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COLLEGE OF AGRICULTURE

THOMAS P. COOPER, Dean and Director

Circular No. 116

Elementary Clothing Project

Junior Agricultural Clubs



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ELEMENTARY CLOTHING PROJECT

The purpose of the Elementary project is to better prepare a girl to make her own clothes. The work will consist of putting into practice some of the stitches previously learned, the operation of the sewing machine with the use of the common attachments, and the making of several pieces of underwear, including the selection of proper materials for these garments.

The club further purposes to create appreciation of well-made garments and to stimulate the girls' desire to appear neatly and modestly dressed and provides a more enjoyable community life through wholesome social activities.

CLUB REGULATIONS

1. Membership :

A. Girls from 13 to 15 years of age are eligible, provided they have completed the beginning project or its equivalent, to the satisfaction of Home Demonstration Agent and local club leader.

2. Requirements for Project :

A. Each member must fill out in full the membership card and return it to the local leader or Home Demonstration Agent.

B. She must keep an accurate account of the amount of materials used and their cost, time spent, and total cost of each garment made. Also, she must determine the value of each article if this article was purchased at retail prices. Record books are provided for this purpose. Estimate labor at 15 cents per hour.

C. Each member must write a story of not less than one hundred words. This story is to be written on the blank pages in the back of the record book.

D. Each member must make an exhibit if asked to do so by the leader.

3. Basis of Award :

A. Quality of workmanship 50%

B. Cost of production (in time and money) 20%

C. Exhibit 10%

D. Record and story 20%

Score Card

A. Quality of work:	
1. Structure:	
a. Accuracy of cutting.....	20
b. Width and evenness (seams and hems).....	20
2. Stitches	15
a. Appropriateness	05
b. Evenness	05
c. Size	05
3. Finishing (neatness and accuracy).....	25
4. Appearance of work	20
a. Cleanliness	10
b. Suitability of material.....	05
c. Harmony of colors.....	05
	—
	100

4. A certificate of achievement is given when the following requirements are met:
- A club member in good standing (see membership rules).
 - Exhibit in some public place.
 - Meet all requirements under project.
 - Submit report, signed by two witnesses.

General Note—All directions given for beginning project hold good for elementary work and should be reviewed before beginning this new project.

ARTICLES TO BE MADE IN ELEMENTARY SEWING

- Kimona night gown, using either a drafted or a commercial pattern; choice to rest with Home Demonstration Agent and local club leader.
- Teddy combination with round neck for older girls;
or
Bloomers and waist for younger girls.
- Princess slip.
or
Corset cover (with round neck) and petticoat.
- Hemmed patch on garment, preferably underwear.
- Removal of stains.
 - Making of Sodium Hypochlorite.
 - Removal of fruit, ink, tea, coffee, grease and grass stains. (See Farmers' Bulletins 861 and 1099.)

ELEMENTARY PROJECT

- One of the garments shall be entirely hand-made, the choice to rest with the leader.

- In making underwear, materials and trimmings should be selected for their wearing qualities and suitability. Standard underwear materials are bleached and unbleached muslin, Berkley cambric, long cloth, pajama cloth, and nainsook. Any of these will give satisfactory service if bought in a good quality. Good quality is determined by the strength of the fiber and the firmness of the weave.

A. Simple tests for quality:

- Rub the material between the hands to see whether the finish is real or whether it is a starch sizing.
- Hold the material between the eyes and the light to see whether or not the meshes between the crossing of the fibers are filled with starch.
- Pull a corner of the material in all directions to determine whether the weave is firm or loose. If the threads bunch up together, leaving an open space, the quality is poor. It is a much better investment to buy a good grade half bleached muslin than a poor grade nainsook.

- The trimmings of underwear should be of serviceable quality. They may either be commercial or hand trimmings.

a. Commercial trimmings:

- Stickerei braid with a firm scalloped edge.
- Narrow rickrack.
- Embroidery edging or beading.
- Lace edges; German Val, torchon, narrow cluny or filet; well made lace beading to match lace edge.

b. Hand-made trimmings:

- Narrow, dainty crocheted edgings.
- Simple tated edges.
- Bias facings or bindings.
- Outline, chain, or feather stitch combined with lazy daisy scalloped hem.

- Shrinking.** Before making material into underwear, shrink it thoroughly; place in hot water without unfolding, allow it to stand half an hour, then without wringing, hang lengthwise, edges even. If this is carefully done, it will not be necessary to press; if wrinkled, press with a fairly hot iron. If material has been pressed or dried crooked, stretch so that warp and woof threads are at right angles to each other.

C. Patterns:

- Use the commercial patterns recommended by Home Demonstration Agent. Under her directions study each pattern very carefully. Be sure to understand the meaning of all markings, then use the pattern accordingly. Mark with pin, chalk, or tracing wheel.
- Draft your pattern according to directions given.

PROCESSES USED IN WELL-MADE UNDER-GARMENTS

1. Basting, even and uneven. (See Beginners' Outline.)
2. Backstitching. (See Beginners' Outline.)
3. Overhanding. (See Beginners' Outline.)
4. Overcasting. (See Beginners' Outline.)
5. Hemming (plain). (See Beginners' Outline.)
6. Combination stitch. (See Beginners' Outline.)
 - A. A combination stitch is used for strength. It is made by permanently fastening the thread, taking two or three short running stitches, then a backstitch. Repeat the full length of the seam.
7. Felled Seam.
 - A. A felled seam is a flat finished seam in which the raw edges are completely hidden. It is used for underwear because of its strength, neatness, smoothness and ease in laundering.
 - B. Method.
 1. This seam is twice sewed, both sewings being on the wrong side.
 2. Lay right sides of material together, baste according to seam allowance and stitch. Use a combination stitch for this when the seam is done by hand. Sew it so that the top stitching will be on the outside. Trim seam to $\frac{1}{3}$ ".
 3. Trim one edge down to within $\frac{1}{8}$ " of line of stitching. Turn the wide edge over the narrow edge and crease it so it lies perfectly flat, baste and stitch. Use hemming stitch if done by hand.
8. French Seam.
 - A. A French seam is a seam within a seam. It is used for underwear because of its strength and neatness.
 - B. Method of making:
 1. Lay the wrong sides of the material together, pin at right angles to the edge every 4 or 5 inches. Baste about $\frac{1}{8}$ " from edge.
 2. Stitch with machine; or if by hand, use the combination stitch.
 3. Remove bastings and trim to about $\frac{1}{16}$ ", being careful to keep the edge very straight. This seam will be on the right side of the garment.
 4. Turn so that the right sides of the material are together, crease down to the first sewing, baste a seam including all the raw edges and stitch. Use a backstitch for this when done by hand.
 5. This seam should be on the wrong side and $\frac{1}{8}$ " deep when finished.

