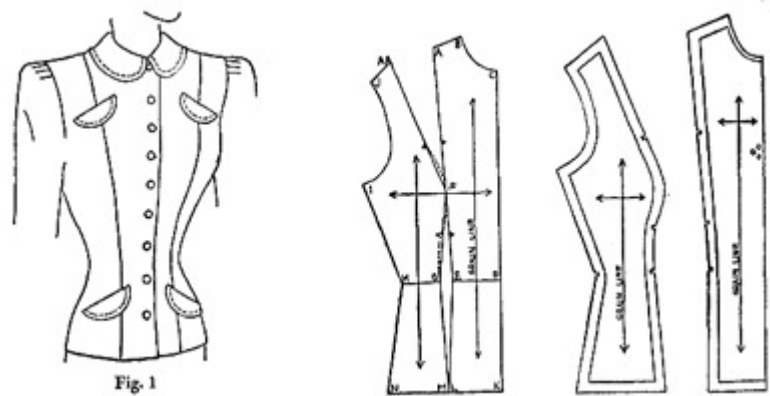
Multiple Dart Tucks

Many variations of designs for either the back or front of jackets may be developed. The single dart may be substituted for several, just as you have learned in bodices. The foregoing diagrams show the bodice sloper pattern used as a foundation for such a style of garment.



French Lining Jacket

This design takes its name from the old shaped linings made as foundations for the draped garments of the 19th century when France provided most of the patterns for all our garments. It is also used over standard dress forms which custom designers



pad up for special customers. The many seams provide opportunity for close adjustments as needed. In this simple form, it is a favorite with the coat and suit industry every year and is used as the basis for many classic styles each year.

It is occasionally referred to as the "princess" style in dresses. Additional seams and secondary darts are occasionally used when desired. When used for dresses, it may be shortened and is then called the "basque" type. ([See page 178.](#))

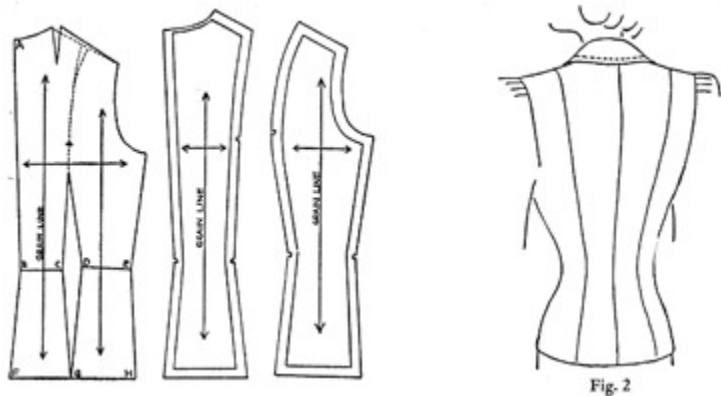
Obviously, when this principle of pattern designing is used in coats or jackets, shoulders may be broadened or raised to permit the use of padding ([see page 125](#)), but the sloper developed for use in jackets and coats could be used in the manner illustrated above and the garment would employ this same means of shaping the fabric to the figure. In these pages, the fundamental

principles of cutting patterns are illustrated in various types of garments merely to show the reader how they might be used to produce a variety of garments.

Note the dotted lines around the bust. The curved dotted line G-F produces a more *revealing* fit at that point. The "rib measurement" is used to decide the intensity of this curve. If the curved line G-F is intense, and therefore lengthened, it may be necessary to slash the front panel section horizontally between E and F and spread until the length of E-F equals the curved line G-F. This will produce a bust revealing garment which closely fits the diaphragm. To further emphasize the fit at this point, the center front edge may be curved also. Designers of expensive, simple but expertly fitted garments use these tricks in shaping which give unusual beauty to garments. At this stage, you are primarily studying *methods*. With study, you will master the finer points of this art of designing patterns.

If the reader will turn to [pages 221 and 230](#) he will find this same principle illustrated for cutting slips and coats. It is one of the most important principles of cutting, as all control has been absorbed in the seams and it produces a garment which is fitted entirely through the use of vertical seams. This permits the grain of the fabric to rest upon the bust and hip levels, which is assurance that the garment will hold its shape well with continuous wearing.

Notice that the normal shoulder dart in the back section can be shifted into the seam. Also observe that the grain of the fabric is established across the bust. In normal figures this places the grain on the lower edge of the jacket also. As the lower edge of the jacket is of secondary importance except as a line of design, it may be altered to suit the posture of the wearer.



Because this design is so very simple, it is of utmost importance that the position of the seams be pleasingly established.

For further study clip many examples of the use of this basic cut in all types of apparel, from bathing suits to bridal attire. You will soon be aware of its possibilities in designing. It is least interesting in this simple form.

You will observe, upon assembling several variations of this French lining pattern, that through slight changes in line, or through the addition of varying shaped pockets, it may be adapted to figures of varying proportions. When fashion calls for movement at the back of the jackets, flares may be added in the same manner they would be added to gores in skirts. Inverted pleats may be inserted in the lower seams as they would be in skirts, also. Through interesting styling details added to the seams, a new design may emerge—and yet the same *pattern* remains. Hence, it is important, to the hobbyist who may design patterns as a means of developing a personal wardrobe, to produce a well fitted French lining pattern which may be used again and again in clothing. It saves much time and gives further opportunity for producing new designs, each of which is dependent upon the fabric and the details for new design interest.

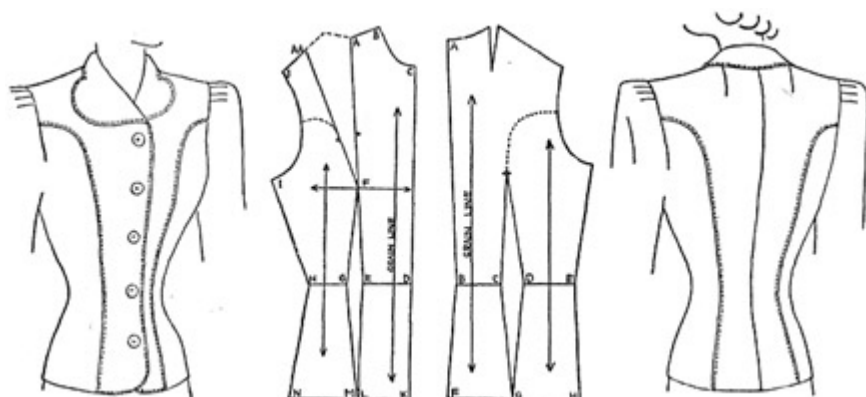
Upon thumbing through period fashion books, you will find that this same French lining was used for the jackets of our grandmothers' day. You will find that this method of shaping men's garments was used in early days also. Many old records offer excellent inspiration for modern designs.

Variations of French Lining

On the following page we have an interesting variation of the basic French Lining. Through the combination of line, we create the illusion of width through the shoulders and then narrow the waist with the vertical lines in that area.

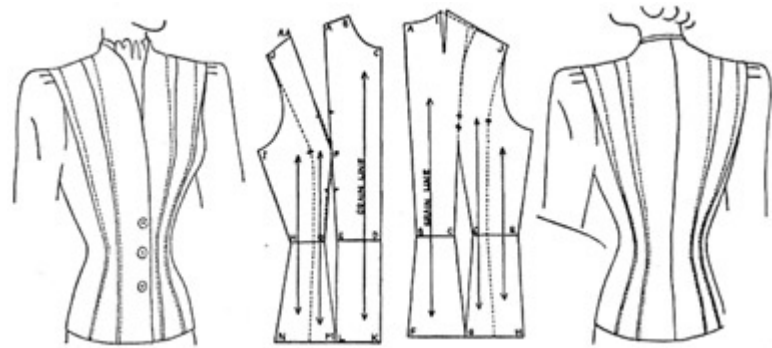
Because the new curved line falls directly over the bust, blending into the vertical line of the original dart, the control becomes shifted to that position. The curve of the bust has been intensified just for further beauty of the silhouette, as in the previous problem.

However, in the back section, the curved line does *not* fall across the point of



the shoulder control dart and therefore we still have need for a control dart near the neck or shoulder. It has been placed at the shoulder neck point rather than the shoulder in order not to distract the attention from the main style interest in the garment.

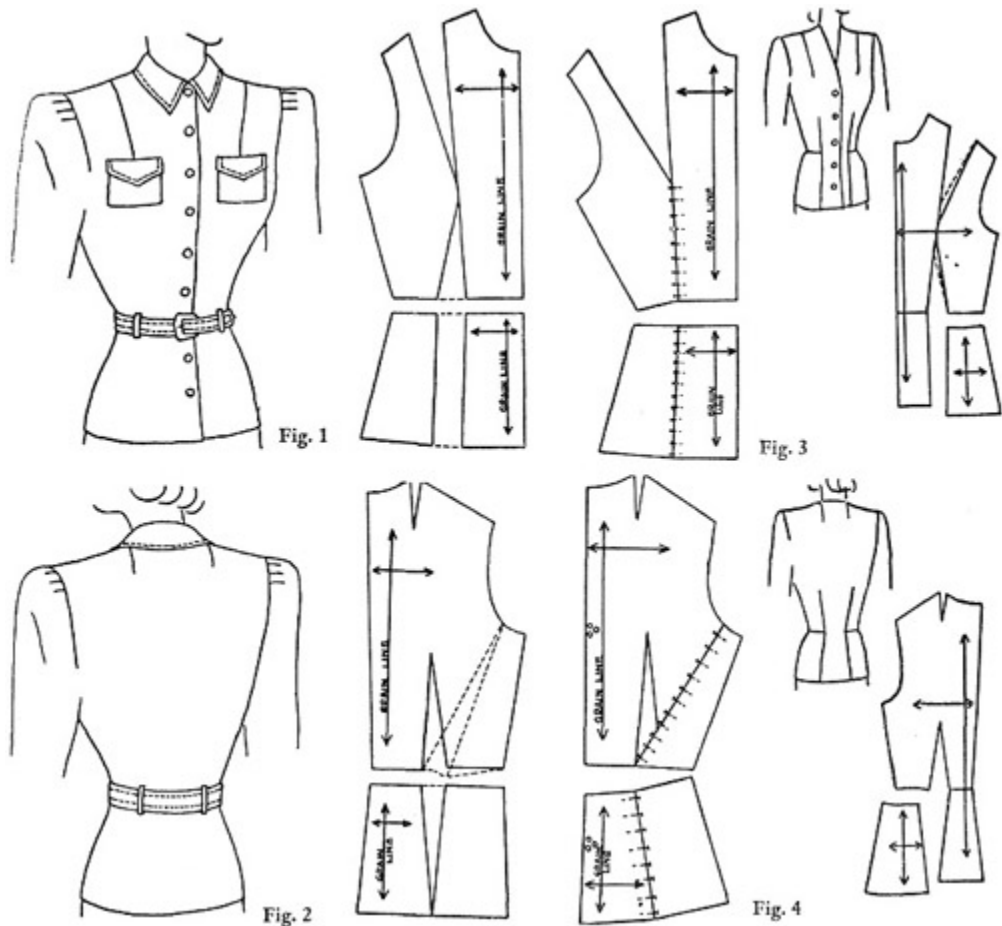
Below, the dotted lines of stitching show the position of the first division of the pattern. When these have been established and the pattern is cut apart, the simulated pleats are *built on* when making the final



pattern. Because these seams are curved at the waistline, these simulated pleats must be faced. These facing patterns are made from the final pattern. Notches should be placed in the shoulder seam to show where the topstitching should start. This design presents a construction problem which must be understood by the pattern designer to insure success in the final garment.

Peplum Jackets

The peplum style of jacket, which provides for a seam at the waistline is used for women having small waist measurement and large hip line. The back is used in combination



with French lining styles when practical to do so.

As shown in small diagrams, occasionally the center front panel section is made without the waistline seam and then the small side peplum section is added. The panel effect is slenderizing and the seam from the panel to side seam at the waist aids in attaining a perfect fit in that area. Observe that this would be possible in the back also, but in such case the dart would not be eliminated as it would form the effect of the part from the dart point down through the hips.

These various styles of jacket patterns may serve as the basis for full length coats and dresses in unlimited variations. Through slashing, additional fullness may be added as desired. These will be illustrated in later examples showing the possibilities for cutting patterns for coats and other full length garments.

1942—Modern Pattern Design

by Harriet Pepin

Chapter 4—Sleeve Patterns

Analysis for Need of Control

In previous chapters you have learned the value of the use of basic control in shaping the bodice patterns. In the study of sleeves in which you are now engaged, you will learn that this same principle is utilized to provide as close a fit as possible with no lack of freedom.

Fig. 1 shows the natural shape of the human arm. In addition to being cylindrical in shape, it is also naturally bent at the elbow and tapers at the wrist. This means that the back of the arm will require additional fabric because it is *longer* than the front. So we provide that extra length in that area with the aid of the dart from the elbow position to the outer edge of the pattern.

Fig. 2 shows another important point in shaping a pattern for the sleeve. Where the arm joins the body (see point A), there is a rounded curve for which some control of course be provided. As this curve is not intense, and extends from the front over the shoulder to the back, it is handled with gathers, or "ease" through that area. In style sleeves, this curve is accented, and additional fullness is provided, but for the time being, we are merely interested in the simple, basic set-in sleeve. Various sleeve designs follow later.

Fig. 3 shows how the flat pattern should look to provide proper length where needed. The fabric must enclose the curved arm and it must also permit movement at the elbow and shoulder. Intersecting lines A-B and F-E are grain lines. Notches are placed at A and B so one automatically records the position of this grain line when tracing around the sloper. The horizontal grain line F-E intersects at right angles and rests at base of sleeve cap.

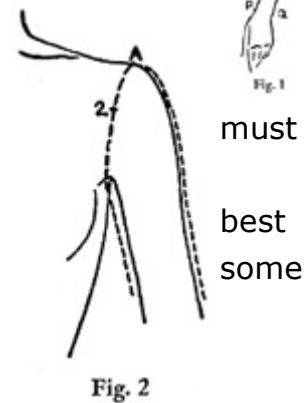
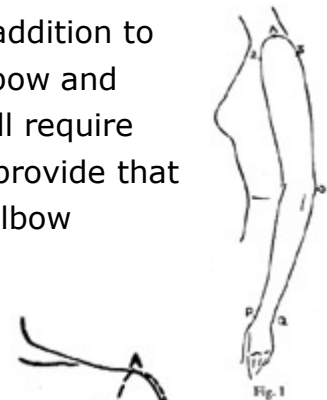


Fig. 2

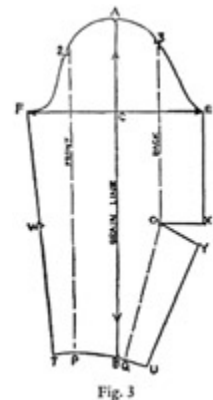


Fig. 3

The front folding line (broken line) indicates where the fabric will rest at the front of the arm when sleeve is being worn. Point P, at the lower point of this dotted line falls at the base of thumb as shown in Fig. 1.

The back folding line (broken line) represents the back of the sleeve, when it is on the arm. Point O, which is the point of the dart, indicates the elbow position. Point Q falls at little finger position as shown in Fig. 1.

The lines E-X and Y-U must equal the opposite side, F-T because, when the dart has been folded in, they must meet in a seam.

Point A at the top of sleeve cap joins the normal shoulder seam of the bodice and serves as a dividing point for distribution of ease in sleeve cap. In standard sizes the average amount of ease is 1 1/2 inches. Usually it is equally divided on each side of A. As individuals vary at this point, seam allowance should be generous to permit alterations. When an individual sloper is being fitted, the curved lines 2-A and 3-A are established in the final pattern *after* a trial fitting in muslin. Points 2 and 3 are usually located 6 inches from side seam in the bodice. They are then established in the sleeve pattern by measuring 6 inches *upward* from points F and E on the sleeve cap. When the sleeve is set—that portion is fitted smoothly to the bodice armscye. The excess from 2 to A and A to 3 is then adjusted in gathers to control the smooth fitting of the arm curve.

The seam of this simple sleeve falls in direct line with the underarm seam of the bodice. In our grandmother's day, most sleeves were so shaped as to place the seam to the front, permitting a closer fit through the biceps. However, modern women want more freedom and this sleeve is simpler to use in factory production, so is preferred today.

Drafting the Sleeve Sloper

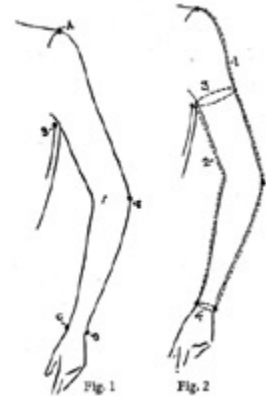
Turn back to your bodice measurement chart on [page 59](#) to find the sleeve measurements given for standard size 16. These may be used to study the method of procedure used for making a sleeve draft. It is advisable to read over the directions first, mentally completing each step before drawing any lines. Check over the following measurement points and the description given for each so that you may visualize the use of each when making a draft.

Measurement Points

The measurements given for sleeve drafts are based upon the ideally proportioned arm. They are the result of research work done by pattern makers in the manufacturing industry. The same method would be used to measure an individual.

Fig. 1 shows the basic points from which measurements are taken. These would be established by marking with chalk. They are, namely:

- A—Shoulder Tip Point
- B—Armpit
- C—Inside Wrist
- D—Back of Wrist, or Little Finger Position.
- E—Elbow Point (Used particularly when measuring individuals.)



Where Measurements are Taken

Fig. 2 shows just where measurements are taken. Notice that you have two vertical and two horizontal measurements. These are all that are needed to produce the draft for a standard size sleeve sloper.

1. *Overarm Measurement*: Taken from the Shoulder Tip Point, over the Elbow Point and down to the back of the wrist or Little Finger position. Arm should be bent as illustrated.

2. *Underarm Measurement*: This measurement is taken from the armpit to the wrist, with the arm hanging naturally.

3. *Biceps Measurement*: Taken in a position in line with the armpit. In standard sizes two inches have been added to provide some ease. When measuring individuals the arm may be measured exactly and then two inches added to the literal biceps measurement.

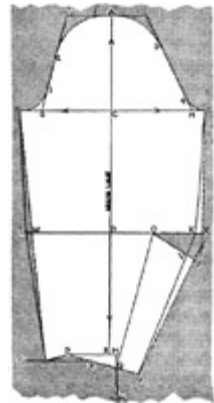
4. *Wrist Measurement*: Taken around the wrist exactly over the wrist joint. One inch is usually added to the exact wrist measurement to provide normal ease.

Read Each Step Carefully

Select a piece of pattern paper 28 X 24 inches.

Have your square, tapeline, ruler, sharpened pencil and curve at hand.

Jot down the four basic measurements given for size 16 sleeve.



A-B—Start one inch below top edge of your pattern paper and draw the vertical line A-B down the center of the sheet. Make this line equal to the *Overarm Length*. Label points A and B.

B-C—From point B, measure upward a distance on this line equal to the *Underarm Length* and mark this point C.

D—Divide the line C-B equally and place a dot. Locate point D one-half inch above that dot.

C-E—From point C, square a line right which is equal to *one-half Biceps Measurement*. Label E.

C-F—From point C, square a line left which is equal to *one-half Biceps Measurement*. Label F.

F-C—plus C-E equals entire *Biceps Measurement*.

F-G—From point F, measure off a distance equal to one-fourth of line F-C and label point G.

E-H—From point E, measure off a distance equal to *one-half* line F-G. Label point H.

A-I—From point A on line A-C, square a line right equal to combined lengths of F-G and E-H. Label point I. Connect points I and H.

A-J—From point A, square a line left equal to twice length of line F-G. Mark point J. Connect points J and G.

D-K—From point D, square line right which is equal to C-E less 1/2 inch. Label point K.

D-L—From point D, square a line left which is equal to C-F less 1/2 inch. Label point L.

NOTE: The combined amounts deducted in the last two steps reduces the elbow one inch as compared to the biceps. This reduction is for the normal arm and might vary with individuals.

F-L—Connect points F and L.

E-K—Connect points E and K.

M—From point B, square a line to the right 1/2 inch long and mark this point M.

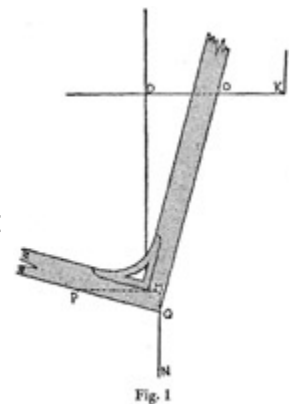
M-N—From point M, square a guide line downward which is 4 inches long. Label point N.

O—Divide the line D-K equally in halves and label point O.

M-P—From point M, extend the line M-B to the left a distance equal to *one half* the *Wrist Measurement* and mark that point P.

Q—Place your square on the points O and P as illustrated in Fig. 1. The corner of the square must rest somewhere on the line M-N. Place a dot at the exact corner of the square and label that dot Q.

Q-P—Connect points Q and P.



Q-O—Connect points Q and O.

R—Divide the line Q-P equally in half and mark the point R.

R-S is a guide line. Make it seven inches long, and make it parallel to line M-P.

P-T—From point P, measure a line equal to P-R to fall somewhere on the guide line. R-S. Mark point T.

L-T—Connect points L and T.

Q-U—Extend the line P-Q to the right, an amount equal to the distance from Q to R. Label point U.

K-U—Connect points K and U.

V—Subtract the length of the line F-L-T from the length of the line E-K-U. The difference represents the dart appearing at the elbow for control. Starting from K, measure off this distance and label point V.

O-V—Connect points O and V.

NOTE: When making sleeve drafts for various sizes from standard measurements, the difference in the biceps and wrist measurements may cause F-L-T to have an outward curve. It makes a more shapely sleeve if this seam is straight. This may be easily accomplished by straightening the line and then adding the amount which was lost to the back of the sleeve where the dart is located. The dotted lines in the diagram on the previous page illustrate the steps which follow.

W—Connect points F and T with a straight line. Label point W at the new intersection point.

X—Extend the elbow line W-O-K an amount equal to the distance between L and W. Label point X. Connect points E and X.

Y—Extend the line O-V until it is equal to the line O-X. Label point Y. Connect points Y and U.

The intersection of lines between X and Y represents the center of the dart.

Shaping the Sleeve Cap

You are now ready to shape the sleeve cap. In placing point J a greater distance from point A than point I was located from A, it results in a rounder curve at the front of the sleeve cap than that at the back of the sleeve. Some pattern makers make the two curves—front and back—identical. However, making an equal distribution requires more alterations when fitting sleeves to individuals. It is recommended that the proportion illustrated be used when making basic draft in standard sizes.

Read Each Step Carefully

Points 1, 2, 3 and 4 which appear on the sleeve draft are merely guide points for establishing a shapely, proportionate sleeve cap for standard size garments.

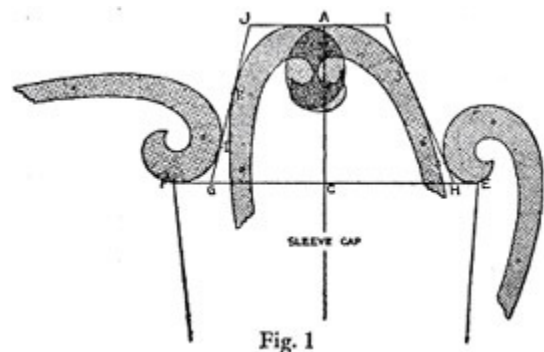
G-1—From point G, measure off a distance on the line G-J which is equal to the length of the line F-G. Label point 1.

J-2—From point J, on the line J-G, measure downward a distance which is equal to the length of the line J-A. Mark that point 2.

1-3—From point I, on the line I-H, measure downward a distance equal to the distance between A-I. Mark that point 3.

H-4—From point H, on the line H-I, measure upward a distance equal to the line H-E. Mark that point 4.

With the aid of your curve, placed in the positions illustrated in Fig. 1, establish clear, clean, curved lines between F and 1; 2 and the line J-A; E and 4; 3 and the line A-I. The top of the cap



can follow the line J-I in the area of point A. It is not a good plan to make the top center of the cap too curved as the shoulder joint is a round shape and the width is needed around the top of the cap. Soften wrist with curve from T to R.

With blue pencil, trace around draft:

A-3-4-E-X-0-Y-U-Q-R-T-W-F-1-2-A.

Check your draft over carefully before allowing seams as given on next page.

Seam allowances for standard size sleeves are usually 3/4 inch on the sides and cap and 1/4 inch at wrist edge.

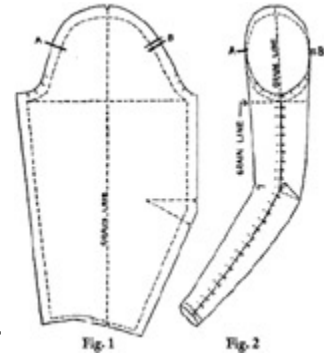
Some garment manufacturers allow extra seam allowance from 2 to A to 3 to provide for adjusting the length of the sleeve caps when alterations are necessary in stores. This is usually done in suits and better grade dresses.

Your cardboard sloper should be labeled as shown in [Fig. 3, page 90](#). Make certain that the biceps and elbow lines are at right angles to the grain line and that each is labeled properly.

Personal Sleeve Slopers

When making a sleeve sloper for an individual, in most cases you will find, by checking the four measurements, that she will closely resemble some standard size which will conform to the size dress she would buy. By a few simple alterations, her sleeve sloper can be made. Unless the woman has an arm which is abnormal in shape because of certain flesh deposits, most alterations will be simple. When customers have abnormal bone structure, such as an extra long upper arm and a normal lower arm, or just the opposite, then the full set of measurements should be taken and a special draft made to those personal measurements. Usually, she will tell you her troubles with ready-to-wear garments and that will help you to decide the proper steps to take.

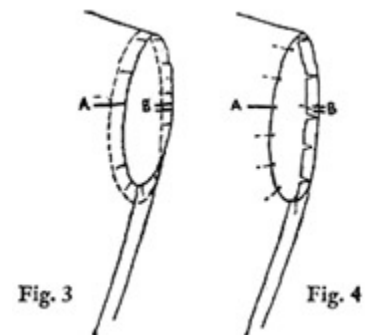
As in the case of making a bodice sloper, the muslin should be properly prepared before fitting is started. A blue vertical line should plainly mark the vertical grain line and another blue line should mark the horizontal grain line. See Fig. 1. Allow a full inch or more for seams and possible adjustments which may be necessary. The sleeve should be pinned together



as shown in Fig. 2. In most cases, the designer is fitting the customer to a bodice at the same time as the sleeve. When the bodice has been properly fitted, the sleeve should be tested. Obviously, it would be impractical to attempt to fit a sleeve without the bodice muslin.

Points A and B are marked on the muslin proof with a single blue straight line in front and two lines in the back at a point 6 inches upward from the side seam of the bodice and a like position on the sleeve. (The area below A and B should be without ease.) In some cases, you will find that as much as 7 inches can be smooth, depending upon the amount of flesh deposit around the shoulder joint. It is best to make these points as high as possible and still maintain a good fit. It results in a smarter looking sleeve.

Figures 1 & 2 show the sleeve muslin prepared for fitting. Figures 3 & 4 show how the bodice armhole should be prepared to receive the sleeve. To make the curved edge of the armhole fold back smoothly, short slashes should be snipped at about one inch intervals. Points A and B should be marked with a straight blue line.



There are two special points of fitting a sleeve:

1. The sleeve cap, to permit freedom of the shoulder joint.
2. The elbow control, to permit freedom to bend the arm regardless of the shoulder.

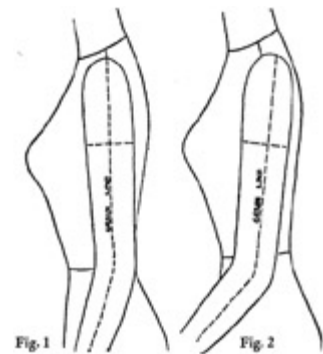
The sleeve cap must be long enough to provide a smooth fit without excess fabric, but it must not be droopy. It must also be wide enough to actually enclose the entire arm, because if it is too narrow, it will stretch the bodice and not permit the entire garment to be comfortable.

More discomfort can result from improperly fitted sleeves than any other portion of a garment. Few dressmakers thoroughly understand just what constitutes a truly well fitting sleeve. Each of the above factors is considered individually and one has little to do with the other.

Fitting Sleeve Muslin

Your customer's arm should hang relaxed throughout this procedure, as far as possible.

Slip the sleeve muslin over the arm as shown in Fig. 1. Note that horizontal grain line is on a true horizontal. Likewise, the vertical grain line will be in a truly vertical position. Fig. 2 shows a common error found in hanging sleeves. This tips the sleeve too much to the back and will result in droopiness at the back of the cap when the arm hangs relaxed.



With the sleeve in the position shown in Fig. 1, pin it into that position temporarily *regardless* of the position of the shoulder seam of the bodice with relation to the blue vertical grain line of the sleeve.

Have customer raise her straight arm directly upward from the side and place a pin to attach the sleeve under the arm. Try and keep an equal portion of the biceps ease to the front and back when placing this pin.

Starting at the armpit, slip the raw edge of the sleeve cap under the folded edge of the armscye, removing the first pins as you insert the new ones. Fit the sleeve into the armscye smoothly up to, or beyond points A and B until the curve of the arm shows the need of ease.

Gently smooth the upper cap into the armhole, working in the direction shown by the arrows in Fig. 3. *Keep customer's arm relaxed at side!* You may note that, due to bone structure, or distribution of the flesh in upper arm, more fullness is needed to front than at back half of sleeve cap. Use some of the seam allowance of sleeve, if necessary, to provide a smooth, shapely cap. As you proceed, your muslin should look like that shown in Fig. 4.

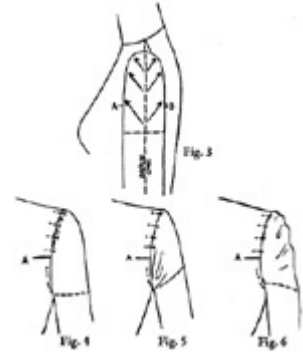
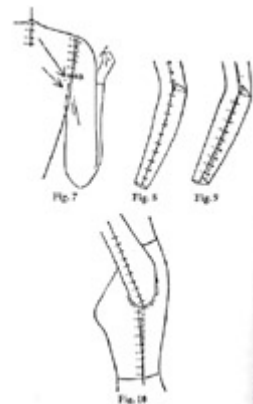


Fig. 5 shows how it will look if you have pushed the cap in too much. Fig. 6 shows how it looks if sleeve cap is too long. Such errors result in complete loss of style in the garment.

So far, you have been fitting only the *sleeve cap* and the arm has been in the relaxed position. To test the width of the cap for muscular activity such as reaching, car driving, et cetera, place your hand on the other side of the bodice armhole in line with shoulder blades and ask your customer to keep her arm *straight*, but lift it forward. If you feel too tight a strain across the shoulders, widen the sleeve cap in the vicinity of point B. A very small amount, such as 1/8 inch may prove sufficient to provide the necessary ease with no loss in the smartness in fit.

Your next step is to check for sufficient elbow control to permit freedom of the arm itself. This is an entirely separate procedure from fitting the cap and checking the reaching width mentioned above.

With upper arm close to her side, have customer bend her elbow as seen in Fig. 7. Watch shoulder area as she does this. If it draws, as shown by arrows, either the elbow dart is not exactly over the elbow, or there is not a large enough dart to provide sufficient control. If the sleeve just binds at the elbow, just release the seam in elbow area and test once more.



To increase elbow control, remove pins from wrist to elbow dart. Work the back of sleeve up gently, and re-pin seam and test again. When sufficient amount has been added, she should be able to bend her arm without causing the back of bodice to strain. Fig. 9 shows how corrected sleeve would appear. Dotted line shows original stitching line. Amount lacking at wrist shows amount added to elbow dart. Pin on a little piece of muslin and mark the new wrist line in red.

Modern factory methods require that sleeves have seams which fall in a true line with the underarm bodice seam in the basic slopers. Check the muslin on your customer and if necessary, correct the position of the underarm seam as shown in Fig. 10. Make a similar check at the shoulder and correct, if necessary, as shown in Fig. 3 on the previous page. These new basic seam positions should be marked in red pencil.

Completing Personal Sloper

Customer's sloper will now be made from this muslin fitting of bodice and sleeve. Remove muslin from customer with sleeve still pinned into position. Mark position of points A and B across armhole seam on bodice and sleeve with red pencil. This locates position of notches in patterns. Go over all darts, seams and other basic points with red pencil. If correction is made as shown in Fig. 10, "true" up all red sketched lines and cut bodice apart *on red lines*, leaving original seams still pinned. Cut away all excess remaining seam allowance outside of your red lines. Cut away dart areas. Press muslin without stretching. Pin muslin down to a piece of cardboard. Mark all grain lines and other identifying marks, such as notches, darts, et cetera, just as they appear in Fig. 3. Write customer's name and date fitting was made. This personal sloper may be the basis for all garments made for her in the future.

Students in classes like to test the perfection of any personal sloper by making an inexpensive, or muslin blouse which involves additional style features, such as added drapery, yokes et cetera.

This might be a good plan until you have had experience in fitting several customers.

Fig. 11 shows a high style garment showing the use of a simple, close fitting basic sleeve. The ease which was provided above points A and B has been steamed out at the seam and the cap fits closely, yet provides the smartest possible fit.

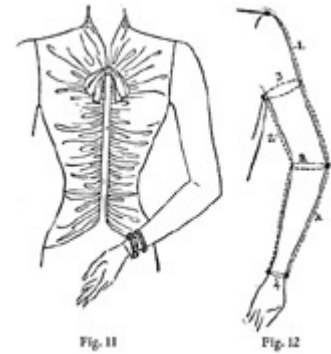
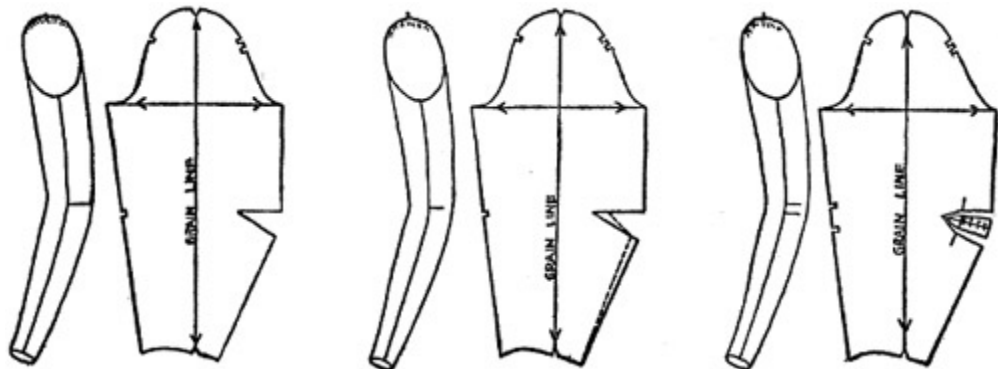


Fig. 12 shows two supplementary measurements which may be taken on individuals. B is taken with arm closely bent to test required width provided by line L-K. A locates elbow height, or actual distance of point D from B on basic draft shown on [page 91](#). These additional measurements can reduce need for muslin adjustments.

Variations of Elbow Control

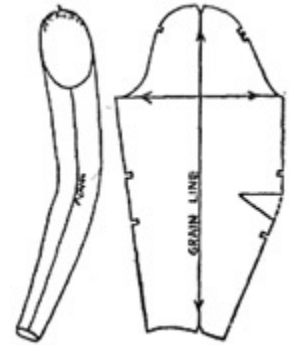


The ease provided at the top of the sleeve cap, where it will meet the armhole of the garment is slight enough, in most fabrics, to be steamed out over a round pad in the final garment. When the fashionable silhouette calls for an exaggerated width at top of the sleeve, darts, gathers and seams are employed and extra length and width are inserted to produce the exaggerated silhouette. This will be illustrated in following diagrams.

As you found to be the case in the study of bodices, the basic control dart in the sloper must extend to the highest point of the curve being fitted. This is also true with regard to the elbow dart.

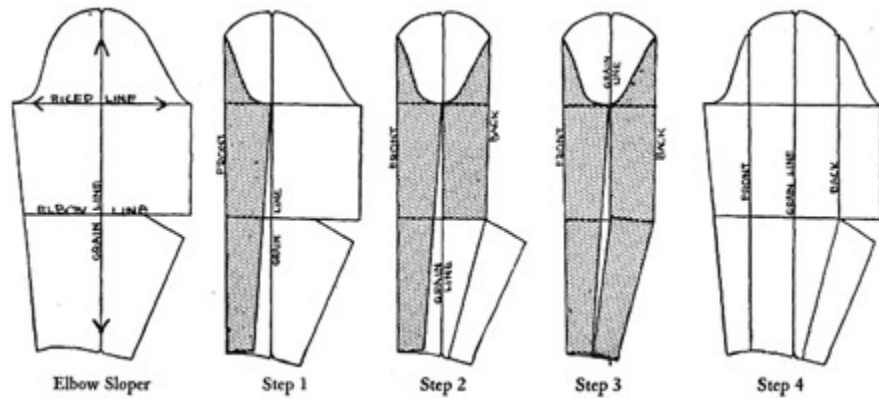
But, it is equally true that the dart may be shortened in the final garment to provide extra elbow room as needed. The basic dart may also be replaced by several small short darts or gathers. Diagrams on this and previous page show method for making such changes.

You will notice that many ready-to-wear dresses show the elbow dart merely folded over without being stitched. The reason for this is obvious. Although the method does not produce a sleek, well fitted sleeve, it makes it more possible for many women to wear the dress without alterations. In higher priced garments, where expert cut and fit is expected, the darts are usually stitched into position but ample seam allowance is provided so that proper alterations may be made as needed.



*The
Folded
Sloper*

Another convenient supplementary sloper



is made of brown kraft paper, with the control at the elbow. This is then folded in such manner as to appear as a fabric sleeve would when hanging on the figure. In other words, this new sloper when folded, represents the *silhouette* of the fitted sleeve. This sloper will prove most convenient when planning sleeves with width at the back and below the elbow. It provides speed in developing such patterns. Carefully study the diagrams shown above before proceeding.

Make a tracing of the elbow control sloper and cut out of heavy paper. Be sure the grain line is in place, with the biceps and elbow

lines at right angles to it. Study carefully steps 1, 2, 3, and 4 as illustrated above. The shaded areas represent the under side of the sloper.

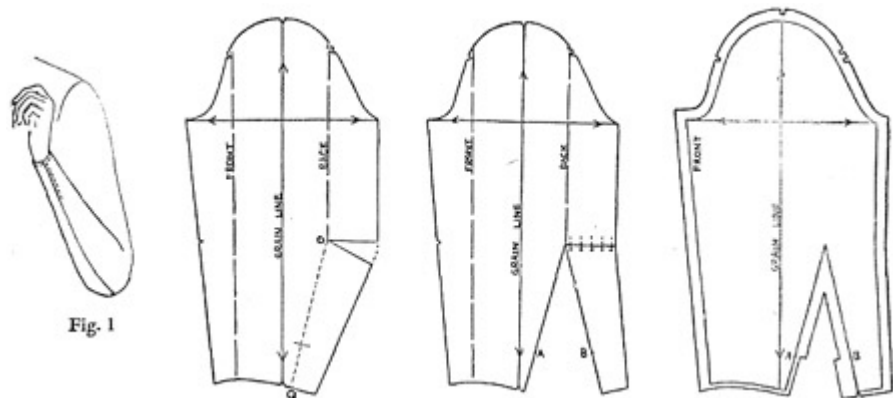
Step 1: Fold front of the sleeve pattern over to the grain line, so that the biceps remains at a perfect right angle to the grain line. Note this makes the front of the sleeve parallel to grain line.

Step 2: Fold area above elbow dart over to the grain line—again keeping the biceps at right angles to the grain line. Result: The back fold, down as far as the elbow, is parallel to grain line.

Step 3: Fold over remaining portion of sleeve below elbow dart so as to have lower wrist points meet. (Sections of the sleeve on either side of elbow dart may overlap at that point.)

Step 4: Unfold sloper and label front and back fold as illustrated. These folds represent the true front and back to the sleeve. Place one notch at the top of the front fold, two notches at the top of the back fold.

Shifting Control to Little Finger Position



As is the case in bodices,

the basic control in sleeves may be shifted to another position and the sleeve still retain the original dimensions. A position which is preferred by many designers is that which starts at the wrist, at the back, in line with the little finger on the hand. Although the dart is

longer than the elbow dart, it is the same size at a point equidistant from the elbow control point.

In the drawings above you will see illustrations showing the procedure used to shift the control to this little finger position. Note that when the control is at the elbow, the portion below the elbow dart is somewhat off grain. When the control is shifted to the wrist, the grain of the fabric in the back section straightens somewhat. Therefore, when a woman has a large biceps and elbow measurement and a small wrist and requires a generous amount of control, sleeves made with the little finger dart or with the control divided between the elbow and little finger position will be more shapely and comfortable to wear.

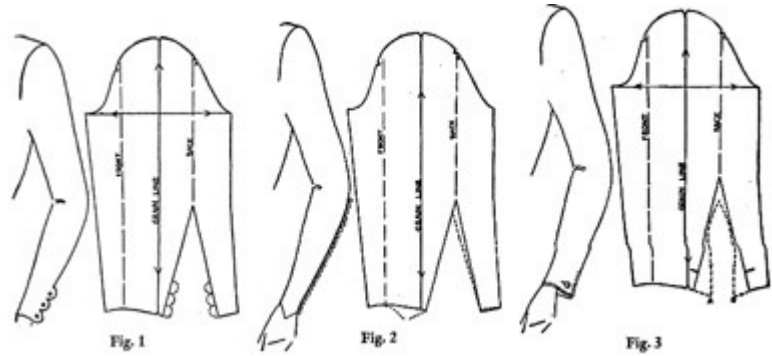
NOTE: Naturally, the seam allowances in the wrist dart will depend upon the manner of closing the sleeve. If the placket is to be placed at the back of the arm (where it is most pleasing in appearance), the allowance would be made accordingly. If the placket is to be in the basic sleeve seam on the *inside* of the arm, then it would be provided accordingly.

As you complete your sleeve muslins, pin them up against the model form by attaching the tip of the sleeve cap to the shoulder seam line. Every muslin should be traced to show the vertical and horizontal grain lines. Study the effect closely. It will be of great help in recognizing faults of sleeves in finished garments. It is important that you keep in mind which part of the pattern is front, and which is the back, as you will study sleeves from the profile point of view more than from the front or back view.

By this time, you can readily see the convenience of having a sleeve sloper which provides for control at the little finger position. This should be made of cardboard from the construction pattern of the previous design. It should be notched and labeled in a similar manner to the original sloper having elbow control.

Variations of Little Finger Control

The following illustrations show the many possibilities for originating new designs from the "little finger



control" sloper. Observe that the new designs are all created in the wrist and dart area.

Fig. 1 has tabs added. Seam allowance on the final pattern would depend upon the designer's decision regarding the actual closing of the sleeve.

Fig. 2 produces a design that includes a pointed shape at the *top* of the wrist. The dart has been shortened to provide more ease in the elbow area.

Fig. 3 shows the simple basic dart shaped gently. Note that the button-holes are placed to bring the sleeve together at the original sloper wrist measurement. Cuff links would give a little additional freedom at the wrist.

In these designs, the focal point of interest lies between the elbow and the wrist. In general, the silhouettes are practically identical. When the long, close fitting sleeve is a fashion favorite, the clever designer continues to produce fresh, interesting varieties of detail so the finished garments will have greater appeal. Each new design is produced from the same sloper, which represents the fashionable sleeve silhouette of that year.

Analysis of Coat Sleeves

If you will inspect garments found in shops, you will notice that certain types of sleeves are common to certain types of garments. Current fashions change, but certain basic sleeve silhouettes are used for certain *basic* garments. Dress sleeves may have a tight fit at

the wrist and a placket provided. Suit jackets, coats, bathrobes and certain similar garments usually have sleeves which eliminate the need for a placket as it would prove to be a nuisance.

When a sleeve is fitted tightly at the wrist and there is no "play" at that point, it is *absolutely essential* that control be provided for comfort in wearing. If this control is too scanty, it will affect the fit and comfort of the entire bodice. But, when the wrist is loose, and the arm bends, the sleeve will slide up a little and permit such arm motion without the need of so much control. Many coat type sleeves are so constructed. One piece "coat type" sleeves appear in dresses occasionally.

Coat type sleeves may be roughly classified into three basic types, all three of which provide, for less fit at the wrist. They are:

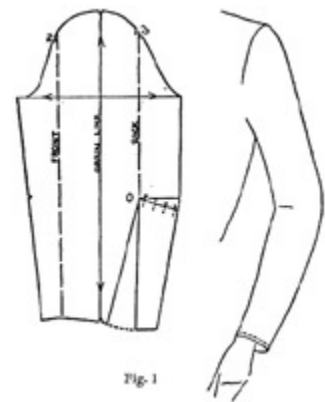
FIG. 1. The semi-fitted one-piece sleeve.

FIG. 2. The straight one-piece sleeve.

FIG. 3. The two-piece semi-fitted sleeve.

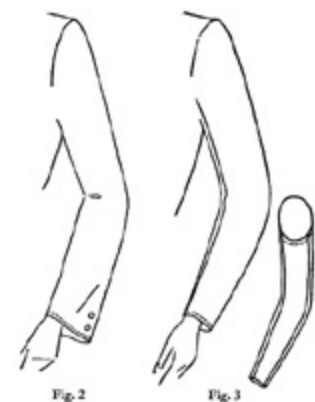
Semi-Fitted Coat Sleeve

The accompanying diagram (Fig. 1) shows the procedure used to produce the semi-fitted sleeve for use in jackets, dresses, coats, bathrobes or other garments which are more convenient if the wrist is larger. The control is partially shifted to the wrist, by partially closing the elbow dart and then slashing from the wrist. The lower edge is properly shaped and the remaining control at the elbow is handled in the usual manner.



