GIRLS' SEWING CLUB

(FIRST YEAR)

(Re-Issue of Extension Bulletin No. 111)

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Some of the purposes of the sewing club are to teach members the principles of sewing that they may be able to make their own clothing, to help in repairing the clothing of the other members of the family, to give a better understanding of methods, fabrics and colors, thus aiding in the selection and making of neat, suitable and attractive garments.

Girls' Sewing Club work is divided into three one year courses, so arranged that the course is very complete and takes in all the steps of ordinary sewing. After a girl has completed the full three years' work she should be competent to do any type of plain sewing.

In order to have the best of success with the sewing lessons, one must study the directions very carefully and follow them accurately. The lesson on each garment should be so studied that a mental picture of the completed article is formed before the actual work is begun.

Plenty of time should be taken to make each article neatly and well, for the character of this first work will largely determine the ideal for good sewing of the club members.

The material chosen for the club work should be of good quality but not expensive.

Any article of the club project may be made several times. Each child has need of several aprons. She may make two or three and choose the best to exhibit.

Work in this club is to be taken up at the discretion of the leader. She determines the number of months to be spent in the work and proportions the length of time to be spent on each garment accordingly.

The work should be taken up consecutively with the exception possibly of the darning and patching, which may be taken earlier in the course if desired so that the club member may become useful in patching and darning her own garments.
COLORADO AGRICULTURAL COLLEGE

Suggestive Constitution

_Name:_ This club shall be known as the ___________________________ Sewing Club.

_Purpose:_ The purposes of the club shall be: (1) To acquire a better understanding of the principles of sewing; (2) to help in caring for the clothing of the family; (3) to make simple and appropriate garments.

_Membership:_ Any girl between the ages of 10 and 18, inclusive, by signing the membership roll may become a member.

_Dues:_ Members shall pay no dues except such as may be mutually agreed upon.

_Duties:_ Each member shall study all lessons received from the State Agricultural College and do the required work in sewing; attend club meetings regularly and furnish reports of work done.

_Officers:_ The officers of the club shall be a President, a Vice-President and a Secretary-Treasurer.

_Exhibits:_ At a time to be determined by the leaders, members will be expected to make an exhibit of sewing at a local or a county fair; proper instructions will be given each member and prizes may be offered by the local community or fair association.
Articles Made in First Year Work

The first year work shall be the making of:

1. Holder
2. Needle book
3. Work bag
4. Work apron
5. Darning
6. Patching

This work is to be exclusively hand-sewing.
Garments:

Accuracy and evenness of stitches will count......40%
Neatness ..................................................40%
Suitability and color of material..........................20%

100%

Story ......................................................................100%
Records ....................................................................100%

3) 300%

This gives a general average based on ..................100%

All club members who succeed in making a grade of 75% or above will be permitted to take up the second year work.

The second year work will be mostly machine work and will begin with machine practice. The garments to be made are a nightgown and a slip. Three Christmas projects are outlined, one is required but all may be made.

Working Materials

Needles—The size of needles is determined by number. A package of sizes five to ten is suitable for most work.

Thimble—The thimble should be of a size suitable to the second finger of the right hand. Every child should learn to use the thimble in all hand sewing. Care should be taken in the position of the hand and needle.

Emery Bag—This is a small bag filled with emery and is used to clean and sharpen needles.

Tape Measure—Learn to use the tape measure in measuring; to become familiar with the inch, half-inch and fourth-inch. In measuring learn to be very exact, for the quality of your work depends largely upon accuracy.

Shears—A pair of sharp shears is very essential in sewing. Have a pair six to eight inches in length. Take care of your shears and do not dull them by cutting paper or hard articles.

Pins—Sharp pointed pins should be used so that the material will in no way be injured.

Keep all of your articles neatly arranged in a work-basket, box or bag.
First Year Sewing

Position In Sewing

Correct position in sewing

Learn to sit erect, the lower part of the body against the back of the chair, the feet placed squarely on the floor. You should hold your work high enough that your eyes are not strained. While this position may seem awkward at first, you will find it much more comfortable and healthful and will soon become accustomed to it. Then, when you sew for several hours at one time, you will find that you do not tire easily.

Be sure that you learn to hold your needle correctly and to always use your thimble in hand work.

Practice In Cutting

This Lesson is To Be Given Under The Direction of the Club Leader

Object—To learn the correct position while working, to learn to use the tape measure in measuring; to become familiar with the inch and half-inch, and to learn to use shears correctly.

Position—Sit erect with the lower part of the body against the back of the chair and the feet placed squarely on the floor.

Materials—

1. Paper eight inches by ten inches.
2. Tape measure, pins, shears.

Method—Study the tape measure until you know which marks stand for the inch, which for the one-half inch and one-quarter inch.

All measurements should be from the center of a line to the center of a line and not between or including the line.

Find one inch on the tape measure. On the left hand side of the paper, measure down one inch and mark by making a pin hole at this point. On the right hand side, measure and mark one inch from the top. Make all measurements accurately. Take hold of the top of the paper, bring it toward you and fold on line of pin holes. Cut on the line of fold, making a strip one inch wide.

Cutting—Have shears from six to eight inches in length with the blades well sharpened. Hold the shears in the right hand with the narrow blade down. Pass the thumb through the upper handle. The forefinger rests under the entire handle and guides the tool while the remaining fingers pass through the lower handle. Take long even strokes so the edge will be straight and even rather than ragged. Repeat the directions given for marking and cutting until you have cut two one-inch strips, two two-inch strips, two three-inch strips. Find one-half inch on your tape measure, study until you become familiar with the one-half inch. Without the tape measure, fold down one-half inch on the two-inch strip. Test with the tape measure to see how accurately the eye has seen. Cut off the end. Repeat from six to ten times.