9. Making a Wide Hem on a Curved Edge—(See Fig. 1.)

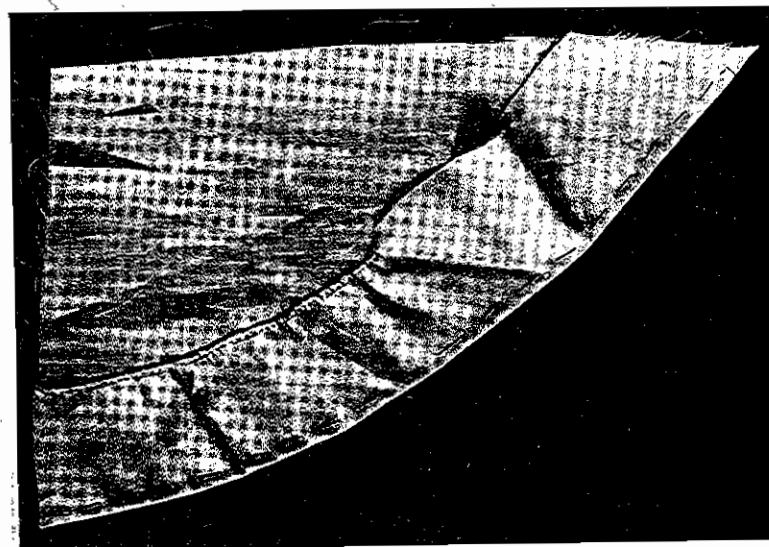


Fig. 1.

- A. Find the line which is to be the edge of the finished garment.
 - B. Fold on this line and baste near the fold. From the fold measure $\frac{1}{4}$ " more than the desired hem and trim on the line.
 - C. Turn the $\frac{1}{4}$ " to the wrong side and baste. Run a fine gathering thread on the edge of this last fold, draw up to fit the garment; baste carefully in place and stitch. Use hemming stitch if done by hand.
 - b. Baste.
 - c. Hem with fine hemming stitches.
10. To Join Lace to a Curved Edge.
 - A. Hem Edge.
 - a. Turn $\frac{1}{8}$ " hem on curved edge, fold, but do not stretch.
 - B. Prepare Lace. If for use on a continuous edge, as for top of nightgown, join ends of lace by placing the wrong side of one end to the right side of other end, keeping right side uppermost. Baste carefully. Overhand in irregular outline around the figure matching figure and mesh; cut away extra portions if necessary. This makes an almost invisible joining.
 - C. Join Lace to Edge. Hold lace edge toward you; full in as the work is done; work from right to left; overhanding edges, use fine invisible stitches.

11. To Join Lace to a French Hem.

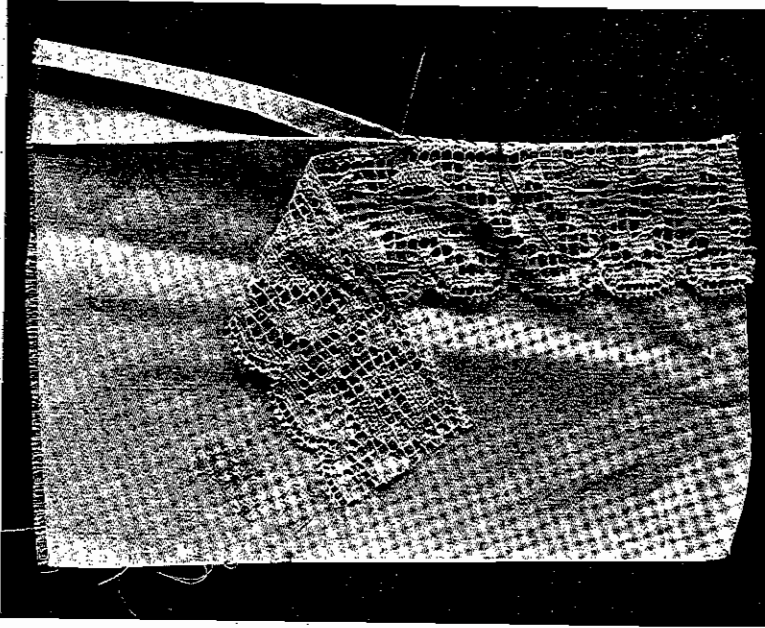


Fig. 2.

- A. Turn $\frac{1}{8}$ " hem to right side of material, baste carefully. Fold back on to wrong side and crease.
 - B. Place right side of lace to right side of garment, holding lace next to body; overhand, work from right to left.
 - C. Press lace up into position, leaving hem on wrong side.
 - D. A line of featherstitching or outline stitch may be placed just below the lace on the right side; this will help hold the hem in exact position.
 - E. If using an insertion or beading with lace, overhand the two together before attaching to the garment.
12. To Finish with Stickerei Braid.
- A. Lay the right side of the braid on the right side of the garment, with the plain edge of the braid and the raw edge of the garment even, and stitch so that the line of stitching is even with the lower points of the scallops.
 - B. Trim the raw edges of the garment, turn the braid down on the wrong side, crease, baste, and stitch down flat on the lower edge of the braid.
 - C. The braid may also be fastened down with feather, outline or chain stitching.
 - D. Begin and end the braid at the center front with about $\frac{1}{4}$ " turn-in at each end for the draw string if one is desired.

13. To Finish with Embroidery Edging.

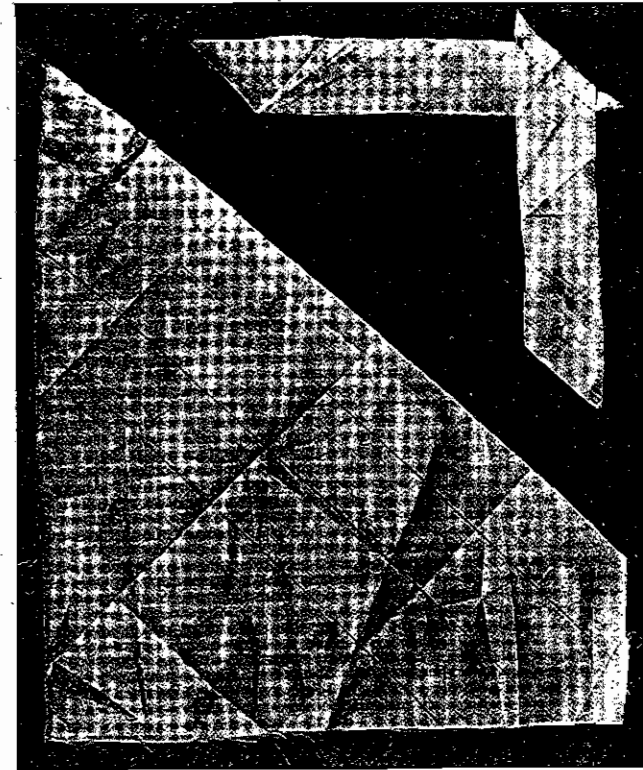


Fig. 3.