Straight Coat Sleeve Eliminating Control

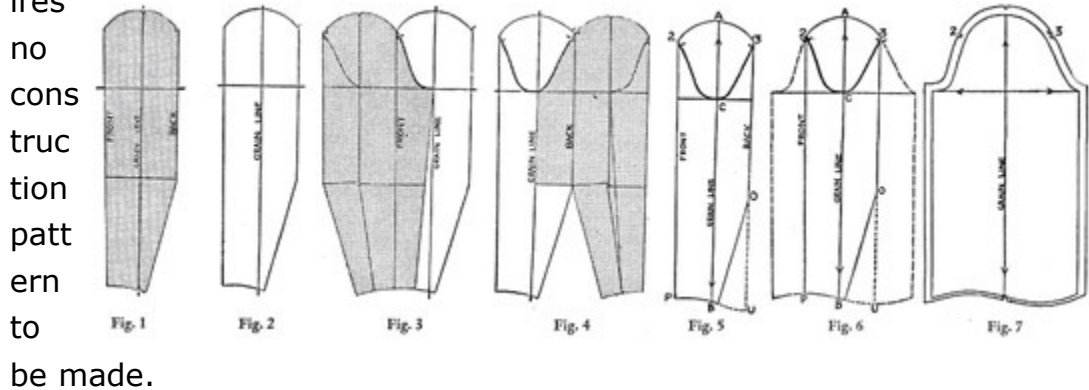
The method used for making the straight, one piece coat sleeve employs the use of the sloper in a folded position. Although the pattern



might be made by using the flat sloper, this problem offers an excellent opportunity of clearly demonstrating the use of this folded sloper method which is so practical in making many following sleeve patterns.

Fig. 7 shows the finished pattern for the straight coat sleeve. Note that the biceps and lower edge of the sleeve are the same width, the seam edges falling parallel to the vertical grain line. Note the front of the sleeve retains the actual front length of the sloper, while a slight curve at the back adds a graceful note to the design. Many sleeves made in factories are cut off straight at the wrist, to reduce production costs.

Carefully study the following illustrations to visualize the procedure. Work directly on final pattern paper as this method requires



1. Trace around *folded* block as shown in Fig. 1 and mark position of horizontal and vertical grain lines. Lift away pattern. Your tracing should appear as in Fig. 2. Complete drawing of grain lines.

2. To draw in lower outline of cap, follow procedure shown in Figs. 3 & 4, *keeping the horizontal grain line* in true position.

3. Your drawing should appear as Fig. 5. Extend the line 3-O downward 1/4 inch below level of point B. Connect U and B as illustrated.

4. Fold pattern under on line 3-U. Trace: 3-C-B-U with tracing wheel. Open the paper.

5. Fold pattern under on line 2-P. Trace: 2-C-B-P with tracing wheel. Open up pattern and go over tracing with pencil. Fig. 6. Complete pattern and make muslin.

Two-Piece Coat Sleeve

Turn back to [Fig. 3, page 101](#), and study the illustration of the conventional two-piece coat sleeve. Notice that it has seams at both the front and back of the arm, the under section being somewhat smaller than the top, thus making the seams less conspicuous. Men's suit coat sleeves are usually cut from this type pattern.

The first step in preparation for making a two-pieced pattern from the simple, one-pieced sloper is to properly fold it to provide added width at the wrist.

Fig. 1 shows the folded dress sleeve sloper as you have used it so far. The two edges are brought closely together to maintain the actual wrist dimension. In later diagrams which involve making deep cuff designs, you will see the reason for this.

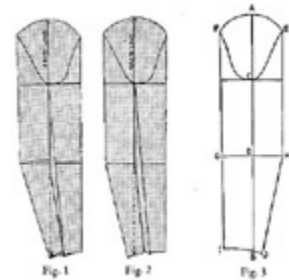


Fig. 2 shows how the sloper should be folded at the lower back section to provide extra wrist width, which is a functional feature of a coat sleeve.

Refold the lower back section in such manner as to bring the edges of the dart together, without over-lapping. Crease in a new fold so that the pattern edges are parallel from the elbow down to the wrist as illustrated in Fig. 2. This might vary slightly when using a personal sloper which might have a large elbow and a small wrist. The pattern would be merely folded to provide the desired wrist dimension.

Trace around your sloper as you did in previous instructions. Also mark in the position of the elbow as it is labeled on your sloper. (Line G-H)

Label your drawing as illustrated in Fig. 3 on this page.

The two-piece sleeve pattern merely provides that the normal underarm seam used in the one-piece sleeve be eliminated and two shaped seams be used instead. However, these seams are not located exactly at the front and back but are made to fall partially out of sight by cutting the top portion slightly wider than the under section (see Figs. 1 & 2, page 105).

By increasing the wrist measurement as explained above, you have established the proportions of the silhouette. The following instructions demonstrate the method for properly placing the two new seams and eliminating the original underarm seam. Because the seams fall in the right position to do so, they also absorb the control furnished by the elbow dart in the original sloper.

K—Divide line F-C in half and mark point K.

L—From point G on the line G-D, measure off 1 inch. Mark point L.

M—From point I on line I-B, measure off $\frac{3}{4}$ inch and mark point M.

K-L-M—Connect points K-L-M with solid line.

N—Divide line E-C in half and mark point N.

O—From point H on line H-D, measure off $\frac{1}{2}$ inch and mark point O.

P—From point J on line J-H, measure off 4 inches and mark point P.

N-O-P—Connect points N-O-P with broken line.

Measure the space appearing at the elbow between the edges of your folded sloper. Jot down that measurement.

Q—From point L on the line L-D, measure off a distance equal to one half the above amount and mark point Q.

K-Q-M—Connect points K-Q-M with a broken line.

R—From point L, on the line L-G, measure off the remaining amount of that same amount and mark point R.

K-R-M—Connect points K-R-M with a broken line.

Fold your pattern paper under on the line F-G-I and trace as follows: I-M-R-K-F. Unfold pattern. See dotted line on diagram.

S-T-U—Mark points S-T-U.

V-W—Fold paper under on the line E-H and trace as follows: H-Q-N-E. Unfold pattern and see dotted line. Mark points V and W.

X—Fold paper under along the line H-P and trace from P to O to H. Unfold and see dotted line. Label point X. Connect points X and W.

The above tracing processes completed the larger section of your sleeve pattern. You are now ready to trace off the smaller, under-section of the pattern. This is done by placing a second piece of pattern paper directly under your draft and pinning the two pieces together firmly to prevent slipping.

Trace as follows: M-Q-K-C-N-O-P-J-B-M.

Trace grain lines and elbow line Q-O.

Remove the under paper and observe your tracing. Turn it over and mark perforated lines with blue pencil.

With blue pencil, mark the outline of the upper section appearing on your first drafting paper as follows: U-T-S-F-A-E-V-W-X-P-J-M-U. Mark grain lines and elbow line.

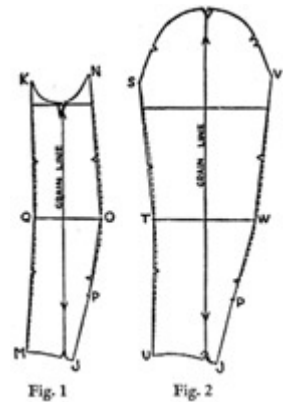
Mark notches on front and back of both sections by measuring an equal distance of 6 inches from points S, V, U, J, N, J, M, K. The area between the notches on the back of the top section will be slightly greater than that of the back of the lower section. This is due to the tiny amount of control which remained between points W and X in Fig. 4 on the previous page. This would be gently eased in when sewing the muslin together at that point.



Dotted lines in Figs. 1 and 2 show how original lines would be softened in the final pattern when the muslin test is made. However, when using the cardboard sloper as the basis of problems which will follow later, it is more convenient to have straight lines.

Allow seams on each section seam and wrist and cap in the trial muslin.

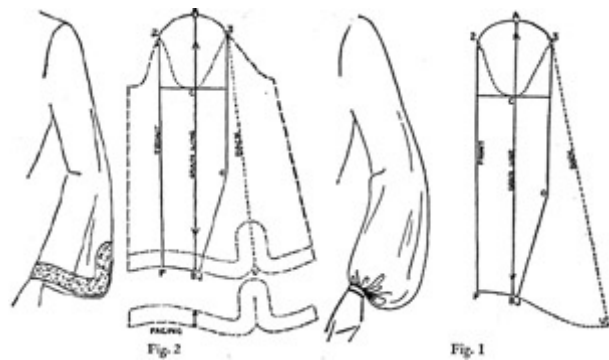
NOTE: Usually all *outer* garments are graded up one size in width because allowance must be made for the coat to be worn over a dress. The amount taken out between points R-L-Q (see Fig. 4 on previous page) would be dependent upon the desired elbow width for the garment being designed. These steps present the method only.



Such adjustments in proportion can be decided when muslin is being criticized. The proportions suggested here are for an average size 16.

Bishop Sleeve or Peasant Type Sleeve

The bishop sleeve reveals its origin in its name. It was a type of sleeve found in the robes of ancient priests. To the present day it is the conventional type found in religious vestments. It rises in



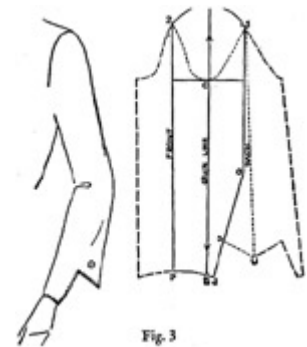
fashion favor from time to time and is a favorite choice of theatrical designers for dramatic costumes. It is also frequently used for costumes for glee clubs, choirs and it has become a classic in negligee and hostess gowns.

The chief characteristic of the bishop sleeve silhouette is the bulk or "movement" at the back of the arm only. In a later lesson, you will study the cut of the "bell" sleeve which resembles the bishop sleeve somewhat but produces an entirely different silhouette.

Follow the same procedure used in making the straight coat sleeve. Amount added at back is dependent upon fabric. When sleeve is to be confined in close fitting cuff, the new back line 3-U must equal or exceed original back line 3-O-J to permit freedom for bending arm.

Folded Sloper Variations and Methods

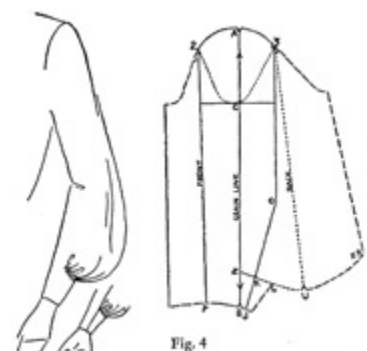
Any number of sleeve designs can be developed from a single basic sleeve silhouette. Some seasons the silhouette may favor width at the top of the sleeve. In another, the sleeves have width at the lower edge, or at the elbow. Once a pleasing basic sleeve has been produced, it may be faced, piped and trimmed in countless ways. Once you have an understanding of the method used to produce some silhouette, you can start originating ingenious sleeves, which, incidentally, can provide the major style interest in any garment. High style clothes, such as dinner gowns, negligee, lounging pajamas, et cetera, offer endless possibility for the use of interesting sleeves.



Provide for a closing in this sleeve as you believe it should be constructed in final garment.

Simulated Cuffs

In the study of bodice cuts, you learned how to make the simulated yoke. Here we



find the simulated cuff. For relationship in an entire garment, this sleeve could be used with a bodice employing the use of a simulated yoke or plastron ([page 40](#)).

The back line 3-U is first established and should equal 3-O-K to permit bending the arm. Pattern is folded on back sleeve line 3-U, traced and opened. Then pattern is folded on line K-J and the cuff portion traced.

It becomes apparent, due to the fact that you are working your design closer to wrist than elbow, that the line 3-U is limited in length although it could be extended gently from L to U to form a larger pouch in the finished sleeve.

As was the case in using this principle in bodices, a small amount must be pinched out for the seam which tapers to nothing at point E. In many cases, you will observe such sleeves having trimming covering the seam, such as insertion, braiding, et cetera. Occasionally a designer will combine lace and fabric and because there is a piecing seam introduced further up on the sleeve, she can add more length to the back and produce an exaggerated pouch as desired. The notch is placed at U to show where the back portion will meet center back point K when sleeve is being constructed. Hence, the fabric from E to U must be gathered into the cuff portion E-K.

Three Quarter Length Sleeves with Cuffs

This design produces a sleeve which has a one-piece cuff which extends around the wrist to a closing at the little finger position. Such cuffs are more difficult to attach and are therefore usually found only in higher priced garments. In some cases they are imitated in the lower priced garments but there is a seam in the cuff on the under side of the wrist to meet seam at sleeve portion (at K-B). This permits assembling the garments with the sleeves flat as they would be in many other simple styles.

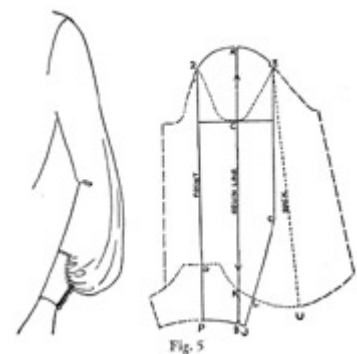


Fig. 5

If the cuff is traced off on a second piece of paper that eliminates the need for tracing off the upper portion, as that first tracing may be used for the final pattern. Seam allowances are added and lines forming cuff can be ignored.

In this style of sleeve, the puff at the back may be exaggerated as desired by lengthening the back line 3-U and widening sleeve proportionately.

The close fitting cuff with the exaggerated silhouette becomes a flattering sleeve, for it suggests that the wearer has a small hand and slender wrist. Many interesting new shapes of cuffs may be used and when a combination of fabrics are used, such as lace and chiffon, further interest may be developed. Through the styling of the garment, a wide variety of designs may be produced from a single pattern.

Adaptations of the Coat Sleeve Sloper

The simple, straight coat sleeve pattern ([page 102](#)) is used as the basis for unlimited designs of coat and dress sleeves. Designers who use the straight coat sleeve for functional reasons—as coat designers would—utilize every possible idea for working up new sleeve designs all of which will adhere to the basic silhouette of the foundation pattern.

This can be done in countless ways, and once the designer has experimented a little, she will find it simple and easy. Some of her designs may create the interest on the top of the arm and others may emphasize the back of the wrist to elbow area.

Fig. 1 on previous page shows a basic coat sleeve silhouette divided into sections which create a line of interest down the top of the arm. Because the original sloper provides a dip at the little finger, she has reduced that curve because diagonal lines are the dominant design interest. When the sleeve is worn, it will *appear*

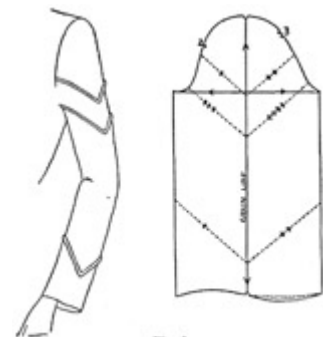


Fig. 1

to be straight across the bottom. If it were to be three-quarter length or "bracelet" length, it could be cut straight, but when it reaches the wrist, the straight lower edge appears awkward.

Fig. 2 shows the coat sleeve as it might be used by a blouse designer. The original length is left at the back, and, if anything, might be increased slightly. The ruffle portion is merely an extension. Because the band will hold the sleeve firmly about the wrist, it requires ample length at the back to permit bending the arm. An excessive amount of added length, however, would produce an awkward looking sleeve as the extra length must be dependent upon the widened silhouette as you learned in the previous problems employing that principle.

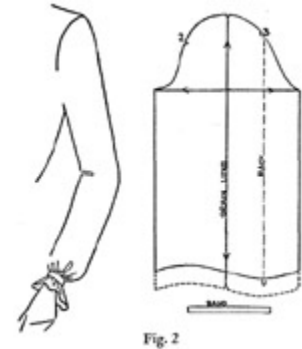
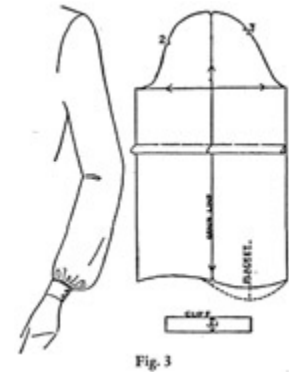


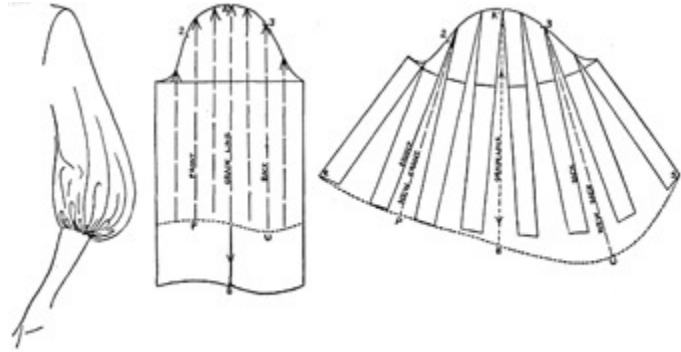
Fig. 3 shows the same basic pattern used for the simple shirt sleeve. The amount the tuck shortens the sleeve equals the amount planned for the width of the straight cuff. A small amount extra has been added at the back to give the sleeve a generous appearance when the arm is relaxed at the side. (This is the mark of a good shirt waist blouse!) The cuff is planned to close at the back with a tailored button closing.



Bell Sleeves

The bell sleeve is slightly different from the sleeves you have made which add the bulk of silhouette at the back only. It derives its name from the silhouette which is produced. The bishop sleeve produced a silhouette which added little weight from a front view of the figure. The bell sleeve is slashed to produce bulk *around* the arm, with an increased amount being placed at the top and back. (If too much bulk were placed under the arm, it would be awkward to wear.)

Before slashing and spreading the pattern, the final pattern paper should be prepared with vertical and horizontal guide lines. These are a convenient means of judging the proportionate amount of bulk which will appear in the finished sleeve.

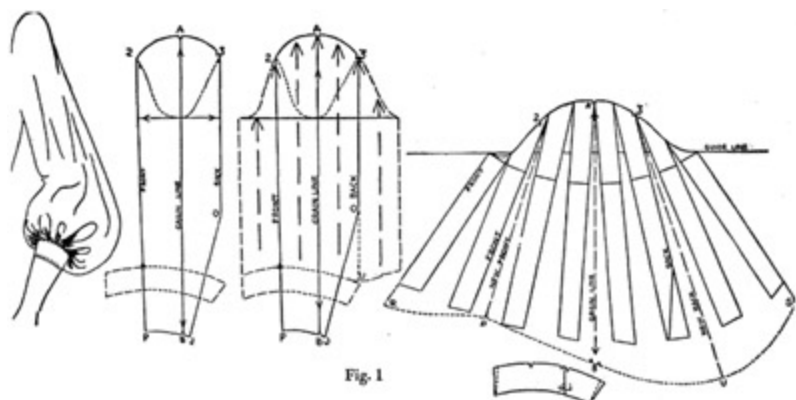


The front point P retains its original length given in the sloper. Points S and R will be of equal distance from the biceps line. Because a slight amount of extra length is added at B in proportion to width being added, B should be dropped *slightly*.

The above sleeve could be pushed up on the arm and held in place with an elastic band.

The lower sleeve has a shaped cuff cut to fit the middle of the lower arm. It is supported at point P which is kept at original length. The puff is then added to the remainder of the sleeve. Points R and S should be of equal distance from biceps line. B is slightly lower or may be equal. Because seam edges on folded sloper don't quite meet, cuff pattern can be adjusted to fit tightly upon arm by reducing it accordingly.

Various Types of Short Puffed Sleeves



The short puffed sleeve has a youthful character in appearance so it is the choice for children and young girls or mature women having youthful proportion

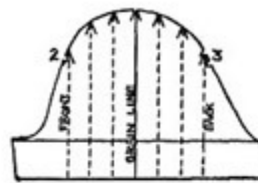


Fig. 1

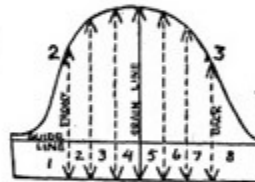
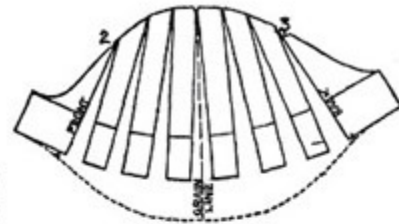


Fig. 2

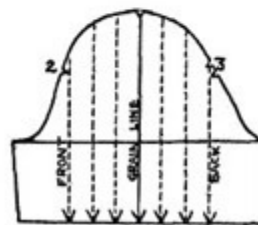
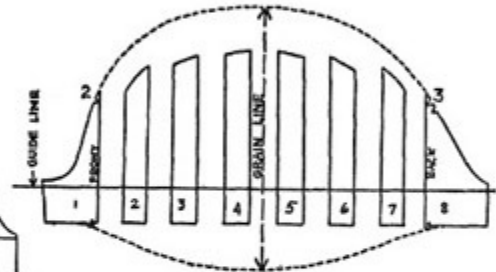
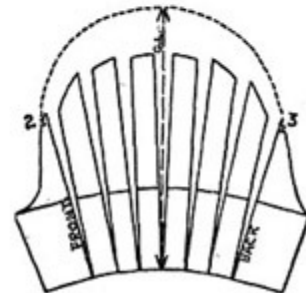


Fig. 3



s. The sleeves you have just been studying provided for extra bulk being emphasized at the back, of the arm to conform to the shape of the arm itself. When fullness is being added above the elbow, the more pleasing effect is achieved by making the center of the sleeve the center of interest. There might be a few exceptions, but in most cases, the statement is correct. Therefore, the highest point of the added curve is at the vertical grainline.

Study the three following silhouettes. Fig. 1 introduces bulk at the lower edge only and, when viewed from the front, adds width to the silhouette on a level with the bust. This would be true whether a cuff is used or not. Fig. 2 produces a feeling of width at the shoulder and on a level with the bust, or just

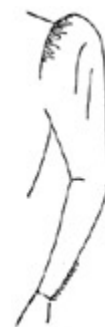


Fig. 1

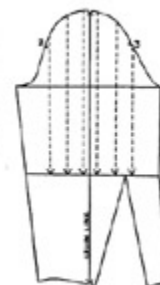


Fig. 2



Fig. 3

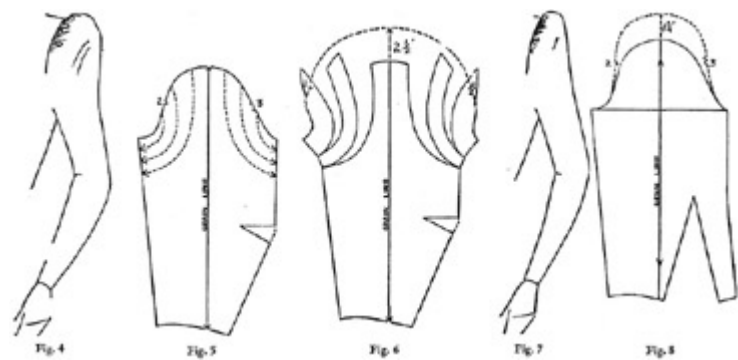
above it. Fig. 3 invites the eye to the shoulder level only. By contrast, the exposed arm below will appear to take on a slimmer appearance. Hence, this single sleeve is best suited to the mature woman who has a plump upper arm.

To achieve an even, round silhouette in the puff, it is necessary to proportion the added length to the amount of added width. If sleeve is widened 3 inches, the build up should be at least 1 inch. After trial patterns have been made, it is advisable to jot down proportions which produced your conception of a pleasing silhouette. Naturally, a fabric must be used which has enough "body" to sustain the silhouette. A well cut puff will neither "break" nor "droop" when worn. Half way between elbow and base of armscye is a good proportionate length. A shorter length is childish and a longer one, unless it extends below the elbow, is awkward looking.

NOTE: The perfection of many sleeve patterns is done in the final muslin. In manufacturing plants, they are tested upon individuals for appearance and comfort for movement of the arms. These diagrams will give you the key to the procedure and it is to be expected that final changes will be made as they are needed for the proportions being used by the individual student of pattern making.

Leg-Of-Mutton Variations

At some future date, when you study



Costume History, you will recognize many of the following types of sleeves, with their varying degrees of bulk in silhouette, to have an interesting historic background dating back to the early 17th century. As space prevents further details about the origin, you will study and compare the procedure used for each and will observe and compare the silhouettes in the finished muslin proofs.

Although this pattern shows the use of the little finger control sloper, either one might be used. The vertical row of buttons exaggerates the slim lower arm in comparison with the wide silhouette at the shoulder.

Note that slashes are made in the outer part of sleeve only. The extra length appearing at elbow aids in supplying plenty of length. The amount added at shoulder point or top of cap must be dependent upon amount of width introduced.

Note that first slash at point 3 could be made to absorb normal elbow control if desired. As illustrated here, however, grain line is the same at front and back of sleeve.

This silhouette differs from that illustrated on the previous page in that a round, melon-like puff appears throughout the cap area but the remainder of the sleeve is closely fitted to give further emphasis on the exaggerated silhouette. It is therefore necessary to slash in such manner as to avoid widening the remainder of the sleeve.

Compare the diagrams showing the procedure used in each. Notice that width starts from the elbow in the sleeve on [page 111](#) but in this design, the underarm seam takes on a curved line, which, when sewed and fabric snipped, will straighten and then force the silhouette bulk outward from the arm.

Slash and spread the sections until your pattern assumes similar proportions to that shown in the diagram.

Obviously, this same pattern could be produced from a little finger control sloper. And for the sake of design, a seam might be introduced and a similar silhouette produced with the upper area slashed as desired to seam.

In the two previous leg-of-mutton styles, the biceps measurement was increased. Compare this style with them and note the different patterns produced for each. This style, when viewed from the profile, should be long and slim and an exaggerated height shown in the cap portion. From the front and back view, it adds no

bulk to the shoulder area, but merely adds height to the wearer. The padding for this sleeve would be a round sausage-like roll set into the armhole and extending out into the sleeve portion only.

During 1939, after several years of various types of the leg-of-mutton and various puffed sleeves, this sleeve became the forerunner to the "molded shoulder" of 1941. In the intervention, obvious gathers and drapery were gradually abandoned for shaping darts which aided in producing the exaggerated silhouette but dispensed with the appearance of bulk.

As no balancing width is added to the biceps measurement, the degree of added height and width to the small cap portion must necessarily be limited. About 2 1/2 inches extra length would probably be the limit in a size 14 sleeve. When the new point A is established,

the line is then "blended" down through points 2 and 3.

Novelty Adaptations

Countless

varieties of designs may be cut which maintain some popular silhouette of the present fashion. In the problems presented below are two illustrations, both of which give bulk and width at the shoulder. To analyze the procedure, consider the silhouette first. Then the construction pattern may be shaped, as in previous problems. The additional design interest may next be inserted as the sketch might show.

Fig. 1 is a direct adaptation of the pattern produced for the third type of leg-of-mutton sleeves just discussed. Because the cap had already been lengthened and fullness introduced around the armhole, the sections were spread only at the seam provided in

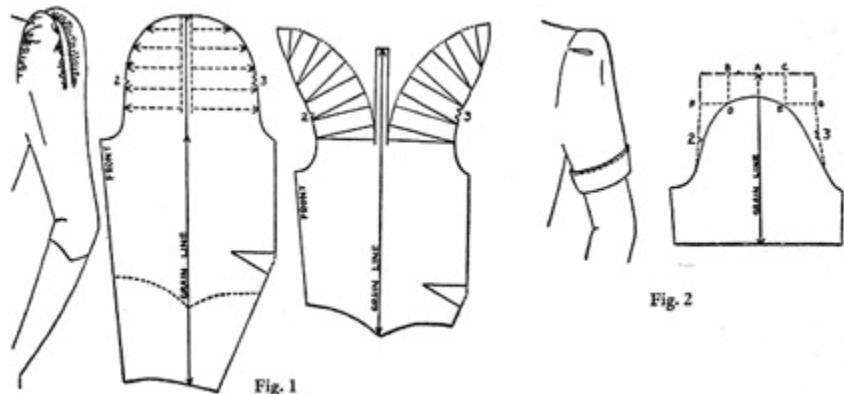


Fig. 1

Fig. 2

cutting the strap. If a more exaggerated amount of bulk were desired, an extension could be added to the area where sections were spread apart.

Fig. 2 was developed from the average sleeve sloper. When completed, the "boxy" silhouette stood away from the shoulder seam smartly. Point A located one inch upward produced a pleasing silhouette.

F-D-B and G-E-C fold in to make the silhouette. For practical reasons, combined measurement of B-A and A-C should not be more than 4 inches. This forms plain section on top of cap. Cap adjustments at 2 and 3 are dependent upon amount of extension at point A.

Circular Cut Novelty Sleeves

Occasionally, interesting new designs for sleeves are evolved from a single cutting principle. Many ingenious designs may be developed

ed that are hard to copy and easy to produce.

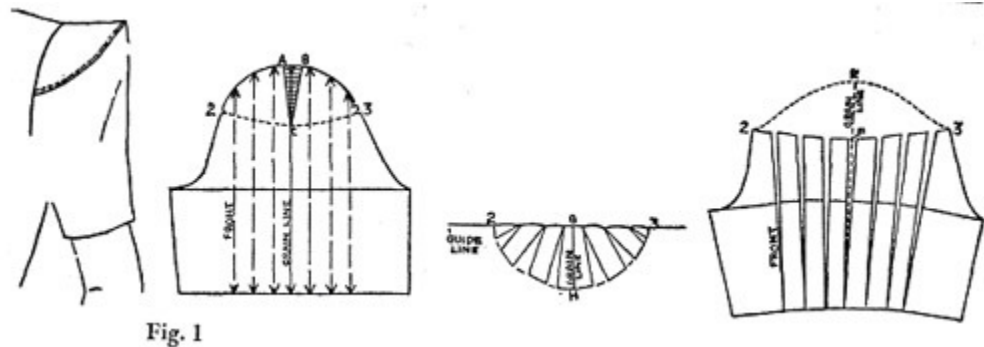
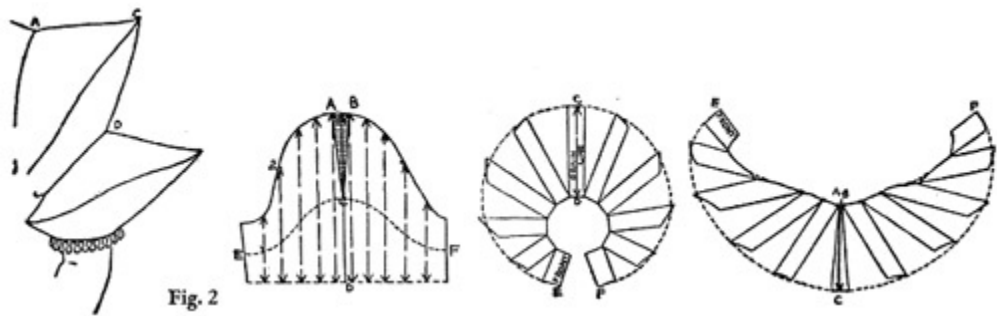


Fig. 1 shows a novelty design for a sleeve that has a "boxy" silhouette with a single, horizontal shaping seam. Because the point of the sleeve is above the level of the armhole, there is no need for control; this is already provided in the basic sloper. The darkened area, A-B-C, shows how it has been removed. Point C represents the desired width of the sleeve "yoke."

To place the line 2-C-3 any lower would spoil the "hang" of the sleeve. When position of "yoke" line has been sketched and slashing lines marked, cut pattern apart on line 2-C-3. Fold in the dart A-B-C and pin securely. Slash and spread pattern as indicated, against a straight line. Now slash the lower portion and spread so that the sleeve will flare in shape as it meets the yoke. Distance E-F should be equal to G-H. Spread sections of lower portion until curved line 2-E-3

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The "Chinese Lantern" novelty sleeve, Fig. 2 below, has repeatedly appeared throughout the periods of fashion. Modern designers frequently adapt it in pleasing ways.

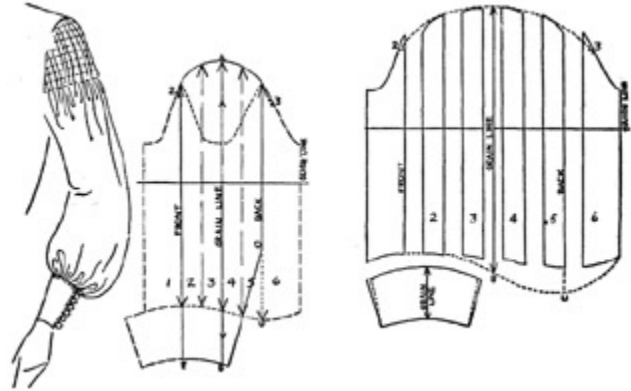
Like the sleeve above, point C lies above armhole level A, which means that normal ease will be removed from this pattern also. To secure the pattern, make the tracing to a point halfway between base of sleeve cap and elbow. Make the three lower pieces from the one circular pattern. Spread upper section until edge E-C-F equals similar line E-C-F to which it attaches.

Note how line E-C-F on the construction pattern follows the general line of the cap. Drawing it horizontally would lead to corrections in the final muslin proof. Dividing the pattern in half, as far as possible, results in a satisfactory muslin sleeve with little need for correction. This silhouette could be further exaggerated by extending the pattern sections at point C, making one balance the other. However, all such exaggeration in silhouette should be added

only to the outside portion of the sleeve. The depth of the inside disks, towards the body, must be kept shallow to avoid excessive bulk.

Balanced Fullness

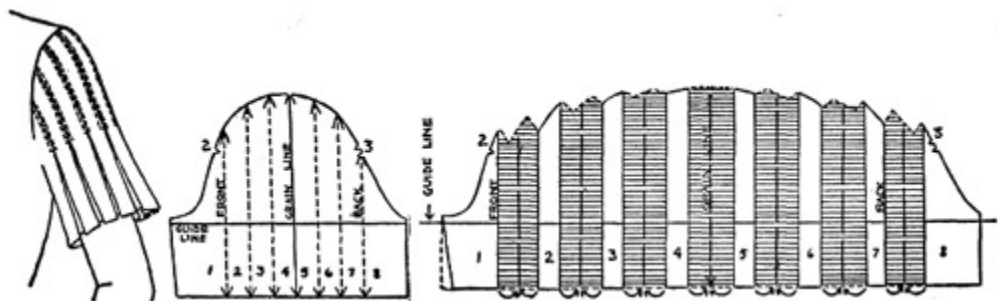
The use of balanced fullness in sleeves is identical with that used in bodices. When fashion favors the normal shoulder contour, usually bulk will appear at the wrist or elbow areas. This may be accomplished through the use of circular cuts studied in bell or peasant sleeves, or through the use of balanced fullness a similar silhouette can be produced in variation.



Shirring, smocking or little pleats could be used to retain the natural contour of the shoulder area. Then the remaining bulk could be released at the elbow or any level desired.

Clever designs are developed through the use of the small yoke in the cap area with added fullness introduced below it. Such fullness

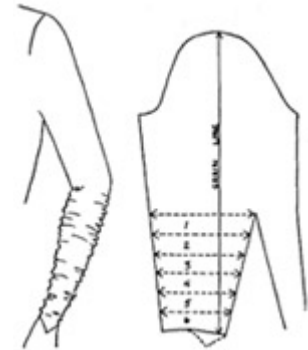
might be balanced or a circular cut.



When using pleats, a quick method is to pleat the paper first and then lay the sleeve pattern over it and make the tracing. When opened up, the notches can be placed according to the resulting irregular edge. As flat pleats cannot absorb basic control, the curve in the sleeve cap at armhole must be accomplished by adjusting pleats to absorb "ease" provided in sleeve sloper between 2 and 3. Note straightened seams under arm.

Novelty Sleeves

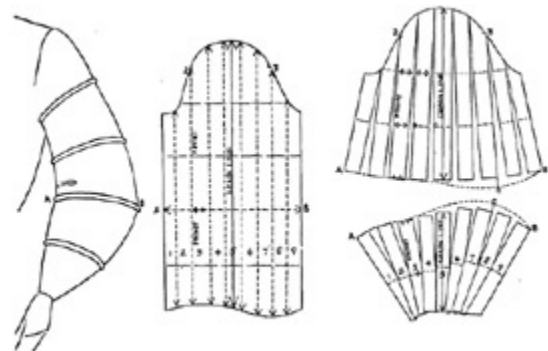
This style of draped sleeve is frequently used for wedding gowns, negligee or other garments having an emotional quality. Naturally, it is not the sleeve for the person having a plump arm. Gathers might be substituted with pin tucks or pleats et cetera to eliminate the silhouette bulk which appears when drapery is used.



The area left by the elbow dart provides the space for spreading the sections and the wrist shaping appears on the top of the hand as shown in the diagram.

Lace, soft velvet or satin and chiffon would be suitable for such a design.

The unusual sleeve below dates back to the period of the French Renaissance and was revived again in the reign of Queen Elizabeth of England when it was successfully employed when stiff brocaded velvets were the fabric choice of the English court.

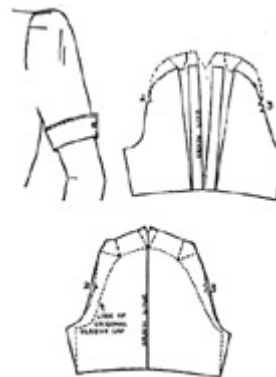
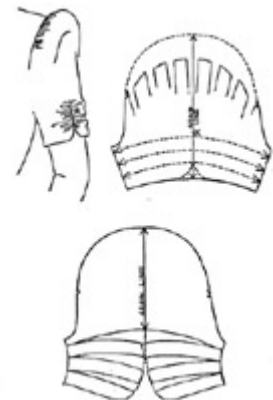


It has been successfully employed in both daytime and evening wraps of modern times. Study the sketch and you will see that the largest area is at A-B seam. The other seams are merely decorative. Extra length is thrown to the center back at point C to make the sleeve curve to the arm.

Desired width at the wrist is obtained by lapping the sections while spreading them. Proportions may be more easily judged by using vertical guide line. Added increase in length of back must be dependent upon amount added to width. When upper and lower halves are completed, they are cut apart to produce the secondary seams as illustrated. Seam allowances are then provided on each in the final pattern. When muslin has been tested for silhouette, sketch in vertical lines to study possibility for originating a second design on the same unusual silhouette.

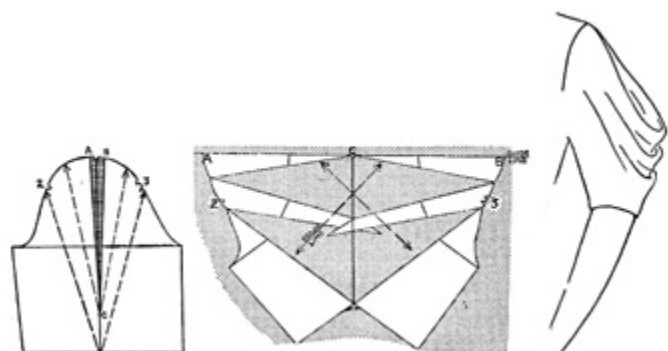
The sleeve below is merely a novelty variation of the third type of short puffed sleeve which was shortened and additional drapery added. As it has been emphasized repeatedly in this text, designers use every chance for adapting new detail in some accepted silhouette of the season. This is particularly true in skirts and sleeves.

During 1939 and 1940, when the accepted fashion for width at the shoulder but form, many sleeves were employed simple darts to fabric around the shoulder. The proved to be to use a sleeve had previously provided for then, by working in the pattern, to shape the darts into position. When the satisfactory results were obtained the paper patterns were made from the muslins. The angle of the darts would determine the shape and in the final pattern, would assume irregular shapes. In producing this pattern, it is suggested that you employ that same method. Try arrangements of various types and compare the finished patterns.



silhouette called molded into designed which manipulate the best method pattern which gathers and

Cowl Sleeve



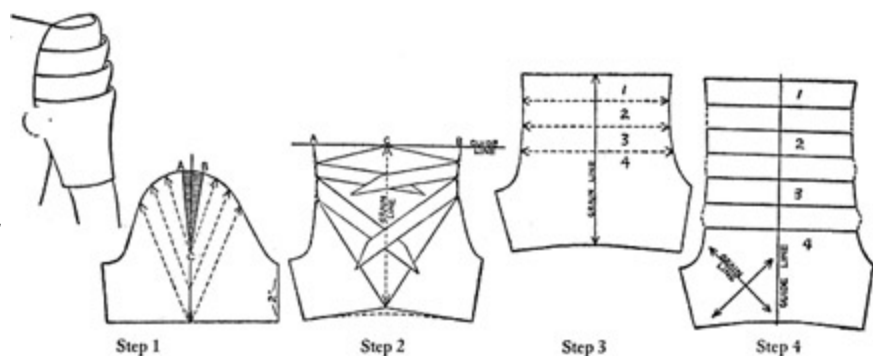
The cowl principle may be applied to sleeves and skirts with pleasing results. It produces a silhouette, in sleeves, which gives bulk just above the level of the bust. When introduced with a close form fitting bodice, it can serve as the focal point of design interest in the garment.

Because the front and back of the sleeve are not identical, the best method for producing the cowl would be through the use of the slashing method. The dart A-B eliminates the ease provided in the original sleeve sloper. The length of that dart determined the "neckline depth" as it was explained in the bodice patterns. That may be made any length desired as is illustrated in the diagram for the following sleeve which is an adaptation of the cowl cut.

The dart areas between the sections will become folds of fabric which will taper from points at the armscye. More fabric bulk might be added by raising point C above the horizontal guide line but the "neckline" would then be sewed up like a seam.

The proportion shown here produces a pleasing sleeve and drapes better if cut on a true bias as indicated.

Variation of Cowl Sleeves



When normal ease has been removed between A and B and sections are in position shown in step 2, this pattern would produce a high, short cowl. When first pattern is finished, slashing and spreading the sections to allow for pleats prevents sleeve from falling into a drape, and maintains the oblong silhouette, emphasized by the horizontal folds of fabric. Make muslin (step 2) to see this.

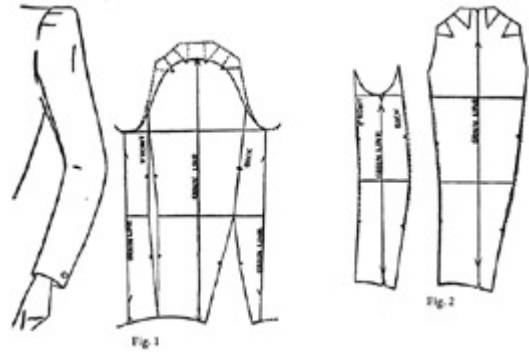
Variations of this effect can be produced from first cowl pattern (step 2). Instead of folds of fabric, braid could be applied, or bias

folds of contrasting fabric, which would support that section of the sleeve, and thus produce a similar silhouette.

Variations of Two Pieced Sleeves

Designers in suit and cloak manufacturing plants use their two-piece sleeve slopers as the basis for originating many

interesting sleeves. Because even the simple two-pieced sleeve must be set into the garment in tubular form, the position of the seams in the final new design may be placed in any position desired.



When fashion dictates bulk through the shoulders in dresses, coats assume a similar silhouette. This provides ample room for covering the dress sleeve and the woman is assured that her outer wraps reflect the current fashion as well as her dresses. You will see this illustrated in the design of capes also.

The steps of procedure are quite simple:

1. Make a tracing of the top section of the two-piece sleeve sloper.

2. Place the smaller underarm section of the sloper against the tracing as shown in Fig. 1. Trace around it as far as vertical center grain line.

3. Turn the under portion of the sloper over, placing the opposite edge against the tracing as shown in Fig. 1. Trace around it as far as grain line.

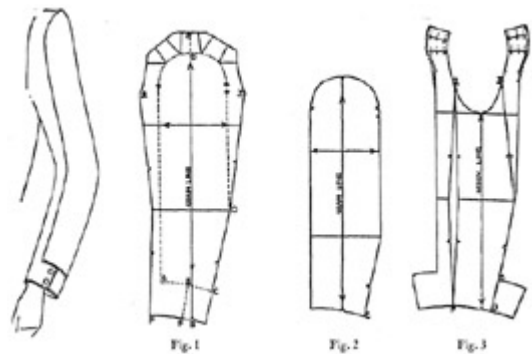
4. Build up the sleeve cap desired distance to produce 1 1/2 inch darts. Total sleeve cap measurement should finish to equal that of the original two-piece sloper less normal ease. (As sleeve stands away from the upper arm, it requires no control.)

5. Cut away the two halves of lower section of new sleeve; restore them to normal position as shown (Fig. 2). Allow seams; cut pattern from muslin.

Such sleeves should be tested carefully in muslin. While pattern is on the table, it is hard to visualize how the darts will look when sleeve is set into armhole. Leave ample seam allowance around cap to facilitate later adjustments. (Drawing illustrates results of a muslin providing four darts; if three or five darts were used, dart angles would differ in each case.)

NOTE: The new cap must measure equally to original sloper cap less the provided ease. This new sleeve must fit armhole of garment. Many styles of leg-of-mutton sleeves and other silhouettes of one-piece origin can be adapted from two-piece sloper with study and practice. "Style" sleeves produced in dressy coats are usually made from one piece sleeve patterns.

Many new sleeve designs may emerge when a basic silhouette produced in the previous problem has been perfected. The following sleeve was produced from the muslin of that pattern. Dotted line in first



step shows desired position of new seam. With muslin still pinned, sketch in this line. Leave all original seams and darts pinned into position and cut the sleeve apart, starting at the wrist: F-E-C-O-D-A-G-E (Fig. 1). The top panel section should appear as shown in Fig. 2.

Flatten the muslin, removing a few of the pins in the front seam as needed.

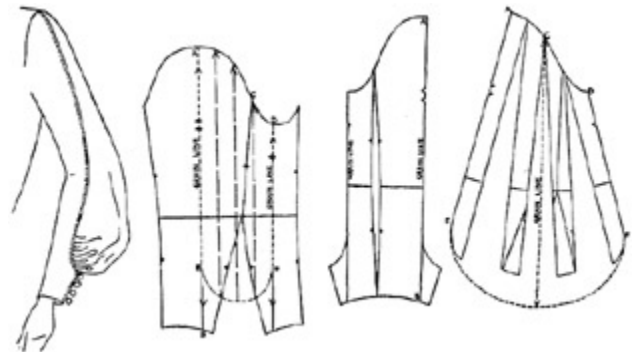
Your remaining sleeve pattern should look like Fig. 3.

Allow seams on both these new sections, after a paper pattern tracing has been made directly from the muslin. Reassemble and observe that, except for losing a little of the shaping around the

elbow at the front of the sleeve, you have repeated the silhouette of the sleeve from which this pattern was made.

