A COMPLETE COURSE IN DRESSMAKING

IN TWELVE LESSONS

BY

ISABEL DE NYSE CONOVER

TRIMMING AND DRAPING

LESSON TWELVE

Edward J. Clode
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LESSON XII

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Lesson XII

TRIMMING AND DRAPING

PART I — TRIMMINGS

FOR COTTON DRESSES

Pointed Edges. — Points of white organdie or other sheer fabric make an attractive finish for collars, cuffs and tunics. To make the points cut straight strips of the organdie one and one-half inches wide. Fold the strips through the center as shown in Fig. 509, and press. Then fold one end diagonally as in Fig. 510, and turn the other end to form the point. (See Fig. 511.) Baste points along edge. Pin lining or facing in place

Fig. 509

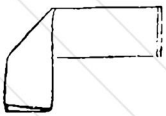


Fig. 510

Fig. 511

and stitch a seam's width back from edge. (See Fig. 512.) Turn the lining or facing onto

the wrong side and press. Sometimes there is a second stitching an eighth of an inch back from the edge as shown in Fig. 513.

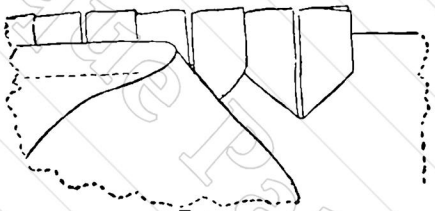


FIG. 512

FIG. 513

FIG. 514

Scalloped Edge. — The Fig. 514 shows a white lawn collar held in scallops by loose stitches of mercerized cotton. Some pretty color ought to be used in the embroidery cotton. The collar is lined in the usual way, then caught every inch with a loop of the embroidery cotton drawn up sufficiently to form the scallop. Bring the needle out as shown in Fig. 515, pass the thread to the outer edge of the collar, turn the collar wrong side out and pass the needle under the thread on the wrong side as shown in Fig. 516, draw

FIG. 515

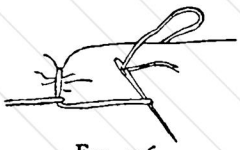


FIG. 516

up the thread to make the scallop and proceed as before.

Rickrack Braid. — This old-fashioned zigzag braid has come to be one of the smart trimmings for cotton afternoon dresses as well as porch and kitchen frocks. Sometimes it is applied flat and stitched through the center. But there are more effective ways of

FIG. 517

FIG. 518

applying it. See Fig. 517 for instance. The braid is basted flat to the material, then caught at each point with three over-and-over stitches of wool. White rickrack braid caught with black wool is pretty on a pink chambray or try white braid caught with purple wool on a lavender check gingham.

FIG. 519

Where the braid edges collars, cuffs, tucks or tunics, it is placed under the edge, only half of it showing. (See Fig. 518.) To do this place the braid on the right side of the goods near the edge and stitch through the center of the braid. (See Fig. 519.) Then turn it onto the

FIG. 520

wrong side, press the edge and stitch as shown in Fig. 518.

Cording. — Often a skirt of a cotton frock needs no other trimming than cording above a hem or at the bottom of a tunic. Cotton cable cord is used for this purpose. It comes in various sizes. The simplest way to do cording is to roll the material over the cord and catch it just in back of the cord by hand although it can be stitched by machine if you have a foot for your machine which is one-sided, that is, does not extend both sides of the needle. (See Fig. 520.)

Piping. — Bias piping at the edge of collar and cuff or in the seams of a dress is another dainty trimming for cottons. Cut the material for the piping in one-inch bias strips. If the piping is to finish the edge of a collar, that is, if the collar is unlined, fold over one edge of the piping a quarter of an inch and press, turn back the other edge an eighth of an inch and press. Then turn under the edge to be piped a seam's width and press. Place the piping under this edge with the edge of the piping extending one-eighth of an inch beyond the piece, and stitch from the right side of the garment. (See Fig. 521.)

If the collar is to be lined, fold the piping

through the center and press it, then baste it to the right side of the collar with the raw edges of the binding along the outer edge of the collar. Pin lining in place and stitch as shown in Fig. 522.

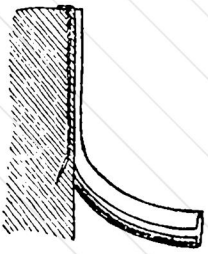


FIG. 521

Where a seam is to be piped, fold under the edge of one piece to be joined a seam's width, fold the piping through the center and press. Then lap the folded edge of the material over the piping, letting an eighth of an inch of the piping extend beyond the folded edge of the piece. Baste the piping in place. Lap this piece and the piping over the right side of the piece it is to join to and stitch through the two pieces and the piping, running the stitching as near the edge of the upper piece as possible.