- A. Follow directions given for finishing with stickerei braid, except for allowing the raw edge of the embroidery to extend $\frac{1}{8}$ " beyond the raw edge of the garment. When ready for second stitching, turn under this $\frac{1}{8}$ " and proceed as directed above.
14. Bias Strips:
- A. To Cut:
 1. Fold the material so that the warp threads are laid on a line with the woof threads. Crease this fold and cut on the crease.
 2. Make a gauge of heavy paper the width of the desired strips (or use a ruler or yard stick) measure carefully and mark each strip before cutting. Cut with long slashes of shears to keep edges even.

B. To Join:

1. The end of a bias strip should run exactly true with either the warp or the woof threads according to the slant.
2. Lay the two diagonal ends of the strips together face to face.
3. Adjust so that the edges of the strips come exactly together at each end of the seam. Baste and stitch. (If done by hand use back stitch.)

C. Bias Strips as Plain Facing:

1. Lay right side of strip to right side of garment. Baste without stretching. Stitch.
2. Turn stitch over to wrong side, turn the edge under about $\frac{1}{8}$ " , again use care not to stretch in basting. Stitch close to edge. The strip may be held in place by a line of out-line, chain or featherstitching.

D. Bias Strips as Decorative Finish may be used on the right side of the garment, in which case it is stitched on the outside along both edges.

E. Bias Strip as Scalloped Facing: Lay the right side of the strip to the right side of the garment. Baste to position. Mark scallops, not too deep, so that the deepest curve of the scallop comes within $\frac{1}{4}$ " of the two edges. Stitch on this scalloped line following it accurately. Cut out the surplus material, leaving a seam about $\frac{1}{8}$ " deep. Slash the points of the scallops taking care not to cut too close to the line of stitching. Remove basting and turn facing to wrong side. Crease and baste around line of scallops. Turn under $\frac{1}{8}$ " of free edges of bias, baste and stitch. Lines of chain or featherstitching with lazy daisy flowers at each scallop point makes a very attractive finish for underwear. Narrow Val lace or tatting or tiny crochet may be whipped on the lower edge. (See Models 1 and 2, Fig. 4.)

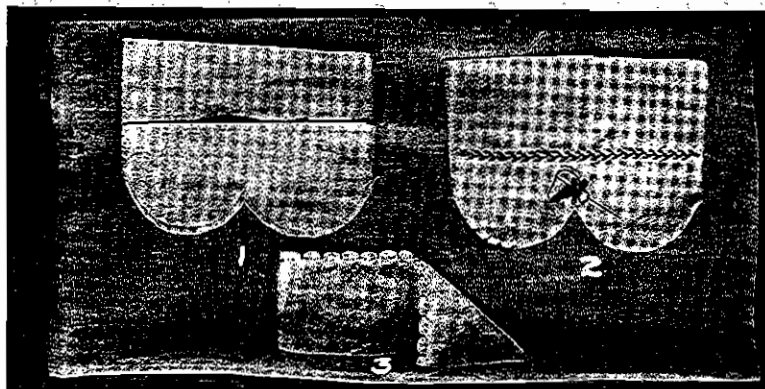


Fig. 4.

15. Scalloped Hem:

- A. Turn a hem $\frac{1}{8}$ " wide onto the wrong side. Crease and baste.
- B. Insert the knot on the under side of the hem; work from right to left; take an overcasting stitch over the entire hem, bringing the needle through to the wrong side, pull the stitch down tight, crumpling the material; take another stitch on top of the first one, pulling down tight, in order to hold securely. Slip the needle along for $\frac{1}{4}$ to $\frac{1}{2}$ " in the fold of the hem and repeat. This makes a tiny scallop. Repeat the desired length. (See Model 3 in illustration above.)

16. To Miter a Corner of Lace or Embroidery.

"To miter is to change a fold from having a square end at the corner to an abrupt angle in which one fold will exactly meet the other one at right angles to it." The surplus material may be cut out after the hem has been actually folded.

- A. Fold the lace with edges even. Crease. Then fold over at right angle allowing the perpendicular of the triangle to be parallel with the width of the lace, and not allowing the oblique angle at the base to extend over the finished edge of the lace.
- B. Crease and release triangle. Cut, leaving sufficient depth for a tiny flat felled seam.
- C. Make seam as dainty and accurate as possible. (See Fig. 5.)

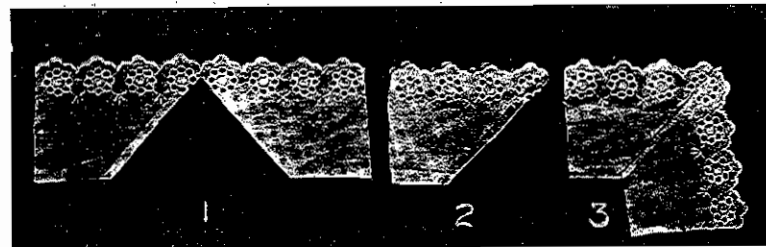


Fig. 5.

17. Rolled Hem with Lace Whipped on it:

- A. Work from right to left.
- B. Actually roll the hem with thumb and first finger of the left hand. Hold the lace, right side to the right side of the garment on the side toward you.
- C. Hold the edge of material to be rolled in the left hand, roll the raw edge under; continue rolling material until raw edge is completely covered. Usually two rollings are sufficient.
- D. Do not allow knot in thread to show; tuck it in the hem. Insert the needle under the roll and bring it out at the top catching it through the edge of the lace at the same time. Repeat.
- E. This makes a very neat, dainty hem.

18. Sewing on Insertion:

A. By machine.

1. Lay the wrong side of the insertion to the right side of the material on the desired line of trimming. Baste carefully.
2. Stitch along each side and slash the material half way between the lines of stitching, being careful not to cut the insertion. Crease back the material, baste and stitch on the right side just below the edge of the lace. If material does not readily fray, the raw edges may be left unfinished, but it is neater to roll them and whip them down by hand.

B. By Combination of Machine and Hand:

1. Make narrow hems along the desired lines of trimming. Stitch.
2. Whip lace to lower edge of hem.

C. By Hand:

1. Rolling and whipping.
2. French hem and whipping.

19. Decorative Stitches:

A. Outline Stitch. (See Beginners' project.)

B. Chain Stitch: Chain stitch is worked toward one. Bring the needle up at the end of the line, let thread hang naturally or hold in place with the left thumb, put the needle back in the same hole it just came through and bring it out a short distance in advance and over the thread which is thus held down in the form of loop; each stitch is made in the same way, one end of it coming out through the preceding stitch and the other held down by the next stitch. Be careful to keep stitches exactly the same length. This makes work uniform.