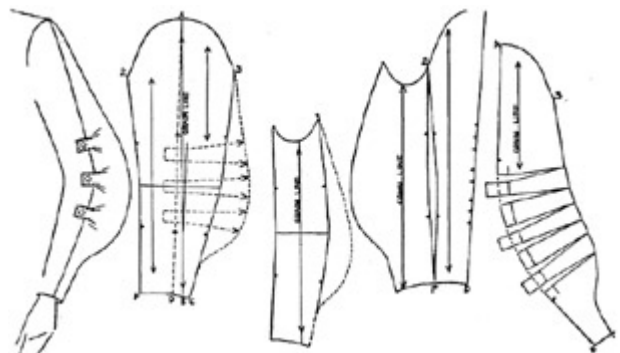
NOTE: From this second muslin, produce another pattern which provides for gathers appearing in panel section only. An endless chain of new designs can be produced from one good basic style silhouette.

The designs on the following page might be developed from the two-pieced sleeve block at a time when fashion favored bulk of silhouette at the elbow. The first has a panel removed at the back which



is represented by A-E-F-D. The remaining sleeve sections are then arranged to meet at normal front seam position and this seam is eliminated. A little of the curved fitting is lost in this procedure. The back panel is then slashed and spread and the pouch added. The original back seam of the sloper provides the closing at the little finger. The decorative seams need not follow the grain line. In fact, one of them could be eliminated. Can you do this in your final pattern?

The sleeve design below provides for new seams to fall down the top of the arm and at the curved back of sleeve. It was successfully produced in a Persian lamb fur coat as the fur concealed the actual position of the



seams and the tabs became the focal point of interest on the sleeve. To eliminate bulk, the tabs were lined with heavy satin and the buttons were of an interesting design in plastic material.

Again, the seam on the top of the sleeve need not follow the grain line and you will note in the diagram that it has been swung forward slightly. It might have a very shallow curve to conform to the arm.

The first step is to build on the curve at the back of upper and lower sections. Normal seam in front is then eliminated and slashing is completed in the new top of sleeve. Tabs are made by extending on at end of the sections which will produce the effect of pleats.



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1942—Modern Pattern Design

by Harriet Pepin

Chapter 5—Adapting Patterns

You may select a topic from this lesson

Analysis of Garments for Utility Purposes

Newspapers,
fashion

magazines and other periodicals print reams about the importance of the proper selection of clothing. Not only must the garment be selected for its becomingness to the wearer, but it should be appropriate for its specific use. The fabric must be appropriate and the cut of the garment must be correct as well. Stores divide their departments to make shopping easier for the customers. Buyers in each department select the clothes to meet the needs of customers who come to their special departments. Salespeople are trained to sell certain types of clothing which have been designed to meet certain needs.

Likewise, the designer becomes specialized. Manufacturing plants specialize. This makes it easier for them to make a profit in that one certain type of apparel. In a general sense, clothing falls into three basic classifications, namely: *Active Sports*, *Spectator Sports* or business casuals and *Social Clothes*. These three classifications are subdivided according to sizes, such as Juniors, Misses and Women's clothing. They are each again subdivided into specific price ranges. Children's clothing manufacturers are specialists in a more general sense and may design all types of children's apparel for all occasions and at varying price ranges. In recent years, however, the children's clothing reflects these three major classifications under the names of Play clothes, School clothes and Party clothes.



Fig. 1

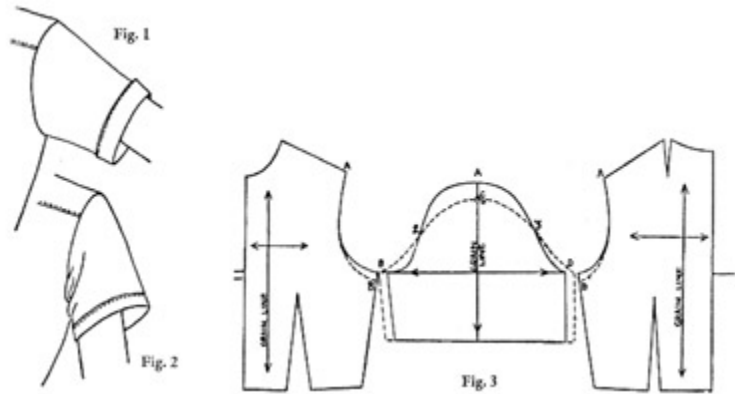


Fig. 2



Fig. 3

The three blouses above illustrated show how a similar basic design may be adapted for any one of the three basic classifications with but a few minor changes. Fig. 1 shows the pattern used for an active sports garment. The sleeve used is called the "action"



sleeve which is explained later in this text. The collar is a convertible type which may be worn open or closed. The pocket is amply large to hold the golf score card or sun glasses. It is, in this form, a strictly functional active sports garment designed to meet the needs of an active sports woman.

Fig. 2 shows the same basic design changed to meet the need of the business girl for a simple business dress. The single dart has been changed to a group of three for further design interest; the functional pocket has become more ornamental than useful; and the sleeves have been made from the basic sloper with moderate extra width provided to meet fashion requirements. Decorative cuffs have been added. If made up in jersey, the garment might be classified as "spectator sports." If made of coarse lace, it might be the tailored "afternoon" dress. In dark silk or sheer wool, with an extra over-layer white collar, it becomes the "business" dress. And, if made of a gold metallic, it might be part of an informal "dinner" dress. It could even be used as the top for casual slack suits.

Fig. 3 is obviously dressy. Made of sheer fabric, with lace trim, it loses its trim appearance immediately. We cannot visualize it in the business office or on a golf course. The use of gathers instead of darts has changed its trim appearance also. It becomes a "social" piece of apparel. Its usefulness in the wardrobe becomes limited.

Adjustments of Armscye and Sleeve Cap for Utility Purposes

The typical action sleeve appears in golf dresses, riding shirts, tennis togs and other garments which require functionalism before style. The change is in the sleeve cap which is shortened and widened to change the "hang" of the sleeve. The sleeve appears at its best when the arm is raised and the added

material shows up in wrinkles when the arm hangs at the side. Except when used for beauty parlor or waitress uniforms which require close fitting sleeves, sleeve is sometimes widened and armhole lowered to provide extra ventilation.

When a designer has patiently developed an especially fine sleeve cap and bodice armhole (which is an important point of style in any garment) he may, if his design reveals an entirely new cut, patent it. Usually it is then given a trade-name such as "Free-Swing" or "Full-Action" and then all garments which include that feature are labeled accordingly. In this text, this type of sleeve is classified as an "action" sleeve merely to identify it in the mind of the reader.

Procedure given here includes the method used to lower an armhole but in many cases the adjustment is made in the sleeve cap only which would then be set into the normal size armhole. Once a good fit has been established, a sloper should be made for convenience in the designing studio.

1. Arrange front and back bodice and sleeve pattern as shown on guide line.

2. Lower front and back armholes 1 inch (this may vary).

3. Widen sleeve an equal amount on both sides.

4. With tape measure, determine size of new armhole —measure back and front.

5. New sleeve cap B-C-D must equal size of new armhole. Start from B, measure through point 2 to locate C at a point equal to front armhole. Repeat for back.

6. Re-establish notch at new point C.

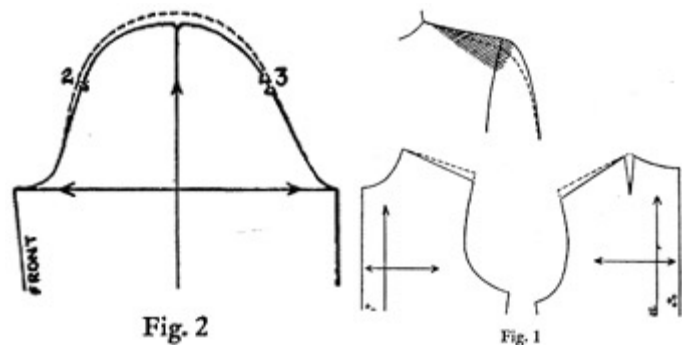
Because shortening sleeve cap removed all ease at shoulder, if extra fabric is not provided at B-2 and D-3, arm would be held in vice-like grip. Pattern makers used to think lowering armhole and also widening bodice was necessary. This only sacrificed fit. If more ease is desired in bodice, it should be added over vertical line of bust and the basic dart enlarged as a result. An inverted pleat in center back will provide extra reaching room without spoiling the trim fit under the arm.

Modified versions can be produced by removing only part of ease at the top of cap and lines 2-B and C-D will have more curve. Complete a muslin test proof of bodice and baste in sleeve. Observe results.

When used in a better type riding shirt, this functional sleeve has a short cap cut and shaped to fit a tight armscye. This permits utmost arm freedom and lessens any tendency of the shirt to work up. The close fitting armscye also eliminates bulk under the riding coat (similarly designed to provide freedom). So carefully designed a shirt, painstakingly perfected, is well worth the premium paid for it.

Padding a Shoulder

Modern fashion, between the years of 1936 and 1941, favored the use of padding in many types of garments. It has been used in mannish type coats for many years, but during that period it appeared in all types of dresses, slack suits and some active sports apparel.



When garment is designed to use padding, shoulder seams should be built up a proportionate amount to enclose the thick padding and still maintain a close, smooth fit. This also requires a small adjustment at top of sleeve cap. The armscye, in being raised, is being increased in size at the top. Hence, the sleeve cap is raised until it equals the new dimension of the armscye. The normal ease is still required unless the shoulder seam is also being moved outward beyond the normal shoulder joint. In such cases, muslin must be used repeatedly to secure the perfect sleeve for the new armscye.

Enlarging the Sleeve

Coat manufacturers usually make their garments which are marked size 16 from a sloper which has been graded up a half size or more in width to provide room for a dress to be worn beneath. Armscyes on the garment are enlarged and the sleeves inserted may be a full size larger. Occasionally fashion dictates close fitting bodices in dresses but large armscyes are used with large sleeves.

The increase in the sleeve is made throughout to insure good proportions but the length remains unchanged. The new enlarged sloper would be designed and then all coat or dress sleeves that season would be made by using that new block.

There are two important changes which must be made in the sleeve to adjust it to fit the newly enlarged armscye: (1) enlarging the sleeve in biceps measurement; (2) lengthening the sleeve cap by lowering position of biceps line.

Read the following steps of procedure carefully. Check each step with the diagrams shown above.

1. Draw a vertical guide line equal to overarm sleeve length plus three inches.

2. Place folded sleeve sloper upon this guide line with vertical grain line meeting it.

3. At shoulder and wrist positions on your paper, place two short parallel lines one-fourth inch away from guide line.

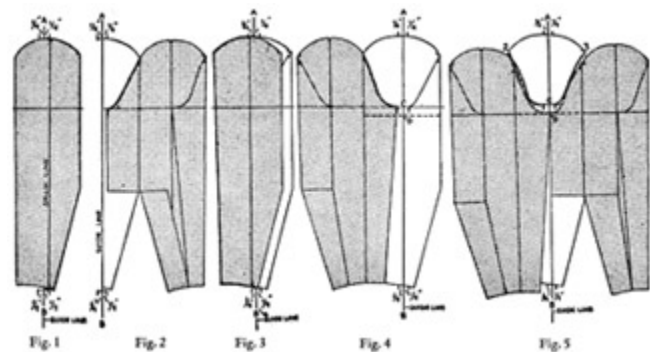
4. Shift sloper to right until grain line and short measuring lines fall in exact line. Trace back of sleeve. Fig. 1.

5. Trace lower half of sleeve cap with sloper still in this position. Fig. 2.

6. Reverse this process by shifting sloper to similar position to the left. Figs. 3 & 4.

7. Locate new biceps line position by placing point D below C an amount equal to the amount armscye was lowered in bodice. Fig. 4.

8. Complete new lowered armscye in sleeve by tracing as shown in Fig. 5. Blend the new lines from D-3 and D-2.



NOTE: This procedure closely resembles pattern grading except for the fact that this sleeve is not being lengthened in proportion to its new width. But observe that the foregoing procedure has increased the sleeve proportionately throughout. To merely enlarge a sleeve pattern at each side would result in a failure in the finished garment. The amount of increase must be based upon the increase made in the armhole. (Step #7)

Novelty Shoulders

Up to this point, your analysis of sleeves and bodices has dealt with the normal or nearly normal armhole. Although the greater portion of garments provide for the use of a normal armhole, yet the Strap Shoulder, Raglan, Kimono and Dolman styles are of sufficient basic importance to be included in the basic study of pattern designing. As have been the cases mentioned previously, when fashion favors armhole and shoulder variation, designers set about to produce an excellent fitting basic pattern for one or more of these recognized cuts and then devise many new designs through the use of each or any of them.

One factor must be kept in mind. Even though the normal armhole is removed, the space which would have been provided in the garment having a normal armhole must also be provided in the garment having a novelty shoulder. The wearer has not changed, even though the garment has. She must still move her arms and the completed garment must have control provided in some way. A loose Dolman is truly ugly if badly cut while a well cut Dolman produces excellent fit in all portions of the garment even though the garment may appear to be quite unfitted around the armhole.

The time required to develop a pattern for some novelty shoulder is well invested. The basic Raglan or Dolman, once perfected, may—like the simple sleeve or bodice sloper—be slashed to permit fullness, divided into secondary seams for design interest, or appear in countless adaptations. Many experienced designers have not yet mastered the basic principles involved in producing well fitted strap or Dolman shoulders. Their garments may look attractive on the hanger, but bind uncomfortably when worn. Each of the following basic novelty shoulders involves a different principle in shaping the fabric to that armhole area. Each provides a different means of so adjusting fit in that area that the

main garment retains the fit originally developed in the basic sleeve and bodice sloper.

The Strap Shoulder

This style of sleeve removes the seam at the upper armhole and takes from the bodice a section which is cut in one with the sleeve. Its simple name is taken from the design of the cut but is sometimes given the French name *epaulette* meaning shoulder-piece.



When making this pattern for a garment which has the normal sleeve which provides ease at the shoulder, the slight gathers which normally would be placed near the bodice shoulder seam must be shifted downward as none of the ease can be placed in the strap area. In order to absorb that fullness, the fabric should have shrinkage quality. Therefore, this design is found in garments using the action sleeve cap or a modification of it which reduces the normal amount of ease.

On average sizes, the strap should not be more than 3 inches wide. Other similar cuts which employ yoke-like straps are cut differently.

The diagram on the following page illustrates the usual method for making such a novelty shoulder. Read each step carefully. Note that diagram shows the pattern made from the action sleeve. A similar procedure would be used if the normal sleeve sloper were to be employed.

1. Draw a horizontal guide line on a piece of final pattern paper and place front and back bodice sections together with shoulder seams meeting as shown above.

2. Draw in position of sleeve strap, not to exceed three inches in width for a size 16 pattern.

3. Lay the sleeve as illustrated with the grain line resting upon the guide line.



4. Trace around the sleeve and remove it. With your red pencil, mark out the sleeve, together with the strap section: A-B-C-D-E-F-G-H-A.

5. Mark notches and a guide line.

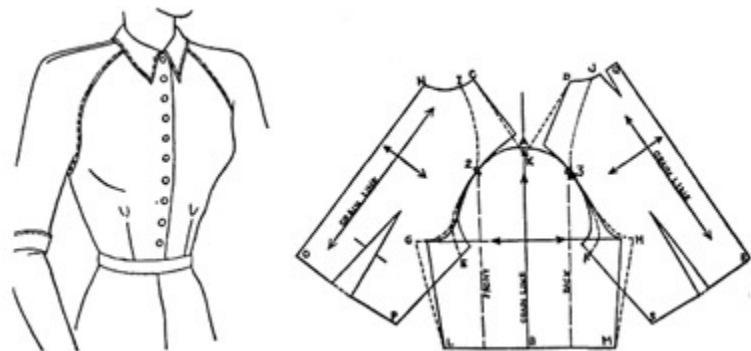
6. Slip a second piece of pattern paper beneath the draft and trace off the sleeve-strap pattern. Add seam allowances to this portion.

7. Add seam allowances to the remaining bodice portions and cut them out. Your pattern should appear as illustrated.

Select many examples of this style of cut. Although the strap is usually of plain design, there is no obvious reason why some design could not be created which might make it a focal point of interest in a garment. A strap seam design was used as the basis for producing many interesting wide shouldered gowns during 1939 to 1941 when wide shoulders were in fashion.

The Raglan Shoulder

The story is told that the Raglan shoulder was originally designed by an English nobleman who had suffered an injury in his arm and in order to have a comfortable top coat, this shoulder was designed for him. It first appeared in men's overcoats and gradually in women's sports coats and gradually it began appearing in blouses and dresses. From 1935 until 1941 it disappeared in women's dresses and coats with the exception of some loose sports coats because it did not reflect the exaggerated shoulders in fashion during that time. In 1941, when the shoulders assumed more of a natural silhouette, with a rounded padding, it again appeared along with the Kimono and Dolman. People having sloping shoulders can be easily fitted to the Raglan styles but, as it has a tendency to emphasize the feeling of sloping shoulder, it is not best suited to such individuals. Research work of later years has improved the Raglan until now it can be made from the normal sloper which provides ample shaping at the top of the sleeve cap.



There are two basic types of Raglan—the close fitting style and the loose, Dolman-like style. The close fitting style requires more care to produce so it is given here. The variations appear in later charts. To produce the close fitting style, the arm-scye is lowered and sleeve widened as diagrammed on [page 124](#) devoted to "Adjustments of the Armscye."

1. Draw a vertical guide line on your pattern paper and place sleeve sloper upon it as illustrated. Trace around sleeve sloper and lift it away.

2. Mark positions 2 and 3 on bodice slopers. (They are same distance from side seam that points 2 and 3 are from base of sleeve cap on the sleeve sloper.)

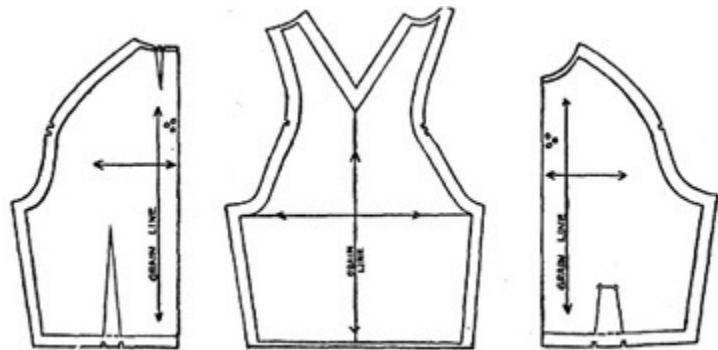
3. Place back and front bodice slopers as shown, with points 2 and 3 meeting. Shift them around into such position that points C and D are an equal distance from point K which is located 1/2 inch below point A on sleeve tracing. Trace around them and remove. Then connect points C and D with point K with dotted lines.

4. Lower armscye on front and back bodice drafts one inch. (This may vary with circumstances.) Widen biceps of sleeve a proportionate amount on each side and blend in lines to elbow and to points 2 and 3.

**5. G-2 should equal E-2.
F-3 should equal H-3.**

6. Sketch in Raglan lines 2-1 and 3-J, to form compound curves with 2-E and 3-F.

**7. Slip paper under draft and trace off sleeve section:
L-G-2-I-C-K-D-J-3-H-M-L.**

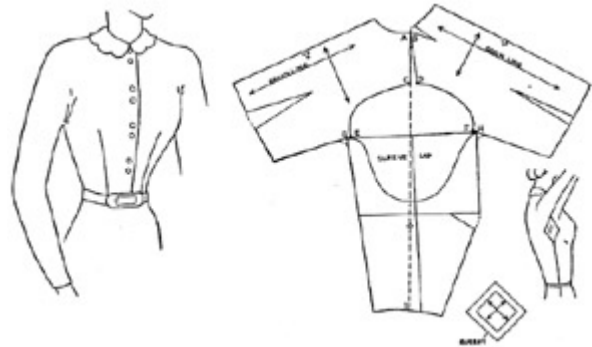


8. On another piece, trace off front bodice: N-I-2-E-P-O-N. Also back: Q-J-3-F-S-R-Q. Add seam allowances, notches et cetera and cut out these patterns. Make muslin for half a bodice.

NOTE: When drafting Raglan from personal slopers having unusual proportions, there may be some points where draft will not appear like the diagram above. The main points to consider are that C-A-D forms a dart. And between points 2-3 represents upper arm measurement. On close fitting styles, the Raglan lines should not fall more than an inch above or below points 2 and 3. Generous seam allowances should be provided on muslin so the adjustments can be made on the individual being fitted.

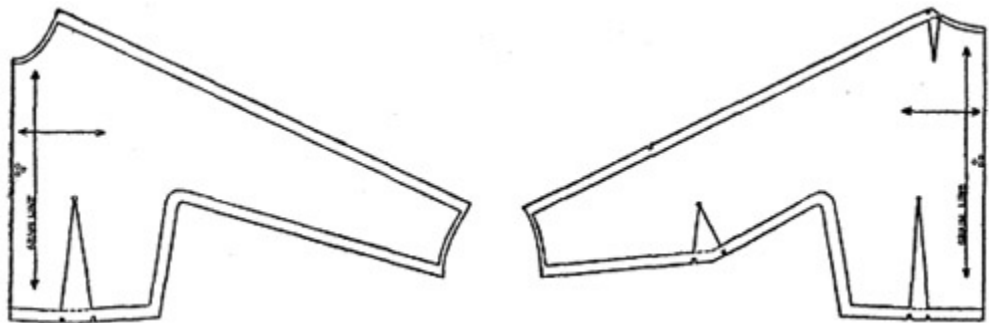
The Kimono Shoulder

The true "Kimono" shoulder has no fitting whatsoever. It is a straight piece of fabric with a hole cut for the neck. However, the shaped Kimono garment above reflects its Chinese influence but produces a more pleasing fit.



1. Place bodice slopers to meet at A-B with C and D apart 1/2 inch.

2. Fold sleeve cap of pattern back and lay on above tracing making G-E and F-H equal. Mark short curves identically at points G and H.



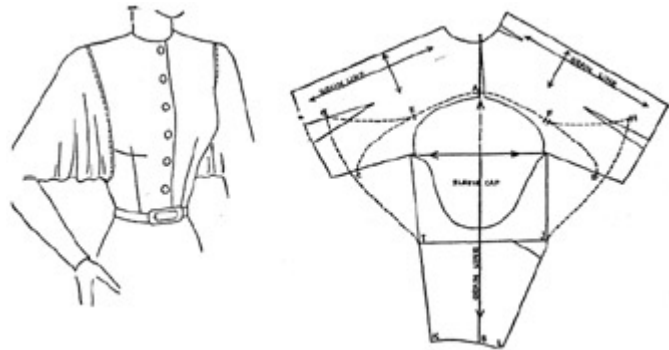
3. Draw seam line A-I to fall in center of wrist. Disregard where line falls to C or D. Place notch on the new seam line. Cut the pattern apart. Locate grain lines as shown and mark up muslin into stripes. Cut center front and back on folds of fabric. Observe results.

NOTE: Seam at shoulder is used on some occasions and in other instances the seam is thrown to the center back or front. In order for you to study the possibilities for creating interesting effects, place

seam at center back and cut center front on a fold of muslin marked horizontally. Try the same results on vertical striped fabric. Gusset can be used to give greater elasticity underarm. No curve would be established at points G and H in such case.

The Dolman Shoulder

Sections are arranged as for Kimono except that Dolman has no seam down sleeve.



Because low armhole limits reaching room under arm area E-G-C and F-H-D is added to the sleeve.

Lines E-G and F-H must equal E-C and F-D respectively. G-I and H-J should also be equal as they will meet as a seam.

NOTE: Original points E and F divide the new armhole equally. Experiment has proved this to produce the better appearing garment. Position of armhole line is important to a pleasing result.

Take tracing of the new sleeve on a second sheet of paper: K-I-G-E-A-F-H-J-L-B-K

Trace off pattern for front and back bodice section. New low armhole is defined by dotted line: C-E-A-F-D. Shoulder seam may be introduced from A to I, if desired.

PRACTICE PROBLEMS

Fig. 1 shows the use of the strap sleeve with a boxy type sleeve illustrated previously. The sleeve pattern is completed first and then it is used with the bodice to complete the strap design. Hence, the space between the pleats on the sleeve should not exceed maximum three inches normally allowed for the strap. Note how exaggerated yoke line

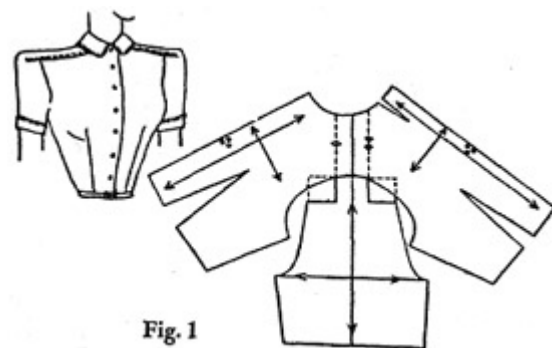


Fig. 1

Note how exaggerated yoke line

extending into the boxy sleeve broadens the figure. It is important that width of silhouette be kept to a moderate proportion or finished garment will have too physical an appearance.

Fig. 2 is cut on the principle of the Raglan which produces the shoulder dart which takes the place of normal slanted shoulder seam. Basic pattern is produced and then sleeve is cut at lines extending to points 2 and 3 and straight pleats added which fold into position at the point where lower armhole of bodice meets the lower cap of sleeve. Many pleasing designs may be produced with varying lines through the use of the Raglan principle. It offers fewer limitations than the strap seam shoulder.

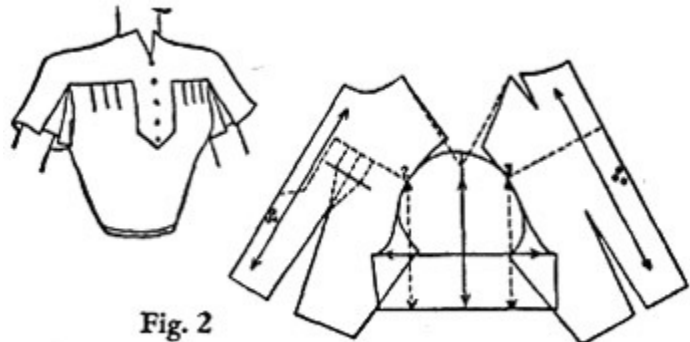


Fig. 2

Fig. 3 shows the Dolman-Raglan sleeve. The method combines the two basic cuts you have just studied. A modification of this combination sleeve is adapted for swagger type sports coats, fur coats and dinner gowns. This style gives bulk to the figure and unless it is combined with a narrow hip line and skirt, it is reserved for the very tall and slender person. During 1941, this style reappeared with the gradual return of the molded shoulder line. A slight padding was used at the shoulder to produce the favorite "molded" appearance of that year.

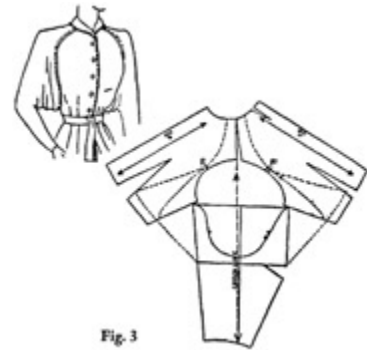


Fig. 3

Fig. 4 illustrates the method for giving a broad-shouldered appearance to the sloping Raglan. By building up the seam at A and B, padding could be added in the garment and the

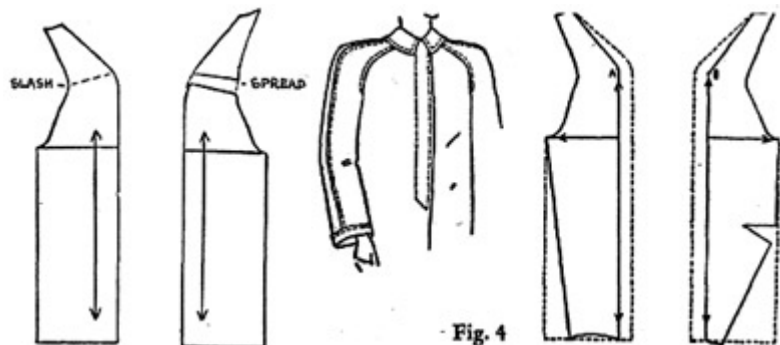


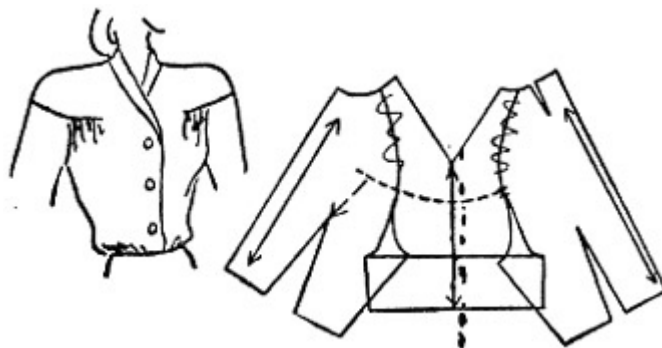
Fig. 4

sleeve enlarged at the same time. The sleeve, in this case was straightened into the conventional style coat sleeve. It could be left fitted at the wrist as desired or widened into a Bell sleeve if fashion favored such a silhouette.

To produce more exaggerated bulge at the armscye, pattern may then be slashed and spread as indicated below. At the seam which joins sleeve to the body of garment, this extra fabric added by spreading would be eased in. This would produce an exaggerated bulk of silhouette to the sleeve. Watch closely for such sleeves found in men's overcoats.

Fig. 5 shows method for developing a yoke design from a raglan style sloper. Curved lines indicate seams eliminated. Dart at A could be extended to form shoulder seam

for the yoke area.



arrow

line to bust point. A portion or all of the control could be shifted. This would throw armscye bodice area downward and would produce room for the seam to join yoke to gathered area. Same procedure could be used for shifting some of back bodice waistline control.

Fig. 7 diagrams method which might be used to produce a deep yoke to which additional fullness has been added in shoulder areas. Note that dotted lines of the front and back bodice yoke fall over

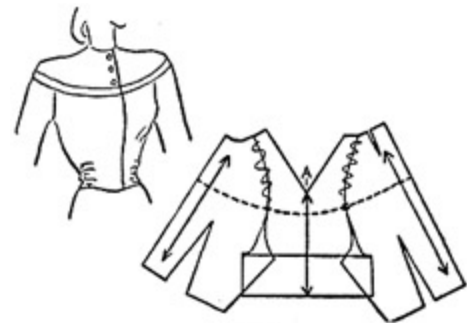


Fig. 5

Fig. 6 illustrates method for producing a simulated yoke. Note extending from new yoke

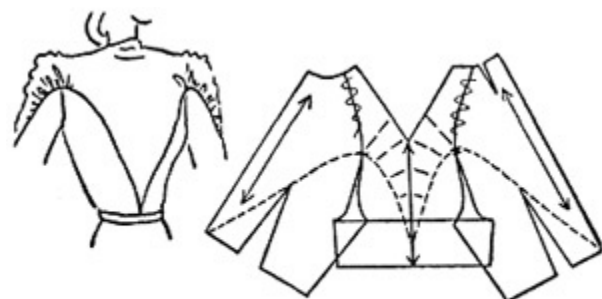


Fig. 7

points of basic darts. This makes it possible to eliminate both of these darts by shifting the control into the seam. When sleeve section has been traced off, slashes are made to add degree of fullness desired.

NOTE: Many combinations of this type may be developed once the pattern designer is familiar with all basic principles common to the producing of a given silhouette or design. The degree of variation is unlimited.

1942—Modern Pattern Design

by Harriet Pepin

Chapter 6—Capes, Ties, Neckwear and Scarves

You may select a topic from this lesson

Analysis of Cape Slopers

The modern cape is a direct descendent of the "Toga" worn by Romans in the early days. It comes and goes in fashion popularity but it seldom completely disappears from the fashion horizon. In fact, some women insist upon having a cape in their wardrobe because it is distinctly becoming to women having regal carriage. It is a favorite wrap of actresses and other individuals who have a dramatic personality. When properly cut, the cape is beautiful and flattering, but when badly cut, it is ugly and unattractive. It is not the garment for timid, apologetic types of women who are short and round shouldered. To wear a cape well, the woman must wear it with confidence, safe in the assurance that it becomes her.

There are two basic silhouettes—the Dolman and the Circular. These two basic silhouettes or a combination of the two, form the basis for most cape designs. The first produces a rectangular silhouette which hangs from the shoulders. The second forms a triangular silhouette which widens like a tent at the base. The *length* of the cape is important to current fashion. A cape may reach to the level of the bust or extend down to the floor or at any point between these levels. When the cape does not entirely cover the dress, it is highly important which cape silhouette is selected to complement the ensemble. Selected clippings showing capes of various lengths and silhouettes should be collected and sorted according to the type of garment being worn beneath. This will give the design student a conception of the possibilities and limitations in using capes. It is also suggested that a study be made of the use of capes throughout the history of fashion. You will find it a most interesting study as well as a source of new ideas for modern cape designs. A collection of capes used for military wear or those found in certain native costumes should be in every student's personal reference library.

When capes are fashionable, many dresses are designed which suggest cape effects by loose circular sleeves, deep pleated flounces attached to shoulder yokes, et cetera. To be practical, such dresses must be worn under cape wraps or the sleeves would become mussed. In the autumn of 1941, the American designers offered many exquisite fur coat designs which were actually variations of the Dolman cape. Because that same autumn there was a revival of the Dolman shoulder, it was natural that the wraps should be designed to accommodate these new sleeves.

The two following sloper patterns—the Dolman and the Circular types—are all that are necessary to produce an unlimited number of cape designs having varying proportions. Necklines and collars used for dresses and coats are equally versatile in cape designs; pleats, yokes, shaping seams, or other garment features may be made a part of a cape design. The important factor is to provide the proper shaping over the bust and shoulders when it is needed in the capes having narrower silhouettes.

How to Take Measurements for Capes

It is more convenient to take all cape measurements to the floor. The finished length can then be estimated as being so many inches from the floor. That amount can then be subtracted from all vertical measurements.

1. Center Front Length: Take from center front base of neck to floor.

2. Center Back Length: Take from center back base of neck to floor.

3. Side Length: Take from shoulder neck point, across shoulder, down over outside of arm to floor. See Fig. 1.

4. Bust-Arm: Take around arms and body in line with bust. See Fig. 1.

5. Hip-Arm: Take around arms and body in line with largest portion of hip. See Fig. 1.



Fig. 1

Drafting the Dolman Cape

Front Section: Plan for cape 20 inches from floor, for hip-length.

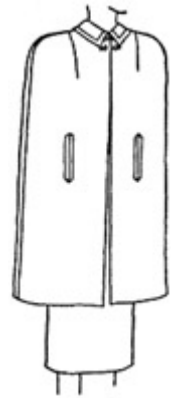
1. Review instructions given in bodices and make draft shown in Fig. 2. Label as illustrated.

2. Extend center front line distance equal to *Center Front Cape Measurement* less distance from floor. Label point 12.

3. Line A-10 is one-fourth of *Bust-Arm Measurement*. It is squared from center front line on level with point 8. In size 14, place point 10 two inches from point 8. (In standard sizes, it is assumed that *Bust-Arm Measurement* will exceed normal bust measurement by eight inches. Hence 2 inches is used here.)

4. Line 1-11 is one-fourth *Hip Arm Measurement*. It is squared from center front line on a level with point 9. (In standard sizes, it is assumed that the *Hip-Arm Measurement* should be 10 inches greater than the normal hip measurement. Hence, in a size 14, point 11 would be placed 2 1/2 inches beyond 9.)

5. Square line from 12. Connect points 10, 11 and 13 with squared line from A to 10. Extend side seam line and shoulder seam line to intersect. Describe shoulder curve.



Back Section:

1. Draw vertical guide line and place sloper against it as shown in Fig. 3. Trace around sloper and label points as illustrated.

2. Extend center back line 2-1 downward distance equal to *Back Cape Measurement* less the desired distance from floor. Mark point 11.

3. Locate points 9 and 10 as you did in front section. Complete draft for the back and check side seam lengths of each section. Curved shoulder lines should be identical.

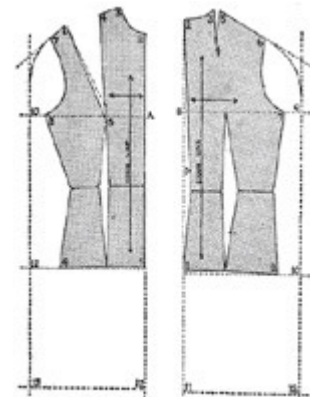


Fig. 2

Fig. 3

NOTE: Fig. 4 shows method of building up finished draft for insertion of padding to create broader shoulder appearance. The *Side Cape Length Measurement* is not used when making the Dolman cape except as a means of checking bulk of the dress when cape is being designed for an individual. It is an important measurement when drafting the circular cape shown below.

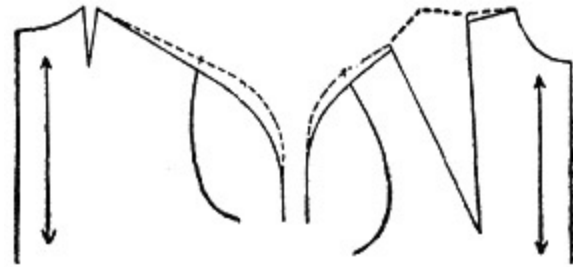


Fig. 4

Maximum bust control must be placed at the shoulder to prevent cape sagging at side. Small back shoulder dart is also essential to good fit in that section.

Drafting the Circular Cape

The Circular cape offers more freedom to the wearer and is generally more becoming than the simple Dolman. This draft produces a garment which has a flat back and front with the circular fullness flaring from the shoulders. It is adaptable to varying lengths and when the basic side seams are eliminated and a center back seam used, it offers interesting ideas for layout of the fabric. Later problems will show methods used for removing some of the fullness or adding fullness to exaggerate the silhouette.



Fig. 1

NOTE: Plan this draft to extend to the hip level. Take the *Front, Back and Side Cape Length Measurements* directly from your model form. Add 1/2 inch to the side measurement to allow for arm. Naturally, when the measurements are being taken from an individual, this extra allowance would not be added.

The waistline bodice sloper which has all control eliminated at the shoulder is the basis for this draft. As hip circumference measurements are not considered, the waistline bodice slopers are sufficient.

- 1. Arrange slopers as illustrated. Trace and label.**

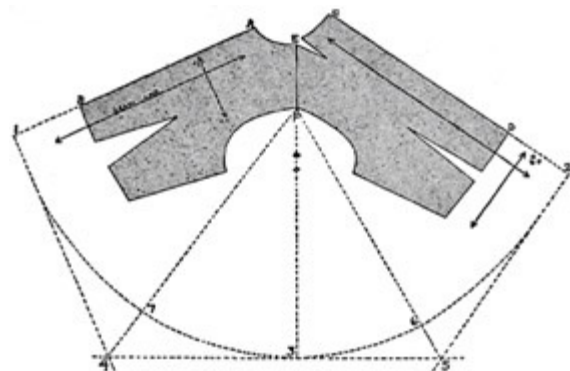


Fig. 2

2. Extend center front line A-B until it equals your planned *Center Front Measurement*.

3. Extend center back line C-D until it equals your planned *Center Back Measurement*.

4. Extend shoulder line E-F until it equals your planned *Side Length Measurement*.

5. Square guide lines from points 1, 2, and 3 to intersect at points 4 and 5.

6. Connect points 4 and 5 with shoulder point F.

7. Locate points 6 and 7 the same distance from F that point 3 is from point F.

8. Connect 1, 7, 3, 6, and 2 with a sweeping circular line. Mark notches on seam line F-3.

The small shoulder dart is retained at the back neckline. This *could* be removed by folding and slashing upward from lower edge to dart point. But, this would throw extra folds up to the shoulder blades which might cause the wearer to appear round shouldered. It is for this reason that many circular cape designs provide for a round, square or pointed yoke which shifts the shoulder control into the seam and permits further degree of flare being added below the yoke as desired.

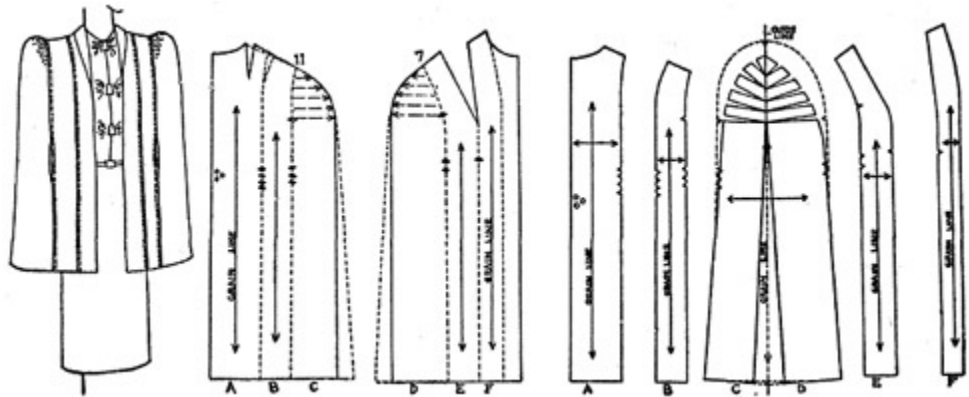
This simple draft is particularly adaptable to short capes which extend only to the waistline. It provides plenty of room for movement of the arms and retains the contour of the flat back and shoulders of the wearer.

Following are interesting adaptations of this Circular and also the Dolman cape which produce exaggerated silhouettes that are influenced by fashion of the season.

When muslins are made for these two drafts, compare them carefully from all angles while they are draped on the model form.

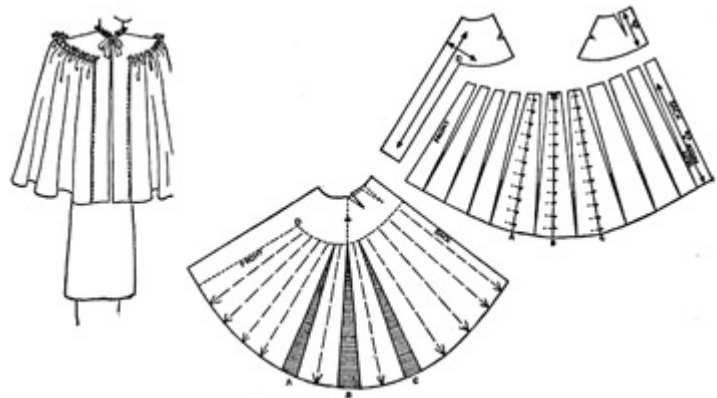
Variations of Dolman and Circular Capes

The above adaptation of the Dolman draft is a cape which was typical between 1935



and 1940 when the silhouettes of the dresses were emphasizing bulk through the shoulders. The puffed shoulder of the cape reflected the current silhouette and also provided ample room for the sleeve of the garment being worn beneath. Note that a small amount of width was added at the side seams and then these two sections were assembled to eliminate the side seam, leaving a remaining shoulder dart.

Below we have a youthful style of cape which might be made of taffeta or net to accompany an evening gown. Some of the flare at the side has been folded out up to the yoke edge, which extends to the shoulder tip (A, B and C).



When the sweep of the lower edge has been thus established, the gathers which are to appear at the yoke are introduced by slashing and spreading the pattern.

CAPE VARIATIONS

Silhouettes, lengths, fullness and necklines of capes may show wide variation. Though essentially



classified as a wrap to be used instead of a coat, the variety of fabric is not especially limited either. Many of the basic principles of pattern making which you have studied in these previous pages may easily be applied in the designing of capes. As a medium for combining fur and fabric, or as a decorative accessory to a garment, opportunities for design interest are quite unlimited.

TIES, SCARVES, BOWS AND JABOTS

Cravat (Figure 1): Although it is commonly believed that the cravat is of English origin, research proves that it was first worn by the middle class Dutchmen in about the year 1660. Shortly after that, it became generally popular with both the English and the French. By that time, it appeared with many elaborations of lace and brocade and was favored by gentlemen of the court. The modern adaptation of the cravat is about 21 inches long and 9 inches wide with slight shaping in the center. It is tied in a simple overhand knot with ends spread.

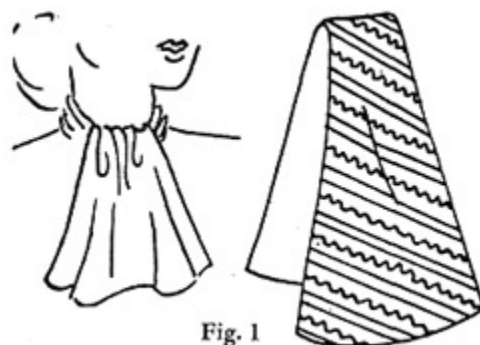


Fig. 1

Windsor Tie (Figure 2): This soft bow tie was popular in this country in about 1860 by men who wished to be recognized for their tendency towards Bohemian-ism. It is about 45 inches in length, cut on true bias and is finished at 7 inches width.

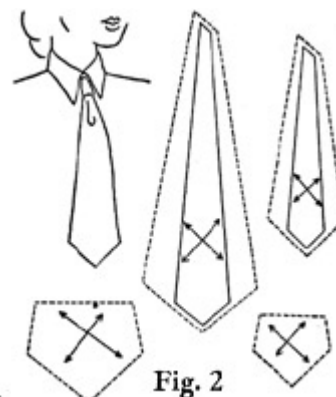


Fig. 2

Four-in-Hand (Figure 3): This tie is conventional for men and is worn by women as an accessory to riding apparel. In accompanying lines show the fabric and heavy interlining. The small tabs are the made of satin.



Fig. 3

diagram, dotted lines show partial linings to be

Stock Collar (Figure 4): This standing collar with attached cravat was originally just the collar portion at the time the Ascot was in fashion for men. Later the tabs

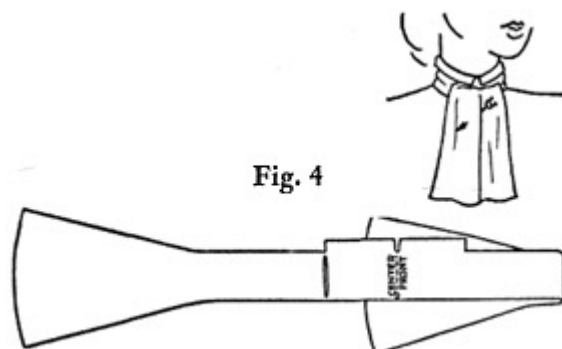


Fig. 4

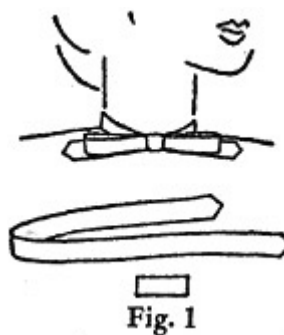
were added and for many years during the period between 1750 and 1850 it was the popular neck dress for men and for riding habits for women. Today, the standing collar with the tabs and the scarf are cut in one piece and are used as an accessory to formal riding apparel for both men and women. The small slit in the center back permits passing an end through to eliminate bulk and when tied in an overhand, the wide ends complete the appearance of the cravat. In some instances, it is confused with the English Ascot due to the similarity in appearance when worn. It is the true English Ascot which is worn by men as an accompaniment for formal morning attire.