Take the second two-inch strip and fringe by making cuts one inch deep and one-half inch apart. Test for accuracy with the tape measure for depth and width. Study the one-quarter inch in the same way, using the three-inch strips.

Turning a Hem—Place the paper on the table in front of you, having the lower edge parallel with the front edge of the table. Mark down from the upper edge one-half inch at each side and several places between, using the eye as a guide. Test this with the tape measure and make corrections. Take hold of the upper edge and fold toward you, creasing on line of marks. Be sure you have a good even edge as the evenness of the hem is determined by the first turn. Make the second turn one inch wide.

Marker—Cut a strip five inches long and one inch wide from a card or a piece of stiff paper. Measure down one-half inch from
the end, using the tape measure. At this point cut in one-quarter inch, cutting at right angles to the edge of the card. One-quarter inch below this make a diagonal cut which will meet the straight cut. Measure down one inch from the end, again make the cut at right angles to the edge and the diagonal cut. Use this marker for measuring the first and second folds of a hem. A marker made in this way should be used in measuring all hems and tucks.

Turn a second hem using the marker. Place the end of the marker against the upper edge of the paper at the right. Place the pin against the straight edge of the notch and press through the paper. Move the marker to the left one inch. Again place the pin against the straight edge and press it into the paper. When the half inch has been marked across the paper, and the first turn made the second turn is marked and made.

Cutting a Square—Place a piece of paper on the table with the bottom edge parallel with the front edge of the table. Starting at the upper left hand corner, measure down seven inches along the left hand side and mark with a pin hole. Starting at the same point, measure along the top seven inches to the right, mark. Take hold of the upper left hand corner, bring it down and to the right, fold the paper on the diagonal line connecting the two pin holes. Mark the point where the corner comes. Unfold the paper. Take hold of the top of the paper, fold toward you and crease, connecting the two lower pin holes. Unfold. Take hold of left side of paper and fold to right, creasing on the two right hand marks. Unfold, cut on the last two creases. This should give a perfect square seven inches on each side.

To Make A Holder

Uses of Holder—A holder is very convenient in lifting things from the stove, and one should learn to use a holder instead of cloths or the apron. The one for which these directions are given has a ring so it may be hung on a nail near the stove.

Materials—

1. Two pieces of material seven inches square. White material is best for cooking holders, but for use about the stove a darker gingham may be preferable.
2. Two pieces of outing flannel five and one-half inches
Cotton is a vegetable fibre. It is the white, downy covering of the seeds that are borne in the capsules or seed pods of the cotton plant. The cotton fibre has been used for cloth since early Bible times.

It grows in warm countries where the soil is light and rich and where there is the proper amount of moisture. The length of the fibre varies from one-half inch to two and one-half inches. That most commonly used is from one inch to one and one-half inches. The fibres are separated from the seed and packed in large bales weighing about 500 pounds.

These bales are shipped to the cotton factories. Here they are first weighed, then the bales are opened and sometimes several qualities mixed. It is cleansed by passing a current of air through the cotton. This beats the cotton against the cylinders until dirt, seeds and stones are removed.

The cotton is next carded. By means of flat cards covered with small wire teeth, the fibres of the cotton are laid parallel. The cotton comes from the machines in a thin layer but is gathered into a coarse rope of cotton called a sliver. When fine strong yarn is required, the cotton is also combed. The comb is made of fine teeth on rollers which remove the short fibres and straighten out the long ones. The slivers from the carding machines pass into the sliver lap machine where the slivers are formed into laps ten inches wide. These laps are then passed through the combing machines where they are again formed into slivers which are put through the drawing and doubling frames. Here a number of slivers are passed together between rollers and drawn out so as to equalize the strength of all. This final sliver is slightly twisted as it is to be drawn out into a fine yarn. This is done by passing the cotton through bobbins and fly frames, of which there are several, the cotton passing through only those required to give the twist needed for the material into which the cotton is to be manufactured. This roving is now ready to be spun or twisted into thread from which the cotton cloth may be woven.

Thread is a small twist made of cotton, flax, wool or silk. The cloth is woven by interlacing the warp or lengthwise threads of the loom with a crosswise or woof thread which binds the outer edges thus forming the two selvages.

It would be well to show some of the common cotton cloths so the children may distinguish between them.
Cloth is a fabric woven from cotton, flax, wool or silk.

**Directions**

Cutting—Mark and cut two seven-inch squares following the directions given in the paper work. Place the cloth before you and make the first turn of one-quarter inch on each of the four sides. Place pins to hold the first turn in position. Always place the pins at right angles to the edge with which the basting is to be parallel.

*Threading the Needle*—The thread should always be broken or cut from the spool. The width across the chest is about the right thread length for basting. The needle should be threaded with the end of the thread which first comes from the spool as it is unwound. If threaded in this way the thread is not so apt to knot and tangle.

Basting is a loose stitch used to hold materials in position while sewing. It is also used as a guide in stitching. Use the colored thread for basting. There are two kinds of basting, even basting and uneven basting. In EVEN basting the space and the stitch are of equal length. This makes the stitches the same length on both the wrong and the right side of the sewing. In UNEVEN basting the space should be one-third the length of the stitch, thus the stitches on the wrong side are quite small compared with those on the right side.

1. Uneven basting. 2. Even basting. 3. Always place the pins at right angles to the edge with which the basting is to be parallel. 4. Turning the corner.