C. Lazy Daisy Stitch: One lazy daisy stitch makes each petal. Bring the needle up at the inner end of petal near the center of the flower, hold the thread under the left thumb, put the needle in exactly beside the hole it just came through and bring it out at the tip of the outer point of the petal over the thread, thus making one chain stitch, then put needle in again at the tip of petal outside the chain stitch so as to make one stitch over the thread, holding the chain stitch in place. Repeat on each petal. Five petals usually make one flower. (See Model 2, Fig. 4.)

D. Blanket Stitch. (See illustration in Beginners' Project.) This is worked from left to right. Fasten the thread on the underside with a few running stitches, and bring the needle out at the point for beginning the blanket stitch. Hold the thread

down with the thumb, insert the needle the desired depth from the edge of the cloth, bring it out under the edges of the cloth, but over the thread held under the thumb. This makes a U shaped loop. Be careful not to draw threads too tight. Repeat, making the stitches of even size. In turning a corner, take three stitches in the same hole, giving the effect of a square with one diagonal draw in. A variation of this stitch may be made by alternating one long and one short stitch.

E. Feather Stitch or Briar Stitch. (See Model 2, Fig. 4.) The feather stitch is a variation of the blanket stitch. Single featherstitching follows three straight lines. It will help you to keep these lines straight to baste them with colored thread. Each stitch taken is a blanket stitch taken first on the right of the central line, then on the left, and so on to completion. The stitch is made toward the worker; bring the needle out at the top of the line, then on the left, and so on to completion. stick the needle in $\frac{1}{8}$ " or less to the right of the point where the thread came out and slightly toward the center line. As the needle is brought out over the thread, a blanket stitch is formed. Then throw the thread around to the left and make a similar stitch on the left hand side of the line. Repeat to end.



Fig. 6.

20. Ruffle: (See Model 4, Fig. 6.)

- A. Material Required—One and one-half times the length of the edge to which it is to be attached. If made of the same material as the rest of the garment it should be cut across the warp threads of the cloth.
- B. Joining at Seams—With either a narrow French or felled seam.
- C. The ruffle may be made entirely of embroidery, in which case no special finish will be required. Embroidery edging may be used. (See directions for finishing with embroidery.) The ruffle may be finished with a hem varying in width according to the width of the ruffle. Be sure it is well proportioned. Lace may be whipped to the edge of the hem. Any of the decorative stitches may be used.
- D. Gathering:
 1. Divide into quarters, mark with basting of colored thread or well placed pin. Gather each section on a separate thread.
 2. Use a knot. Work on the right side of material. Take short running stitches $\frac{1}{4}$ " from the edge.
- E. Joining to Skirt.
 1. With bias facing:
 - a. Divide garment into sections.
 - b. Pin the section points of ruffle and garment firmly, draw gathering thread tight, wind it around one of the pins to hold it.
 - c. Baste ruffle to garment and stitch.
 - d. Cut bias strips according to directions, or use bias lawn binding; turn under $\frac{1}{8}$ " on each side of bias strip; cover the raw seam, which has been turned toward the top of the garment. Baste and stitch on both edges. This finish may be used on either the right or wrong side of the garment.
 2. With receiving tuck. (See Model 4, Fig. 6.)
 - a. Make a tuck $\frac{1}{4}$ to $\frac{1}{2}$ -inch wide around the garment on the right side just far enough from the bottom of the garment to barely cover the gathering of the ruffle. Use a gauge. Baste carefully and stitch.
 - b. Join quarter points of ruffle to quarter points of garment, pin securely. The top of the ruffle should be pinned into place so that it will come up under the tuck to the stitching. Baste and stitch.
 - c. Remove bastings.
 - d. Baste folded edge of tuck down on the gathers of the ruffle so that the raw edge will be entirely covered and the stitching just made will not show. Stitch.
 - e. Remove all bastings and the thread ends on wrong side.

21. General Directions in Taking Measurements:

- A. Be sure that all measurements are loose enough. It is easier to make things smaller than to make them larger. While measurements are being taken, stand erect and squarely on both feet with heels together.
 1. Bust measure:

Pass the tape line loosely over the fullest part of bust; have it come closely under the arms and slightly raised in the back. This measurement must be taken from the back in order to take it correctly.
 2. Waist measure:

This is taken snugly, directly at the waist line.
 3. Hip measure:

Pin a belt $\frac{1}{2}$ " or $\frac{3}{4}$ " wide, of folded cloth around the waist. Adjust it snugly at the waist line. From the underarm seam at the waistline, measure down 5" over each hip; put in a pin horizontally on each side, hold the tape loosely around the hips just under these pins, being sure the tape line is equi-distant from the floor. Compare hip measure with that of pattern.
 4. Front length—Measure from the top of the narrow belt at the waist-line to the floor.
 5. Side length—Measure from the top of the narrow belt over the hips to the floor.
 6. Back length—At the center back over the top of the narrow belt at waist.
 7. Length of waist front—From base of neck to waist-line.
 8. Width of front 2" below neck at armhole.
 9. Length of waist back—From base of neck to waist-line.
 10. Underarm seam—from pit of arm to waist-line.
 11. Width of back at middle of armhole.
 12. Neck—base of neck.
 13. Sleeve.
 - a. Length from shoulder to wrist over bended elbow.
 - b. Armseye—loosely.
 - c. Wrist.
 - d. Knuckles (over thumb, hand out straight and limp.)

22. Alteration of Patterns:

- A. Select pattern according to measurements rather than age. It is far more accurate.
- B. The measurements necessary for the making of the garments in this project are:
 1. Bust.
 2. Length.

If the patterns are selected according to these measurements, little alteration will be needed.

C. General directions for alterations:

1. To increase bust measure—Draw a line straight down from the center of the shoulder, the length of the front pattern. Cut through this line and separate the piece enough to give one-fourth the whole amount needed on both back and front. Do the same to the back.
2. To decrease bust measure—Lay a fold extending from the center of the shoulder straight down the length of the pattern, the fold to take up one-fourth the amount needed to decrease the pattern.
3. To lengthen back and front—Cut through pattern horizontally about two inches above waistline at the underarm seam; separate the pieces enough to give the added length, being careful to keep the proper slant in the under-arm seam.
4. To shorten back and front—Lay a fold through the pattern about 2" above the waist-line on both back and front, the fold taking up the desired length. Straighten the under-arm seam by folding the edge of the pattern back on itself.