FIG. 522

Binding. — A contrasting color binding is an easy way of finishing the outer edges of collars, cuffs, pockets, etc. Binding was described fully in Lesson II.

Tucked Insets. — Organdie, swiss and other light-weight stuffs often have insets of tucking in the skirt portion. Usually these insets are in the form of straight bandings above the hem of the skirt or tunic. Cut straight strips of the material and pin tuck them crosswise. To form a pin tuck, fold the material with the wrong sides together and crease the edge of the fold. Stitch about one-sixteenth of an inch from the crease. When the material is flattened out it forms a pin tuck. Place the pin tucks about three-eighths of an inch apart. After the band is pin tucked lay a ruler on either edge and cut the edges true. Turn under the edges of the garment which are to join to the band and stitch as shown in Fig. 523. Trim the raw edges on the wrong side close to the stitching. If the joinings are machine hemstitched it adds greatly to the effect.

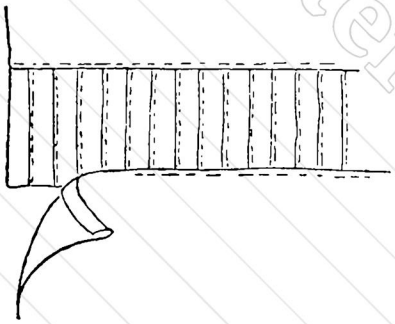


FIG. 523

Shirred Insets. — These are handled much the same as the tucked insets and are also

used mostly as skirt trimmings. Cut a straight piece of material, run gather threads either side and stitch edges of garment to it as shown in Fig. 524.

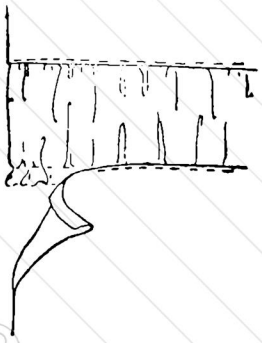


Fig. 524

FOR SILK FROCKS

Many of the trimmings described for cottons are also used on silks, for instance, the pointed edges, cording, piping, binding, tucked and gathered insets. Of course, in the case of the silk frocks, the pointed trimming, binding, and insets are usually of the same silk as the dress. In fact, the smartest silk frocks have self-material trimming.

Applied Shirrings. — The Fig. 525 shows an applied shirring which is especially nice for taffeta. In any case it ought to be of material the same color and texture as the dress. Cut a straight strip of material about one and a half inches wide. Cord either edge of the material and shirr the material up on the cord, turning the raw edges onto the wrong

Fig. 525

side. Lay the banding thus made along the neck edge, the lower edge of the sleeve or on the skirt, and slip-stitch either edge in place.

Quilling. — Taffeta dresses are often trimmed with bias shirred frills called quillings. Cut the bias strips any desired width from one inch to three inches and run a cording through the center, gathering the material on the cord. Then fray out the edges by taking one-half inch of the edge between the thumbs and first fingers and pulling gently. The Fig. 526 shows the quilling ready to apply to the dress. Quilling is used on the lower edges of tunics, skirts, sleeves and sometimes around the neck.

FIG. 526

Seashell Scalloping. — A dainty banding can be made by zigzagging a gather-thread in a narrow straight strip of material about one and one-quarter inches wide. Fold the strip through the center lengthwise with the right sides of the material together and stitch the length of the strip, running the stitching an eighth of an inch from the edge. To turn the strip right side out, pin a small safety pin to one end. Run the pin through the center of the strip. This will turn it

right side out. Flatten the strip out, bringing the joining center-way of the strip on the under side. Press the strip, run in a gather-thread, zigzagging it, and draw up the thread. (See Fig. 527.) Seashell scalloping is prettiest applied in a large zigzag, Grecian key or scalloped design at the bottom of tunic of a taffeta frock. A chiffon tunic is also attractive trimmed with seashell scalloping of taffeta silk.

FIG. 527

Shirring. — Shirrings are not used as much as formerly but there are designs that call for shirrings at the waistline of a skirt or tunic and sometimes at the lower edge. Plain shirring is formed by gathering the material in parallel rows. (See Fig. 528.) Usually shirring is reinforced with lawn on the wrong side of the goods. Baste the lawn to the material along the lines of the shirring after the shirring has been drawn up. Machine stitch over the lines of shirring or tack the shirring to the lawn by hand. Then cut the lawn away between the lines of shirring.