*To Bast the Turn on the Holder*—Tie a knot in the end of the thread. If the end of the thread extends beyond the knot, it should be cut off close to the knot. The knot should be small and neat. Hold the cloth with the fold toward you and the turned edge at the top. Begin at the right and sew toward the left. Put the needle into the cloth one-eighth inch from the top and one-eighth inch from
the right hand side of the square and bring it out one-quarter inch to
the left of where it went in, pushing it through the cloth with the
thimble. Again put the needle into the material, this time one-quarter
inch to the left of where it came out and bring it out one-quarter
inch to the left of where it went in. Keep the line of basting one-
eighth inch from the folded edge. This is even basting. Turn the
square and baste the fold down on the second, third and fourth sides.
Fold, pin and baste the turn on the second square. The two squares
should be the same size. Take out the pins. Place one square on the
table with the folded edges up. Place the two squares of outing
flannel directly on top having the edges of the outing flannel come
one-fourth inch from the folded edge of the cover. Pin at each side
and baste the lining squares to the under square with even basting.
Place the second square directly on top, having the folded edge
down. This brings the folded edges of the two squares together on
the inside. Pin the two squares together, keeping the corners and
edges even. Baste the squares together using even basting and sew-
ing one-eighth inch from the edge.

**Sewing**—Sew together using the overhand stitch. The OVER-
HAND STITCHES should be small and neat, the same distance
apart, the same depth and the same slant. This stitch is used where
strength as well as neatness is required. Begin to sew near the
middle of one side. Fast-
en the thread by pulling
back the edge of the
cloth so two or three
little stitches can be
taken over each other on
the fold. Hold the work
in the left hand, keeping
the edge between the
thumb and finger. Bring
the needle through on the
side toward you and as
near the crease as possi-
bile. Put the needle in
very near the edge on the
side from you, point the
needle toward you, push
it through, catching the
dge of each square. The
stitch is always taken to the right of the previous stitch, the needle
put through the two folds and the thread carried over the top of
the folds. Repeat, taking one stitch at a time until you have sewed
the four sides. The stitches should be near together and take in
very little of the cloth each time. To fasten the thread, take two or three small stitches over each other in the holder just below the overhanding. Clip and pull out all basting threads and press.

Place the holder on the table in front of you, take hold of the upper left-hand corner. Bring it down even with the lower right-hand corner. Press with the finger to make a diagonal crease along the line of fold. Open and baste across the square just below the crease with uneven basting. Place on the table in the same position as before. Fold as before, but from the upper right to the lower left, crease and baste as directed above. Sew with the running stitch following the line of the creases.

*To Make the Running Stitch*, make very short stitches in and out of the material, much the same as in even basting. These stitches are very small and are of the same length on both sides of the material. In making this stitch, it is well to have several of the small stitches on the needle at once. Skill is shown by making these stitches short and even.

*To Sew on the Ring*—Place the ring at the upper left hand corner of the holder so the upper edge of the ring comes even with the upper edge of the holder. Fasten the thread in the upper edge of the holder about three-eighths of an inch from the left side. Bring the needle through the edge of the holder and under the ring. Take hold of the thread near the eye of the needle, carry it to the left and bring it under the needle. Pull the needle through and draw the thread even so the purl is on the edge of the ring. Put the needle through the edge of the cloth and under the ring one or two threads to the left of where it was put in before, and carry and draw the thread as before. Repeat until about one-fourth inch of the ring has been covered. This is known as the buttonhole stitch. This is a very important stitch and should be made skillfully. The stitches should be parallel and close together. The loop which forms the purl should be brought to the inside of the ring. Put the needle into the edge of the holder and fasten with three or four tiny back stitches. Turn the ring so it extends out beyond the holder. Pull out the uneven bastings and press the holder.

**Needle Book**

This is a receptacle for needles which will be found very convenient in the work box or bag. Work on this teaches some of the simple ornamental stitches: Blanket stitch, back stitch, cross stitch, outline stitch and chain stitch.

**Materials:**

1. Aida canvas, five and one-quarter inches by four inches.
2. Lustre crochet cotton—the color should harmonize with the color of the canvas.

3. Crewel needle number 7.

4. Two pieces of white flannel five inches by three and three-quarters inches.

5. Shears, pins, tape, thimble.

Lustre crochet cotton is cotton thread which resembles silk but has all the qualities of cotton.

Silk is made from the fibre of the cocoon spun by the worm known as the silk worm. The raising of silk worms is an industry which is carried on very extensively in many countries that have a climate suitable to their growth. France, Italy, China and other countries of similar climate, produce most of the silk of the world.

The silk moth lays her eggs, and these eggs are collected and kept in a cool place until hatching time. When leaves of the mulberry tree are new and tender and ready for the small worms, the eggs are exposed to warmth and in from eight to ten days they hatch. The worms are then fed on mulberry leaves. They grow very rapidly until at the end of a month they have reached their full size. When full grown they begin to spin their cocoon. This cocoon is made of silk fibre, held together by a gelatinous substance. After about three weeks the caterpillar worm changes into a moth. The moth escapes by moistening and puncturing one end of the cocoon, thus spoiling the cocoon for the purpose of making silk. To prevent this destruction, the cocoon is subjected to intense heat a few days before the moth is ready to escape, and the caterpillar is killed.

The cocoons are placed in hot water to soften the gelatinous substance and then the ends of four or five of the cocoons are caught together and reeled off. The silk is taken from the reels and made into bundles called hanks. These hanks are packed into bales, weighing about 133 pounds. The bales are shipped to the silk manufacturing centers. They are opened, the hanks soaked and the raw silk wound into skeins. The skeins of silk are wound upon spools or bobbins and as it is unwound it is passed over plates to remove dirt and foreign materials. After the silk is thus cleaned it is usually dyed and then placed on the winding spindles and wound. The weaving is now done, the process varying according to the kind of silk cloth to be made.