23. General Rules for Cutting:

- A. After reading the directions carefully, pin all pieces of the pattern to the cloth before beginning to cut.
- B. Place them on material economically. Watch for the "right and wrong" of the material; also for the "up and down." To avoid cutting two pieces for the same side, place the two wrong sides of the material together before arranging patterns.
- C. Place the large part of the pattern at the end of the material so that which is left will be in one piece. Place the dots or marking indicating the straight line of the pattern on the lengthwise threads of the material. Mark all notches; do not cut them.
- D. Use sharp shears and cut accurately with long slashes.

24. Kimona Nightgown:

A. Materials:

1. Unbleached or bleached muslin.
2. Outing flannel.
3. Cotton crepe.
4. Nainsook (for fine nightgowns).

B. Measurements:

1. Entire length.
From highest point of shoulder to floor, allow 1" for shrinkage and 3" for hem.

2. Bust.

Take measure very loosely over fullest part of bust, have it come up closely under arms and raise tape slightly in back.

3. Front waist.

From neck to waist-line.

C. Material Required:

1. Twice the length of the individual from shoulder to floor, of material 36" wide.
2. $1\frac{3}{4}$ yards lace.
3. No. 70 white cotton for machine stitching.
4. No. 8 sharp needles, pins, drawing pencil, eraser.

D. To Draft Pattern:

Cut a strip of paper 18 inches wide and equal to length of gown, allowing for hem and shrinkage. Mark corners A B C D.

From point A measure down 9" for the sleeve. Draw a dotted line straight to the center front to indicate sleeve line and bust line. The bust line must be larger than the bust measure to allow the gown to slip over the head easily. Since the pattern represents one-fourth of the gown, find one-fourth of the bust measure, add 2" to this amount and measure from the center front over on the bust line and mark a point Y. From this point draw a line straight to the bottom corner of the paper to represent the side seam. Draw a curve to join sleeve line and side seam line. The gown will tear easily if not rounded under the arm. From point B measure up $1\frac{1}{2}$ " and draw a curve to point D. From point C measure $3\frac{1}{2}$ " along each side CO—CI. Connect with curved line to form back of the neck of gown. Locate a point $4\frac{1}{2}$ " from point C along the line CD. Connect H and O to form curve for front of the neck of gown. Mark all lines and cut pattern.

E. Cutting.

1. Lay cloth smoothly on large table, fold it lengthwise through center and then crosswise through the center. Smooth all wrinkles from the pattern, pin it to the material with the straight edges along the folded edges of cloth. Cut carefully, following the line of pattern. Do not cut along the shoulder (AC).
2. Unfold one-half length of material. Crease, or cut out the pattern along the curve (OH) to form the front neck line. (If pattern is creased it may be used again.) Repin the pattern to one-half length of material and cut material along the curve (OI).

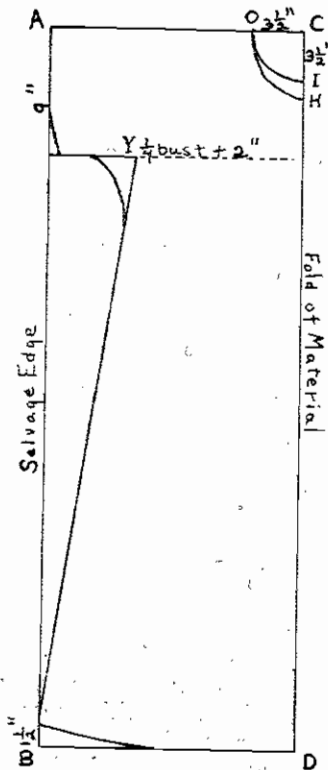


Fig. 7.

F. To Make:

1. Seams—French or flat fell.
 - a. Lay the wrong sides of the material together. Pin the edges to each other, beginning at the sleeve to prevent stretching.
 - b. Baste every seam and stitch about $\frac{1}{4}$ " from the edge. This puts the stitching on the right side of the garment. Use combination stitch for this when done by hand.
 - c. Remove bastings and trim seam to about $\frac{1}{8}$ ", being careful to keep edge very straight.
 - d. Turn the garment, crease along line of stitching, baste a seam $\frac{1}{8}$ " from edge to inclose raw edges and stitch. (Use a backstitch for this when done by hand).

2. Finish of neck and sleeves.

For lace, crocheted or tatted edge, crease the material evenly toward the wrong side, turning down $\frac{1}{8}$ ". Back of this, baste either bias tape or narrow linen tape just even

with the creased edge. Sew on the lace by means of over-hand stitch, catching the gown, tape and edging with each stitch. Hold the right side of the gown and the lace toward you and make the stitches shallow and close together. The other edge of the tape may be stitched down or fastened with small chain or feather stitching.

3. Hem:

Try on gown. Have another club member see if the length is even. Place a pin at the shortest distant point and another corresponding to that length at the front, another at the side, and one at the back. Take off the gown and trim it evenly along the bottom, using the pins as a guide.

For the bottom hem crease and press $\frac{1}{4}$ " turn first. Turn a $1\frac{1}{2}$ " to 2" hem. Plait in any extra fullness, turning plaits toward the side seams, or run gathering thread around edge of hem and shape it to body of the gown. Stitch the hem.

4. Press the nightgown.

- G. Compute the cost; figure out the time required to draft the pattern and make the gown, plus the cost of material and trimming.

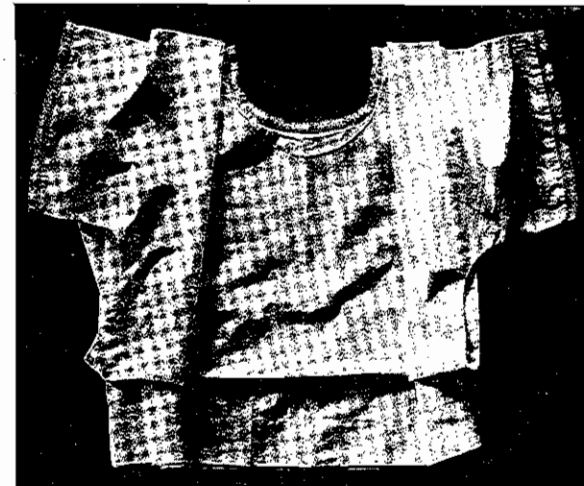


Fig. 8.

H. Commercial Pattern:

If a commercial pattern is used, compare your measurements with those of commercial pattern. (See directions for alteration of pattern and general rules for cutting.)