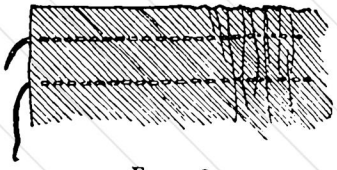


FIG. 528

Tuck shirring is formed by taking up a narrow tuck at each line of shirring (see

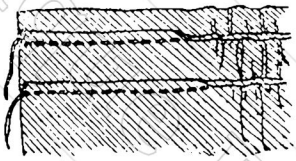


FIG. 529

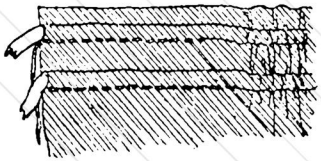


FIG. 530

Fig. 529), while cord shirring is made by cording each line of shirring. (See Fig. 530.)

Pleated Insets. — Strips of narrow pleating inset in skirts and tunics is a favorite trimming for taffetas and satins. (See Fig. 531.) Stitch the edges of the garment to the strip of pleating as described in making tucked insets.

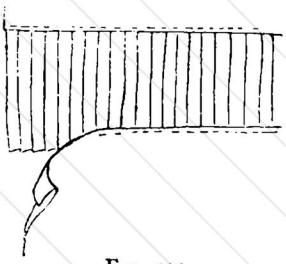


FIG. 531

Looped Trimming. — The Fig. 532 shows loops of grosgrain ribbon stitched to the edge of a tunic just as the pointed trimming was stitched on.

FIG. 532

Braid and Tassel Trimming. — If soutache braid is slip-stitched on in a circle and a tassel hung from the center it makes a smart motif for trimming a silk street dress. (See

Fig. 533.) These motifs are usually placed in a diamond pattern over the entire skirt about eight inches apart, as polka dots are printed on a fabric.

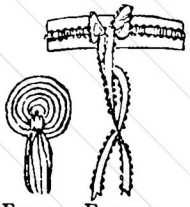


Fig. 533 Fig. 534

Girdles.—The Fig. 534 shows a plain girdle of a taffeta frock with a double-faced satin ribbon tied around the center. The bow and streamers come at the center-front. If you want to finish a sash at a side closing, make a single loop and one end as shown in Fig. 535. Finish off the back edge of the girdle with a hem. Loop the front end as shown in Fig. 536, running a gather-thread across. Wrap the free end around the loop and tack at the bottom of the girdle. (See Fig. 537.) Where the girdle fastens at the center-back finish it with a bow knot. A made knot is more effective than a tied one. (See Figs. 538, 539, 540 and 541.)

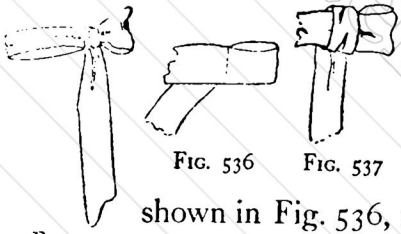


Fig. 535 Fig. 536 Fig. 537

Fig. 538 Fig. 539 Fig. 540 Fig. 541

FOR CLOTH DRESSES

Of the trimmings already described, these are suitable for cloth dresses of velour, serge or tricotine: pointed edges, cording, piping, binding, insets of pin tucks or pleating, ribbon loops and braid and tassel trimming. Where points are used at the edge they are of the dress material, pipings are often of contrasting velour; a matching grosgrain ribbon about three-quarters of an inch wide is used for loop trimming. Braid and tassel trimming is nearly always black. There are many other trimmings for cloth dresses.

Organ Pleated Ribbon. — Grosgrain ribbon in a matching shade tacked on in organ pleats makes a pretty trimming for light-weight woolens, such as serge or velour. (See Fig. 542.) The ribbon pleated in this manner is used to edge tunics or around the neck or sleeves.

FIG. 542

Buttons. — If buttons are sewed on in groups placed close together, they add a decorative touch. (See Fig. 543.) If the buttons have holes instead of shanks try

FIG. 543

sewing them on crow-foot fashion with a light-colored silk floss. (See Fig. 544.)

Embroidery. — Many of the serges and velours are heavily embroidered. One of the simplest and most effective ways to embroider is to couch on heavy silk or wool. (See Figs. 545 and 546.)