Cutting—Measure five and one-fourth inches along a woof thread and cut on the line. Measure four inches along a warp thread, cut on the line of a thread. Complete cutting of rectangle on thread. To thread a crewel needle with crochet cotton, fold the end of the thread over the needle; with the needle pull the end
First Year Sewing

of the loop close between the thumb and forefinger. Slip out the needle and crowd the eye of the needle down over the end of the loop. As the loop is crowded through, catch between the thumb and forefinger of the right hand and pull through. Do not knot the thread.

Sewing—Fold the canvas to form a booklet four inches by two and five-eighths inches. Crease well. Begin at the crease and make the blanket stitch around the edge.

Blanket Stitch—Hold the canvas in the left hand, having the right side of the material up, and the edge toward the worker. Have the needle threaded with the crochet cotton and sew with a single thread. Begin at the crease, put the needle through the hole one square from the near edge. The needle is put through from the top and is brought out at the edge from under the material, the needle being held at right angles to the near edge of the material. The thread is pulled through, leaving about two inches at the end. Having the thread at the edge of the material it is held under the left thumb, the needle is inserted from above one square from the edge and one square to the right of where it was inserted the first time, and brought out under the edge and over the thread. The needle is brought through and the thread is pulled evenly until the stitch is at right angles to the edge. Again hold the thread under the left thumb, insert the needle one square from the edge and one square to the right of where it was inserted the last time and bring it out under the edge and over the thread, pull the thread evenly. Repeat until you reach the corner. At the corner there will be three stitches taken in one hole. For the second of these three, the thread is held exactly at the corner, making one diagonal stitch. Keep the stitches straight and the tension even.

When ready for the last stitch, the beginning thread is pulled through to the wrong side and the last stitch is taken in this hole; the thread is then carried along the edge and the needle is put down between the canvas and the first stitch. The work is then turned to the wrong side and a square knot is tied.

To Tie a Square Knot—Take one end of the threads in each hand, lay the thread from the right hand over the thread in the left hand. Bring the left end over and under the right, pull the ends until the thread lies smooth along the edge of the canvas. Now take hold of the thread, which was the right end and place it over the thread which was the left and then through the loop. Take hold of the two ends, pull the knot tight and cut off the ends. This is a very strong knot which will not slip.
Back Stitch—The back stitch is used where there is to be a strain. It may replace or be used instead of machine stitching. Begin at the crease and three squares from the edge. Bring the needle up from the under side three squares from the edge having about one and one-half inches of thread on the under side, put the needle through to the under side of the canvas one square to the right, bring it up two squares to the left, pulling the thread through evenly, again put the needle down one square to the right and bring it up two spaces to the left. Repeat all the way around the rectangle and fasten the thread by tying a square knot with the beginning thread on the under side. Cut both ends off short. This makes a continuous line of sewing on the upper side, being a series of short stitches one meeting the other. The stitches on the under side are twice as long as those on the upper side and overlap each other, thus giving a cord-like appearance.

One square in from the back stitch make a row of cross stitches.

Cross Stitches—Begin at the crease and at the top, bring needle up from below leaving about an inch of thread. Put the needle down through the space one square below and one square to the left. Bring the needle up one square to the right on the same line. Put needle down one square above and one square to the left; bring needle up one square below. Put the needle down one square to the left and one square above and bring it up one square to the right; down one square below and one to the left; up one square above. Repeat until a line of crosses has been made around the cover, carry the thread through to the wrong side and tie to the beginning thread, clip ends close. On the right side, the stitches will be slanting and form crosses and on the wrong side vertical and horizontal stitches should alternate.

One square below the cross stitch make an outline stitch.

Outline Stitch—Work from left to right. Bring the needle up from below at the crease on the line you are to work. Put the
Outline stitch

Wool is an animal fibre which is obtained mostly from sheep. The surface of each wiry fibre is covered with tiny scales. The quality of wool depends upon the fineness, the length of fibre and the number of scales to the inch. The scales of the fibre interlock. It is this property which causes wool to mat and become thick when improperly washed. After the sheep are sheared, the fleeces are rolled and shipped to the factories where they are first sorted, to divide them into the different grades, and then washed to remove grease and dirt. Great care must be taken in washing not to injure the fibre. The water must be soft and of the right temperature, and the soap must be one that does not contain free alkalis, as strong alkalis destroy wool. These points should be remembered in washing woolen garments. After passing through the five tanks and rollers, the wool is dried and treated with olive oil, so it will be soft and elastic for spinning. All burs or vegetable matters are then removed and the wool blended or mixed before it is sent to the carding machine. It passes from the carder in the form of a gauzy lap of wool the width of the machine and is delivered as a sliver or rope of wool. If worsted yarn is to be made, the wool is combed until only the longer hairs are left, and these are made to lie in the same direction before being twisted. This gives a strong but expensive yarn. The woolen yarn is not combed but carded a great deal and the fibres lie in every direction.

The spinning and weaving are carried on much the same as for cotton materials. Wool may be dyed in the raw state or as yarn or cloth.

Since wool absorbs considerable moisture and has an oily surface, needles are less apt to rust when kept in wool than when kept in cotton.

Cutting Flannel for Leaves—Cut two or three pieces of flannel five inches by three and three-quarters inches. Pin the pieces together and make little diagonal cuts one-eighth inch deep and one-

needle down two squares to the right of where it came out and bring it up one square to the left. Again put the needle down two squares to the right and bring it up one square to the left, bringing the needle out on the same side of the thread. Repeat until the line has been worked around the cover.
fourth inch apart around the edges; then turn the flannel pieces and cut the opposite direction, thus making shallow points.

**Fastening the Flannel to the Canvas**—Place the cover of the needle book wrong side up. Place the flannel leaves upon the cover so the edges come the same distance from the edge of the cover on each of the four sides and pin in place. Thread a needle with the thread used for working the cover. Start from the outside at the center and put needle through the cover and the leaves. Pull the needle through, leaving two or three inches of thread. Three-fourths inch below on the center line put the needle through to the outside. Carry needle to the center and put it through the first hole to the inside again. Three-fourths inch above on the center line put the needle through to the outside. Bring the thread to the center and tie, making a square knot and then a bow.

