## HOME COURSE

## Dressmaking and Ladies Tailoring

## AMERICAN SYSTEM

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# American System of Dressmaking 

BY

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## PREFACE

The Science of Dressmaking and Ladies' Tailoring embraces a vast scope of knowledge, much of which because of the very nature of the relation which she sustains to the home and society, becomes, in a general way, the common property of all women. Beginning with the simplest forms, and gradually developing chapter by chapter, the more complicated phases of the profession, the author has studiously striven to classify and crystalize this general knowledge into a tangible working system. The success of her efforts will depend largely upon the student's ability to apply the instructions given.

This volume is intended to be at once a complete text book for the beginner, a handy guide for the seamstress in the home, and a ready reference for the graduate and professional dressmaker.

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## CHAPTER 1.

Introduction, Hints, Rules, Front of Waist, Taking measurements. Order of taking, neck, bust, waist, front, back, under arm, armhole, shoulder and drafting front.

## INTRODUCTION.

For a great many years much has been known of making beautiful tapestries, embroideries and needlework, but the great problem of putting the art of plain sewing on a scientific basis and making it a part of woman's education is just now being solved. To meet the growing demand for more practical methods and to supply the long felt want that has been but sparingly met by the use of patterns, the American College of Dressmaking has spared neither time nor expense in the preparation of these lessons.

Since in any work a thorough understanding of the rudiments is essential, so in sewing the first step is to implant those elements and principles which are the foundation of all needlework, and each part should be so thoroughly mastered that the next becomes easy. Thus we have arranged a course of twenty lessons so systematically that each succeeding lesson is a natural stepping stone to what follows.

Study these lessons carefully and diligently, as much depends upon the aptness, energy and spirit with which you
enter into the work. You cannot become a successful dressmaker unless you manifest every interest in the study and put forth every effort to carry the work through from start to finish without dragging.

Nor do we want you to rush through with the course with a view to finishing in the shortest possible time, but rather to study each lesson until you are thoroughly familiar with every part of it before taking up another. If at any time there are any points that you do not perfectly understand to your own satisfaction, write and ask us and the information will be cheerfully and promptly given.

If at all possible, arrange your work so that a certain time, say an hour or two, more or less, each day may be set aside for this special study. Permit no other task or duty to take its place. If possible it is well to have a little room that you can call your study and sewing room where you can withdraw from other duties and apply all your energies to the work in hand. Keep everything that pertains to sewing in this room. You will find it very convenient. Provide yourself with a good tape, yard stick, tracing wheel, a sharp pair of scissors and a good pencil.

## HOW TO PROCEED.

First-Study the lesson carefully, comparing instructions and accompanying drafts. (You will observe that the instructions tell how the large draft is made.)

Second-With the lesson and draft before you for reference and comparison, take a sheet of wrapping paper and draft a pattern exactly like the large printed one.

Third-Draft ten other patterns, using different measures each time. (This is not required, but we strongly recommend it. One of the main secrets of the success of our graduates is that they know the system, because they learned it well by much practice.)

## TAKING MEASUREMENTS.

Just a word of caution about taking measurements before entering upon the lesson proper. Strange as it may seem, there is nothing more important in dressmaking than the taking of correct measurements. It matters not how nicely you have drafted the pattern or how carefully you have put the different parts together, you cannot turn out
a satisfactory piece of work unless the measuring was accurately done. This requires practice-much practice. Practice as much as possible until you have become perfectly familiar with every detail.

Observe very closely the form of the person whose measures you are taking. This is very essential as different forms have different characteristics of contour. Two persons may have the same measurements exactly, yet their forms be so different that a pattern that will fit one may not fit the other at all. For instance, two persons may each have 38 bust measure; one of them may have a full, rounded bust and a narrow back, while the other may be flat in front with large protruding shoulder blades and a deep hollow in the back, where the measure is taken up.

For practice it is well to take the measures of as many different persons as possible. Before beginning to take measures, tie a cord tightly around the waist at waist line and take the measure to the bottom of this cord. Pay no attention to the seams in the waist of the person whose measures you are taking. They may or may not be correct. Always take the measures in the order given below, and write each measure down in same order. For recording measures, use the accompanying blank. For practice measures you can extend this blank as far as you like, ruling blank paper and pasting it on at the bottom.

## THE WAIST MEASURE.

The American System uses the following ten measures for the waist:

First, neck; second, bust; third, waist; fourth, front; fifth, back; sixth, chest; seventh, width of back; eighth, under arm; ninth, armhole; tenth, shoulder.

1. Neck measure: This measure is taken around the neck directly under the chin. (See Line 1, Figs. 1 and 2.)
2. Bust measure: This measure is taken around and over the fullest part of the bust, having the tape line well up under the arms, and bringing it to the center of the back. This may be taken as tight as desired. (See Line 2, Figs. 1 and 2.) It is well to stand directly behind the person in taking this measure.
3. Waist measure: Pass the tape around the waist line, drawing it very snug and tight. (See Line 3, Figs. 1 and 2.)
4. Front measure: Place the end of the tape line on the prominent bone at the back of the neck; pass the line over the shoulder near the base of the neck and down over the fullest part of the bust to the waist line, drawing it snug. This measure is taken from the back of the neck to get the length of the front from the shoulder down to waist line. It might be taken from the shoulder, but as there is no set or determined point from which to take the measure on the shoulder, we take it from the back of the neck. (See Line 4, Fig. 1.)
5. Back measure: Measure from the prominent bone at the back of the neck to bottom of waist cord. Allow plenty of room, as too short a measure gives a low neck in the back. (See Line 5, Fig. 2.)
6. Chest measure: This measure is taken across the chest, from armhole to armhole, midway between the base of the neck in front and bust line. (See Line 6, Fig. 1.)
7. Width of back: This measure is taken across the back, firon: armhole to armhole, about midway between base of neck in the back and bust line. (See Line 7, Fig. 2.)
8. Under arm measure: Place the end of the tape line close up under the arm and measure straight down to the bottom of waist cord. (See Line 8, Figs. 1 and 2.) The arm should be dropped naturally at the side while this measure is being taken.
9. Armhole measure: Pass the tape around under the arm and bring it up to the shoulder. This measure should be taken very tight, or the draft will be too long from bust to shoulder. It drafts out larger than taken. It is the tightest measure we take, and should not be more than two inches larger than neck measure. (See Line 9, Figs. 1 and 2.)
10. Shoulder measure: Measure from the base of the neck at the side, to shoulder point. This measure can be taken as long as desired, depending on the prevailing style. (See Line 10, Figs. 1 and 2.)

The draft used in this lesson is made from the following measurements: Neck, 12 inches; bust, 36 inches; waist,

24 inches; front, 21 inches; back, 15 inches; chest, 14 inches; width of back, 14 inches; under arm, 8 inches; armhole, 13 inches; shoulder, 5 1-2 inches.

## DRAFTING FRONT OF WAIST.

Measure in three inches from the left edge of the paper and down two inches from the top, and draw a perpendicular line to the bottom of the paper; this we will call Line 1. Measure down from the top of this line $21 / 2$ inches and make $\operatorname{dot} A$; also measure down on this same line onefourth of the neck measure and make dot N. From the top of line 1 draw a horizontal line to the right parallel with the top edge of paper; mark this Line 2. From the left end of Line 2 measure to the right $21 / 2$ inches and make dot M. Dots N and M are the ends of the neck curve. (Rules for different neck measures are given in Lesson 2.) From dot M measure out on Line 2 to the right, the length of the shoulder measure, and make a dot; then drop or lower this dot $11 / 2$ inches and mark it S , for shoulder point. (This is called the shoulder drop, and usually averages about $11 / 2$ inches. However, if the person for whom you are drafting has very sloping shoulders, the drop will be two inches; but if the shoulders are high and square, one inch will be sufficient. The form must be observed when taking the measures.)

Draw a line from dot $M$ to $\operatorname{dot} S$ and mark this Line 3 -the shoulder line. From dot A measure down on Line 1 one-half the armhole measure and make dot B. From dot B measure out to the right one-fourth of the bust measure and make dot C; then measure out one inch further and make dot D. Draw a line from dot B to $\operatorname{dot} \mathrm{D}$ through dot C. This is the bust line. Mark it Line 4.
(The draft we use for this lesson is for one-half the front, and, as the front should be a little wider than the back, we add an additional inch to one-fourth of the bust measure. By using just one-fourth of the bust measure, the line would come directly under the arm, but by adding the one inch it comes a little past.)

From dot D measure straight down the length of the under arm measure and make dot E. Then draw curved line 5 from dot D to E and extend it below dot E about
three inches, or, with the aid of the curved ruler, draw Line 5 , having dots $D$ and $E$ on ruler respectively on dots $D$ and E on draft.

Now measure down $41 / 4$ inches from dot $B$ on Line 1 and make dot F ; also measure down $21 / 4$ inches from dot D on Line 5 and make dot G. Draw Line 6 from dot $F$ to dot $G$. This is the dart line. From dot $M$ draw line 7 straight down-parallel with Line $1-21 / 2$ inches shorter than the front measure. This is the front measure or front line. (See draft.)
(You will remember that we took the front measure from the prominent bone at the back of the neck across the shoulder at the base of the neck and down in front to waist line. Now this $21 / 2$ inches we take off when drawing Line 7 is the width of the neck from the prominent bone around to the shoulder, and as we are only drafting from the shoulder, Line 7 should be $21 / 2$ inches shorter than the original front measure. Take off $21 / 2$ inches when the neck measure is from twelve to fifteen inches; when it is below twelve inches take off two inches; when above fifteen inches take off 3 inches.)

Now draw Line 8 from dot E to the end of Line 7 and on to Line 1. This is the waist line. (Line 8 in different measures will come in different positions. Sometimes when the front measure is quite short it slants up. When this occurs, if the darts above the waist line appear too short, move Line 6 a little nearer Line 4, using your own judgment as to how far to move it.)

The top of the first dart is determined by the point where Line 7 crosses Line 6. Make dot H on Line $621 / 2$ inches to the right of the junction of Lines 6 and 7; this is the top of second or back dart. The first or front dart is n arly always one and one-half inches wide. To get the width of back dart, find the difference between the bust and waist measure and use one-fourth of the difference for the width. Rules regarding darts will be given in the following lesson.

Make a dot on Line 8 each side of Line 7 one-half of first or front dart's width, and draw lines from these dots to junction of Lines 6 and 7, and mark these Lines 9 and 10
respectively. Make a dot on Line 8 three-fourths of an inch to the right of the back edge of the front dart; now measure out to the right of this dot on Line 8 one-fourth of the difference between bust and waist measures and make another dot, and draw lines from these last two dots to dot H; mark these Lines 11 and 12 respectively. Finish darts below the waist line on same reverse slant by measuring down below the waist line the same distance that the top of the darts are above the waist line; that is, make the center line of each dart the same length below the waist line as above, then draw the other lines. (See draft.)

Now find the midway point between dots $B$ and $N$ and make dot I. From dot I measure out to the right one-half of the chest measure and make dot J. Now draw a line from $S$ to $J$ and curve on down to $C$; or, with the aid of the curved ruler, draw the armhole, placing dots S , J and C on ruler respectively on same dots on draft, allowing the curve to come to a point about one-fourth inch above dot D. Connect this point with dot D. Also use the curved ruler for drawing the neck curve. If the neck measure is 12 inches place the 12 -inch lines on ruler on dots M and N on draft; if 13 -inch neck, place the 13 -inch lines on ruler on dots M and N , and so on. If a swell front is desired, place dot N on ruler on dot N on draft and let the waist line on ruler meet the waist line on draft and draw Line 13. (See draft.)

This completes your first lesson. If there are any points therein not entirely clear to you, frankly write and tell us what they are. We guarantee to satisfy you in every particular, and want you to feel perfectly free to ask us questions at any and all times.

We do not send the curved rulers for continuous use, still if you prefer you may use them on every pattern you draft. With reasonable care they will last you a lifetime. They are sent simply to give you a definite idea of the general outline of the different curves and to use for practice until you have a perfect picture of the curves absolutely fixed in your mind, and can make them off hand without any guide whatsoever. These curved rulers are made, of course you understand, to fit the measures used in this draft only. The measures used in the draft accompanying this
lesson are a fair average. For any other measures, of course, the curves will vary somewhat. When this occurs and the curve you wish to draw is larger than the curved ruler, place the ruler at the lower part of curve and draw a part of the way up, then move the ruler up and continue the line.

We strongly urge that you draft at least ten patterns from that many different sets of measures; that is, of ten of your friends. You will be surprised at the rapidity of your improvement in making the curves as you advance on each new pattern. After drafting these ten patterns you ought to be able to make the curves with comparative ease. Remember the three things of greatest importance in this lesson are: (1) Taking measures correctly, (2) practicing curves, and (3) practice.



(This blank is given only for the Student's convenience in practice or actual work.)

## CHAPTER 2.

Back of waist. Determining length of back, width of side bodies, width of center back. Finding position of back bust line. Extension of lines below waist line. Dart rules. How to arrange and apportion darts. Neck rules. Different sizes, etc. Drafting back.

## NOTE

(Proceed as in the first lesson, that is, first study the lesson with the draft before you for comparison; second, using the same measurements, make a draft exactly like the one accompanying the lesson; third, we advise that for practice you make at least ten other back drafts from that many different sets of measurements. Use the accompanying measure blank in which to record them.)

## DRAFTING BACK OF WAIST.

The draft used with this lesson is made from the same measurements as given in previous lesson, but for your convenience, we will repeat them here:

Neck, 12 inches; bust, 36 inches; waist, 24 inches; front, 21 inches; back, 15 inches; chest, 14 inches; width of back 14 inches; under arm, 8 inches; arm hole, 13 inches; shoulder, $51 / 2$ inches.

Measure in one inch from the left side of the paper and down one inch from the top and draw a perpendicular line
the length of the back measure plus one-fourth of an inch; mark this Line 14. From the top of Line 14 draw a horizontal line to the right, parallel with the top edge of the paper, the length of one-fourth of the bust measure minus one inch; mark this Line 15.
(You remember that in the front draft we used onefourth of the bust measure and added 1 inch to allow the under arm seam to come a little past the center under the arm, because we wanted the fronts a little wider than the back. Since we used one-fourth of the bust measure and added one inch in front, we will use one-fourth of the bust measure minus one inch for the back.) This line is the same length that the bust line in the back will be.

Now draw a line straight down from the right end of Line 15 the same length as Line 14 ; mark this Line 16 . Connect the lower end of Line 14 with the lower end of Line 16 ; mark this Line 17. This is the waist line.

Measure down one-fourth of an inch on Line 14 from the top and make dot K ; also measure down 2 inches from the top of this same line and make dot $L$. This is for the shoulder slant. From the left end of Line 15 measure to the right 2 inches and make dot O . Dots K and O are the ends of the neck curve. Draw a slight curve from dot K to $\operatorname{dot} \mathrm{O}$. From dot L draw a line straight across to Line 16 parallel with Line 15 ; mark this Line 18 . Now place the end of the yard stick at dot 0 and let the length of the shoulder measure fall on Line 18 and draw Line 19 -the shoulder line. (See draft.) Make a dot where Lines 18 and 19 meet and mark it dot P.

Measure up from the lower end of Line 16 the length of the under arm measure plus one-fourth of an inch and make dot R. Measure up the same distance on Line 14 and make dot T. Draw a line from dot $T$ to $\operatorname{dot} R$; mark it Line 20. This is the bust line.
(You remember that in drafting the front, when drawing the arm hole we let it come to a point one-fourth of an inch above dot $D$ and then connected it with the under arm measure or Line 5. That is the reason we add one-fourth of an inch to the under arm measure in the back-to make it as long as the under arm measure in the front since the two join together.)

Find the midway point between dots T and L and make dot U at that point. From dot U measure out to the right one-half of the width of back measure and make dot $V$. Now draw a curved line from $P$ to $V$ and curve on down to R , or, with the aid of the curved ruler draw the arm hole, placing dots $\mathrm{P}, \mathrm{V}$ and R on ruler respectively on same dots on drafts.

Find the width of the back at the waist line and take it out of the center of Line 17. To do this measure Line 8 in the front draft omitting the darts; that is, measure from Line 1 to Line 9, skip the front or first dart and measure the space between the darts, skip the second dart and measure from Line 12 to Line 5. Substract this from one-half of the waist measure which will leave the width for the back. Take this out of the center of Line 17 , leaving the same amount on each end.

The back is divided into three parts-center back, and two side bodies. The center back is usually $11 / 2$ inches wide at the waist line except when the waist measure is quite large; then it may be made two inches.
(In the front drafting Line 8, omitting the darts, we will say, measures six inches. One-half the waist measure, in this case, is twelve inches, which, minus the six inches of the front, leaves six inches for the width of the back at waist line. The length of Line 17 in this draft is eight inches. Subtracting six inches for the width of the back, leaves two inches to take off of Line 17-one inch at each end.)

So make dot W on Line 17 one inch from Line 14; also make dot X on Line 17 one inch from Line 16. Then draw a line from dot K to dot W ; mark it Line 21. This line represents the true back measure. For round shoulders draw Line 21 to dot T. With the aid of the curved ruler draw a curved line from $\operatorname{dot} R$ to $\operatorname{dot} X$, having $\operatorname{dots} R$ and $X$ on ruler respectively on same dots on draft, letting it extend 2 inches below waist line; mark this Line 22. This is the true under arm measure. (See draft.)

Now mark off the center back and side bodies on waist line or Line 17. Make the center back $11 / 2$ inches wide; so from dot $W$ measure to the right $11 / 2$ inches and make dot $Y$. Then divide the remaining space between $\operatorname{dot} \mathrm{Y}$ and $\operatorname{dot} \mathrm{X}$
into halves and make $\operatorname{dot} \mathrm{Z}$ at the midway point. (See draft.) To get the width of the side bodies in the arm hole, use one-third of the arm hole for the center back, and make dot N at this point. Divide the balance into halves and make $\operatorname{dot} \mathrm{M}$ at the midway point. Then with the aid of the curved ruler draw Lines 23 and 24, placing dots N, M, Y and Z on ruler respectively on same dots on draft, extending Lines 23 and 24 about two inches below the waist line.

## NECK RULES.

The rules and draft given in the first lesson are for a 12 -inch neck measure. In every case use one-fourth of the neck measure to get dot N , and always measure down on Line 1 the length of that measure for $\operatorname{dot} \mathrm{N}$. Now dot M in front draft is for a 12 -inch neck measure and is placed $21 / 2$ inches from the left end of Line 2. For a 13 -inch neck, place dot M $23 / 4$ inches from the left end of Line 2 ; for a 14 -inch neck, place dot M 3 inches from the left end of Line 2, thus adding one-fourth of an inch for every additional inch of neck measure over twelve inches. When the neck measure is more than fifteen inches, it is better to add one-fourth of an inch to the back by placing dot $021 / 4$ inches from the left end of Line 15.

If the neck measure is eleven inches, or less than the 12inch measure, reduce in the same proportion; that is, for an 11 -inch measure, place dot $M$ just $21 / 4$ inches from the left end of Line 2; for a 10 -inch measure, place dot M 2 inches from the left end of Line 2. When the neck measure is less than 10 inches make dot $0,13 / 4$ inches from the left end of Line 15.

## DART RULES.

In forms with a very large bust and waist, place the darts just a little over three-fourths of an inch apart on the waist line, moving the top of the back dart the same distance also. If the darts are placed one-fourth of an inch further apart on waist line than given in the first lesson, place the top of the back dart one-fourth of an inch further out also.

When there is a very great difference between bust and waist, and the back dart is over 3 inches, make the front dart enough wider to take up a part of the excess over 3 inches. The back dart should not be over $31 / 4$ inches wide.

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| 10 |  |  |  |  |  |  |  |  |  |  |  |
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## CHAPTER 3.

Testing Measurements in Front and Back. Overcoming errors in measurements. Tracing the linings, fronts, back, center back and side bodies. Allowing width of seams, etc. Tracing wheel.

## TESTING MEASUREMENTS.

Before proceeding any further with the drafting, it is necessary to test the measurements of the front and back drafts to see if they correspond with those you have taken. Of course, if they were taken correctly and you made the right calculations when drafting, you will find them just exactly the same when testing them. Test them in the same order as they were taken and you will not be so apt to miss any of them.

First test the neck measure. Begin at dot N in the front draft and measure the neck curve up to dot M, being very careful not to let the tape line slip at any time; then measure from dot K to dot O in the back draft. Twice this measure will give the entire neck measure, as this is only one-half of the waist. This measure will test out from one to two inches larger than the original neck measure. You will remember that this measure was taken around the neck arrectly under the chin. Now as the base of the neck is from one to two inches larger than at the top, so the drafting must test out more than the measure taken.

Next test the bust measure by measuring from dot $B$ to dot D in front draft; then measure Line 20 in back draft from Line 21 to dot $R$. This measure should test out very nearly correct, if you made the right calculations in finding one-fourth of the bust measure and adding one inch. The short distance cut off of Line 20 in drawing Line 21 will not interfere with the fitting.

Now test the waist line. Measure Line 8 from Line 1 to Line 9 , skip front dart and measure the space between the two darts, skip the second dart and measure from Line 12 to Line 5. Then measure Line 17 from dot W to $\operatorname{dot} \mathrm{X}$. Twice this amount should give the original waist measure. If the measure tests out too large, take the back dart up a little and make Line 17 a little shorter by moving Line 22 a little nearer Line 24 . If it tests out too small, let the back dart out a little and make Line 17 a little longer by moving Line 22 a little nearer Line 16.

Test the front measure by measuring Line 7 from dot M to Line 8 and then add $21 / 2$ inches for the width of the neck from the prominent bone at the back around to the shoulder which was subtracted when drafting.

Measure Line 21 from dot K to Line 17 to see if it corresponds with the original back measure. Also test the under arm measure by measuring Line 5 from dot D to $\operatorname{dot} \mathrm{E}$.

Test the shoulder by measuring from $\operatorname{dot} \mathrm{M}$ to $\operatorname{dot} \mathrm{S}$ in front draft and from dot $O$ to dot $P$ in back draft. These measures will always test out a little larger than taken.

## TRACING THE LINING.

Now that you have made the drafts and tested the measures and know them to be correct you are ready to trace and cut the lining. This requires a tracing wheel. You can trace the front just as it is drafted, but each piece of the back must be traced separately if you desire a seamed lining. You will need about two yards of lining for a waist. Use the lining crossways of the material and it will not stretch out. A very safe way is to fold the lining through the middle, so that the ends will come together, pinning it securely, so that when tracing it will not slip, and both fronts will be traced exactly alike. This is very essential, for if the fronts are not just alike, the waist is apt to twist.

Lay the front draft on the lining with Line 1 about $11 / 4$ inches from the ends of the lining. Pin the draft to the lining in several places. Trace the waist line or Line 8 first. Then trace Lines 1 and 5, begining at the waist line and tracing up; also trace the dart lines in the same manner, tracing Line 9 first, then Lines 10, 11 and 12 from the waist line up. Now trace the neck curve, beginning at dot N and trace to dot M ; also trace the arm hole, beginning at Line 5 and tracing up to dot S ; then trace Line 3 from dot S to dot M . This finishes the front tracing.

Take the draft off and cut out the lining. Leave the $11 / 4$ inches on the front line or Line 1 for hems. Allow $3 / 4$ of an inch for seams on Lines 5 and 3. Cut the arm hole and neck curves in the tracing.

Now place the back draft on the double lining, being very careful to have the waist line, or Line 17, on a straight thread of goods. Trace the waist line first, then Lines 21 and 23 , always beginning at the waist line and trace up. Next trace the neck curve from dot K to dot 0 , then the arm hole from dot N to $\operatorname{dot} \mathrm{P}$, then trace Line 19. Trace Lines 21 and 23 about two inches below the waist line, beginning at Line 17 and tracing down.

Remove the draft and cut out the center back. First, cut Line 21, allowing three-fourths of an inch for a seam. Next cut Line 23 and allow one-half inch for a seam; then cut Line 19, allowing three-fourths of an inch for a seam. Cut the neck and arm hole in the tracing.

Now place the draft back on the lining, being sure to put the waist line on a straight thread of the goods, and to have the lining pinned securely together. Trace off the form next to the center back, tracing the waist line first. Then trace Lines 23 and 24, remembering to trace up from the waist line. Next trace the arm hole from dot $M$ to dot N , then trace Lines 23 and 24 about two or three inches below the waist line, beginning at the waist line and tracing down.

Remove the draft and cut the curved Lines 23 and 24, allowing one-half inch on each line for seams. Cut the arm hole in the tracing.

Lay the draft back on the lining, putting the waist line
again on a straight thread of the goods and trace off the next side form.

Trace the waist line first, then Lines 24 and 22, always tracing up from Line 17. Next trace the arm hole from dot $R$ to dot $M$, then trace Lines 24 and 22 about two or three inches below the waist line, tracing down from the waist line.

Remove the draft and cut out this form. First cut Line 24, allowing one-half inch for a seam, then cut Line 22, allowing three-fourths of an inch for a seam. Cut the arm hole in the tracing.

If you prefer to cut a paper pattern first from your draft before laying draft on the lining, it may be done in the following manner: Place the front draft on a piece of paper and leave a margin of $11 / 2$ inches at Line 1. Trace according to instructions as given for tracing the lining. Cut the neck and arm hole curves in the tracing. Allow three-fourths of an inch for seams when cutting Lines 3 and 5 . Cut as far below the waist lines as you wish the pattern to be.

Place the back draft also on the paper just as the instructions on the lining direct and trace the center back first, then remove and cut. Then put the draft back on the paper and trace the form next to the center back; remove draft and cut, allowing the same amount for seams as given for the lining. Proceed in the same way with the next form.

If your lining does not happen to be in one piece, as is sometimes the case, you will find a paper pattern much more convenient to use. Always be sure to have the two front edges on the straight of the goods, and be very careful to have the waist lines in the center back and both side forms on a straight thread of the goods; otherwise the waist will twist. In using the paper pattern, remember to trace the waist lines, seams and darts as you did with the draft, as you will need these tracings in the lining to baste by.

Be very careful when tracing to begin right at the waist line to trace up or to trace down. If you do not, when cutting you will be apt to make the waist shorter or longer and also make it larger around the waist.

It has been stated that you should cut the arm hole and neck line in the tracing but it is better to leave one-half inch on these lines also. Then if they are too small they can be cut out more. It is a good idea never to cut out the neck curve before the collar has been pinned or basted on, for the front should be left as high as possible to maintain the round shape. This is very important. Of course, cut out enough so that the front will fit up around the neck fairly well.

## IRREGULARITIES IN DRAFTING.

Occasionally when you are taking measurements you will find a person who is more developed on one side than on the other. In many such cases, padding will be advisable, but sometimes you will find it necessary to take measures for each side and make two different drafts according to each set of measurements. This, however, is very rare.

You are also apt to have to draft patterns for persons with enlarged necks, but with medium busts and waists. First, draft a pattern as though the neck was normal, using a neck measure about the same as the arm hole measure, and a shoulder measure in comparison with the other measures. Then take the neck and shoulder measures as they really are and apply them to neck curve and shoulder line on draft and make each long enough to correspond with "enlarged" measures. In this way you keep the shoulder, front and arm hole lines in their proper proportions.

When taking the measurements of a round shouldered person, the back measure is extra long while the measure from the point of the shoulder to the bottom of the waist is shorter in proportion to the back measure than it is in a straight back; therefore when fitting a waist on such a person it will bulge in the arm hole. This can be partly overcome in the cutting if you will lay a small dart in the pattern in the arm hole in the back, letting the dart run out towards the center of the back; if there is still fullness there when fitting, it can be more easily remedied. When cutting the lining, allow wider seams in the back as the round shoulders are wider and require more room than the normal back. It is also a good idea to take a long shoulder measure and then when fitting, if it is too long, it can be cut off, while if it were too short it would have to be pieced.

If the person is hollow between shoulder blades, and the blades are very prominent, the back measure will be shorter in the center than it would be two inches at either side, so be very careful to take a long back measure on such a person or the lining will come low in the back of the neck, the shoulder blades taking up the length.

In drafting a pattern for fleshy forms, it is sometimes necessary to use three under arm pieces. Draft the front as directed in Lesson 1 until you come to the extension of Line 5 below the waist line; do not extend this line but draw a new Line 5 from dot $C$ straight down to the waist line: parallel with the old Line 5, and make the extension below the waist line from the end of the new Line 5 .

Draft the back as directed in Lesson 2 until you come to the division of Line 17 and the arm hole for the side bodies and center back. Make the center back on Line 17 from one and three-fourths of an inch to two inches wide. Use one-third of the balance of Line 17 for the width of the first side body and a little over one-half of the remaining for the width of the second side body making dots at the division points.

Use one-third of the arm hole for the width of the center back, and a little more than one-third of the remaining for the width of the first side body, and a little over one-half of the balance for the width of the second side body, making dots at the division points. Draw Lines 23 and 24 from the first and second dots on Line 17 to the first and second dots in the arm hole, and draw a new Line 22 from the third dot on Line 17 to the third dot in the arm hole.

Now cut off the space between the two Lines 22, also between the two Lines 5 in the front; join these two pieces together and lay on a piece of paper and trace around the outside edges and make the hip curve; trace the waist line and then cut out, allowing for seams. After tracing the second side body and front, do not forget to allow for seams where you cut off the two pieces to form the third side hody; also give a curve over the hip in the second side form.

## CHAPTER 4.

Sleeve Measurements. Rules for drafting a sleeve pattern. Rules for upper part of sleeve, lower part of sleeve, length of sleeve, etc. Testing measurements. Tracing linings. General instructions on sleeves of all kinds. Drafting a sleeve.

## THE SLEEVE.

The American System uses the following six measures for drafting the sleeve lining:

First, length of sleeve; second, length of sleeve from shoulder to elbow, third, around the top part of arm; fourth, around the lower part of arm; fifth, wrist measure; sixth, hand measure.

1. Length of sleeve: This measure is obtained by measuring from the arm hole at the shoulder point down over the bent elbow to the joint of the wrist. (See dotted Line 11, Fig. 1, Lesson I.)
2. Length of sleeve from shoulder to ellow. Measure from the arm hole at the shoulder point to the elbow point. This is called the elbow measure. (See top part of Line 11, Fig. 1, Lesson I.) In taking this measure be very careful about placing the elbow correctly, as a wrong measure here will make the sleeve out of proportion-either too long above the elbow or too short below, or vice versa.
3. Around the top part of the arm: Measure around the top part of the arm at the fullest part, which is usually about five inches below the arm hole; this measure should be taken rather loose. (See Line 12, Fig. 1, Lesson I.)
4. Around the lower part of the arm: Measure around the arm just below the elbow; this measure should be taken rather loose, also. (See Line 13, Fig. 1, Lesson I.)
5. Wrist measure: Measure around the wrist at wrist joint.
6. Hand measure: Measure around the hand at the largest part, with the thumb held inside the hand, so as to get the sleeve large enough for the hand to slip through easily.

In drafting the plain coat sleeve use only the first four measures. The measures used in drafting the sleeve for this lesson are as follows:

Length of sleeve, 25 inches; elbow measure, 15 inches; around top part of the arm, 12 inches. Around the lower part of the arm, 10 inches.

Measure in one inch from the left edge of the paper and down two inches from the top and draw a perpendicular line the length of the entire sleeve; mark this Line 1. From the top of this line draw a horizontal line to the right, parallel with the top edge of the paper, the length of the measure around the top part of the arm plus two inches; mark this Line 2. Draw a line straight down from the right end of Line 2 the same length as Line 1 ; mark this Line 3. Connect the lower ends of Lines 1 and 3 ; mark this Line 4. Thus you have formed a rectangle, the length of which should be the same as the entire sleeve length, and the width two inches more than the measure around the top part of the arm.