Bows in Fashion

To some women, the mere suggestion of a bow being used on a dress would suggest dowdiness and would meet with their immediate refusal of such an idea. Yet, some of the more smartly dressed, sophisticated women wear garments which include the use of a single bow, or a series of bows. The question is not the use of a bow, but what sort of bow which should be used for the type of garment or the type of woman.

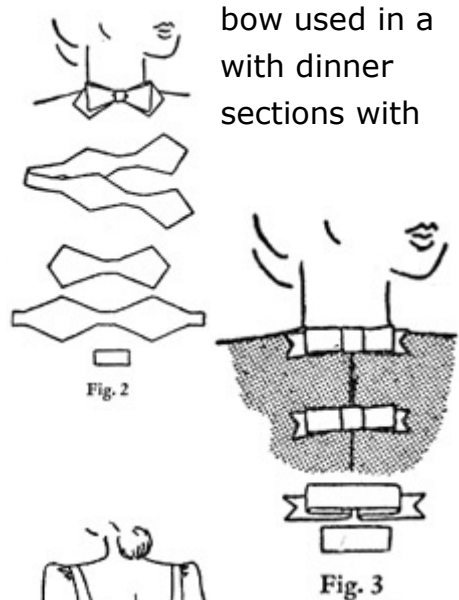
Milliners soon become aware that the art of tying a bow is an important factor in creating trimmings for hats. There are several factors to be considered when using a bow for trimming. First, the finished effect desired is dependent upon the fabric which will be used. The bow which is to give a youthful effect cannot be made from too pliable a fabric or ribbon. Artificial stiffening would only give a stilted effect. Second, the age of the wearer of the garment. Third, the size of the wearer. A large woman will not benefit from a soft, bulky, youthful French bow, while a trim, tailored bow of the right size to scale with her size, might give the impression of trimness which her clothes need.

Fig. 1 shows the popular "shoe-string" type, made from either a bias or straight tubing, with ends, pressed flat. It is usually best to make and then use an additional piece to simulate the be tacked together and it may be then quickly for laundering and assembled again.



type, made finished the strip knot. It may ripped apart

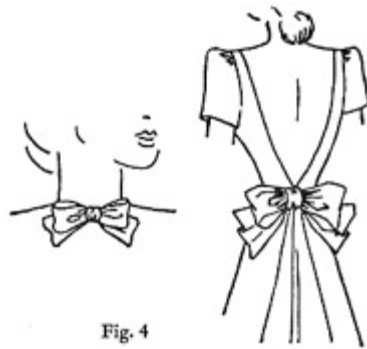
Fig. 2 shows another variation for a tailored similar manner. It is like the bow-tie men wear jackets, cut and shaped, or it may be made in the idea of saving material.



bow used in a with dinner sections with

Fig. 3 shows the "boxy" bow resembling the "shoe-string" style which is often made from grosgrain ribbon. A series of such tailored bows, properly spaced at intervals down the front of an otherwise simple dress can create a slenderizing effect without creating a "fussy" appearance.

The semi-soft, "French" bow is frankly youthful. It might be made in scraps of leftover material, or from a of fabric or crisp ribbon which ties thin, angular woman, a series of these proportioned bows would give a little without being too youthful. Observe the evening gown a youthful feeling when used with a sash. Fig. 4.



sections, from straight piece easily. For the nicely added bulk how it gives

Fig. 5 shows the third classification of bows. We shall call it the "scarf" bow because it becomes more of a scarf than a bow as it is so soft that it has a droopy, scarf-like effect. You can readily visualize how such an effect, when seen on a child's dress, is despondent and unattractive. That is because this bow might be said to be glamorous, and mature appearing. Yet, when it appears on a sophisticated evening gown of chiffon, or a negligee, it suggests dignity and can be a very pleasing addition. Naturally, the effect is achieved through the use of a very soft velvet or chiffon.



Start *now* to clip illustrations showing the clever use of bows in garment design. Become intelligently "bow conscious." Divide your clippings into the three basic classifications and paste them on extra sheets. You will find this research most enlightening!

Detachable and Attached Jabots

The modern jabot (pronounced Zha-bo) is the outgrowth of the cravat which became elaborately decorated with ruffles and lace. Today it is no longer found in the men's wardrobes but is an accessory to women's garments. Like bows, the jabot may be limp and lacy or it may be crisp and trim. Its appearance and character are dependent upon the fabric and trimming.

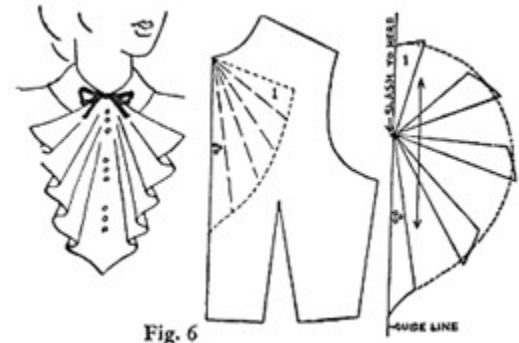


Fig. 6

The accompanying illustrations show the method used for producing pleasing jabots. The first step is to get a construction pattern of the general outline. Then the ripples are introduced through slashing and spreading. When a series of ripples are to appear, (Fig. 7), the section containing the design for them is slashed all in one piece and then the pattern for each section is traced off separately.

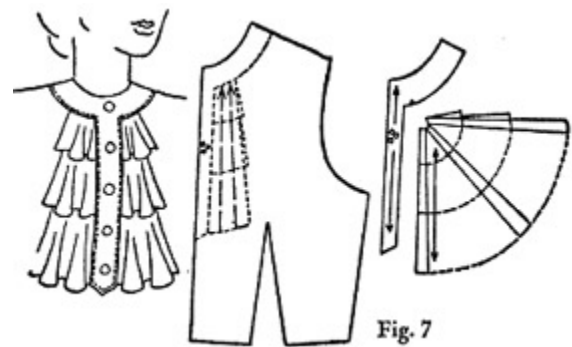


Fig. 7

Ample hem and seam allowance is then added. This will produce a cascade of circular ruffles all of which will have identical ripples which follow a line downward. This eliminates a confusion of meaningless ripples and will produce a more attractive finished jabot.

Detachable and Attached Revers

Fig. 8: Horizontal slashes produce horizontal ripples in jabot. This style better suited to crisp fabrics.

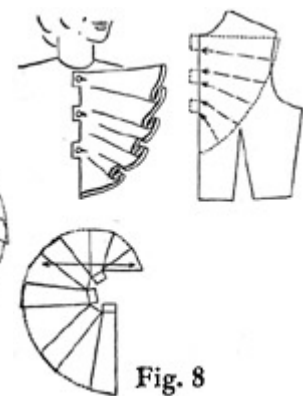


Fig. 8

Fig. 9: Slashes must merge at center front neck point. This style also suited to soft fabrics as well as crisp ones.



Fig. 9

The fact should not be

overlooked that the neckwear manufacturing industry, as an accessory to the entire garment industry, stands in a class by itself. Manufacturers of dresses and suits purchase thousands of finished pieces of neckwear which are applied to their garments. Then, the neckwear designer also alertly follows the prevailing changes in necklines as they appear from season to season in order that she may offer a wide choice of new, interesting designs which will reach the consumer through the counters of the department stores and specialty shops. Neckwear designing requires a specific talent for fine details. The writer has observed, in teaching students who are preparing for careers in the field of fashion, that individual students may reveal a marked aptitude for this single field of designing. Neckwear is an important part of every business woman's wardrobe and thousands of dollars are invested yearly for these dainty bits of lingerie that will give the up-to-the-minute look to some basic dress that is being mustered into service for a second season.

1942—Modern Pattern Design

by Harriet Pepin

Chapter 7—Collars

You may select a topic from this lesson

Collars and Cuffs

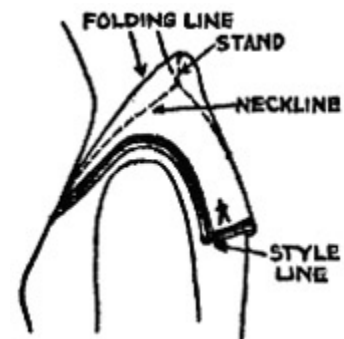
A well fitting collar may make or break a garment. The thought and study which may be necessary to originating a beautiful collar is well worth the time and effort because the same pattern may be used repeatedly in its same form or with minor changes. Wholesale manufacturing designers always have their "pet" collar patterns which they find to please many types of women. In fact, the right proportions to a collar may be what sells the dress by the hundreds.

A well fitting collar must be comfortable and flattering. It must be so designed as to permit wearing a wrap, if it is on a dress. If it is attached to a coat, it must permit wearing a hat unless it is attached to an evening wrap.

The same basic principles used to produce collar patterns may be applied to designing cuff patterns. As cuffs are usually of secondary interest and may merely repeat the design interest of the collar, only limited space will be devoted to the study of cuffs in this text.

Collars are graded when garments are reduced or increased in size. The collar which has been designed for a size 16 would appear of wrong proportion when used on a size 40 dress. Certain collars, having certain degree of roll or stand, are better suited to junior size dresses. Others prove more adaptable for children's apparel and still others give a feeling of dignity and would be used for clothes for elderly women.

Vocabulary: Before attempting to interpret the instructions for making collars, it is important that you know the terms which are used to describe certain portions of collars. They are:



Attached: A collar so designed as to be attached to any shaped neckline and to be so worn without being adjustable.

Convertible: A collar designed to be attached to bodice in such manner as to permit wearing it open or closed and still maintain a finished appearance.

Break: A term used to indicate the point where the rever, which is built in with the bodice, may start to fold back into lapel.



Neckline: The portion of the collar which will be attached to the garment.

Style Line: The outer edge of the collar where trimming may be added.

Stand: The portion of the collar which provides the height of roll.

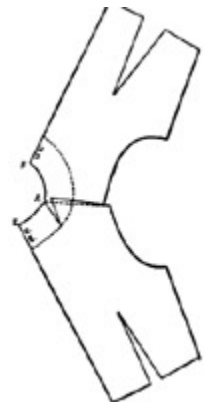
Folding Line: The actual point along which the roll appears when collar is being worn. It may be imaginary or pressed into a flat edge as in tailored suit types.

Classification of Collars: From a pattern designer's point of view, collars may be classified into three major classifications, namely: Attached Collars, Convertible Collars and Tailored Suit Collars. These classifications refer to principle of cut rather than functional use of collar itself. Some collars are cut by one method, others by a combination of two methods.

NOTE: All measurements given are for full size garments—14 to 18.

ATTACHED COLLARS

Making the Collar Sloper: Neckwear designers use a collar sloper to produce new designs for collars to be attached to varied size garments. Custom designers usually use the new neckline on the garment pattern instead of a sloper as the single collar design will be used as a part of the design for a garment. Likewise with the wholesale dress or coat designers. The sloper merely represents the shape of the area around the neckline, with notches placing the position of the shoulder seam of the bodice sloper.



1. Place front and back bodice slopers together in manner indicated on this page.

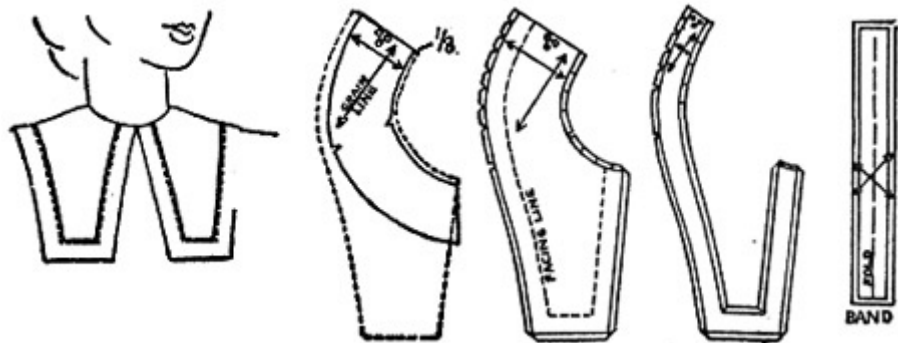
2. Trace around them on manila cardboard.

3. Measure inward from points E, A and F a distance equal to one half the shoulder seam length. Describe circle parallel to neckline which will connect these points.

4. Mark notches showing position of basic shoulder seam. Label front and back. Cut out the sloper, ready for use when needed.

Flat Collar

This name is given to any collar which appears to lie flat around the base of the neck with no visible appearance of any roll. It may be cut directly from the



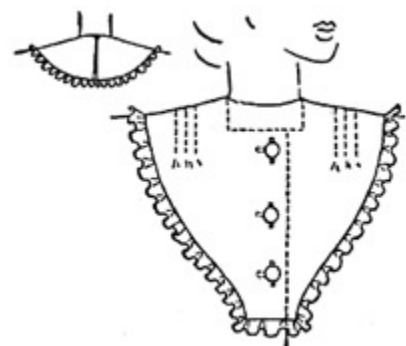
collar sloper or the shaped neckline of any garment for which the pattern has been designed and collar is to become a part of.

Trace around sloper and add 1/8 inch around neckline which will reduce its true size slightly. Mark indicators. Add 1/4 inch seams to style line and make facing pattern. Cut bias neck band.

NOTE: When attaching neck band, or sewing collar directly to garment, neckline of collar must be stretched very slightly to fit. This will cause a very slight roll, which provides space for edge of garment to lie between collar band and collar. This little trick prevents tendency of the flat collar to "kick up" on the edge upon being attached to neckline of garment.

Plastron Type Collar

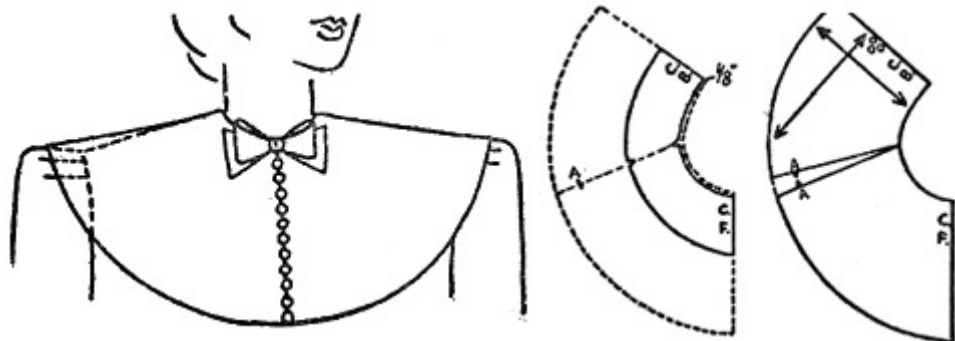
The plastron collar above is merely a flat collar which has been finished without the neck band to



attach it to garment. The neckline is built up 1/8 inch, plus the normal 1/8 inch seam allowance to insure a close fit so neckline of garment will not creep up above neckline of collar. Some designers attach tabs at the center front and each side of back closing so the collar may be temporarily attached with small safety pins. The illustration shows a plastron collar with a round neck designed to conceal a square neck on garment. Notice how the buttonholes on the collar have been placed in line with buttons on the dress to facilitate buttoning the collar down firmly in front.

Bertha Collar

The true Bertha collar extends from the neckline to a point just beyond the normal armhole.



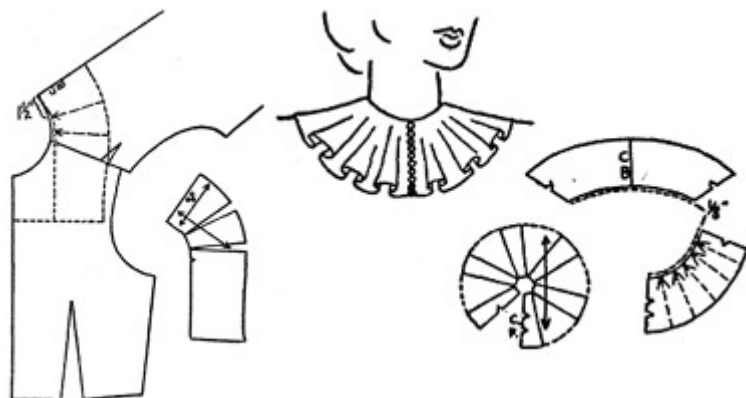
Occasionally you see a similar type collar which has a definite shaping seam over the arm. Such a collar would be made from the Dolman cape pattern.

The neckline is reduced in size to form the tiny roll and collar is completed in manner desired. Should it be used on a garment having a puffed sleeve, it would be slashed and spread slightly at normal shoulder seam position to insure the neckline fit.

This collar derives its name from a short cape which was popular in the 1920's. It need not necessarily be used with a close, round neckline nor have a round style line. It may be emphasized in outline by the addition of ruffles or it might be cut into several sections to add further interest.

Rippled Collar

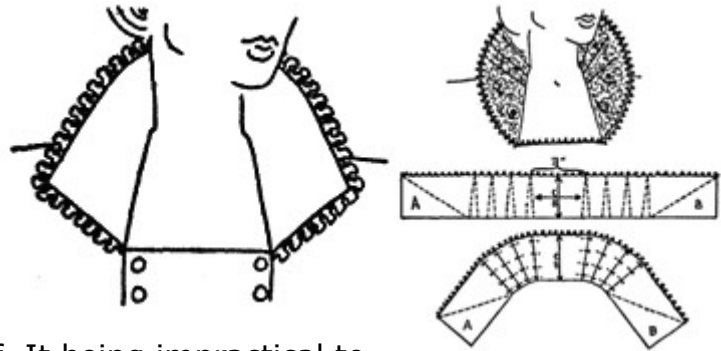
The rippled collar, cut on a circular flare principle is youthful and pleasing. In this design, the collar has the



seams at normal shoulder position and center front in order to have each half the front spread into a complete circle. Necessity for seams would be dependent upon the degree of fullness. If collar closes at center front, no center back seam is needed. Circular ruffles may be introduced to plain round collars, or small godets set into the style line at intervals.

Elizabethan Collars

It has been told that proud Queen Elizabeth sponsored this fashion for collars which would conceal the back of the neck because she had a blemish and wished to conceal it. It became conventional attire during her



reign along with the wide stiff ruff. It being impractical to wear under wraps, it is generally used for hostess and bridal gowns. In more conservative proportions, it is seen on waitress and beauty operator uniforms. This demonstrates method for using a style neckline as basis for designing collar. The slashes are started 1 1/2 inches from center back. *This is the secret of making the collar stand up without artificial support.* Spread sections 1/4 inch each for a collar 4 inches wide.

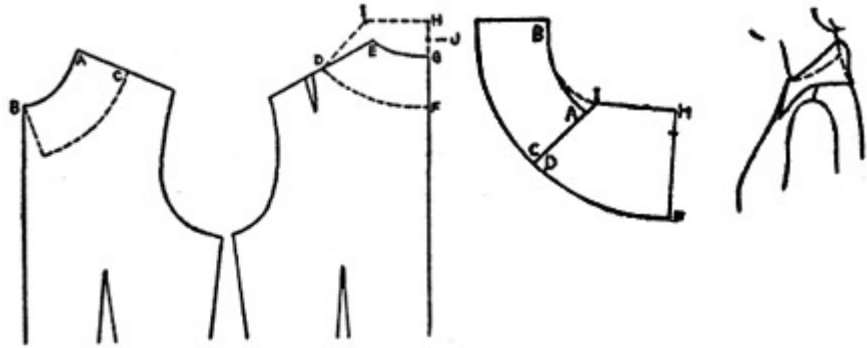
When a strip of old lace is being used, one is reluctant to cut it. A similar style of collar can be produced by shaping it with darts which reduce the style line down to size of neckline. In this design, sections A and B would be folded back under neckline of the garment. If the ends of the lace were mitred into squares, a similar style to that illustrated at the left would result.

Half Roll Collar

This style of collar is extremely popular in the dress industry because it is becoming to many women. It has a stand at the back which gradually lessens until the collar lies flat at the front base of the throat. It is adaptable to various shapes of necklines as the following illustrations show. The basic instructions apply to any one of the three varieties of the following finished collars illustrated.



1. Draw around front and back bodice slopers as illustrated, shifting the shoulder dart over to the shoulder for convenience.



2. Draw in the style line of the front of the collar on the front tracing. Label A, B and C.

3. Label points G and E on back bodice tracing.

4. From center back point G, measure upward a distance equal to twice the desired amount of stand in the finished collar. Mark point H and locate J halfway between G and H. J is the folding line position.

5. From point J, measure downward a distance equal to the desired finished width of the collar at the back plus 1/4 inch. (F)

6. Locate point D by measuring line A-C on front bodice.

7. Square a line from H equal to back garment neckline G-E.

8. Connect D and I.

9. Cut out back portion of collar: D-I-H-J-G-F-D. Also cut out front collar section. Arrange the two sections so shoulder seams meet. Blend in line I-B. Complete final pattern and muslin.

NOTE: Should you wish to reduce the width of the collar at the shoulder, to merely trim off the edge would cause it to sag at the shoulder. *A new draft must be made to the desired new proportions.*

So that you may readily appreciate the many possibilities for creating new designs from a single collar pattern which fits attractively around the neckline, it is wise to pause here for experiment.

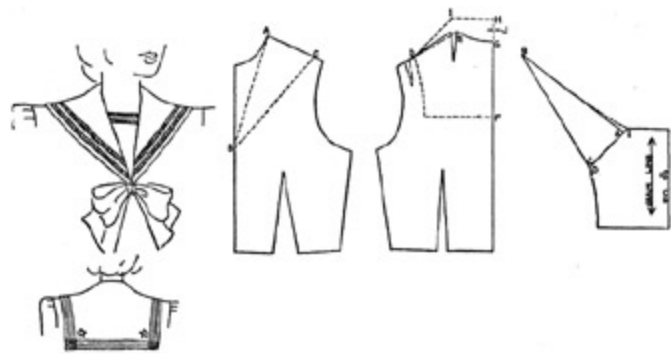
Because the line D-I supports the collar at a given point at the shoulder seam, the changes must be made from that point to the center front. Place a piece of thin paper over the illustration of this collar (upper left column). Trace

in the area from the neck and shoulders to the collar edge, then roughly sketch out a few ideas for cutting experimental patterns. When you have a few, trace around the final pattern for this collar, first trimming away all seam allowances. Test the results of your pencil ideas, which may require correction when the muslin proof is on the model form. Round lines may be changed to diagonal, diagonal to vertical and horizontal, and so on.

Run through your daily newspaper ads, clipping interesting collar illustrations. After collecting a few, and working out some more basic collar patterns presented here, you will see that just a few patterns form the basis for hundreds of new designs that vary *only* in the style line at the front.

Half Roll Sailor Collar

Although many sailor collars are cut to lie flat, if a little stand is provided in the back, it will provide room for the bulk of the scarf and it will also be a little more becoming, especially to adult figures. The method used for this collar is identical with that used in the previous problem except that the V neckline is established first and then the remainder of the pattern is drafted.



When you have become familiar with the results of varying degrees of stand provided in collars, you will observe that the wider the collar, the less stand it should have. A satisfactory pattern was produced from this sketch in which the stand did not exceed three-fourths of an inch. If the stand is too high, from a profile view, the wearer will appear round-shouldered.

Because the original design for this half-roll collar was planned to provide width through the shoulders, the line D-I (which is dependent upon the original line A-C) is longer than it was in the previous pattern involving this cutting principle.

Although this illustration shows the conventional type of sailor collar, designers vary them in many ways, sometimes designing the front to be square and to fall slightly lower or higher than the point at which the lower back edge rests upon the shoulders.

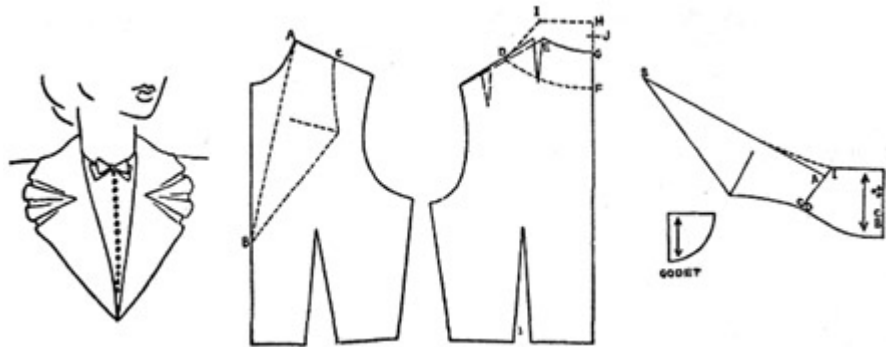
If a deep V-neck similar to this were to be used as a detail of a hostess gown, the designer might employ gently curved lines and continue them into a curve across the back. Provided the length of the line D-I in the basic pattern isn't changed, she would use the same basic pattern to produce new designs quickly and accurately.

When you have experimented with variations of this basic collar, draft a new one from this same principle which will be attached to an oval neckline. Establish the line A-B first and then proceed in the usual manner. Compare the shapes of the two collars.

NOTE: Collars that have a stand at the back cannot be successfully closed in the back. To attempt this would result in the loss of the stand, and the entire beauty of the collar would be destroyed.

Half Roll Shawl Collar

Like the sailor collar, the shawl (sometimes called "fichu") collar may be



cut flat or in a varying degree of roll as desired. In a simple style, it is used for mature women's clothing because it gives the feeling of dignity to the wearer and when it has been styled interestingly or given a new line through changing the style line, it may assume a more youthful feeling. A similar effect is achieved by the use of a simple bias fold of fabric such as that purchased at any trimming counter. However, that type will stand rather high at the back of the neck and this pattern may be designed as desired. You will also study another means of cutting a similar appearing collar in a later problem.

Notice that the little quarter circle godet which is set into the small slit at the point creates a softened effect and invites the eye above the bust level. Any number of interesting designs can be produced from the basic shawl collar pattern as long as the width of line D-I which rests upon the shoulder is not changed. Such a change, you have previously learned, will mean drafting an entirely new pattern to the revised width at that point. Notice the compound

sweeping curve which appears through point OD on the finished pattern. This gives a graceful line to the silhouette of the collar, even when used in a simple form.

When the pattern is finished, try laying it on the muslin with a true bias fold at the center back and observe the result. The bias will permit the collar to adjust more smoothly. A collar which has an inch stand in the pattern will appear to have but a three-fourth inch stand when worn if cut on a true bias. While making this pattern, watch your proportions when planning the godet.

Because line A-B is straight, such a collar, when drafted, might be made a part of the bodice front from A to B. Lay the collar against the bodice front tracing, so the neckline edge B-I rests along the line A-B, and see how such a seam might be eliminated by placing a seam at the center back of the collar (the garment would slip over the head). If this type collar is planned for a surplice bodice front, the surplice pattern is made as usual ([page 44](#)); then the collar pattern is sketched between the V-neckline and armhole and traced off on a separate sheet of paper. From there on, the procedure for completing the collar would be as shown above.

The author wishes to emphasize, now that you have observed and compared collars with no stand and those with a stand at the back only, that the latter is the more popular—and more becoming to most women and girls. The truly flat collar is quite juvenile. As women mature, a prominent bone appears at the back of the neck. The collar with a slight stand conceals this; it also tends to give, from the front, a well-proportioned neck. The half-roll collar also hides prominent collar-bones.

Full Roll Collar

Although this collar is sometimes called the "Peter-Pan," it takes its professional name from the appearance when being worn. The finished collar should have a stand which is equal around the base of the neck. Because of the roll, it is especially pleasing for the woman who has an exceptionally thin, long neck as its round shape softens her angular features. It is youthful, so is not suited to elderly or mature women and should be definitely avoided by the woman having a round face and short, broad neck. When cut on the bias, the roll is less apparent and it



appears cut that way in the majority of designs. If you wish to make the experiment, you will see that this collar, when cut wide, will be unpleasant in appearance as width seems to emphasize the rolled appearance. Therefore it is made rather narrow.

1. Trace around the shoulder area of front bodice sloper. Extend the line A-B outward from the shoulder neck point as a guide line.

2. Place the back bodice sloper against this guide line as shown in diagram with points C and B meeting. Fig. 1.

3. Square a guide line from the center front point E. Draw in the desired style line of the collar from the center back to the shoulder seam. Make this follow the general contour of the neckline.

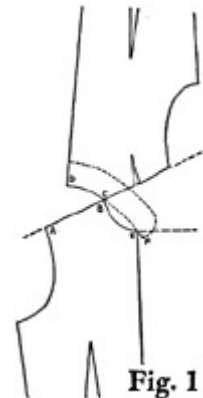
4. Following the same shallow curved line of D-C, continue on to make the front collar line C-E.

5. Because the new collar line C-E is more shallow than the bodice front neckline B-E, it must be extended on to point F or until it equals the original neckline measurement, B-E, to which it will ultimately be attached.

6. From point F, complete the front style line to meet that which has already been sketched into the back section.

NOTE: In this design, a rounded front has been used, but it could be square or the curved lines inverted if desired. *The distance that the front of your collar design stands away from the guide line will be the distance the same point will be from the center front edge of your finished blouse when the collar has been attached.*

7. Trace out the outline of the collar in blue pencil. Observe that it is a very shallow curved shape. It is this shallow curve, sewed to the deep curve of the garment neckline which produces the roll around the neck.

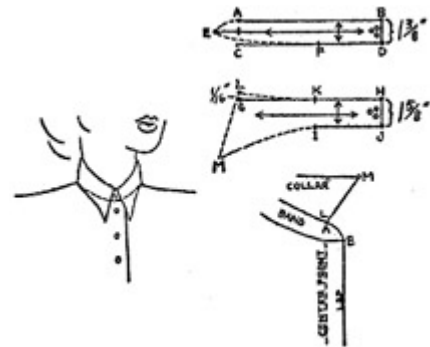


It is suggested that you try this same type of collar in varying widths and with a variety of front shapes. You will then be able to observe its limitations.

Compare this finished full roll collar pattern with those made for the half-roll and the flat roll collars. Lay the center backs of all three collars one upon the other. Notice that the straighter the neckline, the more rolled the collar will become. This is an important fact to remember when you are designing collars.

Mannish Shirt Collar

If you will compare the shapes of all the collars you have produced thus far, you will see that the less curve there is in the collar, the more stand it will have when worn. The man's collar, being made of a straight strip of shaped fabric produces the extremity of stand all around the neck. It appears in riding shirts and other mannish apparel for women. Men's shirts show a wide variety of proportions and styles to suit the varying facial proportions of men.



Band:

A-B and C-D equal one half neck measurement. F-D equals half back neck measurement. B-D and A-C are equal in length. Locate point E half way between A and C one inch outward for tab lap. Draw curves from A to E and E to F. Note shape of curves.

Collar:

G-H is one half neck circumference. H-J is 1/4 inch longer than B-D.

I-J is one half back neck measurement. K-I equals H-J.

L is 1/16th inch from point G. Draw shallow curve from L to K.

Draw desired style line L-M-I. Edge L-K-H is sewed to collar band at A-B.

CONVERTIBLE COLLARS



Convertible collars are so named because they are designed to be worn either closed or open. When in the closed position, the convertible collar appears somewhat like a half roll collar attached to the neckline. When worn open, the front of the bodice folds back to assume the appearance of revers and the collar has a notched design. Such styles of collars must be accompanied with a facing which is attached to the bodice front so the garment will have a finished appearance either way it is worn.

Naturally, the width of the rever portion is governed by the amount of lap which is provided for closing the garment. They are, therefore, quite similar on all types of styles. The basic neckline is usually lowered slightly to create varied results, and the style line of the front of the collar may be varied as desired. However, as this type of collar is an accompaniment to so many tailored shirt-waist types of blouses and dresses, the proportions have become somewhat standardized and a designer will use what he considers to be the best proportions in many of his garments year after year.

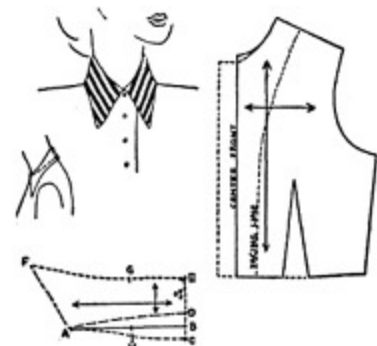
After painstaking analysis in our classrooms, it was found that two types of the convertible sports type collar could be successfully developed on the same cutting principle. Although similar in appearance from a front view, these two collars are quite different in fit in the back.

For the sake of comparison, they are illustrated with similar pointed ends. However, there is no reason why they couldn't have curved ends instead. The important feature is the variance of cut in the back of each. It achieves a different fit.

Active Sports Collar

This collar provides a close fit at the back of the neck when both open and closed. This snug fit at that point makes it more becoming and also more practical for wear under suit jackets and coats.

The first step is to lower the front bodice neck line slightly, removing some of the intense curve.



1. To draft the collar, draw the horizontal line A-B equal to one half the new garment neckline.

2. To locate point C, square a line downward from B equal to one-half desired stand at back. This may vary from 1 to 1 1/2 inches as desired.

3. Locate D by squaring a line upward from B which is also equal to half the desired stand.

4. Locate E from point D, a distance equal to D-C plus 1/4 inch. (As this is the style line of the collar, it must be made deep enough to hide seam at neckline.)

5. B-H and E-G equal one half the back neckline measurement. They are squared from points B and E respectively.

6. C-A is squared from C up to a point in line with point H and then breaks to form a compound curve. Complete desired shape of points on collar at F.

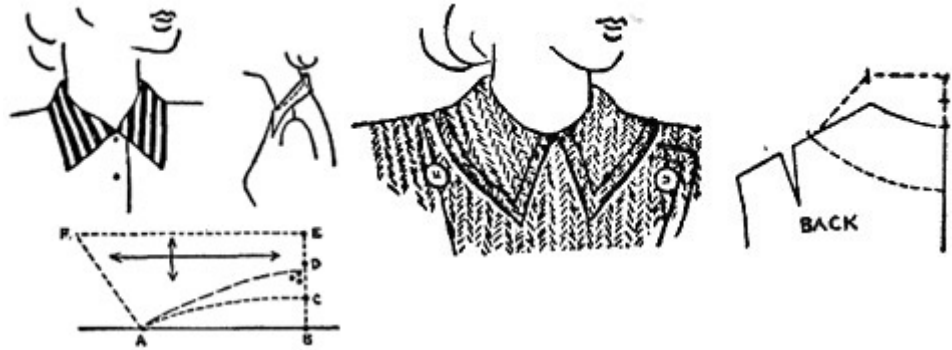
NOTE: The guide line A-B equaled the original neckline measurement. Curved line C-A has now become the edge of the collar and will be longer than the straight line A-B. Make A-C equal to A-B by moving E-C inward accordingly. Cut final pattern and make muslin proof with A-F-G-E-D-B-C-H-A comprising the one half of the collar cut on fold at center back.

Variation of Active Sports Collar

This variation of the regulation convertible sports collar looks about the same as the previous collar except at the back, where, instead of closely fitting about the back of the neck, it has a tendency to stand away from the neck. It is a good feature in the cotton sports garments because it provides ventilation at that point, but, when this collar is worn beneath the tailored jacket, which is made to fit up closely at the back of the neck, then the collar wrinkles badly and appears ill fitted.

Note that the style line of this collar appears on a straight line while the previous design provided for a slight fitting curve. This shaping curve contributes to the good fit, but unless the garment is intended to be worn closed, it can be designed on a straight line if desired. This collar develops nicely when using the striped fabrics because the style line is straight.

1. A-B equals one half the bodice neckline measurement and is a guide line.



2. B-E is stand.

three times the desired amount of

3. A-C is a shallow sloping line which becomes the neckline of the finished collar.

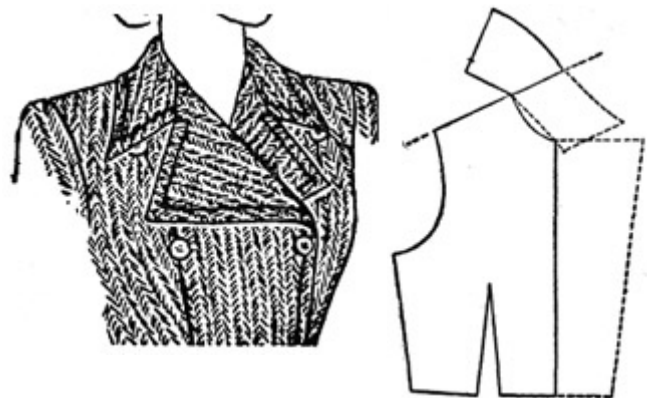
4. Broken line A-D represents the folding line in the fabric.

5. E-F is squared from B-E. It is a straight line. Connect points F and A.

6. Your finished collar pattern is represented by the area A-F-E-D-C-A. Line C-A is longer than the guide line B-A which was made equal to half the bodice neckline. Reduce the length of the collar through the center back to make A-C equal the line B-A.

Reefer Collar

This collar takes its name from its original use on sailor's top coats called "reefers." It is found on ski-suits, trench coats, slack suits et cetera which are designed for warmth or for their mannish appearance. The method used combines that used for making half roll and full roll collars.



Try your pattern with a collar four inches wide with a stand of one inch on a full size garment. When back section has been drafted, cut it out and complete design as for the full roll collar. The squared line from

center front is a guide line for making design for end of the collar. It may then be shaped as desired for the finished garment.

Note the compound curve at the shoulder point of collar. This permits it to adjust to curve of body. Center front of garment can be lowered as in active sports collar.

TAILORED SUIT COLLARS

The mannish-type tailored suit collar is so named because it is generally used for men's apparel. It resembles the convertible collar but it is not convertible and is not cut to be worn closed. When you have studied the method used to produce this type of collar, you will see that many styles may be designed upon that same basic method. The problems which follow this first explanation involve the repeated use of this basic procedure with varying proportions. The four basic points where variety is shown may be listed as follows:



- 1. The height of the closing which establishes break of rever.**
- 2. The width and shape of the rever portions.**
- 3. The height of the notch.**
- 4. The shape of the collar portion.**

When we stop to consider that the majority of men's coat styles are dependent upon these varied points of collar design, we can appreciate that some designs for tailored suit collars will be becoming to certain women while others will be suited to some other women. A mature dignified appearing garment can be produced or a snappy, impudent appearance can be produced.

Many methods have been worked out for producing this collar in men's tailoring work. Exhaustive tests were made by students in class sessions and as a result, the method given here was produced. The method was then tested with many varying heights of the closing, heights of stand, widths of revers and heights of the notch. It then became apparent that this method might be accepted as being adaptable for designing women's garments. Very few women's garments are "man-tailored" and it was necessary to work out a

method which would produce a neat, smartly fitted tailored suit collar which could be made of soft fabrics. The finished garment depends upon final construction.

Although the following examples afford an opportunity for you to create many designs from this basic method, to complete this study, you should clip many examples of the tailored suit collars. You will find that fashion in certain years will favor the high closing, for instance, with rounded lapels.

Another year the notches may be open and the next year they may be closed. In a like manner, fashions for men change from year to year, yet these changes are all based upon the use of the same collar.

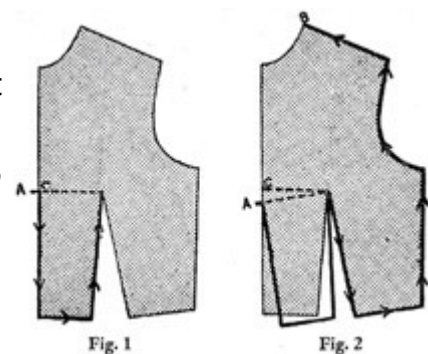
The Single Breasted Type with Medium Closing

The proportions given for making the draft for this collar are based upon a normal size 14 figure.

In each of the following problems, a suggested height of the stand has been given. These dimensions produced what the writer considered the most pleasing muslin for the height of the closing. In manufacturing plants, such dimensions are more or less standardized at between 1 inch to 1 1/2 inches. When using these instructions to produce a pattern for individuals, the length of the neck should be considered and stand of the collar changed accordingly.

The accompanying sketch shows an average garment having the tailored suit collar. The height of closing, width of revers, position of notch and the height of stand are average. Therefore it would be a style suited to mass production.

Experiment in our resident classrooms proved that, to produce a well fitting collar of this type, best results were obtained in most of the styles, *if a portion of the basic bodice control was thrown to the center front.* This results in length being added from the shoulder neck point B and the center front point A. (Figs. 1 & 2.)



It is necessary that you know just how much

additional length will result from pivoting some of the control to the center front as the darts vary in size in different personal blocks. Figs. 1 and 2 show how this may be done.

1. Square a horizontal line from the center front of your waistline sloper over to the point of the bust. Label this point C.

2. Starting from point C, trace around the sloper to the point of the dart, as shown by the arrows in Fig. 1. Keeping the sloper firmly in position, label your starting point on your draft as point A.

3. Place your pencil in the dart point and pivot the sloper to the left as shown in Fig. 2, until point C on the sloper is the desired distance (the desired extra length being added for the type of collar being drafted) from point A on your draft. With your sloper held in position, complete the tracing up to shoulder neck point B.

NOTE: It is only necessary to trace the sloper to point B and it does leave the area between points A and B unhampered with unnecessary lines.

Read Each Step Carefully

1. Trace around front bodice sloper, from A to B, pivoting one inch into the center front. (See above instructions.) This amount can vary.

2. Establish height of closing two inches below bust line. Add one and one-half inches lap. Label point C.

3. Extend shoulder line from B three-fourths inch to locate point D. (This amount standard in all sizes.)

4. Draw folding line C-D. Extend this line from D a distance equal to one-half back neck measurement plus 1/4 inch. Label point E. (This added fraction should be doubled when making double breasted styles.)

5. Square the line E-F from line D-E. It is one-half inch long. Connect F and D.

6. Line F-G is squared from line F-D. It is one and one-fourth inch long or *the desired stand*. Label G.

7. The line G-H is squared from G and is one-fourth inch long in all standard sizes. Label point H.

8. Connect points F and H. Extend line H-F through F, a distance equal to the collar stand (F-G) plus one-half inch. Label point I. This is the width of the collar at the center back.

9. Fold pattern paper under on *folding line* C-D. Sketch in desired shape of collar and lapel upon front bodice section using proportions shown in your sketch for a basis. Locate point J, temporarily, on the folding line.

10. Trace these lines through with your wheel and then open paper flat. With blue pencil, trace over the perforated lines so you may clearly see the shape of the pattern as it appears at this stage.

11. The shape of the line H-B will vary with different styles. In this case, it is a shallow curved line. Start to form this line by squaring a distance of one and one-half inches from H and then, with the aid of your curve, connect the line with point B. In some designs, a straight, squared line from H might connect with B. In other types of closings, it may appear as a reverse curve. However, in any case, always start the line by squaring a short distance from H so your pattern for center back collar won't have a point.

12. In order to give a pleasing appearance when the garment is being worn, the line J-K should have the appearance of being practically straight. It should extend smoothly through point J. Lay your curve from KK to B, using the straight arm. If point J does not fall exactly on the line, that is not important as the neckline of this type of collar is not fixed, as in the convertible type, but is actually part of the design. KK-J-B should be a continuous sweeping line.

13. The next step is to complete the style line of the collar. When you sketched in your design in step #9, you traced the design for the ends which would appear as a part of the notched design lying upon the chest when garment is worn. That portion is labeled J-KK-MM-OO. The remaining style line of the rest of the collar must be dependent upon the first sketched lines made in step #9. Square a line from center back line I-F a distance of one inch and label that point Q. Connect points I-Q-OO-MM with a shallow compound curve.

14. The collar being cut double, the under section usually is cut on the bias with a shaped seam which aids in making the upper collar hug the back of the neck closely. The revers are cut in one with the bodice and have a facing which extends out to the dotted line N-P.

NOTE: Although, to avoid confusion in the diagram, notches were not placed in Fig. 3, they should be recorded before following tracings are made of the various sections. A cross sectional line across the line J-KK with the tracing wheel will establish position of the notch which may then be made in the usual manner in the final pattern.



15. On another piece of pattern paper, trace off the pattern for facing: B-Q-N-P-C-LL-KK-J-B.

16. As your upper, or outside collar portion will be attached to the facing, trace this section off next: MM-KK-J-B-H-F-I-Q-OCHMM. Establish grain parallel to center back of collar and indicate with three circles for a fold.

17. Trace off pattern for bodice front: C-LL-KK-J-B-O-N around armhole and bodice to C.

18. Trace off pattern for half of under collar: MM-KK-J-B-H-G-F-I-Q-OO-MM. Note the shaped center back which provides for use of a seam. Also note that the neckline of the collar facing is larger than the upper collar. This is necessary when the heavy woolen is used for lining and is not turned under but "cat-stitched" over the neck seam of garment as in men's suit coats. When making a silk weight jacket, the under collar is made identical to upper collar. In this problem, cut the upper and lower pattern sections to study their usefulness.

19. Provide normal seam allowances to all edges except the collar and revers edges and edge of facing. These may be smaller because there is little strain on them. Retain your draft and complete your muslin as instructed on the following page. To get a good test, baste sections together instead of pinning them.

ASSEMBLING CONVERTIBLE AND TAILORED SUIT COLLARS

The proper method for assembling the convertible style collar, or the tailored suit notched collar, is simple. However, because so few of our resident students were familiar with the method, it was believed advisable to include these instructions in this text.

It is not practical to attempt to assemble the Muslin by the pinning method, so a basting stitch should be used instead.

1. If the under collar has been planned to have a seam at the center back, sew these two sections together. (Fig. 1.)

2. Sew shoulder seams of bodice. (Fig. 2.)

3. Sew shoulder seams of facing sections together. (Fig. 3.) (When no back facing is used, the collar would be attached to the front portions of the facings.)