The book is now complete and the needles may be arranged in it.

**Work Bag**

The bag is a useful receptacle for holding the sewing work. It teaches the combination stitch, the chain stitch and the French seam.

**Materials:**

1. Two pieces of material ten by eighteen inches or one piece ten by thirty-six inches. Chambray, gingham, Indian head, linen or other material suitable for
a bag may be used.

2. Needle No. 8, crewel needle No. 7, thread No. 70, pins, thimble, shears, tape measure, gauge.

3. One and one-half yards of one-eighth inch cord or one-inch ribbon.

4. D. M. C. number 16 or similar floss in white or color.

*Indian Head* is a heavy white or colored fabric of plain weave.

*Gingham* is a cotton material of plain weave with many combinations of warp and woof threads, usually to form stripes and plaids, but often in the plain. The threads are dyed before being woven into cloth.

*Chambray* is always woven a plain weave, having colored warp and white filling. It is in plain colors, and of light weight.

*Linen* is made from the fibre in the stem of flax. Next to cotton, flax ranks the most popular of vegetable fibres. Linen is probably one of the oldest types of cloth, for it was common to the Egyptians. We read of it in the Bible and it was very plentiful among the Romans.

The fibre from which linen is made lies just inside the woody covering of the stem of the flax plant. The plant grows erect to a height of twenty to forty inches and at the top bears a flower and later the seed pod. The fibres are many times as long as cotton fibres and are thicker and stronger. Thus the fibres can be made into a very firm thread.

The flax which is grown for its fibres is harvested before it is ripe. The stems are pulled out of the ground and tied in bundles—the straws all lying straight. The seeds are removed. This process is called rippling.

The next process is called retting, which is really a process of rotting the woody fibre in the straw. The straw is dried and by a process known as scutching the woody part is scraped out. The long gray fibres are now bound into large bales weighing about two hundred pounds each.

The flax goes to the mills and is combed to get out the long fibres. The long fibres are used for the strong threads and to make the fine linen cloth, the short fibres are used in making inferior cloth.

The fibres are run through carding machines and are gathered into a coarse, loose twisted rope called a sliver. Several slivers are then taken together, twisted and rewisted until they become a thread. The spinning is done much the same as the cotton spinning. After the spinning is finished the thread is washed and boiled and if a white cloth is to be made the thread is bleached. It is sometimes woven unbleached and then bleached in the cloth.
Linen is woven into cloth in much the same way as cotton. The drying, beetling and calendering of linen completes the process. To make the threads stand out, the linen is put through a process of beating which is called beetling. The glazing and pressing which gives linen the glossy, smooth finish is called calendering.

The manufacturing of linen is a very fine art, and the production of a beautiful damask requires more skill in the preparation of the thread and the working of the design than is required for silk.

Parts of Scotland and Ireland are probably most noted as centers of linen manufacture. However, the industry is common in most countries.

Cutting—Measure two oblongs eighteen inches along the warp thread and ten inches along the woof thread, or one piece thirty-six inches along the warp thread and ten inches along the woof thread. Mark or crease. Cut with long, even strokes following the mark or crease. Place the pieces one above the other, having the wrong sides together and the warp threads running in the same direction. Pin together the two longer sides; place the pins at right angles to the edges. Make a French seam.

French Seam—A French seam is a double or finished seam. The first seam is turned and sewed so the raw edges come on the inside and do not show. First baste with uneven basting one-fourth inch from the edge. This basting is used as a guide for the first line of stitching. Sew with small running stitches. Take out the bastings and trim the edge close to the stitching. The first seam is turned and again basted so the raw edges come on the inside and do not show. Baste one-fourth inch from the edge with uneven basting and sew with the combination stitch.

Combination Stitch—The combination stitch consists of one back stitch and two or three running stitches, then another back stitch and two or three running stitches. Clip and take out bastings.

Sewing—Six inches from the top on either side of the bag begin to baste the two sides. If the bag is made of two pieces the lower end is also basted. Sew with small running stitches. Turn the seams. Six inches from the top on either side of the bag, cut across the seam at right angles to the edge. Cut just to the line of
First Year Sewing

sewing. Turn the bag and work out the seam. To work out the seam, place the thumb of the left hand against the underside of the seam, draw the line of stitching over the thumb until the cloth lies flat on either side of the line of stitching. Fold the right sides together and crease, having the stitching line come on the edge. Baste with one-fourth inch uneven basting one-fourth inch from the edge. Open and see that no raw edges show on the right side. Sew with the combination stitch, following the line of basting.

The six inches above the seam should have one-half inch on each side turned to the wrong side. This turn should come in line with the stitching. Baste down the turn with one-fourth inch even basting. Across the upper end of the bag make a one-fourth inch turn on either side. Pin and baste. It is important that the first turn of the hem be true, as the evenness of the hem depends largely upon the accuracy of the first turn.

Make the second turn of the hem two and three-fourths inches wide. Pin and baste in place, using one-fourth inch even basting. This brings the folded edge of the hem to the end of the seam. There should be no cut edges showing. Sew with the hemming stitch.

Hemming Stitch—Begin at the right hand side and sew toward the left. Have the edge of the hem to be sewed, from you. Lift the edge of the hem and fasten the thread in the first turn by taking two or three back stitches. Bring the needle out at the edge of the fold. Work with the needle parallel to the edge of the first fold. Take up one or two threads of cloth just below the edge of the fold, bring the needle up and through the edge of the fold. Repeat, putting the needle into the body of the cloth a little ahead of where it came out of the fold. Fasten by lifting the edge and taking two or three back stitches in the first fold.