Divide Line 2 into thirds, making dots at each division point and mark these dots A and B; also divide Line 4 into thirds and make dots C and D at the division points. (See draft.) Draw Line 5 from dot $A$ to dot $C$ and Line 6 from $\operatorname{dot} \mathrm{B}$ to dot D . The rectangle is now divided into three parts. The two left divisions are the upper part of sleeve, and the right division is the under part of sleeve; the top
or upper part must always be twice as wide as the under part.

The sleeve is always curved out under the arm. To get the depth of this curve, use one-third of the measure around the top part of the arm.

In this draft the measure around the top part of arm is 12 inches; one-third of 12 is 4 , so measure down four inches from the top of Line 1 and make dot F ; also measure down four inches from the top of Line 3 and make dot G. Draw Line 7 from dot F to dot G .

Measure down on Line 6 from dot $B$ the length of the elbow measure and make dot E. Measure down on Line 1 the same distance less one inch (as the inside elbow measure is always one inch less than the outside) and make dot H . Two inches to the right of dot H make dot I and draw Line 8 from dot $F$ to dot I and continue it on down to the junction of Lines 1 and 4.

Now measure down the same distance on Line 3 as you did on Line 1 and make dot J. One and one-half inches to the left of dot J make dot K and draw Line 9 from dot G to $\operatorname{dot}$ K. (See draft.)

Make dot L on Line 6 half way between Lines 2 and 7. Measure out one inch to the right of dot $L$ and make dot M. Draw Line 10 from dot $M$ to dot E. Measure Line 10 from $\operatorname{dot} M$ to $\operatorname{dot} \mathrm{E}$, and whatever that measure is, subtract it from the entire sleeve length; this will give you the length to make Line 10 below the elbow. Continue Line 10 from dot E so as to cross dot C , making it the length of the measure you had after subtracting, and draw Line 11 from the lower end of Line 8 to the lower end of Line 10 . (See draft.)

From dot $D$ measure out to the right $31 / 4$ inches on Line 4 and make dot N. Draw another Line 10 from dot E to cross dot N , making this line one inch shorter than in the upper arm. (See draft.) When basting the sleeve together, this extra fullness must be gathered in at the elbow.

Make dot 0 at the end of Line 10 in the under arm. From the junction of Lines 3 and 4 measure out to the right one inch and make dot P. Continue Line 9 from dot

K to $\operatorname{dot} \mathrm{P}$ and draw Line 12 from dot O to $\operatorname{dot} \mathrm{P}$. (See draft.)

Now, draw a line commencing at dot F and curve up to a point three-fourths of an inch above dot A, cross Line 2 about one inch for $\operatorname{dot} B$ and curve on down to $M$, and continue on down about one-half inch below Line 7 and up to $\operatorname{dot} \mathrm{G}$; or with the aid of the curved ruler draw the top curve of the sleeve, having dots $\mathrm{F}, \mathrm{M}$ and G on ruler respectively on same dots on draft; mark this Line 13. This finishes the sleeve drafting.

## TESTING SLEEVE MEASUREMENTS.

Measure Line 10 from dot $M$ to dot $E$ and on down to Line 11 ; this should be the same length as the original sleeve measure. To test the measure around the top part of the arm, measure from Line 8 to Line 9 about four inches below Line 7. If this measure should test out too small, move Lines 8 and 9 out a little by moving dot $F$ to the left and dot $G$ to the right and draw new Lines 8 and 9 to these points, then when drawing Line 13, of course, extend it out to these points also. If the measure should test out too large, alter it by moving dot $F$ to the right and $\operatorname{dot} G$ to the left and draw new Lines 8 and 9 to these points. If the change is not too great, the easiest and quickest way to remedy it is to baste the seam in a little farther.

If the sleeve is too small at the wrist make Lines 11 and 12 a little longer and draw new Lines 10 to these points.

## TRACING AND CUTTING THE SLEEVE.

Lay the draft on the double lining and pin down carefully; the lining may be used either lengthways or crossways, but whichever way you use it, be sure and cut both sleeves the same way of the goods; also cut both sides of the sleeve on the same grain of the goods. Be sure and have Lines 1 and 3 on a straight thread of the goods or the sleeve will twist. Trace Line 8 from dot I to dot F, then Line 10 from $\operatorname{dot} \mathrm{E}$ to $\operatorname{dot} \mathrm{M}$. Trace Line 13 from $\operatorname{dot} \mathrm{F}$ to dot M. Now, trace Line 8 from dot I down to the junction of Lines 1 and 11 and trace Line 10 from dot E to

Line 11, then trace Line 11. Tracing from the elbow up and from the elbow down keeps it from slipping.

Remove the draft and cut out the upper part of the sleeve lining. Leave three-fourths of an inch for seams on Lines 8 and 10 and cut Lines 11 and 13, leaving a margin of from $11 / 2$ to 2 inches on Line 13.

Place the draft back on the lining and pin it down very carefully. Trace Line 10 from dot E to $\operatorname{dot} \mathrm{M}$ and Line 9 from $\operatorname{dot} \mathrm{K}$ to dot G ; then trace Line 13 from dot G to dot M. Now trace Line 10 from dot E to dot O and Line 9 from dot K to $\operatorname{dot} \mathrm{P}$, then trace Line 12 . Remove the draft and cut the under part of the sleeve by leaving three-fourths of an inch for seams when cutting Lines 10 and 9. Cut Lines 12 and 13 , leaving as much margin on Line 13 as before.

If you prefer to cut a paper pattern proceed in the same manner as given for the lining.

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| 1 |  |  |  |  |  |  |  |
| $\overline{2}$ |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |
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| 6 |  |  |  |  |  |  |  |
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| 70 |  |  |  |  |  |  |  |

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## CHAPTER 5.

Different Styles of Sleeves. Shirt waist sleeves, lego'mutton sleeves, bishop, plain, coat, lace, elbow sleeves. Foundation of all sleeves.

## SHIRT WAIST SLEEVES.

The draft given in Lesson 4 is for a plain coat sleeve. For a shirt waist sleeve use the same draft and draw a curved line from the junction of Lines 1 and 4 to $\operatorname{dot} P$. (See dotted Line 14 in Fig. 3 accompanying this lesson.) When cutting a pattern, instead of cutting Lines 11, 12 and 10 , begin at junction of Lines 1 and 4 and cut Line 14 around to dot $P$. If you wish a little more of a dip, make a deeper curve as indicated by dotted Line 15 in Fig. 3.

## LEG-O'MUTTON SLEEVE.

Use the same draft as given in Lesson 4. Cut the upper part of the sleeve out by first cutting Line 11, then Line 8 from Line 11 to $\operatorname{dot} \mathrm{F}$; also cut Line 10 from Line 11 to $\operatorname{dot} E$ and on up to $\operatorname{dot} M$, then cut Line 13 from $\operatorname{dot} M$ to dot F. Now cut the under part out by cutting Line 12, then Line 9 from dot $P$ to dot G, and Line 10 from $\operatorname{dot} 0$ to dot E and on up to dot M , and then Line 13 from $\operatorname{dot} G$ to dot M. You now have the upper and under parts of the sleeve separated.

Lay these two pieces on another piece of paper, placing the back edge of each, from elbow to wrist, together, letting the tops lie as they will; that is, place Line 10 from dot E te Line 11 in the upper part and Line 10 from $\operatorname{dot} \mathrm{O}$ to $\operatorname{dot} \mathrm{E}$ in the under part together. (See Fig. 4) Cut along Lines 8 and 9 until the top of the sleeve is reached; cut along Line 13 in the upper part about one inch, then circle out above Line 13 until you are about six inches above Line 2. Have the longest part of the sleeve come in a line with dot E . Cut Line 13 to outline the under part of the sleeve just the shape it is at the top, then circle up to meet the enlarged part of the upper sleeve. Take up the two pieces and you have a Leg-O'Mutton Sleeve pattern. Before laying it on the lining or goods, test the measure around just below the elbow, also the wrist measure. This sleeve has only one seam (inside seam) and if it should test out too small you would not have much extra width to let out.

Now, if your goods is in such a shape that you could cut to better advantage by having the pattern in two pieces, just cut the under part off, as indicated by dotted Line 10 in Fig. 4, remembering, of course, to allow for seams on the back edge of each piece. Leave the upper part with the enlarged part on it as it is and cut by it. The top may be cut larger or smaller than is given here. Gather or plait the sleeve into the armhole. If plaited, lay the plait when fitting the sleeve.

When basting this sleeve into the arm hole, place the seam at the point where you can feel the strong cord when placing the thumb up under the front of the arm. Commence the fullness in the top of the sleeve about one and one-half inches above the seam and let it extend on over the shoulder to a point within one inch of dot M. (It is advisable when cutting the lining or goods to cut a notch at dot $M$ while the draft or pattern is on the lining, so you will know just where to place it. If the sleeve is in two pieces the seam will mark the place.) When cutting this sleeve, be sure to have Line 10 from dot E to wrist on a straight thread of the goods. This is a close fitting sleeve from elbow to wrist. If fullness is desired at the wrist, widen the sleeve by commencing at a point one-third of the
sleeve length from the top, on the seam edges, and cut from this point down to the wrist any width desired. (See dotted Lines 17 and 18 in Fig 4.) The fullness may be gathered or laid in lengthwise tucks or plaits.

This sleeve may be made with or without a lining. The lower part of the Leg-O'Mutton Sleeve may be used to cut the long tight fitting cuff, cutting it any length desired.

## BISHOP SLEEVE.

Use the same draft as given in Lesson 4. Make a dot two inches to the left and one inch below the junction of Lines 1 and 4 in the upper part of the sleeve; also make a dot two inches to the right and one inch below dot $P$ in the under part. Then draw a new Line 8 from dot I to the new dot in the upper part, and a new Line 9 from dot K to the new dot in the under part, and curve the bottom around the same as directed for the shirt waist sleeve, or Line 14 in Fig. 3. When making this sleeve, begin gathering about one and one-half inches from the seam at the wrist and gather on around to within one and one-half inches of the seam, putting more gathers in the back than in the front. The sleeve will fall down over the cuff all around and it sets better if it is made over a tight fitting lining. By using the lining it holds the cuff in place on the wrist and prevents it from slipping down over the hand.

The rules for drafting this sleeve make a sleeve that fits to the arm at the elbow. If you prefer to have it full both at the top and at the elbow, take the measures around the upper and lower arm very loose, or the size you want the sleeve when finished, and then draft according to instructions.

## LACE SLEEVES.

When cutting lace or embroidered sleeves without a seam in the back, use the same draft as given in Lesson 4. Cut out the sleeve proper ; that is, cut along Lines 11, 8, 13, 9 and 12 ; then cut Line 10 from dot 0 to dot E and from dot E to Line 11. Do not cut Line 10 from dot E to dot M . Now cut the under part of the sleeve off from $\operatorname{dot} \mathrm{K}$ to $\operatorname{dot} \mathrm{E}$ and place the two back edges together; that is, place Line 10 from dot E to Line 11 in upper part and Line 10 from dot E
to dot O in under part together. (See Fig. 5.) Lay these on a piece of paper and trace a new pattern by tracing Lines $8,9,11,12$ and 13 . When tracing the lower part of Line 9 , trace right on up to the upper part through the dot or opening. This dart will have to be seamed, but do not cut it out until after the sleeve is fitted, for if the elbow is not in the right place it can be changed, whereas if it were cut out, it could not. The dotted lines in Fig. 5 are left to show the former position of the under part.

## ELBOW SLEEVES.

Use the same draft as given in Lesson 4 and cut from $\operatorname{dot} \mathrm{K}$ to $\operatorname{dot} \mathrm{E}$ and on to $\operatorname{dot} \mathrm{I}$; do not make this a straight line, but curve around from dot K to dot I through dot E . This will make the pattern a little longer in the back than on the inside, which is necessary, since the arm is longer on the outside than on the inside. (See dotted Line 16 in Fig. 3.)

The draft given in Lesson 4 may also be used in cutting the loose or flowing sleeve. Cut along Lines $8,13,9$, and make Line 14 as in Fig. 3 of this lesson, and cut it. If a wider sleeve at the bottom is desired, extend Lines 11 and 12 out long enough to get the extra width.

Thus you see the foundation of all sleeves is the plain coat sleeve as given in Lesson 4, and for any sleeve, however fancy, that has a tight fitting lining, the coat sleeve is used.

The instructions given for all these different drafts or patterns make sleeves that fit close at the elbow, at the top, and at the wrist. To make them larger you can either take the measures around the upper and lower arm looser and draft according to instructions given in Lesson 4, or a more simple way is this: Move dot I to the left and dot K to the right as far as you want the sleeve when finished, even though you have to move them past dots H and J. Also move dot F to the left and dot G to the right, making Line 7 as long as you desire, and draw new Lines 8 and 9 from the new dots $F$ and $G$ to the new dots I and K. Then draw Line 13 to meet the new dots F and G also, allowing it to extend above Line 2 from one to two inches. You will also have to make Lines 11 and 12 longer; extend Line 11 out
from the junction of Lines 1 and 4 and draw a new Line 8 from the new dot I to this point; also extend Line 12 from dot $P$ to the right and draw a new Line 9 to this point from the new dot K .

When a tight, glove-fitting sleeve is made, great care must be exercised in the shape at the top and in the elbow; otherwise you will have a sleeve in which you cannot raise the arms or bend the elbow with any freedom. This sleeve must be fitted to the arm and in the arm hole as carefully as any other part of the waist.

When the long shoulder effect is worn, Line 13 must be drafted as much lower at its top as the shoulder of the bodice extends below the point of shoulder.

It is always advisable to draft a sleeve pattern for each patron from her own measurements. Dressmakers too often make the mistake of trying to make the same sleeve pattern do for everyone, and hence in a number of cases a poor fit is obtained. No two persons are exactly alike; some arms are long from the shoulder to the elbow and short from the elbow to the wrist, and some are the reverse; some are large around the upper part of the arm and small around the lower part, and vice versa.

Every beginner and most dressmakers consider the making of the sleeve the most difficult part in all their sewing, yet it need not be if it is given the attention from the start that it deserves, and is thoroughly mastered. It is, however, one of the most important parts in the making of a costume.

Nothing is more uncomely and uncomfortable than an illfitting sleeve. It is, therefore, very necessary that in the first place correct measurements are taken; secondly, that the drafting is accurately done; third, that the cutting and the basting are carefully and minutely done; fourth, that the sleeve is put in the armhole in the right position. Much, however, depends upon the basting and the location of the elbow, since a little carelessness in either direction may result in a very unsightly appearance.



FIG. 4

## CHAPTER 6.

Basting and Fitting Lining of Waist. Seams to baste first. Shoulder seam, under arm, darts. How to baste seams so they will not gap. Basting sleeve seams. Correcting errors. How to stand. How to pin. Regulating darts. Fitting shoulder and armhole. Fitting sleeve lining. Length of sleeve. Removing lining and making changes.

## BASTING LINING OF WAIST.

We will now take up the lining of the waist where we left off in Lesson 3 and proceed to put it together. Proper basting is a very important factor in the fitting of a garment, and should be learned as correctly as any other part of dressmaking.

Thread a needle with colored cotton thread, and baste along in small stitches on the waist lines in each part of the waist, also in the front tracings, or Line 1. This will enable you to always know just where those lines are and will aid you in putting the waist together, and in fitting. Leave them in until the waist is finished.

Use basting cotton No. 50 for basting the seams and always make short stitches so the seams will not gap when fitting.

First, baste the darts, beginning at the top and baste down; be sure and keep the traced lines together. This can
be done with more exactness if they are first pinned together. The waist line in the darts may not meet exactly; if they do not, see to it that there is the same difference in them in both fronts, as they must be exactly alike.

Next baste the two center backs together. Begin first by pinning them together at the waist line and then on up, and baste from the waist line up and from the waist line down, keeping the traced lines together. Now baste on the side forms that fit next to the back, pinning them at the waist line first. In each case hold the back next to you. Baste each of the other forms on in the same manner, placing waist lines together, etc., etc.

Baste the shoulder and then the under arm seams. Proceed in the same manner in basting the under arm seams as given for basting the backs. Instead of basting the shoulder and under arm seams on the same side as the others are based, baste them on the opposite side; then when fitting, if any changes are to be made, they can be made at these seams with very little trouble.

## BASTING THE SLEEVE LINING.

First, baste the inside seam. Begin at dots I and K and pin it together each way, pinning up from dots and down from dots, and then baste it. The upper part of the sleeve is much wider than the under part. To make the back seam, place the top edges of the upper and under parts together, and pin them; also pin on down toward the elbow until within two inches or such a matter of the elbow, keeping the tracings together; then baste it. Now pin the parts together at the wrist line and on up to within two inches of the elbow, and baste it. The upper part will be found to be a little longer than the under part of the sleeve; gather this extra fullness and adjust it in this 4 -inch place at elbow and baste it.

Lay the sleeve on the table or some flat surface with the upper part down. If it is basted properly it will lie flat and smooth except the fullness at the elbow ; if not basted properly, it will twist. If the upper part of the sleeve draws in toward the elbow (after it is basted), there is too much fullness at the elbow; draw out the basting and let
enough of the fullness out to make it set smooth. If it draws away from the elbow, there is not enough fullness there. Again the importance of correct measurements is shown, for if the elbow measure is a little too high or too low, the seam may have to be rebasted and the elbow put in the proper position.

## FIITING THE LINING.

The next important step after the basting is the fitting. If the measurements were accurately taken, and the calculations and drafting were properly done, and great care was used in the putting together and basting, there would be no alterations to make an da perfect fit would result, if the form you are fitting is normal.

Put the waist lining on the person to be fitted and have her stand in a natural position. First pin it at the neck and then on down to the bust, allowing the front tracings to come just together. Do not lap it, but pin it like you would a seam. Next pin the waist lines together and then on up to the bust.

Now notice the bust. If it appears too tight, allow more room by letting out the under arm seams. If too loose, make these seams a little larger. Do not fit it too tight over the bust. Note the waist in general; if too large, take it in on the under arm seams. Sometimes it will be necessary to take some of the surplus out at the darts, but you will have to use your own judgment largely in this. You do not want the lining to draw cornerwise from the darts to the under arm seams; it must fit perfectly smooth there.

Notice if the darts are in the right position. If they seem too low, raise the front at the shoulder seam; if too high, lower the front at the shoulder seam. Sometimes they may need running just a little higher, or they may have been basted a little too high.

Next, fit the shoulder. If you have to open the seam, place one hand on the back and the other over the front and smooth them both up at once toward the shoulder, noticing that they fit up to make the neck right.

Now look at the arm hole. It should fit quite close. Do not be in too big a hurry to trim it out, for remember
that a three-eighths-inch seam must be taken off when the sleeve is sewed in and this will make the armhole one inch larger. Of course, if it fits too snug and feels too tight, it may be trimmed a little; do not cut out too much in the back and over the shoulder. A wide back is required when the shoulders are to be fitted long, but the back is narrower if the shoulder is fitted short.

If the lining wrinkles much in front when the arms are hanging down, it is too high under the arms and needs trimming out. If, after cuittng the arm hole out here, it makes the front too loose above the bust, raise the front at the shoulder seam. If the arm hole is too large, make the shoulder and under arm seams a little larger. Occasionally there will be a little fullness in the arm hole right in front of the bend of the arm that cannot be taken out. In such a case, take a small dart about one-fourth of an inch deep in the lining and one and one-fourth inches long, letting it extend out toward the back dart; this gives a good spring over the bust.

If there is still a little fullness over the bust in the center front where it is pinned together, take a small dart in the center front where it is pinned together, take a small dart about where the bust line is, letting it extend toward the arm hole.

If the lining is too loose across the shoulder blades, make the curved seams a little larger. See if the waist line in the back is in the right position. Observe height of the neck in the back. Notice if the side bodies are the right length, setting well down to the form, and if the waist is high enough under the arms.

If the side bodies set close to the waist and arm hole, most of the changes can be made in the under arm and shoulder seams. The darts and curved seams will not often have to be altered. If the curved lines bulge out any, pin them in. If the back draws across the upper part, let the center seam out a little. If it is too large at the waist line and taking it up under the arms throws the curved seams too far forward, take the center back seam up a little. It is advisable to fit as broad across the shoulders as can be worn and not bulge in the back. Trim out the neck sufficiently to be comfortable. Do not have it too high in front
or too low in the back. When all the necessary changes have been made, mark with pins where the bottom of the waist is to come, which depends upon the style in which it is to be made.

## FITTING THE SLEEVE LINING.

Before taking the waist lining off, fit the sleeve lining. Adjust the sleeve in the proper position; draw it well up under the arm so that the elbow is in the right location, and pin the sleeve in the arm hole at the inside seam and around under the arm almost up to the shoulder seam. Now have the person bend her arm back and forth and you can readily tell if the elbow is correct; if it is too high, lower it ; if too low, raise it, by adjusting the seams. If the sleeve is too loose take up a little on each seam; if too tight let it out equally on each seam; the shape of the sleeve is much better retained by using both seams. Of course, if the sleeve is just a trifle too small or too large, the change may be made in just one seam. If there are changes to be made above the elbow, make them there and not below; the same applies to changes made below the elbow. Make the sleeve the desired length, being very careful not to get it too short. However, fit it as long as can be comfortably worn, as sleeves seem to shorten with the wearing.

Of course, you will not need to make all these changes in one fitting, but they will appear from time to time, and as said before, the more accurate the measurements and drafting are done, the fewer changes will have to be made. This requires much practic and patience, and the more practice and experience you have, the sooner you will reach perfection.

Carelessness in basting the sleeve may cause you to think that it has not been properly put in or is not cut correctly. Every remedy but the true one is tried; the arm hole becomes disfigured and stretched by much basting and trying on, and the sleeve is ruined by too much trimming and twisting.

Now remove the lining. As you take the pins out of the fronts to open it, be sure and place them back in one front just where you removed them; also mark the point in
the arm hole where the inside seam of the sleeve is placed. It is a good idea to take a needle and thread and run around with small stitches in all changes you have had to make, also where the pins are around the bottom so they can be removed. Mark the changes in the shoulder and under arm seams and trim them evenly before taking out the pins. In order to have both sides just alike, fold the waist together and pin at the waist line, top of darts, under arm seams, and in the back, and then trace all of the sewings where changes were to be made in the one side, on to the other side. Run the tracing wheel also over the stitches for turning at the bottom. Open the sleeve and trace on to the other any changes that may have been made.

If one shoulder is a little higher than the other, trace the highest one and then pad the other.

## CHAPTER 7.

Stitching Linings and Finishing Seams. Arranging for hooks and eyes. Covering same. Boning the waist. Seams to bone and how long to cut bones. Putting in bones and finishing. Second fitting of waist. Padding and how to use it. Finishing the bottom of lining. Use of canvas. Fitting a waist lining over a form.

## STITCHING LINING AND FINISHING SEAMS.

The stitching is now ready to be done. Stitch all but the shoulder and under arm seams. Do not stitch in the basting threads, but as close to them as possible, as it makes them so hard to draw out. Stitch the curved seams just inside the tracing, and the others just outside. After stitching them, trim them off evenly. Leave one-half inch seams in the center back and darts, and one-fourth inch in the curved seams. Stitch all the seams the same way, either from the bottom or the top, and be sure the needle is on the waist line before the turn is made. Overcast or bind them, as best suits your convenience. This will prevent any fraying out of the seams. If you overcast them, use small, even and very shallow overhand stitches and do not draw them very tight. If you bind them, use seam binding, sewing it along the edges of the seam and arranging it so as to sew both edges of the binding at the same time; do not
draw the stitches too tight. Both edges of the curved seams are to be overcast or bound together, but each edge of the center back and darts must be overcast or bound separately.

## ARRANGING FOR HOOKS AND EYES.

Now put the hooks and eyes on. Use a strip of canvas, cut on the true bias, one and one-half inches wide, and double it in the center lengthwise. Cut a strip of lining about two inches wide and baste one edge of this to the two edges of the canvas, having the three edges even. Now baste this on to the inside of the lining with the canvas up, having the three edges come on the line where the fronts are to meet. Turn the edge of the front down over the canvas and baste it. Stitch it on the edge, and also back far enough to permit a whalebone to pass through. Fix the other front in the same manner. Press well and then slip the whalebone in between the folds of the canvas. These bones should be about seven inches long, and the genuine whalebone gives the best satisfaction for the fronts.

Now mark the space for the hooks and eyes. In order to get them even, pin the edges of the fronts together at the waist line, being very careful to have them exact; then pin them up to the neck curve, pinning about one-half inch from the edges. Open these edges and bend back this halfinch space. Cut a piece of cardboard the length of the space you want between the hooks, which is usually about one inch, and lay it on the edges of the fronts and mark both fronts with crayon, from the waist line up to the neck. Remove the pins and sew the hooks and eyes on firmly in the crayon marks-the hooks on the right side about oneeighth of an inch back, and the eyes on the left side about one-eighth of an inch out. Cover them with the strip of lining which was sewed in with the canvas, pulling it up under the hooks smoothly and then overhand it down neatly. If the facing is too wide to make a neat finish, cut off the extra width.

## BONING THE WAIST.

All the seams must be carefully pressed and finished before boning them. We advise the use of featherbone, since it can be cut any length desired and there is no waste. Use sewing silk for sewing the bones in and a medium sized
needle and take a very long stitch. Each bone should reach below the waist line to the turning-up line for the bottom of the waist. Bone the darts first. Cut the featherbone the length of the darts; pull the casing down a little and cut the bone off about one-fourth of an inch, so as to make the casing longer than the bone and then turn the casing over the ends of the bones to make a smooth finish. If you possess a machine attachment for boning, you can sew the bones in very easily. Lay the featherbone under the foot of the machine and place the edge of the seam over it and stitch it down on the part of the seam that extends out, stitching as close as possible to the seam stitching but never in it; also stitch the other edge of the bone to the other edge of the seam, being careful to have it smooth and straight. In like manner bone the center back and under arm seams, but do not bone the latter until after the second fitting. When boning a waist for fleshy forms, it is sometimes necessary to place a bone midway between each two seams and fasten them to the lining only.

## SECOND FITTING.

The lining is now ready for the second fitting. Urge your patrons at all times to wear smooth underwear; also to wear a good corset and to have it the same each time they are fitted. Once in a while a patron will lace differently and cause a great deal of trouble in the fitting in this way. You cannot secure a perfect fit over bunglesome underclothes or over an old, broken-bone corset. If you find that these defects are true of a patron, do not hesitate to call her attention to it.

Sometimes after boning a waist it is a little too tight. If so, let it out in the under arm seams, as they have not yet been stitched. Now, notice if any padding must be used and if so, mark the places. If one shoulder is higher than the other, a more perfect fit is obtained by padding the lower one. If there is a hollow in the center of the back between the shoulder blades, put in a small pad. If there is a hollow place under the arms, pad it; if these pads are made after the fashion of a dress shield and sewed in after waist is finished, more pleasing results follow. If the chest is flat,
the appearance will be much improved if padding is placed there also.

For the padding use cotton batten which comes in rolls. When more than one layer is needed to fill the hollow, make the first layer to fit the place to be padded, then the next one a little smaller, and so on until it is filled. If you will pull the cotton out at the edges instead of cutting it, the padding will not show where it begins. If you are obliged to cut it for some places, pull out the edges afterwards. If the material for the outside of the waist is of heavy goods, the padding may be placed between the lining and the material; if not, it will have to be placed on the wrong side of the lining and then covered.

A very satisfactory way to make the waist appear fuller through the bust when it is necessary is to wear a corset cover which has two or three ruffles across the front about three and one-half inches wide, sloping off to about two inches wide at the arm hole and the under arm seam. These ruffles are very pretty, made of embroidery, although they may be made of bias crinoline. If the arms are long and thin, padding may be used between the elbow and shoulder in the sleeve; a better way, however, is to plan the waist with sleeves that are timmed to enlarge the appearance of the arms.

Now observe the waist very carefully to ascertain if all the necessary changes have been made and if it fits perfectly. Notice if the shoulders set properly and be sure that the arm hole is correct. Notice the sleeves in particular, that they are the proper length and that they set well. If they appear too long at the top, turn them down, pin and then trim them off; if left too long or too high on the shoulders they will stand up when stitched in. If the long shoulder effect is worn, the sleeves should be cut less rounding at the top than when the shoulders are short.

Cut a bias strip of canvas or crinoline about an inch wide and baste it around the bottom of the waist on the inside; turn the edge of the waist under just a seam's width, cut a bias strip of lining one and one-fourth inches wide, turn under one edge and hem it down as a facing on the turned under seam of the bottom of the waist; then turn
under its other edge and hem it neatly to the waist. This is done, of course, after the outside material is draped on.

The lining is now ready to be draped, which should be done upon a form, as it requires a great deal of time. If you do not have a form, it will have to be done on the patron, and there is danger of you hurrying too much for fear you will tire her, and perhaps, in your hurry, you will overlook some things that should have your careful attention, whereas if you had a form you could take your own good time and not feel hurried, or that you were subjecting your patron to long and tiresome fittings.

## FITTING A LINING OVER A FORM.

One of the greatest difficulties in making one's own clothes is the necessity of having to try on again and again, and it is not always easy to ascertain whether the desired effect is being produced or not. It is, therefore, of the utmost importance when one is making her own dresses, to possess a form of her own bust measure upon which to drape the waists and skirts. It is almost impossible to fit one's self without it. They may be purchased in any size. If you are sewing for others, you may need several sizes. However, adjustable ones are manufactured now which can be made any size desired. The size of the form is based upon the bust measure.

To prepare a form for your own personal use, cut a lining from heavy unbleached muslin or from cotton duck, or some strong material, and have it fitted perfectly to your own figure, letting it extend five or six inches below the waist line. Place the lining upon the form, draw it well on and pin the fronts together for one or two inches from the neck down, and up two or three inches from the bottomjust enough to hold it firmly on the form, but open at the bust line. If the lining does not fit the form perfectly, do not try to make it do so, but make the form to ft the lining. Pad between the form and lining with cotton, tissue paper or scraps of cloth until the lining fits the form as smoothly and evenly as it did you. Especial care must be given to the shoulders and neck; if the lining is too long waisted for the form, raise it up by padding more under the shoulders. If too loose in the back, fill it up there. When the form is
firm and will not dent in handling, sew the two front edges together with an overhand stitch.

This will require a great deal of care, but you will find it well worth your trouble, because it will simplify all the work in the future and save many fittings. Leave the lining always on the form and fit your waists over it. You can fit and make shirt waists on this form without every trying them on and be assured of a perfect fit, since all the imperfections can be easily seen and corrections made. When fitting waists that have a lining, fit the new lining right over the lining you have just put on the form.

Note.-The subject of boning thoroughly treated is so comprehensive-embraces so much, and as it comes more properly after the student has finished the elements of dressmaking-has completed the course-we have made arrangements with the Warren Featherbone Company by which they are to prepare for us a special lesson on featherboning, which comes immediately after the student graduates.

## CHAPTER 8.

Draping a Waist. The yoke. The lower part. The back. Fullness in front and back. Finishing bottom of waist. Where yoke joins waist. Lace yokes. Evening waists. How to press seams in cloth. How to press velvet and silk. How to press sleeves. How to baste and stitch velvet, plush, corduroy, woolen goods, etc.

## DRAPING A WAIST.

The construction and draping of a waist require the most careful attention to every detail, but one can feel moderately sure of a good effect if sufficient perseverance be exercised and much care be observed throughout the entire work.