Fig. 544

Braiding. — Flat gold, silver or black silk military braid is also used on woolens. Stitch the braid on as shown in Fig. 547. Soutache

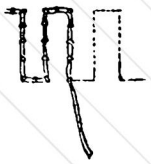


Fig. 545

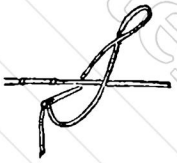


Fig. 546

Fig. 547

braid is often stitched on in a plaid design at the lower edge of a skirt. (See Fig. 548.) Lesson VII told how to stitch on soutache braid.

Machine Stitching with Heavy Floss.—Heavy black silk floss or mercerized embroidery cotton makes an effective trimming, stitched in parallel rows around the bottom of a skirt. To do this, wind the floss or embroidery cotton on the bobbin of the

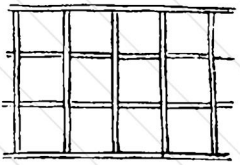


Fig. 548

machine, loosen the tension and stitch from the wrong side of the garment.

Fur Trimming. — In handling fur always cut from the hide side and with the point of a very sharp knife. In joining two pieces of fur, select portions that have the fur nearly the same depth at the point of joining. The fur must always run in the same direction. Butt the edges of the fur together and join with over-and-over stitches, using strong linen thread. Finish the outer edges of a fur trimming piece or banding by taping it. Lay the tape on the fur side of the piece and whip it to the edge with over and over stitches. (See Fig. 549.) Then turn the tape onto the hide side. (See Fig. 550.) This rolls the edge of the fur. In sewing the fur to the garment, the stitches are taken through the tape and the garment.

FIG. 549

FIG. 550

FOR SUITS

Trimming on dressy suits consists of insets of pin tucks, machine stitching and embroi-

dery as described in trimming for cloth dresses: also tailors' tacks used at pockets and tops of darts. To make a bar tack which is used at the ends of pockets as a stay, take four or five over-and-over stitches about one-quarter of an inch in length, covering these with over-and-over stitches worked close together and in the opposite direction. (See Fig. 551.)

FIG. 551

To make an arrowhead tack at the top of a dart, mark a triangle on the material as *A*, *B*, *C*, Fig. 552. Bring the needle up at point *A* and take a short stitch at point *C*. See Fig. 552 for position of needle. Insert the needle at point *B* and bring it out on the upper line of the triangle just to the side of the first stitch. Take a stitch at the bottom of the triangle just above the first stitch and insert the needle on the upper line near point *B* and next to the last stitch. Bring it out on the upper line near point *A* and close to the last stitch. Repeat until the triangle is covered.

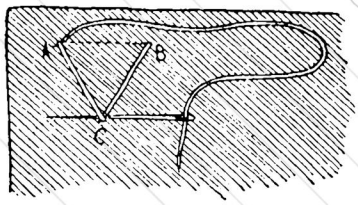


FIG. 552

FOR BLOUSES

Lace, embroidery and tucks are the usual trimming for blouses. (See Lesson V.)

FOR UNDERWEAR

Here, too, lace, pin tucks and embroidery are the trimmings most used.

CHILDREN'S CLOTHING

Hemstitching with an Ordinary Sewing Machine.—Simulated hemstitching gives a pretty finish in the seams of children's cotton frocks and underwear. With the aid of blotting paper it can be done on an ordinary sewing machine. Lay the two pieces to be joined with the right sides together and insert strips of blotting paper at the edge. (See Fig. 553.) Remove the sewing machine foot, loosen the tension and stitch through the material and blotting paper. Tear away the paper and turn the raw edges of the seams onto the wrong side of the goods and stitch either side of the seam. (See Fig. 554.) The width of the hemstitching

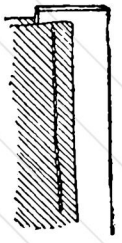


FIG. 553

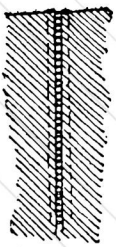


FIG. 554

will vary according to the number of thicknesses of blotting paper used.

PART II — HOW TO DRAPE

It is always advisable for a beginner to learn how to use a standard tissue paper pattern and to become accustomed to sewing before attempting to drape material. Perhaps a word of explanation is necessary. Draping is the process of pinning the material on a form and cutting it.

There are just a few general rules to observe in draping. Anyone who understands the parts of a garment and sewing ought not to have difficulty in mastering it. Some dressmakers drape the goods and cut it without making a pattern. However, this is not the safest nor in many cases the easiest plan. The highest priced dressmakers do their draping with muslin, cut a pattern from the muslin and then cut the goods according to the pattern thus obtained.

How to Drape a Fitted Lining. — Sometimes the muslin is draped on the person for whom the garment is intended, but more often it is draped on a dressmaker's dummy. For convenience' sake we will suppose that

the muslin is to be draped on a dummy. If it were being draped on a person the process would be similar.