Beginning at the folded edges on the sides of the hems, overhand each end for one and three-fourths inches or to within one inch of the sewed edge. Fasten the threads well.

On the right side, make a guide line across the end of the bag on each side one and three-fourths inches from the top, using one-fourth inch uneven basting. Just above this line make a line of fine back stitches (See page 16), thus forming a casing. Fasten the ends securely for the draw cord is to be run through this casing and hence this seam must be very substantial.

Stamp or draw your initial on one side of the bag so it comes at the center. Work with the chain stitch following the line of stamping.

Chain Stitch—Begin the letter by taking two or three back stitches and bring the needle out at the beginning of the letter. Work toward you. Hold the thread down with the thumb of the
left hand. Put the needle down through the same hole it came up and bring it up one short stitch (about one-eighth inch) toward you along the line marked, letting the needle come out over the thread. Pull the thread smooth but not too tight.

Again hold the thread down with the thumb of the left hand, put the needle down into the hole it last came through, putting it inside the loop of thread, again bring the needle up one short stitch toward you and over the thread, pull the thread smooth. Continue until the letter is completed. Turn to the wrong side, and fasten the thread by taking two or three back stitches under the chain. Press.

Always press embroidery on the wrong side, placing several thicknesses of soft cloth under the embroidery.

To Put in Cord or Ribbon—Cut the cord or ribbon into two parts. Pull one end through a bodkin or fasten in a small safety pin. Start at the right hand side of the bag and run the ribbon through the casing on both sides, bring it out at the starting point. If ribbon is used, tie in a small square bow. If cord is used, lap the ends one inch and wrap and sew firmly together, pulling the cord through so the piecing comes in the casing.

Put the second piece of cord or ribbon through the casing, starting at the left side. Bring the cord or ribbon out at the left side before fastening. This draws the bag together when the loops at the sides are pulled in opposite directions or as the bag hangs on the arm.

Sleeveless Apron

This type of apron has been selected as the long lines give greater length and for this reason is much more attractive where one wears the short skirt or has no pronounced waist line.

Aprons have a two-fold purpose, to protect the food from dust and foreign articles that may have accumulated on the clothing; and to protect the clothing from particles of food that may be spilled.

The apron will be found to be very convenient and should be made of good quality of material suitable to the use to which it is to be put.
A good quality of blue checked gingham which costs from 10 to 15 cents, holds its color and its form and is much more satisfactory in every way than the cheaper grades.

The following draft makes a good apron:

**Measures:**

1. **Bust measures** should be taken from behind. Place the tape measure around the fullest part of the bust or just under the arms and take an easy measure.

2. **Hip measure** is also taken from behind. Place the tape measure around the hip about seven inches below the waist line. This should be an easy measure and the tape should be held parallel to the floor.

3. **Width of back.** Four inches below the base of the neck, measure across the back from arm to arm.

4. **Height of shoulder in back.**
   1. Measure up from the end of the line which measured the width of the back to the top of the shoulder line.
   2. Three inches from the end of the line, again measure up to the top of the shoulder line.

5. **Width of front** should be measured two inches below the base of the neck from shoulder to shoulder.

6. **Height of shoulder in front.** Measure up from the end of the line, which measures the width of the front, to the top of the shoulder. Three inches from the end of the line, which measures the width of the front, measure up to the top of the shoulder line.

7. **Length of back.** Measure from the base of the neck to the bottom of the skirt.

8. **Length of front.** Measure from the base of the neck to the bottom of the skirt.

**Draft of Pattern**

1. **Back**—Use a large piece of paper. Draw a line one and one-half inches from and parallel to the left edge of the paper. Measure down six inches along this line and place the point A. From the point A draw a line of indefinite length at right angles to the edge of the paper. On this line measure one-half the width of the back. Mark the point B. Directly above B measure the height of the shoulder. Mark the point C. Three inches from B toward A, mark the point D. Directly above D measure the second height of the shoulder and mark the point E. Connect C and E with a straight line, letting the line extend three-fourths inch beyond C. Mark this point F. Draw a curved line connecting E and A. Nine inches below A place the point G. From G draw a line of indefinite
length parallel to A B. From G measure one-fourth the hip measure plus one inch. Mark the point H. Connect the points F B H with a slightly curved line. Measure down from A the length of the back less four inches. Mark the point I. From the point I draw a line of indefinite length parallel to A B. On this line from the point I, measure one-half the width of the back of the apron at the bottom. For a forty-inch length, this should measure fourteen inches for the average bust measure, and decrease one inch in width for every decrease of five inches in length. Mark the point J. One inch above J mark K with a slightly curved line. Connect the points I and K. Connect K and H with a straight line. For seams of the front and back, draw lines one inch beyond the shoulder and the side lines and parallel to each; one-fourth inch beyond the arm’s eye line, make a curve parallel to the arm’s eye curve. At the back allow for the hem by drawing a line parallel to and one and one-half inches beyond the line A I. At the points C and H of the front and back draw lines at right angles to the shoulder and side lines. Let these extend to the outer lines as guides for joining. Cut out the pattern following the outside lines.