If the waist is to have a yoke, drape it first. Open the under arm seams and lay the center front of waist on a fold of the material and cut to outline the neck in both front and back and make the yoke as long or as short as desired. The back will come out bias. If the yoke is wanted to open in front, lay center of back on fold of the material. Now place this yoke on the form and pin it securely.

The lower part is draped next. In the draped waists which are generally worn at the present time, the outside material is not fastened in with any of the seams except the shoulder seams. There are instances, however, when the material is fastened in the under arm seams as well.

Measure the material from neck to waist line to get the length, then add six inches for fulness and cut off a width from the material this length. Pin the center of the goods at the center of the front, placing it high enough so it will reach the lower part of the yoke and the arm hole. Push the goods straight back under the arm, pinning as you go; also pin at the top of the under arm seam. If tucks or plaits or fulness are desired, pin them in as you proceed. As you pin it on down on the under arm seam, give the goods a swing toward the front, which will give the seam a bias effect and leave some fullness in front, which may be gathered or plaited in at the waist line. After this is carefully pinned down, trim off the goods at the yoke line, in the arm hole, under arm seam and around the bottom, leaving enough to turn up at the bottom; also allow for seams under the arm. If waist opens in front put the selvage of the goods at the center of front, leaving enough for hems and drape one side of front, then remove it and cut other front by it and replace both on form.

Drape the back in the same manner, placing the straight of the goods at the center of the back and pinning toward the under arm seam. Have the goods high enough to reach the shortest part of the yoke. Pin along at the yoke line and the arm hole and to the top of the under arm seam. If you desire tucks or plaits or fullness pin them in as you did in the front before pinning it down on the under arm seam. If the waist is to open in the back, cut it down through the center; if to open in front, leave the back whole. Trim the goods off around the yoke, arm hole, under arm seam and around the bottom, leaving enough to turn up at the bottom and allowing for a seam under the arm. Remove from form and cut the other side of the back just like it. Then replace on form.

If you desire to have no yoke in the back and want it draped up to the neck and shoulder, proceed in the same way, allowing the material to extend up to the highest point of the shoulder and pinning it at the neck and shoulder seam, and then cut it off there, allowing for a seam. Drape the front without a yoke in the same way.

Now remove from the form with the lining also and
be sure no pins fall out. Carefully baste along the front, around the yoke, neck, shoulders, arm hole and the under arm seams-both in front and back; also around the bottom. Open the shoulder and under arm seams and baste the outside in with the lining, turning the seams this time so they will be on the same side as the other seams. Be sure to keep the waist lines together when rebasting the under arm seams. Use your own judgment as to whether you sew the outside seams in with the lining or leave them separate. If the lining seems fuller than the outside, leave it so, but be sure there is no fulness in the outside. Turn the goods under at the bottom and baste it.

Finish off the waist neatly. Use any kind of finish where the yoke and waist meet; either turn it in and whip it or cover with ribbon binding or braid. If you prefer the yoke unlined, cut the lining out at the yoke line. If the yoke is of lace or embroidery and is very thin, a lining of chiffon or net should be put under it. A lined yoke may come farther down than an unlined one. If there is to be any tucking or plaiting or gathering, it must be done before it is draped. If you have not left enough on the opening of the yoke for a hem, you will have to face it with itself and fasten it with small hooks and eyes.

If you do not have a form on which to drape the outside material and do not care to tire your patron with long standing, you can cut the goods by the fitted lining before it is stitched, allowing for all fullness and doing the tucking or plaiting before cutting it out.

## EVENING WAISTS.

Drape evening or low-neck waists in the same manner. When fitting the lining, mark on it just how low the neck is to be, then when draping, bring the material up to these marks. In these waists it is a good idea to run the bones in the back clear to the top to keep the waist from drooping. In some instances where the material is soft and full, it is advisable to run a string or tape around the top on the inside that can be drawn to fit the wearer.

## PLAIN TIGHT FITTING WAISTS.

Cut the lining of a tight fitting waist the same as directed in Lesson 3. If it is to have a skirt portion, draft the
pattern below the waist as far as desired. This will require a hip measure, which is usually taken around the hips five or six inches below the waist line. Then, when testing this measure, if it tests out too small, trace outside the lines far enough to get the extra width; if too large, trace inside the lines. Be sure to get it large enough over the hips or it will draw and wrinkle there.

After cutting the lining out and shaping it below the waist line, lay the front on the doubled material with front edge of the lining on the straight edge of the goods, and pin carefully and then cut out. Place each piece of the lining on the doubled goods, always keeping the waist lines on a straight thread of the goods. After all are cut, separate and place each piece of the lining with its corresponding piece of the material or goods. You will not get two pieces for the same side when cutting both sides at once this way on the doubled goods, and can cut as saving also. Occasionally, however, you will have a piece of goods that can be cut to much better advantage by cutting each piece separately. When this occurs, be sure to compare the two corresponding pieces before cutting, so you will know that they are right and thus avoid the danger of cutting two pieces for the same side. If the material has much of a nap, cut each piece of the waist to run in the same way; otherwise, by different reflections of light, caused by the different directions of nap, the garment may appear to be made of two shades of goods. It is advisable, even in material that has no nap, to cut each piece the same way.

## BASTING MATERIAL ON LINING.

Lay the lining on the table and place the goods over it and smooth the goods over and over again and draw it out a little. Pin it carefully in several places around the edges to hold it in place, then baste it about where the pins are. Turn it over and baste along the waist line also. The idea is to get the outside drawn a little tighter than the lining, which will obviate all those little lengthwise wrinkles so often seen in a tight fitting waist. Careful judgment, however, must be used in the smoothing, as different textures of goods give more or less in this smoothing, which must always be done lengthwise of the goods.

Join all seams together from the waist line up and from the waist line down, making the turn at the waist line decided. Pin and baste according to instruction already given for basting the lining. If there is any unevenness in any of the pieces, caused by careless cutting, do not attempt to full it in, but let it come out at the top or bottom, being sure first that the waist lines are together. After all the seams are basted, cut the darts off a little so that when fitting the waist will set well down to the form; when ready to bone they can be cut off the desired width.

Clip all seams at the waist line after they are stitched and finish them as you wish. If you bind them, be very careful to put the binding on loose enough so the seams will not draw; otherwise a perfect fit will not be obtained.

## PRESSING.

Careful pressing is the most important part in dressmaking. You cannot hope to attain the desired results unless this is properly done. Special pressing boards may be purchased from dressmakers' supply houses, but homemade ones answer the purpose quite as well. A narrow iron is more preferable for pressing seams than a wide one, but in the average household the ordinary flatiron will be chiefly used. While it has long since been the custom to press the seams open with the point of the iron, a much better result is obtained by using the square end, as the edges of the seam are thus spread out evenly at the same time that the seam is pressed.

Open the seams in cloth dresses and dampen with a wet sponge or cloth and press hard until thoroughly dry. Do not press velvet by setting a flatiron on it. Lay the iron on its side with a damp cloth over it and open the seams and draw them across the edge of the iron. Soft fabrics, such as silks, cashmeres, etc., do not require dampening. Do not use an iron that is too hot, as the heat takes out the dressing and leaves the silk soft and old looking; move the iron quickly and smoothly over the seams. For sleeves, a small sleeve board made of hard wood is used. However, if you have none, a broomstick or a small rolling pin will do.

In making up goods that shrink, such as linens, duck, etc., it is best to shrink them before making them. Place
them in hot water, dry and press well. Haircloth and canvas should also be dampened and pressed before it is used; otherwise, if the dress becomes damp the haircloth and canvas will shrink and ruin the looks of the dress.

On account of its springiness, woolen material should be slightly stretched down in length and basted more closely to the lining. In open-meshed goods, where the threads are quite prominent, great care must be used in the stretching or the threads will be crooked. When basting velvets, plush, corduroy, etc., baste as close to the edge as possible, as the basting thread often breaks the pile or nap down and leaves a mark. When stitching these materials, stitch against the pile and the seams will show less and the goods will not push ahead of the presser foot. After stitching the seams, clip every stitch or two of the basting and remove at once. Clipping the basting in this way will leave the seams smooth and will leave no marks, whereas if you undertook to draw out a long basting thread it is likely to cut the pile on velvets and plush and split silks. Remove all bastings from such materials as soon as possible.

## CHAPTER 9.

Shirt Waist. Measurements. Cutting, basting and fitting. Added fullness for shirt waist, tucks, plaits, etc. Under arm seam. Shoulder seam. Finishing seams. Belt line. Collar band. Front plait.

## SHIRT WAISTS.

The term "shirt waist" covers a very large field, embracing the perfectly plain waists of linen, gingham, percale, etc., with a single box-plait down the front, and proceeding through different degrees of elaboration to the more costly ones of silk, lace and chiffon. Not so much care and skill is required in the making of a shirt waist, and one can easily fit herself, but a careful fitting is needed to make it appear "chic."

Draft a pattern the same as given in Lessons 1 and 2 until you come to the darts in the front and the curved forms or side bodies in the back, which do not draft-simply outline the front and back. Measure out to the left of the junction of Lines 1 and 8 from two to four inches and make a dot. (This depends on how large the bust is and how full you want the waist in front at the waist line.) Draw a line from this dot to dot N and mark it (1-a), and use this new line (1-a) for the front edge of the waist. If you want still
a little more breadth across the bust, draw the arm hole from dot J to dot C with less curve. If more fullness is desired in the back, trace Line 14 instead of Line 21, allowing it to extend four or five inches below Line 17 or waist line.

The pattern is now ready to cut the waist material. If there are to be any tucks or plaits, or tucks and insertion, they must be put in before it is cut out. If you do the tucking on a machine with a tucker, be sure the tucker is adjusted right. Try it beforehand on a piece of the same material; if you try it on a heavier or thinner piece of goods, the tucks will not look the same in the waist as in the sample.

Place Line (1-a) on the straight edge of the goods, allowing for hems. Give plenty of spring over the hips and allow four or five inches below the waist line. Be sure and have both fronts just alike. Lay the tucks from the neck and shoulder to the bottom of the waist so as to keep the goods straight while cutting and the waist will not draw across the bust. You can stitch them as far down as you desire.

Place the center of the back on the straight of the goods also, and remember to allow for all seams. When cutting the sleeves, be sure not to cut them the full length, but leave off the depth of the cuff. Baste according to instructions given for basting a lining.

## FITTING SHIRT WAISTS.

Put the waist on and pin the fronts together carefully, and pin them straight. Tie a string around the waist and adjust the fullness in the back and mark where the gathers will be and the space they will occupy. If the tucks or plaits run straight of the goods, see that they set that way, or if they run to the front, notice if both sides are just alike. Notice if the waist draws across the bust; if so, let the fronts out at the under arm seams. The waist should fit quite loose across the bust. If the arm holes are too large, take up the shoulder seams. Be sure that the arm holes turn a perfect curve over the shoulders; do not have them shorter at the shoulder seams. The effect of a great many waists is spoiled in this way. They give the sleeves a
pointed effect at the top instead of the rounded curve they should have.

Draw the fronts forward at the waist line and arrange the gathers so as to make the waist set perfectly smooth under the arms. Now pull the fronts up until you have as much of a droop in front as desired and mark it. If it draws across the hips, let the under arm seams out below the waist line. If this does not give as much fullness as is needed, leave the seams open entirely below the waist line. Fit plenty long in the back. The skirt is usually pinned to the waist at the center back, and as it tends to pull the waist down in the back, the neck will be too low in the back if not fitted long enough. The neck requires especial care. Do not trim it out too much; the neck band should fit closely, though not too snug.

Fit the sleeve so that it is not too long at the top. Mark the place in the arm hole where the seam is to come; also mark where the gathers begin and end. Adjust them to come well down in front, beginning about one and one-half inches from the seam and extending up over the shoulder and not too far in the back. Notice the gathers at the wrist to see if they are arranged to give a pretty set to the bottom of the sleeve. Fit a strip of lining or canvas on the sleeve for a cuff and cut it the desired length and width.

In nearly every instance the sleeves are made to accord with the design of the shirt waist. Plain shirt waists have plain sleeves finished with a cuff, while more elaborate waists have the sleeves either tucked or box-plaited, finished with a deep cuff of fancy design.

Observe the waist all over very closely to see if all the necessary changes have been made and whether there are any more to make. If not, remove the waist, draw out the bastings and mark both sides alike and trim them, and rebaste. Use the French seam when stitching the seam. This is made by stitching on the right side and trimming evenly close to the stitching; turn the seam on the wrong side, crease the edge and take off another seam about one-fourth or one-half of an inch deep. This will cover the edges of the first seam if they were trimmed evenly and closely. If the waist is wool or of heavy material, trim seams evenly and
either overcast or bind or notch them. Leave the shoulder seams unstitched until after the second fitting, so in case there is any fullness to be disposed of, or any little readjustment to be made, it can be done without having to rip a finished seam.

Now a plait must be put on in front. If a woolen waist, waist, line the plait with canvas, cutting it as wide as the plait is to be when finished. Cut the material to cover the canvas and enough wider to turn in a good edge. Turn in these edges and baste them and then press the plait. Basio it on to the right front, placing the center of the plait on the front tracing. Turn the edge of the front back so as to be stitched down the same time the plait is stitched. Stitch the plait on both edges and about one-fourth of an inch from each edge. Remove the basting and press well. Turn the edge of the other front under and stitch down if it is wide enough; if not, you will have to face it. Fasten it either with buttons and buttonholes or hooks and eyes.

Gather the fullness at the waist line in the back, two rows being sufficient. These are stayed with a strip of the material about three-fourths of an inch wide and stitched all around on the under side. Or, if a tape is used to tie around the waist adjust it in the same manner at the back. You can arrange the gathers in the fronts the same way by stitching the tape to them also. Some shirt waists are not gathered at the waist line in the fronts at all, but allowed to fall free from the neck and shoulders. In this case, the tape is stitched on the outside at the back, over the gathers, and tied in front each time the waist is worn, and the fullness adjusted to suit the wearer. Many prefer this plan, as they are much easier laundered.

When a waist is made of heavy material and full in front, it is sometimes necessary to cut up to the waist line from the bottom at the point where the gathers begin, and the fulness gathered into a band. This band should be about one and one-fourth inches deep when finished and cut a little on the bias. Even with the band, the fronts may be drawn down tight or pulled up to droop over the belt. Fixing the fullness in a band in this manner does away entirely with the bunglesome quantity of material below the waist
line, which intereferes so often with the proper fitting of the skirt. The bottom of the remainder of the waist is finished with a narrow hem. Cut the collar band just a little curved, as it will set up to the neck smoother than a straight band. Baste one edge of the band to the neck of the waist and stitch it; turn the other edge over the seam and overhand it down neatly.

If there are any changes to be made in the sleeves, make them now, and be careful to get both sleeves alike. The opening of shirt waist sleeves varies its position according to the dictates of fashion. Sometimes the opening is at the inside seam and sometimes at the back of the sleeve or the under side. For a shirt cuff, cut an opening at the back of the sleeve from the wrist the desired depth. Sew an undrlap to the back of the opening with the seam on the right side; crease the seam over on the lap and fold the other edge over the seam and stitch down. Join the overlap to the front of the opening on the right side of the sleeve also. Turn down the other edge of the lap and fold over so as to cover the seam. Adjust the overlap so as to entirely conceal the underlap and then baste it. Stitch all around the overlap, keeping the point in a good shape; when stitching around the point, stitch it down through the underlap so it will hold the opening in good position. Or, if you prefer, you can leave a small opening at the inside seam. The underlap should be about one and three-fourths inches wide, and the overlap about two inches wide, with one end pointed. Sew the seams of the sleeves up, using the French seam also, and press them well before putting on the cuffs. Gather the fullness at the bottom of the sleeve and bind it if it is a woolen or silk waist.

The cuff is usually made with an interlining and sewed to the sleeve after it has been gathered. Cut the interlining, which should be of white linen or muslin, the length and width you want the cuff when finished. Cut the goods a seam wider and baste on to the interlining, turning all the edges over the lining. If the cuffs are to be stitched any, it must be done now, and then pressed. Line them with silk or some soft material. Fasten them on to the sleeve by hand so no stitches will show. If the waist is of cotton or
similar material, put the cuffs on just like a band-sew one edge to the sleeve and turn the other edge over it.

Baste the sleeves in the waist and then try it on again before stitching them in. Look the waist over carefully and notice if all the changes have been made. See if the fullness in the fronts and back is adjusted properly, and if the tape or strip is on at the waist line all right, and note whether the sleeves are in correct position. Remove and stitch the shoulder seams and then the sleeves, having the shoulder seams turned to the front. Stitch a bias strip in with the sleeves and then turn the strip over the seams and overhand it down so there will be no "raw" seams.

Sometimes after tucking or plaiting the fronts, it will be found that they are not wide enough to take in the whole pattern. In such a case, you will have to piece the material, making the seams come where they will least show-under the arm or perhaps under a tuck or plait.

Shirt waists are usually made unlined, though in some instances, such as a transparent, or a thin, soft silk, a lining is advisable; but for the ordinary waists of cotton and linen, a well fitted corset cover answers the purpose just as well.

## LESSON 10.

Collars and cuffs. Stock collars. Drafting a stock collar. Cutting a sailor and bertha collar. Storm collar. Coat collar. Soft collar. Depth of collar. Finishing collars. Cuffs and how to draft and make them.

## HOW TO DRAFT A COLLAR PATTERN.

Take one-half the neck measure and add half an inch to it, then make a rectangle whose top and bottom will each be that measure, and make the sides each four inches long, and number these lines 1, 2, 3 and 4 respectively. (See Fig. 6 , accompanying this lesson.) This will make a draft for a collar two inches wide. When drafting for a wider one, make the side of the rectangle twice the width you wish the collar to be. Using the neck measure given in the first les-son-12 inches-one-half of twelve is six inches; adding half an inch, according to instructions given above, makes six and one-half inches long to draw the top and bottom of the rectangle; make each end four inches long.

Find the midway point of Line 3 and make $\operatorname{dot} \mathrm{A}$-the depth of the collar in front; also make dot B at the midway
point of Line 4, and make dot C at the junction of Lines 2 and 3. On Line 1, one inch from Line 4, make dot $D$ and connect dots B and D by a straight line. Now draw a slight curve from $\operatorname{dot} A$ to $\operatorname{dot} D$; also one from $\operatorname{dot} C$ to $\operatorname{dot} B$, or use the curved ruler enclosed, putting dots $\mathrm{A}, \mathrm{C}, \mathrm{B}$ and D on ruler resectively on same dots on draft and draw the curved lines. By measuring from dot C to $\operatorname{dot} \mathrm{B}$, you will find that it is about one inch longer than from $\operatorname{dot} A$ to dot D ; this being one-half of the collar, it will make two inches difference in the whole collar, which is the correct proportion. You can use the lower part of this collar to cut a shirt waist neck band.

When cutting this collar, lay the edge from $\operatorname{dot} \mathbf{A}$ to dot $C$ on the fold of the goods, and allow for turning under on all the edges. Interline with canvas; baste the material on the canvas and turn all the edges over the canvas and baste them. If you want the collar stitched any it should be done now; then press and line with silk or some soft material.

## SAILOR AND BERTHA COLLARS.

The sailor or round lay down collar is best made by folding a waist in the center of the back before the under arm seams are basted, and pinning it down very carefully to a piece of paper, spreading it out smothly; then cut to follow the neck curve of the waist in the back and down in front to just where the fronts lap together. Remove the waist from the paper and shape the lower edge as you wish -either rounding or square, and leave it open in the front. Place the back edge of the pattern on a fold of the goods when cutting the collar. A collar cut after this fashion will always fit smoothly over the shoulders. The waist which it is cut by should be carefully fitted at the neck and shoulders before the collar is cut.

Cut a bertha or cape collar on the same principle, only hollow it out in the neck to the desired shape, and make the bottom either circular, square, scalloped, pointed in the front, back and shoulders, or any fancy shape desired. You may use the front and back drafts to cut these different collars by, provided there were no changes made in the neck and shoulders when fitting the waist that was cut by
same drafts, but if there were changes made, it is a better and safer plan to cut by the waist.

## SOFT COLLARS.

When cutting a soft collar, have the goods straight or an exact bias in front. It should be about five inches wide and the length at the top the same as the neck measure, and the bottom about two inches longer; allow enough in length to finish the ends. Test the collar both at the top and at the bottom to see if it has the right measurements and then hem both sides with a narrow hem. Attach a piece of featherbone to each end, allowing the ends of the featherbone to extend under the hems at the top and bottom, and then gather the ends of the collar down on the featherbone and stitch it there. Then turn the featherbone over and whip it down to the collar. A bone may be placed in the front also, but is is not necessary. Fasten with very small hooks and eyes. These soft collars should be made extremely neat to look well.

Coat and jacket collars will be given in the lesson on "Tailor Made Suits," No. 15.

## CUFFS.

## DRAFTING A CIRCULAR CUFF.

First, measure the hand around the thickest part with the thumb held inside of the hand. This measure should be taken as snug as can be drawn over the hand, then one inch added to that measure. This one inch will allow for seams and the room the canvas will take up.

Take one-half of this measure and add two inches to it and draw a rectangle whose top and bottom will each be this measure, and whose sides will each be six inches. Number these lines 1, 2, 3 and 4 respectively. (See Fig. 7, accompanying this lesson.)

Make a dot two and one-half inches on Line 1 from Line 4 and mark it dot E ; also make a dot down on Line 4 two and one-half inches from Line 1 and mark it dot F . Connect dots E and F by a straight line. Now make a dot down on Line 3 one and one-half inches from Line 1 and mark it $\operatorname{dot} \mathrm{G}$; also make $\operatorname{dot} \mathrm{H}$ at the junction of Lines 2 and 3.

Draw a curved line from dot $G$ to dot E. Begin at dot H and draw a curved line following Line 2 about one inch and then curving on up to dot F. These curves may also be drawn with the curved ruler given for the collar, drawing the line from $G$ to $E$ by the top edge of the collar, and the line from H to E by the lower edge. This is just one-half of the cuff pattern; when cutting a cuff of the material, place the line from G to H either on a straight lengthwise fold, or on a true bias. These cuffs are interlined with canvas and finished off the same as given for cuffs in Lesson 9.

When attaching the cuff to the sleeve, place the middle of the cuff or dot $G$ at the inside seam of the sleeve. This is a curved cuff with a narrow back; if the cuff is wanted even in depth all around, measure the shortest part of the cuff in depth and finish the bottom from this point. (See dotted line in Fig. 7.)

Use the lower part of the Leg-O'Mutton Sleeve to cut the long cuff so much in vogue now, cutting it any length desired. Use the lower Lines 8 and 9 to cut by-not the dotted Lines 17 and 18 shown in Fig. 4 in Lesson 5.

The cuff for the bishop sleeve may be fixed in this manner; either cut an opening or leave the inside seam open two or three inches. Finish this opening by sewing a straight strip of the material clear along both edges of the opening, having the strip equal in width its entire length. Turn the other edge over to cover this seam and stitch it down. When the cuff is attached to the sleeve, turn under the band or strip just sewed on, at the upper or overlapping edge of the opening and extend it on the under side to form an underlap.

Cut two pieces for each cuff, and an interlining of crinoline or coarse muslin that will hold starch when laundered may be put in between the two pieces. Baste the interlining to the wrong side of one piece, then baste the second piece right over this, the right sides of the material facing each other. Stitch along both ends and one side. Trim the seams even at the corners and turn the cuff and baste around the seamed edge. If you want a few rows of stitching around the edge, do it now. Sew the cuff portion to which the interlining was basted to the edge of the gathered
sleeve, allowing the seam to turn toward the outside; turn under the edge of the other or outer cuff piece and baste it to the sleeve so as to cover the first seam made, and then stitch, or you may stitch the first seam and then whip the other edge over it.

If the opening is made at the inside seam, a plain cuff may be put on the sleeve before the seam of the sleeve is sewed up. Baste one edge of the cuff to the sleeve and stitch it; also stitch the sleeve seam. Turn the other edge of the cuff in and whip down over the seam, no lap or facing is necessary; the edges of the seam are hemmed. Finish the opening firmly with a buttonhole bar so the seam will not rip.

## BLOUSES.

Use the drafts as made for a shirt waist and extend Line 5 straight down to a point about six inches below the waist line or Line 8 ; make a dot four inches to the right of the end of this line and draw a line from the new dot to dot D; this gives a new Line 5. Extend the line (1-a) -given in shirt waist instructions-down one inch further than the new Line 5 and draw a line from the end of Line (1-a) to the end of the new Line 5 .

Extend Line 16 in the back six inches below the waist line or Line 17, and make a dot two inches to the right of this and draw a new Line 16 from this dot to dot R. Extend Line 14 six inches below Line 17 and draw a line from the end of this line to the end of the new Line 16.

The pattern is now ready to cut a blouse. Place Line (1-a) on the straight of the goods and allow for hems; place Line 14 in the back on a double fold of the goods. Do not use the darts in front or the curved forms in the back. Cut, baste and then fit. It must fit very loose over the bust. The fronts may be hemmed with a plain hem or a plait put on as directed for a shirt waist. Fasten it in any mode. Hem the bottom of the blouse and run a rubber the size of the waist measure in the hem. A tape may be used instead of the rubber. Use the sailor collar on a blouse. The blouse and collar may be made V-shaped in front by cutting each that shape and wearing a chemisette under the blouse, which can be easily cut by the front and back drafts to fit the neck, and the lower part shaped as desired.

CUFF DRAFT

## CHAPTER 11.

Skirt measurements. Waist. Around the hips. Length in front. Length on side. Length of back. Drafting front gore. First side gore. Second side gore. Back gore. How to proportion width of gores for different measures. Testing skirt measures. Width of skirt. To proportion the skirt. Observations to make in taking skirt measures. Changes for different forms.

## SKIRT MEASUREMENTS.

The American System uses the following five measures for drafting a skirt: First, waist; second, around the hips; third, length in front; fourth, length on side; fifth, length in back.

To take the skirt measures: First, measure around the waist at the waist line, drawing it snug. (See Line 3, Figs 1 and 2, Lesson I.) Second, measure around the fullest part of the hips about five or six inches below the waist line. (See Line 14, Fig. 1, Lesson I.) Third, place the end of the tape line at the waist line in front and measure down to the floor, allowing the tape line to touch the floor two or three inches in front of the feet. (See Line 15, Fig. 1, Lesson I.) Fourth, place the end of the tape line at the waist line on the side and measure down over the largest part of the hip and on down to the floor. (See Line 16, Fig. 1, Lesson I.) Fifth, place the end of the tape line at the
waist line in the back and measure down to the floor, allowing the tape line to swing out from the feet farther than in front. (See Line 17, Fig. 2, Lesson I.) If the skirt is to have a train, this measure will have to be taken as long as the train is desired to be.

The measurements used in this lesson in making the drafts are as follows: Waist, 24 inches; around the hips, 42 inches; front length, 42 inches; side length, 43 inches; back length, 44 inches.

As the seven gore skirt is very popular at all times, and is quite easy to make, we will use it in this lesson. Before attempting to draft a skirt patttern, it is necessary to determine how wide the gores are to be at the hips, which is done in the following manner: Allow two or three inches from the hip measure for the back gore and divide the balance of the hip measure by five, as there are five gores to draft after the back gore is deducted-one front, and two side gores on each side. Remember there are two back gores also.

As the hip measure in this lesson is 42 inches, subtract two inches for the back, which leaves 40 inches to be divided by five-the number of gores-which gives eight inches for the width of each gore at the hips. Make them about two inches wider at the knees, and about twice as wide at the bottom as at the knees. The skirt should begin to flare at the knees or about 24 inches from the waist line. 'If the skirt has a very short front measure, commence the flare about two inches further up.

## DRAFTING FRONT GORE.

The pattern we draft in this lesson is for a drop skirt or lining.

Draw a straight line 42 inches long-the length of the skirt in front, and mark this Line 1. Measure down from the top of this line six inches and make dot H (hip) and also make another dot 24 inches from the top and mark this dot K (knee). Dot H marks the hip width and dot K the flare at the knees.

From the top of Line 1 measure straight out to the right two and one-half inches and make dot W (waist), and draw Line 2 from the end of Line 1 to this dot; this
is the width of one-half of the front gore. (See Fig. 8 accompanying this lesson.) Since we are to make the width of the gores at the hips eight inches, the front gore must be about five inches wide at the top, and as we are only drafting one-half of the front gore, we make it two and one-half inches wide at the top. Line 1 is to be laid on a double fold of the goods when cutting a skirt.

Now, measure straight out to the right from dot H four inches (one-half of eight) and make another dot H , as it is for the hip also. Measure out from dot K to the right five inches (one-half of 10 , since it is two inches wider at the knees than at the hips), and make another dot K. Then, using the tape line, measure from dot W to $\operatorname{dot} \mathrm{H}$ and on to dot K , and on down to the 42 -inch mark on the tape line, making the width at the bottom about twice that at the knees; mark this point dot B (bottom). Draw a curved line from dot W to dot K through dot H and down to $\operatorname{dot} \mathrm{B}$, and mark this Line 3 . This line must be the same length as Line 1. Connect dot B with the bottom of Line 1 and mark it Line 4. (See Fig. 8.)

Make a dot on Line 1 one-half inch from Line 2 and draw a curved line from this dot to dot W. This forms a curve to fit over the stomach. In case of a large, full stomach, this line must be raised up above Line 2 insead of curving down as it does in this draft, or the skirt will "pull up" in front.

## DRAFTING FIRST SIDE GORE.

Proceed as in front gore by first drawing a straight line 42 inches long. Since this line joins to Line 3 in front gore it must be the same length as that line; mark this Line 5. Measure down six inches from the top of Line 5 and make dot H; also make dot K 24 inches from the top of the line.

Measure straight out to the right from the top of Line 5 and draw Line 6. (See Fig. 9.) Make a dot on this line five inches from Line 5 and mark it dot W (waist.) Since this gore is whole, we must make it eight inches wide at the hips, so measure out to the right from dot H eight inches and make another dot H (hips also). Measure out
from dot K to the right two inches farther than at dot H , or 10 inches, and make another dot K (knees also).

Now, begin at dot W and measure with the tape line down to $\operatorname{dot} \mathrm{H}$ and on to dot K and on down to the 43 -inch mark on the tape line, making the width at the bottom twice that at the knees, and mark this point dot B. Draw a curved line from dot W through dot H and $\operatorname{dot} \mathrm{K}$, and on to dot B, and mark this Line 7. This line must correspond to the side measure in a seven-gore skirt. Connect dot B with the bottom of Line 5 and mark it Line 8.

Make a dot on Line 6 one inch from Line 5, and lower this dot one-half of an inch and draw a slight curve from this dot to dot W; also draw a line from the new dot to dot K on Line 5. (See Fig. 9.) This will take off a little fullness so as to make the skirt fit smoothly over the hips. Mark it Line 9.

## DRAFTING SECOND SIDE GORE.

Draw a straight line 43 inches long-the same length as Line 7 in the first side gore, as the two are joined together, and mark it Line 10. Make dot H down six inches and dot K 24 inches from the top of this line. Also draw a line straight out to the right from the top of Line 10 and mark it Line 11. (See Fig. 10.)

Since the front edge or Line 10 of this gore is to be sewed to Line 7 of the first side gore, it must have the same curve over the hips as Line 7. This is ascertained in the following manner: Measure from dot H on Line 7 in the first side gore straight up to Line 6 (see the dotted line in Fig. 9), and make a dot there. Now, measure from this dot to dot $W$ at the left, and whatever that measure is, measure off the same distance on Line 11 from Line 10 in the second side gore, and make a dot there and mark it dot W. Make this gore the same width at the top as the first side gore. You recall that on Line 6 in the first side gore, we took off one inch and made a dot there and then lowered the dot one-half inch from which to draw Line 9 in order to make the gore fit smoothly over the hips. That left the gore four inches wide at the top, so make the second side gore four inches wide at the top also. Make a dot then



four inches to the right of dot W on Line 11 and mark it dot W. (See Fig. 10.)