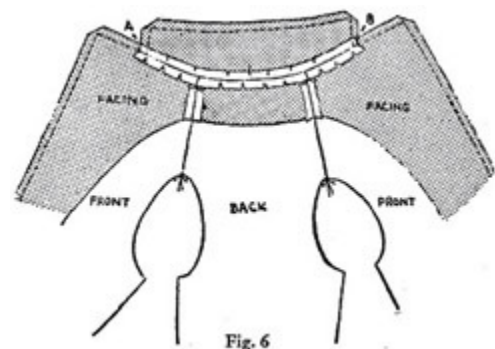
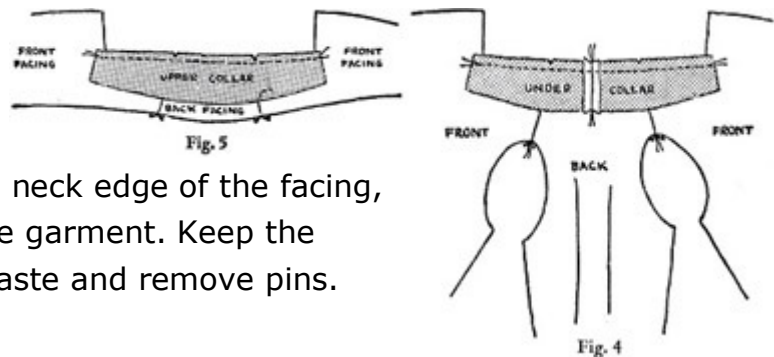
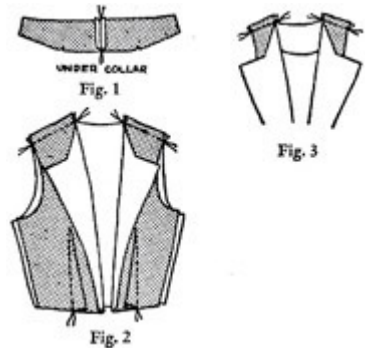
4. Starting from the center back, pin the neck edge of the upper collar to the neck edge of the facing, working toward the front of the garment. Keep the material flat upon the table. Baste and remove pins. (Fig. 5.)

5. Sew neckline of the under collar to neckline of the bodice, working in the same manner. (Fig. 4.) In tailored wool suits, this step would be eliminated. (Examine a man's coat collar.)

6. Flatten and snip raw edges of seams on both sections just assembled.

7. Lay facing against bodice section with the right sides of each lying against the right sides of the other. (Fig. 6.)

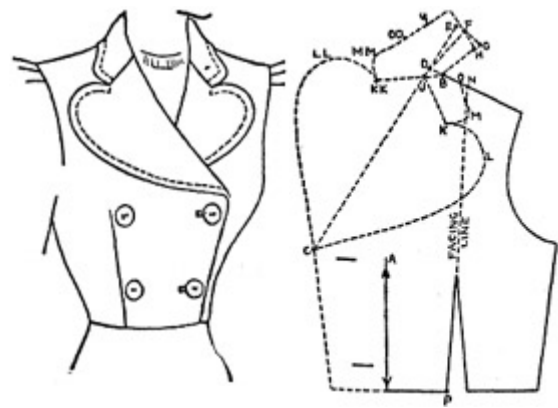
8. Starting at the center back of the collars, pin the outer edges of the collars and revers together, with the seams meeting



NOTE: Before drafting this design, turn back to [page 157](#); compare the two diagrams. Note that the high position of C swings the entire collar portion proportionately. Compare the two collars for style lines. Fundamentally, they employ the same drafting principle, but each change in the height of the closing, or in the width and shape of revers, causes the pattern for each of the following examples to change in shape. To become familiar with this phase of designing, many models should be made in muslin from original designs proportioned by yourself, or random sketches from fashion magazines. Through this drill, students soon memorize the steps of procedure and become adept in the use of this principle.

The Double Breasted Style

In a full size pattern, the following proportions produced a successful muslin. Note that, although the break is located on a level with the bust, the extra length shifted to the bust is only one-half inch. On a single breasted garment, it would be an inch. See set of proportions in summary on [page 163](#).



1. Shift one-half inch to folding line.

2. Plan full double breasted closing. Note that lap edge is not truly vertical.

3. Plan lap for use of button one and one-fourth inch in diameter.

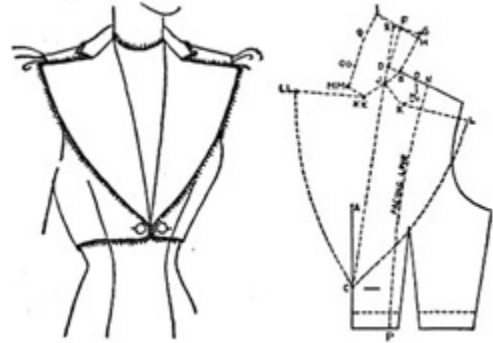
NOTE: Step 4 in your draft instructions makes special reference to the length of the line D-E when making a pattern for a double breasted garment. Use your curve when describing curved shape of the rever portions.

The amount to be added to the folding line through shifting of control will vary greatly with individuals. Tailors take a "guide measurement" from the center back of the neck down to the desired level of the break. Then the tape line is extended to the waist to establish exact height of point C on pattern. This permits checking to insure that sufficient length has been pivoted into center

front before a muslin is made. It is difficult to so alter the muslin afterward. *Make the folding line a bit too long rather than too short.*

The Single Breasted Type with Low Closing

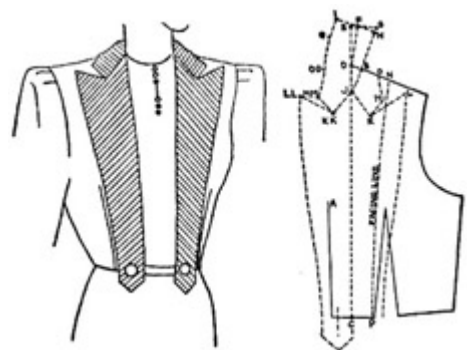
The sketch for this design suggests a low stand used at the back. Compare it with the sketches shown on the two previous designs. Also note that the break of the rever is located just above the waistline, which forms an extra long folding line. The following proportions produced a pleasing result in muslin when the pattern was drafted from the sketch.



- 1. Plan the collar stand at only three-fourths of an inch.**
- 2. Because the folding line is extra long, shift the control to lengthen it one and one-fourth inches.**
- 3. Plan the button to be one inch in diameter.**
- 4. Use normal one-fourth inch extension to make line D-E.**
- 5. Plan wide, generous revers which extend beyond the armscye of the garment as shown in the sketch. Note the horizontal line of the top edge of the revers. This will give the finished garment a youthful appearance despite the deep V closing. If the same low closing were used, with narrow revers, the garment would appear mature.**

Tuxedo Closing

Observe that this design provides for the open or "Tuxedo" style of front which eliminates the usual V-shaped neckline. This will mean a few minor changes in the method used in the previous designs. The following proportions were used to produce a pleasing garment.

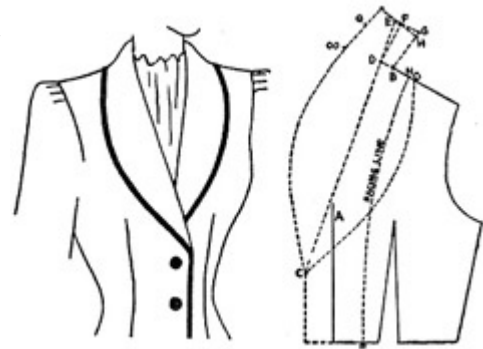


- 1. Make stand of the collar one and one-fourth inches.**
- 2. The Tuxedo style front eliminates the need for shifting extra length into center front.**
- 3. Plan the tuxedo points wide enough to accommodate a button one and one-half inches wide.**
- 4. Step 4 in your drafting instructions doubles the amount added to the line D-E when making a double breasted closing. In this style, that rule would be reversed and only one half the amount would be added or *one-eighth* inch. Upper and lower collars could be made identical as for a wash garment.**

The area used for the tabs would be built on the rever section as they extend down below normal waistline.

The Single Breasted Type with Shawl Collar

It is possible to cut a shawl collar on the principle of the tailored suit collar such as illustrated here. The proportions given were found suitable for a size 16 garment.



- 1. Make the stand of the collar one inch.**
- 2. Plan the break of the rever at two inches below bust level**
- 3. Increase length of folding line one inch by shifting control to center front.**
- 4. Follow drafting instructions given for tailored suit collar except that point J is eliminated.**

This produces a garment which has the collar cut in one with the bodice front and the shaped seam at the center back. Although in this simple form, it appears mature, many interesting designs may be produced from this method. When used for house coats, bathrobes and evening coats designed for a double

breasted closing the same rules which apply to the double breasted tailored notch collars would be used to make this collar.

SUMMARY

After drafting this series of varied tailored suit collars, you have probably become aware that variations, aside from the size and the shape of the collar, occur in the two basic steps given below. The following proportions represent the findings of the instructors and students who spent many hours in comparative study by drafting a great variety of designs. This chart may serve as a guide for you.

Establishing Length of Line D-E: varies with style of closing or degree of lap used:

Single Breasted: Line D-E equals one-half back neck measurement *plus one-fourth inch*.

Double Breasted: Line D-E equals one-half back neck measurement *plus one-half inch*.

Tuxedo Closing: Line D-E equals one-half back neck measurement *plus one-eighth inch*.

Lengthening Folding Line by Shifting Control to Center Front: varies with height of break of rever—also with postures of individuals.

At bust level: Shift control to increase folding line *three-fourths inch*.

One to three inches above: Shift control to increase folding line *one-fourth inch*.

Two inches below bust: Shift control to increase folding line *one inch*.

Waistline closings: Shift control to increase folding line *one and one-fourth inches and up*.

Tuxedo style closings: No extra length required at folding line.

Extra high chest closings: No extra length required.

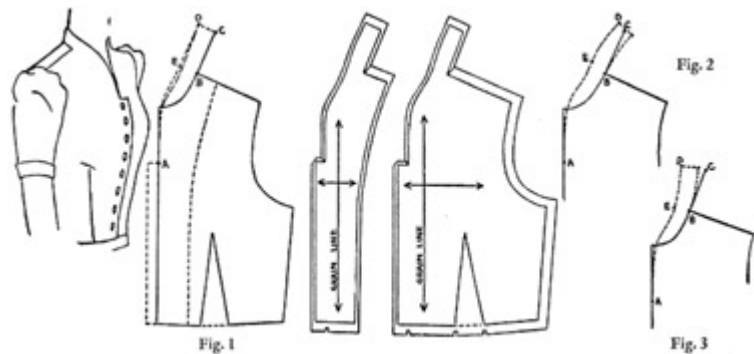
Double Breasted styles: At the above mentioned levels, shift control only *half* that normally required for single breasted closing.

When Cutting Collars Involving the Use of Thick Fabrics: sometimes the outer edge of the collar has a tendency to curl. If the width of the finished pattern for the upper collar is widened from one quarter to one eighth inch at the neck edge, throughout the area which provides a stand, this will correct this difficulty. The thicker the fabric being used, the greater the need for the increase.

Raised Necklines

The raised neckline is a favorite with designers because it may be used as a substitute for the plain flat collarless neckline which is not so flattering to some women.

The proportions given below will produce a nicely fitting neckline for standard sizes providing for normal head carriage. (Fig. 1)



- 1. Establish the height of closing three inches above bust level.**
- 2. B-C is equal to one half back neck measurement and is squared from the shoulder line B.**
- 3. D-C represents the stand and is one inch long, squared from point C.**
- 4. From D, square a guide line equal to one half the back neck measurement. Label E.**
- 5. The line D-A should be a compound curve. It appears straight when garment is worn.**
- 6. The standing neck band is cut in one with the bodice. Provide seams as shown in diagrams of final patterns.**

NOTE: Because this design called for a high closing, no control was shifted to lengthen the edge of the new neckline which is relative to the folding line on

tailored suit collars you have just been studying. When designing this style of neckline with a low closing, first shift control in accordance with the summary on the previous page.

When cutting this pattern for one having an *erect head carriage*, this draft should be corrected slightly to give extra length at the top edge of the neck band. When draft has been made, locate point C in the manner shown in upper diagram. Move C one fourth inch and then you will have a slight flare from E to D. (Fig. 2)

Likewise, when cutting this style of collar for a woman who carries her head *somewhat forward*, the opposite type of curve would be needed to keep the collar from gaping awkwardly at the upper edge. In such cases, swing point C over one fourth inch in the opposite direction and complete in usual manner. Note how this produces a curved collar of the opposite type. (Fig. 3)

If you look for them, you will find many interesting uses for this neckline in conjunction with other portions of the design for dresses and coats. It is worked into yoke as well as plain styles.

Collarless Necklines

The plain, collarless neckline is the most difficult for most women to wear as its unrelieved line provides little more than a frame for the neck and throat. The addition of trimming, small revers, or a collar which has an interesting style line, will prove more flattering to most women. Therefore, when planning to use such a simple neckline, great care must be taken to give it pleasing proportions which are

suited to the face, neck and size of the wearer.

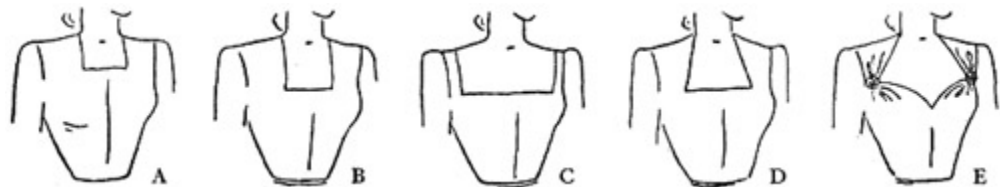


Fig. A

illustrates a square neckline of uninteresting proportions. It is neither high nor low and its monotonous proportions do nothing to flatter the wearer. Fig. B shows the same neckline lowered to form a rectangle. Note that this change will have an effect in slenderizing the neck of the wearer. Fig. C shows the broad, squared neckline. As the edge is outside the area of the head and neck, it

requires perfection of neck and shoulders to be worn. If used for a customer having a broad neck and square shoulders, it will reveal and emphasize her physical type. Fig. D is a pleasing variation of the square neck. Its broad base is flattering. Fig. E shows the straight lines curved to give a still softer effect. The drapery and clips invite attention away from the throat.



Fig. F shows a badly proportioned round neck which is monotonous and which does nothing for the wearer. It lacks character. Note the improvement shown in Fig. G when the line has been brought close to the neck at the sides and then lengthened to form an oval. It is a good plan, when fitting a muslin foundation pattern to a customer, to experiment with a string of beads and then trace in the best type of oval neckline for her.

The "bateau" or boat neckline shown in Fig. H is not suited to many women. It broadens the shoulders and will seem to shorten the neck. Therefore, it should not be used by stout, plump women.

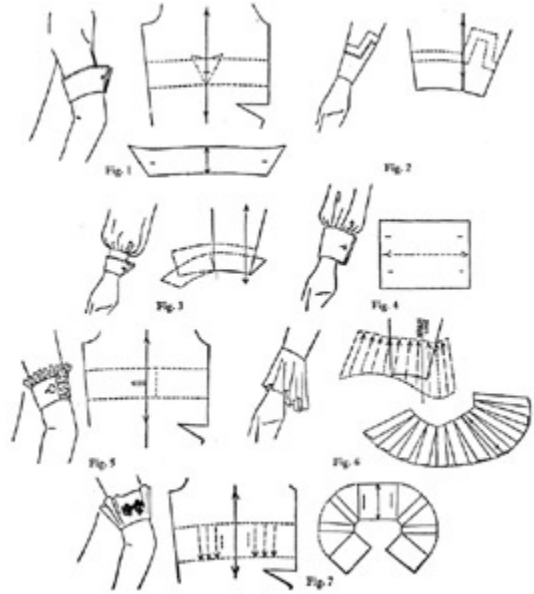
Fig. I exposes both neck and shoulders, like C, and may be worn only by women who have exceptionally beautiful throats. For that reason, it does not appear in many evening dresses found in stores.

When planning the V shaped neckline, be sure that the line is straight and clean. The narrow shaped V neckline is sophisticated and flattering to the greater percentage of women. Therefore, it seems to remain in the fashion picture year after year. It has dignity and creates an emotional, dramatic feeling when used in evening dresses, hostess gowns and semi-formal apparel. When additional drapery is added, as shown in Fig. J, with a focal point of interest appearing at the point of the neckline, such as a bow, or jeweled clip, it is most pleasing to the young matron or dowager.

Carefully study examples of collarless necklines. Clip those which show careful planning. It will help you to appreciate the work of a good designer.

Cuffs

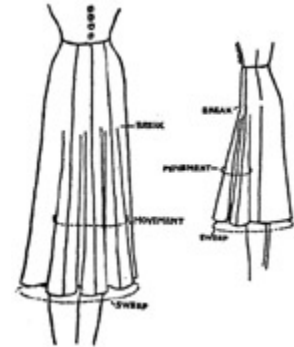
On this page are illustrated a few basic types of cuffs, with the diagrams which give the method which might be used for cutting each. They are not presented as a problem, but as a basis for analysis of representative styles. It is hoped that they will be a guide for you to develop a method for cutting original designs which you may wish to make from time to time. Note that the same principles are used for introduction of fullness as has been used in previous problems in pattern making.



Chapter 8—Skirts

You may select a topic from this lesson

The methods used for cutting skirts are being presented at this point, because after having studied cutting principles applying to other portions of the garment, you will have acquired a deep appreciation of the artistry required to produce a pattern for a well hung skirt.



The skirt is the portion of the garment which is essentially physical in character. It covers the hips and limbs of the wearer. Emphasis placed upon certain areas will give the woman a sexy appearance. In some cases, this might be deliberate intent on the part of the designer, but when it has been done unintentionally, and the garment is worn by the wrong type of woman, the results are disappointing.

The garment which has a flattering skirt will be the favorite in any woman's wardrobe. Unfortunately, many women's figures are such that there is a great need for flattering the hips and limbs and a well designed skirt will sell the rest of the garment to the customer. Every woman secretly yearns for beauty of limb more than beauty of face. Hence, if you would become known for your talent as a designer, learn to cut shapely, flattering skirts and your future will be assured!

The silhouette and the length of the skirt is a vital point in changing styles. It has been widely said that the skirt will "date" the garment. It must be proportioned to suit the size of the wearer and the height of the hemline. It must be designed as a unit. It is therefore a dangerous procedure to merely shorten a skirt three inches in an attempt to bring a dress into current style.

A few professional terms describe skirt features:

1. *Sweep*: is used to describe the width at the hemline.
2. *Movement*: refers to the fullness or the bulk of the silhouette.
3. *Break*: is the point where the fitted area of the skirt breaks away from the body into movement.

Because the skirt is suspended from the waistline and falls naturally from some given point, a well hung skirt is the result of the proper placing of the grain of the fabric. If this is not carefully planned, it may sag or pucker at the seams or twist on the body. When the pattern is being designed, the texture of the fabric must be taken into consideration in planning the degree of movement and sweep. A skirt designed to be used for a tweed fabric would appear skimpy when used for light weight silk or chiffon.

When one says, "The skirt has good lines," he means to say that it has a pleasingly balanced silhouette, the break being well placed for the length of the skirt and the amount of movement. The seams within that silhouette are also pleasingly spaced to create the impression of a perfectly proportioned woman. It must be equally attractive whether the figure is standing or in motion. A well fitted skirt will not cause wrinkles to appear through excessive fitting in any one area. The flattering skirt will veil the bad proportions of the wearer and reveal the good ones to a modest degree. It will be smoothly fitted, but it will at no time appear to hamper freedom of movement.

How to Take Measurements Correctly

The measurements needed to draft a skirt sloper would normally be recorded at the time measurements would be taken for the bodice and sleeves. As some of the bodice measurements are common to the skirt draft, turn back to your basic measurements to ascertain the following:

- Number 11. *Front Waistline Measurement*
- Number 11. *Back Waistline Measurement*
- Number 13. *Shoulder Blade Width (back only)*
- Number 14. *Front Hip Measurement*
- Number 14. *Back Hip Measurement*

Take these length measurements from waistline tape to floor:

- *Front Center Skirt Length Measurement*
- *Side Skirt Measurement*
- *Back Center Skirt Measurement*



The method used for taking these last three length measurements is shown in Fig. 1. On the normal size 14 slopers used in manufacturing plants usually the back length is made one half inch longer than the front length measurement. It is assumed that the posture is ideal which provides for a true horizontal waistline and the difference in length is due to the additional length caused by the curve at the back hips. The side length measurement is made equal to the back length measurement. The front section of the skirt would be curved downward at the waistline towards the center front to a point one half inch downward.

These proportions would vary in patterns used for larger size garments. Manufacturers of specially sized "stouts" use special slopers which provide for abnormal deposits of flesh and imperfect posture. It is interesting to know that most irregular size, stout women would not have abnormal flesh distribution if good posture had been maintained!

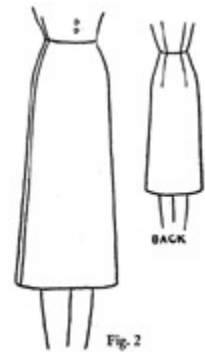
The vertical skirt length measurement to the floor is a permanent record. As the fashion changes the heights of the skirt hems change. It is also convenient to have the full length measurement in case one has occasion to cut a full length garment. Naturally, when fitting slopers to individuals, the measurements would be taken directly from the individual and the proportions might differ somewhat from the standard figure of that height.

You will recall, when you were experimenting with various hip length bodice patterns, you found that the jacket which had a center back seam, with accompanying darts, produced a close fitting jacket. When the center back seam was eliminated for a fold of the fabric, a semi-fitted garment resulted. This skirt pattern is intended to be worn separately or as the *attached* skirt to a bodice for a dress. It is not an extension of the hip-length bodice pattern. Such an extension would be used to produce a *vertically fitted garment* having no waistline. Such designs are presented later in this text. The simple, basic

skirt sloper should be cut on the fold at the front and back centers and the back darts provide the control of the shaping through the back hip area. The shaped side seams aid in fitting the side hip area.

Drafting the Two-Pieced Skirt Sloper

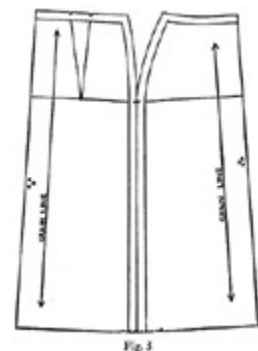
Fig. 2 illustrates the simple skirt sloper which forms the basis for a wide variety of dress and suit skirts. It is seldom used as a skirt pattern in this simple form. When it is, usually extra inverted pleats are added in at least one side seam to provide ample walking room.



Your finished draft will provide a *minimum* of walking room needed for a slender figure. Larger size women need walking room distributed around the skirt and therefore this style would not be suitable for such individuals as it would mean adding all the required walking room at the two *side* seams and that would result in an ugly silhouette.

The basic hip darts extending from the waistline to the hip in the back are basic control darts. Note that they are slightly tilted outward at the hip. This conforms to the natural contour of the feminine body. Further comment will be made as to the possibilities of changing the position of the darts when designing for certain proportioned individuals. These darts are needed to give a smooth fit to the back hips when a skirt has a straight silhouette. They *control* the fabric over the *back* hips.

In Fig. 3 on this page, note that the side seams provide the fitting for the *side* hip curve. Also note that the side seam of the front section is more curved than the back. This is caused by the fact that the ideal figure has a straight silhouette at the front and the curve of the hip starts at each side. Certain

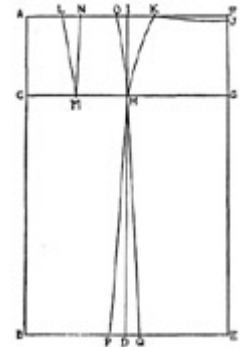


types of figures require some control in the front. In later lessons you will observe how the curve of the side seam may be lessened when darts are used.

Read Each Step Carefully

All measurements given here are for an average size 14 figure. See chart on [page 59](#).

A-B—Draw the vertical line A-B equal in length to *Back Skirt Length*. (Determined by subtracting height of desired hemline from full length measurement.)



A-C—From point A, on line A-B measure downward a distance equal to *Hip Depth*. (In standard sizes placed at seven inches but with individuals, it may vary from 6 to 10 inches.) Label point C.

B-D—From the line A-B, square a line to the right, equal to one half the *Back Hip Measurement*. Label point D.

D-E—Extend the line B-D an amount equal to one half *Front Hip Measurement*. Label E.

E-F—From the line B-E, square a line upward which is equal to line A-B. Label F.

A-F—Connect points A and F with a straight line. Line A-F must equal B-E.

F-G—This line equals the line A-C. Connect points G and C.

D-H-I—Square a line upward from point D to intersect the line C-G. Mark point of intersection H. Extend this line to intersect with line A-F. Label point I.

F-J—The area between points F and J equals the difference between the *Center Front Skirt Measurement* and the *Center Back Skirt Measurement*. Label point J.

(Occasionally, in certain individuals, these measurements are the same. In such cases, eliminate location of point J.)

J-K—From point J, measure off a distance on the line F-I equal to half the *Front Waist Measurement*. Label point K. With the aid of your curve draw lines J-K and K-H.

A-L—From point A, on line A-I, measure off a distance equal to half *Back Shoulder Blade Width* less one-half inch. Label L.

C-M—From point C, measure off distance on the line C-H equal to the line A-L plus one inch.

Subtract half *Back Waist Measurement* from the length of line A-L. Cut small strip of paper equal to this difference. Fold strip into three equal parts.

L-N—From point L on line L-I, measure off a distance equal to two-thirds of the strip of paper and label point N. Connect points L and N with point M to form back hip dart.

I-O—From point I on line I-N, measure off a distance equal to the remaining unused third of strip of paper. Label point O. Use curve to connect points O and H.

D-P—From point D on the line D-B, measure off one and one-half inches and mark point P, (to provide minimum walking room in side seam).

D-Q—From point D, on the line D-E, measure off a distance of one and one-half inches and mark point Q. (This adds an equal amount of walking room to back section on each side.)

NOTE: Because line K-H is more intensely curved than O-H, it should be shortened at K to make two lines of equal length.

Slip another piece of paper beneath your draft and trace off the pattern for the back section as follows: A-C-B-P-D-Q-H-O-N-M-L-A. Also trace the position of the hip line OM-H. Mark point D to show position of a notch.

Slip another piece of paper beneath your draft and trace off the front section as follows: J-G-E-Q-D-P-H-K-J. Trace in position of hip line G-H. Mark D for a notch.

Allow normal construction seams at side and waistline. *In all your skirt muslins, no seam allowances need be added to the lower edge.*

Place notches and punch hole to show back dart.

Place grain lines at right angles to hip line.

Place notches to indicate position of point D on each section.

Lay finished patterns together as shown in [Fig. 3, page 169](#). Remove the point at the hemline (dotted lines) to produce a continuous, shallow curve.

Produce your muslin proof, leaving ample seam allowance at side seams. Model forms vary and your finished sloper should provide same walking room provided for in lower portion of model form. When muslin has been approved, make cardboard slopers from pattern.

In the instructions given you to make the draft, the rectangle was first established, based upon the hip measurements of the back and the front. The back hip dart was established as two-thirds of the difference between the back hip measurement and the back waist measurement. The remaining third of the difference was left to shape the fabric at the side seam. This proportion is that found pleasing for the average woman. When you make such a draft for an individual, the muslin pattern proof can be assembled without cutting away the areas at the side seam and then with the muslin on

the individual, the distribution of this tapering to meet the waistline can be manipulated according to the actual shape of the figure of the customer.

It was mentioned that the basic skirt sloper is seldom used in its simple form as a pattern for a skirt. The reason for this is obvious if we will stop to reflect that the motion of the limbs when walking is forward and backward. Hence, the perfectly plain front, which provides no actual means for the movement of the limbs, would have a tendency to wrinkle across the abdomen when the figure is in motion. The additional "walking room" added at the side seam helps a little, but it isn't actually needed at that point, but is needed in the front of the skirt instead.

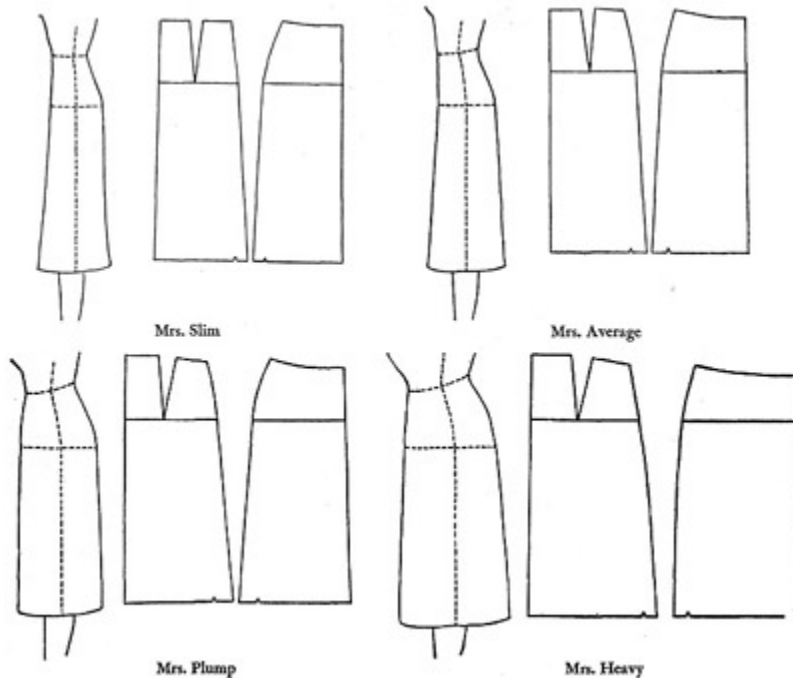
If you will study your skirt pattern, you will notice that the front was fitted in one place only— at the side seam, yet, in fact, most women have a slight curve caused by the abdomen. Hence, should your customer have such a figure shape, you might adjust the muslin on her figure to provide a little dart about half way between the center front and the side seam. This would then reduce the amount of shaping that would be provided at the side seam and would *distribute* the fit more accurately.

Hence, if you wished to produce a "perfectly plain" skirt pattern and the individual being fitted had a pronounced curve at K-H, you would establish a small dart in the side front between J and I in the draft and then the distance from K to I would be established in the same manner that point O on the back section was established. Such a dart, if folded out in the pattern and a slash is made from the hemline to the dart point to effect shifting fullness to the hemline, would be referred to as a "working dart." It serves a functional use in changing the shape of the pattern for a functional reason. The resulting "perfectly plain" skirt pattern would have just a little more room at the hemline in the front than the basic sloper would have and would be more attractive on the figure.

The sloper, as it now is, then, is a diagram or pattern of the measurements of the individual to whom it has been fitted. The notches placed at the common point D on each section will indicate to you where the "walking room" area starts. Some patterns include the use of the walking room. Other patterns eliminate the need for it by throwing the movement to the back and front entirely.

Analysis of Individual Skirt Slopers

The above diagrams show the gradual changes which



appear in patterns for increasing figure proportions. In these illustrations, the lines across the hip show the position of the grain of the fabric, which, in most cases, is not visible. Only in rare cases, when a fabric which has a pronounced stripe might be used crosswise, would the grain line be apparent. And, by looking at the illustration of Mrs. Heavy, you can readily imagine how unsuitable such a skirt would be for her. However, it might be used for Mrs. Slim who has a straight waistline and hip line.

The hipline is the point from which the skirt is hung. With the various figures, the pattern shows more fabric above the hipline at the back while the front section shortens a proportionate amount.

The side seams of the skirt may be adjusted as desired to suit the natural contour of the figure being fitted. Mrs. Slim, being erect in posture and carriage, requires a hip side seam which is practically perpendicular. As the figures grow heavier, the side seam is gently curved to conform to the natural contour of the figure. In cases where the individual has an excessively bad posture, the curve would be limited slightly rather than permit it to repeat the excessively bad posture line at the back.

It is *technically* possible to cut and fit many styles of skirts to certain types of figures; but, when the muslin is completed, it becomes obvious that, despite the fact that the skirt has been fitted, it is not suited to the individual. Therefore, you will soon learn that every individual has certain proportions which are flattered most advantageously through only a certain few styles of skirts and a certain few silhouettes.

Illustrated herewith are two common types of bad posture which require major alterations in ready-to-wear skirts. To correct the fit of a standard size skirt for an extreme example of such posture would require ripping the skirt apart and re-hanging it entirely. When the case is moderate, the fit may be corrected somewhat, but these women should have their clothes specially made for them whenever possible.

Fig. 1 probably has rounded shoulders and the resulting "question mark" silhouette thrusts the abdomen and hip bones forward and destroys the natural curve of the back hips. In fact, her silhouette is about opposite to what it should be. The position of her hip level will be lower than normal.

Fig. 1 shows her wearing a standard size garment. Notice how the curve of her abdomen lifts the hemline and pulls the side seam forward. In extreme cases, this will cause the side seams of the skirt to ripple. The back section of the skirt is completely thrown out of line because of what



has happened to the front section. Because she does not have the normal curve at the back hips provided in the standard garment, it will bulge at the back and probably dip at the hemline. It may wrinkle near the waistline also.

Fig. 2 shows a sloper fitted to this same woman. The grain line is established at the level of her hips. To accommodate the curve of her abdomen and front hip bones, a small dart is placed at each side of the front. The side seam is hung as straight as possible and the waistline is dropped at the front slightly to hide her bad posture.

When making a skirt of wool fabric, the extra front dart area may be eased into the waistband and then steamed out over a curved cushion. When designing gored skirts for her, this shaping provided by the dart may be hidden in the seams. But that shaping must be provided to achieve a properly hung skirt which will hide her physical defects.

Fig. 3 shows the example of the opposite in bad posture. This is not common to large women only. If you will study girls of high school age, you will see too many who carry themselves in this manner, thinking, in so doing, they are standing "straight." Note what happens to the fit of the standard size garment when worn by such a figure. Because her back hips are thrust outward, this lifts the back hemline and pulls the side seams backward. It then causes the front section to pull tightly just below the abdomen and wrinkles appear in the skirt after a few moments of wearing the garment. You can readily see that to properly hang this skirt, it must be ripped apart, lifted all around to provide sufficient width to the back section, and entirely re-hung.



Fig. 4 shows how her sloper should be fitted. To eliminate the wrinkling across the front the skirt should be suspended from the curve of her abdomen. Due to her posture the front

waist measurement will be larger than her back waist measurement. The back hips being large, the control darts at the back will be just that much larger. The waistline should be lifted slightly in the front, but a loose belt would have a tendency to drop at the front unless supported by being attached to the garment.

Lay your transparent ruler parallel to the center front and sketch in a straight line for the side seam. Note that, in order to reduce the evidence of her back hip width, it is advisable to shape the line of the side seam with a *slight curve*. Do not let it exactly follow the contour of the back of her body, because that would only emphasize that bad line. A *modified curve* is the best line to use in such a situation.

Obviously, even though adjusted, the straight skirt does not flatter such a figure. The vertical line of the muslin below the hips only intensifies the curve above. With your pencil, lightly sketch in a line on Fig. 4 to widen the back of the skirt from the hips to hemline. Her "plain skirt" should be made like the following tailored suit skirt pattern.

Drafting the Tailored Suit Skirt Pattern

At first glance, this skirt looks very much like one made from the basic skirt sloper. But the normal walking room added to the side seams has been shifted to the *center back* and the side seams have been moved forward slightly to give a slenderizing effect from a front view. It is a skirt popularly used to combine with tailored suit jackets which require a slim skirt from a front view to balance the slim lines of the jacket. It is not generally used as the skirt to complete a dress, because of the change of position of the side seams which would not conform to those established in the simple bodice. However, there is no reason why it could not be used, if the bodice is so designed as to require the use of an unattached skirt, as is the case in many evening gowns.

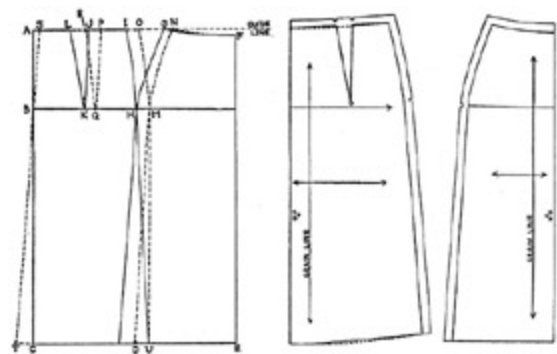


The draft is started by tracing around the back and front sections of the basic skirt sloper. (See diagram on following page.) The normal walking room is eliminated at the side by placing the notch at the hemline of the back sections upon the notch of the front section which has been traced. These seam allowances are shown by the solid lines extending from point H on the diagram. When tracing is completed, label all points from A to L as illustrated.

Dotted lines show procedure. The dimensions given below are suitable for a size 14 or 16 skirt.

M—Locate this point one inch to the right of point H.

N—Locate this point three-fourths inch from point G. (This straightens the curve of new side seam slightly and enlarges waistline one-fourth inch.)



M-N—Draw new front side seam N-M.

O—Place this point one inch from point I.

O-M—Draw the new back section side seam O-M.

P—Locate point P one inch to right of point J.

Q—Locate point Q one inch to right of point K. (This reduces size of normal back darts and moves them out slightly for better proportion.)

R—Locate point R one and one-half inches from point L. (This reduces size of back dart one-half inch.)

R-Q-P—Draw in new dart R-Q-P.

In locating point N, waistline was enlarged one-fourth inch.

In locating point R, you reduced width of the dart one-half inch.

S—Hence, locate point S three-fourths inch from point A.

T—Extend line from S through point B equal to original center back skirt length of original skirt sloper A-B-C. Note that the extra walking room appears between points T and C. Square hemline T-C from point T to C.

U—This point marks the normal amount of walking room which extended beyond the notch in tracing your back section.

M-U—Connect point U with the new side hip point M. This makes the dotted line O-M-U the side seam of the back section of your new draft.

M-D—The new front section side seam is established by connecting point M with point D. Line N-M-D becomes the new side seam of the front section.

On another piece of pattern paper, trace off the following front and back sections:

Front: E-F-N-M-D-E.

Back: T-B-S-R-Q-P-O-M-U-D-C-T.

Trace along perforated lines with blue pencil to observe shape of the new pattern when compared to basic sloper.

Establish grain from center back and center front edges of pattern. Note that, due to the extra sweep being centered at the back, skirt hem does not appear on a parallel with hip level.

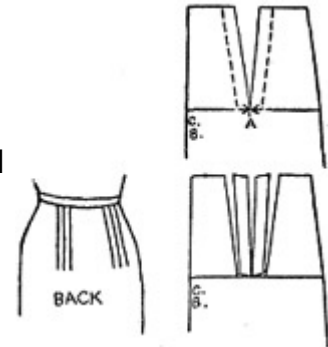
Complete pattern by adding symbols shown and produce the muslin proof for the entire skirt so you may notice the

resulting silhouette. Study it from every angle and compare it with muslin from a basic skirt sloper. If you have recorded grain lines at the hip, you will see the results if this pattern were to be used for pronounced plaids or stripes. It has its limitations as most patterns have.

Multiple Darts

When you design skirts for women having a large back hip measurement and a small back waist measurement, the back dart must necessarily be very large to provide the shaping for the pronounced curve. In such cases, it is

advisable to divide the basic control dart as was suggested in bodices. The method used would be just like that which you have previously studied in sleeves and bodices.



When striped fabrics are being used, dividing the control in this manner will also aid in concealing the control somewhat. The result will bring further emphasis upon the pattern of the fabric and will reduce the obvious appearance of the necessary darts required to shape the fabric to the badly proportioned figure.

Skirt Patterns Cut According to Fabric Width

The skirts included in this group are usually designed "according to the cloth." On some occasions, the fabric being too narrow to use lengthwise without seams, it may be used crosswise. Wholesale designers arrange position of pleats to aid in hiding the piecing seams when possible.

All of these skirts are based upon the methods used for making your basic sloper. The measurements which you took for that problem could be used for these. When a basic sloper has been fitted to an individual, it may serve as the basis for making any one of these skirts as it will give the information as to skirt length, front and back hip measurements and the best

position for the basic darts as well as the amount of drop to the front waistline.

Wrap-Around Skirt (Pencil Silhouette)

The hemline of the true wrap-around skirt equals the hip circumference. The little walking room is provided by the lap which is left open for expansion. This same type skirt is simulated, occasionally, with the minimum amount of expansion added at the side seams and the remaining expansion provided by the lap. The degree of lap is a matter of choice. More may be added to the under portion than on the upper portion, if desired.

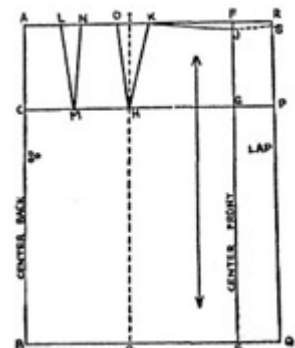


Obviously, this is not a skirt for the woman with heavy thighs and small hips. But it may be used successfully for the woman having heavy hips and tapering limbs, because her excessive hip measurement provides plenty of walking room in the lower portion of the skirt.

NOTE: All dress model forms, except those designed for bathing suit designers, are so shaped as to provide necessary walking room below hip level. For this reason, this type of skirt cannot be tested on a model form. Yet it may be successfully worn by an individual having suitable proportions.

1. Use pattern paper equal to desired skirt lengths *plus* 3 inches. It should be equal in width to half hip circumference plus desired amount of lap.

2. Follow previous instructions given for making basic skirt sloper but eliminate steps used to establish points P and Q. As there are no side seams in this skirt, no walking room will be added at that point.



3. To establish lap, extend lines A-F, C-G and B-E a distance equal to desired amount of lap. Connect points Q-P-R with straight vertical line.

4. Fold pattern paper on line F-E. Trace along line J-K. This establishes curve of waistline in lap portion.

5. Label pattern for fold in center back and vertical grain indicator squared from hip line. Allow normal seam at waistline. Edge of lap S-P-Q may be selvedge of fabric or it may have a hem.

6. Complete muslin proof. Trace in position of normal hipline and normal position of side line H-D so these blue lines will aid in judging results. *The hip-line and normal side seam position should always be traced into muslin proofs.*

Peasant Skirts

The "peasant" skirt is so called because it is so typical of that worn by the lower classes in Europe. It has reappeared in fashion again and again and the persistently popular "dirndl" of Swiss origin will be recognized as being merely a revival of the peasant skirt.



Though the skirt appears to be elementary as to cut, to meet the standard of good fit, it should be carefully cut to conform to the requirements that appear in a basic skirt sloper. Obviously, it is a skirt to be worn by the youthful slender figure as the closely fitted bodice reveals the actual size of the wearer and the exaggerated skirt provides a charming contrast.

The following diagram illustrates how a tracing is made from the basic skirt sloper in a similar manner to that used for the "wrap-around" skirt except that no lap is added.

This construction pattern is then divided into sections. Note that the front and back sections, which allow for a fold at that point, are just half the width of the remaining sections. Number the sections.



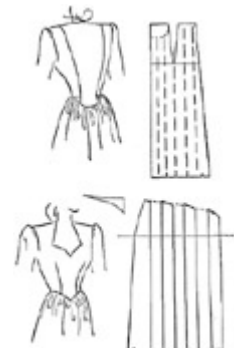
The back hip dart and side seam shaping are ignored. Hip level line is clearly marked. Also the position of the side seam.

On a new piece of final pattern paper, a horizontal guide line should be drawn. The construction pattern should be cut apart and the sections should be spread apart, as for balanced fullness, with the original hip level line resting squarely upon the guide line.

NOTE: Experiment has proved that, because the fabric of the skirt must be gathered into a closely fitted waistline, it is best to proportion the degree of fullness according to the waist measurement. A three to one proportion, which makes the new skirt waist measurement three times that of the basic skirt measurement is nice for average fabrics. There is no set rule, of course. Because the hip measurement on the sloper is larger than that of the waistline, this will make the finished skirt slightly less than three times the normal hip measurement.

Blend in the normal curve at the top of the skirt. Record the position of the normal side seam and the grain indicators should be at right angles to the guide line. Label back and front for fold of fabric. Cut skirt pattern apart on side seam line I-D and notch for assembling.

NOTE: 2 lengths of 39 inch fabric would provide a waist circumference of 78 inches. A person having a 26 inch waist measurement would need only two lengths of such fabric and the seams would be placed at the side. If a narrow fabric is being used, the position of the

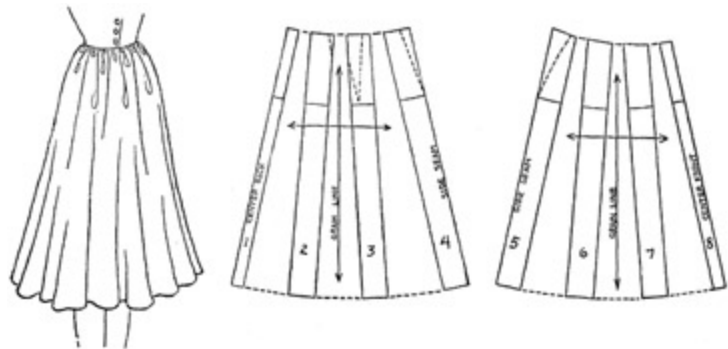


seams would be placed accordingly. When two and one half widths of fabric are used, usually the narrow section is used at the front, the two wider sections then meet at a seam in the center back.

When this skirt is being designed to attach to a bodice which has a shaped lower edge—a point at the front, or a dropped waistline at the back the construction pattern should first be shaped accordingly and then cut apart and spread in usual manner. See diagrams below.

Simulated Peasant Skirts

The true peasant skirt discussed previously obviously produces an oblong



silhouette which has a hemline equal to that gathered into the bodice at the waist. Hence, designers sometimes introduce a semblance of a circular sweep, thereby exaggerating the sweep at the hem and reducing the bulk in the area of the waistline. This makes the skirt more suitable to women of less slender measurements.

Again the proportion may vary with the fabric being used. If you are using a full length skirt sloper, then the width at the hemline should be increased to that used at the waistline to give the final silhouette a pleasing balance. For example: If the waistline measurement in the skirt will be double that provided in the sloper, the hemline should be four times that provided in the sloper. On short, daytime length skirts, the sweep at the hemline may be only three times that provided in the sloper.

The method for making the construction pattern is like that used for making the true peasant skirt. The diagram shows a three-to-one proportion of spreading the sections.