2. *Front*—Again use a large piece of paper with straight edges. Measure down six inches along the edge of the paper and place the point A. From the point A draw a line of indefinite length at right angles to the edge of the paper. Measure one-half the width of the front on this line and mark the point B. From B measure up the height of the shoulder and mark the point C. Three inches from B toward A mark the point D. From D measure up the second measure for the height of the shoulder and
mark the point E. Connect the points C and E with a straight line letting the line extend three-fourths inch beyond C. Mark this point F. Measure down nine inches from A. Mark this point G. Draw a line parallel to A B. On this line measure one-fourth the hip measure plus two inches. Mark the point H. Connect the points F B H with a slightly curved line. From the point A measure down two inches. Mark the point I. Connect the points E and I with a rather deep curve. From the point A measure down the length of the front less two inches. Mark the point J. From the point J draw a line parallel to the line A B. From J measure one-half the width of the front. For a forty-inch length and average bust this is fifteen inches, the width decreasing one inch for every decrease of five inches in length. Mark this point K. One inch above K mark the point L. Connect the points J and L with a slightly curved line. Connect H and L with a straight line. For seam allowance see draft for back of apron. At the points H and C draw short lines at right angles to the side and shoulder lines.

Cut out the pattern, following the outside lines.

3. Pocket—For a pocket cut an oblong four and one-half inches by five inches. Fold through the center lengthwise having the greatest dimensions for width. Round off the lower corners.

4. Belt—For belt, cut strip of paper two and one-fourth inches wide and two inches less than one-half the width of the back at the waist line. This gives one-half the length of the belt.

Materials

Calico is a cotton cloth with a figured design, printed on one side. It was first made in Calicut, India, from whence came the name.

(Other cotton materials described on page 19.)

1. One-eighth inch checked blue gingham, preferred.
   Percale or calico in good pattern may be used. When possible use thirty or thirty-six inch material.
Amount—Have twice the greatest length of the apron plus four inches unless the material is narrow and the apron requires piecing; then allow one-half yard more than twice the length.

2. Thread No. 60. Needle No. 8.
3. Two and one-half yards of finishing braid. Finishing braid comes in three or six yard bolts and by the yard. It has one straight edge with a selvage finish and one scalloped edge with the buttonhole finish. It may be worked with white or color. If a color is selected, it should be the same as the color in the apron.
4. Five, three-eighths inch buttons.

Shrink Material—Fold the material smoothly and place in a tub. Pour on cold water to cover and soak 10 to 15 minutes, then gradually raise the temperature by adding hot water. Let the material stand in the water over night or for several hours. Pour off the water and press out of the material as much of the water as possible, but do not wring. Unfold and hang on the line, stretching the material so it hangs smooth. When almost dry, take from the line and press.

Cutting the Apron—Fold the material through the center lengthwise. Place the pattern of the front with its center on the lengthwise fold. Have the large end of the pattern toward the cut end of the material, with the figure in the right direction if there is an up and down. If there is no up and down the pattern for the back may be placed with the large end at the other end of the material, and the center of the pattern for the back along the selvage. The belt should be laid lengthwise of the material and should be double. The pocket should be placed so the warp threads run lengthwise. If the material is narrow and it is necessary to add gores, be sure to have the material in the gores cut lengthwise and the figures matched at the seams. If possible make the gores of the material so the selvage edge will join the selvage edge of the larger piece. The seam should be taken the width of the selvage.

Pin the pattern so it will lie smooth. Note carefully all seam and joining marks on the pattern and mark on the cloth with a tracing wheel or with colored thread. Cut with long even strokes following the edge of the pattern. Take out pins, fold and put away the pattern.

Sewing

Basting—Place the front and back together at the shoulder right side out so the guide marks COME TOGETHER, pin and baste with even basting along the seam line, one inch from the
edge, having the seam on the right side of the garment. Pin the underarm seam. Baste the second half of the back at the shoulder and pin the underarm seam. Slip the garment on to see if the slope of the shoulder is right, the width of the front and back right, and that the arms’ eyes are large enough. Make any necessary alteration.

If the apron fits properly make French seams at the shoulders (See page 21), first basting one-fourth inch out from the first basting with one-half inch uneven basting. This basting is used as a guide for the first line of sewing. Sew just outside of this guide line with the running stitch. Remove the bastings, trim, work out and turn the seam. Baste the French seam and sew, having the line of sewing come on the line of first basting or the marked line. Be sure the seams are trimmed and sewed so no raw edges show on the right side.

Turn one-eighth inch to the wrong side around the neck and arms’ eyes and baste. Take the edging and baste around the arms’ eyes and neck, having the right side of edging against the wrong side of the apron, the scallop extending beyond the edge and the straight edge covering the turned-in portion. Hold the edging slightly full to allow for curves. Baste. Sew the edging on the apron with the hemming stitch, first hemming the apron to the edging on the right side at the upper edge of the apron, then turning and hemming the edging to the apron on the wrong side.

Pin the backs and front with guide lines together and the seams on the right side. Baste, sew, trim, turn and complete the under-arm seams.

Down each side of the back, turn, baste and sew with the hemming stitch a three-fourths inch hem. The first turn should be a scant one-fourth inch.

Mark the bottom of the apron to see that it is even. Then make a gauge to mark an even hem. Take a strip of card-board or a post card five and one-half inches long and one inch wide. Be sure that the card-board has perfectly straight edges and square corners. Measure on one edge of card-board the distance equal to the width of the hem and with sharp scissors cut in one-fourth inch at right angles to the edge of the card-board. One-fourth inch below make a diagonal cut meeting the first. You will find this type of a gauge very convenient in measuring the width of hems, width of seams, etc. Turn and baste hem. Then stitch with the hemming stitch.

If there is considerable fullness at the top of the hem, run a gathering thread in at the edge of the first fold. Take fine stitches. Adjust the gathers so the hem fits smoothly. Baste and sew with the hemming stitch. (See page 22.) The neatness of the work
depends upon the stitches being very small, the same distance apart, and of the same slant. Overhand stitch the ends of the hem in the back.