First of all cut a straight length of material five or six inches longer than the distance from the shoulder to the hips. If you want a hem and lap at the center-front of the lining, measure back from one of the selvedge edges one and three-eighths inches and mark a line; then measure one-half inch beyond this line and mark a second line. The second line will be the center-front of the lining; and the material from the first mark to the selvedge, the hem. If the front of the lining is to fasten with hooks and eyes and the edges just come together without a lap, measure an inch and three-eighths from the selvedge edge and mark a line. This line indicates where the goods turns for the hem and also marks the center-front. In either case, do not turn the hem but pin the muslin to the dummy bringing the line which marks the center-front of the muslin to the center-front of the dummy. (See Fig. 555.) Whenever it is possible, bring the straight thread of the goods parallel to the center-front.

Run your hand over the muslin, smoothing the muslin to the shape of the dummy. Pin

it around the neck, across the shoulder, around the armhole and across the bust-line. Also, pin the muslin to the dummy at the underarm, allowing fullness enough from the center-front to the underarm so that the wrinkles run straight up and down and do not drag to the back. (See Fig. 556.)

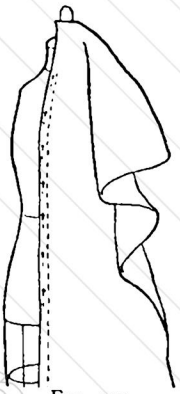


FIG. 555

Cut off the material which extends beyond the pins at the neck, armhole and underarm to within one inch of the pins. Now you are ready to fit the darts from the bust to the lower edge and to get the exact run of the seams. Use a black tape to mark the edge of the piece at the shoulder, neck and underarm. Pin the tape on, then stand away from the dummy and see if you have the shoulder and underarm seams placed correctly. The shoulder seam should come on the top of the shoulder and the underarm seam ought to start at the center of the armhole under the arm and run

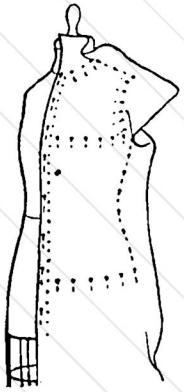


FIG. 556

straight down. Care must be used that the underarm seam does not slant toward the front or the back. This is a common fault in garments. The curve of the armhole must be a continuous curve without bumps or hollows in it. The same holds true of the neck. After the edges have been determined satisfactorily, pencil mark along the outer edges of the tape and remove the tape. Also outline the darts. (See Fig. 557.)

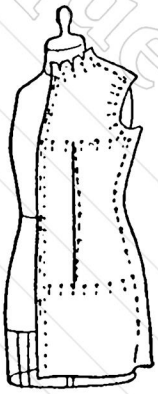


FIG. 556

It is a good plan to leave the front pinned to the dummy while draping the back. The same method is used in pinning the back to the dummy. The straight thread of the goods is placed along the center-back, the muslin is then pinned at the neck, armhole and underarm. A dart can be taken out extending it into a seam center-way of the shoulder or to the center of the side of the armhole. Of course, the seam will be only marked on the muslin. It will not be cut. In putting the tapes on to mark the outer edges, be sure to notice the run of the armhole at the top. The armhole ought to take

a continuous curve from the side-front to the side-back. It must not jog at the shoulder seam nor run out in a point.

After the muslin pieces are removed, trim the edges to within three-eighths of an inch of the pencil marks. This leaves just the regulation seam allowance. Cut a paper pattern from the muslin and then cut the material according to the paper pattern.

If you want a one-piece back, the slight fullness in the back dart can be taken up and the seam spread a trifle at the armhole. This throws just a little more goods into the armhole. However, so slight an enlargement of the armhole is hardly noticeable.

How to Drape a Coat. — Cut a straight piece of muslin several inches longer than you want the coat from the shoulder to the lower edge. Determine how much lap you want on the front. Measure one-half of this distance back from the selvedge edge and mark a line. This mark will be the center-front of the coat. Pin the selvedge edge of the muslin to the dummy bringing the line just marked to the center-front of the dummy. Smooth the muslin to the dummy and pin it at the neck, shoulder, armhole and underarm just as fitted lining

was pinned. True up the outer edges and place the side-front seam as indicated by tapes in Fig. 558. In a coat it is advisable to take up some material in a dart at the shoulder and, of course, the average coat needs a little material taken up at the waist-line, too, at the side-front, as described in making the fitted lining. Both these darts are taken up along the line where the side-front seam will come.