Measure out eight inches from dot H and make another dot H ; also measure out ten inches from $\operatorname{dot} \mathrm{K}$ and make another dot K . Place the end of the tape line on the second $\operatorname{dot} \mathrm{W}$ and measure to $\operatorname{dot} \mathrm{H}$ and on to $\operatorname{dot} \mathrm{K}$ and on down to the 44 -inch mark on the tape line, making the width at the bottom a little more than twice as much as at the knees, and mark the point dot B. Draw a line from the second $\operatorname{dot} \mathrm{W}$ to $\operatorname{dot} \mathrm{H}$ and on to $\operatorname{dot} \mathrm{K}$ and on down to dot $B$, and mark it Line 12. Connect dot $B$ with the end of Line 10 and mark it Line 13. Draw a curved line from the first dot $W$ to the second dot W ; also draw a curve from the first dot W to dot H on Line 10. (See Fig. 10.)

When drafting 'a skirt with a ten-inch train, the back edge of the second side gore or Line 12, should be about seven inches longer than the front measure or Line 1 in Fig. 8 ; or, two-thirds of the difference between the front and back measures. The back edge of the back gore should be about three inches longer than its front edge, or Line 14.

## DRAFTING BACK GORE.

Draw a straight line 44 inches long, or the same length as Line 12 in the second side gore, since the two will be seamed together, and mark it Line 14. Measure down six inches on this line and make dot H ; also make another dot $H$ four inches to the right of this dot. From the top of Line 14, draw a line straight out to the right and mark it Line 15. (See Fig. 11.) In this draft the back gore is made three and one-half inches wide at the top. However, it may be made wider if desired, only when making it wider, make the second dot H further out than given here. So measure three and one-half inches on Line 15 from Line 14 and make a dot; mark it dot W (waist). Place the end of the tape line on dot W and measure to $\operatorname{dot} \mathrm{H}$ and on down to the 44 -inch mark on the tape line, making the bottom from ten to twelve inches wide, and mark the point dot $B$. Draw a line from dot W to $\operatorname{dot} \mathrm{H}$ and on to $\operatorname{dot} \mathrm{B}$ and mark it Line 16. Connect dot B with the end of Line 14 and mark it Line 17. Draw a curved line from the junction of Lines 14 and 15 to dot W. (See Fig. 11.)

In proportioning the width of the gores at the waist line, hips, knees and bottom, make the gores at the knees two inches wider than at the hips; make the second side gore the same width at the top as the first side gore. The front and first side gores should each be about twice as wide at the bottom as at the knees; the second side gore should be a little more than twice as wide at the bottom as at the knees. The back gores should be about the same width as the whole front gore at the bottom.

If you want both edges of each gore flared, place dot $K$ on Lines 5 and 10 about three inches farther up and draw new Lines 5 and 10 from the new dots $K$ on same lines to points about two and one-half inches to the left of the bottom lines in the first and second side gores. The flare may be commenced at dots H on these lines if desired, or at any point between dots H and K . Where sharp corners occur at dots $K$ on the back edges of the first and second side gores, put in curved or slanting lines to take out the corners. The lines at the bottom of each gore should be rounded some.

## TESTING SKIRT MEASURES.

Measure the waist line in each gore and multiply it by two, since this is just one-half of the skirt. This should test out about four inches more than the original waist measure, as it includes the fullness in the back gore.

Measure between dots H in each gore to test the hip measure. Multiply it by two, which will give the entire hip measure. It should test out about four inches longer than the original measure, as the back gore has the fullness for the back included, while the measure itself was taken around the hips plain. If it tests out more than four inches, leave it so, as the back gores may be made as wide as desired.

Measure around the bottom of each gore and multiply it also by two. This will give you the width of the bottom in inches; divide by 36 to ascertain the width in yards. From three to four yards is wide enough for an ordinary plain skirt, though it may be made fuller by making the back gores wider.

## TO PROPORTION THE SKIRT.

The proportions given in this lesson for the size of the gores at the waist line are for a 24 -inch waist measure. When drafting a skirt for different waist measures, use the 24 -inch waist measure as a basis.

If the waist measure is 26 inches, make all the gores enough wider at the top to take in the extra two inches. There are five seam edges to make on each side-one or the front, and two on each side gore, making ten seam edges in the whole skirt. Divide the extra two inches among the ten edges, making each seam a little over onefifth of an inch further out than it is in the 24 -inch waist measure. If there are more than two inches to add to the waist measure, make the gores proportionately larger at the waist line, dividing equally among the ten seam edges the amount over 24 inches. In waist measures smaller than 24 inches, reduce the gores in the same proportion.

When taking skirt measurements, always observe in particular the build or form of the person. You may take the measures of two persons who have the same waist and hip measures, and yet their forms be entirely different; one may have a large, full stomach and be flat on the hips, while the other may have a flat stomach and very large, round hips. Thus, you see, the skirt drafting for these two persons would have to be quite different. The one with a full stomach and flat hips would have to have deeper curves on the edges of the front and first side gore, and instead of curving down at the waist line, add a little more above Line 2 in front to keep the skirt from pulling up in front; the hip curves must also be drawn with less curve than in the l:arge-hipped person.

## CHAPTER 12.

Cutting Lining for Skirt. Making gores. Width of seams. Basting skirt lining. How to make corrections. Finishing seams. Trimming bottom. Use of canvas. Use of haircloth. How to cut and use each. Facing. How to use velveteen. Opening in back. Band. Arranging fullness in back. Walking skirts. Measurements. Length of back gore. Cutting. Sponging. Shrinking. Cutting goods with an up and down, with a plaid, etc.

## CUTTING THE SKIRT.

Very few skirts at the present time are lined, or if a lining is used, it is in the form of a foundation or drop skirt, made entirely separate from the outside skirt. The lined skirt is scarcely ever seen, though there is some talk of its return, büt it is hardly likely to be very popular, as it is always so heavy. This, you will remember, is for a drop skirt or a lining.

Lay the front gore with Line 1 on a fold of the goods, as this is the center of the front, having the bottom of the draft at the end of the goods, in order that you may place the top of the next gore up into the piece left. Trace the lines that outline this gore-waist, side and bottom. When cutting, leave a three-fourths inch seam on the sides and cut it from one to one and one-half inches longer than the tracing.

Cut the other gores in the same manner, keeping the straight edge of each gore on a straight line of the goods. When the material is narrow, you may have a piece on the lower part of the bias edges of the goods. When you do, be sure to have the piecings cut on a straight line of the goods where it is to be sewed to the gore. Do not piece a bias edge to a straight edge. When cutting gores that have the flare on both edges, place the center of each gore on $\dot{a}$ straight thread of the goods.

After cutting the gores, mark the seams with notches near the top-the front gore with one notch and the front side of the first side gore with one notch, as these two edges join. Mark the back edge of the first side gore and the front edge of the second side gore with two notches as these two edges join. In other works, mark Lines 3 and 5 with one notch, and Lines 7 and 10 with two notches, and Lines 12 and 14 with three notches. This will enable you to keep the gores from getting misplaced when basting them.

## BASTING THE SKIRT.

Always start with the front gore and pin the first side gore to it, beginning at the top and pinning down rather close, and be very careful not to stretch the bias edge. Pin all the gores this way before basting, placing the straight edge of each to the bias edge of the other, or, put the corresponding notches together. Hold the bias edge next to you in each case. This is very important. The two bias edges of the back will come together at the center in the back. Leave an opening in this seam for the placket. Use short stitches when basting.

## FITTING THE SKIRT.

Cut a strip of lining lengthwise about two and one-half inches wide and the length of the waist measure plus two inches extra for lapping, and notch the center. Pin this around the person you are to fit, and place the notch directly in front. Do not lap the ends of the band in the back, but pin to form a seam.

Put the skirt right side out on the person and pin the center of the front gore to the center of the band; also pin
all the seams to the band, letting them come up easily and smoothly over the hips and having them straight from the hips to the waist line. Pin so the seams will not slant toward the back.

If the gores are too wide at the top, you will have to take the fullness out at the seams. The best way to do this is to smooth the fullness as close to the seam as possible and pin the skirt to the band, having the fullness between the pin and the seam. If there is any fullness on the other side of the seam, dispose of it in the same way. This will leave the seam pinned with the pins at three different places. When you take the skirt off to rebaste it, remove the center pin which fastened the seam to the band, and the edges of the gores will still be held in place on the band by the other pins.

If the fullness is taken from one edge only, pin as directed above, always placing a pin on each side of the seam. Rip the stam open a short distanct and let the fullness out from just the one side and then rebaste. If the fullness is taken from both sides just pin the seam enough larger to take up the fullness, pinning down toward the hip the width of the seam. Notice all the seams closely to see that they run straight from the hips up to the waist line; if they do not the gores will not hang evenly. If the gores are too narrow to permit the seams to come up straight, pin the seams to the band and then fit the hips so as to make and keep the seams straight. Always be very careful to test your drafting accurately around the hips before cutting, for the error is hard to correct when cut too small.

If the skirt is too loose over the hips, take the seams deeper, and it may be necessary to let them out just a little at the waist line. If the skirt draws across the stomach, loosen it on both front seams. Arrange the inverted plait in position in the back and pin it. If all necessary changes have been made, have the person sit down in order to ascertain if the skirt sets well in front when she is sitting; it will roll up across the stomach if it is too tight there. Extraordinary care must be exercised here as the skirt must not be fitted too tight around the hips and stomach and yet it must not be allowed to hang in little lengthwise folds or ripples from the waist to hips. Be sure that all the changes
are marked. Remove the skirt and rebaste the changes to be made and baste the skirt on to the band where it is pinned, except the inverted plait; this must be re-arranged during the second fitting.

Now put the skirt on again and lay the inverted plait so that its edges will come together for five or six inches below the band, without having to be drawn together to make it stay in position. If you prefer to have this fullness gathered instead of the plait, have the gathers occupy about three inches-one and one-half inches each side of the placket.

The instructions given in Lesson 11 are for a round seven-gore skirt. By "round length" is meant a skirt that just touches the floor all around. If you are going to make a fancy skirt, make it to touch the floor in front and on each side and with a graceful sweep. in the back. Commence the sweep at the second side gore, but be sure first that this gore fits perfectly smooth over the hips, as sometimes they take it up more than you had counted on and it will be too short; the skirt must be even at the bottom or the beauty of the sweep is lost.

Before ascertaining the length, see if the skirt sags or pulls down in the back; if it does, raise it up and trim off a little at the top. If trimming it makes it too large at the waist line, take the seams up a little. If one hip is higher than the other, which is frequently the case, pad the lower one enough to make it the size of the other. Mark just how far the padding must extend.

If the person is very slender and the skirt is made plain around the hips, her appearance would be much improved if both hips were padded a little. If she is flat in the back, a small bustle should be worn, or a pad may be made and fastened in the skirt at the last fitting; slope it off gradually from the waist line.

Now that all the padding is done and the bustle arranged, the skirt length can be measured.

Fit the skirt over the same number of petticoats as will be worn with it, as a skirt may be made from one-half to one inch shorter by a different set of petticoats. These petticoats should all fit smoothly over the hips to make the skirt set well.

Remove the skirt and mark all changes in the bottom with a coiored thread. Mark both sides alike. You cannot be too particular about this.

## STITCHING THE SKIRT.

Commence at the top of the seams and stitch down to the bottom. When stitching the back seam, stitch in at the same time a straight strip of lining about one-half inch wide; this will prevent the bias seam from stretching or sagging. Draw out the basting thread and trim the seams evenly and notch them in several places where the flare comes so they will not draw. The seams may be overcast or bound, using binding ribbon with which to bind them.

Now, finish the placket opening. If you are making a drop or foundation skirt, do not use canvas, but just a strip of lining and make a fly about one and one-half inches wide and sew to the left side of the opening. Face the right side with a facing about one and one-half inches wide and stitch it down firmly at the bottom over the fly. Press the seams and then stitch the band on. Other ways of fixing the placket will be given in a later lesson.

## FINISHING THE BOTTOM.

The instructions given for a drop or foundation skirt also apply to the outside skirt, only the backs in the outer skirt are made wider, to allow more for the inverted plait. The following instructions are given for finishing the outside skirt:

Fold the skirt together at the center front fold, and pin the corresponding seams together at the top. Be extremely particular when doing this as the skirt must hang even all around. Now pin the front seams together all the way down, then the two first side gore seams, and so on until all the seams are pinned. Notice if the gores are the same width at the bottom. If not, make them so by taking up the seams of the widest one. After they are all pinned together evenly, put in a few pins between the seams near the bottom so that both sides will be held firmly.

Now notice if both sides are marked even in length. Run the tracing wheel on one side on the mark for the bottom, and then see if the other side corresponds to this one.

Or, take the tape line and measure each seam, noticing whether the corresponding seams are the same length. When you are certain they are all the right length, trim the skirt off around the bottom, leaving about one-half inch below the marked or traced bottom line; this one-half inch is to turn over the facing.

## BASTING THE CANVAS ON.

Cut a strip of canvas about two or three inches wide on the true bias. If it is cut wider than three inches it will have to be cut to fit the bottom of the skirt. Baste the canvas on the inside of the skirt, placing the edge of the canvas on the marked line for the bottom of the skirt. Hold the canvas towards you and baste real close to the edge, drawing it just a trifle when you come to the curves at the bottom. After basting all around, turn the skirt so the material or the right side of the skirt will be next to you instead of the canvas. Hold the canvas in position with your left hand and baste it at the top from the outside. After this is done, baste the one-half inch space at the bottom of the skirt up over the canvas.

If preferred, haircloth may be used instead of canvas; it will make a much lighter facing. If you use haircloth, cover its seams with a piece of cloth or lining or the hairs will work through to the outside. Cut the haircloth so the hairs will run around. Use skirt featherbone if you want the skirt to stand out well at the bottom. Stitch it in with the machine at the top of the canvas. If you do not use the featherkone, put a few rows of stitching around the top of the canvas.

## APPLYING VELVETEEN.

Sew one edge of the velveteen to the lower edge of the skirt on the inside, using a short running stitch. Begin at the back, lay the right side of the velveteen toward the skirt, and allow the edge to lie on the skirt just a narrow seam's width, the remainder of the velveteen extending below the bottom of the skirt. Sew this on with an occasional back stitch, being careful to take the stitch into the facing only and not through to the outside. Be sure and do not stretch the velveteen.

After the lower edge has been properly sewed on, turn the skirt on the right side, crease the velveteen so that about one-eighth of an inch will extend below the bottom of the skirt and then baste it all around on the right side. Turn the skirt again and turn in the top edge of the velveteen and whip it down to the facing. Some dressmakers do not turn in the top edge, but cat-stitch across the raw edge to hold it to the skirt.

Another way of applying velveteen is to place it right side down on the material and baste it and then stitch it. This is done before the facing is put on. Baste the velveteen on first, then the facing, and then stitch. Turn and baste the facing down smoothly and stitch if you desire, or catch it down lightly to the material. Fold the velveteen down on the facing, allowing it to come about one-eighth of an inch below the bottom of the skirt, and then baste it; finish by whipping it down to the facing. If braid is used instead of velveteen, it must be shrunk first by dipping it in water and then pressed until dry. Press the bottom of the skirt well after it is finished.

## WALKING SKIRTS.

When taking the measure for a short walking skirt, take them just to the floor and then take off an equal amount from each measure. The skirt will then hang even all around and you will have the correct measure over the hips. A walking skirt should clear the floor about two inches. Draft it plenty long, however, as some people take up a skirt on the hips and stomach more than others.

Do not draft the gores quite so wide at the bottom except the back gore, which will need to be wider. Do not flare the lower part of Lines 3, 7 and 12 quite so much, commencing about two inches below dots K to decrease the flare. Make the back gore at least four inches wider all the way down and curve the top at the waist line.

## CUTTING AND FITTING THIS SKIRT.

All cloth must be sponged and shrunken before cutting and making a skirt, or it will shrink and show spots after it is made. Take a damp cloth or sponge and thoroughly
dampen the goods and then press it until dry; do not have the iron too hot.

If the cloth has an up or down or a nap, be very careful to cut all the pieces one way; if there is a plaid in the goods, place dot H always on the same mark of the plaid. Place the center of the front gore on the fold of the goods and arrange the other gores to the best advantage not to waste the goods, being sure to keep the straight edge of each gore on a straight thread of the goods. Cut and baste according to instructions given for the round length skirt. Stitch all the seams except the back seam. Leave this open until the seams are stitched on the outside or any trimming of straps, etc. Finish the seams on the inside by binding or overcasting.

## CHAPTER 13.

Making Straps and Bands. Putting on skirt. Stitching on bands. Stitching the back seam. Finishing the placket. Different ways of finishing the placket. Hooks and eyes. Arranging hangings. Pressing. FIVE-GORE SKIRT. Cutting width of gores at the hips. Omitting second side gore. NINE-GORE SKIRT. Width of gores at the hip, at the waist, at the bottom. Width of front gore. Width of first two side gores. Width of third side gore.

## MAKING STRAPS AND BANDS.

If the seams are to be finished with straps, cut the straps the desired width from the cloth; if not too wide, they need not be lined with canvas. However, if they are over an inch wide, a light weight interlining of canvas will be needed. Cut the canvas the desired width and then cut the goods enough wider to turn over the canvas and to baste down. Baste this on to the skirt and then stitch; or stitch the strap first and then apply to the skirt by hand.

If the gores are to be trimmed with bands in any fancy design, cut a paper pattern in the form of the design and lay it on the gore and outline it with crayon or tailor's chalk, and then follow these lines or marks with the bands. Cut the bands on the bias and he sure to have them even. Do not baste them on too tight or they will draw. After all the trimming is on and the seams finished, stitch the
back seam, as, you remember, it was left open in order to make the trimming easier to put on.

Finish off the placket, using canvas in the fly and facing. The placket is one of the most important considerations in a well-made skirt and should be given careful and close attention. It may make or mar the general appearance of an entire gown. The skirt may be thrown entirely out of position and given a very careless appearance by the absence of hooks and eyes on the placket, or because they are sewed on in a manner as to be nearly useless.

The question of using either hooks and eyes or the patent fasteners must be settled by the individual. Many prefer the latter, while others would have nothing but the former, but both are very good and have been used together with satisfactory results. Whichever is used, see to it that they are sewed on firmly and close enough together to insure sufficient protection against the strain at this point.

Plackets may be arranged either at the back, front or side of a skirt, depending upon the design, and there are many methods of finishing them. The opening should be only as large as is necessary to get the skirt easily over the hips-the shorter it is the better, provided it is not too short to slip on and off easily.

The habit-back skirt requires even more careful attention at the placket opening than any of the other designs, as the closing must be made as invisible as possible. The back seam should appear to continue to the waist line and there should be no gaping at the opening. The best method of fastening this skirt is as follows:

Stitch and press the back seam, leaving an opening for the placket. Lay a canvas facing one inch wide on the right-hand side from top to bottom of the placket. Turn the edge of the material over this the width of the seam and cat-stitch and press. Put the hooks on equal distances apart-about one inch to insure a perfect closing. Cover or face this with a piece of lining and hem it down neatly by hand. Sew an underlap on the left-hand side and mark the places on the underlap for the eyes to correspond with the hooks. Push the rings of the eyes back into the seam which joins the underlap to the skirt without breaking the machine stitching. They may then be sewed to the under-
lap on the wrong side; sew them on firmly. If you care to do so, you may finish the eyes by buttonhole stitching all around the part that is visible.

Occasionally the opening in a skirt is on the left-hand side of the front under a tuck or plait. Sometimes an extension lap is put on the outside of the front closing and an underlap applied to the side gore that joins it. This extension may be cut any shape desired, either with straight lines or fanciful curves. Cut two laps, having one edge of each straight, and then stitch them together along the outline or curved edges, leaving the straight edges open to be sewed to the skirt. Work three buttonholes in the extension lap, one each at the top, center and bottom, then after it is sewed to the skirt sew three buttons on the skirt to correspond with the buttonholes. The underlap is cut and sewed to the side gore the same as any other underlap.

This extension may be allowed on the front gore when cutting; it is then lined or faced and machine stitched and made to fasten upon the side gore, either with buttons and buttonholes or hooks and eyes. In this case, no underlap is needed unless desired.

## FINISHING THE BOTTOM OF A WALKING SKIRT.

If the bottom of the skirt is to be stitched with several rows of stitching, face the skirt either with itself or with bias strips of light weight flannel, cotton and wool mixture, so the stitching may show with better effect. The facing should be basted around on the skirt several times, beginning at the bottom and basting one row, then another, and so on until the top of the facing is reached. This will prevent the skirt and facing from slipping when being stitched. Stitch the first row near the edge so as to catch the facing and then stitch the rows about one-fourth of an inch apart until you reach the top of the facing. Be careful to have an easy tension on the machine that the stitching may not draw. A wire gauge fastened to the needle bar will make the stitching more even. After the stitching is finished, turn up the bottom at the tracing or marked line for the bottom of the skirt, and hem if it is long enough; if not, it will have to be faced with a lining.

If you do not care for so much stitching and a simple
hem is preferred, baste a bias strip of lining or cambric in the bottom of the skirt in the same manner as the flannel, and turn the hem over it and baste in place and then one or two rows of stitching may be put in at the top.

Fasten the belt or band of the skirt at the top with hooks and eyes. Do not have the band too wide. Draw out all the basting threads and press the skirt well. Use a long ironing board so as to stretch the skirt out full length. Begin with the front gore and press out any folds or wrinkles that may be in it. Dampen the seams and press until perfectly dry. Keep the skirt straight on the board and press up and down-not back and forth. Press the inverted plait in the back, and the bottom of the skirt thoroughly.

Put a hanger or loop on each front seam and one in the center of the back so that the skirt will hang even when hung up. If you wish to make an outside belt of the same material, cut it on the bias about one and one-half inches wide. Turn the edges in and stitch and then press. Face it with a piece of lining, sewing the facing on by hand. The belt may be made either long enough to just meet or to lap in front. In the latter case, make the ends pointed and fasten it with one or two claps.

## HOW TO FINISH A DROP OR FOUNDATION SKIRT.

A drop or foundation skirt may be made of taffeta, percaline, nearsilk, or any like substance. This skirt is usually finished with an accordion- plaiting flounce, which may be any prescribed depth, or with two or three ruffles or a wide ruffle, a ruching, or any way you desire. If you use accordion-plaiting and do not have a plaiter, you will probably have to send it out to be plaited. If you make it yourself, cut the goods crosswise, the depth you wish the plaiting to be and sew the pieces together and press the seams open. You will need about three and one-half times the amount of the width of the skirt where the plaiting is to be applied. Be sure and have the plaiting an even depth all the way. Hem both edges with the hemmer; the lower edge may be left plain or it may be finished with a narrow ruching about three-fourths of an inch wide, made of the same material as the flounce. Cut the ruching
on the true bias and either hem both edges or fray them out; gather it in the center and stitch to the bottom of the plaiting through the gathering thread. After plaiting the flounce, join it to the skirt, having the lower edge of the flounce come even with the bottom of the skirt; cover the edge where it joins on to the skirt with ribbon binding, or with a narrow facing of silk.

If two or three ruffles are used, hem the lower edges and gather the tops and apply to the skirt. As much care should be exercised in the fitting and making of these foundation skirts as the outside ones.

## FIVE-GORE SKIRT.

Take the skirt measure as directed for a seven-gore skirt and make the calculations for the width of the gores at the waist and hips also the same. Omit the second side gore and add its waist and hip width to the front and first side and back gores. For instance, if the hip width of the second side gore is eight inches, add one inch to each side of the front gore or Line 3, and also add three inches to the back edge of the first side gore or Line 7, and the balance to the front edge of the back gore or Line 14. To proportion it for other measures, taken one-half of the width of the second side gore and add it to the back gore or Line 14 ; take one-fourth of the remaining half and add it to the front gore or Line 3, and add the balance to the back edge of the first side gore or Line 7 .

Thus you see when the width of the gores at the hips in a seven-gore skirt is eight inches, for a five-gore skirt make the front gore one inch wider on each edge, and the first side gore three inches wider on its back edge, than given in Lesson 11. The width of the gores at the waist line is divided in the same way. The back edge of the first side gore in a five-gore skirt, or Line 7, must be the same length as the side length measure.

## NINE-GORE SKIRT.

Take the measures as given before and make the calculations for the width of the gores at the waist and hips by subtracting two inches for the back from each of the waist and hip measures and divide the remainder by seven. The
tops of all the gores should be the same width. Make the side gores at the top about one-half of an inch wider than the calculations; this one-half inch is to be taken off the front edges of each gore at the top to form the curve to fit over the hips and stomach. Make a dot then on the top lines of the side gores one-half inch from the front lines and draw a line from each of these dots to dot H.

The width of the bottom of the front and first and second side gores should be about the same as in a seven-gore skirt. Make the back edge of the second side gore the same length as the side length measure. The third side gore should be a little wider at the bottom than the second side gore in a seven-gore skirt. The backs are drafted the same as given for the seven-gore. If you are drafting for a habitback skirt, divide the full waist and hip measures by nine, using a very loose hip measure. The nine-gore skirt makes a pretty round-length skirt also, but the seven-gore gives better results in a train skirt.

## CHAPTER 14.

Circular Skirt. Width of gores at waist and hips. Different ways of drafting a circular skirt. Darts at the waist line. FLARE SKIRT. Basting and stitching the seams. Determining the hip depth for the flat seams. Finishing seams. Finishing the bottom of skirt. PLAITED SKIRTS. Arranging of plaits. Lengthwise tucks at the seams. Allowing for tucks. SHIRRED SKIRTS. Kind of shirring. Marking for shirring. Yoke pattern for skirts. Accordion plaiting.

## CIRCULAR SKIRT.

Lay the front and first side gore of the seven-gore round-length skirt on a large piece of paper, placing Lines 3 and 5 together and pin the second side gore on to the first side gore and the back gore on to the second side gore at the waist and hip lines, and let the bottoms of the last two lie as they will. Now measure along the waist and hip lines and if you wish an inverted plait, allow for it; if it is a habit-back skirt, use just the original waist and hip measures. Cut along the waist and bottom lines and down Line 16.

The skirt may also be cut by placing the gores together from dots H to the bottom, letting the tops lie as they will. The fullness at the waist line is taken up in small darts
over the hips to make it fit smoothly. There will not be so much width at the bottom, however, as in the former.

If you want a skirt cut circular in front only, place the front, first and second side gores together as directed in the first method of cutting the circular skirt and then cut the back gores separately. A circular skirt cut after this fashion will prevent, to some degree, the sagging which sometimes occurs in a circular skirt, caused by some parts of it coming on the bias.

## FLARE SKIRTS.

Instructions have been given in a former lesson for cutting a skirt to flare on both edges of each gore below the hips. A few words here in regard to special treatment in the finishing, to preserve the flare and make them hang in just the proper manner, will not be amiss. After basting and stitching the seams, try the skirt on and pin a tape around to determine the hip depth to which the flat seams shall extend, for in a flare skirt, the seams above the hips must be finished so they will lie open and flat, while below the hips they are finished off together. Mark the skirt with a basting thread along the edge of the tape. Remove the skirt and clip both edges of each seam on the inside at the basting thread in order to divide the flat-finished seam from the rippled part. Extend this clip the full width of the seam edges, running in close to the stitching. Open and press the seams above the clip and finish each edge neatly with binding ribbon or notch them. Or the seam may be finished with a row of machine stitching at each side of the seam and quite close to it.

Now mark up from the bottom just how far the hem or facing is to extend, usually about three inches, and clip the seams also at this point, and open and press them below the clip, in order to do the hemming or facing poperly. The seams between the clips must be bound together, using a narrow strip of lining or binding ribbon. Do not press this part of the seam to either side, but allow it to stand out straight from the inside of the skirt, which will give a pretty rippled effect to the gores.

Interline the bottom with crinoline, having the edge of the crinoline come to the tracing line that marks the bottom
of the skirt and turn the bottom up over the crinoline at the tracing line and baste it. Baste over this a bias facing and whip the lower edge to the turned-up edge of the skirt; the upper edge may be hemmed down by hand or by several rows of machine stitching.

## PLAITED SKIRTS.

Under this head may be included side-plaited and boxplaited skirts, skirts plaited in clusters and those of single plaits with more or less space between them. All of these skirts, if properly constructed, present a very cha:ring appearance, and it is very imperative that their consiturtion be thoroughly understood in order to overcome the difficulties presented in the different designs that fashion decrees.

In skirts of seven, nine, or more gores, the adjusiment of the plaits is not so difficult, since alterations may be made at the seams, but in the few gore skirts it is not always so easy to obtain the correct position of the lines and get the plaits symmetrinal. Much, however, depends on the joining of the skirt to the band or belt so that the plaits themselves will be uniform.

If you wish to make a skirt that is tucked at the seams, measure the width of the tucks and allow twice the width of the tuck for one tuck. This extra width must be allowed on the straight side of the gores when cutting; keep the front edge of each gore straight. When fitting a skirt with lengthwise tucks, to the band, the extra fullness at the top of the skirt may be laid under a tuck.

If you desire a skirt with plaits placed in about knee depth or below, allow an extension from that point on the bias edge of the gore, wide enough to make as many and as wide plaits as desired; do not cut the back edge of this extension bias, but straight down from top to bottom. Cover the plaits where they are fastened down at the top with a fancy strap or with buttons. Finish the bottom of the skirt as you wish. Folds make a very pretty finish. Make them on the true bias and use them double of the goods. They may be either stitched on or put on by hand-either to overlap or with a space left between them.

Gored skirts that have a side plait or an inverted box-
plait let into the seams some distance up from the bottom are sometimes troublesome through a tendency of these inlet plaits to show below the bottom edge of the skirt, as there is nothing to which to sew them. This difficulty may be overcome in this manner: Bind the top of each plait, and after the skirt is otherwise finished, take a tape or a strap of lining and sew it to the top of each plait, letting it extend from one to the next all around the inside of the skirt. In a light-weight skirt this is generally found to be enough, but in a heavy-weight cloth skirt a short tape or strap may run diagonally from the top of each plait to the next seam and be firmly sewed there to the wrong side.

When a plaited skirt is made of material that will launder, the laundering will not be difficult if one understands the correct way of ironing. Do not press the lower part of the skirt out flat, but lay each plait as it is pressed at the stitched upper portion in position all the way to the bottom of the skirt and press it down. Afterward the iron may be run under the plait to smooth the part underneath.

When a plaited skirt is made of heavy material or is lapped vey much at the waist line in fitting, it may be made less bunglesome by cutting away the surplus material after the plaits are stitched. The underlapping goods is cut away to within an inch of the stitching, then across the top of each plait. The raw edges left are to be bound with a bias strip of lining.

## SHIRRED SKIRTS.

There are several ways in which skirts may be shirred; some are shirred all around at the top, while others are shirred on the sides and in the back, leaving the front gore plain; some have just a few rows of shirring, while others are shirred to a depth of five or six inches; some have every other gore shirred and the others plain.

Use the seven-gore skirt draft and pin the gores together from the H dots to the K dots, allowing the tops and bottoms of each gore to lie as they will; the tops will lie open and the bottoms will overlap. Cut the goods aboat one and one-half times larger than the pattern. Lay the pattern on the goods so that the front will be on a straight
fold and, holding the goods with the left hand at the top and the right hand at the bottom, draw the goods up under the pattern in very small, straight folds until you have one and one-half times its width drawn under, keeping the same amount folded in at the top as at the bottom. After this is done, cut to outline the waist line of the pattern at the top. Cut it extra long at the bottom, as shirring takes up some in length. You may have to seam the goods before laying the pattern on; if so, seam the straight edges together.