Usually such skirts are cut in four sections, with the grain of the fabric centered in each section. Occasionally, the center back and front are cut on a fold, but this throws the side seams on a more pronounced bias of the fabric and gives the skirt less balance. It will have a tendency to give a flat appearance to the front and back of the skirt when worn.

When experimenting with this skirt it is a good plan to mark the muslin on the grain into stripes and then observe the results.

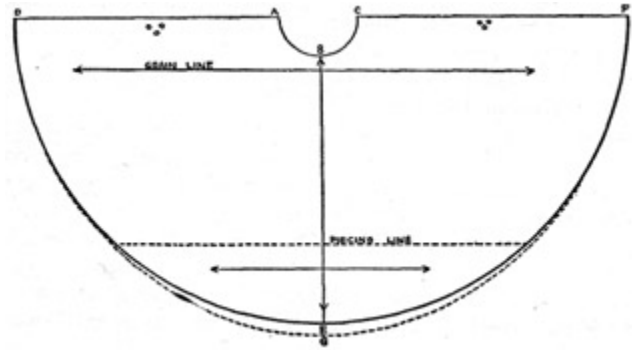
If desired, this skirt may have an increasing amount of gathers at the back, merely by spreading the sections more in that area. In such cases, notches should be carefully placed at the waistline to indicate the position of center front, side seams and center back so that gathers will be intensified as planned in the pattern. It is most successful in crisp fabrics.

Full Circular Skirts

The true circular skirt—cut on the basis of a circle—is not becoming to some women as it will necessarily increase the appearance of the wearer's hip measurement. For that reason, it is not found in average day-time dresses but is found more frequently in housecoats or evening gowns. It is the basis for many skating skirts as it is particularly flattering when the figure is in motion and is flattering to the exposed thighs in motion. Bouffant evening gowns of net, chiffon or tulle may be made of several circles.



The diagram shows how to plan a skirt on the basis of a single circle. A-B-C, the waistline, is a true half circle equal to half the waistline *less two inches*. By



cutting the waistline a little small, this makes allowance for the natural tendency of the fabric to stretch when final garment is assembled. A-D and C-F should equal the desired side skirt length. B-E is the center front skirt length. B-G is the back skirt length.

Note the dotted line showing position of piecing. Although the skirt might be pieced on D-A and C-F, usually designers prefer to place the piecing, carefully matched, down into the ripples of the skirt where it will be less obvious. Wherever possible, the piecing should be made with the grain, as if to widen the fabric.

The skating skirt, when made of more than one circle will ripple gracefully at the edge instead of assuming a disc-like silhouette when the figure is whirling rapidly. The plans for skirts involving more than one circle are as follows:

For a circle and a half: Divide the waist measurement, *less two inches*, into thirds. Use two thirds for the waistline of a complete circle and the remaining one third for the extra half circle.

For two full circles: Divide the waist measurement, *less two inches* into halves. Use one half for the basis for making a circular section. Make a duplicate pattern from that. Adjust front length in that area.

Full circular skirts are best planned on the basis of a circle or more, or a circle and a half. To introduce a third of a circle

of the fabric placed at the side seams and the center front seam (or fold) falling on a bias. When hung in this manner, the center front and back will have a tendency to sag slightly and thereby bring the fabric to that point. It will then ripple at the center front and back more intensely than at the sides and will be more slenderizing when worn. This is a popular skirt with manufacturers' designers, as it is so adaptable for many fabrics. It also adjusts nicely on figures of varying hip proportions.

The Simulated Circular Skirt

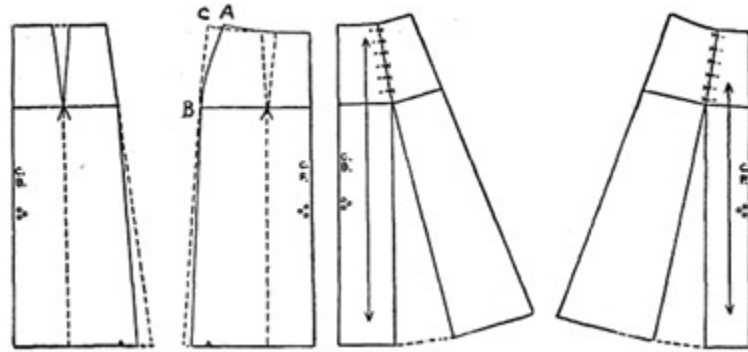
This simulated circular skirt produces a silhouette which is actually fitted down to the hip level and then the ripples break into a soft modified movement around the thighs, increasing in sweep to the hemline. To produce this pattern, a new method is used which introduces the use of a "working dart."



As illustrated here, it is shown as a two-pieced skirt with seams at the sides only. The center front and back of the skirt are on the straight, vertical grain of the fabric. But because the side seams are cut on a straight line, it would be possible to place the straight grain of the fabric at the sides and the side seam might even be eliminated entirely. This would throw the bias towards the *center front* seam and, like the semi-circular skirt previously discussed, the ripples would naturally shift to the center front and back position.

The accompanying diagram shows how the pattern is made from the basic skirt sloper pattern after it has been traced, *including* the normal walking room at the side seams. The problem is to so shape the pattern to provide for an *equal* distribution of the sweep around the skirt to simulate a circular skirt.

The dotted line from hemline to back basic dart indicates position of slash when dart has been



folded and pinned. This throws a flare at that point. By extending the side seam down in a straight line, additional flare is added at the side.

The side of the "working dart" in the front section may equal that of the back section, or be slightly smaller, which will lessen the degree of flare slightly. When the working dart has been established, the amount used for the dart is restored at the side seam to maintain the necessary waistline measurement. B-C must equal the original line B-A.

Cut out the construction pattern, fold and pin the darts permanently and slash from hemline to dart points. Make final pattern, placing grain at center front and back. Try out results in muslin and then try another muslin with pattern laid on straight grain at the side seams. Compare your results.

Multiple Gored Skirts

Gored skirts may provide a close fit to any desired point for establishing the break in a skirt. As the fashion changes, the level of the break may be raised or lowered but the proportion established through the vertical seams may remain the same. The principle of cutting remains the same.

When planning a gored skirt for an individual, great care should be taken in placing the panel seams. Additional top stitching of the seams will aid further in slenderizing the wearer. Because the limbs move forward and backward while the figure is in motion, more fullness is added to the sweep of

the front and back of the skirt than at the side. This is not noticeable when the skirt is on the figure and it may appear to have an equal distribution of movement throughout, but when the sides are widened to equal the movement at the back and front, they will appear to have a greater amount than the back and front. This silhouette is not a flattering one.

The amount of movement must be dependent upon the draping qualities of the fabric to be used. A winter weight tweed suit would appear bunglesome if the movement were to be the same as that used in a pattern for a light weight wool flannel. When you have made several skirts out of varying fabrics, you will soon know just about how much sweep the skirt can have for the texture of fabric. If you will clip out photographs of garments showing gored skirts, worn on the figure, you will learn much about the draping qualities of fabrics. Sort them according to the fabric and according to the amount of movement which appears.

One must remember that all gored skirts are actually hung from the hip-line. Shaping above and below that point may vary as desired. But usually, when the sections have been assembled, the silhouette follows the figure down to, or nearly to, the hip level. Observe the importance in placement of fabric grain.

Four-Gored Skirts

There are two examples of four-gored skirts which are favorites in ready-to-wear. One is cut on the bias and is suitable for average and light weight soft woolens, silk crepes or rayons. The other has less sweep and the sections are cut on the straight grain. It is best suited to heavy woolens and worsteds, corduroys or suede leathers.

Bias Four-Gored Skirt

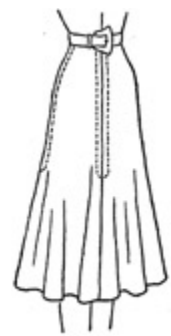


Fig. 1

Because the fabric molds to the figure when cut on the bias, this skirt produces a silhouette which appears to have a lower break than it actually has. It may also be cut on the straight grain of fabrics having elasticity, such as crepes, and it hangs equally well although the break will appear in the normal position.

1. Trace around your front and back skirt slopers as indicated in Fig. 2 on next page.

2. Introduce two small darts in the back which equal the amount of the control dart plus *one-fourth* inch.

3. Build out the back side seam that *one-fourth* inch.

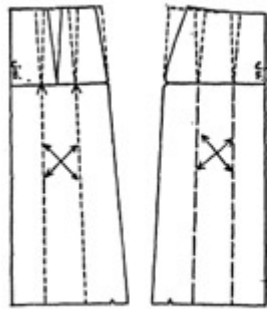


Fig. 2

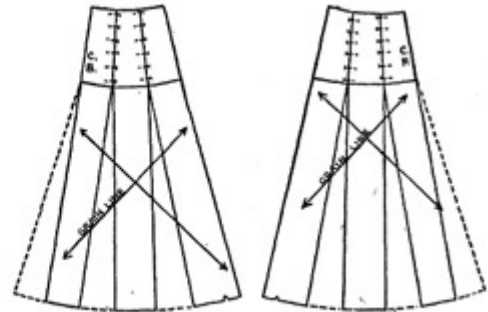


Fig. 3

4. Draw in two small darts in the front section which equal the shaping of the curve at the side seam from hip to waist. Straighten the side seam accordingly to retain original waist measurement.

5. Fold and pin in these darts permanently. Slash from hem to hip level, to point of darts.

6. Spread the construction pattern on a piece of final pattern paper as illustrated.

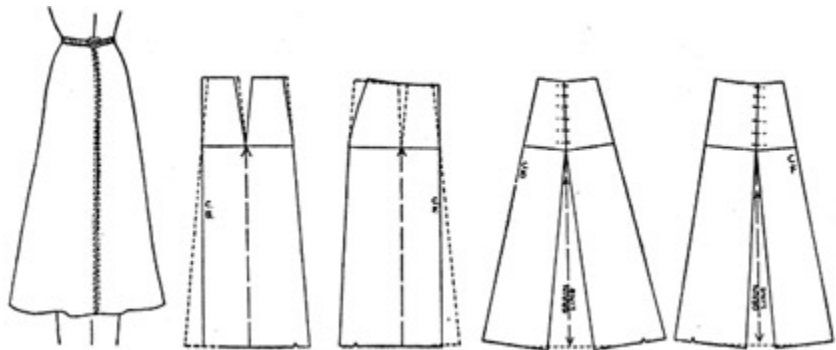
7. Pin the sections down securely. Build out the center back and front seams an amount equal to one spread between sections as shown in Fig. 3. This will intensify the movement at the center back and front seams where it is most needed for walking room.

8. Because the minimum walking room provided in your basic sloper was included when the slopers were first traced, the pattern need not be built out at the side unless you have a desire to add width at that point for some reason.

9. Complete the pattern, establishing a true bias grain in the center of each section. Cut your muslin proof and make an entire skirt to observe result.

When extending a pattern like this into a full length skirt for an evening dress, it beautifies the silhouette to intensify the movement at the center back. This can be done by *increasing* the amount built on the center back seam. Skirts having trains should always have an increased amount of movement at the center back. When the figure is in motion, the skirt will then drag and

produce a graceful line at the back of the skirt.



*Narrow
Four-Gored Skirt*

The second type on next page should produce a silhouette which is cone shaped with little or no rippled movement at hemline.

It is more frequently found in tweeds that have no draping qualities in which pleats might prove too bunglesome.

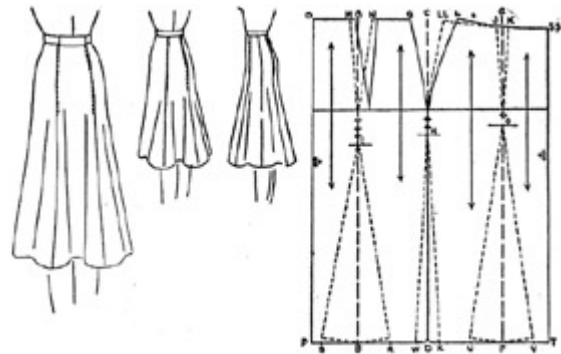
This skirt pattern is used as the basis for the semicircular culottes and semi-circular shorts explained later. It is an important silhouette to study.

The diagrams show proportions found to be satisfactory on average size 14 figures. If finished muslin indicates too much movement in center back and front, reduce the amount of shaping at those points above hip line and the flare at hemline will be reduced proportionately in second muslin.

As normal walking room is included when first tracing is made of the sloper, side seams need not necessarily be straight. The amount taken off front and back center seams can vary, but the finished silhouette of the skirt should appear to be merely an extension of the normal widening of the figure from waistline to the hip, *plus* a slight increase flare at the center front where the figure is normally quite flat. When using a sloper having shaping darts at the front, they may be used as working darts to produce the flare at the lower edge. The straight grain of the fabric should fall in the center of each section.

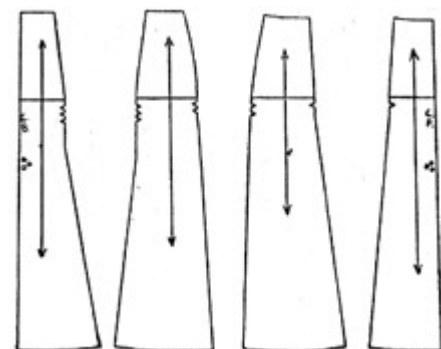
Six-Gored Skirt

The six-gored skirt is sometimes called the "panel skirt." It is a universal favorite as the position of the seams permits expert fitting and proportioning of the sections to suit any type of figure.



In this case, flares have been provided and the level of the break of the movement varied to drop slightly at the back. This same type of skirt may be designed to have limited sweep and then pleats or godets inserted as desired. These instructions also demonstrate the method for moving the basic back control dart slightly to make it fall in the position for the panel.

1. Place slopers together as shown in diagram and



eliminate normal walking room when tracing them.

2. Draw vertical lines A-B, C-D and E-F indicating sectional seam positions at hip level.

3. Establish varied level of break at front, side and back as shown by points I, H and G.

4. Describe dart J-K equal to one half distance from C to L.

5. Straighten side seam in amount as shown by LL.

6. Establish pleasing proportion for back panel using hip level line as basis for establishing pleasing proportions. Move dart M-N as desired.

7. Establish points S and R three inches from B. Make lines I-R and I-S equal to line I-B.

8. Establish points U and V three inches from F. Make lines G-U and G-V equal to G-F.

9. Establish points W and X one inch from point D. Make lines H-W and H-X equal to H-D.

10. Label for center back and front folds and notch.

11. Trace off sections as follows:

- **Back Panel: O-M-R-P**
- **Side Back: N-S-Q-X**
- **Side Front: J-V-W-LL**
- **Front Panel: SS-T-U-K**

Allow seams at waistline and on sections as needed and cut out patterns. *Be sure that all notches are recorded.* If muslin is basted and seams pressed, results will be shown more clearly.

NOTE: When cutting this skirt for individuals, sweep, point of break and the width of panels should be adjusted to height and size of the wearer.

Designers frequently eliminate the normal side seam in this skirt. The pattern is made as directed here and then the front and back side section patterns are placed together to the level of the hips. This will leave a "dart" above the hip level which would be sewed in like any other dart. This permits this skirt to become a skirt having only four sections, with the vertical grain of the fabric placed in the center of the side section. In factories where hundreds of garments are being assembled, this reduces operation costs. And, too, it gives the garment more semblance of complication of cut, making it more difficult to be copied except by an expert in pattern designing. When a garment is being cut from a limited amount of fabric, this method proves very practical.

Eight-Gored Skirt

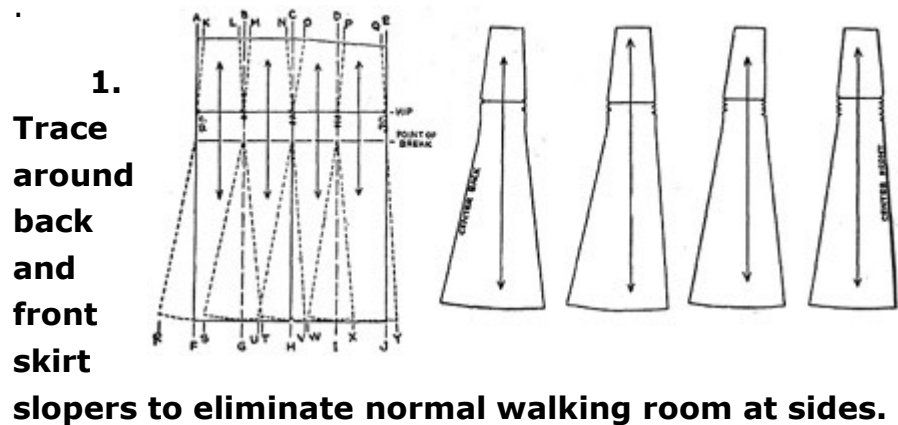
In the foregoing skirt designs the movement was added equally on each side of the seams to the adjacent sections. This resulted in producing a ripple upon which the *seam fell on the top*. In this design you will learn a way of distributing the movement in such manner as to make the seam fall down straight and be partially hidden by the ripple at the hemline. In this design, too, the degree of sweep has been increased towards the back for greater interest.



This skirt, with the same proportions, was designed for a suit of wool twill which had pleasing draping quality. The multiple gores slenderized the hip area and also gave the appearance of increased height to the

wearer. It accompanied a "torso" length jacket of French lining cut, and the seams in both jacket and skirt coincided.

As the lower edge of the jacket was level, the position of the skirt "break" was made level; had the jacket hem dipped at the back, the "breaks" would have followed that line to give a good silhouette. These little details are overlooked by many designers. Remember, you must have relationship in horizontal and vertical or diagonal divisional lines, as to design and form—in the silhouette. In dark fabrics, divisional lines lose importance; silhouette is seen first. In light fabrics, divisional lines catch the eye, but in good design the finished silhouette should also be made as beautiful as possible



2. Erase back control dart and curved front side seam.

3. Draw vertical guide line OH shown in diagram.

4. Draw vertical guide line B-G half way between A-F and C-H. Establish break three inches below hipline.

5. Draw vertical guide line D-I half way between E-J and C-H.

6. Divide area normally used for back control dart plus side seam shaping into fourths. Use one fourth each for shaping gores, shown by points K-L-M-N.

7. Point O shows one half normal side front seam shaping in sloper.

8. Points P and Q each mark off the two remaining fourths.

9. Add sweep at hemline as follows:

- **Y to J . . . 1 inch**
- **X to I . . . 1 1/2 inches**
- **W to I . . . 2 1/2 inches**
- **V to H . . . 1 1/2 inches**
- **U to H . . . 3 inches**
- **T to G . . . 1 1/2 inches**
- **S to G . . . 3 1/2 inches**
- **R to F . . . 3 1/4 inches**

Establish vertical grain indicators at right angles to hip level line on each section. Complete final patterns by tracing off sections as in previous problems. Allow seams and make sure all notches are recorded. Trace off hip level position on each gore when making muslins.

Assemble by basting.

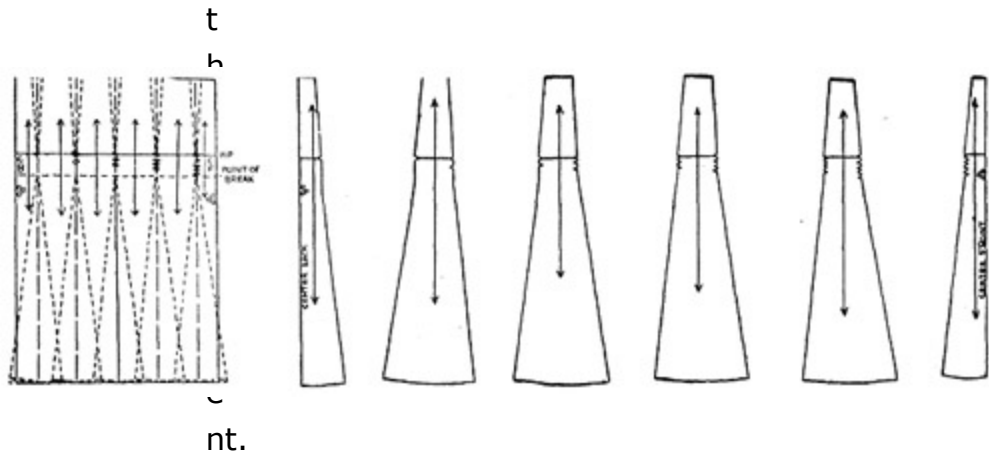
Ten-Gored Skirt

The ten-gored skirt is made on the same principle as the other multiple-gored styles but, due to the number of sections, the back and front sections are cut on the fold. In planning the draft, these sections should



be half as wide as the remaining full sections. The amount of normal shaping on the side seam of the front sloper block would be divided into fifths, each one of which would be used to shape each gore and the last would be used to shape the side seam.

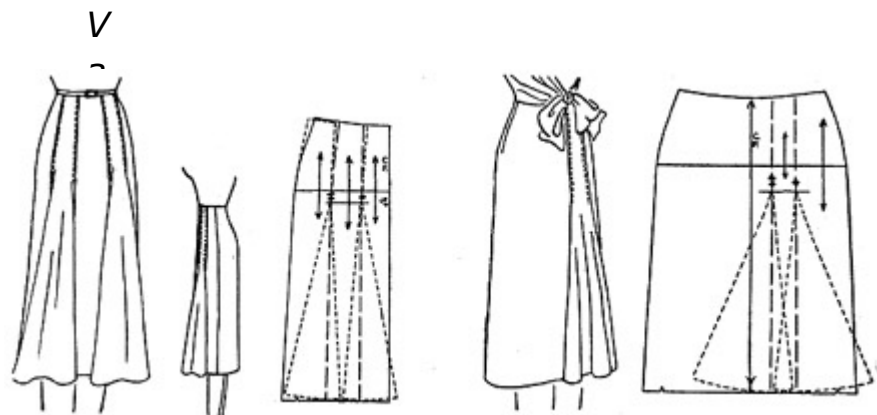
Likewise, the total amount of shaping provided by the basic control dart in the back section, plus any shaping which might be at the back side seam in the sloper would be divided into fifths and that amount would be distributed in shaping each of the gores in the back portion of



NOTE: When cutting such skirts for individuals who are of irregular proportions, judgment must be used. A woman having a large abdomen would have little shaping at the side of the front sloper. Hence, the sections would have relatively little shaping.

This skirt is most attractive in a full length garment. It permits distribution of movement as well as variety in the level of the break. Great care should be taken in the placing of grain indicators and the notches to avoid errors when cutting and assembling the muslin.

In the writer's opinion, the wise designer or hobbyist will devote plenty of time in developing several becoming gored skirt patterns. Like basic blocks, they can be the basis for designing many interesting frocks all of which will include skirts which have proved to be becoming and flattering. As the level of the break may change from one season to the next, these minor changes can be made in the new patterns, but if the vertical divisional lines have been pleasingly established, they never should change. They may create the illusion of slenderness to the wearer and they also serve to establish the definite position for the folds of the flares which will emphasize these vertical divisional lines. The gored skirts have continued to be fashion favorites, year after year because they are, when properly proportioned and cut, truly flattering to the majority of women.

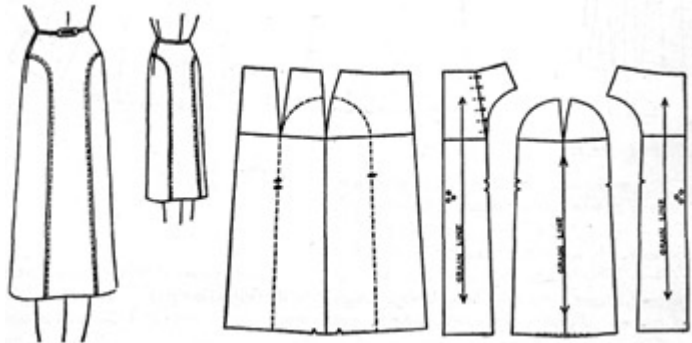


S
of Gored Skirts

Gores may be introduced in any portion of the skirt as desired. A gored front may be combined with a straight skirt back. The only precaution should be to observe the point at which the side seams meet. On some occasions, some of the normal walking room should be increased or

reduced to "balance" the back and front and give a symmetrical appearance to the finished garment.

*Shifting
Darts
and
Eliminating
Seams*



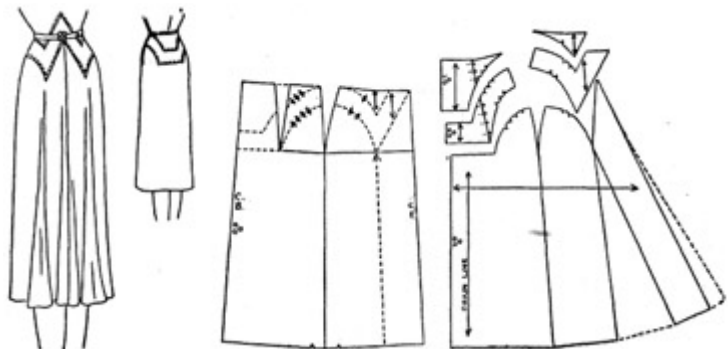
As you continue your study of skirts, you will become conscious that certain silhouettes are produced with each diagram. Many times, the same design of cut may be used to produce any silhouette which might be in fashion favor with the addition of width to the lower edge. You will also become aware that the same elementary principles of cutting which you learned in previous chapters are repeated in the cutting of skirts. In this instance, this yoke-panel design skirt shifts the basic control darts into the seam of the yoke which is placed in just the right position to cross the point of the control dart. The front is then made to repeat the functional design of the back section. Because these panels form the major design interest in the skirt, the remaining side sections are cut as one. The seams of the design become construction seams as well as decorative seams. If fashion favored pleats, they might be added under the edges of the panel sections. If flared skirts were fashionable, flares might be added as desired.

Because no extra walking room is being added at the new seams, the normal walking room is included when tracing is made of skirt sloper. The panels should widen just a little at the lower edge to conform to the side silhouette of the skirt. The upper portion of the curved side seam becomes a dart as was the case in the Dolman cape design.

If pleats or flares were to be added at panel edges, then the walking room would not be included when slopers were being traced. The finished skirt would have front and back

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Front Fullness



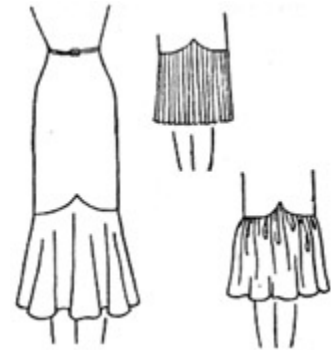
Here we have a skirt design which gives pronounced interest to front fullness in the silhouette. The design of the back yoke gives a flat effect to the back. The added flare introduced at the points of the yoke and center front seam give the focal point of interest to the skirt, both through design of yoke and silhouette. By leaving in the normal walking room, the skirt has a slight amount of sweep when viewed from the back, but, if a more extreme effect is desired, and the wearer had a figure permitting such extremity of design, the normal side width would be left out and this

would place still greater emphasis upon the front of the skirt where movement is placed.

If wide fabric were to be used, the skirt might be so cut as to have no vertical seams except at center front. Otherwise seams would be in normal side position. Note that flared section is on a semi-bias.

Flounces

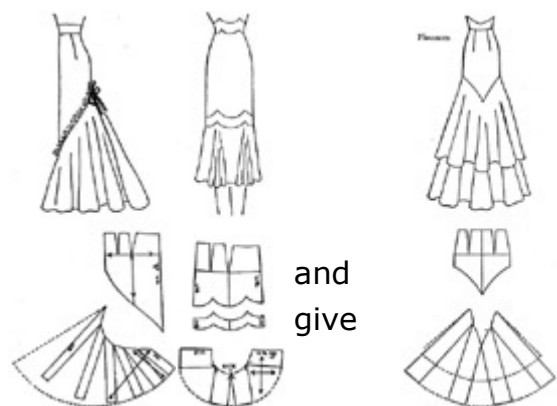
Flounces frequently return when fashion favors the slim silhouette. They relieve the severity of the straight skirt and may provide fullness all around



the hemline or in certain areas as desired. In the year 1940, they reappeared after several seasons of the "swing skirt" which broke from the waistline or the hip. When the "torso" silhouette gradually appeared and the break of the fullness was lowered generally, flounces naturally appeared to provide another means of producing that same silhouette with the use of a different cut. A flounce may have balanced fullness at top and bottom or it may be cut on the circular principle which will create quite a different silhouette. The position may be varied as to the breaking level by the use of diagonal lines

illustrated below.

The principles of cutting used to produce jabots collars should



and give

you an immediate cue to the procedure which would be used to produce these flounced skirts. The same muslin top may be used to test the three styles for daytime wear. It is important to render these problems in order that you may learn the value of good proportions.

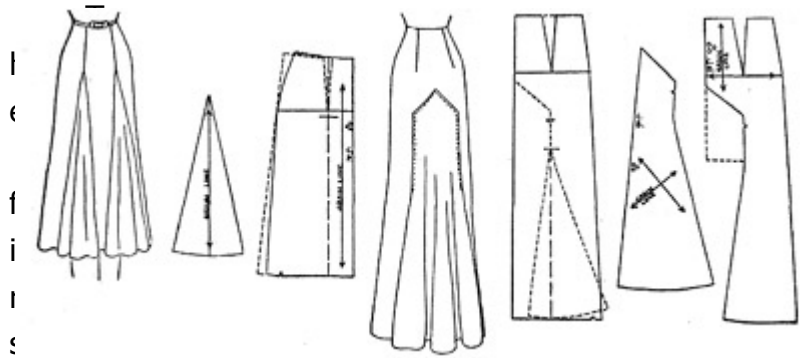
Movement may be intensified merely by varying the space between the sections when you are spreading them.

Godets in Skirts

A section of fabric set into a skirt area is called a Godet, pronounced "go-day." Godets may be set into seams to introduce more movement; they may be set in or upon a slit made in the area; or they may be set over an area which has been cut away from the body of the garment.

Godets which are cut upon the principle of the circle are usually cut on the straight grain when the godet is less than a quarter of a circle. When it is a quarter, half or full circle, the seam edges can then be on the straight grain of the fabric.

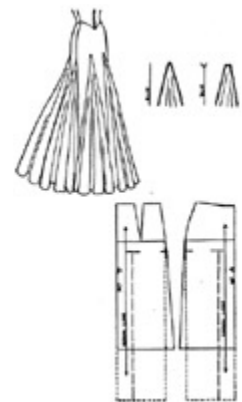
The fullness produced by the godet must first be dependent upon the fabric being used and secondly upon the length of the skirt itself. A street length garment might appear awkward if the godet is cut too full, especially when using a firm fabric, such as taffeta or tweed. The evening length skirt would appear skimpy if the godet were not generously cut in width to balance the length.



t skirt shows the godet in a seam. The original skirt pattern might have been a modified six-gored pattern. By the addition of the godet, fullness is provided without making a new pattern.

The second style is a shaped godet. Because it is laid on the bias, it has ripples appearing throughout area. Note how skirt is cut lower to retain close hip line under top portion of godet. If this godet were cut on the straight it would not ripple and to introduce a ripple, the section would be slashed.

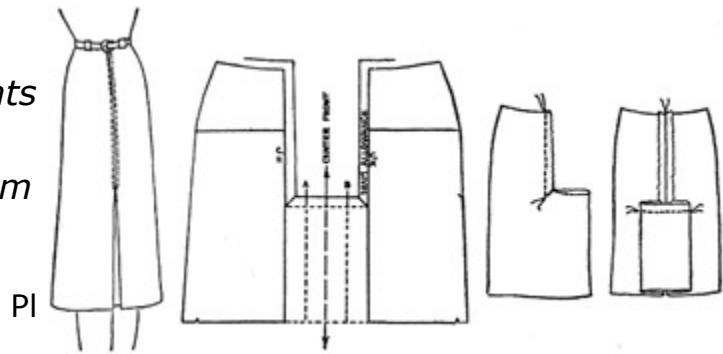
The third style shows the godet set into a slit made in the body of the skirt. Note diagrams showing methods of constructing garment. A normal inside seam might be used in the first style. By keeping the seam edges of the godet on the grain of fabric, it won't have a tendency to pucker when set in. This requires careful stitching as garment is constructed.



On certain occasions, the use of a godet will save fabric. On other occasions, it will provide opportunity for greater design interest when using lace and fabric et cetera.

These patterns should be carefully worked out to observe possibilities for using godets in design ing.

*Pleats
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may be used to provide walking room to an established silhouette without adding movement when figure is not in motion. They remain popular from year to year. There are many types —knife pleat, box pleat, inverted pleat and many others known by various names. Principle used for cutting depends upon how the fabric will be folded to produce some certain style of pleat.

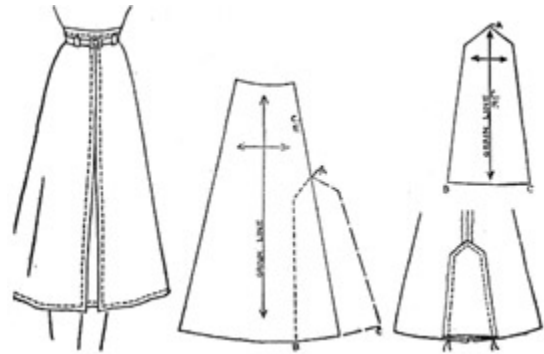
This first skirt shows the pleat added to the center front. The upper portion is reduced to a seam and the lower portion provides the material for the pleat. Draw a vertical guide line for center of the pleated section. Locate points A and B equidistant from this line, according to depth of the pleat. Place sloper a like distance from point A and trace around it. Reverse and do same for point B. Complete pattern by allowing seams. Dotted lines A and B will be the back fold of the inverted pleat. The visible fold will follow line of center front seam. Seams could be provided by making extra allowance for same after cutting pattern on lines A and B.

Note the method shown for constructing this skirt. In some cases, a slight fitting is taken off at

center front above hip line and side seam is straightened proportionately. This throws slight flare to center front and the visible fold will be slightly off grain. Pleat could then be produced as shown above.

Pleats in Gored Skirts

In many cases a pleat may be introduced at any existing



seam position, such as at the side seam in skirts, seams in slightly flared skirts made from the *narrow four-gored skirt* pattern or any other gored pattern to which no rippling flare has been already added.

The procedure for this pattern would be to trace around the four-gored front section and fold pattern paper on center front line. Extra fabric required for desired pleat would be traced in as shown. Usual seam allowance would be added to the skirt section and then a pattern of the invisible portion would be taken off portion enclosed by A-B and C. This would automatically provide seams at the back of the pleats. The finished skirt would resemble the original skirt pattern except that extra walking room would have been provided. During 1939 and 1940, when the modified bell silhouette was used in many tweed suits, the suits showed the use of this pattern repeatedly.

The back section of the pleat need not be cut on the straight, but could be cut on a bias to

introduce a little fabric manipulation which would appear only when figure is in motion.

These patterns may be tested in muslin by using the front section only.

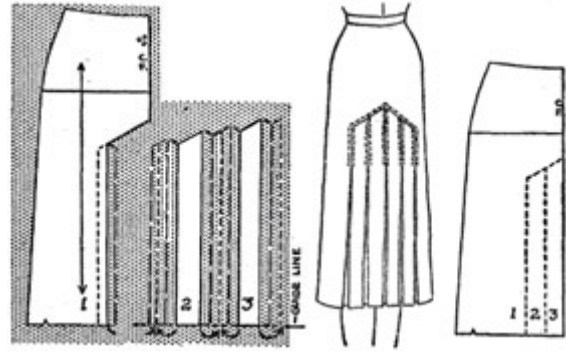
Study garments shown in stores. Observe how the designers employ these principles of cutting in countless ways.

Many designers use ingenuity in saving fabric and thereby cut manufacturing costs. When fashion decrees a slim silhouette, functional pleats may be provided, but when the figure is not in motion the silhouette is slim. When fashion favors the bell-shaped silhouette, designers use the circular cuts in countless ways to create new interest.

The additional styling or finish added to seams must depend upon production limitations and upon the fabric employed as the medium. The above skirt is a success when cut from suede, wool tweed, denim, taffeta or cotton-back velvet, fabrics that have practically no draping qualities but retain the silhouette produced by the cut. The same skirt pattern, attempted in a gingham, light-weight wool or soft crepe, would collapse at the hem disappointingly. Likewise, the depth of a pleat should be sufficiently generous in firm fabrics like wool— to balance the weight of the fabric itself. A very shallow pleat laid in a tweed skirt would not remain in press after wearing. In lighter wool, pleats may even be laid double, one upon the other, with no excessive appearance of bulk.

Pleats in Godets

When pleats are set into cut-out areas such as godets, seam edges must be carefully planned to

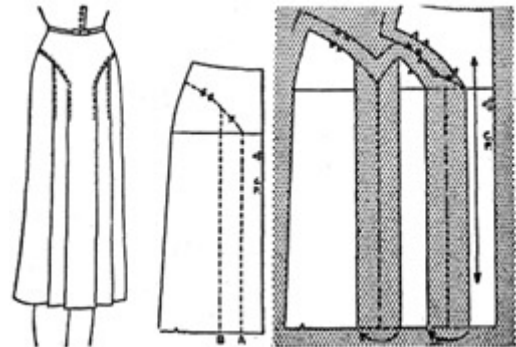


make a neat job when the garment is constructed. If you will fold a piece of paper into box pleats and then study the second diagram, you will visualize the procedure. As no seam should fall on a visible folded edge, when the godet section has been cut away, the back of the first pleat which is to be part of the garment is established first.

The back center, where the two visible edges will meet are shown by dotted lines, the back folds with broken lines and the visible folds with straight lines. As a preliminary step, plan a godet which is straight at the top. Then complete the pattern and muslin for one which has the shaped top shown. Pleat a section of paper and trace across it with diagonal line. Observe the resulting notches which must result when pattern is flat.

Pleats Adjoining Yoke Panels

In this case entire skirt front is cut in one section. This can be done only when the shape

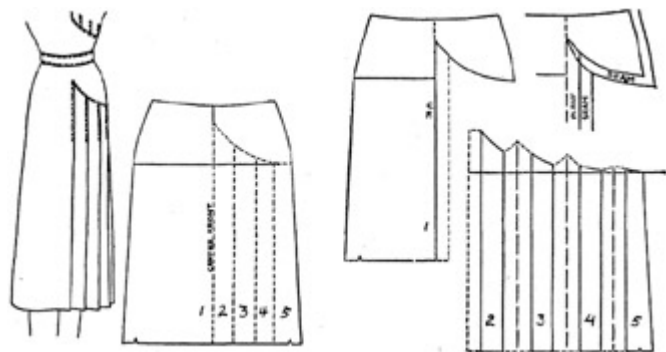


of yoke makes it possible. In other cases seam would be planned at back of the first pleat which

forms panel effect. Note that this silhouette is straight. The same design could be used to produce a simulated circular skirt by using the plain skirt front produced in that problem. In such a case, the panel would be planned slightly wider at the hemline to conform to entire form of the silhouette. This would cause folded edges of the pleats to fall slightly off grain. This problem should be tried in various ways, using varied lines of yokes to visualize its limitations.

*Pleats
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Pleats can be used as



a part of an asymmetric design. They are illustrated here in the form of simple knife pleats. Normal seams must be provided on sections 1 and 2. Note diagram showing the method for mitering point. As shape of yoke varies, this detail must be carefully worked out. Obviously this design involving stitching close to fabric edge should not be used on materials having a tendency to ravel easily.

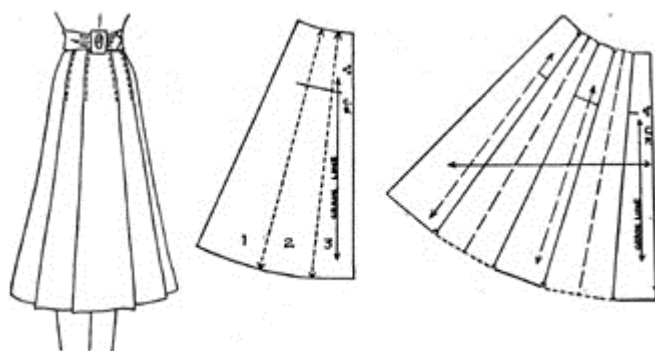
The lines established to produce informal balance in a skirt are usually first established in the bodice and then continued on down around the body into the skirt. Review the discussion of formal and informal balance given on [pages 50 and 51](#). Use thin paper and trace over the above illustration and then, within that silhouette,

experiment with diagonal lines from which pleats might be suspended to provide walking room in the skirt. Select examples of informal balance used in blouses—including the surplice styles—and try to complete the design for the skirt through repetition of the line established in the bodice portion. If you have a model form with which to experiment, make several construction patterns of back and front bodices and front and back skirt sections. These may be made of muslin or paper. They should be pinned up against the model form and then, by working *around* the figure, lines which are established in the front may be continued on into the back to establish a feeling of unity. View the results of these experiments from front, back and profile views.

Assemble many clipped examples of pleated skirts for observation. You will find some that employ asymmetric design involve the use of drapery instead of pleats. On [pages 202 and 203](#) an explanation is given for methods for making such types of patterns, some of which employ both.

*Pleats
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1940, when the bell shaped silhouette was favored for skirts, this design appeared frequently in dresses and suits. It is also made from the *narrow*

four-gored skirt pattern but in this case, the center front seam has been placed on the straight grain fold. A similar skirt could be designed, however, using a series of inverted pleats, one of which would be located at the center front as diagramed previously.

Note that the dotted lines have been placed to conform to the silhouette of the skirt, being spaced wider at the hemline than waistline. Also, when the sections are spread, a similar proportion is used.

To study the final result when using a striped fabric, mark your muslin for stripes. As some pattern designers prefer to place a seam at the back fold of each pleat and then establish the grain on each pleat identically with that of the panel, a second such pattern should be made from the first and the muslin again marked for stripes. It is then possible to compare the results of the two methods in finished muslin. Because the edges of the pleats have a tendency to curl slightly when worn, this design is often produced for "unpressed" pleats. This of course, adds slightly to the bulk of the silhouette. If sections are spread sufficiently, center front can be placed on bias fold and side seams will fall on straight of fabric. This is frequently done in light weight plaids.

Fitted Full Pleated Skirts

The shaped pleated skirt which is made from several straight lengths of fabric is usually sent to a pleating company for steam pleating. The fabric should be planned and seamed except for the last seam so that it will reach



the pleater flat. The hem should be previously basted into position also.

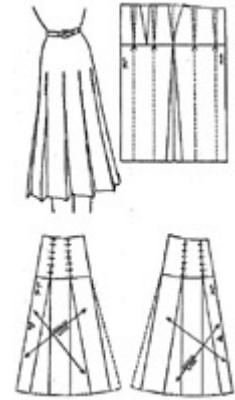
Pleats should be planned according to measurement of size being made. A 40 inch hip could have twenty 2 inch pleats. A 36 inch hip could have eighteen 2 inch pleats and so on. The depth of the pleat itself determines how many lengths of the fabric will be required. Fig. 1 shows the shallow pleat which requires twice the finished hip measurement. Fig. 2 shows the deep pleat which requires three times the finished hip measurement. When planning a skirt which will have a low break, at least 2 extra inches should be added to normal hip measurement to provide walking room from hip level to break.



When fabric is returned from pleater, a strong basting thread should be back stitched across the skirt on the hip level and down to break. The open seam should be finished. Skirt must then be fitted in the normal amount provided for in original sloper at side seams and basic back darts. This shaping must be done in those same areas to produce a smooth fit. In manufacturing plants, this is estimated by measurements taken from the model form. For individuals, a personal fitting would be requested. This is done by lapping over the visible edges of the pleats and the area re-pressed into position. The front waistline is then shaped to the normal curve as provided in basic sloper so that the skirt will not drop downward at the front to cause pleats to spread at hemline. Similar procedure would be used when using group pleatings spaced evenly.

Simulated Circular Pleated Skirt

Here we have a design for a skirt which was also popular from 1938 to 1940 when the bell shaped silhouette was in fashion. Many similar designs were produced those years all of which produced a somewhat similar finished form.



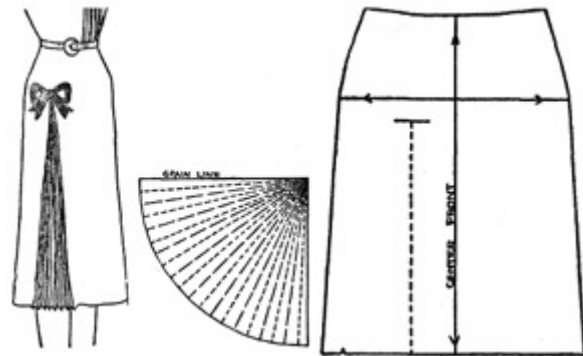
The method for preparing the construction pattern is quite similar to that used for producing the first type of four-gored skirt *except that in this case the normal walking room at side seam is eliminated* when sloper tracing is made. The final amount added at the side seam of each section equals half the amount of area which is produced when darts have been folded into position and the pattern has been slashed from hemline to point of dart.

Note that the center front and back seams have not been used in this instance, but the center front has been placed on a *true bias fold*. These pleats might be inverted instead of pleated and if a greater number were desired, the method would be the same only that more working darts would be established from the waistline to hip level. The proportions given here produced a shapely garment when cut from light weight wool.

Because normal walking room was not included, these pleats will not lie flat as might be the case in the former straight skirt. The fan-like pleats therefore produce quite a different silhouette. This design would not be practical for use for material which does not take a press easily.

Circular Pleated Godet

An interesting variation of the flared godet is that which is



"sunburst" pleated and set into slash in the garment. As such a godet might lead to construction difficulties in a finished garment, the designer foresees this difficulty and plans a bit of ornamental interest which becomes a part of the design but which at the same time will give the garment a neat appearance when finished. A similar theme could be introduced in the sleeves and upper portion of the garment to produce a feeling of unity through repetition.

Circular skirts may be designed to use sunburst effects and this service is available at the pleating companies. It is wise to consult them on the preparation of the fabric to insure satisfactory results based upon their mechanical methods.

After studying these basic methods which are common to certain silhouettes, you should be prepared to originate several interesting designs of your own.