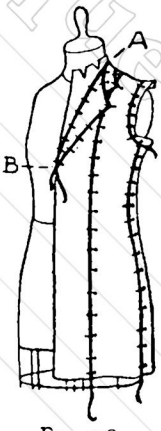


FIG. 558

The back of a coat is draped in the same way, the underarm and shoulder seams being matched with the front. Here, too, the curve of the armhole must be continuous with the curve of the front armhole.

Figure 558 also shows the marking with tape for the collar and revers. Place the tape along the lines you want for the finished collar and revers. Mark the tape lines on the muslin before removing the muslin. When you are tracing the pattern from the muslin, trace the shape of the revers on an extra piece of paper. Cut out the revers and place this piece of paper along the neck

edge of your coat pattern, trace around the outside of the revers piece adding it to the coat pattern, as shown by dotted lines in Fig. 559. The line *AB*, Fig. 559, is the neck edge of the coat pattern.

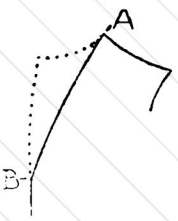


FIG. 559

Baste the muslin together at the shoulder on one side or lap the edges at the shoulder being careful to lap them sufficiently to take up the seam allowance on both the front and the back. Then trace the outline of the collar on a piece of paper. This gives you a collar pattern for a flat collar. Determine how high you want the collar to roll at the back of the neck. Pin or thumb tack your collar pattern to another piece of paper and draw a line continuing the center-back line on either side of the collar. Measure on this line beyond the inner edge of the collar the amount you want the collar to roll and make a mark. Run a line out at right angles to this line and from the point just marked for an inch or so then curve it to touch the front edge of the collar. Measure the inner edge of your original collar, then measure this amount on the line you have just drawn, starting from the front edge. Usually it is

necessary to add about one-quarter of an inch beyond the first center-back line of the collar so that the collar with the roll added will be large enough to sew back onto the neck of the coat. Draw a new center-back line from the point just determined to the lower edge of the collar. If the collar jogs at the center-back at the lower edge, add a little at the lower edge so that the lower edge will have a smooth line when the whole collar is cut out. (See Fig. 560.)

Fig. 560

See Lesson V for shaping sleeves.

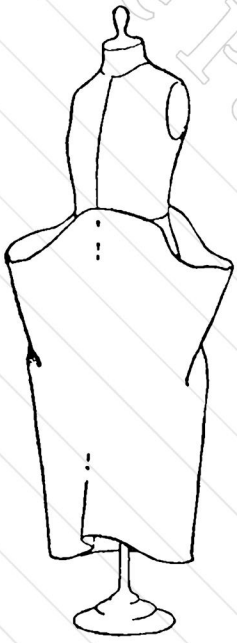


Fig. 561

Draping Skirts.—Pin the straight thread of the muslin to the center-front of the dummy and the straight edges of the muslin to the center-back as shown in Fig. 561. Tie a cord around the waistline, catching the top edge of the muslin under the cord. Raise or lower the top of the skirt under the cord until it hangs

correctly. Mark where the cord comes on the muslin with a soft pencil. Remove the cord and gather the top of the skirt along

FIG. 562

FIG. 563

the pencil mark. Except in very sheer materials, there are usually darts taken out at the sides of the skirt. (See Fig. 562.) To even the lower edge of the skirt, cut a pasteboard guide as shown in Fig. 562.

If the skirt is to have side seams, use black tape to place the seams as shown in Fig. 563. Care must be taken that the seams do not

FIG. 564

FIG. 565

run toward the front or the back. As many seams may be added as desired and in any place desired in this way. If a fitted skirt is wanted, take out more darts at the top or add more seams and take out the fullness in the seams at the top.

Figures 564 and 565 show a skirt that is plain across the front and draped in pleats at the back. To do this, pin a straight thread of the material parallel to the center-front of the dummy. Smooth the muslin over the dummy and pin it at the waistline across the front and down about ten inches at the side. Then pin a straight thread of the material to the center-back of the dummy so that the lower edge of the skirt hangs evenly. Lay the fullness in pleats at the waistline. (See Fig. 565.) Remember in hanging any draped skirt to pin what is to be the smooth part of the skirt to the dummy first and then fold the pleats.

This completes the series. Keep the Lessons for reference. After you have been sewing several months go back and read them all carefully.

MATERIALS
AND HOW TO TEST THEM

Can you tell whether a piece of goods is wool or cotton, or part wool and part cotton? Do you know good wool when you see it? Do you know that shoddy may be all wool? Can you distinguish silk from artificial silk? Can you tell whether or not a material will give good service?