Another way to make the shirred skirt is to cut the widths of the goods perfectly straight and use enough of them to make the skirt plenty full; or, all the gores may be used by making each gore half as wide again as it is in a plain skirt, and then seam them up.

Now, the lines for the shirring must be marked. Use a piece of cardboard cut the length you wish the first row of shirring to be from the top and measure along every two or three inches from the top and mark with crayon or tailors' chalk. Mark off the next rows in the same manner, using a cardboard cut the length you wish to make the rows apart. Mark all the rows before beginning to shir. Use either a straight running thread with which to shir, or a small tuck may be made on the right side and a cord run in the tuck to draw it up on. If you use the tucked shirring, allow extra length for it.

Shirrings may be placed equal distances apart or in groups. If every other gore is shirred, cut the gores to be shirred half as wide again and leave the others plain.

If you want to cut a yoke for a skirt, take the gores and pin them together from the tops to dots H, lapping them so the seams are taken out. Use only enough of the back gore to make the waist and hip measures the same as the original measures, and then fit as you would a skirt.

## CHAPTER 15.

Tailor-Made suits. Shrinking and sponging goods. Cutting twills and woolens. Cutting coat. Length of coat. Basting canvas and goods. Clipping and pressing seams. Lining for coat. The collar, cuffs, and sleeves and how to arrange them. The skirt. Seams. Placket. Lining. Stitching. Finishing. The peplum. How to cut and make a peplum. Trimming, etc. Nap on velvet.

## TAILOR-MADE SUITS.

Until recent years it was considered impractical for the home dressmaker to attempt the making of a tailormade suit or gown, but now with increased facilities and reliable information, the amateur can produce some very creditable results. By observing every detail, however small, and following the rules carefully to the very letter, she will accomplish results which will be both pleasing to herself and friends.

The work is not so much greater in a tailor-made suit than in a draped gown, except the basting and fitting, which must be accurately done, and with numerous pressings, giving each and every part its proper consideration. Much depends upon the basting and the size of the stitches. Use a very small running stitch so that the seams will not gap and the waist will set well down to the form.

The cloth must always be shrunken and sponged before it is cut out. Your dealer will probably do this for you at a slight extra cost per yard. However, in case you have it to do yourself, the following method may be employed when shrinking heavy goods: Use a piece of unbleached muslin about one yard longer than the cloth; also use a board from eight to ten inches wide and a little longer than the cloth is wide. Dip the muslin in water until it is thoroughly wet and then wring as dry as possible, and spread it out on a large table, smoothing out all the wrinkles. Lay the cloth on the wet muslin, first tearing the selvage off and, if double-width goods, leave it folded through the center lengthwise so the right sides will face each other. Adjust the muslin at the ends of the board so that when rolling the cloth on the board, the cloth will not touch itself. Roll up smoothly on the board, watching closely to keep out wrinkles, and leave it rolled from two to four hours. Unroll and spread it out on a table or some smooth surface to thoroughly dry. You do not have to use the hot iron in this method, which makes it more preferable than any other way, although it requires a little more time and care.

If you prefer to use the iron, follow this method: Use a large, long table that will not be injured by water, and a piece of unbleached muslin about a yard wide and two yards long. Place a large ironing blanket upon the table, being careful to smooth out all the wrinkles. Lay one end of the goods, if single width, right side down upon the blanket, and dip the muslin in water and then wring as dry as possible and place over the cloth. Run the iron over this several times, then remove the muslin and press the goods until almost dry. Shrink only a small portion at a time, moving the material until the full length has been sponged and pressed. Wet the muslin each time you put it on the material. Leave double-width goods folded with the right sides turned in, and if it is very heavy and the steaming process does not go through the second fold, repeat the process on the other side after finishing one side.

For colored fabrics that may spot or fade when wet, put a handful of salt, or enough vinegar slightly acid to
the taste into the water. When pressing the thinner materials, be careful not to draw or stretch either side, but keep the threads straight in both the length and the width. Canvas or haircloth used for interlining must always be shrunk before using it.

## CUTTING TWILLS AND WOOLENS.

When cutting all woolen materials having a smooth, close nap or pile, the nap must run toward the bottom of the garment. Also when cutting waists and skirts on the bias of the goods, the lines and directions must be arranged so that the proper results will follow. In twills and diagonals, a far better effect is produced if the twills in all the pieces run in one direction. When making velvet or plush garments, the nap or pile should run upwards, as its tendency is to fall outward, thus bringing out its beauty and depth of color. If it runs downward, it is more apt to flatten so that its richness and color is less effective.

The tailor-made suit or gown usually has all its seams visible on the outside, although they are pressed so flat that the outside surface is perfectly smooth. Take the measures the same as given in the first lessons and draft the pattern accordingly, then lay it on the material and pin and cut, allowing good, big seams, especially at the front center line where the closing part will come. In heavy goods you will have to outline the pattern with tailor's chalk, as the tracings will not show; then, after removing the pattern, run basting threads through all the marks. Draft the back with the curved forms and the front with the darts. Pin the different parts together, beginning at the waist line and pin up, and from the waist line down, then baste.

Try the waist on and observe that the waist line sets well down into the curve of the figure before making a single alteration. Pin the fronts together carefully and if it seems to fit too snug across the bust, a slight curve may be allowed beyond the center front line, thus producing the swell front effect; but if it is much too tight, make the alterations at the under arm seams. If the arm hole is too tight, clip the edge all around the front to the depth
of three-eighths of an inch, and if too high under the arm, clip there also. Mark the pieces that need padding.

Remove the waist and rebaste, making both sides exactly alike, unless one side of the figure is larger than the other, in which case both sides must be fitted. After all the necessary alterations have been made, stitch the seams just outside the bastings; this will allow plenty of room for boning and prevents the waist from being too tighl after it is boned. Draw out all the bastings and open all the seams and clip the edges and press very flat. Apply the featherbone as given in the previous lesson. A fitted canvas or haircloth may be placed over the fullest part of the bust, as this assures a good shaping to the front of the waist. Cut the lining, which is usually silk, and join the parts together as given in Lesson 3; apply to waist by placing corresponding seams together and tack occasionally. Hem down the front and round the bottom close to the edge. If the edges of the front are to be stitched or trimmed, they must be done before the lining is ,iut in. If the bottom edge is ornamented with stitching, this must be done and pressed before the bones are put in.

For the invisible closing at the front, insert a strip of crinoline before stitching and then press ii: aifix the hooks and eyes, after which the lining is hemmed down over them. The bottom of the coat may also be finished with a peplum. T his peplum may also be lined with silk. Cut the lining the same as the outside material and do not use any interlining. It is cut separately from the waist and seamed on.

Long coats are cut in much the same manner as short coats. If the skirt part is cut separately and afterwards joined to the coat at the waist line, the making is not so difficult. The skirt portion may or may not be lined. If not lined, the seams must be bound. Long coats in which the skirt part is cut in the same piece with the waist are more difficult to make. Instructions for these can be taken from the instructions given for cutting a princess.

Linen canvas makes the best interlining for a standing collar. Shrink the canvas first, then cut a double strip bias, the same shape as the collar and stitch it closely with the
machine back and forth to stiffen it. Cut the material a good seam larger on all the sides and baste on to the canvas. Turn over the edge of the material and baste, clipping the upper curve portion where necessary to make it set down smoothly. Add the hooks and eyes and then face with silk.

Where the entire collar and lapels are applied, they are made and put on in the following manner: Cut them the desired shape and interline with canvas and press well. Turn over the edge of the material and then apply the machine stitching, which must match the stitching on the waist. Line both the collar and lapels with silk; without catching in the lining, join the collar to the neck of the coat, turn the seam up on the collar and cat-stitch or overhand it down neatly. Turn in the remaining or lower edge of the collar lining and hem. This should be done with extreme neatness, as the roll of the collar must be preserved and the lining must not be full, and at the same time it must not be drawn tight. else the outside will not look well.

Coats made without collars and having a fancy facing upon the outside around the neck and down the fronts are very popular and are less difficult to make. This fancy facing must be cut just the same shape at the neck and down the edge of the front as the coat. The other edge may be cut any shape desired.

The sleeves of a tailor-made garment are usually made plain. The lining is made separately and the two are put together at the top and bottom. If the cuffs are used, make them according to instructions already given in a previous lesson. Be sure to do the stitching or trimming of braid, etc., before you line them. Nothing must show through after the lining is put on unless it is the buttonholes. In turning over curved edges, always clip them so they will lie smooth. Do not neglect the pressing. Stitch the sleeves in the armholes, leaving the lining out to fell down over the seam.

## THE SKIRT.

The skirt may be made unlined if the material is very heavy. If lined, cut the lining the same as the outside,
but seam it separately and press each, then put together with the corresponding seams facing each other. Sew the two together in the waistband and tack the seams together lightly, letting the bottom of the lining extend under the facing.

If the skirt is unlined, a silk foundation skirt is used. When making an unlined skirt and you want the seams stitched overlapped, baste the seams with one edge wider than the other. Fit it before stitching or finishing the seams. Cover the widest edge with ribbon binding or with strips of bias silk, then stitch. Press so that the narrow edge will be covered by the wider one, then baste each seam down to the skirt and stitch down from the outside. Face the bottom with a narrow facing, interlining with crinoline or light weight canvas. The bottom may be finished with several rows of stitching or left plain.

Finish the placket by one of the methods already given, or you may use a continuous facing, which is made by cutting the facing as long again as the placket cpening and akout two or two and one-half inches wide; then stitch it straight around the placket. Face the right side down as a faced hem and interline the other and leave it out as a fly. A placket opening finished after this method will never tear down when putting the skirt on.

## THE PEPLUM.

To cut a peplum arrange the gores of a seven-gore skirt as given for cutting a skirt-yoke pattern or a circular skirt, and follow the waist line when cutting. Cut any width desired. They are generally left open in the back, and some have the inverted plait the same as the skirt. They may be lined or unlined. If unlined, finish around the edge with a narrow silk facing. Peplums are usually attached to the coat by means of a belt which is stitched solidly to the coat. Use the stitching silks which are made for stitching purposes, as the ordinary sewing silk is too fine and sinks into the goods.
(The subject of tailoring will be continued in Lesson 16.)

## CHAPTER 16.

Cutting cloaks. Measurements. Tight-fitting jackets. Cutting with one dart in front. Lining. Finishing seams. Cutting sleeves. Drafting a front with seam running to the shoulder. Cutting same. More than three seams in the back. Sack coats. Box coats. Finishing unlined coats. How to use canvas.

## COATS, JACKETS AND CLOAKS.

The first important item in the making of either of these garments is to have the cloth properly shrunken, and instructions for this have been given in the preceding leslon. Tight-fitting coats that closely outline the figure require much more care and attention in the making than a fancy coat, though the latter may appear far more elaborate when finished. The measures should be taken a little looser over the bust, and a little longer on the shoulder than for a dress.

After drafting the pattern, lay the pieces all out on the goods, being careful to place them so they will all run the same way of the goods, having the nap run down; pin them in a number of places to the cloth. Be very particular to have each piece of the pattern on the right grain of the goods; otherwise the coat will twist and draw and no amount of basting and fitting will straighten it. Outline
each piece with tailor's chalk and allow for large seams. If the cloth is double-width, you may be able to cut all the pieces economically with the cloth folded lengthwise through the center, as it is folded when purchased.

If single-width, lay the goods out smoothly with the wrong side up and after outlining all the pieces of the pattern, cut off the length of the cloth containing them. Take the remainder of the cloth and reverse it and lay it out with the right side up and place over it the piece on which the outlines are marked, with the right side of the latter facing the right side of the lower cloth, and be extremely careful that the nap of each runs the same way. The chalk outlines are now on top. Pin the two widths together smoothly and cut through both thicknesses.

To draft a pattern with one dart in front, omit the first dart and take one-half of its width off the front edge of the front by drawing Line 1 from dot $F$ to touch the waist line three-fourths of an inch further in, and take the other half of the dart's width off the back edge of the front by drawing Line 5 from dot $G$ to touch the waist line threefourths of an inch further in. Place the top of the second dart on Line 6 about three and one-half inches from Line 1 and use one-fourth of the difference between the bust and waist measures for its width. Let the center of this dart on Line 8 be at a point straight down from the top of the dart.

Cut the front of the coat from tailor's canvas which has been thoroughly shrunken. When cutting a coat with the front in one piece, cut the canvas the same shape of the front along Lines 1 and 3 and in the neck and arm hole; cut it to follow Line 5 about three inches, then slope across from this point to the waist line at the bottom of the dart or Line 12, and continue straight on down to the lower edge. This leaves no canvas at the side waist line where it would break and cause the coat to wrinkle. Baste the canvas to the wrong side of the cloth, then baste all the coat seams together and then fit.

When a coat is made with a seam or seams running to the shoulder, the canvas must also be cut in pieces and joined together. To draft a pattern with two seams run-
ning to the shoulder in front, use the two darts and divide the shoulder into three equal parts and draw a line from the top of the first dart to the first division in the shoulder, and a line from the top of the second dart to the second division in the shoulder. Or you may draw a line from the top of the first dart to dot $M$ and a line from the top of the second dart to the center of the shoulder. If only one seam is wanted to run to the shoulder, use one dart in the front and draw a line from the top of this dart to the center of the shoulder.

If more than three divisions are made in the back they must be made equal in width at the waist line; two lines may be drawn to the shoulder dividing it into three equal parts, and one to the armhole dividing it into two equal parts; or, one line may be drawn from the center of back to dot $O$ and a second line to the center of shoulder, and a third to the armhole. This will divide the whole back into eight pieces or the half back into four pieces. The front and back allow for all seams on each edge of every piece, and have the pieces equal width at the waist line.

After fitting, make all the necessary changes, if any, and stitch the seams. Stitch the dart in the canvas separate from the dart in the cloth, and clip the seams on all the canvas and press well. If the seams are to have straps stitched over them or if they are to be stitched with one or more rows of stitching each side of the seam, or as lapped seams, press well and then stitch before the lining is put in.

Now fasten the canvas down to the cloth with several more rows of basting. You can scarcely do too much basting or pressing in a tailor-made garment. In fact, that is one of the main secrets of a well-made tailored suit. To prevent the coat from wrinkling and breaking over the bust, take a piece of haircloth and shrink it and cut to follow the shape of the front, around the neck, shoulder and armhole, but a few inches smaller, and finish it in a point about three inches above the waist line. Do not make a dart in it, but cut out a V-shaped piece to make it fit, and draw the cut edges together. Baste a strip of cambric over this seam and all around the edge of the haircloth to hold it to the canvas and also to cover its raw
edges. Attach the haircloth to the canvas by means of the padding stitch and hem it to the canvas at the bound edges. A padding stitch is made by many small stitches about onehalf inch long on the canvas side which just barely catch, but do not show through on the right side of the cloth.

Cut to shape, a piece of canvas about three inches wide and baste it around the neck at the back; also similar pieces around the armholes of the back and under arm seams to meet the canvas in front. This holds the coat in better position and improves the stitching.

Cut the collar the desired shape. Interline with canvas, having the canvas a seam's width smaller than the cloth. Fasten the canvas firmly to the cloth by employing many padding stitches. When doing this on the collar and lapels or revers, roll and shape them as the stitches are being made, in the direction in which they are to lie. Turn the edges of the cloth over the canvas and baste and then press. If the collar is a rolled turn-over colar, baste it in the neck so it will lie flat on the coat, with the canvas side up. The upper or turn-over part of the collar must lie flat and must join the turned-over lapel at the tops of the fronts, to form the notched collar. The lapels or revers may be allowed on the fronts when cutting and then turned and pressed back into position, or they may be cut separately and then seamed on. The former is more practical and far more easily done.

Try the coat on. Fold over the lapel corners at the top and see that the collar is the right size and sets properly. The front edges of the coat should lie close to the figure at the bust, and a well-fitted coat will hold itself in shape at this point even when unbuttoned. Now cut the facings from the cloth for the collar and fronts. The front facings must be cut to the shaping of the fronts after the edges have been altered. To do this, lay the cloth on the fronts and over the turned lapel corners and pin it carefully in place. Be sure to keep the front and lapel in their proper shape. Cut the required length and width; it should be about three inches wide. If the collar facing is of cloth, cut it on the width or cross grain of the goods with no seam in the back. Fit it to the canvas collar and join it to the
front facings; press the seams open and then baste to the canvas collar and fronts, turning in the edges of both facing and coat. This makes a visible closing and the buttonholes are to be worked through both thicknesses.

If any padding is required, use a few layers of sheet wadding, decreasing in size until the edges are very thin; baste around the armhole from front shoulder to back shoulder, having more under the arms, making it thick or thin where the figure requires it.

If an interlining is to be used to give more warmth, it should be put in before the front facing is put on. Cotton flannel may be used for this, though there is a soft, all-wool material that comes especially for this purpose, which is more preferable. Do not cut the interlining in pieces like the silk lining or the outside, but fit it across the back in one piece. Cut it in places, where necessary, to make it fit, and then tack the cut edges together. Fit the fronts in the same way; do not make seams, but clip it along the edges to make it lie smooth and overlap the cut places. Turn up the bottom of the coat all around. It is now ready for the lining.

Line the coat either with silk or satin. Silk substitutes may be used where it is an absolute necessity for economy. Have the lining match the shade of the cloth. A white lining is very pretty and attractive, though not so serviceable. Remember, all the stitching and finishing of seams must be done before the lining is put in.

Cut the lining from the same pattern as the cloth, making any alterations that were made when fitting the coat. Lay a fold about two inches wide down the center back in the lining, and baste it. Then when the coat is finished remove the basting. This is to give freedom when raising the arms. All ready made suits and coats have this fold. Stitch the seams together and then fasten it to the coat at all the edges, placing the corresponding seams together and facing each other. The lining of the sleeves is cut like the outside and the seams are stitched and pressed and then attached to the sleeve at the top and bottom; baste it through the cloth of the sleeve about five or
six inches from the top. Use a piece of wadding about two inches wide and fifteen inches long, curve one side of it and plait it up in three-fourths inch plaits. Baste this into the top of the armhole after the cloth part of the sleeve is basted in, to hold up the top of the cleeve; then turn in the edge of the lining and hem it down all around the armhole so as to cover the seam and stitches.

If the coat is to be unlined, each seam must be bound separately with a soft bias silk; the armhole seam, however, is bound as one seam. A facing of silk is applied to each front, and the bottom of the coat is turned up and a narrow facing of bias silk is stitched on to cover the raw edge.

To cut a sack coat, use no darts in front and cut the back with no seams. Slant the under arm seams out from the armhole to make it wide enough below the waist line so it will not draw over the hips. To make a double-breasted coat or jacket, cut the fronts according to instructions given, only allow more-say three or four inches on the front edges. In fitting this sort of a jacket it is sometimes necessary to take up a small dart in the center of the neck about one and one-half inches long, to make it fit smoothly around the neck. Cloaks and jackets require very hard and careful pressing to make them look well, and a very large, heavy iron is needed with which to do the pressing.

## CHAPTER 17.

Wrappers. Princesses and Dressing Sacques. Cutting a wrapper. Basting and Finishing. Cutting the princess. The lining. The front. The first and second side bodies. Waist lines. Width at bottom of front and side bodies. Center back. Trimming. Dressing sacques. Drafting a pattern. Cutting. Fitting. Finishing.

## PRINCESS.

A very popular gown is the princess, with its long, graceful lines, and it is made in various designs. While these gowns appear to be very simple, they are somewhat difficult to make, as their success depends almost entirely on the fitting. There are two styles-the long regulation princess, and the corsage skirt. The regulation princess is more adapted to slender, well-proportioned figures.

To cut a lining for the long regulation princess, use the same drafts as given in Lessons 1 and 2, only cut them about five inches below the waist line. When taking the measures for a princess, take the hip measure also, as the princess is tight-fitting at the hips, then measure the drafts five inches below the waist line to see whether they correspond to the hip measure taken. Cut the lining according to instructions given in Lesson 3, and lay the front on the material with its front edge on a straight double fold of the goods, and pin securely. Place the waist line of the
second side form or body of the back on the same thread of the goods as the waist line of the front and close enough to the front so that Line 22 five inches below the waist line will join Line 5 the same distance below the waist line. This will form another dart under the arm, the seam of which may extend to the bottom of the garment. (See Fig. 12.) Make the skirt part at this seam as long as the hip length skirt measure and then allow two inches more so as to be sure that it will be long enough.

Cut along the neck and shoulder and armhole and down between the front and second side body or Lines 5 and 22 , cutting out the dart there, then cut the armhole in the second side body and down Line 24 to five inches below the waist line. Slant the goods out from this point until the bottom is about twenty-seven inches wide. If you are cutting from single width goods and have not room to cut the two pieces above the waist line together, you will either have to make a hem down the center front and lap it, or fold the material through the center lengthwise and let the piecing come on a line with the center of the underarm dart. The latter is more preferable, as the seam is not used now in the front. You may have to take off a narrow strip when piecing this way, but the piecing should not come in front or up the side body. But if the material is wide enough to cut the two pieces above the waist line together, then any sized gore may be pieced on the skirt below at Line 24.

To cut the next or first side body, lay the lining on the material so that Line 24 of the second side body five inches below the waist line will touch the straight edge or selvage of the goods. Continue Line 24 on the straight edge until it is the same length as Line 24 in the second side body. Slant the back edge or Line 23 from the waist line until the side body is about twenty-four inches wide at the bottom. (See Fig. 13.)

To cut the center back, lay the lining with the armhole on the straight edge or selvage of the goods, and measure down from the waist line the length of the back skirt measure and allow two inches more. Slant Lines 21 and 23 from the waist line until the bottom of the center back is about
twenty inches wide. (See Fig. 14.) This will make a princess nearly four yards in width around the bottom. In large hipped figures, cut the fronts a little wider at the bottom than twenty-seven inches.

Baste the lining to the material and the pieces together according to instructions already given. Only one dart in front may be used and it may extend to the bottom in a tiny seam. When piecing on a gore at the side, if you will first baste the seams up and try the dress on, you can easily tell what size gore to piece on by the space that hangs open at the bottom. Finish the bottom with a facing of the material about three inches wide cut on the bias. The seams must be boned and the bones must extend over the hips. Finish the placket opening with sufficient fastenings to avoid any gaping. If the gown is designed for street wear. make it the regulation walking length; if for dress occasions, a moderate sweep gives a pretty effect.

If you prefer the corsage skirt, which extends only about five inches above the waist line, cut the pattern off that distance above the waist line, or, just cut the material that length. The top is then finished with a facing and an interlining of light weight canvas about one and one-half inches wide. In fitting a corselet skirt on a figure having a small waist and large hips, make the alterations on each and every seam, so as to keep each portion of uniform size. Allow good, big seams on each edge when cutting a princess, to permit of enlarging in case it is too snug. The corselet skirt, of course, requires a blouse, which may be made of contrasting material such as silk, lace, etc.

## WRAPPERS.

While a wrapper does not require so much care and attention in its fitting and is much easier to make, still there is a tendency toward elaboration and dress effect in some of them that demands careful treatment as the work advances. Usually only the waist is lined, but the lining may be left out entirely.

To cut a wrapper with a plain back and full front, use the center back and first side body of the princess to cut the back. Arrange the front and second side body as given for
the front of the princess also, and, if you wish a yoke, mark on the lining with the tracing wheel the shape it is to be. Cut an extension on the front edge about half as wide again as it is (see Fig. 15), and allow the material to reach to the highest point of the yoke. Trace the waist line of the lining on to the material, then when basting the lining and material together, place the waist lines together and baste them securely. Gather the top of the wrapper front and adjust the gathers smoothly and fasten down to the lining. Baste the yoke of the material on the lining and turn under the lower edge so as to cover the gathers and baste and then stitch. Or, the yoke may be basted on first and the wrapper cut long enough to permit of a heading, which may be turned down and gathered with a couple of rows of gatherings and then stitched over the lower edge of the yoke. Baste the darts in the lining only. The back may have a yoke also.

When cutting wrappers from cotton goods, which is usually about twenty-seven inches wide, two whole widths will be needed for the fronts. If you seam the two widths together to bring the seam in the center front it should be overlapped to form an inch hem and stitched from the right side. If you want to avoid the seam in the center, cut one of the widths lengthwise through the center and stitch one of these half widths to each side of the whole width.

A wrapper front may also be cut whole and have no yoke. You may tuck the goods to yoke depth, either the full width of the yoke or just half. It may be tucked solid or in clusters, and the tucks made any width desired. Before cutting a wrapper this style, lay the tucks or fullness on down straight of the goods to the hips, then arrange the front and side body as already given.

To cut a back with plaits in the center at the waist line, lay the lining of the first side body with the armhole on the straight edge of the material, then lay the waist line of the center back on the same thread that the waist line of the side body is on and have Line 23 of the side body and Line 23 of the center back join about four inches below the waist line. Now cut an extension of twelve inches at the waist line of the back and the cut the skirt portion
from the end of this extension down straight with the goods. (See Fig. 16.)

If you desire plaits also between the side body and center back, leave a space of twelve inches at the waist line between the two. (See Fig. 17.) This fullness may be gathered instead of plaited. Make any style sleeve and collar and bertha. A very pretty collar may be made in the sailor style for the back and the fronts pointed. This may be further trimmed with narrow lace slightly fulled in. A pointed bertha makes a very pretty finish, or, if the wrapper is made of dimity, foulard or silk, wide lace may be fulled in around the yoke. Either hem or face the bottom. Trim with ruffles around the bottom if desired. Bias bands make a pretty finish; also a wide flounce is usually becoming. The opening or placket down the front is finished by sewing a straight strip about two inches wide clear round the opening. Face the right side down to the wrapper as a faced hem and fix the other side and leave out for a fly.

The fastenings in the front are usually invisible by being arranged under the hem. The lining fronts are fastened separately with hooks and eyes. If you want a belt, cut it two inches longer than the waist measure. Cut a lining the same size and turn the edges of the belt and lining together and stitch. If you prefer the belt to lap in front cut it about five or six inches longer than the waist measure.

The old fashioned mother hubbard cut large in the yoke with loose armholes is a very comfortable dress for morning wear and makes a very desirable lounging robe for an invalid.

## DRESSING SACQUES.

Use the same drafts as given in Lessons 1 and 2 and mark on the draft the depth of the yoke, then if you care to, you may cut the yoke part off at these marks, and use this for the yoke pattern. Cut the skirt portion twice the width of the yoke, both front and back. They may be cut any length desired. If it is to be fastened down at the waist line it should be cut a little longer than if left to hang
loose. If fastened to the yoke with a heading, allow extra for this when cutting. Cut a small gore off of each front section on the under arm seam, making the top two inches narrower than the bottom. When fastening the front portion to the yoke, let the skirt portion extend out about three inches at the armhole and the back skirt portion about one inch. This is to form the balance of the armhole which must be shaped by that part of the pattern which was cut off from the yoke at first.

The fullness of the skirt portion may be either gathered or plaited and stitched on to the yoke. A dressing sacque may be cut without a yoke and the fullness both in front and back arranged from the neck and shoulders by tucking or plaiting the material before cutting. Lay the tucks or plaits on down to the bottom of the garment before the pattern is laid on, then when stitching, stitch the depth desired. This will keep the sacque from drawing across the bust. Any style sleeve and collar may be worn. A pretty effect is obtained by putting a ruffle of the material or lace or embroidery around the yoke.

If you prefer to finish the dressing sacque off in kimono style, cut the neck out in front from the shoulder to a point three or four inches down from the center of the neck. Then baste on a bias or a straight strip about six or seven inches wide. Begin at the bottom, place the right side of the strip on the wrong side of the kimono and baste up the front, round the neck and down the other front. Turn this over and turn in the edge and baste it down so as to cover the seam just made and then stitch. The one stitching is sufficient to catch both edges. When worn this strip is turned down round the neck and as far down as desired where the fronts are overlapped. Use the flowing sleeve and leave it loose at the bottom. Face them on the right side with a two-inch band the same color as the strip round the neck and down the fronts, which may be of contrasting color.

## MATCHING FIGURES AND PLAIDS.

The effort to match figured, checked, striped or plaited material in cutting and fitting is sometimes a very difficult matter and some very unsatisfactory results are often ob-


tained; yet it is a very simple and easy matter if a few points are borne well in mind. Select one position for the figures or flowers, and in the latter, the stems usually run downward. When cutting a garment where several widths must be joined as in a circular or shirred skirt, it is of the utmost importance that the pattern or figures on the material should be matched, and oftentimes this cannot be done when the widths are simply joined at the selvages. It will sometimes be necessary to lap the second width some little way over the first in order to find the corresponding figures. When this is done turn in the edge of the second width and pin it to the front or first width. Proceed in the same manner to join the other widths for both sides of the skirt. Slip-stitch the widths together from the outside. This is done by slipping the needle along inside the turnedin edge of the applied width, and then taking a stitch in the under width. When the skirt is turned wrong side out, the slip-stitching will be found to form the basting of the seam.

When purchasing plaids, an extra quantity will always be required beyond that needed for a plain material gown of the same design. When cutting be sure to keep the waist line of each piece on the same line or section of the plaid. If a seamed waist, the plaids must be matched both ways. Cut the fronts first in the usual way. Place Line 21 of the back in the center of a plaid, leaving Line 17 on the same section of a plaid as Line 8 in front. To cut the first side body, place dot $Y$ on the same section of the plaid as it came on in the center back. To cut the second side body place dot Z on the same section of the plaid as it came on in the first side body. This will give a back with an unbroken plaid after it is seamed. The plaids may not match when sewing Lines 5 and 22 together, but it will show least under the arms.

## CHAPTER 18.

Infants' and Little Girls' Dresses. Little Boys' Clothing. Drafting patterns for an infant's first outfit. Dresses. Slips. Skirts, Wraps, etc. Little Wraps. Drawers. Nightgown. Waist. Sleeve. Collar. Little Boys' Clothing. Sailor waist. Blouse waist. Buster Brown suits. Pants. Collar and band.

## INFANTS' FIRST OUTFIT.

There is not so much opportunity for changes in the cutting and making of infants' garments, still from time to time there are improvements tried, with a view to making the process of dressing an infant a less wearisome operation and to give greater comfort to the child. The beauty of these little garments is the extreme neatness with which they are made.

To draft a pattern of a slip, draw a straight line thirtysix inches long lengthwise on a piece of paper and mark it Line 1. Make a dot on this line two inches from the top and mark it dot N (Neck). Also make another dot on this line three and three-fourths inches from the top and mark it dot A. From the top of Line 1 draw a line straight out to the right four and one-half inches long and mark it Line 2. Make a dot one-half of an inch below the right end of Line 2 and mark it dot S. Make dot $M$ one and threefourths inches from the left end of Line 2. Connect dots

M and S with a line and mark it Line 3 . From $\operatorname{dot} \mathrm{A}$ measure straight out to the right and draw a line five and one-half inches long and mark it Line 4. From the bottom of Line 1 measure straight out to the right and draw a line sixteen inches long and mark it Line 5. Connect the right ends of Lines 4 and 5 with a line and mark it Line 6. Measure from dot $S$ straight down to Line 4 and make a dot at the midway point. Make another dot one-fourth of an inch to the left of this dot and draw a curve from dot $S$ to the last dot and curve on down to the right end of Line 4. This forms the armhole curve in the front. (See Fig. 18.)