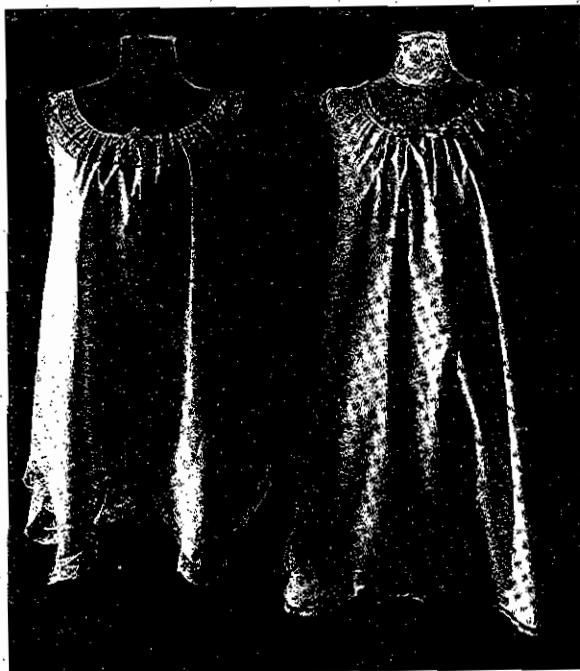


Fig. 9.

25. Teddy Combination:

A. Commercial pattern.

B. To draft pattern.

1. A shirtwaist pattern (Page 26), may be used.
2. It is necessary to know measurements from shoulder to knee and from under-arm to knee. With these measurements the waist pattern can be extended down to desired length.

26. Bloomers and Waist for Younger Girls

or

A combination of waist and bloomers as in illustration. Pages 22 and 23.

A. Material.

1. Bloomers:
 - a. Cotton crepe, muslin, nainsook or long cloth, etc.
 - b. Wool or sateen for winter.
 - c. Rubber elastic. (Do not use in white goods. Laundering will spoil it.)
2. Waist—Sateen, unbleached or bleached muslin, long cloth.

B. Pattern.

C. Measurements.

1. Bloomers:

- a. Hip measure—loosely.
- b. Length from waist-line to front of ball of knee, allowing 3" to 4" to blouse at knee.
- c. Waist measure—loosely.
- d. Knee measure—band used.
- e. Compare measurements with pattern.

2. Waist—Sateen, unbleached or bleached muslin, long cloth.

- a. Bust.
- b. Waist.
- c. Length, front and back.
- d. Compare measurements with pattern.

D. Required amount of material:

1. Bloomers.

- a. Twice length from waist to knee, material 36" wide.
- b. Elastic—twice circumference of knee.
- c. Waist band 2" wide. Pieces for reinforcing crotch may be cut from waist.

2. Waist—Length of front and length of back.

E. To Cut:

The finish for the bottom of the bloomers must be decided upon before the pattern is placed on the material. Be sure of the finished length before the material is cut out and whether you must cut off, or allow on the pattern. (See general directions for cutting.)

F. To Make:

1. Waist:

- a. To cut: Follow general directions for cutting. Allow for seams, closing, etc.

b. To make:

- (1) Place the front and back shoulder seams together right sides of material facing each other. Pin and baste $\frac{1}{4}$ " from edge. Try on. Fit under-arm seam and make alteration on shoulder seam if necessary. Allow for closing in back.
- (2) Mark under-arm seams with pins. Make flat fell seams on shoulders.
- (3) Flat fell under-arm seam.

- (4) Turn the hem on the left side back $\frac{1}{8}$ " narrower than the one on the right side. The right side overlaps the left side and no stitches of this hem should be visible. Fit waist before stitching back hems.
- (5) Fit armseye loosely. Face armseye and neck with bias tape.

2. Bloomers:

- a. Join the two front and the two back pieces (inside of legs) with either a French seam or a flat fell seam. If a flat fell seam is made, care should be taken that the fell of each back and front seam turns over to the same side. When joined together, this seam should look like one continuous seam.

(1) Cutting the band:

Back

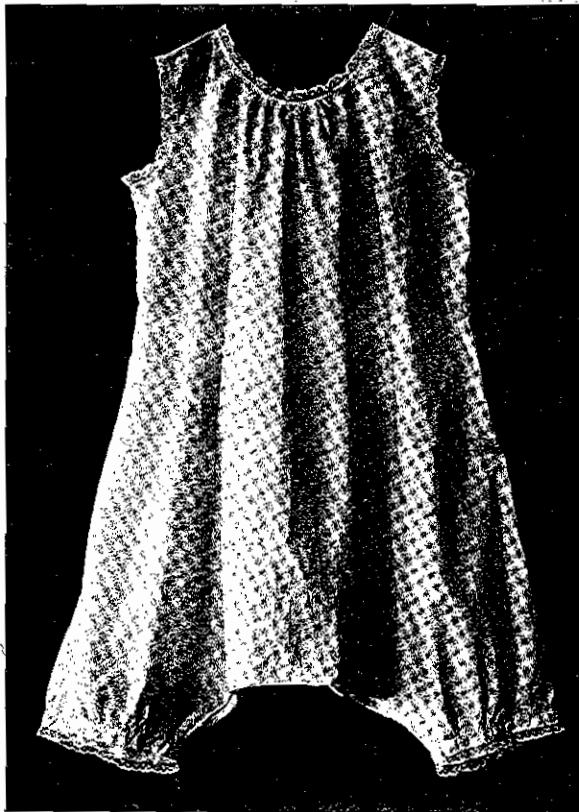


Fig. 10.

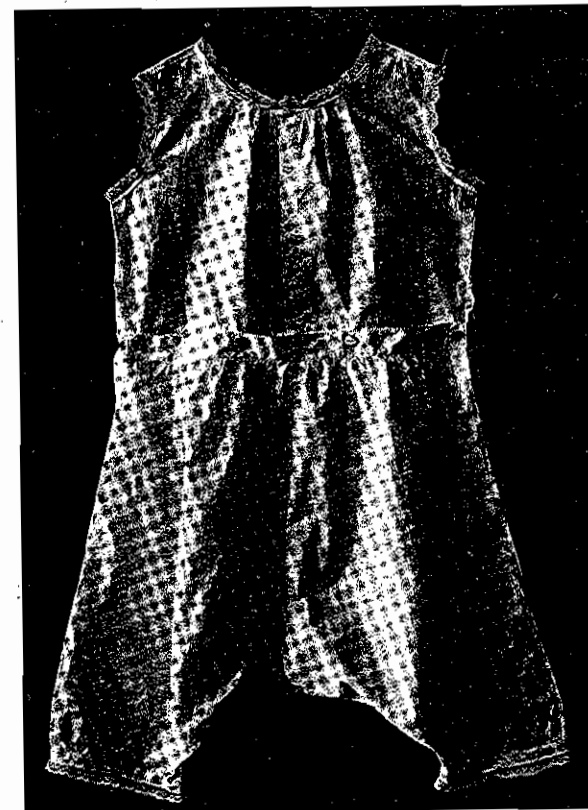


Fig. 11.