NOVELTY SKIRTS

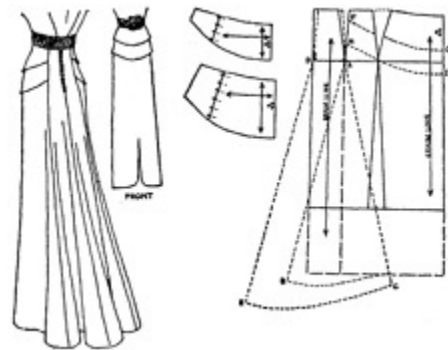
The following illustrations and diagrams show the possibility for producing the various silhouettes—with or without drapery—through the block system. In former years, most of such skirts would

have been draped upon the model in muslin. The muslin would then be opened, placed upon the table, corrected and the paper pattern made and tested once more.

Space prevents illustrating many of these more complex designs, but our student, ambitious to become an expert, should spend hours reproducing complicated cuts by recognized designers. The music student eagerly observes the works of master musicians, attends concerts to study the rendition of compositions—not to imitate, but rather to chart his own limitations and to spur him to emulation. Such effort encourages the student pattern designer to present his own work, certain that his good creations eventually will bring him recognition as an expert.

Back Fullness

Peplum patterns should be traced off first. Darts are folded in and final pattern made for each as shown in diagram.



A portion of the normal back dart is then moved to center back and same amount restored to dart area. Lines A-B and A-C will meet in a seam and must be of equal length.

By lengthening line D-E, a train is added which must be balanced by ample width at the hemline. Short darts substituting for side seam shaping arc hidden under peplums.

The Cowl Skirt

In previous pages, the principle of cutting the cowl bodice and cowl sleeve was shown. The

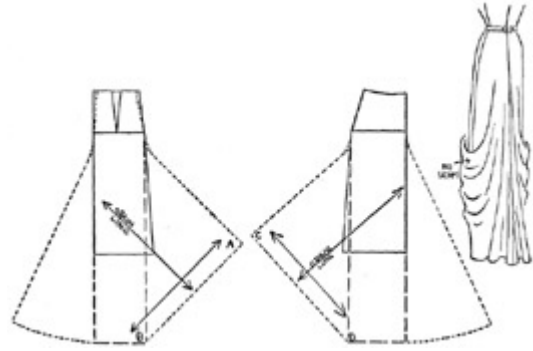
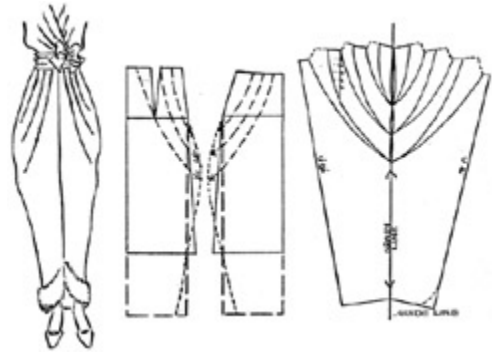


illustration shown below presents a version of the cowl skirt which has additional movement added at the center front and back seams. This skirt is sophisticated and graceful and because of the heavy drapery at the sides and the vertical folds of fabric intensified at the front and back, it gives the wearer a tall, slender appearance.

Notice that the amount folded into the back basic dart has been restored and the fitting removed at center back and the side seam. This would be possible only by cutting the upper portion on a true bias. The weight of the drapery causes the fabric to adjust to the average size figure. Points A and C may be located at any distance from the side seam to place drapery at any desired level. When pattern has been completed, A-B and C-D are placed together on the vertical grain of the fabric and the seam eliminated. This throws the sections on a true bias. The center front and back flares may be on a partial bias. In the soft silk crepe fabric used, this produced a beautifully hung skirt. Weights were sewed at points A-C and this caused the cowl to collapse heavily at the sides.

"Peg-Top" Silhouette

From 1912 to 1916 this novelty skirt (rather ungainly, grotesque garment of uncertain



origin) held the fashion spotlight. While experimenting with the possibility of producing this silhouette through the block system, the following diagram resulted. The curved line starts below the hip level, and should be placed in the position desired. The curved slash lines require careful pinning of the curved pleats to form the drapery. This is best accomplished by holding the fabric over the hand while pinning and starting at the waistline and pinning downward about an inch. Obviously, such pleats fall into drapery and would not be stitched down like a straight pleat. Records show that they were treated like folds of fabric. If desired, the center back can be cut on a fold and this will throw the side and front on a more pronounced bias.

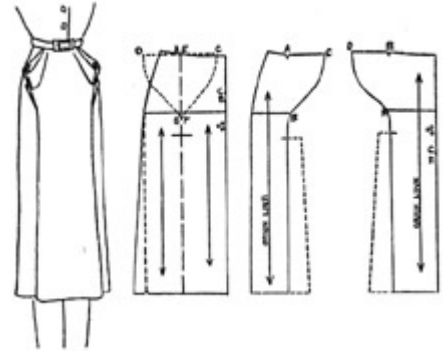
A similar silhouette can also be produced through the use of the cowl principle but the drapery would fall from a single point at the waistline.

As this book goes to press, fashion trade papers are hailing the trend towards a revival of the "peg-top" silhouette in afternoon and dinner dresses. As 1942's skirt is short, designers are arranging the folds of material differently for proportion's sake. In some cases, a high cowl cut

starting from the waistline is employed. Hemlines are kept narrow; all drapery is placed at the front.

Peg-Top, 1942 Style

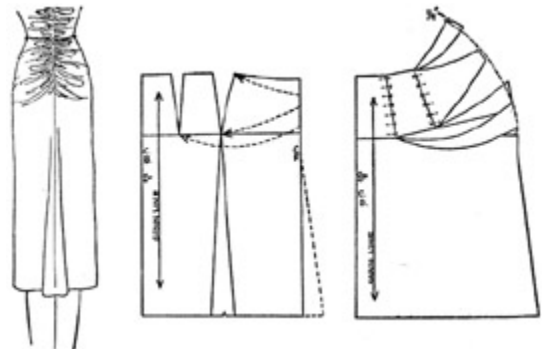
Inserted pleats below a cowl drapery provide the walking room and yet maintain a slender silhouette. A skeleton lining to which the point B-F might be attached would keep the skirt from sagging with prolonged wear. Side darts might be substituted for side seams.



Draped Skirt

To allow for fabric stretching on the bias, as it will be at the center front when sections have been

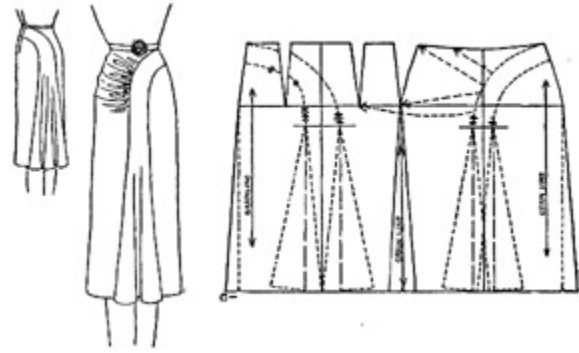
spread for drapery, the waistline is reduced slightly.



Notice how vertical flare is first added to construction pattern to provide walking room and to invite further interest to the point of interest in the skirt. To make the finished silhouette less tubular, the normal walking room could be used when making construction pattern.

*Draped
Asymmetric
Design*

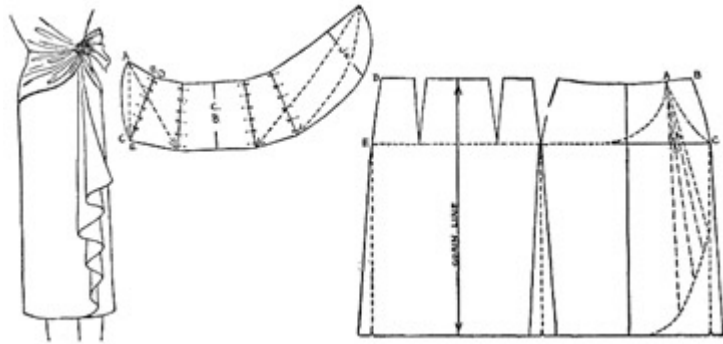
Sketch
in the design
with pattern
on the form
to establish



pleasing proportions. Note that movement is greater at back than front. Trace off gore patterns and then cut away remaining segments. Fold in the darts and slash.

Normal walking room might be retained if desired.

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Jabot-Wrap-Around Skirt

The name merely denotes principles employed in producing the pattern.

Peplum sections are traced off first and assembled as shown, in one continuous piece. Lower portion 1 of skirt front is discarded. Necessary laps for wraparound added last.

Chapter 9—Slacks, Shorts, Culottes and Bathing Suits

Not so many years ago, slacks were not the accepted garments they are today. As social standards change, so clothes change. There are but few women today who do not include at least one slack suit in their wardrobes. Originally, slacks or trouser-like garments were used for certain purposes, such as for beach, fishing, hunting or similar rugged environment. Women liked them and accepted them generally. Then the manufacturers introduced lounging slacks made from feminine types of fabrics. The cinema stars did much to popularize the garments. After a grinding day in the studios where perfect grooming was maintained, the psychological benefits which were felt by slipping into ultra casual apparel increased the demand for a wide variety of slacks. Because the stars could afford to pay the price, designers created lounging clothes in luxurious fabrics such as velvet, satin and even gold lame. By some women, they are preferred instead of the usual hostess gown or informal dinner dress.



When both men and women became accustomed to this new type of apparel, slacks were soon classified functionally, the same as any dress might be. Fashion magazines showed beach slacks, after skiing trousers, cruise slacks et cetera. Finally shorts appeared and now they are generally accepted for active sports wear.

It has been interesting to note how these garments have improved as to cut and fit during the ensuing years. Once accepted as conventional garb for women, designers made the slack-buying public style conscious. Women demanded more than just a loose, trouser-like garment. They demanded superior cut and fit which could improve the appearance of the wearer. The designers devoted more thought to placing of the seams and darts. Fabric designers developed fabrics which had little tendency to wrinkle and which could be packed successfully. Shops devoted to producing made-to-measure slacks sprung up in larger cities. Corset manufacturers developed the "pantie-girdles" as the ideal foundation garment to be worn with such garments.

The culotte, or divided skirt, is not so modern. It originated as a substitute for the riding habit used for the side saddle when that style of riding was abandoned for the modern astride seat. It was a modern riding skirt. Now that social standards have changed, women wear riding jodhpurs, breeches and

frontier pants. The culotte is an active sports garment used for golf, skating or spectator sports and it is the wise selection of the women who do not have figure proportions for the conventional slack suit. The divided feature of the garment gives it the functional value.

The regular dress model form cannot be used for testing the fit of trouser-like garments but special bathing suit forms are used in the industry. The method for drafting the slack pattern is given and upon completion, this may be checked for accuracy. To gain further knowledge, the reader should draft a pattern for some certain individual and check the muslin upon the figure.

In these first pages are given the methods used to produce the basic slack pattern, straight skirt culotte and the semi-circular culotte. These are followed with further instructions on methods used for cutting varied designs based upon each of these three silhouettes. Shorts are merely an abbreviation of the street length culottes. In later text devoted to lingerie, instructions are given for developing patterns for panties. Note that each of the above basic drafts produce a distinct silhouette. Designs for any subsequent garments should be dependent upon the silhouette produced in the basic block being used.

How to Take Measurements Correctly

The following measurements are used for drafting the basic slack pattern. The last two listed are not needed for the loose, conventional slack but these measurements should be recorded for use when designing shorts or other variations of styles made from the slack pattern.



1. *Side Length Measurement*: Taken from Side Waist Point to the floor. From this amount, subtract one inch or the distance the garment will be from floor.

2. *Hip Circumference*: Taken around the body at the largest position of the hip curve. At the same time, record this hip level at which the measurement was taken. In standard sizes, seven inches is used for all sizes except extra sizes.

3. *Waist Circumference*: Taken around the body at the waistline.

4. *Crotch Depth Measurement*: Taken from Side Waist Point to the chair, with the customer sitting erect in chair. If this measurement is taken too short, slacks will "bind" when wearer is seated.

5. *Bottom Circumference*: An estimate of the finished width at bottom of trouser leg. See standard sizes given on next page. Should be estimated from customer's height and size of foot. Trouser should not have wider cuff circumference than seven-eighths of foot length.

6. *Knee Height*: Taken from Side Waist Point to knee.

7. *Thigh Circumference*: Taken around the upper thigh.

STANDARD FIGURE PROPORTIONS

	SIZE 16	SIZE 14
Side length:	43"	41"
Hip circumference:	37"	36"
Waist circumference:	27 1/2"	26"
Crotch depth:	11"	10 3/4"
Knee height:		
Bottom circumference:	24"	22"
Thigh circumference:	22"	21"

NOTE: Hip circumference exceeds combined front and back hip measurements which would be secured by doubling measurement of average dress model form. The model form provides extremely small, corseted hip measurement. Slack manufacturers plan their garments with generous hip measurements, assuming wearer will be lightly corseted.

Drafting the Mannish Slacks

The following described method for producing either standard size slacks or personal patterns has been developed after much research on the faulty fit of many slacks now on the market. Measurements may be taken directly from an individual and the hip-length sloper drafted as shown on [page 209](#) or measurements may be taken from a model form or a standard size skirt sloper which has been the basis for designing dresses may be used as directed. Measurements furnished above on this page may be used for the first draft,

taking the *Side Length*, *Crotch Depth*, and the *Bottom Circumference* to produce the proper width of cuff.

All the proportions suggested are based upon a successful size 14 garment. If you are working with a set of personal measurements and wish to try the procedure, you should first run through the text and divide the established proportions to avoid later mistakes.

Select a piece of pattern paper equal to the *Side Length* plus eight inches. This will allow ample room for you to extend the pattern down to provide a hem or additional length needed to add a cuff.

Read Each Step Carefully

See diagram on below.

A-B is a vertical guide line which is *6 inches* longer than the *Full Side Length Measurement*. Label points A and B.

C is located *10 inches* below point A on the line A-B. Label point C.

D—Square a guide line left across the paper from point C. Label point D.

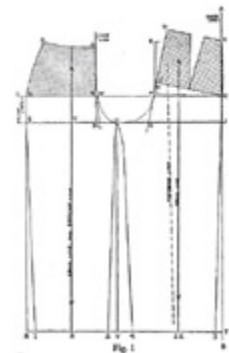
Lay your back skirt sloper, with the center back facing inward, in such manner as to make the hip level line of the sloper rest exactly upon this guide line just squared from point C. The side hip point should rest on point C.

E-F—Trace the center back line to produce the vertical guide line E-F shown in Fig. 1. Label points E and F.

G—Shift the skirt sloper to the right, still keeping the side hip point resting on C, until the side waist point rests against the vertical guide line A-B. Label G.

H—With the sloper in same position, trace around it, from G to center back point H, including the basic dart. Label H.

I—With sloper still in same position, trace down center back to hip line. Label I.



I-C—Remove back skirt sloper and connect I and C. (The space between I and F is the extra length needed to accommodate curve of buttocks when figure is seated.)

J—Locate this point from point G, a distance equal to the *Crotch Depth Measurement*. Label point J and square a guide line to the left across the paper.

K—Extend the line H-I downward until it intersects with the horizontal guide line extending from point J. Mark this intersection point K.

L is located from point K a distance equal to one fourth the *Hip Circumference*. (As your back and front skirt slopers represent half a total hip circumference, then you may add their combined measurement and divide that sum in half to get the required measurement.) Label point L.

M—Locate this point *one-half inch* from point L.

N—From point M, square a line upward. Where this line intersects with horizontal guide line C, label point N.

O-P-Q—Place the front skirt sloper with the front hip level point resting on point N, and the hip level line resting upon guide line drawn from C. Trace around the skirt sloper from waistline to hip line and label points O, P and Q.

Connect points L and O with a straight line.

R—From point Q, square a line downward which is equal to the *Full Side Length Measurement*, less the hip level height on your sloper (distance from P to Q). As you already know, in standard sizes, this would be seven inches, but when using a customer's personal sloper, this would of course vary. Label point R.

S—Where the line Q-R intersects with the crotch depth guide line squared from J, label point S.

T—Square a line from R to intersect with line A-B. Label intersection point T.

U—This point is located at a point which is one third of the distance from L to K. Label point U.

V—Square a vertical line downward from point U which will intersect with the lower line R-T. Label point V.

Shaping the Crotch: These points are established to aid in shaping the curve of the crotch just as similar points were established when shaping armscye and sleeve cap curve.

W—This is located the same distance from L that U is from L. Label W.

X—This is located the same distance from K that U is from K. Label X.

With the aid of your curve, draw in the curved lines at the front and back. Note that the curve from W to U is not as intense as that from F to U. Garment will bind if the front curve is too intense. Check that line in the muslin.

Establishing the Grain Lines: The grain line in the front section is usually the pressing line in the finished garment. Because of the extra fitting and shaping given to the inside back seam, this would not be true in the back section. The proportion of the shaping given here is usually followed in all trouser leg widths. If the leg is to taper more than usual, a greater relative amount would be removed at each point.

Y—Locate point Y half way between points U and S. Label point Y.

Z—Locate point Z half way between points R and V. Label point Z.

Connect points Y and Z and extend line upwards through waistline.

ZZ is squared from the line V-T and need not divide the area in half as it is being located as a fabric grain indicator.

Tapering the Trousers: Proportions given are used to produce an average slack. Later diagrams show a greater amount of shaping. (Some men's tailors measure the customer's shoe and taper trousers so they will not exceed 7/8 of shoe length at cuff.)

1 is located from point Z a distance equal to one fourth the *Bottom Circumference Measurement* less one-fourth inch.

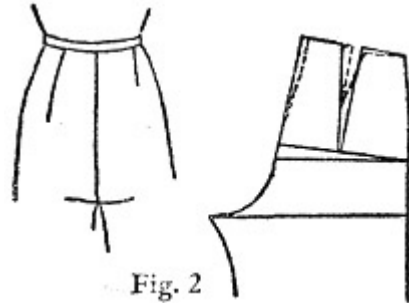
2 is located from Z a distance equal to one fourth the *Bottom Circumference* less one-fourth inch.

3-T equals R-1.

3-4 equals 1-Z-2 plus *one-half* inch. Label 4.

Connect these points: S and 1; U and 2; U and 4; J and 3. Use straight lines and then establish curves near point U as shown in Fig. 1.

Shaping Center Back and Shortening Dart: If dart is shortened and straightened to fall in a parallel line with center back seam it creates a mannish effect and tends to slenderize hipline. A slight curve placed in center back seam will make garment fit feminine figure more literally. See Fig. 2.



If customer's sloper has pronounced curve at side back seam, it should be traced in as draft is made and then tapering can be started from that point.

Tracing Out Pattern: with blue pencil, trace out as follows:

Front: O-W-U-2-1-S-Q-P-O.

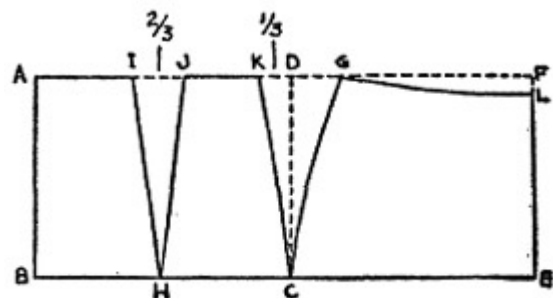
Back: H-I-X-F-U-4-ZZ-3-J-C-G-H

Correcting Position of the Side Seam: If the individual being fitted has a large hip measurement and small waist measurement, the shaping at the side seam of the front section must necessarily produce an exaggerated curve. This may not be evident in the skirt pattern but may be revealed in the slack silhouette. When the muslin has been draped upon the model, observe the side seams. If they appear too curved, straighten them by marking in the new seam line with red pencil. Correct the final pattern by taking some off the back and adding it to the front section as indicated by the muslin. Straight side seams give the garment a more mannish appearance, which produces smarter slacks.



Drafting Hip-Length Sloper

If you wish to draft slacks for someone for whom you have no sloper,



take measurements as shown on [page 207](#), and draft hip-length sloper as follows:

A-B equals hip level. B-E is one half *Hip Circumference*, squared from B.

C is located halfway between B and E. C-D and E-F equal A-B and are squared from CE.

F-G equals one-quarter of *Waist Circumference*. Connect G and C with curved line.

H is located halfway between B and C. A-I equals B-H less one half inch. Connect I and G. Subtract one-quarter *Waist Circumference* from length of line A-D. The difference will go into dart and shaping of side seam.

I-J equals two thirds of that difference.

D-K equals remaining one third.

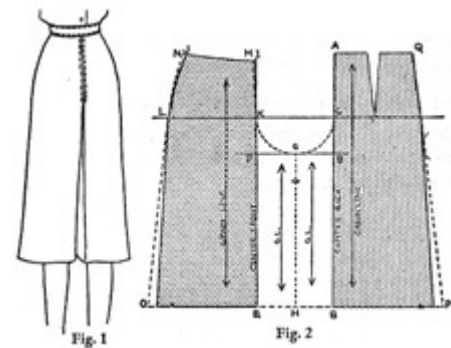
Connect I and J with H. Connect K and C.

L is one half inch below F. Connect L and G.

Use these patterns for making trouser draft as usual.

Straight Skirt Culotte

This trouser-like garment resembles a straight skirt with a little additional walking room added at the sides. The culotte feature becomes evident when the figure is in motion. This basic pattern is used when making straight pleated shorts or other styles of culottes to which pleats have been added. It is made directly from the straight skirt sloper. This pattern is seldom used in this form except in shorts. Pleats are usually added to give more walking room.



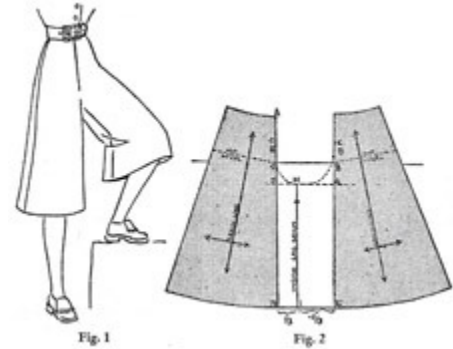
1. Draw a horizontal guide line across the pattern paper.
2. Lay the back skirt sloper upon this line so the hip level line rests upon this guide line. See Fig. 2.

3. Trace around the back skirt sloper. Label points A, B and C.
 4. Point D is located from point A a distance equal to *Crotch Depth Measurement* plus 1 inch.
 5. Square a guide line from line D-B.
 6. Point F is located from point D a distance equal to one-fourth the total *Hip Circumference*. (Because it is assumed that the skirt sloper being used would represent half the total circumference of customer, add the front and back hip measurements of the sloper and divide that sum in half.)
 7. Locate point E, on the same level with B, a distance from B equal to D-F. Label E.
 8. Locate point G halfway between points F and D. Locate point H halfway between points E and B. Connect points G and H.
 9. Connect points E and F with a vertical guide line extending upwards through F.
 10. Lay the front skirt sloper along this line in such manner as to have the hip level line resting on the horizontal guide line made in Step 1.
 11. Trace around the sloper. Label points I, J and K, L.
 12. Remove *one-fourth* inch shaping from point. I. Label point M. Add the same amount to side waist point J and mark point N. (N-L should equal J-L in length.)
 13. Establish vertical grain lines at right angles to hip level line. Establish parallel grain lines in inside trouser area. Mark notch on line G-H.
 14. Increase walking room on each side seam *one inch*. Label points O and P.
 15. Draw in crotch curve K-G and C-G, shallow curve.
 16. Outline pattern in blue pencil.
- Front Section: M-K-G-H-E-O-L-N-M.

Back Section: A-Q-P-B-H-G-C-A.

Semi-Circular Culotte

This semi-circular culotte can be quickly made from the *narrow four-gored skirt* pattern diagrammed on [page 185](#), whose silhouette resembles this skirt when the figure is not in motion. If you saved the final pattern of that skirt, trim off the seam allowances and follow instructions given below using the skirt pattern in the same manner that you would use a sloper. If you have destroyed it, make the skirt pattern, but no seam allowances need to be added.

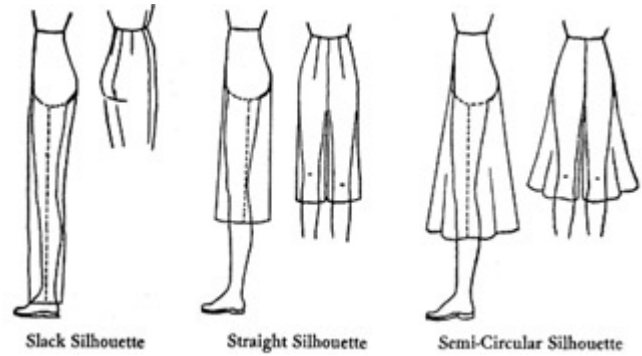


1. Draw a horizontal guide line as shown in Fig. 2.
2. Place front and back skirt sections with hip level lines resting on the guide line. Separate them until the space between them equals one fourth the total hip circumference of your model. (Measure the hip lines on these patterns, add them and divide that sum in half.) C-B equals D-E.
3. Locate point F a distance from point A equal to the *Crotch Depth* plus 1 inch. Square a line from F. Locate point G at the point of intersection.
4. Point H is located at a point equal to one third of the distance from F to G. D-I equals F-H.
5. Connect points H and I and place notch.
6. Establish grain indicators vertically in the center of each section. Note that this will throw all seams slightly off grain equally. Grain could be placed parallel to side seams, which would throw center seam on more of a bias.

The following diagrams show an analysis of the three drafts you have made. Note that the slacks conform to shape of limbs; the straight culotte falls straight from hip level; and the semi-circular eliminates all darts around waistline and extends the silhouette line, the fabric falling with gentle sweep at lower edge. Also note position of seams.

Variations of Slacks

Following are several variations of these three trouser-like silhouettes together with diagrams showing the slight changes which are made to produce the added interest in design or the silhouette. As it is impossible for you to observe your results on the model form, they are presented for guidance when you may be creating actual garments.



When you study these over, you will quickly observe that no new pattern making principles are involved. You have arrived at that stage in your study when the remaining lessons will merely demonstrate the repeated use of fundamental principles mastered in earlier chapters. It is the repeated use of these principles which makes the student an expert.

Inserted Group Pleats

As you clip examples of varied designs for slacks, you will notice that many styles introduce dart tucks at the front. This gives a soft effect and will also divide the front area to create the illusion of a more slender waistline. Most women find the soft drapery produced by the tucks to be quite flattering.

Fig. 1 shows a popular style. The dart nearest the center is actually extended down to the bottom of the trouser. This is produced by slashing as shown in Fig. 2. The second short dart pleat is accomplished by building out the side seam an amount equal to the width of the dart. In some cases, the pattern is slashed through to make a wider slack at the cuff. When front bulk is exaggerated by pleats, a hip length fitted lining should be used across the front. This will keep the garment adjusted to the figure.

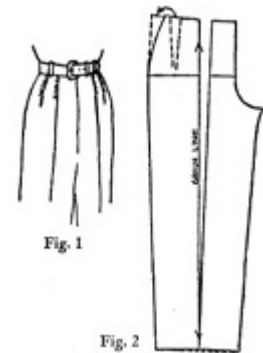
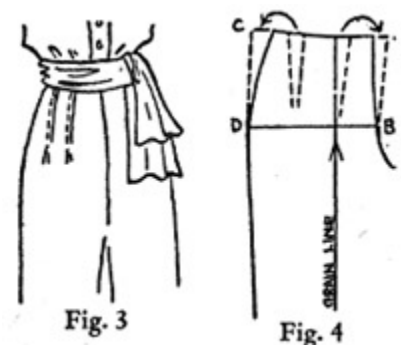


Fig. 3 shows a slender trouser which has two short dart pleats at the waist. This style concentrates all the drapery above the hip level. Fig. 4 shows how



the center front seam and the side seam are built out an amount equal to each dart. Obviously, these tucks must be limited in size as the seams can be built out only to a moderate degree.

"Clam Diggers"

Fig. 5 shows an amusing sports garment which was inspired by a designer seeing young people rolling up the legs of regular length slacks when digging clams at clam bakes on the east coast. She simplified the problem by producing short slacks, complete with cuff, which were the right length!

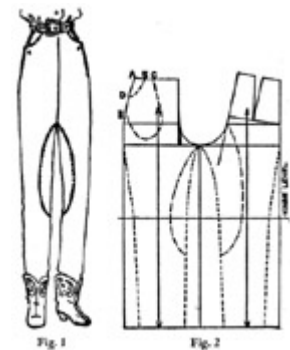


They were made from sturdy fabrics, such as denim and corduroy and then they became popular for bicycling and other sports where a regulation slack was not as convenient. They were not worn nor designed to flatter but for the convenience which they provided.

Because of their shorter length, the regulation slack pattern would be tapered slightly more than for a full length garment. In making this novelty style, the knee height measurement would be the basis of establishing the proper length for the garment. Note that they fall about two inches below the knee.

Western "Frontiers"

These functionally designed trousers are sometimes called "Kentucky Training Pants" because they were a favorite with men engaged in training horses. In the ranch country of the west, they were called "Frontier Pants." Originally, they were designed for men but when women started wearing them, an enterprising manufacturer started making the same style to women's measurements. They were more comfortable and flattering and they are now available in many different fabrics for varying climates. In denim, wool twill, corduroy or cotton twill, they are the conventional garb at the western dude ranches. The trousers usually taper to provide for wearing with western boots.



The high crotch and narrow leg provides ample freedom for the western saddle rider. Obviously, this garment is not one for the plump figure as it is too

revealing. It is boyish in appearance and is the favorite of the expert western horsewoman who, through her activities in the saddle, has retained a slender hipline.

Re-enforcement patches are usually made from the same fabric and the patterns for these patches are traced from the final pattern as shown in Fig. 2. In this case, the novelty pockets are made by extending the back section A under the flap down to B-C which forms the lower edge of the pocket. The facing for the flap is also cut the same shape. By sewing the sections together at B-C, the lower edge of the pocket is closed into the necessary pouch shape. Many variations of pocket design are developed by designers.

Bathing "Trunks"

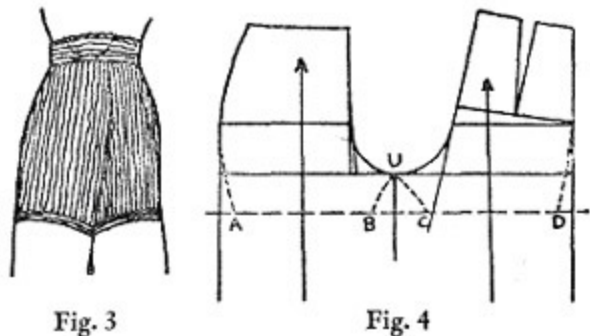
Bathing trunks are the accompaniment for the modern dressmaker-type skirted bathing suits.

They are usually made from rayon jersey or wool jersey. The accompanying

diagram shows how they are shaped to the actual thigh measurement. As these garments are made from fabric having elasticity, they should be sized small, but care should be taken that sufficient length is provided in upper portion, but yet not have too deep a crotch as that would hamper swimming movements. If the lower edge is made with a tight band of the fabric the garment will hold its shape better. In some cases, a hem is turned and elastic inserted and on some occasions a narrow tape facing is used.

Extra close fitting trunks, as for dancing, require still more fitting; fold in fitting darts extending from hem to crotch line. Make final pattern from specially fitted muslin. The darts will change the shape of the crotch seam edge but not its length.

Another fitting dart, from C-D to point of waistline dart, may be folded in, and shifted to the waist dart in making final pattern. Very important: the tighter the trousers, the higher the crotch for comfort and freedom; low crotch garments must have wide legs to be comfortable.



"Regulation Navies"

"Regulation navies" are a conventional style of shorts the design for which was borrowed from the men. These cotton twill shorts were originally designed as regulation garb for American sailors. Usually they have a white cotton tape sewed down over the seams which have been moved forward slightly. In some cases they are lined with white coarse cotton. Like the mannish "Frontier Pants," they are best suited to the slight boyish figure. The double front closing is like that used on the regulation "bell bottomed" sailor's trousers.

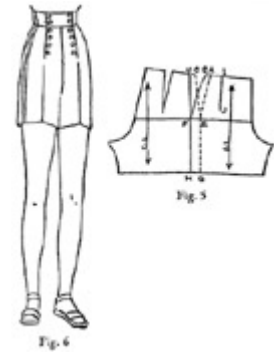


Fig. 5 shows the method used for moving the side seam forward. A-E-G is the new side seam. No flare is provided at the side as in feminine shorts.

Variations of Straight Culotte

The simple straight skirt culotte which provides an inverted pleat at the center front and back is quite a popular style. This pleat adds extra walking room but adds nothing to the width of the silhouette when figure is not in motion. When the pleat is used, the extra walking room which was originally added to the side seams may be eliminated if desired. This pattern is developed in the same manner as for the inverted pleated skirt shown on [page 193](#).

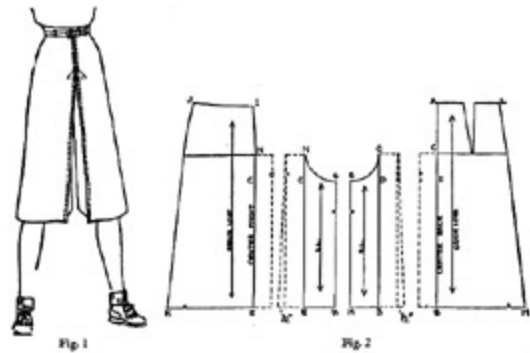


Fig. 2 shows the diagram of the method. Especially note the one half inch extension which is added to the back seam of the pleat in the under leg section. This is done to cause the under section to push forward slightly.

Cut your original straight culotte pattern on the lines A-B and N-E. Spread these sections and build on the added area according to the depth of pleat desired. Before you cut out the pattern, fold the paper on both lines N-E and C-B to study the positions for the seam allowances. When the muslin is assembled, you would snip the seam allowance diagonally at points N and C in the same manner as used for making a skirt.

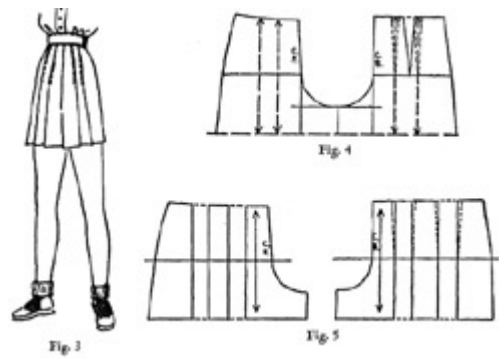
Almost any skirt design could be adapted to the culotte just as long as the basic silhouette is the same. Varied yokes with panels, group pleats, or even a peasant skirt can become a straight silhouette culotte. Naturally, the same is true of the straight shorts, as shown on next page.

In 1942, a revival of culottes resulted from the need for functional clothing to be worn for defense work. Although they were ideal for that specific purpose, fashion designers saw, in the growing trend towards such clothing for gardening and other war-born activities, a ready market for them as an alternate for slacks, also growing in favor.

Many interesting new designs have been produced by students experimenting with this culotte silhouette. Gored designs, models with several pleats and pleats adjoining panels have been successfully designed. Because it produced a garment resembling a tailored skirt, the fabrics used (denim, cotton twill, gabardine and serge) were of texture which insured the garment holding its shape.

Straight Pleated Shorts

Fig. 3 shows the straight shorts with added pleats at front and back. The added movement provided by pleats is particularly good for the wearer who has plump thighs. The eye is attracted to the movement when the figure is in motion and the vertical lines of stitching slenderize the hips.



Notice that Fig. 4 shows how to distribute the basic control under the two pleats, just as you did when you distributed the shaping in shaping tops of the panel skirts. In this case the dotted lines in Fig. 5 show how the pleats would taper slightly from hip to waist, thus producing the bulge necessary in the back of the garment. If this type of garment was being cut from a personal sloper which provided for shaping darts at each side of the front, the pleats in that area would be tapered also to provide the necessary bulge in the finished garment needed to make a neat fitting waistline across the front.

The length of shorts should depend upon the wearer. Some smart styles fall just below the knee. Some women can wear them just above the knee.

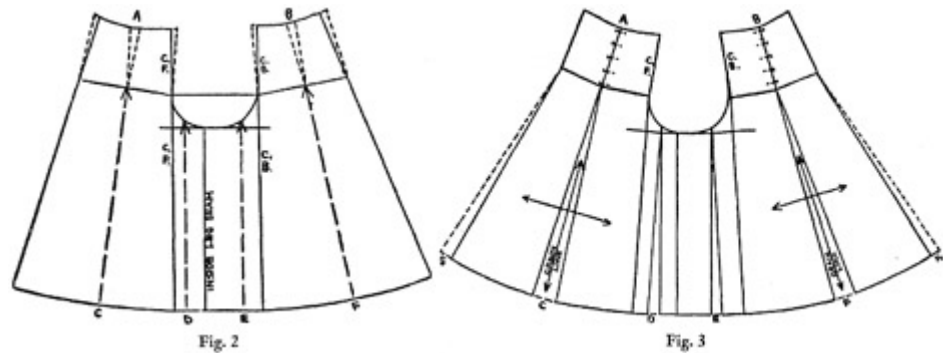
Variations of Straight Pleated Shorts

Variations of Semi-Circular Culotte

The floor length semi-circular culotte produces an interesting garment for lounging or beach wear as a change from the conventional trouser type. Experiments have proved the fact that an extremely full silhouette, cut on the circular principle is not as pleasing as one of a more moderate sweep. The fact that *proportionate* fullness must be added to both inside and outside of each leg causes the extremely full styles to be too bulky around the knees for comfortable walking.



Fig. 2 shows the method for increasing the sweep. A and B can be one inch each and yet



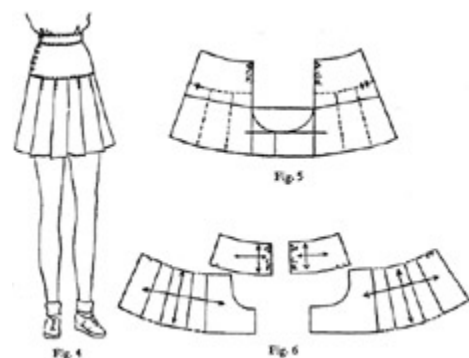
produce a generous sweep at the hemline of a full length garment, because as the length of the garment increases, so the width increases at the hemline. Note the positions of the dotted lines in preparation for slashing.

Fig. 3 shows proportions for spreading. Spaces at C and F would be dependent upon the amount taken at A and B. D and E should not be spread more than one half the space at C or F. At the side seams, G and H, add the same amount as D and E. This distributes the movement evenly around the hemline.

If the garment were to be short, as for a skating culotte, instead of the single darts A and B, two darts could be planned and that would distribute the movement still more generally.

Circular Pleated Shorts

Compare the silhouette of these shorts with those illustrated on [page 216](#) which were



developed from the straight culotte pattern. Because of this difference, these shorts would be more flattering to women with small waistlines and large hips, just as a semi-circular skirt would be. In such cases it would be important to keep the length in mind and make them long enough to offset the horizontal line of this yoke. A variation in the shape of the yoke would also aid in slenderizing the wearer.

Note that the pleats taper at the yoke line. This is done by making the first dotted lines shown in Fig. 5 at right angles to the yoke line. The position of the pleats conform to the basic silhouette. Gores could be used in much the same manner, if desired. Or a gored design could be made from the straight silhouette and the added sweep accomplished as in an eight-gored skirt.

Many smart designs for shorts portray some popular skirt cuts of the season.

Chapter 10—Lingerie

You may select a topic from this lesson

The exquisite bits of apparel belonging to the general classification of lingerie (pronounced lan-jer-ee) are an important part of milady's wardrobe. They include all pieces of underclothing and other garments designed especially for use in the privacy of her boudoir. The group includes nightgowns, slips, panties, brassieres, bed jackets, negligee, sleeping pajamas, corsets et cetera. The boudoir negligee is not to be confused with the "hostess gown." The former is intended for *emergency* while the latter is a modern substitute for any semi-formal dress except that it is usually purchased for wearing when entertaining guests. Lounging pajamas differ from sleeping pajamas. Although these flimsy bits of apparel appear fragile and impractical, they are indeed, quite the opposite!

Lingerie, first of all, is functionally designed. By this, the author means to say that the garment, aside from being made as beautiful as possible, must first be perfectly cut to provide a minimum of bulk but a maximum of comfort. Most lingerie must withstand repeated launderings. It therefore may be beautiful, but the fabric must still be as durable as possible. When the functional points have been created, then whatever beauty is added must be added without loss to the functional value of the garment.

Corset, brassiere and lingerie designers become highly specialized in their field. Probably designers have labored more diligently over the design for a girdle or a slip than any designer has struggled to create a dress or coat. Women want a smooth-fitting slip, and although they may require dresses made to their measurements, they still expect to buy their slips ready to wear. Hence the development of our bias slips. They adjust somewhat to the varying contours of women's bodies with a minimum amount of excessive wrinkles. A fortune was made on an ingeniously cut pantie which provided for the use of a gusset! Many manufacturers patent their designs for slip and underwear patterns and each year they add some improvements to the functional design and offer a new style made from that same basic pattern. Once a pattern is developed, the other changes are relatively simple.

As mentioned previously, most lingerie is made of washable knitted or woven fabrics. Occasionally some luxurious garment is shown in a shop and the sales girl will mention that it should be dry cleaned. But fabric manufacturers have developed such a fine assortment of truly beautiful washable fabrics, most lingerie may be laundered carefully with no disastrous results. Lingerie satin, crepe de chine, flat crepe, fine muslins and knitted silks and rayons and even washable satin and lastex are now to be had in popular priced lines.

The greater portion of lingerie is constructed by machinery. New attachments on the sewing machines have reduced the need for handwork and brought simulated luxury at popular prices. The fashion conscious woman, who can afford it, will want some of her lingerie wardrobe to be hand made, even though she may realize that will give it no greater durability. Most hand finished lingerie is made outside this country. In some countries, such as Porto Rico and the Philippines, our manufacturers have built large finishing factories where the gifted native women add their needlework artistry under the direct supervision of American stylists. This accounts for the fact that a hand finished garment may be purchased here at considerably less than ten dollars.

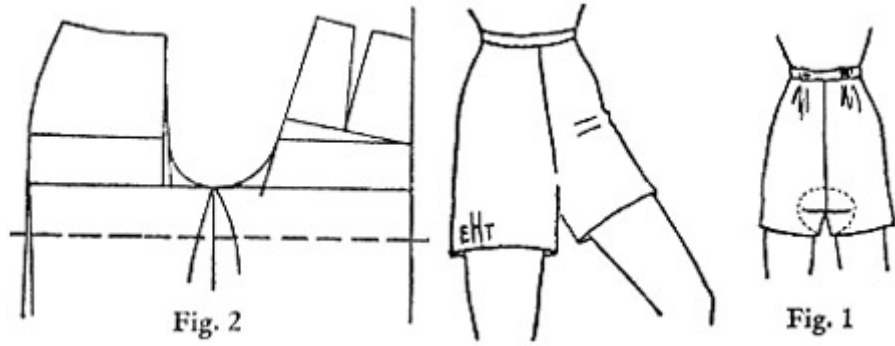
The person who is especially talented in the creating of intimate apparel can find excellent opportunities in the designing field. First must come the study of the need for functionalism in the cut of the garment and after that, ideas for beautifying the garment may be varied and interesting. Lingerie design follows trends suggested by dresses. Nightgowns show pronounced fashion changes. Underwear changes to meet the demands of dress silhouettes. A surprising amount of beauty is to be found in this highly selective field of women's apparel.

Panties, Bloomers etc.

In the past few years corset designers have perfected a modern garment known as the "pantie-girdle." This serves the purpose of the two garments and the sale of chemise and panties has lowered. However, you should study the two basic patterns which form the basis for most designs for panties or the modern version of the "bloomers" of past years.

Straight Panties

Straight panties are developed from the basic slack pattern draft. For the uncorseted figures of adolescent girls, such garments may be hemmed and an elastic inserted in the hem to give a snug fit at the thigh.

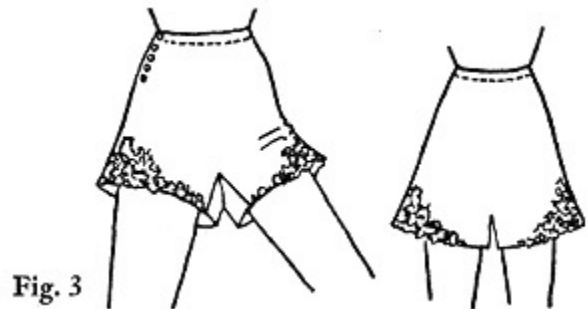


Quite recently a pajama manufacturer introduced a summer sleeping garment which had a pajama "short" instead of trouser. His designer placed inserts of elastic at each side of the back, and provided the control which was adjustable to waistline of wearer.

Notice that the silhouette of this pantie is that of a trouser. When elastic is used at the waistline, no placket is necessary. This basic pattern forms the basis for many such garments which are made from fine knit fabrics. Some models are re-enforced at the seat for more durability.

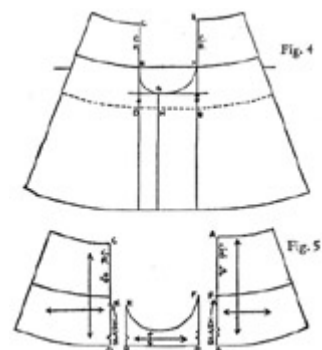
Simulated Circular Panties

Because this style of garment will adjust to fit more variations in figures, it is used more frequently. It is made from the semi-circular culotte pattern. The usual center front and back seams have been eliminated and the inside leg portion has been made into a gusset which is set into the slash placed at the center front and back of the main sections of the garment. The setting of the gusset requires expert machine operating. If you will inspect some models found in the stores, you will recognize the use of this cut, or variations of it.



1. Cut semi-circular culotte off at desired level.

2. Cut off inner leg sections at E-D and F-B.



3. Place these together with normal seam line G-H closed. Trace around them and eliminate this seam. Two gusset sections are required for the garment.

4. Original back and front seam lines C-D and A-B are then labeled to lay on fold.

5. F and E indicate point to which slash will be made in fabric.

6. Sew gusset sections on line E-F. Set into slashes in body of the garment.

Slips

As has been. The designs presented for your analysis are selected as being typical styles found available in almost any apparel store today.

As mentioned previously in this text, designers have spent countless hours of effort in designing the "perfect" slip which will adjust to the varying contours of women's bodies. Fig. 1 shows the "princess" style which has vertical seams which achieve the fit in the garment. Because of its many vertical seams this is a popular design for slips being made to customer's measurements. The sweep at the hemline may be varied as desired. In some cases, this style of slip is cut entirely on the bias with the lower front and back panel cut double to make the garment "shadow-proof."