To draft the back, draw a straight line thirty-six inches long lengthwise of the paper and mark it Line 7. Make a dot on Line 7 one-fourth of an inch from the top and mark it $\operatorname{dot} \mathrm{B}$; also make another dot three and three-fourths inches from the top and mark it dot C. From the top of Line 7 measure straight out to the right and draw a line four and one-half inches long and mark it Line 8. Make a dot one-half of an inch below the right end of Line 8 and mark it dot E . Draw a line from D to E and mark it Line 9. From dot C measure straight out to the right and draw a line five and one-half inches long and mark it Line 10. From the lower end of Line 7 measure straight out to the right and draw a line sixteen inches long and mark it Line 11. Connect the right ends of Lines 10 and 11 with a line and mark it Line 12. Draw a curve from dot E to the right end of Line 10 for the armhole curve. (See Fig. 19.)

To draft a sleeve, draw a straight line across the top of the paper ten inches long, mark it Line 13. From the left end of this line measure straight down and draw a line eight inches long and mark it Line 14. From the lower end of Line 14 draw a line straight out to the right and make it the same length as Line 13, and mark it Line 15. Connect the right ends of Lines 13 and 15 with a line and mark it Line 16. Divide Line 13 into four equal parts by making dots F at the two and one-half inch mark and dot G at the five-inch mark and dot H at the seven and one-half inch mark. (See Fig. 20.) Now, measure down on Line 14 and make a dot two and one-half inches from the top and mark it dot I; also measure down one and one-half inches from $\operatorname{dot} \mathrm{H}$ and make $\operatorname{dot} \mathrm{J}$; also measure down on

Line 16 and make a dot two inches from the top and mark it dot K. To outline the top part of the sleeve begin at dot I and draw a slight outward curve at dot F ; follow Line 13 to dot G, then curve down to dot J and on to dot K, making an under arm curve from J to K. Draw a slight inward curve from I to the end of Line 14; also an inward curve from K to the end of Line 16. Draw an outward curve from the lower end of Line 14 to the lower end of Line 16. (See Fig. 20.)

To cut the slip, lay the front draft on a double fold of the goods and the back draft on the selvage edges. Allow for the hems on the back. One-fourth-inch seams and a two-inch hem for the bottom are allowed on the draft. If you want to make the slip with a yoke, cut the tops of the drafts off one-half inch below Lines 4 and 10. The yoke may be made of all-over lace or embroidery, or of tucks and insertion.

To cut a slip with fullness at the neck, lay the front and back drafts with their straight edges on a double fold of the goods, though back from the fold about three inches. When cutting extend the neck curves to the fold. This fullness may then be gathered and fitted to a band at the neck or a draw string may be run in and the fullness drawn to fit any sized neck. When cutting this style of slip from material thirty-six inches wide, let the bottom of the slip be the width of the material and then gradually slope to the armhole.

When a yoke is used, use two full widths of goods thirty-six inches wide and cut them thirty-four inches long for the skirt portion. These widths may be left straight on each edge or a small gore may be cut off of each edge at the top, making the top of each width about thirty inches wide instead of thirty-six.

To cut a band or waist for a petticoat, cut off the tops of the front and back drafts about three inches below the armhole and make Lines 6 and 12 straight instead of slanting. Before cutting, pin Lines 6 and 12 together and lay the pattern with its front edge on a double fold of the goods. Hollow out the neck and armholes a little more than for a slip. For the skirt portion use two widths of thirty-six inch goods. Flannel skirts are made in the same
way, the band always being made of muslin. The trimming of flannel skirts consists of embroidery or fancy stitches. Open the seams in flannel and cross-stitch them down, and fell or overhand seams in muslin, or use the French seam. Do not leave any raw seams. When putting skirts on waists, face them on. Always finish the placket opening neatly.

Finish the slips with a ruffle of embroidery around the yoke, or they may be left perfectly plain. The skirt portion may also be trimmed in tucks and insertion or left plain. Finish the sleeves in any dainty way you desire. Use the same drafts for making the gowns, only cut them a little larger and do not use the yoke, but leave the fronts in one piece, also the back. If at all possible, purchase the shirts and bands ready-made.

A coat may also be made by the slip pattern, by allow ing more for seams and cutting the sleeves larger. Cut to open in front by placing Line 1 on the selvedge of the goods, and place Line 7 in the back on a double fold. A simple little cape may be made by using an eighteen-inch square of fine flannel or any soft woollen goods. Cut a circle out of the center for the neck. Fold the piece through the center diagonally and cut from the neck to one corner to form the opening for the front. Scallop all around the edge with the buttonhole stitch. A cape made after this style makes an appropriate cape for the coat also.

## LITTLE GIRLS' DRESSES.

Take the measurements of children a little looser than for adults, especially the bust and waist measures. Draft the pattern the same as given in Lessons 1 and 2, omitting the darts and side forms. The bust and waist measures are so near the same in children that the difference is taken out in the under arm seams. If the waist measure is larger, as is sometimes the case, add one-half of the excess to each side of the front. Make a dot out to the right of $\operatorname{dot} \mathbf{E}$ this distance and draw Line 5 from dot D to this new dot. Draw the armhole curve one-half of an inch above the bust line, as children do not need as deep a curve at the armhole.

Sometimes a small dart is used for children over eleven years of age in the front lining. Place the dart midway
between Lines 1 and 5, extending the top to within one and one-half inches of Line 4. Do not use so much of a drop for the shoulder slant for very small children-about onehalf of an inch less. If shoulder is three inches long, make the drop about one inch, from three to five inches the drop should be about one and one-fourth inches, and from five to seven about one and one-half inches.

When drawing Line 18 in the back raise it the same amount that you take off of the shoulder drop in front. Thus, if you lowered dot S only one and one-fourth inches instead of one and one-half inches, raise Line 18 one-fourth of an inch higher than given in Lesson 2. Extend the left end of Line 17 out one inch and re-draw Line 21 from dot K to the end of the line; also extend the right end of Line 17 one inch and re-draw Line 22 from dot $R$ to the end of the line. Test the waist measure and if too small make Lines 8 and 17 a little longer; if too large, make them shorter.

The sleeve measures are taken the same and sleeve drafted as for adults. The skirt measures are also taken the same, but dots K are omitted and the gores are slanted from dots H to the bottom.

The materials which are used so much for children's wear, such as linen, duck, madras and cheviot, should be shrunken before being made. If not shrunken, an allowance will have to be made on all the pieces, and this does not always give satisfactory results. One inch to the yard is the estimate shrinkage for these goods. The following method may be used which does not require pressing: Roll the folded goods smoothly in a cloth and cover with water and leave it over night. Remove in the morning and hang up to dry without wringing. It will take it some time to dry out thoroughly, but it will not need pressing until after the garment is made, then it is dampened and pressed. It is a good idea to put a tuck under the hem, or the bottom of the skirt may be ornamented with several tucks, then as the dress shortens a tuck may be taken out.

No better selection can be made for a little tot than the Bishop style, since the long unbroken lines give apparent height to the child and is much more becoming than those which are belted or seamed on at the waist. The
little plain mother hubbards make good every day dresses, as they are easier laundered. For girls from four to six years of age the French dress is very suitable. The skirt is seamed on to the waist, with the waist blousing over the skirt a little below the waist line. The skirt and waist both may be cut with either plaited or gathered fullness. The Buster Brown dress may be and is worn by choldren of all ages. The suspender dress is a very useful garment, as it can be worn with separate waists, and it is a very convenient way to remodel old dresses.

All the varieties of dresses for children can be made by using as a basis the drafts which have already been given. While there are many and great variations from this original draft, still with the knowledge and experience you have acquired thus far you will have little difficulty in adapting it to all changes, if you but exercise a little originality mixed with a moderate degree of ingenuity and common sense.

For instance, in cutting a blouse place the back of the draft with Line 21 on a double fold of the goods and cut round the neck and armhole, also the shoulder. Cut the blouse five inches longer than the back measure. Then slope the goods out from the armhole to the bottom, making it three inches wider than the width of back measure. This will make the whole back six inches wider at the bottom. Now place the straight edge or Line 1 of the front on the selvage edge of the goods and cut along the neck, shoulder and armhole. Cut the front six inches longer than the front measure and make each half front four inches wider at the bottom than one-half of the chest measure. Cut out a Vshaped point in front at neck and finish with a sailor collar.

Do all tucking or plaiting before cutting out. There are many different varieties of aprons, which may be made of white linen lawn, crossbar nainsook, plain and checked ginghams, etc. All of these can be made from this same draft. The yoke aprons may be cut by using the tops of the front and back drafts to an inch below the armhole. The skirt portion is cut plain and gathered on to the yoke. For a short yoke cut across a little above the armhole, then after the skirt portion is sewed to the yoke, hollow it out some under the arms to form the curve of the armhole.

The suspender style is very pretty and dainty, especially when the straps or suspenders are made of insertion. This may be varied by putting shoulder ruffles on the straps.

Instructions for children's underwear are given in the next lesson.

## LITTLE BOYS' CLOTHING.

While the making of boys' suits is not a very difficult task, there are a few details of finish that require more or less time and attention, chiefly among which are the trousers and the putting in of pockets. But if the pockets are made and placed in each section of the garment before the portions are put together, no serious trouble will be experienced. The blouse is so similar to that of girls' that the instructions given above applies equally as well to boys'.

Every small boy should have a play suit, which is generally made of khaki in a very simple style. Russian suits are also very suitable for small boys since they are so easily made. The fullness at the lower edges of the trousers is put into a band or drawn up on elastic. The Norfolk suit, which consists of a box-plaited jacket and bloomer knickerbocker, is worn by boys up to fourteen years of age. When made of serge and finished with several rows of machine stitching a very smart tailored finish is obtained. All suits made from serge, duck, pique, etc., should be thoroughly shrunken before making. Use the same process of shrinking as given for little girls' clothing.


## CHAPTER 19.

Muslin Underwear. Drawers. Drawers band. Underskirt. Yoke for underskirt. Nightgown. Sleeve for gown. Chemise. Corset cover. Seamless Corset cover. Combination suit. Stitches.

## MUSLIN UNDERWEAR.

The making of underwear should be considered quite as important as the outside garments, for upon the fit of the under garments depends largely the fit of the outer ones. A great amount of time may be put in on the making of underwear as the amount of handiwork is unlimited, the finish often being made entirely by hand, yet much fine and beautiful work may be done on the machine, and it is a great time saver. Much care should be exercised to have the tension drawn evenly on both the upper and lower threads; also to use just the right size needle and thread. One should not expect to obtain good results using the same needle and number of thread on all materials. No. 80 cotton is the best for white work except on very fine material, when 100 may be used for hems and tucks and all outside stitching. Every make of machine is accompanied by a table of the size of needles that should be used with the different numbers of thread, and it is wise to follow these directions. Leave no raw edges on muslin underwear of any kind. Either use the French or the felled seam. The
latter is made by placing the edges together and stitching a three-eights of an inch seam; then one seam edge is trimmed close to the stitching and the other edge is turned in and stitched down over the trimmed edge, making a perfectly flat joining.

To draft a pair of drawers, draw a straight line 27 inches long lengthwise on a piece of paper and mark it Line 1. From the top of Line 1 measure straight out to the right and draw Line 2 twenty-two inches long. Draw Line 3 from the right end of Line 2 parallel with Line 1 and the same length as Line 1 . Connect the lower ends of Lines 1 and 3 with a line and mark it Line 4. (See Fig. 21.)

Measure down three inches from the top of Line 1 and make dot A . Measure fourteen inches from the junction of Lines 1 and 2 and make dot B on Line 2. Measure down eighteen inches from the top of Line 3 and make dot $C$. Make dot D on Line 4 seventeen and one-half inches from the junction of Lines 1 and 4. Make dot E three inches below dot B. Now draw the curved line 5 from $A$ to $B$ and also Line 6 from A to E. Draw straight lines 7 and 8 from $B$ to $C$ and from $E$ to $C$. Draw the curved Line 9 from $C$ to D. (See Fig. 21.)

Now fold a large piece of paper through the center and lay the draft with Line 1 on the fold of the paper and pin securely. Cut along Lines 5, 7, 9 and 4. Remove the draft and unfold the sheet of paper and lay the draft back on it, placing Line 1 in the center and cut one side by Lines 6 and 8. This gives the pattern complete, and makes a medium-sized pair of umbrella drawers for a twenty-five inch waist measure. If wanted larger or smaller add to or take from on the straight edge or Line 1. For more length from B and E to C lay a fold in the muslin; for shorter length lay a fold in the pattern between dots $B$ and $C$. For more length from $C$ to $D$ lay a fold in the muslin; for shorter length lay a fold in the pattern between dots C and D. From $\mathbf{A}$ to E is the front of drawers and from A to $\mathbf{B}$ is the back.

When making drawers use the French seam to join the edges of each leg portion and also to join these portions together in the seam that extends from the front band to the back or Lines 7 and 8. In open drawers this seam is
not joined, but each portion is faced along this edge with a bias strip of the same material. This strip may also be cut to fit the portion. Stitch the facing to each leg portion or along Lines 7 and 8 from dot $E$ to $C$ and from $C$ up to $B$. Turn in the other edge of the facing and hem it to the inside of the garment.

If the leg portions are to be ornamented with tucks, allow for the tucks when cutting and tuck the portions before stitching the seams. Hem the bottom, however, after the seams are stitched. A gathered ruffle of either the material or embroidery makes a pretty finish and should be inset in the hem, which is cut through its folded edge for this purpose. Sew the ruffle to the lower edge of the hem and baste down over the seam and stitch. If no hem has been allowed sew the ruffle to the edge of the drawers so that the seam will come on the inside and then face it on the inside with a strip of the material about one and one-half inches wide. Baste one edge of the facing in the same seam as the ruffle and stitch. Turn in the other edge and stitch down to the drawers.

When insertion, either of lace or embroidery is used, baste it in position with a row of basting on each edge and then stitch on each edge also; cut the material underneath through the center and turn each of the edges back and crease to hold it flat. Cut away to leave only enough for a tiny hem turned back from each row of stitching and then stitch.

To make a band for the drawers, take one-half of the length of the waist measure and add one inch to it and draw a rectangle whose top and bottom will each be this length and whose sides will each be six inches, and number these lines 1, 2, 3 and 4. (See Fig. 22.) Make dot A on Line 1 one and one-half inches from the junction of Lines 1 and 4. Make dot B two and one-half inches from the top of Line 2 and make $\operatorname{dot} \mathrm{C}$ at the junction of Lines 2 and 3. Make dot $D$ three inches from the top of Line 4 and connect dots A and D, also C and D, with straight lines. Draw a slight downward curve from $B$ to $A$.

When cutting, place Line 2 from B to C on a straight fold of the goods. Two bands should be cut from the draft for each pair of drawers. The top of the drawers is gath-
ered and put into this band. If a wider or narrower band is desired, make the rectangle either wider or narrower. For closed drawers a placket on the one or both sides will have to be cut. Cut it seven or eight inches long and finish it by sewing a straight strip of facing the entire length of the placket and face one side down as a faced hem and leave the other out as a fly. This is done, of course, before the band is put on.

Underskirts are cut much the same as outside skirts, and to avoid the bulky fullness at the waist line and over the hips, yokes are frequently used. The width of the yoke is usually about five inches. To draft a pattern of a yoke, take one-third of the waist measure and add the width of the yoke to it and make a square whose ends and sides will each be this measure and number the lines $1,2,3$ and 4. (See Fig. 23.) Make dot A on Line 1 five inches from the junction of Lines 1 and 4 and make dot $B$ at the junction of these lines. Make dot C on Line 2 five inches from the bottom and make dot D at the junction of Lines 2 and 3 . Draw deep curves from $C$ to $A$ and from $D$ to B. (See Fig. 23.)

When cutting the material, lay Line 2 from C to D on a straight fold of the goods and when making, dot $D$ is placed in the center of the top of the skirt. Two yokes should be cut for each skirt. Tucks and insertion and ruffles of lace or embroidery make a good finish. Allow for the tucks when cutting.

The same pattern for a front of a wrapper will apply equally as well to cutting the front of a night gown, except that night gowns do not need to be so wide at the bottom as a wrapper. The back may be cut by the draft given in Lesson 2 by extending Lines 21 and 22 the desired length, making the bottom the width of the goods. Cut off the top of the back any desired depth to obtain a yoke. They may also be made without a yoke. The yoke may be of the same material or of lace or of embroidery; or it may be made of tucks and insertion or tucks and plain strips. A ruffle either of the material or of ebmcoidery may be used around the yoke. Any mode of trimming can be used in the finishing. The sleeves are cut flowing or fastened into a band. Night dresses may be cut low in
the neck, either round or square and finished with beading through which a ribbon or tape is run and the fullness drawn up to fit the wearer. Make gowns large and roomy as they shrink in the laundering. In fact, all muslin underwear should be made large to allow for shrinkage.

A chemise is also cut the same as a nightgown, only no yoke is used and it is made shorter. The top and armholes are prettily finished with beading and ribion drawn through it to regulate the fullness.

For a tight-fitting corset cover use the draft as given in Lessons 1 and 2, cutting the side forms in the back separately and using the darts in front. Hollow out the neck either rounding or square or cut it V-shaped. Sleeve caps may be placed in the armholes or trimmed around with narrow lace or embroidery. A very popular corset cover is now made from wide embroidery. Some make them to extend straight around the form below the arms, but as this is so low it does not give sufficient protection. To allow it to come higher, place the front and back drafts on the embroidery and cut out an armhole large enough to permit the embroidery to come up well under the arms. The raw edges may be hemmed or faced with a very narrow facing. Ribbon or beading and ribbon sewed to the cover to extend over the shoulder will hold it up in position. The fronts are cut as wide as desired and the fullness adjusted with ribbon run through the top of the embroidery. The lower edge of the cover is shaped that it may slope from the back to a dip length to form a blouse in front. The fullness may be gathered into a band cut the size of the waist measure, or the bottom hemmed and a tape or ribbon run through the hem and the fullness adjusted each time it is worn. A peplum may be put on at the bottom also if desired. The fronts are finished with a hem and an underlap which is done before the bottom is finished. Close the fronts with buttons and buttonholes. The right side of the front should be faced with plain material as the buttonholes are hard to work in embroidery.

Another method of making a corset cover is to make it without seams. Use the same draft as given in Lessons 1 and 2, omitting the side forms in the back and instead of using the darts, take off in front or on Line 1 from dot

F to Line 8 one-half the quantity usually used in the darts, and the other half from the under arm seam from dot $G$ to Line 8. That is, begin at dot F and slant to Line 8 onehalf the quantity or width of darts, and begin at dot $G$ and slant to Line 8 the other half of the dart's width. Cut the front out and place the under arm line on Line 22 of the back and pin together. Place the center of the back on a straight fold of the goods, allowing for fullness if desired. The front will come out bias. Hollow out the neck the desired depth. Finish with a peplum around the bottom and with beading and ribbon at the top or neck.

To draft a combination suit, draft a front and back as given in Lessons 1 and 2, except that you do not need the curved forms in the back. The back will have to be reversed; that is, Line 22 of the back must come next to Line 5 in front. Draft the drawers as if they were to be made separately, except they should be drafted a. little longer on Lines 1,7 and 8 to take the place of the band or yoke. Unfold the drawers, draft and join the front to the front of the waist having Line 8 in the drawers meet Line 1 in the front of the waist and Line 7 in the drawers meet Line 21 in the back. Gather the back of the drawers and join to the back of the waist.

A union suit is also very pratty made with a row of beading at the waist line and t.ee fullness drawn up with a ribbon or tape. The neck is hollowed out and finished in the same manner. The armholes and neck may also be finished with a narrow edging of lace or embroidery. If the combination suit is made to open in front the drawers will have to be made open. Finish with felled seams. The drawers may also be made with a wide yoke and the yoke joined to the waist. If a skirt is preferred instead of the drawers, apply in a like manner.

Draft children's waist and drawers and join them together as given above for adults, and a good pattern for children's night drawers is obtained. The waist is opened in the back, and the back of the drawers put into a band, which should button to the waist. The leg should be drafted to the ankle. Any plain sleeve may be used.

To draft children's drawers, take two measures, the waist measure, and a side measure, from the waist line over

$140$
the hips to the knees. The latter is the length the drawers are to be. Make Line 1 from $A$ to Line 4 the length of the side measure, then add one and one-half inches above dot A from which to draw Line 2. Make Line 2 three-fourths of the length of the side measure, plus one inch, and draw Line 3 the same length as Line 1 , and make Line 4 the same length as Line 2. To find dot B, measure out from the junction of Lines 1 and 2 one-third of the waist measure and add one inch. Make dot E one and one-half inches below dot B . To get dot C measure up from the bottom of Line 3 one-half the length of the side measure and subtract one inch. To get dot D measure out from the junction of Lines 1 and 4 on Line 4 one-half of the length of the side measure. Draw curved lines from $A$ to $B$ and from A to E , also from C to D . Draw straight lines from E and B to C .

## STITCHES.

The hand stitches upon muslin differ somewhat from the hand stitches upon dresses. Muslin underwear is subjected to a greater strain in laundering, consequently the stitches must be taken firmly through the goods, while in dresses the stitches are concealed as much as possible. The stitches generally used on muslin are the overhand stitch, back stitch, hemming and running stitches. The overhand stitch is employed for seaming two edges together, usually two selvages. First baste the two edges together, then hold the material loosely in the left hand, having the edges between the thumb and forefinger, and place the needle in from the back and let it point toward the shoulder. Overhand with close stitches over and over the edge, taking up as little of the material as possible and making the stitches of equal length and depth. When the material is opened this edge or seam must lie perfectly flat and not form a cord.

Back stitching is used in seams requiring strength, and is made by taking one stitch at a time, placing the needle back each time in the same hole where the thread of the last stitch was placed. The hemming stitch is a slanting stitch and is made by holding the hem across the forefinger of the left hand and placing the needle in so it will point
toward the left thumb. Take up one or two threads of the cloth and also catch the fold of the hem at the same time. When turning a hem always turn it toward you. Whipping is done much the same as overhanding.

## CHAPTER 20.

Selection of Materials and Designing.

## SELECTION OF MATERIAL AND DESIGNING.

There are many factors that enter into the selection of material and each in its turn should receive due consideration. Chiefly among these may be mentioned the height, complexion, color of eyes and hair, general features, general form and build of the body, etc. Another factor quite as important from a practical standpoint is the means at one's command-one's financial circumstances. There is nothing more out of harmony than to see a woman dressed, no matter how well and tastily, beyond her means. It is every woman's duty to herself, her family and her home, to be at all times as attractive as possible in a quiet, modest way. It not only elevates the home, but adds much towards beautifying the world, and making it a good place to live in, but when one dresses simply for a matter of display and far beyond her ability and thereby deprives her family of the real necessities of life, all the charm and beauty are lost to those who admire the beautiful-and know the circumstances. No woman with right motives will "put all her money on her back."

In the selection of material, choose that which will add to rather than detract from the beauty and personal charm of the wearer. One does not have to dress gaudily and in
loud colors to be attractive. Simplicity is considered one of the chief characteristics of a well-dressed woman. Above all, dress comfortably. Dress according to the laws of nature and in harmony with the surroundings. Beauty in personal appearance is often lost by a lack of understanding how to maintain and utilize the beautiful gifts of nature.

The tall, slender woman should avoid all figures and lines that would have a tendency to emphasize and increase the effect of height. Plan and design to dress with much fullness and many ruffles. If she be well-proportioned, a tailor-made gown will be very becoming. The long tightfitting coats will also add to her appearance if the skirt be not too short.

On the other hand, the short, stout woman must, of course, employ tactics just the reverse in effect. She must avoid all appearances having a tendency to accentuate her natural short lines. Simplicity is her safeguard. A skirt made with many gores and the use of vertical lines and stripes will apparently add to her height. She should avoid large, puffy sleeves.

Harmony of color is of as much importance as proper adaptation of lines. If the color is not in harmony with the wearer, the smartness or chic is destroyed. The finished product must be characterized both by a unity of color and a symmetry of outline.

When making a selection of material, the design of the gown should, to some extent, influence both the style of material and the width. For instance, if a circular skirt or one with very wide gores has been chosen, a material of double width should be selected so as to avoid seamings. For a skirt with narrow gores a single width material may be used.

Sometimes a women is prevailed upon to purchase too much material, and sometimes not enough, but it must be remembered that one person may cut more economically than another, and while one woman may be contented to piece out a width, another would refuse to do so, but would open the goods its full width so that no piecings will be required. This, of course, necessitates a greater quantity of material, but it also denotes good workmanship. How-
ever, there are occasions when small piecings may be required at the lower edge of a gore even in the widest goods, but this is unavoidable.

In designing a garment as well as in selecting the material for it, there are important points to consider, two of which are the season of the year, and the occasion for which it is intended. Usually light colors and delicate tints or shades are more desirable and pleasing in the thin, lightweight materials for summer wear, while the darker and more neutral shades are more suitable in heavy material for winter wear. Garments for summer weather are designed to be light, cool and airy, but for winter they must be lined and interlined. For instance, in summer the coats are made of light-weight material, open in front, of a short length and perhaps with short sleeves. In winter the long, heavy double-breasted, and high neck collar coat is worn and is usually made of a dark color. Of course, there are some who can afford to have an assortment of the light colors, such as white, light tan and gray, but the average woman can only afford the most serviceable one.

The same is true of dresses. People in modest circumstances must plan and design their dresses according to their means. That is, if one can only afford to have one "extra" dress or costume, plan and design the making of it so that it will be suitable for all occasions as nearly as possible. Do not cut it low in the neck and with short sleeves, as it could then be only properly worn at evening. Do not make it a strictly street dress, for then it could not be used as a visiting dress. There are many people who can make one dress do for most all occasions for one season, and they look well, too.

For a reception gown the soft, sheer materials, such as chiffon, crepe de chine, nettings, etc., are most suitable, especially for a person who is not too stout and can wear broad effects. These gowns may be properly worn decollete. For the more stately and well-proportioned figures, taffetas, peau de soie, satin, velvet, etc., are used. For young girls, netting, chiffon-taffetas, lawn, batiste, wood-crepe, Swiss and China silk may be used.

A wedding or bridal gown may be of silk, satin, chiffon, crepe de chine, lace, or any of the fashionable ma-
terials which are appropriate. Chiffon or crepe de chine give very graceful, soft, clinging effects, while a lace gown is charming in the extreme. China silk and taffeta may also be used, and are less expensive. Organdy and similar materials are often used for a young bride.

A wedding gown should be made high in the neck and with long sleeves, although short sleeves may be worn with long gloves. A very appropriate as well as economical way is to make the dress with a lace yoke attached to a guimpe, then should you afterwards want it for dinner or evening wear, it is easily transformed by leaving off the yoke.

Silk should form the foundation or lining for the finer materials, but if organdy is used, a pretty lawn slip trimmed with lace will answer for both the waist and skirt foundation. For those who can afford it Liberty satin under chiffon and net or any transparent material, gives a shimmering effect that no other lining can equal. Any amount of handwork may be used upon wedding gowns, and laces are used very extensively. In fact, the decoration may be as elaborate as one's taste and means permit.

Light weight materials can be shirred, tucked, plaited or ruffled and do not require as much other trimming as the gown made of heavier material. The latter require and demand trimmings of jet, applique, lace, etc.

When combining colors on an evening dress or gown, great care must be exercised in the combination, as colors look very different in artificial light from what they do in daylight.

Afternoon gowns are made of somewhat heavier material such as broadcloth, voile, velvet, silks, etc. Lace, netting and Swiss are also worn over a foundation or lining of silk, which must harmonize with the color of the trimming.

For street wear almost any material may be used except thin, transparent, light materials. One should select something that will wear well. Dark skirts worn with separate waists are very suitable for the street. The waist may be made of any material, either light or dark.

## COPYING FROM FASHION PLATES.

With the knowledge you have gained from these lessons you ought, by a reasonable amount of practice, to be able to reproduce most any of the costumes and dresses you see illustrated in the fashion plates of the fashion magazines. Every woman, whether she sews only for herself and family or for the public, should take at least one of the leading fashion magazines, and as many more as her means will permit. They constantly reflect the ever-changing styles and foretell the tendency toward change and the trend in which the coming fashions are moving. Changes in styles are not sudden or apupt, as some suppose, but rather gradual and slow. If dessed, we will furnish a list of a number of the leading magazines, giving price and address where published. From these you can make your own selection.

In former years the fashion magazines showed only the general outline of the gown or costume, leaving all the draping and trimming to the originality and ingenuity of the dressmaker. But of late years the finished garment in colors true to life is shown to the best advantage on the figure, oftentimes being even exact photographic reproductions. You have learned how to draft your own patterns which may be applied to any fashion plate design. The draping and trimming, being but minor details, are left entirely to your own taste. You can use the plan and scheme for finishing the dress as illustrated or may modify it to suit your own taste and convenience. Perhaps you can make a combination of two or three of the styles given. You may like the waist of one and the skirt of another. If so, put the two together. Where the illustration has several rows of small tucks, you may prefer one or two large ones, or where it has tucks, you may prefer shirring. If so, make the changes. Do not be afraid of yourself. "Nothing attempted, nothing gained," you know.

If you have always relied upon ready-made patterns, and thought it impossible to reproduce the fashion plate illustrations without patterns, you will be surprised at the ease and success with which you can duplicate the illustrations from your own drafting. Study the fashion jour-
nals as much as possible. Practice every spare moment at reproducing some gown or a part of it by cutting the different parts out of paper or some cheap cloth before attempting it on costlier goods.

One cannot expect to be skilled in designing unless the proper materials are at hand with which to work and design. First of all, it is quite necessary to have a form and some cheap material such as crinoline ,etc., to practice on. The material may then be pinned and arranged upon the form any number of times in different ways, making it a decidedly easy matter to copy or reproduce any style in the fashion magazine. Orie can then pin and unpin, arrange and rearrange until the desired effect is produced.

After the crinoline is draped upon the form the way you wish a waist or skirt to be draped, you can then remove the crinoline and drape the material right on the form without any delay or difficulty. Always purchase the crinoline with which you practice and experiment as wide as the material which you are going to make up; then you will not have to drape and redrape the material on account of it not being the same width as the crinoline.

When making belts or girdles, buy the belt forms already made for that purpose, and get them a size or two larger than the waist measure so they can be fitted to your own figure. Girdles are usually high in the back and draped very full.

The error altogether too common, of carrying a style to an unwarranted extreme, must be avoided. This was sadly noticeable in the abuse of the pretty and popular princess, which was attempted to be worn by all figures, when it was designed for and best adapted to only those of normal and well-proportioned forms. This abuse of the princess is more responsible for its waning in popularity among the fashionable than anything else. No style should be carried to excess. The old Greek motto, "Modesty in all things," is a very good one to observe.

## CHAPTER 21.

Boys' Pants. Taking Measurements. Waists, seat width, outside length, inside length, knee. Drafting front of pants, drafting back of pants. Pockets. Fastening. Fininshing.

## DRAFTING BOYS' KNEE PANTS.

The following five measures are used in drafting boys' pants: Waist, seat width, outside length, inside length and knee.

Waist measure: Pass the tape around the waist line taking a rather loose measure.

Seat width: Measure over the largest part of the seat and on around to the front.

Outside length: Measure from the waist line, down over hip to knee. This should be the length you wish to make the pants.

Inside length: Measure from the crotch down to the knee, or the length desired.

Knee measure: Take the measure around the knee the width you wish the leg of the pant to be at that point.

The draft used here is made from the following measures: Waist 24 inches, seat width 17 inches, outside length 16 inches, inside length 8 inches, knee 13 inches.