Cut a piece of material 2" wide by the length of the back band.
Add 1", which will be turned under to reinforce the band.

Mark the center back.

(2) Sewing the band to the bloomers:

Back

Take the back part of the band and place it with the right side to the wrong side of the bloomers. Pin the places marked for the center back to the seam of the center back of the bloomers.

Turn in 1" at each end for reinforcement. Then pin each end of the top edge of the bloomers (the end where the placket turned in faces the drawers) exactly at the end of the band.

Draw up the gathering threads in the bloomers to the same length as the band.

Put a pin at each end of the belt and bloomers and wind the gathering threads around it. This will hold the thread in place.

Adjust the gathers. Put most of the fullness at the center. There should be little fullness for $1\frac{1}{2}$ " from each end.

Pin and baste the bloomers carefully to the band. Stitch the band and the bloomers together with a plain seam.

The seam will come on the outside.

Turn the edge under, on the opposite side of the band.

Place this turned edge so as to cover the raw edges and the first stitching of the band and pin or baste it down.

Finish the corners with an overhanding stitch. Stitch very close to the turned edge. This stitching is on the right side.

- b. The inner seam which joins the two legs (seat) may also be bound with a flat fell or a French seam. Take the back and the front pieces and pin them carefully together at the center seam. From the center, pin each one of the leg seams. This will help to make sure that the center seam matches exactly. Width of seam should be $\frac{1}{8}$ " in fine material and never more than $\frac{1}{4}$ " in coarse material.

c. Plackets in bloomers:

The placket may be made as a continuous fell or bound placket. The latter is easier to make.

(See Page 13, Fig. 6.)

- (1) Cut a piece of material 17" long and 2" wide for each placket. Place the right side of the placket on the wrong side of the material.
- (2) Stitch these together with a plain seam.
- (3) Turn this seam and press it back on the placket.
- (4) Make $\frac{1}{8}$ " turn and lay the turned edge so as to cover the first stitches.
- (5) Stitch close to edge of turned hem. The second stitching will be on the right side.
- (6) Crease the edge of the placket very flat at the bottom of the slit fold the placket over on the back part of the bloomers. At the bottom of the slit make two rows of stitching.

d. Bands:

The band is made in two parts. The back part is equal to one-half waist measure and 2" for lap minus $\frac{3}{4}$ ". It is shorter than the front band and laps over the front. The button holes are cut in the back band. On account of the strain on the buttons and buttonholes, the bands are reinforced at these points.

e. Finishing lower edge of bloomers:

- (1) The lower edge may be finished with a plain hem $\frac{3}{4}$ " wide. Hold fullness in place with $\frac{1}{2}$ " elastic band inserted in hem. This finish is best for bloomers made of sateen or woolen material.
- (2) Plain band with placket (as in Figs. 10 and 11.)
- (3) Lace, embroidery or ruffle (see general directions).

27. Princess Slip:

A. Material—Use good underwear material with suitable trimmings. Amount; see pattern.

B. Patterns:

Use pattern suggested by Home Demonstration Agent or local leader. Be sure to get correct size; buy according to measurements.

C. Cutting.

1. Prepare material and pattern as before directed.
2. Compare measurements with pattern and alter pattern if necessary.
3. Follow general directions for cutting.

D. Making.

1. Use flat fell or French seams.
2. If opened on shoulders, face the ends of the shoulder straps deep enough to accommodate fastenings.
3. See directions for making, joining and trimming the ruffle.
4. The trimming of the ruffle should match that of the neck and armholes.
5. See directions given for finishing neck and armseye given under teddy combination and corset cover.

28. Corset Cover with Round Neck.

A. Material:

1. Muslin, long cloth, cambric, or nainsook.
2. Trimming—lace insertion, beading, tatting, etc.
3. Required material: 30" of material 27" wide.

B. Pattern:

Use pattern with a round neck. A shirt waist pattern may be used, cutting a deeper back and front. The shoulder seam from the armhole is from 1" to 1½" wide. (See illustration.) Measure from E on the EF line 1½" and locate J. Measure from G on the GH line 1½" and locate I. Measure from the neck line on line CD 6" and locate S. Measure from the neck line on line AB 5" and locate K. Draw and curve from J to S and from I to K. In cutting the fronts, allow 1" for hems on each side and 1" or more for fullness as desired.

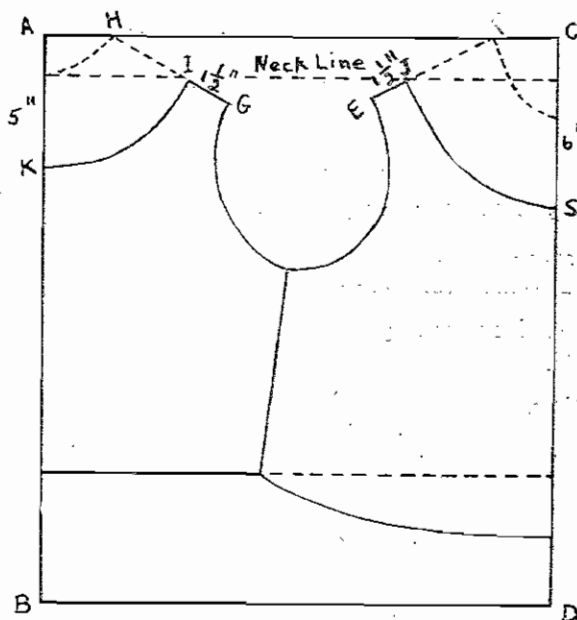


Fig. 12.

C. Cutting:

1. Compare measurements with pattern.
2. Follow general directions for cutting, allow for seams if necessary.

D. Making:

1. Use flat fell or French seams.
2. Closing.

Turn the hem on the left side front ⅛" narrower than the one on the right side. The right side overlaps the left side and no stitches should be visible. Fit corset cover before stitching the front hems.

3. Fitting.

After the front closing is made, the side seams stitched once, the shoulder seams pinned together and a gathering thread run in at the waist-line, the corset cover should be fitted.

- a. Pin together at waist-line.
- b. Pin fronts together.
- c. Draw up gathering thread, wind around pin to hold in place.
- d. Have under-arm and shoulder seam in their proper places and adjust gathers.
- e. The armseye should fit snugly but should not bind.
- f. Do not fit corset cover tightly over bust. There should be a little fullness across front. If the garment should be too tight, the hem may be let out and a false hem added.
- g. Hold the trimming around the neck and sleeve of the corset cover and decide how far the neck and armseye should be cut out.