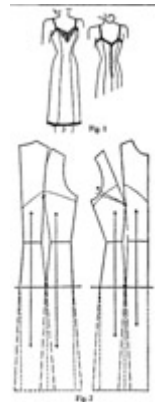
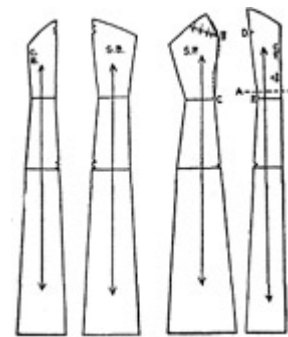


Fig. 2 shows the method for producing the pattern from the basic hip length bodice sloper. By introducing an extra dart at H, a close fit is assured at the top. This dart is then shifted over into the vertical seam extending down over the bust point. Extra hemline sweep is added as for gored skirts.

Fig. 3 shows the construction pattern with the discarded sections removed. To provide a snug fit under the breasts and around the diaphragm, draw a compound curve from B to C. D-E, being the same length of the original line B-C must be lengthened to equal the new curved line B-C. This is accomplished by slashing construction pattern horizontally at



point A and the extra length provided in the final pattern by spreading the sections as needed.

The final pattern would be completed in the usual manner with grain indicators marked to intersect with the hip level line. Some designs provide for a double of fabric through bust area. This would be made in the same manner as a facing from final pattern.

The procedure used for making this slip is the same as that to be used when making any full length garment from the hip length bodice sloper. The front section being arranged to make the bust and hip lines follow the horizontal grain of the fabric will insure a well-hung garment. Later examples in coats and one piece dresses will give further practice in the use of this procedure.

A similar style, cut on the bias, eliminates the side seams and inserts elastic fabric in area of waistline to cause garment to fit snugly at side waist.

Bias "Bra-top" Slip

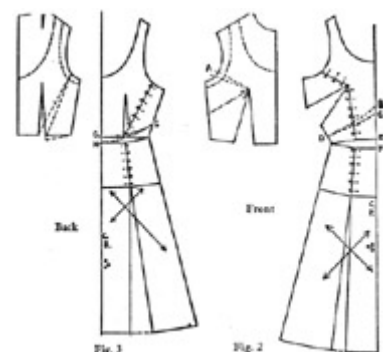
Variations of this slip are to be found in most stores. It is usually made from a knit fabric or, when cut from lingerie crepe or satin, it is made on the bias of the fabric in the skirt portion at least. Because there are no vertical seams for fitting, it is best worn by the woman who has no intense curves.



The upper section may be designed with the simple double bodice top with adjustable shoulder straps or it may be shaped as shown here. In some cases the position of the darts will vary or the control may be divided with darts extending from raised waistline and the underarm seam.

The control is shifted in the bodice sections as illustrated. The working dart is introduced in the front skirt section and then that is shifted to the hemline to provide walking room. The normal basic dart appearing in the back skirt section is also shifted in a like manner.

Vertical guide lines are then drawn upon the final pattern paper and the front and back sections are arranged as shown in Figs. 2 and 3. Note how the



shaping waistline seam is revealed when the two sections are placed against the guide line. In the front section, line D-C is the new raised waistline. The distance from B to C can be made about one half that distance shown between E and F. The remainder of the center front length is absorbed in the bias cut.

In the back section—because the new waistline starts from the normal waistline—the new seam can absorb all the normal fitting provided at the waistline in the slopers.

If a bias slip is cut too narrow through the thighs and at the lower edge, it will have a tendency to creep up when the figure is in motion. When such slips are ironed, the iron should follow the grain of the fabric by ironing in a diagonal motion. This will help to restore the shape the garment had originally with each washing. Any garment which is cut with a bias skirt will gradually sag when hung in a closet. The only way to avoid that problem is to store it flat in a dresser drawer.

When you have cut the pattern for this slip and have tried your results in muslin, it will become obvious that, because of the lack of vertical seams, this garment may not be made to fit as closely and smoothly as the previous princess design. In observing dresses in stores, you will notice that the high priced sheer dresses will have well cut slips accompanying them. The less expensive garments will have slips which may be made with less material, time and labor. The custom designer should select about the same method. The slip will vary with the final cost of the garment being made for the customer. The better the slip fits, the smoother the dress will look on the customer.

You may see a similar design to this slip which has a panel in the back which is cut on the straight of the fabric. That style will improve the fit and not add too much cost to the finished garment. In some instances, the back panel is cut on the bias. At this writing, lingerie designers are using a new elastic fabric which is set under the arms at the waistline. This may solve the problem for the customers who want a closely fitted slip with no placket at the waistline.

Novelty Slip:

This style of slip introduces four seams, each one of which



contributes to the fitting of the garment. By laying the pattern on a true bias of the fabric, this will aid in adjusting the fabric to the contours of the figure. It is given here in a simple form, as a problem for cutting, but it might be trimmed with sections of lace if desired.

Because this slip has only four seams instead of the six fitting seams of the princess style, it would be best suited to a slender woman or a full figure with a large waistline.

1. Start by making the construction patterns for front and back bodices as shown in Figs. 2 and 3. Draw in the desired line of the top as shown by the dotted lines. Cut away the remaining area and discard.

2. The back dart is eliminated by folding it in and pinning. Draw in the angle of center front dart and add the small fitting dart at the top.

3. Fig. 4 shows how the bodice section should appear when darts have been folded and control shifted to center front.

4. Use the four gored skirt pattern which you studied on [page 185](#) as the basis for the skirt portion. Arrange the sections as shown in Fig. 4.

5. If you wish additional walking room at the center front, this may be added as is shown by dotted line A- -B. Seam allowance would then be added as shown.

6. The shaped facing would be made from the final pattern. As the facing is cut narrow at the back, it would serve as a trimming and yet finish off the top of the garment. For durability, the facing could be cut much wider, if desired. If the slip were to be made of dull surface lingerie crepe, the facing cut of satin would give an added note of interest and trim.

7. The center back zipper closing would facilitate getting into the garment.

A satisfactory test may be made of this design by cutting one-half the garment and then pinning or basting the side seams together.

NOTE: This style of slip would be adaptable to an evening length garment. This completes your study of methods used for cutting slips. From this information, you should be able to originate a wide variety of designs as desired. The method used for making these full length garments is that used in making coats or dresses which have no seam at the normal waistline. Space will be devoted to those in [Chapter Eleven](#).

Brassieres

During the late nineteenth century and the early twentieth century, the camisole, or corset-cover, was worn under blouses and dresses. Women who had an overdeveloped bust wore a blouse which had a fitted lining or a tightly fitted corset-cover to maintain a smoother contour. Shortly after the last world war, the social order changed.

Women bobbed their hair, entered the business world and gained their right to vote. As is usually the case, fashions interpreted the new era and skirts became shorter and the "boyish" figure became the vogue. Waistlines were indefinite, but the bust was confined with the new "bandeau brassiere."



Fortunately, this unhealthy garment was abandoned as the natural figure returned to fashion. The scanty garment remained, but it was changed to conform to the natural contour of the breasts. Since then, the corsets and brassieres have improved until today, a woman may find a wide choice of styles to suit her specific requirements in almost any price bracket. Not only does the 1942 brassiere mold the shape of the breast but it is designed to support it as well. It has been designed to serve a definite functional use. It has also been designed to bring comfort and serviceability. The variation in price usually determines delicacy in fabric, perfection of cut and the minimum amount of bulk.

Much credit should be given to the diligent designers who have specialized in the foundation garments. They usually work with models as they must study the problems of countless types of women. Usually they have had experience selling foundation garments before they entered the creative phases of the work. Some understudied experts for several years before they became head designers. They have contributed greatly to the enviable figures of American women.

Because there is such a wide choice of styles available in the stores, one seldom has occasion to create a single garment. Although most large cities have a few shops which specialize in foundation garments and negligee where a large stock of ready-to-wear is carried, there is little occasion for "made-to-measurement" service. A few small alterations will usually be all that is necessary.

Herewith are shown a few representative types which show the functional designs which are created to meet needs of customers:

Fig. 1: Was designed especially for the 1940 low, V-necked evening gowns. Elastic edges on the sides of the front assure modesty to the wearer.

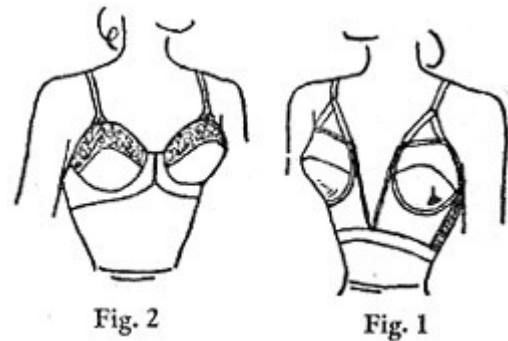


Fig. 2: is a style designed for the teen age girl with partially developed bust. It is light weight and cup shaped feature gives firm line desired.

Fig. 3: is designed for the woman with the overdeveloped, sagging bust. Note stitched under portions to give support where needed. Some such designs show light boning instead of re-enforced stitched area.

Fig. 4: is a lacy creation having wide center front panel to divide the breasts. This foundation garment would be best for the gown having drapery in bust area.



Fig. 5: was designed in 1938 for wearing with popular strapless evening gowns and bathing suits. Note gusset of elastic.

Methods given for producing bathing suit tops would be used to cut patterns for brassieres. Special model form should be used in such instances.

Nightgowns and Panamas

Like all well designed clothing, sleeping garments of today are less bulky than in our grandmother's day. Yet they are functionally designed to give

comfort to the wearer. In the previous era, only women of wealth could afford nightgowns which were flattering but today, thanks to our able woven and knit fabric manufacturers, the modern woman may have flattering sleeping garments of delicate fabrics and colors and yet they will be serviceable and moderately priced.

Assuming that the fabric is beautiful to the eye, the next point of consideration is the cut. And there must be comfort. Comfort as to warmth and as to the cut of the garment. Most of the garments sold in the stores are "year-round" models. However, if you will notice, in the hot summer months, stores feature nighties and pajamas made from extra sheer cotton and synthetic fabrics which are actually cooler than the usual garment. Now that American women have become actively interested in skiing, hunting, camping and rugged ranch living it is natural that the primitive heating conditions of some mountain cabins will create a demand for extra warm sleeping garments. As a result, there has been an increasing demand for fleecy nightgowns and a subsequent revival of cotton flannel. A modern fabric used to meet this demand is a "brushed rayon" which simulates wool in appearance.

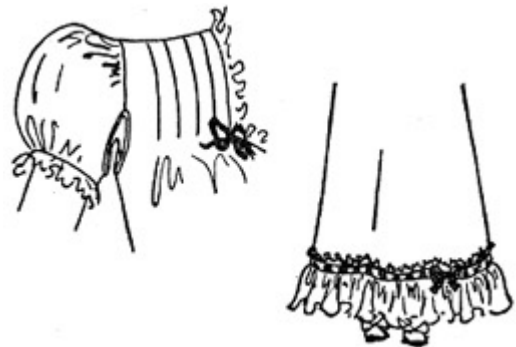
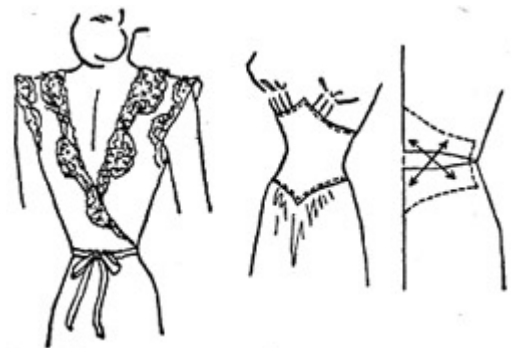
A few general rules will apply to designing the pattern for a nightgown. The garment should be wide enough in the skirt to permit freedom of the limbs while sleeping. If sleeves are to be used, they should be cut to provide the necessary freedom of the arms. Whenever possible, the waistline should be adjustable.

This may be accomplished with a tie-belt which runs through the loops placed at the waistline under the arms. Or, a set-in

waistline band at the front may extend on into a sash belt across the back. Drop shoulders are not popular because they have a tendency to tear out with the movement of the arms.

Tiny straps are not practical because they cannot be made durable enough. Therefore the sleeveless types, with wider areas over the shoulders, are the more popular. If short

puffed sleeves are desired, some designers leave the sleeve unattached under



the arm, finishing off the garment and the sleeve with a tiny, firm binding. This will add the freedom needed.

Like dresses, nightgowns fall into three basic classifications: the strictly tailored, mannish types; the semi-tailored and the distinctly dressy, elaborate feminine types. Designs for nightgowns usually follow the current trends in dresses to some degree. When special interest is being focused upon hemlines, then you may expect to see nighties having flounces on the hemline. When puffed sleeves were in vogue, both nightgowns and bed-jackets had puffed sleeves. The same is true with capes, circular skirts et cetera.

In recent years, sleeping "ensembles" have found a ready market. These include the nightgown with an additional negligee which matches. Some are padded and quilted to give added warmth. Others may be made with a contrasting lining for extra modesty. Combinations of nightgowns and pastel flannel dressing robes which match are found in the more expensive lines.

An ingenious refugee from war-torn Europe was confined to an American hospital for a few weeks and while there she was so annoyed with the purely functional hospital nightgowns which reach just below the knees and tie in the back, she designed similar models of silk which included the same functional features. She soon had more orders than she could fill!

Sleeping Pajamas

When sleeping pajamas were first adopted by women, many of the first models were not comfortable. The pattern makers—in an attempt to make the garments loose and roomy—made the mistake of lowering the crotch without widening the leg of the garment proportionately. The results were most unsatisfactory—like wearing a glove with too short fingers. In the chapter in this text which explains the method used for lowering the armhole, you were taught that when the armhole is lowered, the sleeve must be widened at the biceps accordingly. The same is true when the crotch is lowered on a trouser-like garment. The "Frontier Pants," being cut high in the crotch to serve a functional need for horseback riding are proportionately tight in the thighs. However, the most comfortable sleeping pajama has the crotch depth of the average slack suit. It will provide ample room for movement of the limbs while sleeping.

Except in some special designs for children's garments, pajamas are usually made two-pieced. Due to the variation in torso lengths in adults, the one-pieced garments would only fit a limited number of people. Hence the popularity of the two-pieced models. Actual sleeping pajamas are usually quite simple in cut and trim to insure ease in the laundering. Lounging pajamas, which may be dry-cleaned, are sometimes quite elaborate.

Hostess Gowns

Entirely unlike nightgowns, sleeping pajamas or negligee, this group of garments are a form of apparel for wear in the entire home. Lounging pajamas resemble a dress more than the sleeping garments and the fabrics are luxurious as to color and texture. Some women want them to harmonize with the color scheme of the house. They are modern in origin, filling an existing need for suitable lounging apparel for casual evenings at home whether guests are being entertained or not.



The hostess gown is full length, like an informal dinner dress. When it has been selected to harmonize with the home decorative scheme, it is reserved in the wardrobe for that purpose. Velvet, plain and figured silk crepes, metallics and other glamorous fabrics are usually used. The hostess pajama-suit serves a like purpose and would be made of similar fabrics.

The "house coat" or "breakfast coat" is an outgrowth of the hostess gown. Women enjoyed the hostess gown because it enveloped them completely. When women started to wear cotton slacks for the busy hours of the morning, a designer started producing the cotton house coats which proved to be far more attractive and they soon rose in favor. The modern housecoat is usually made of gingham, cotton pique or calico and it should be crisp, fresh and becoming. The same pattern which might be used for a velvet hostess gown might be used to make a cotton house coat.

Women of moderate means can now enjoy the luxury of extra garments of this type. Modern business girls find that it gives them a definite mental lift to shed their business clothing and slip into an inexpensive garment of this type after a difficult day at the office. It is quite correct to wear when receiving casual drop-in visitors and, due to its simple cut, it may either be laundered or

dry-cleaned inexpensively. Every woman and girl should try to manage to possess at least one such garment in the wardrobe. There is nothing quite so depressing as to see one trailing around in a flannel bathrobe or a jaded negligee. A few yards of twenty-five cent cotton percale can produce a most attractive garment which will endure for months and be a constant joy to the wearer.

Chapter 11—Coats

You may select a topic from this lesson

This chapter will be devoted to the discussion of outer garments. In the previous chapter you studied how to produce slips by assembling waist and skirt patterns or using hip length slopers. This same method would be used for making any full length garment.

The designing and making of coats involve many principles of garment construction which make it a highly specialized field in the industry. As it is closely related to the men's tailoring field it is natural to observe that many men have entered this phase of designing. Usually a manufacturer will specialize in coats and suits.

The actual making of the pattern differs little from the method which would be used to produce any other garment pattern. The principles of cutting are much the same. The fabric is limiting, as only a certain amount of manipulation can be done in the bulky fabrics used for making outer garments. If the fabric used is much the same as that to be used for dresses, the styling may be similar to a dress, but if it is thick and bulky the designer must rely upon silhouette interest and proportionate spacing for beauty in his garments. If the fabric is a hard twisted worsted, such as that which would be used in producing men's suits, then the finished woman's suit will be as simply cut as a man's garment and will resemble a man's suit.

Coats and suits made from softer fabrics which have been especially designed for the purpose are usually referred to in the fashion terms as being "dressmaker types." That is an apt term because it means that the fabric is sufficiently soft and pliable to require no special heavy pressing equipment and therefore the garment may be created by the small dressmaker who might also create dresses. The second type is called the "man-tailored" garment and to turn out such a garment, the workmanship must be that commonly used in finishing men's apparel. It has a distinctly mannish appearance.

As the construction of the latter would require special training and equipment, it is natural that the majority of women's coats fall under the classification of "dressmaker type" garments.

Although the majority of coats have a lining, occasionally summer weight garments are partially lined only. The pattern for the lining of the coat should be slightly smaller than that for the coat. Some dressmakers use the same pattern for cutting the lining but, when the seams are stitched, they are made slightly deeper than the original seam allowance and this process reduces the size of the lining slightly. Naturally, the more seams there may be in a garment, as in vertical fitting, the less the adjustment would be in each seam. The length of the lining is not altered. About one half inch reduction across the front and back should be quite sufficient.

If you will notice finished garments, you will usually see a vertical pleat laid in the lining at the center back. This provides expansion with arm movement. As wool will stretch to accommodate body movements and silk will not, this pleat is important.

As all coats must be designed to close at the front or side, a facing is needed to finish the front. Usually this facing is made from six to eight inches in width and it takes in the front neck section also. This facing would be made from the final garment pattern. Inspect finished garments for facings.

From 1938 to 1942, padded shoulders have been included in many dresses, and in most outer garments for several years. When paddings are to be used, allowance must be made in the pattern for that added bulk. Such methods have been diagramed previously. ([See page 125.](#))

The methods used for cutting and fitting most full length garments may be classified as follows:

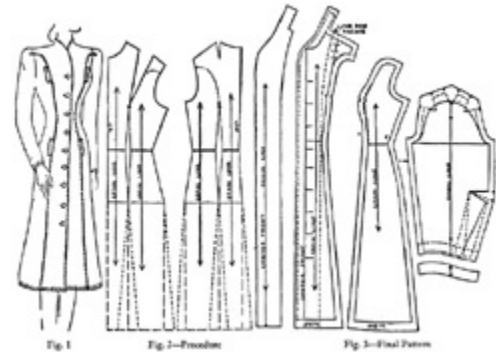
1. *Vertical seam fitting.*
2. *Seamed waistline with control darts.*
3. *Combination of these two.*
4. *Straight, Boxy or Swagger types.*
5. *Combination Straight or Fitted with Swagger.*

The prevailing silhouette of any season will determine which of the foregoing methods would be used the most. Illustrations and diagrams showing the method for cutting the pattern for each type are furnished herewith. It is suggested that you work up all of these

designs so that you may observe the results. The sleeves have been included to show you how the garment is coordinated in its design theme. These need not be worked up because your interest at this moment is the study of silhouette of the body of the garment.

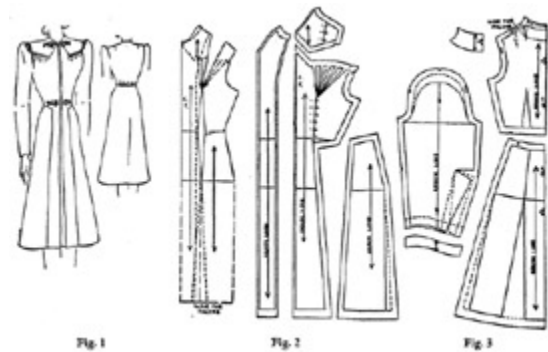
Vertical Fitting

The pattern for this style of garment—with many variations—could be produced from any of the variations of the French Lining jacket patterns illustrated in this text. It is essential that the jacket pattern being used be designed so as to provide for the hip line to fall on the horizontal grain of the fabric. Turn back to the section devoted to jackets ([page 82](#)) and note which of the patterns provide the proper hip line and which do not. When completing your pattern for this design, introduce greater sweep to the hemline.



Seamed Waistline Fitting

The coat which has a seamed waistline may be developed from any combination of bodice and skirt patterns in just the same manner as a dress, except that provision must be allowed for an opening down the front or side. Note that grain indicators are established in construction pattern. The side front skirt section, when finally attached to the bodice front panel will maintain the original shaping which was provided from waist to hip in sloper. Front facing eliminates yoke seam. No lap is required in this design.



By slashing sleeve from wrist to point of elbow dart, basic elbow control dart is closed partially and thus the larger wrist measurement required in a coat is provided. The back bodice darts are treated as soft waistline fullness between notches.

This is a youthful design which might be made of a bulky novelty silk or rayon crepe, medium or light weight wool. Such designs involving gentle fullness might also be found in soft, thin fur pelts such as kid or broadtail caracul. This design also suggests opportunity for interesting manipulation if a striped fabric were selected for it. When using the fabric on a bias to secure a diagonal effect, the sections being so handled would have a new grain indicator placed from the present line with the aid of the triangle, as instructed in previous chapters. This design also suggests the possibility of using a combination of fur and fabric, the yoke and side front sections being made of sheared beaver or some other flat fur and the remaining portions made of a thick wool. In such case, the portions which would be covered with fur need not be made from expensive wool but could be cut from pre-shrunk lining cotton.

Combination Fitting

This pleasing design for a coat is made from a variation of the French lining with center front panel seamed at the waistline to provide opportunity for placing more fullness below the waist than above it. The belt is merely an extension from the side sections. This produces a silhouette having a "forward movement" and would be suitable for the angular type figure. The sleeves are a modified Bishop style gathered into cuffs which are large enough to slip over the hand easily. Together with the soft roll reefer collar, this added bulk would softly flatter the extra slender woman.



This style might also be adapted as a maternity coat, the gathered center front being made with an elastic which would make the garment adjustable for wear during the earlier months. The fabric for this "dressmaker type" garment should have pleasing draping qualities because of the use of gathers.

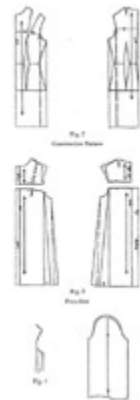
Boxy Type Silhouette



Fig. 1

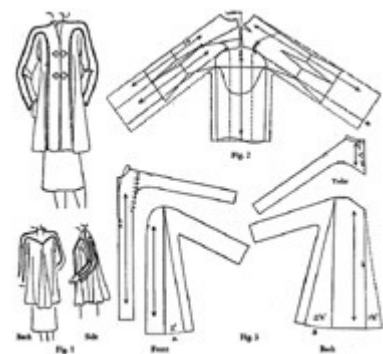
The boxy and swagger silhouettes require control maintained above the bust and the shoulder blades just as the Dolman cape would. This may be accomplished by concealing the control in some seam of the design or it might be placed at an angle extending from the neckline and thereby be hidden under a rever. When the curves at the back have been flattened through the use of shoulder pads, the ease may be "worked in" at the point and then, through steam pressing over a curved pad, the wool fabric would mold into a soft curve. But when a fabric is used which will not respond to steam and shrinking, the darts would be placed in any convenient position, dependent upon the design of the garment. [See page 75](#). The darts which would shape the hip length sloper at the waist are ignored just as was done in making the Dolman cape.

To achieve the "boxy" silhouette which provides extra room around the lower part of the *front* and *back* armscyes, a slash is made from hem to arm-scye as shown by points A and B, Fig. 3. When spread is completed, note the resulting change of *shape* in the armscye as shown in Fig. 4. But, because the boxy coat has little or no flare at the hemline, the extra width under the arm must be removed from the underarm seam as is shown by the broken lines in Fig. 3. If two thirds of the width is removed, this should produce a boxy silhouette of pleasing proportions. Note also that the normal shoulder seam has been raised to accommodate the thickness of the padding. It has also been moved outward. In such cases, it is necessary to measure the new armscye and actually fit in a muslin sleeve until it hangs correctly. The final pattern for the sleeve is then made accordingly.



Swagger Type Silhouette

Below is shown a typical "swagger" silhouette. Unlike the previous style, the full hemline is retained to provide movement in the silhouette. When cutting this pattern, it is very important to watch your proportions



when sketching in the first divisional lines which form the panel and sleeve strap in the front and the yoke and sleeve strap in the back. See Fig. 2, showing arrangement of slopers and the spacing of these divisional lines. Broken lines A and B show place where flare will be introduced by slashing and spreading as shown in back section of Fig. 3. Amounts given produced a pleasing half size model which reached to within eleven inches of the table level. Flare added to center back seam will increase the movement throughout the back of the garment.

Combination Fitted and Swagger Silhouette

Here you see the same design adapted to a combination silhouette which has a fitted front and a swagger back which is still more flared than in the previous diagrams. Compare the Figs. 2 on these pages. Note in the combination silhouette, this front divisional line forming the panel has been made to follow the line of the basic dart and then a slight flare has been introduced below the hip level. Two broken lines appear in the straight back section to throw extra fullness in the back. Note distribution of this added fullness in back section of Fig. 3.



The belt slips through an opening left for that purpose in side seams. This gives the freedom to the swagger back and retains the front section in position.

Similar combination designs can be produced for the fitted front accompanied by the dolman or circular cape. (See page 140.) Likewise, the tailored suit collar, reefer collar and others suited to outer garments may be drafted for coats. Methods for so doing would be as previously diagramed.

If the reader wishes to specialize in the field of women's coats and wraps, a brief apprenticeship to a tailor would teach him much about the technique in handling coat fabrics and the fine tricks used to interline the garment to prevent excessive stretching through the

shoulders, "staying" the seams, et cetera. He should study coats for classification in silhouette, for their functional classification and for styling detail common to such types of garments.

In the opinion of the author, the field of coat design might be said to be the architectural phase of clothing design. When it has been mastered, it pays proportionate returns for the effort.

Fabrics used have their limitations. The methods used to cut and style them smartly are singularly common to coat manufacturing.

Chapter 12—Children's Clothing

You may select a topic from this lesson

At the time of this writing, there has been no established rule for sizing children's and infants' garments. One manufacturer may produce a size number 6 garment which will prove to be somewhat larger than a similarly marked garment made by some other manufacturer. The mother must go into the store and purchase the garments according to the actual size of her child because some age 8 children will wear size number 6 apparel and again the opposite may be quite true.

As is the case with adults, a government sponsored survey was started and through the aid of the schools, measurements were to be taken of thousands of children of varying ages and sizes in an attempt to determine the measurements of an *average* child of certain age. This may aid in standardizing measurements as far as the manufacturing is concerned, but still the mother will have to purchase her daughter's clothing according to her actual size rather than her age.

For one who contemplates entering this specialized field, it is a wise plan to make a careful study of the garments which are now being designed and shown in the stores. This can easily be accomplished by actually selling the merchandise in a children's and infants' department in any city. Customers soon voice objections to certain types of the apparel and in some cases, the small customer expresses her objection to certain points about the clothing while trying it on. Hundreds of clippings of good examples of functionally designed clothing for youngsters will do much to aid in visualizing shortcomings and may aid in stimulating ideas.

A few days spent at the lake shore during a week in summer gives excellent opportunity for the study of varying shapes and sizes of growing children from toddlers up. The designer should know her little customers before attempting to create apparel for them.

Children's and adolescents' clothing closely follows the trends shown in adult apparel. For the past several years "mother and daughter" dresses have been successfully sold in stores. Costume history books show us illustrations of small children dressed much like their parents. Fortunately, modern mothers

are more sensible and they favor simple, well-cut clothing for their children and much of the fussiness of former years has been replaced with functional design of a high order. Yet these small folks want some interest in their clothing and clever designers cater to the interests of that age when they plan their designs and patterns.

Apparel for growing children may be classified roughly into three groups: infants', children's and girls'. The infants' clothing extends to about two years. The children's from two to eight years and the girls' from eight to sixteen. Boys' clothing would run about the same as girls'.

It is to be remembered that these do not represent sizes, but ages. Hence, the girl's sixteen dress would not be confused with the misses' size sixteen found in another department of a store. The girl's size sixteen is designed to meet the needs of a young growing girl, to appeal to her taste and to fit her undeveloped figure. It is merely an enlarged size eight or ten.

As girls vary greatly from age eight to sixteen, when the growing girl reaches the size and contour which makes it impossible to purchase her clothing in the children's department, she will then go to the "junior" department and probably find that a size thirteen or fifteen will fit her.



In some cities, custom designers for growing girls and small children build successful following in business. Between the ages of ten and sixteen, many adolescent girls develop figures of disappointing proportions and the wise mother realizes the importance of properly designed clothing for her daughter at that age.

Analysis of Children's Figures

Because the small child from two to eight years of age has a tendency to have a bulge at the waistline instead of at the bust level, the control for this curve must be placed at the waistline. The back of the figure is flat through the shoulders and otherwise quite normal. Therefore the draft for the back sloper would appear quite similar to that which would be made for an adult.

When you have completed your draft for size four, you may notice that the shoulders have an excessive slope as compared to the adult draft. This is

caused by the posture of the small child. The number 9 measurement increases in the girls' measurements which will bring the pitch of the shoulder upward slightly.

How to Take Measurements Correctly

Turn back to your previous instructions on basic measurements and read over the information once more. Check the [adult measurement chart](#) and the [children's](#). Note the similarity in points of measurement. Note that there is no need for a *Bust Point Height* or *Bust Point Width* in children's sloper drafts but it is necessary to use these measurements in the "junior" sizes.

Fig. 1 illustrates the method for determining the *Full Length* for a child's draft. The same measurement is used when making the front bodice draft. You will also note method shown for taking trouser side length. This could also be considered as a skirt length, when needed. Your *Center Bodice Length* added to your *Trouser Side Length* given in the measurement chart would give you *Full Length* in the standard sizes given in your chart. Skirt lengths vary for any given size and many manufacturers finish the skirt lengths in single sizes at a variety of lengths in just the same way hosiery is finished in a variety of leg lengths for a single foot size. In all cases, hems are generous to provide ample material for alterations.



Fig. 2 a "trunk measurement" which is taken when garments such as snow-suits, full length one-piece sleeping garments, or "creepers" are being made. This is merely used as a checking measurement to make certain that the crotch depth is ample to give room for sitting. Separate trousers or panties will pull down at the waist, but the full length garments must be cut with an extra low crotch to provide ample "trunk" room.



The *Hip Level* is more or less standard at 7 inches for adults, except in extra large sizes when it may be dropped to 8 or 9 inches. Due to the changing heights of children, it is

established at 4 inches below the waistline for size 2 and increases one-half inch with each size until it reaches 7 inches.

As the armscyes in children's garments should be roomy, when taking measurements directly from an individual, take the *Side Bodice Length* about 2 inches below the armpit to produce a generous armcye. You will remember that in the adult's clothing we try to fit the sloper closely at that point.

Necklines are usually made somewhat looser than for the adult so this measurement should be taken generously when measuring an individual child.

Although the designer strives for a certain amount of style and fit in the child's garment, her first thought must be for the comfort of the wearer. Common sense must be employed when fitting the little sloper and when using it to produce new designs. The sloper becomes a measurement guide, particularly through the shoulder, neck and sleeve areas.

Bodice Measurements		Front		Back		Front		Back		Front		Back	
		Size 2	Size 4	Size 2	Size 4	Size 8	Size 10	Size 8	Size 10	Size 11	Size 13	Size 11	Size 13
1	Center bodice length	9 1/2	10 1/4	9 1/2	10 1/4	12 1/2	13 1/4	12 1/2	13 1/4	12	12 1/2	13	13 1/2
2	Full bodice length	11 1/2	12 1/4	10 1/4	11	14 1/2	15 1/4	13 1/4	14	14 1/2	15	13 3/4	14 1/2
3	Across measurement	9	9 1/2	10	10 1/2	11	11 1/2	12	12 1/2	11 3/4	12 1/4	12	12 1/2
4	Shoulder point width	10	10 1/2	10 1/2	11	12	12 1/2	12 1/2	13	12 1/2	13	12 3/4	13 1/4
5	Full bodice width	13 1/2	14 1/4	12 3/4	13 1/2	16 1/2	17 1/4	15 3/4	16 1/2	16 1/2	17 1/4	16	16 3/4
6	Shoulder pitch	10 3/4	11 5/8	10	10 7/8	14 1/8	15 1/4	13	14	14 1/2	15	13 1/2	14
7	Shoulder width	3 1/2	3 5/8	3 1/2	3 5/8	4	4 1/8	4	4 1/8	4 1/4	4 3/8	4 1/4	4 3/8
8	Neck measurement	5 3/4	6	4 1/8	4 3/8	6 3/4	7	5 1/8	5 3/8	7 1/2	7 3/4	5 1/2	5 3/4
9	Shoulder height	9 1/4	10	8 3/4	9 3/4	12 1/4	13 1/4	11 3/4	12 5/8	11 3/4	12 1/4	12 1/4	12 3/4
10	Side bodice length	4	4 1/2	4	4 1/2	6	6 3/4	6	6 3/4	5 3/4	6	5 3/4	6

11	Waist measurement	11 3/4	12 1/2	10	10 3/4	14 3/4	15 1/2	13	13 3/4	13 1/2	14 1/4	13	13 3/4
12	Hip measurement	14	14 3/4	12 3/4	13 1/2	17	17 3/4	15 3/4	16 1/2	17	17 3/4	17 1/2	18 1/4
	Full length			25	28			40	44				

Sleeves

Overarm length	11	12 1/2		17	18 5/8			20	20 3/4
Underarm length	7	8 1/4		12	13 1/4			15	15 1/2
Biceps measurement	9 5/8	10		11 1/8	11 1/2			12	12 1/4
Wrist measurement	5 7/8	6		6 3/8	6 1/2			6 1/4	6 3/8

Trousers

Crotch depth	8 3/4	9		9 3/4	10			10 1/2	10 3/4
Thigh circumference	13	14		17 3/4	18 1/4			19	19 3/4
Side length	17	20		30	32			39	41

Bust point height

front								6 1/8	6 3/8
back								6 1/8	6 3/8

Bust point width

front								6 3/4	7 1/8
back								5 1/4	5 5/8

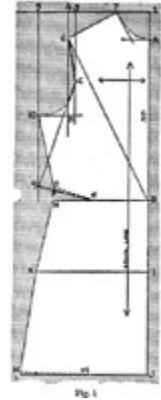
Children's, Girls', Juniors' Measurement Chart

Measurements for larger sizes in each of the following groups may be secured by adding the same gradation which is shown between the two sizes given in any one of the following groups. That is, there is 3/4 inch added to *Center Bodice Length* for size 2 to make size 4.

Add 3/4 inch to that measurement given for size 4 and you have the measurement for size 6 etc.

Drafting the Child's Front Sloper

To draft the child's front sloper, follow the instructions given for drafting the adult front bodice as shown on [page 60](#). Proceed as far as and including 10-D. From that point, follow the instructions given below:



B-E-9—Square a guide line left from point B on line A-B. Locate point E half way between lines A-B and the guide line #5. Connect E with point #9.

F-9—Measure the line B-E-9. Subtract one half *Front Waist Measurement* from this sum. Locate point F from point #9 a distance equal to that difference.

F-10—Connect point F with point #10.

G—10-G equals 10-9 in length. Label point G. Connect point G with point E.

H is squared from B to equal one half *Waist Measurement*.

I—Extend line 2-B downward a distance equal to *Hip Level* for draft size being made. Label point I.

J—Extend center front line B-I to desired skirt length. Label point J. (Equal to A-B plus 2 inches.)

K—Square a line from point I equal to one half the *Front Hip Measurement*. Label point K.

L—Square a line from point J equal to I-K plus one inch. Mark L. Connect points H-K-L.

M—Locate point M half way between L and J. Label M.

N—Make K-N equal to I-J in length. Label point N. Connect point N with point M.

Establish vertical grain indicator parallel to the center front line A-J.

Establish neckline and armhole curves as for the adult draft. With blue pencil trace out final pattern as is shown by white area in Fig. 1.

J—On line B-I, from point B, measure downward a distance equal to *Hip Level* and label point J.

K—From line H-I, square guide line to pass through J. From point J, on the guide line, measure off a distance equal to one-half *Back Hip Measurement*. Label point K.

L—From point I, on line H-I, square a line to the right which is equal to line J-K *plus* one inch. Label point L. Connect points F-K-L.

M—Locate this point half-way between points I and L.

N—Make K-N equal to the line J-I. Connect N and M.

O—Locate point O a distance from point J equal to line B-E *plus* one-half inch. Connect point O with points E and G.

Establish the grain indicators parallel to the line A-I. Establish neckline and armscye curves in same manner as for adult block. With blue pencil trace out the pattern as is shown by white area in Fig. 1.

NOTE: Frequently, individual children's measurements will produce no space between points 7 and 8. Usually children have rather straight, flat backs and the shoulder blades do not become very prominent until the child reaches the age of eight or ten.

Drafting the Child's Sleeve Sloper

To produce a draft for a child's sleeve sloper, the same method would be used as that used to produce a similar pattern for an adult. Use the measurements given for children appearing in the [chart on page 240](#). (See [page 91](#).)

Adaptations of Children's Pattern Designs

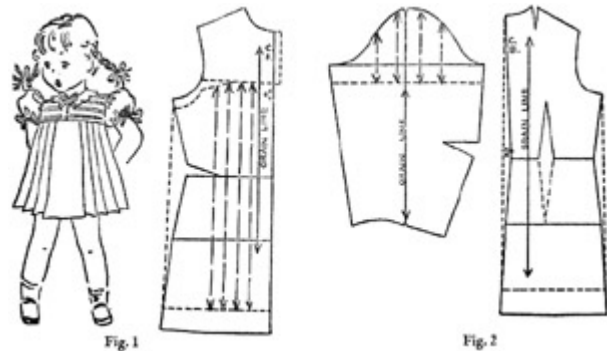
In order that you may study the functional characteristics commonly found in children's apparel, it would be advisable for the student to study fashion magazines and to clip and classify many examples of garments. These may be separated into types of garments, such as sleeping apparel, dresses and coats. These groups may then be sorted according to cut, such as yokes, styles,

bodice and skirt dresses and those which provide the shaping through vertical seams. The latter would be largely princess types. The following diagrams illustrate representative types of these three classifications.

Aside from the careful selection of suitable fabrics, colors and trim, the designer of children's apparel works very much as the designer for adult apparel. A close understanding of the habits and preferences of the small child is essential to creation of original designs which will have an immediate appeal to the child and to the mother.

Fullness Under Yoke

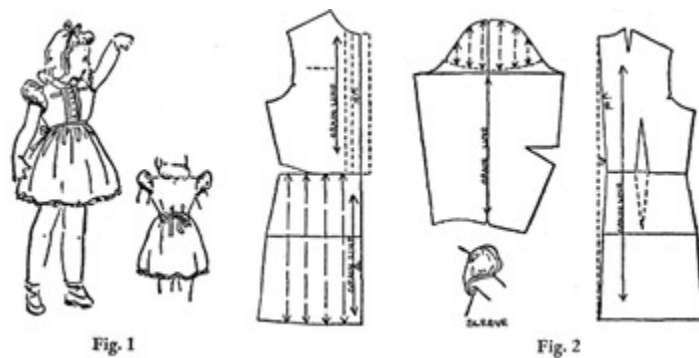
The straight full dress, attached to a yoke is a popular cut for the small girl. It looks well on the chubby tot and also on the thin body. Note the tiny puffed sleeves, the little flat scalloped collar and the use of bows as a trimming.



The dart, which produces extra length in the front of the garment is moved up under the yoke. The straight side seam removes the fit provided in the sloper. Extra fullness is provided in the front by slashing. Pleats, gathers or smocking could be used. A similar amount of fullness could also appear in the back section. Puffed sleeve is produced in the same manner as for an adult. Note short length of sleeve.

Combination Fitting

This little dress has a seamed waistline in the front with a straight back which is adjusted to the figure by means of a sash. As long as the garment opens at the front, one



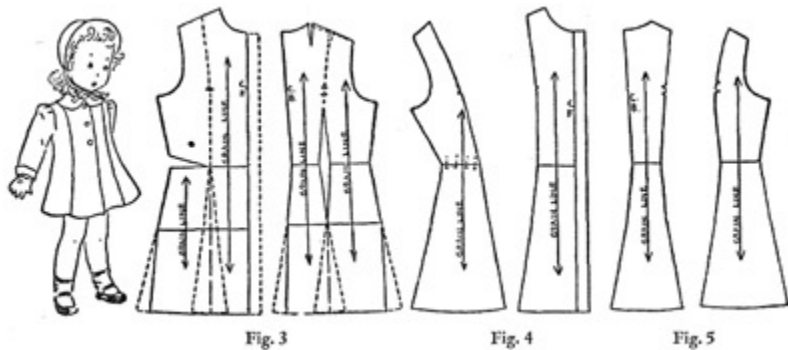
might add a simple inverted pleat at the center back which would give additional sweep to the back of the skirt. The extra fullness held by the band across the front hides the curve of the body and at the same time produces a pinafore effect which is youthful and charming on her little plump figure.

Note method for cutting this sleeve which is merely a "cap." The lower edge of the sleeve and the armhole are finished with a binding put on in one operation.

Vertical Fitting

Fig. 3 shows method for producing the pattern, which is simple. Note how the waistline dart is folded out, and divisional seam line placed to fall on point of

basic dart. Flat collar would be cut from basic sloper in usual manner. Note position of grain indicator in front side section (Fig. 4). The two back sections (Fig. 5) closely resemble adult's pattern. Degree of waistline fitting may be reduced if wished. Normal seam allowances, generous hem should be added. Note darted sleeve in sketch, as for an adult.



HOOD

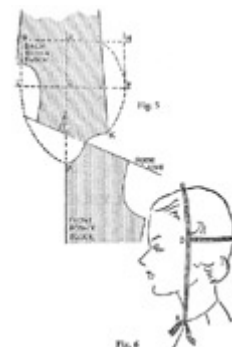
The detachable or attached hoods have proved so practical for outdoor

sports, they are added to many such garments designed for adults as well as children. The following diagrams show the method used for producing such a pattern. When the muslin has been made, a close fit may be added wherever desired. It is well to remember, however that it must be loose enough to be worn over another head covering and it must also provide enough freedom to move the head.



Arrange back and front bodice slopers against' guide line as is shown in Fig. 5.

The line A-B is an extension of center front bodice.



See Fig. 6 for method for taking measurements.

AB- measurement taken from base of throat to center top of head plus one inch.

D- is eye level.

DF- Depth of back of head and is squared from AB.

DE- desired amount to extend beyond edge of face and is also squared from point D.

B-G equals DE and is squared from point B. B-H equals DF and is squared from point B.

Draw shape of the back of the hood as desired— square, curved or pointed. As point F is a measurement point denoting required depth for size of head, line D-F should not be shortened in this shaping process.

If hood is to start from V-shaped neckline as shown in Fig. 3, the measurement A-B should be taken from the point of the neckline. Normal neckline A-K shown in diagram is used for most hood designs. Front edge G-E-A may be shaped as desired. A draw-string or elastic can be used about the face or a contrasting shaped cuff facing shown in Figs. 1 and 3.

Summary

If my readers have carefully studied these pages, have faithfully rendered the problems which have been diagramed, they have become acutely conscious of the fact that there are but a limited number of basic, underlying principles when using the block system of pattern making. They have become aware that there are only a limited number of ways to introduce drapery; for adding sweep at the hemline of the garment; for maintaining a smart fit through the careful shaping of seams.

Art in any form is governed by but very few rules. But there is one rule which is common to all artists—the rule of accuracy. Careless mistakes will lead to discouraging hours of correction. In this text the writer has attempted to teach methods—the way to produce the pattern for recognized silhouettes. No mention has been made of time-saving "short-cuts." They have little to do with the teaching of fundamental principles and methods. It is to be assumed that each individual will adopt time-saving methods which, when used with intelligence and accuracy, can prove valuable to him personally. But before they can be employed, the worker must first have a clear understanding of the fundamental principles of his art so that he may be confident of pleasing results in his completed design.

The block system of pattern making is an American method. It has been developed in America by Americans. Fortunately for our American women who buy the designs and the designers who create them, our leadership in fashion is also typically American. No one city can claim leadership. Designers working in California may find inspiration for one silhouette; the designers of the Middle West may be noted for the simple wearable clothes found in the wardrobe of the majority of women; and the Eastern designers may create the clothing of our festive hours—clothes that bring the sparkle of gala evenings. In our broad expanse of country creators are permitted freedom and individuality.

The true creator is a restless soul. He naturally craves constant change. And this restlessness brings forth new ideas. The buyers select models created in various markets and the women who go into the shops to buy find an interesting variety of silhouettes, trimmings and colors from which to choose. This condition is a healthy one. American women demand beautiful clothes at their own price. Fabric manufacturers have magically produced this beauty for

our designers. The designers must be prepared to produce the beauty in line and form. In fashion art form is silhouette. And the fashion of the hour is first manifested in the silhouette. Beauty in form is achieved through expert cutting—through a superior knowledge of the art of pattern making!

Almost every large city in America has at least one specialized fashion training center where creative men and women may study. For this reason American creative talent is not dominated. The field of creative fashion design is democratic. The leading fashion designers in America today come from remote villages as well as large cities. If the talent is in the hands, and those hands have been trained to produce the ideas, success is practically assured. The ability to produce a shapely muslin— beautiful in line and form—is sufficient to demonstrate creative talent. Never before in the history of our country has such an opportunity awaited our ambitious American designers.

HARRIET PEPIN