Measure in one inch from the left edge of the paper and down one inch from the top, and draw a perpendicular
line the length of the outside measure and mark this Line 1. From the bottom of Line 1 measure out to the right one-half of the knee measure minus one-half inch, for the width of leg at the bottom, and draw Line 2. From the bottom of Line 1 measure up the length of the inside measure and make $\operatorname{dot} A$. To find the width of the front on the seat line, measure from Dot $A$ to the right one-half of the seat measure minus three-fourths of an inch and draw Line 3. From the top of Line 1 measure out to the right onefourth of the waist measure minus one inch, to obtain the width of the top, and draw Line 4 . Draw Line 5 from dot $B$ to the end of Line 2 for the inside seam. Make a dot one-fourth of an inch below the junction of Lines 1 and 2, and draw a line from this dot to the junction of Lines 2 and 5. This is to give a slant to the bottom of the pant. Extend Line 1 to the dot below.

Also make a dot one-fourth of an inch above the right end of Line 4 and draw a line from this dot to junction of Lines 1 and 4 to give a slant at the top. Draw a curved line from the last dot to dot B and mark it Line 6. (See Fig. 1.) This completes the draft for the front of pant.

## DRAFTING BACK OF PANTS.

Measure in one inch from the left edge of the paper and down three inches from the top and draw a line the length of the outside measure and mark this Line 7. From the bottom of Line 7 measure out to the left and draw a line and mark it Line 8 . From the right end of Line 8 measure to the left three and one-half inches and make dot C . From dot C measure out to the left one-half of the knee measure plus one inch, for the width of the leg at the bottom, and make dot D .

From the bottom of Line 7 measure up the length of the inside measure and make dot E. Measure to the left of dot E two inches and make dot F . To get the width of seat, measure out to the left of dot $F$ one-half of the seat measure plus one and one-half inches and make dot G, and draw Line 9 from dot F to dot G . Draw Line 10 from dot C to $\operatorname{dot} \mathrm{F}$, and Line 11 from dot $G$ to $\operatorname{dot} \mathrm{D}$. Line 10 should be the length of the outside measure so continue it until it is that length and so it will touch Line 7, and make
a dot at the junction and mark it dot H. From dot H measure out to the left one-fourth of the waist measure plus two inches for the width of the top and make dot l. Draw a curved line from dot $G$ to dot I and curve on up to a point about three inches above dot I and mark this Line 12. Draw Line 13 from dot H to the end of Line 12.

Make a dot one-fourth of an inch below dot C and draw a line from this dot to dot D and extend Line 10 to the dot below. When drawing Line 10 from F to H , allow for flap as indicated. (See Fig. 2.)

Cut the pattern allowing for seams on Lines $1,5,6,10$, 11 and 12. Allow for hems at the bottom and a seam's width or more at the top. Fit the back of the pant with a dart in the center of each piece. Sew up the inside seams and stitch them flat on the right side; sew the inside seams of each leg, then joining the inside seams at the seat line, baste and stitch the front and back seams, then press well and stitch on the right side. Hem the bottom of each leg portion and finish the placket with a facing. Sew a band on the inside at the top for the buttonholes, to fasten to waist. The band can also be joined to the pants between the buttonholes.

If the pants are to have pockets they must be put in before the seams are basted and stitched. First stitch the darts in the back portions, then cut them so the seams can be pressed flat. Mark where the pockets are to come and run a colored thread along the mark so that it is visible on both sides of the material. Cut a piece of the cloth two inches wide and one inch longer than the pocket mark and baste it with its right side facing the right side of the material and in such a position that the pocket opening or mark will run directly through


Fig. 3 its center and leave one-half of an inch at each end. (See Fig. 3.) Baste a piece of canvas the same size as the piece of cloth in the same position, on the wrong side of material. Two rows of stitching must now be put in, one an eighth of an inch above the pocket mark and the other an eighth of an inch below. Do not stitch across
at the ends. Tie the ends of the thread of the stitching firmly, then cut through carefully exactly on the pocket mark with a sharp pair of scissors or a knife, and cut just to length of mark. Remove the bastings from the piece of cloth, and push the ends through the pocket opening and baste around the opening from the outside, letting the loose part of cloth form a cord beyond the stitched edge of the seam, but no more than an eighth of an inch. At the ends the cloth piece may be drawn entirely through the opening and basted flat on the wrong side. Draw the two edges of the opening together with loose overhand stitches and press very thoroughly. (See Fig. 4.)


Fig. 4 Stitch around the opening from the outside as close to the seam as possible.

Cut the pockets from some strong lining about seven inches long and four and one-half inches wide. It will require two of these pieces for each pocket and leave one piece an inch longer than the other. Place the two pieces of the pocket together in such a position that they will hang straight. Face the top edge of the longer piece with a piece of the cloth two inches deep and stitch at its lower edge to the pocket. Cut the lower corners of the pocket rounding, trimming both portions alike. Now place the shorter pocket piece on the inside of the garment so that its lower edge will extend toward the top of the garment and its straight edge one-half iach below the pocket opening and on a line with it. Baste this securely in place and stitch from the outside across the straight edge only of pocket. Remove basting and turn this piece down so that its rounded edge will extend toward lower part of garment. Place the longer pocket portion over it with the two rounded edges together and with the facing on longer piece toward the cloth of the garment. Baste this in position to the top of pocket opening and stitch from outside close to the seam, as on the lower edge. Now turn in the edges of the two pocket pieces and stitch all around. A button hole bar is put in to stay the ends of the pockets.

If the pants open down the front, the opening must
be faced with fly portions. Cut a piece of lining the length of the opening and about one and one-half inches wide and shape it at lower end by the front portion. Baste this on the outside of the front edge of the left front portion and stitch along the edge. Turn the facing over to the wrong side, allowing the cloth edge to extend over far enough to conceal the lining, and baste in place. Cut two more facings like the first one, one of the cloth and one of the lining. Stitch together on the same edge as the first facing was stitched. Then turn, and baste it firmly and stitch on the edge to hold it flat. This piece is basted in place on the under side of the left front portion with the edge of the piece just a trifle under the edge of the front. The lining of this piece is placed next to the material. The buttonholes may be worked in this fly piece now or after it is stitched in place and are worked from the cloth side, the first one to come just below waist band. A row of stitching one-fourth of an inch back of the buttonholes and through both outside and flypiece will hold it in place against the facing of the left front portion. Overcast the raw edges at the inside.

Cut two more fly facings, one of lining and one of the material and sew together at the outer or rounded edge. Place the right side of the material to the right side of the right front portion, sewing the curved edge of the cloth only to the pants. Press the seam open and turn in a narrow edge of the lining and baste down over this pressed open cloth seam, and make a row of stitching on the front portion close to the seam which will hold the facing in place. There should also be a row of stitching on the other edge of this extension fly piece to hold it and its facing together. Buttons are sewed on this piece to correspond with the buttonholes in the fly. The leg portions are now stitched up the seams, pressed open, and the bottoms hemmed.

## CHAPTER 22.

Stitches. Basting, running, back-stitch, overcasting, over-handing, hemming, cat-stitching, feather-stitching, hem-stitching. French hem, French knots, buttonholes, eyelets, loops, sewing on buttons, button molds,

## SEWING STITCHES.

In sewing as in embroidery the beauty of the work depends largely upon the smoothness and evenness of the stitches. Uniformity in length of stitches and straightness of line are of the utmost importance. The mistake is often made of using a needle too large and thread too coarse for the material, and vice versa. Do not use a long thread, and to avoid knotting and tangling, thread the needle with the end that hangs from the spool. After threading, make a knot at the longest end by twisting the end of the thread once and a half around the first finger of the left hand, then roll downward on the ball of the thumb, twisting once or twice and slip off and draw down to the end of the thread with the middle finger.

The stitches commonly used are the basting running, overcasting, overhanding, hemming and cat-stitching.

BASTING-There are two kinds of basting stitcheseven and uneven. Even basting is made by passing the
needle over and under the material making the stitches of equal length. (See Fig. 5.)


Fin. 5


Fig. 6


Fig. : In uneven basting the stitch and space are not the same length. The stitch that is taken up on the needle is shorter than the space covered by the thread. (See Fig. 6.)

RUNNING-Running stitches are made just like the even basting stitches only smaller.

BACK-STITCH - To make a back-stitch, take a short stitch on the upper and a longer one on the under side, and bring the needle out a stitch in advance. Continue by inserting the needle to meet the last stitch, passing it under the material and out again. Stitch in advance. Continue by inserting the needle to meet the last stitch, passing it under the material and out again a stitch in advance as before. Fasten at end by taking two stitches over the last one made. (See Fig. 7.)

Overcasting-When taking this stitch the needle should always point toward the left shoulder. Hold the material loosely in the left hand and make the stitches about one-eighth of an inch in depth and one-eighth of an inch apart, and keep the spaces even between the stitches. (See Fig. 8.) This stitch is used to keep raw edges from raveling.


Fig. 8

OVERHANDING-The overhand stitch is used for seaming two edges together, usually to selvedges. Baste the two edges together first, then hold the material loosely in
the left hand, having the edges between the thumb and fore-


Fig. 9 finger, and place the needle in from the back and let it point toward the shoulder. Overhand with close stitches over and over the edge, taking up as little of the material as possible and making the stitches of equal length and depth. (See Fig. 9.) When the material is opened the edge or seam must lie perfectly flat and not form a cord.

HEMMING-A hem is a fold of goods turned down and folded over to conceal a raw edge. Always turn the hem toward you. Crease the raw edge over one-fourth of an inch with the thumb and forefinger. To get the hem equal in width, cut a piece of cardboard the width the hem is to be, and place the end of the cardboard at the turned edge and mark the desired width by putting in pins, or colored thread. Move to left and continue marking until hem is marked all the way, then fold the material on the marking, and baste it down first. The hemming stitch is a slanting stitch and is made by holding the hem across the forefinger of the left hand and placing the needle in it so it will point toward the left thumb. Take up one or two threads of the cloth and also catch the fold of the hem at the same time. (See Fig. 10.) It is very important to have the stitches slant in the same direc-


Fig. 10 tion and of uniform size.

CAT-STITCHING-Cat-stitching is a small stitch used to hold the various edges in dressmaking, especially the flannel edges. Place the pieces of the flannel together and make a seam. Trim off one edge of the seam and press the other edge down to cover the seam. Insert the needle under the flat seam at the upper left hand corner, then cross to the edge below and take a small stitch a little to the right through all the thicknesses; cross again to the top and insert needle as before, taking a similar stitch, always pointing
the needle to the left. (See Fig. 11.) Flannel seams may also be pressed open and each side of the seam cat-stitched. (See Fig. 12.)


Fig. 11


Fig. 12

FEATHER-STITCHING-Feather or brier-stitching is often used in fancy and embroidery work as well as in sewing. To make this stitch bring the needle and thread up through the material, which should be held over the left forefinger. Take a short slanting stitch, bringing the needle out over the thread which is held down by the thumb. Take the second stitch on
 the opposite side, pointing the needle towards the line on which you are working. Two or more stitches, instead of one, may be taken


Fig. 13 on each side. (See Fig. 13.) The beauty of feather-stitching depends upon the uniformity of the stitches.

HEM-STITCHING-Measure from the edge of the material twice the width of the hem wanted and with a needle or pin pick out one of the threads, being careful not to break it if possible. The chief difficulty is in drawing the first thread. From four to six threads should be drawn, depending, of course, upon the texture of the fabric. Turn the hem, creasing the edge one-eighth of an inch, and baste it even with the threads drawn. Fasten the thread in the hem and take up an even number of the cross-threads. Draw the needle through and take one stitch in the hem, being careful not to take the stitch too deep. Repeat this until hem is finished.

FRENCH SEAM-This is made by joining a narrow


Fig. 14
of the first seam. (See Fig. 14.)
FELL SEAM — A
fell is a seam hemmed down to conceal a raw edge. It is made by trimming off one edge of a seam very close to the stitching and turning the other edge down flat to cover the short or raw


Fig. 15 edge; press hard with thumb, then baste and hem. (See Fig. 15.)

FRENCH HEM-First crease a narrow turn on one edge of the material, then a second. Hold the wrong side towards you and fold


Fig. 16
table linen. (See Fig. 16.) the hem back on the right side and crease the material; overhand the folded edges together with very short stitches. Open the hem and crease with thumb. This hem is used in hemming

FRENCH KNOTS-Draw the needle and thread through the material to the right side and take one very short back stitch. Hold the needle in the right hand, and with the left take hold of the thread near the material and twist the needle around the thread three or four times. Then put the needle down through the material close to the point at which it was brought up. Hold the thread firmly near the cloth so that it will not untwist or knot while being drawn through. The size of the knot will depend upon the nurnber of times the thread is twisted around the needle. These knots make a very effective trimming on dresses for children. They are used chiefly in embroidery work.

BUTTONHOLES_A buttonhole is an opening or slit cut in a garment to hold a button, and the edges are worked to prevent ravelling. Always cut it straight by a thread of the material. The edges are usually barred with the thread or twist used in making the buttonhole. This is done by putting the needle in from the wrong side at the lower right hand side of the hole. Draw it up through the length of the thread and carry it to the next end and form a bar by taking two stitches, then go back to opposite end and take two stitches. Begin working the buttonhole at the corner or starting point. Insert the needle from the wrong side through the hole, and while it is pointing toward you, bring the double thread that hangs from the eye of the needle around under the point of needle and draw the needle through the loop thus formed, drawing the thread up tight and letting the purl come just to the edge of the slit. Skip two or three threads of the material and take another stitch, and so on.

When one side is completed, take the stitches around the end in a curve and repeat stitches on the other side. When the last end is reached, bar the end and work the stitches over the bar stitches to fasten the end of the thread. The distance apart and the depth of stitch taken depend entirely upon the material. When making buttonholes in goods that fray out easily it is well to overhand each edge of the slit before working the hole; especially is this true when making a buttonhole in a bias piece of material.

EYELETS-An eyelet is a round hole made and worked in a garment either for a button or cord, the latter being
used when the garment is fastened by lacing it up. The eyelet is made with a stiletto or bodkin. Hold the hole over the left forefinger of the left hand. Overcast it closely with buttonhole twist, drawing the stitches firm to tighten the edge of the hole and to keep it open. Use the buttonhole stitch and instead of drawing the purl to the edge of the eyelet, let it come to the outside, as the purls would soon fill the eyelet up. However, the eyelets may be made large enough at first to allow the purls to come to the edge as in a buttonhole.

LOOPS-A loop is used to take the place of an eye. Mark the places where they are to come opposite the hooks. Insert the needle from the wrong side and bring it up through the material. Make a bar of three stitches one over the other about one-fourth of an inch long. Work these closely with the buttonhole stitch from right to left, letting the purl come over the lower edge of the loop; fasten on the wrong side.

SEWING ON BUTTONS—Use a coarse thread and msert the needle from the wrong side and bring it up through the material and into one hole of the button and draw it down in place. Lay a pin across the button and work the stitches over the pin. If there are four holes in the outton, turn the pin a little and sew across the other holes. After the button is sewed on firmly, remove the pin and pull the button from the material as far as possible; wind the thread around the button several times and pass the needle to the wrong side and take several stitches to fasten the thread.

BUTTON MOULDS-To cover button molds cut a cireular piece of the material and gather it around its edge by whipping it over and drawing the thread up and place the mold inside of this. The piece must be cut small enough at first so that its edges will not quite meet after the mold is put in or it will look too bunglesome. Overhand the edges together and fasten thread securely. A small facing may be whipped on to conceal the edges and stitches.

## CHAPTER 23.

Bias Bands and Folds, Circular Flounces, Graduated Circular Flounces, Circular Yoke, Girdles, Cording, Shirrings, Tucked Shirring, French Shirring or Gathers, Ruching, Pinking, Mode of applying Shirred Trimmings, Single Side-plaits, Single Box-plaits, Double box-plaits, Applying Fur Trimming.

## BIAS BANDS AND FOLDS.

Bias bands, folds and ruffles are used so extensively in dressmaking that it is very desirable to know the best and quickest way of cutting and making them accurately. Spread the material of whatever the bands are to be made, smooth upon a table and mark up four inches from the lower left hand corner on the left selvedge, and also mark four inches to the right of the left corner. Using a yardstick or ruler, draw a line with chalk or pencil from one mark to the other. From this line mark the desired width for the bias strips and draw another line through these marks. Continue marking off from last line made each time until you have a sufficient number marked off. Cut through the lines and join the ends together neatly and accurately. Make the seams diagonally, not straight..

Bias folds are used in many instances and for many purposes and are made of various widths. The milliner's fold is made by turning the top edge over one-half inch.

The lower edge is then turned under a seam's width and is brought up to within one-fourth or one-eighth of an incir of the top edge. (This is decided by the size of the fold being made.) When several folds are put on a garment the lower ones are made plain by folding each through the center lengthwise, bringing the two raw edges together. Turn the raw edges in toward the inside in a narrow seam and baste along close to the edge. The milliner's fold is put on at the top by slip-stitching it on.

When applying straps to seams on a coat avoid, if possible, placing the joinings of the straps in a prominent place; it is better to waste a few inches and discard the piece with the seam in it. To make straps for a coat cut them about one and one-fourth inches wide; fold evenly through the center lengthwise, right side out and overhand the two raw edges together with coarse even stitches. Flatten it out so that the row of overhanding will come in the middle of the strap and press well on the wrong side. Baste it over the seam on coat and stitch near each edge through both strap and coat.

When making crepe folds cut them straight across the goods, if possible, as this will show the crinkles running diagonally. When cut bias the crinkles will run straight and the effect is not so good.

## CIRCULAR FLOUNCES.

To cut a circular flounce, cut a circle of paper whose diameter will be thirty-four inches. To do this properly spread out the paper on a table, place the end of the tapeline in the center of the paper and hold it there with the forefinger of the left hand. Then stretching out the tapeline with your right hand, hold your pencil at the twenty-six inch mark and make a circle carrying the tapeline clear around with the pencil and letting it revolve under the forefinger at the center, but holding it in one place. Now holding the end of the tapeline in the center again, place the pencil at the thirty-four inch mark and make another large circle. Cut in the twenty-six inch circle mark, and you vil have a pattern for an eight-inch circular ruffle. Cut this into halves and lay one straight edge on a double fold of the goods and cut out. This will necessitate piecing the
goods, but piece it on the straight always. It will require two of these for the entire flounce.

## GRADUATED CIRCULAR FLOUNCE.

Use a seven-gore skirt pattern and lay all the gores out on a piece of paper, having the front edge of the first side gore touch the back edge of the front gore, and the front edge of the second side gore touch the back edge of the first side gore, also add back gore in same manner to second side gore. Now arrange the bottoms of each gore so there will be a small space between them, and pin the gores down in a number of places. Draw a circular line around the bottom from the front to the back gore. Measure up from the bottom of the front gore the width you wish the flounce to be at that point and mark it, also measure up on the back edge of the back gore the width you wish flounce to be there and mark it. Begin at the mark on front gore and draw a circular line, gradually increasing the flounce in width until the mark in the back gore is reached. Trace the line just made and remove the gores and cut in traced line. Lay the pattern with its front edge on a fold of the goods and cut. This flounce may also have to be pieced.

## CIRCULAR YOKE.

Place the shoulder seam of the front to the shoulder seam of the back so that the neck line will be one continuous line, and lay these on a piece of paper. Trace around the neck curve in both front and back and also down the front and back the width you wish the yoke to be. Remove the drafts and cut out the neck curve and round it at the bottom. If yoke is to open in front lay the back edge on a fold of the goods; if it is to open in the back lay the front edge on a fold. If you wish to make a circular yoke of bands and trimmings to run around, baste them on to the paper pattern, shaping them as they are basted. The bands or trimmings, whatever they may be, will have to be fastened together with fancy stitches.

## GIRDLES.

The foundation or form for the different styles of girdles can be purchased so reasonably that it saves a great
deal of time to purchase them already made up. However, if you prefer to make them, use a bias piece of canvaz, cuiting it the shape and width you wish the girdle to be. Stitch a small dart under each arm and probably in the center back to make it fit at the waist line. Then fit it to the form or figure and open and press the seams. Stitch featherbone in the front, back and uade. each arm on the seams. Cover the edge of the canvas with the material and the girdle is ready to be draped.

## CORDING.

Cording is made of bias bands about three-fourtins of an inch wide, with a cord placed in the center and the goods folded down over it and basted close up to the cord. Rows of plain cording are made by folding over the material at the desired places, putting the cord in position and sewing along with short stitches close to the cord. Make as many rows as you wish at regular intervals. The cord may be any size desired. Be very careful not to let it twist when basting it in.

To make shirred cording first mark the distance apart the rows are to be, if more than one row. Then put the cord under the material at each line of marking and sew them as in plain cording, being careful not to catch the cord. The desired number should all be run in, then the threads drawn up together, being sure that the cord is drawn up evenly at the same time.

## SHIRRINGS.

There are many different styles of shirring, the one most commonly used being the straight plain shirring. If more than one row is used, they should all be marked first. If the material is too thin and flimsy to be marked, run a colored thread in, which can be removed after the shirr thread has been put in. Do not use very fine thread or silk because it will knot and break. Make a large knot at the end of the thread before starting so it will not pull through. Leave a long thread at the end of each row.

## TUCKED SHIRRING.

This is made by making a tuck any width desired and shirring it. They may be put in singly or in clusters. Great
care must be exercised in the marking of these tucks as any unevenness whatever in the shirring mars the effect entirely. Tucked shirrings of this character can be shaped to accommodate almost any pattern by drawing up or letting out the threads. If necessary, the thread of the first tuck may be much shorter than the last, if a curve is being formed. Tucked shirring somewhat resembles cord shirring, only it has a softer appearance.

## FRENCH SHIRRING OR GATHERS.

These are made by taking a succession of small stitches on the under side and longer ones on top. These stitches must all be kept the same length as when begun to insure evenness. Three rows are usually made and the stitches in each row must come one below the other to draw up properly. This method is particularly desirable for heavy material and is used when adjusting a quantity of material to a comparatively small place, as is sometimes used at the back of skirts.

## RUCHINGS.

Ruchings are made fuller than ruffles and before they are gathered they should measure about twice the length of the space they are to cover. They may be cut straight or on the bias. When making them of chiffon or net cut them on the straight. Cut as many strips as desired and join them with seams. They should be about two inches in width. Fold the top edge over one-fourth of an inch, bring the lower edge up to the center of the strip and fold the top edge which has been turnd under, over it. This brings both edges to the center so that no raw edge remains. Shirr through the center and the ruch is formed.

Single ruchings of silk or woolen materials are cut in bias strips about two inches wide, seamed together and pinked on each edge, and either plaited or shirred through the center. In cotton goods they are hemmed on each edge with a very narrow hem.

There is also a three-tuck ruching which is made by cutting the strips six or seven inches wide and seaming them together. Then fold through the center likewise and mark along this fold. Open it again and bring the top edge to within one-half inch of the center fold or mark; also
bring the lower edge up to within one-half inch of the fold. Fold through the center again where it was folded at first and shirr it along one inch from the center fold. When the shirr is drawn up there will be a ruche with three tucks even in width.

## PINKING.

Pinking is used either on bias or straight materials, but the former gives much better results. It is done with a pinking iron which should be very sharp. They come in different sizes and patterns.

The edges to be pinked should be folded together with several folds of the goods and basted securely together. If the material is heavy only two or three thicknesses must be cut at one time, but in thin, soft materials several thicknesses can be cut. Place the material on a block of wood and holding the pinking iron in position and strike it very hard with a hammer, being careful to hold the iron level so it will cut through all the thicknesses. Do not raise the iron until you are certain it is all cut, which may be ascertained by slightly pulling the edge which is to come off. If it does not come readily give the iron another stroke. Continue until the end is reached.

## MODE OF APPLYING TRIMMING.

Before shirring any material always divide it into fourths, making marks at the division points; also divide the place where the shirring is to be applied into fourths. Then use a thread at least long enough to shirr one-fourth of the material each time, and when applying the shirring to a garment, pin the quarter marks of the shirring to the quarter marks on the garment and adjust the gathers evenly between each two quarter marks, letting the seams come in as inconspicuous places as possible, and baste it. It may then be stitched or fastened down by hand. Fasten the ends of each thread securely and clip off any extra length.

## SINGLE SIDE PLAITS.

Single plaitings require about three times the length of space where it is to be applied. The plaits are usually cut on the straight of the material and are any length desired. One edge should be hemmed before plaiting. If you chance
to have a plaiter, follow the instructions which accompanied it. If done by hand begin at the hemmed edge and lay the plait the width wanted and baste as you proceed to the other end, with small running stitches right on the edge of the plait to hold it down firmly so that when pressing, the edge will not turn up. Keep the edge of the plait on a straight thread of the material. Lay the next plait in the same manner, allowing it to come right up close to the plait just laid, and continue until the plaiting is finished. If the plaits are very wide more than one basting thread will have to be put in. It is then pressed. Lay the plaiting on a pressing board or table with the wrong side up; wring a piece of muslin out of water as dry as possible and spread over the plaiting. Use a hot iron and press until the muslin is perfectly dry. Do not try to press very fast or the plaits will twist and wrinkles will be pressed in them. In such a case the muslin will have to be redampened and the wrinkles pressed out. Always use a fine thread when basting the plaits in as the bastings are not removed until after the pressing is done and coarse thread will often leave marks.

## SMALL BOX-PLAITS.

Single box-pleating also requires about three times the length of space it is to cover. It is made by first turning a side plait, then reversing and turning an equal sized plait in the opposite direction, bringing two single side plaits facing each other on the wrong side. These are pressed in the same manner as single side plaits.

## DOUBLE BOX-PLAITS.

Double box-plaits are made like single box-plaits only two side plaits are laid one over the other, the lower one extending out a little wider than the top one. Let the center fold on the under side extend to the center of the plait. If three of these side plaits are laid they are called triple box-plaits. Double box-plaits require about four times the length of space to be covered and triple box-plaits require six times the length of space. These plaits may be laid solid or with spaces.

Ruchings are frequently made of the double and triple box solid plaitings, and either hemmed or fringed on the edges and stitched through the center.

Plaitings are applied on underskirts in different ways; sometimes the raw edge is basted to the garment and then covered with a bias strip or seam covering; sometimes they are made with a heading of their own by turning the edge over at the top before the plaiting is done, and then stitched on. Another way is to measure up from the bott:)m of the skirt three-fourths of an inch less than the width of the trimming to be applied, and mark this width all around with a colored thread. Place the plaiting on the skirt with its right side toward the right side of the skirt and its lower edge toward the top of skirt and its upper edge even with the mark which was made with the colored thread. Baste and then stitch. Remove the basting and let the ruffle or plaiting fall over. This may be restitened at the top after the ruffle is let down, though this is not necessary.

APPLYING FUR TRIMMING.
Applying fur trimming is not a very easy matter, especially to one inexperienced in that line. Use what is called a glover's needle, and heavy glazed thread or buttonhole twist. The trimming is usually sold in liands of different widths. When necessary to join the widths turn the pelt side up and push the fur away as much as possible and join with an over and over stitch. When cutting collars and revers from the fur piece, first tack the fur to a board with the pelt side up, stretuhing it well. If the pelt seerns hard and dry dampen it to make it soft and pliable. Lay the pattern on and outline it with crayon or pencil. Then use a sharp pen knife and cut through the pelt only. If there is a weak place in the skin it must be drawn together before it it stretched upon the board. When joining pieces of fur be careful to have the hairs run the same way in the different pieces. Apply fur trimming to the cloth with a close hemming stitch. Hold a piece of cardboard next to the fur and close to the edge where it is being applied and the thread will not twist and knot up with the fur. The cardboard can be moved along as it is sewed.

## CHAPTER 24.

Fitting up a Dressmaking Shop. Location. Room, Space, Reception room, sewing room and fitting room. Furnishings. How to Construct a Form for one's own use.

## FITTING UP A DRESSMAKING SHOP.

The first thing to be considered in opening up a dressmaking establishment is the location. As it is to be a business concern it should be located where you will get the most business, and where it is most accessible. Unless one has a large capital with which to start, it is better to avoid the strictly business part of the city because of the high rents usually charged in those parts, and locate nearer the residence district.

The next thing to consider is your room space. In many cases you will have to take just what you can get, but by a little planning and ingenuity on your part, you can arrange it so as to meet all the necessary requirements. Select one large, airy, light room, or a suite of three rooms. In the former, you can curtain it off into three divisionsa reception or office room, a fitting room and a sewing room. Or, you may have a carpenter partition off the space for you, using cheap ceiling lumber and extending the partitions only a part of the way up. In the reception and fitting rooms put neat white swiss sash curtains at the windows.

Make your reception room or office as cheerful and home-like as possible. The furniture, of course, will depend upon the amount you wish to spend on it. A rug, a table well supplied with fashion magazines, two or three rocking chairs and a few pictures on the wall, including your diploma, are all that are necessary in this room.

In the fitting room you will need only a full length mirror, a small table and one or two chairs, and a goodsized footstool up on which your patron can stand when measuring length of skirt.

The sewing room is the most important of all, as this is where you will spend the greater part of your time and where the bulk of the work is done. Too much care and judgment cannot be exercised upon the arrangement of this room. Above all, have all the daylight you can possibly get, as the best results in sewing are to be obtained only in good daylight. Next to light is convenience. Arrange all the furnishings of this room with the object of having everything as convenient as you can. One machine may do for a while, but you will probably need two or more soon.

There should be at least two long tables in this room; one should be high enough to draft and cut the patterns and material without having to bend over; the other should be low enough to sit at and sew. Both tables should be well supplied with drawers in which to keep all the accessories, such as the un-cut materials, linings, canvas, trimmings, unfinished garments, etc.

Provide each helper with an easy chair and a work box containing scissors, basting and sewing thread of the different colors, needles, hooks and eyes, tapeline, tailors' chalk, emery, lapboard, etc. Avoid having them to get up and look for all these things, as it takes time and provokes worry. You will need about three press boards-a waist board, sleeve board and skirt board, all of which should be padded and covered with heavy muslin.

The waist board should not be very wide and not necessarily over two feet long. The sleeve board is a narrow board, wider at one end than at the other. The skirt board is a long common ironing board, over which the skirt can be easily slipped and the seams pressed. This board may answer the purpose also of the other two boards. Two
small irons and one large one to press heavy material are needed. Several pieces of muslin should be provided, as they are sometimes needed in pressing, as explained in a former chapter.

Several simple bust forms may be needed, or one of the adjustable forms, bust and skirt combined, will be all that is necessary for a while. Besides the shears for cutting and trimming you will need one or more pairs of buttonhole scissors. Keep them all sharp. Do not depend upon newspapers in which to send out the finished garments. Buy a roll of wrapping paper and have it attached to one end of the table. You will need this also in drafting patterns. On one side of the room tack a strip of muslin about two or three inches wide to pin the different garments to as finished. Don't throw them over the back of a chair or on a table where they will become wrinkled.

When drafting patterns notice if your tapelines correspond with the yardsticks in length of inches. Tapelines often draw up and this will cause a great deal of troable. A carpenter's square is a very handy device in drafting and will shorten the labor quite a little.

## HOW TO CONSTRUCT A FORM FOR ONE'S OWN USE.

Where family sewing is done in the home it is almost as important to have a dress form as it is to have a machine, and one may be constructed at much less cost than the boughten ones and will answer the purpose quite as well.