4. Finish front closing.

5. Finish underarm seam (French seam) and shoulder seams (flat fell or French).

6. To make band:

- a. Cut band 4" longer than waist measure. The 4" will be divided as follows:
 - (1) 1" on each side to be turned under for reinforcement.
 - (2) 1" to be allowed for shrinkage
 - (3) 1" for the lapping of the right over the left side.
- b. Find center of band. Mark it. From the center back locate points for under-arm seams. (one-fourth waist minus ¾".)
- c. At each end turn in 1" for reinforcing fastening.
- d. Pin center back of band and center back of corset cover together. (Seams will come on outside of garment.) Pin marked side of seam of band to under-arm seam of corset cover. Pin each front to each end of band, making sure that the edges meet accurately.
- e. Adjust gathers. Leave space of 1½" at each side seam without gathering. Have more gathers at center back and near each center front than at sides.

- f. Baste band to corset cover. Stitch.
 - g. Turn $\frac{1}{8}$ " on cut edge of band and turn it over the last stitching to be on the right side of corset cover. Overhand each end of band at fronts.
 - h. Stitch the band down to turned edge and all around it.
7. Fastening—Divide the right side front into 3 or 4 parts and make the button holes up and down, the first one near the turning of the neck. Cut the one in the belt horizontally.
 8. Finishing of top before lace is put on—Face back with bias tape.
 9. Trimming—A variety of trimmings may be used, but aim to have the trimming durable as well as pretty. Use a crocheted cord or tape to draw in surplus fullness around neck. Ribbons should be used only on rare occasions.



Fig. 13.

29. Plain Petticoat:

A. Material:

1. Outing flannel, sateen, muslin, long cloth.
 2. Amount depends on pattern.
- B. Pattern—2, 3, 4 or 5 gores.
Buy pattern according to hip measure.
- C. Cutting:
1. Compare measurements with pattern.
 2. Follow general directions for cutting.
- D. Making:
1. Pin, baste, and stitch seams. Make each seam flat fell or French.
 2. Make double hemmed placket 10" long in back or on left side at seam.
 3. Mark center front and center side of skirt.
 4. Run two gathering threads around top of skirt $\frac{1}{4}$ " apart.
 5. Make belt 3" or 4" longer than waist. Measure. Turn in 1" at end. Mark center front and center sides.
 6. Draw up shirring threads.
 7. Pin center front of band to center front of skirt. Pin center side of skirt 1" from center side of band—toward the back. This gives more fullness to back.
 8. Baste band to skirt. Stitch—bringing seam on right side of garment.
 9. Turn $\frac{1}{8}$ " on raw edge of band. Bring this turned edge to meet shirring threads. Baste down.
 10. Overhand edges. Stitch all around band. Have corners square and see that the end of the belt and end of the skirt meet exactly.
 11. The bottom may be hemmed or scalloped or a ruffle may be used. (See general directions.)
 12. Make buttonhole lengthwise of band. Sew on button.

30. Hemmed Patch:

- A. This patch is used for repairing undergarments because its felled edges make it strong and able to stand repeated laundering. It is usually square or oblong in shape.

B. Material:

1. A worn or torn undergarment.
2. A bit of material to match that has been shrunk.
3. Rather fine thread and needle.

C. Directions:

1. Cut away the irregular, worn part leaving a square or oblong hole.
2. Cut the patch carefully, following the thread of the material, $\frac{3}{4}$ " larger on all sides than the hole, which means that the patch is $1\frac{1}{2}$ " wider and longer than the hole.
3. Lay the right side of the patch to the wrong side of the garment, see that all the margins are exactly even, pin and baste carefully to position.
4. Turn to right side, cut diagonal slashes at all four corners $\frac{1}{8}$ " deep. Turn edge of garment material under $\frac{1}{8}$ " all around hole; baste; then hem to patch; take especial care to make square corners.
5. Turn to wrong side.
6. Turn under edge of patch $\frac{1}{2}$ " to $\frac{1}{4}$ " all the way around, taking care to turn square corners; baste; hem to garment with fine stitches.

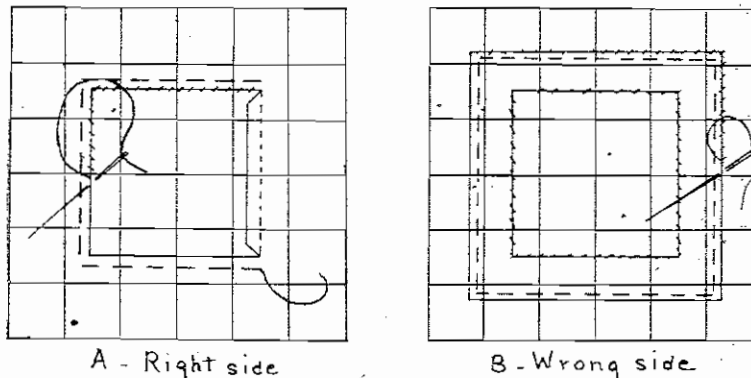


Fig. 14.

31. Removal of Stains:

Note: See Farmers' Bulletins Nos. 861 and 1099.

Sodium hypochlorite is one of the best bleaches that can be used for the removal of such stains as fruit, ink, perspiration, mildew, etc. It can only be safely used on white cotton or linen fabrics as it removes colors also.

Referred to as in Farmers' Bulletins as Javelle water. The name, Javelle water, means a solution of potassium hypochlorite. Labawacque's solution is the right name for a solution of sodium hypochlorite.

Sodium hypochlorite and potassium hypochlorite solutions are equally effective as bleaches.

A. Method of making sodium hypochlorite:

Dissolve $\frac{1}{2}$ lb. chlorinated lime (bleaching powder), in 2 quarts of cold water. Dissolve 12 ozs. washing soda in 1 quart of boiling water. Pour the clear liquid from the chloride of lime into the soda solution. Let the mixture settle and then strain thru a cloth into bottles. Cork, label, and keep in a dark place.

Instead of 12 ozs. of washing soda, $5\frac{1}{2}$ ozs. of mono-hydrated sodium carbonate, which can be found at drug stores, may be used.

B. Method of removing stains with sodium hypochlorite:

1. Fill a basin about half full of lukewarm water.
2. Spread the stained fabric over the basin so that the stain is directly over the water.
3. Use a medicine dropper, small glass rod, or handle of a teaspoon to drop the sodium hypochlorite directly on the stain. Allow it to remain about half a minute, then rinse in the lukewarm water. Repeat as many times as are necessary to completely remove the stain, taking particular care to thoroly rinse out the bleach.

C. Procure a copy of Farmers' Bulletin 861 and remove at least six stains of different kinds. Report your results with each stain.

D. Be sure to have all stain removing agents carefully labeled and tightly corked, whether for use in club or at home. Exercise utmost care and follow instructions.