Nature of the Fibers.—In order to judge and test fabrics intelligently one must know something of the nature of the various fibers from which these fabrics are made. The fibers most used in dress fabrics are wool, silk, cotton, artificial silk, and linen. Each of these fibers has certain characteristics which distinguish it.

Wool is the hairy covering of the sheep and is kinky and elastic—not smooth and straight like the hair of most other animals. It is covered with many overlapping scales like the shingles of a roof. Because of its kinkiness, scales, and elasticity it can be spun into very fine yarn. Wool fibers may

be from one to eight inches long. When wet wool becomes soft and plastic and if pressed, the fiber scales become entangled causing the wool to felt. This is the reason wool requires careful laundering. Since it is a poor conductor of heat, it is suitable for winter fabrics.

Silk is a solid rod-like filament secreted by the silk worm, a kind of caterpillar. This fiber the worm spins about itself, forming an envelope or cocoon. The long strong even filaments are many yards in length and, when reeled from the cocoons, make the better grades of silk. The short waste ends, when spun into so-called "spun silk" yarn, make the poorer grades.

Cotton is a flat twisted tubelike vegetable fiber, varying from a little less than one inch to two inches in length. It is not as strong as silk or linen but is stronger than wool. It is less elastic than silk or wool but more so than linen. Being a good conductor of heat it is chosen for our warm weather garments. The spinning qualities of cotton depend upon the length, twist, and fineness of the fiber.

Mercerized Cotton is chemically treated cotton. Cotton cloth or yarn is immersed in a strong caustic soda or caustic potash solution, then stretched and washed. This causes the fibers to lose most of their twist and to become round, smooth, and glossy.

If cotton is well mercerized the fibers very closely resemble silk in appearance.

Linen is a vegetable fiber obtained from the stems of the flax plant. A single filament may vary from a few inches to several feet in length and has a complex structure. It is very smooth, lustrous and silky looking. It is stronger than wool or cotton but not as strong as silk. Linen is more readily injured and disintegrated than cotton by strong washing powders or chemicals. It is even a better conductor of heat than cotton and, therefore, makes the coolest garments.

Artificial silk is of vegetable origin, being made by a chemical process from cotton or wood pulp. It is a smooth solid filament, similar to silk in appearance and with a luster even greater than silk. Herein lies its chief value for in wearing quality and durability it does not begin to equal silk. When wet the fiber swells somewhat and loses strength so that it must be handled with great care, but in drying again it recovers its original strength. Normally it is about one-half as strong as silk and has almost no elasticity.

To Determine the Kinds of Fibers in Cloth.—Perhaps most of us think we can recognize an all wool, all silk, all cotton, or all linen fabric by its appearance and feel. Sometimes we can. But to recognize a material in which the cotton and linen fibers have been

carded in the same yarn, or to tell silk from artificial silk, silk from mercerized cotton, new wool from shoddy, or to detect the presence of a very small amount of wool, cotton or silk in a fabric, is a more difficult problem than the eyes and fingers alone can solve.

Different kinds of fibers are now so cleverly mixed and woven that the microscope and chemical tests are the only means by which one can accurately determine the fiber content of a piece of cloth. Some of the chemical tests are very simple and can be readily performed in the home.

Animal and Vegetable Fibers. The fibers described in the preceding paragraphs fall naturally, according to their origin, into two groups, animal fibers (wool and silk) and vegetable fibers (cotton, linen, and artificial silk). All animal fibers are similar in chemical composition, are proteins, and therefore are similarly affected by heat, acids, alkalies, and other chemical reagents. All vegetable fibers are similar in composition, are cellulose, and react similarly toward reagents but very differently from the animal fibers. For example, strong acids weaken and destroy vegetable fibers but do not readily destroy animal fibers. Animal fibers will readily dissolve in hot alkali solutions while vegetable fibers are little affected by them. This explains many of the precautions necessary in

laundering fabrics. For example, woolens and silks must be washed in a neutral soap solution, or one which contains no free alkali.

Burning Test. When testing a woven cloth, ravel out a single warp yarn* and a single filling yarn* and burn each of these separately. This is necessary because the threads running lengthwise may be of one kind of fiber while those running crosswise are of another. If the yarn flames and burns quickly, emitting the odor of burning wood, it is cellulose or vegetable fiber. Cotton, linen, and artificial silk yarns all burn in this way. If it is a cotton yarn the fiber ends of the unburned portion remaining in your fingers will be brushlike—its fibers tending to separate. If it is a linen yarn the fiber ends remain closely in contact.