Cut and seam a lining of some very strong duck or drilling crossways of the material. Use the darts in front and the forms in the back and cut it at least six inches below the waist line. Use the measures of the person for whom you are sewing, so that every curve and line will conform to her figure in its proper place. Fit the lining on the person as carefully and perfectly over the hips as any part of it. Stitch the seams with very coarse thread to make them stout. Stitch up the center front line, leaving a space in the middle large enough to admit the hand and fill the lining with bits of cloth and cotton. The latter is better, but requires a large quantity, as it must be made very solid. This will take lots of time and patience, for the stuffing must be done evenly and smoothly in order to bring
out the curves. Cut a piece of cardboard the size of the neck and two inches wide and fit inside the neck of the lining. Glue it to the lining. Use a stocking leg to form the arm. Take a large dart in it at the elbow point to form the bend at the elbow. Stuff this until it is the same size as the arm, and make it the same length as the arm. Sęw it in the armhole of the lining. Be sure there is enough stuffing at this point. Since the form is now perfectly fitted to six inches below the waist, the skirt can be fitted also. Place the stuffed lining upon a standard or pole of son:e sort, having it arranged so the skirt will hang freely. If a bustle and hip pads are worn, remember to place them on the form also when fitting the skirt.

Papier mache forms, such as are seen in stores for displaying goods upon, can be purchased at a slight cost, and by putting the fitted lining over this and stuffing it out where necessary, saves a great deal of time. Where there are two or three in family to sew for it is better to purchase one of these forms, having the bust measure correspond to the bust measure of the smallest person. Each one will need a fitted lining, then when using the form put on the lining needed and stuff it up. In this event, do not stitch the center fronts together before putting it on the form, but overhand them together after the lining is on the form, leaving a space in the center large enough to put in the filling.

These forms are very useful for pinning on trimming and laces, etc., to enable one to see the effect, and also in designing and planning a costume.

## CHAPTER 25.

Jionschold Recipes. Washing fannels and blankets. Low to wash an incant's underwenx. How to clean and Keep Lace. Cleanirg Delicate Fabrics. To restore the finish to old goods. To make old black Cashmere look new. To restore color to faded ribbons. Washing cotton goods without fading. To restore color destroyed by acid. Cleaning velvets. Cleaning kid gloves.

## HOUSEHOLD RECIPES.

WASHING FLANNELS.
As one wash is sufficient to ruin flanneis, unless the work is done in a proper manner, particular attention should be given their first launder. If this is done properly they will not be apt to shrink so much later on. The secret of washing flannels is to have the changes of water of the same temperature and never to rub soap or anything directly on the garment. Keep the temperature of the rvater the same throughout the entire process, as sudden changes from hot to cold will shrink any woollen fabric. Flannels should have a clean suds prepared especially for them and should be well shaken before being put in water to free them from lint and dust, and the water must be warm, but not boiling, as flannel shrinks when put into boiling water. Stir two tablespoonfuls of a good washing powder in a quart of lukewarm water until a strong lather is produced
and pour this into a tubful of water of the same temperature lefore the flannels are put in. Lay the flannels in the suds and cleanse by lifting up and down and rubbing with the hands. From this water lay them into a second pre pared exactly like the first and of even temperature. Rinse well in this and lay them in clear, warm water. Wring through the ciothes wringer, pull and shake well and dry in warm temperature. While drying, shake, stretch and turn them several times and they will keep soft without shrinking. If possible press before perfectly dry, but after they are dry a damp cloth should be placed between the iron and the garment.

Blankets are washed in the same manner, though, of course, they are not ironed. All work of this kind must be done rapidly, for the chief point in washing flannels is not to let them lie in the water a moment longer than necessary. The fumes of a lighted match of the old-fashioned variety will bleach out the remnants of stains in many instances in flannels.

HOW TO WASH AN INFANT'S UNDERWEAR.
The baby's underwear should be of flannel, as soft and fine as the means at hand will permit, and kept in the best possible condition by washing it properly. If washed carelessly they will shrink and be so rough that they will irritate the tender flesh almost beyond endurance.

The following method has been used successfully for years and the little garments retain their soft, fleecy look until worn out: Use water that is as hot as you can bear your hand in comfortably to cleanse and purify the garments. Dissolve a little borax in it and add enough soap to make a strong suds; wash the flannel through two waters prepared in this way--plunging up and down and rubbing gently between the hands. Do not rub soap on the flannels, as this will thicken the texture. Rinse through clear water of the same temperature as that used for washing, and pass them through the wringer. Pull and stretch each in shape before hanging out. This is quite important, as the tiny wool fibers interlace, causing them to become hard and shrunken, if neglected. After drying, spread them on the ironing board, cover with a damp cloth and iron over this, pressing down heavily. Do not have the iron too hot.

## HOW TO CLEAN AND KEEP LACE.

Lace should never be rubbed hard, for this will break the delicate threads and destroy its beauty. Fill a largemouthed bottle half full of water in which a little borax has been dissolved. Dip the lace in water and after rubbing soap on it put it in the bottle and set it on the back of the stove or some other place where it will keep warm. Allow it to soak ten or twelve hours, shake the bottle up for a few minutes and pour the contents.into a pan or basin. Dip the lace up and down in the water, then squeeze or press it out (never wring it), and rinse through two waters, adding a little boiled starch to the second. Press while it is wet, upon a clean board or marble slab, to dry, placing each scailop staight and smooth. The borax cleanses the fabric without rotting or injuring it in any way.

Another way of cleaning lace is to roll it tightly around a class bottle and fasten it securely. Make a suds of warm water and pearline and allow the lace-covered bottle to soak in this for several hours. Repeat the process in another suds, patting the lace often with the fingers. Rinse in several waters and then dry the lace on the bottle with a soft towel.

To clean lace that is slightly soiled sprinkle some magnesia upon a smooth sheet of writing paper, and lay the lace upon the paper and sprinkle more masnesia over it; cover with another sheet of paper and place a book or some light weight upon the paper, letting it rest for several days. Then take it up and brush the powder out. It will be nicely cleaned.

Laces that are seldom used or worn should be rolled upon strips of dark blue paner to keep them firm without creasing them. Do not fold fine cobweb lace when putting it away; drop it carelessly into a satin-lined box and allow it to remain in the position you place it; do not finger it or move it about.

## CLEANING DELICATE FABRICS.

To remove mildew from any white cloth stir one ounce of chloride of lime into a quart of cold water. After it has settled two or three hours pour the clear liquid off into a bottle and it will be ready for use. Dip the mildewed spots in the liquid and let dry. If one application does not remove
the stain entirely repeat the process. Rinse in clear water.
To cleanse grease from wool or silk, apply a fluid made by dissolving two ounces of white soap and one-half ounce of borax in a quart of warm soft water. Pour a small quantity into a bowl, add the same amount of water and sponge the goods with it. After it is clean sponge with clear water and hang up to dry.

Paint may be removed by washing the spots in turpentine. If the cloth is too heavy to be washed, put two parts ammonia and one part turpentine in a bottle and shake well. Apply this until the paint is softened, and it can be scraped off.

Spots of paint, grease, pitch or oil may be removed from silk or linen by rubbing with purified benzine applied with a cloth or sponge. To destroy the odor of benzine add a little oil of lemon.

Fruit stains may be removed from clothing by pouring boiling water through them. Ink spots may be removed with sour milk, and afterwards rubbed with a piece of lemon on which some salt has been sprinkled. Remove tar spots by putting butter upon them, and then wash out the grease spot with soap and water.

To remove ink from white linen, dip the spots immediately in pure melted tallow, then wash out and the ink will have disappeared. To remove iron rust from clothing mix a teaspoonful of oxalic acid in three tablespoonfuls of hot water and apply to the spots. It will bleach out the rust, and if washed afterward with clean water will not hurt the goods.

Another method is to tie up the spots with a little cream of tartar, and place in cold water and let come to the boiling point, when the rust spots will disappear. Lemon juice and salt are also good for the same purpose. To remove iron rust from linen or cotton, wash the cloth through one suds and rinse. Rub ripe tomato juice on the spot and lay in the sunshine until nearly dry, then wash in another suds.

TO RESTORE THE FINISH TO OLD GOODS.
The fine glossy finish that comes on certain grades of new woollen goods must sometimes be restored to make an article look well. Thus if a stain is made on the goods the
gloss is removed when the stain is washed out. This leaves a dull spot on the material, spoiling the general effect of the whole piece. To restore the original glossy finish the cloth should be laid on the table or other smooth surface and carefully brushed with weak gum water. Dip a clean toothbrush in the water and lay the gum water on carefully and evenly. Then place a sheet of clean white paper over it, and either press it with a lukewarm iron or put a weight on the paper and leave it there until dry. When the cloth is dry the dull spot will have disappeared, and if the operation has been performed successfully there will be no break in the glossy finish apparent to the eye.

To obtain the glossy effect on linen, it is advisable when washing to put a little gum arabic in the starch. Dissolve a half teaspoonful of the gum arabic in boiling water, and when cold add to the starch. The linen will then have a beautiful gloss finish when ironed.

## TO MAKE OLD CASHMERE LOOK NEW.

Soak the goods in strong soft-soap suds two hours; then, having dissolved one ounce of extract of logwood in a bowl of warm water, add warm water to cover the goods, which should be taken from the suds without wringing. Allow the goods to stand in the logwood water over night; in the morning rinse in several waters without wringing. To the last water add one pint of sweet milk, which will stiffen the goods a little; iron while quite damp.

Another method is to wash it in hot suds in which a little borax has been dissolved. Rinse in bluing watervery blue-and iron while damp.

## TO RESTORE COLOR TO FADED RIBBONS.

Add a little pearlash to soap lather, place the faded ribbons therein and their natural color will be restored. Silk colors may also be restored when treated in this manner.

Cloth that has turned yellow from long standing may be whitened by soaking it in buttermilk a few days. White clothing that has been discolored from red calico, or streaks that are often found on napkins or towels, which by mistake have been washed with the white goods, may also be removed by soaking in buttermilk.

## WASHING COTTON GOODS WITHOUT FADING.

Two cups of salt dissolved in ten quarts of cold water is the proper mixture in which to dip cotton goods before washing them. Goods of black and white, slate color, brown or their shades, may then be washed with safety, for the salt sets the colors. After they have been dipped in the solution hang them in a shady place to dry and afterward wash them in the usual way. Calicoes and muslins do not require hot suds and should never be allowed to soak long in the water. Wash quickly, turn the wrong side out, dry in the shade, and always iron on the wrong side with a moderately hot iron.

Very delicate cotton or colored things of any description, silk, or flax embroideries and the like, should be put in bran water with soap jelly and not soap powder or soda, then rinsed in salt and water. To make the bran water, tie up a quart of bran in a muslin bag, boil it and let the water cool until it is almost tepid. Wash the articles thoroughly and quickly, and rinse in cold, salt water, adding a little vinegar if the colors need reviving. Pass through the wringer, hang in the shade, and iron on the wrong side before quite dry. Cretonne may also be washed in the same way.

## TO RESTORE COLOR DESTROYED BY ACID.

First apply ammonia to the spot to neutralize it, after which an application of chloroform will, in almost all cases, restore the original color.

## CLEANING VELVETS.

Lay the velvet on a table or some other smooth surface and apply naptha with a toothbrush to the spots only, brushing it well into the pile and against the nap.

To remove creases in velvets, hold the creased part over a pan of steaming water, or spread a damp cloth over a hot iron and pass the velvet slowly over this, brushing it with a soft brush against the pile. Repeat the process until the crease disappears and until the pile stands up.

Faded plush may be brightened by brushing it very lightly with a sponge dipped in chloroform.

Mud stains on a black dress may be removed by rubbing them with the cut surface of a raw potato.

Kid gloves may be nicely cleaned if you will take the pains and have patience until you learn the system thoroughly. The material to use is gasoline or purified benzine, which is not quite so odorous. Both are highly inflammable, however, and the vapor arising from them is explosive if in reach of fire, so this work should never be done at night, nor in a room where there is a lamp or fire in the daytime. Use a bowl and pour into it enough of the liquid to cover the gloves, wetting them thoroughly. Then smooth one of them out on a clean board and with a soft brush, sponge or cotton cloth, rub them carefully, one way only, from the wrist to the finger tips. If the first bowl of benzine becomes soiled before the gloves are thoroughly cleaned throw the liquid onto the ground and start again with some fresh.

When you finish rinse and squeeze out in the clean benzine until they are as dry as possible, after which put them in the sun to continue drying. Have a clean, smooth stick about a foot long and rounded and tapered like a finger, and over this draw each finger of the gloves in turn, holding it smooth there while you rub it dry with fine soft muslin. When all this is done polish with white French powder and a soft flannel, keeping the glove fingers tight on the stick all the time. Put the gloves on every little while during the drying process, so they will not shrink too small, and when all is done you will be delighted with the results of your work.


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Many women nowadays are earning 8100 a week- $\$ 5000$ a year by dressmaklng. One woman, the head designer of Chicago's largest retail dry goods house, earns 810,000 a year. Balaries of $\$ 25.00$ to $\$ 50.00$ a week are common, Learn dressmaking at home. We teach you by mail and put you in a position te command the largest salary of any woman in your locality, or yon can start in buslness yourself. Become a Graduate Dressmaker. The regular Diploma of the College issued to all who complete this course of lessons. The American System requires no charts or patterns. These lessons will teacn $\bar{y}$ ou how to draft your own patterns and make your own clothes and enable you to dress better at one-third the usual cost. They teach you how to Design, Draft, Cut, Fit, Make, Drape, and Trim any garment, including children's clothing. This College is endorsed by all high grade Fashlon Magazines-Delineator, Designer McCalls, Pictorial Review, New Idea Woman's Magazine, Modern Priscills, Housekeeper, etc.

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## Sunexixan Susten 

## TAUGHT ONLY BY THE <br> Aneritan College,



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## POST-GRADUATE LESSON No. 1

## introduction

Of the many inventions of recent years of devices to aid the Dressmaker in adding to the comfort and appearance of her customer, probably that of Warren's Featherbone as a substitute for whalebone is the most important. Until recently Dressmakers were averse to using anything but. genuine $e_{\text {: }}$. Whalebone, but on account of the waning of the whale. bone industry, the price has so advanced that it is beyond the reach of the majority. We now have a substitute, Warren's Featherbone, which is sold by the yard and is so much less expensive and more satisfactory, that it is used almost universally. The story of its invention and the discovery of the many and varied places of utility in women's apparel awaiting its coming, will prove of interest to every dressmaker.

## THE VARIOUS FORMS OF WARREN'S FEATHERBONE

There are as many different forms of Warren's Featherbone as there are uses to which it is to be put. There are 26 different etyles of Warren's Featherbone for the dress aloue, composed of different amounts and qualities of quill fibers, hence varying in weight and in the degree of flexibility. There are 10 styles of covered and 5 styles of uncovered bone for the waist, 4 styles for the collar, Warren's Featherbone Crinolette and 5 styles of bone for the skirt, and 4 styles of Warren's Featherbone Cord used for cording, piping and shirring.

Dressmakers should be acquainted with all the 26 styles of Warren's Featherbone, and know for which kind of work each style is adapted, and ase the size or style of bone which will give the best results in the work on hand.

The following illustrations show sections of these different forms of Warren's Featherbone.


Skirtbone

Silk Co!larbone


Single-cord Collarbone

Taffeta Ribbon Collarboue


1/4-in. Soft Fiaishing


Standard Grade


No. 2 Grade


3 -cord Tape


Hooiz \& Eye, $1 / 4 \cdot 11$



Double-cord Skirtbone


Tanlor's Bone

5.cord Tape


Quillbone


Twill

H. B. Tape


Cotton


Gros Grain


Prussian


Shellbone


Satin


Moire


Washbone


10 cord Tape

## TO BONE A WIAIST

All dressmakers know that the secret of a perfect-fitting waist is to have it properly boned. As Warren's Featherbone is stitched fast all the way to the seams by machine, it becomes a part of the waist and never pulls out, nor does the waist lose its shape.

SPRINGING IN THE BONES "Springing" is simply stretching the goods so that there is more bone length than seam length; this carves the waist toward the fignre; therefore the amount of spring required depends upon the amount of carve to the figure. The rales given in this lesson are for the average normal fignre.

Be sure to use sewing silk, a very long stitch and medium-sized needle Ali the seams must be carefully pressed and finished before beginning to bone a waist. Straighten the bone by drawing throagh the fingers to remove the curve caused by coiling in the box.

Place the Featherbone wrong side up under the machine foot, pass the needle through the center of the bone, in the center row of stitching, allowing one inch to project back of the needle for finishing the ends. Draw the bone straight toward you, drop the presser foot, then place the doning attachment over the bone so as to guide it onder the needle (as
shown in Fig. 1), securing it in place by tightening the thamb screw. Now raise the needle and presser foot and you are ready for boning. DARTS. Place the waist wrong side up on the machine (as in Fig 2), Begin by boning the first dart. Lay the flatly pressed open seam on top of the bone and boning attachment so that the bone is right in the center of the seam (See Fig. 2). Pat the needle down abont one inch below the


FIG. 1


FIG. 2
top of the dart, close to the seam stitching, crowd the goods (using the forefinger of each hand) up to the needle, lower the presser foot, and cut, being sure the fullness starts ight with the first stitch or from the needle (see arrow, Fig. 2). This is an important point, as it prevents the bone from showing at the top, or cansing a little plait above the top of the dart. Continue crowding to within one inch of the waistline, following the seam stitching very closely, bat never in the same stitching, then hold the


FIG. 3


FIG. 4
seam very firm to the bottom of a short waist. Bone both darts alike.
UNDERARM SEAMS. Begin to bone two inches from the top; crowd the seam for two inches; for extra thin material hold the seam easy to within an inch of the waistline, then spring; for regular weight material, stretch the seam to within an inch of the waistline, then spring the bone by raising the waist baok of the presser foot and pressing it up close against the foot, at the same time holding the seam tight in front to
one inch below the waistline and continue easy to the bottom of the short waist. (See Fig. 3.) For tea gowns, princess gowns, long basques or coats, spring well to the curve of the hips, then crowd the goods toward the needle, giving the curve over the hip and preventing any tendency in the waist to roll up.

BACK UNDERARM SEAM. Be sure that this seam is fitted snogly at the armhole. The next seam back of the nnderarm seam is the important one to be kept smooth its entire length; it is boned the same as the underarm seam. This seam is sometimes boned its entire length, that is, clear to the armhole, and is crowded to one inch above the waistline to prevent the bone from bulging, then sprung the same as the underarm seam. When stitching in the sleeve, stitch right through the bone, then trim the bone down to the seam and finish by fastening the ribbons over the edge of the seam.

THE ROUNDING SEAM. The ronnding, or outside back seam is boned only on its straight length; that is, begin to bone where the rounding or carving ends, proceed as before, crowd the goods to one inch above the waistline, then hold the seam firm.

CENTER-BACR SEAM. Begin one inch higher than the rounding seam, crowd to one inch above the waistline, then hold the seam very firm. The waist is now half boned. Keep on toward the right front of the waist, boning as directed, thus working from back to front on last half of the waist.

TO BONE A LINING. In boning linings the seams will need less springing at the waistline than waists that are lined. If the waist requires boning between seams it should be done before the outside is basted on.

FINISHING BONES AT THE TOP. Yon have allowed on each seam one inch of bone to extend beyond the needle; first, tie the thread so that the stitching cannot rip; rip the center row of stitching out of the extended bone: slip the casing back and cut the bone off one-half inch, ronnding the corners, then turn the casing loosely over the end of the bone and fasten to the bone and NOT to the seam of the waist, thas learing one-half inch of bone loose at the top of each seam.

TO RIP WARREN'S FEATHERBONE from the waist, begin at the top aud with sharp scissors inserted between the bone and the seam, run them quickly down the bone, cutting right through the stitching.

HOOK AND EYE BONE. Take off the attachment, lay the waist right side down on the machine with the front hem opened out, flat. Place the bone inner curve down, thas ; start the bone one inch below top of darts; the bone mast lie just outside of the basting line (where the waist is to turn back on front); take a few stitches at the top of the bone to hold in place, then crowd for about two inches, and stitch plain to the bottom of the waist

WARREN'S FEATHERBONE TAPES are generally used around the edge of the basque or waist instead of canvas, when style requires the use of sach stiffening material. The Three-Cord Tape is ased for light
fabrics and short waists; the Five-Cord for heary materials and pointed basques. You can readily see that the wider Tape would not set well about the short waist.

Place the Tape $\frac{1}{8}$-inch below the ends of the bones which you have trimmed slanting to correspond with the waist edge. Stitch along the upper edge of Tape, being careful to use the Tapeinner c̣urve down, thus $\rightarrow$. After starting the stitching across the darts, take hold of the edge of the waist back of the machine needle, and hold it well toward the right; keep the Tape smooth and stretch the goods a little between back dart and underarm seams, as turning up the Tape to finish brings it to a point where the distance around the waist is less than at the edge, and the Tape should be smooth when folded up This is an important point. Turn up the Tape under the end of the bones, and fell the top of the Tape to the waist lining, then fell on the facing

TO BONE A COLLAR. Four to six bones are used; as best suits the wearer. Two bones are tacked in about $11 / 2$ inches from the center front, two more at a point just back of the ear when adjusted, and one at each end, the bones back of the ears being cut slightly longer than the front bones. Warren's ribbon-covered Collarbone may be used without ad. ditional covering, or a Warren's Featherbone Stock Foundation mas be used as a skeleton collar.

## WARREN'S FEA THERBONE IN DROPSKIRTS AND PETTICOATS.

To bone foundation skirts or petticoats of the ordinary shape, stitch a $1 / 2$ inch bias band, to form a casing, just under the top of a 10 -inch plaiting or raffle and two or more above this about six inches apart. Insert in thess casings Donble-Cord, Three-Cord or Five-Cord Tape, or Skirtbone, according to the weight of the dress skirt. The bone should be tacked at intervals on the edges, to prevent twisting. Should the fonndation be too full, fasten the bone firmly at the side back seam and draw the bone in at the back. If preferred, instead of stitching casings on foundation, the covered Skirtbone (silk or cotton) can be stitched through the center of the bone on to the skirt, being careful to neither stretch nor pucker the skirt daring this operation. Always place Crinolette in the 2. inch hem of the foundation.

## FEATHERBONE IN LATE FASHIONS.

The most marked departure in Fashions in several seasons is the return to vogue of the fitted and Princess styles. The blouse with more or less dip, held sway so long that its position was declared by some invalnerable. Its advocates shrugged with dismay at the idea of the tight boned bodice. Nevertheless, the boned bodice is here, minus the uncomfortable featares of its ancestors and plas many new graces of fit and ontline.

The Princess gown is shown in all fabrics, from sheerest batistes and chiffons to richest silks and velvets. In each and every case its success is dependent on its fit. No beanty of fabric or richness of material can cover ap shortcomings of fit in this mercilessly trathful style. The success of the Princess garment, either the whole dress or the skirt, is very
largely dependent on its proper boning. And Warren's Featherbone in this, as in many other fashions, is the first and sure and only aid to right results.

The dressmaker who understands the method of boning a waist perfectIs with Warren's Featherbone faces this present era of the Princess in fashions withont fear or misgiving. The "new Figare", which is so well bronght out in the new Princess forms, has a gracefully tapering waistline, apparently, if not really, smaller than it has been for some seasons. Every detail that tends to the real or apparent reduction of the waist measarement is counted vastly important to day.

Featherbone is a genuine aid to this all-desired end. With Gros Grain Waistbone, or the splendid Shellbone, a waist is boned smoothly and in most charming lınes Featherbone is stitched firmly to the waist seams, not sprang from them as is whalebone, 'the latter method raising the waist fabric from the bone and thus increasing the waist measurement.

To decrease the apparent size of the waist and keep the proper balance of the hip size, the sleeve tops mast contribute a broad or built-out effect. This effect is sometimes obtained by the arrangement of the trimming; but more often, since sleeves are smaller and plainer, by the use of some of the many forms of Featherbone to give a broad effect. A little cap may be made of the waist lining, with a fine Featherbone cord run in the lower edge. The cord is soft and pliable, yet perfectly resilient. It gives just the desiredextention to the shonlder line withont a hint of stiffness.


Bonillonne trimmings, while introdnced fally a year or so ago, continue high fashion The fine Featberbone Cord is ran in the hems of bands or in tiny casings of silk, and these arranged in any fauciful design desired. The Featherbone Cord naturally arranges itself in most graceful carves and is extremely easy to work with. Lace stitches are often employed in carrying ont the design of the bonillonne, these stitches being done in heavy embroidery silk. Plain, straight cordings, done over fine Featherbone Cords, are extensively used as a trimming this season.

The fitted waist forms make important the Hook and-Eye Bone, which holds the garment smooth and perfectly fitted at its closing seams. Its method of insertion has already been described in this lesson.

## STOCK OR COLLAR FOUNDATIONS.

Never was there a time when stocks or collars played such an important part in woman's apparel as at the present time. There is no end to them, becanse of the fact that the collar nsually wears shabby far quicker than the remainder of the waist. The beanty of these collars depends largely apon the neatness with which they are made.

Warren's Featherbone has made a royal road to satisfactory neckdressing. Featherbone Collar Fcundations make collar making a pastime and collar wearing a joy. Perfectly shaped and accarately fitted collars of fine mousseline de soie are surported with strips of this Featherbone Collarbone and the whole neatly bonnd. Tack your trimming on this foundation and add hooks and eyes if that is your favorite method of fastening.

The lace and transparent collars are wholly dependent on Featherbone for their success, if not for their very existence. The sheerer the foundation, the thinner the supports, the better the effect, says Fashion. Remember that you can sew right through Featherbone; thos the covering may be tacked right to the Featherbcne stays, which then bear all the strain.

Collar Foundations are made in round and pointed styles, in both black and white. They come with or without a Featherbone run in the top and bottom binding. There are different grades, the finest of them stayed with silk covered Featherbone and bound with satin.

No woman who has worn lingerie waists that has not entered against this oharming style one special complaint, namely, that the coilar cramples down and grows massy-looking long before the waist itself shows signs of soiling. At least this is her complaint if she is not thoroughly familiar with the many applications of Warren's Featherbone. She can overcome this difficulty in several ways. She can tack strips of silk-covered Collarbone in the collar at proper intervals, or she may prefer the fashion of tacking in the whole soft collar.

Embroidery, which has taken sach firm hold of every detail of feminine dress this season, will find a very prominent place in neckwear. Here Featherbone Foundations are especially useful becanse the worker may, if she chooses, and she often does, tack her material over a soft Featherbone stock and work the embroidery right through the mousseline de soie and the fine Featherbone also.

A good suggestion is a collar and caff set embroidered on the light-colored cloths, a Japanese pattern being ased, with touches of gold braid. The cuffes should be stayed with Featherbone Taps around the edges, as the flaring turn-back caff invariably loses its smart appearance in a very short time.unless so fortified. Other embroidered stocks have the covering embroidered first, thoroughly pressed, and then tacked to the Featherbone Foundation.
Dainty lace stocks are quickly arranged over the low, soft foundations. Lay together the straight edges of two strips of inch-wide Valenciennes or Clnny lace, and whip neatly, finishing one end straight and the other cornered, to overlap. Tack to the Featherbone Foundation and the collar is ready for wear.

Among the most dainty of the new neck-dressings are the stocks of fine linen, hand-embroidered and lace-trimmed. The linen used is extremely fine but not sheer. The stock proper is adjusted over a Warren Featherbone Fonndation. A long tab end reaches quite below the bast line, broadening out to admit lace medallions,

## WARREN'S STOCK FOUNDATIONS



STYLE 1 Stock Foundation. Washable. Of fine lawn; supports of Warren's Featherbone. No bone in top or bottom binding. Round and pointed


STYLE 2 Stock Foundation. Of mousseline de soie; supports of War. reu's Featherbone. Round and pointed.


STYLE 4 Stock Foundation. Of monsseline de soie; supports of silkcovered Warren's Featherbone Collarbone. Satin bound. Round.


STYLE 5 Stock Foundation. Same as Style 4, but in pointed shape. Finest foundation made.
All Warren's Stock Foundations come in sizes 12 to 16 ; heights $11 / 2$ to $21 / 2$ inches: in black and white.
which are embroidered into place and the hneu cut away beneath with excellent effect. Two little ends of the linen mark the beginning of the long tab. These, the tab and the stock itself are finished in fine buttonhole stitch, with a border of eyelet design. A frill of narrow. Valenciennes edges the tab.

The Featherbone Stock'Foundation 18 worn with the greatest success under any sort of soft neok-dressing, be it ribbon or silk or a fancy stock with tie ends, or a plain stock. Not one woman in a thousand cau wear a stock collar neatly without the help of Warren's Featherbone, and the one who can achieve a neat neck-dressing without it invariably acquires discomfort, becanse she must needs wear her neck-dressing too tight in order to keep it in place.

The Warren's Stock Foundations are made in varying heights, from $11 / 2$ to $21 / 2$ inches. There are the low soft stocks that so many women prefer, and also the extreme heights for the long and slender cecks. A new Foundation is cat to slope well op under the ears, the bones arranged slantwise. This is a collar style much adrocated


Embroidered linen stock over Warren's stock foundation. in Paris.

## GIRDLE FOUNDATION

If you inquire of any one interested in feminine fashions what she considers the most distinctive feature of women's costume in the last year and a half, the answer invariably is, the Girdle.


Taffeta Girdle made over
Sytle 5 Foundation

Warren's Featherbone is the heart and soul of the girdle vogue! It shapes itself closely in to the figure as does no other boning. It is easily worked, as it may be sewed through readily by hand or machine, and in this way, the drapings may be caught at the most convenient point, and always at the point of fastening, which holds the draping stretched firm-a most essential fact in successful girdle effect.

The Princess style which for the past season has been shown by the best desiguers, is an effect easily produced by the skilful use of the girdle. One of the most satisfactory so-called princess gowns shown at a recent opening
was really a two-piece garment, held together in design by a wide lace girdle, the lace lined with chiffon and the whole held smooth to the figure with a boning of Warren's Featherbone. The narrow tape was used for this in preference to the waistbone, and as it was covered over with several folds
 of the chiffon, it was not discernible through the meshes of the lace.

The sash girdres that are so fashionable now in the thin summer frocks are most successfully arranged on the girdle foundations that fasten in the back. The Foundation Style 2 may be laced in the back instead of the front and arrang. ed as a sash girdle; the Style 12 and Style 8 are also excellent shapes for this purpose.
Every one of the Warren's Featherbone Foundations is designed with a definite view of suiting a certain type or style.

The Style 4 is perhaps the general choice, and best gdapted to the average requirements. Style 5 is an extreme corselet effect for the slenderwaisted. The three Featherbone strips in the front hold this girdle in the fashionable straight-front effect. The Style 6 fastens in the back, and is very often draped with some fanciful cross-front arrangement.

Style 8 is a good form for the rather large figure, as it has a good, deep front point, narrow sides and a modest depth in the back. Style $O$ is a back-fastening girdle designed for the short-waisted figure and is modest in all its lines, avoiding the pronounced effect that tends to call attention to any lack of symmetry. Style 12 is a back-fastening girdle of much the same lines as the Style 8 and is well adapted to the general figure.


STYLE 0 Girdle Foundation. For short-waisted figures. Back fastening


STYLE 1 Girdle Foundation. A tape frame; supports of Warren's Featherbone.

sl'YLE 4 Girdle Foundation. Front lacing, pointed above and betow waistline in back.


STYLE 6 Girdle Foundation For medium figures. Back fastening. Deep front point.


STYLE 8 Girdle Foundation. For medinm and stont figures. Back fasteniug. Deep front point.


STYLE 10 Girdle Fonndation. Like No. 4, but without point below waist in back.


STYLE 12 Girdle Foundation Suited to the average figure. Back fastening. Moderate front and back points.

All Warren's Girdle Foundations come in waist measures 20 to 34 inches, in black and white.

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