The pocket has a three-fourths inch hem at the top. Around the sides and bottom it is turned in one-fourth inch and basted. The pocket should be pinned on the right side of the apron at a convenient height and then basted and hemmed down to the apron with the hemming stitch. Turn in the edges of the two belt pieces and baste so that the edges just come together. Overhand the two pieces together. The belt should be fastened at the waist line on the seam under the right arm. Baste in place and hem down. All threads must be securely fastened at the beginning and end of the seams so the sewing will hold.

**Buttonholes**—To make a buttonhole, put a pin in one-fourth of an inch from the edge of the hem and a second pin the width of the button from the first pin following the threads of the goods. Fold so the two pin holes come together and clip on a line with the pins. Open the cloth, insert the scissors and cut to the pins. Tie a knot in the thread, insert the needle between the two layers of cloth about one-fourth inch from the inner end of the buttonhole and bring the needle out about two threads from the inner end of the buttonhole. Buttonholes are usually stranded and barred to give them strength. The bars are at the ends of the buttonhole. The strands are at the sides of the buttonhole. Take one small stitch across the inner end, carry the thread along one side and take a short stitch at the outer end, bring the needle up on the second side and take a long stitch putting the needle down at the inner end. Repeat until there are two or three threads on each side and one is again at the starting point.

Overcast the buttonhole by taking three shallow stitches over the edge on each side. One is now ready for the buttonhole stitch. Hold the side of the buttonhole to be worked toward you, working from right to left. Slip the needle in the opening and bring it out
one-sixteenth of an inch from the edge of the opening, pointing
the needle toward you. Before pulling the needle through, take the
double thread at the eye of the needle and throw it under the point
of the needle from right to left. Draw the thread out straight,
keeping the purl on the edge of the buttonhole. Continue this until
you reach the end near the fold. The stitches should be near to­
gether and of equal length and tension as in the blanket stitch.
The stitches on the end spread on the outside like the spokes of a
wheel. It should take about five stitches to make the turn. The
second side is made the same as the first. To finish, put the needle
through the purl of the first stitch, draw the thread tight, turn to
the wrong side and fasten with two or three back stitches. Cut off
the knot. Be careful not to spread the buttonhole while working.
A piece of gingham or cambric should be used on which a button­
hole may be practiced. Take a piece of cloth three inches by three
inches and fold it through the middle. There should be two but­
tonholes in the belt and three in the apron on the right hand side
so that the apron laps from right to left.

Buttons—After the buttonholes are worked, place the two
hems together right over left and pin. Place a pin at the end of
the buttonhole to mark the position of the button. Use a double
thread for sewing on buttons. Begin with two small back stitches
at the point marked for the button. Put the needle up through the
hole of the button. Place a pin on top of the button. Bring the
thread across and down through the second hole. Continue until
six or eight stitches have been taken. Remove the pin, raise the
button, bring the needle through to the right side of the cloth and
under the button close to the stitches, wind the thread around several
times to form a shank and allow space for the buttonhole. Take
the needle through to the wrong side and fasten the thread
securely.

Take out the basting threads and press the apron carefully.
A garment is not complete until all basting threads have been re­
moved.

Stocking Darning

Girls should learn to darn their stockings properly.

Materials:

1. A worn stocking.
2. Darning cotton to match, both in color and size, the
   thread of the stocking.
3. A long-eyed crewel needle is good but the needle
   should not be too coarse.
4. A darner or something with a smooth hard surface
   over which the stocking may be drawn.
5. Thimble, shears and basting cotton.
The darn in the foot of the stocking should be made on the right side and in the leg it should be made on the wrong side, as the under side of a darn is usually the smoother.

**Darning**—Place the darning inside the stocking and smooth the stocking over it; trim off the ragged edges and outline the portion to be darned with white basting cotton. Have the outline the shape of the hole or a square on the diagonal, and allow it to extend from one-fourth inch to one-half inch beyond the edge of the hole. Always darn the warp, or threads running lengthwise, first.

**Darning**

Beginning at one side of the outline, follow the warp threads with small running stitches. Do not knot the thread, but let the end extend about one-half inch. Turn and work back, taking up the threads that were passed over in the preceding row. Leave the thread loose at each end to form a small loop, which allows for shrinkage and elasticity of weave. Repeat, letting the basting determine the end of each row. When the hole is reached take the stitches over one edge and under the opposite, reversing this in the next row. Continue until all the warp threads are in. For the weaving, work with the needle at right angles to the warp threads and carry the needle over the first thread, under the second, over the third, under the fourth and so on. Returning, pass over the threads taken up before, and under the threads passed over, leaving the thread loose at the ends. Repeat until the darn is finished. Remove the bastings and press.

**Patching**

**Materials:**

1. A garment needing patching.
2. A piece of material like the garment.
3. Thread No. 60 or 80, depending on the fineness of material.

4. Needle No. 7 or 8, pins, thimble, shears.

Girls should learn how to patch their dresses and under-garments: If the garment to be mended has been washed, the materials used for patching should also be washed. When the garment is worn so the material around the hole is weak, it is better to cut away a portion, making a square or oblong hole.

Place the patch under the hole having the right side of the patch against the wrong side of the garment; the warp thread of the patch parallel with warp threads of the garment and the design, if any, matching. Pin the patch in place, having it extend one inch beyond each side of the hole. Clip the garment at each corner of the hole, cutting out on the diagonal one-eighth inch. Fold under the edge one-eighth of an inch on each side of the hole and baste close to the folded edge. Turn the garment on the wrong side, fold under each side of the patch one-eighth of an inch; unfold at each corner, cut across where the two creases meet, cutting off a small triangle; fold back and baste the folded edge of the patch to the garment, keeping the patch smooth. Turn the garment to the right side, begin at the center of one side and hem the garment to the patch, using the hemming stitch. Turn the garment to the wrong side again and beginning at the center of one side, hem the patch to the garment. Clip, take out the bastings and press.

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