If a yarn burns with difficulty, emitting a very disagreeable odor like burning hair or feathers, it is protein, or animal fiber. Wool and silk both burn in this way. A woolen yarn as it burns rolls up, forming a little ball at the end; silk, unless it is weighted with metallic salts to make it appear of heavy quality, does the same thing. If the silk yarn is heavily weighted with metallic salts, it not only does not roll up but there remains after the burning a white or gray ash.

*Warp yarns are those running lengthwise in a cloth while filling yarns are those running crosswise.

Boiling-Out Test. The presence of cotton or other vegetable fibers in a woolen cloth or yarn is determined by a boiling-out test. When cotton is carded with wool in the same yarn it is often impossible to tell by the appearance or by burning that the cotton is there. A very simple chemical test will reveal its presence. Dissolve one ounce of caustic potash or caustic soda or a tablespoonful of lye in a pint of water. Boil a small sample of the cloth in a little of this solution for fifteen minutes. The wool will dissolve but cotton, if present, will remain. Strain the solution and the residue will give an idea of the amount of cotton present.

To Identify Silk when Associated with Cotton or Wool. The boiling-out test as given above for wool and cotton may be applied to silk and cotton since silk is soluble in lye and cotton is not. One can readily identify silk in a wool mixture by the appearance of the fibers.

To Tell the Difference Between Silk and Artificial Silk. The three following tests may be applied:

(1) Pull out single yarns from the cloth and burn. Silk, an animal fiber will burn slowly and give a disagreeable odor; artificial silk, a vegetable fiber, will flame, burn quickly, and give almost no odor or the odor of burning wood.

(2) Moisten a yarn and try to pull it apart. As we learned previously, artificial silk fibers are very weak when wet and can be easily torn, while the strength of silk is not affected by moisture.

(3) The boiling-out test may also be used to distinguish between silk and artificial silk. Silk, an animal fiber, will readily dissolve in alkali while artificial silk, a vegetable product, will not.

To Distinguish Linen from Cotton. Cotton fabrics are now so cleverly finished to look like linen that even experts are often deceived. If a fabric is all linen or all cotton or is woven with a cotton warp and a linen filling as many of them are, it is possible to detect the difference between the cotton and linen in the following ways:

(1) ***By Appearance.*** Boil a sample of the cloth for fifteen minutes in a soap solution, rinse thoroughly, and dry. This will remove any starch or dressing. Now the linen threads will still present a smooth, lustrous appearance while the cotton will be less smooth and dull.

(2) ***By Tearing.*** Linen is stronger than cotton and tears with greater difficulty. The ends of torn linen yarns show very uneven but parallel, glossy fibers, while the ends of torn cotton yarns show rather even, curly, dull-looking fibers.

(3) ***By Burning.*** The burning test may be

applied for the purpose of observing burned ends of the yarn as previously explained.

Since linen and cotton are both cellulose there is no satisfactory chemical test for distinguishing one from the other. This means that if a fabric is woven of yarn in which linen and cotton are carded together none of the above tests or any chemical test will reveal its exact nature. A cloth appearing to be all cotton may contain a very small percentage of linen or a cloth appearing to be all linen may contain a small percentage of cotton. (Because of this fact the microscope is really the only means of determining correctly the true nature of linen and cotton fabrics.)

Judging the Quality of Fabrics.—An examination of fabrics reveals some very important facts as to their general character and quality.

Firmness of Weave. A cloth to be durable and to hold its shape should be firmly woven. Its firmness may be determined by the following simple tests:

(1) ***Pulling Test.*** Pull the sample in all directions. The yarns should have about the same elasticity and remain in their original positions. The cloth should retain its original form.

(2) ***Creasing Test.*** Crease a sample of cloth between the thumb and fingers. A good

piece of wool or silk will spring back into shape, due to their natural elasticity. If a wool fabric remains creased, it is probably due to the use of shoddy or reworked wool which has lost most of its elasticity in chemical treatments or remanufacture, or to a poor grade of virgin wool. If a silk fabric remains creased it is probably heavily weighted to make it appear of good quality. Cotton and linen crease rather easily, linen much more readily than cotton.

(3) ***Thumb Nail Test.*** Rub the edge of the thumbnail diagonally across the cloth. If the threads are loose they will move out of position following the direction of the moving nail.

(4) ***Sewing Test.*** Run a pin or needle back and forth through two thicknesses of the cloth as if sewing them together. Then with the needle still holding the cloth, pull the two pieces in opposite directions. If the threads separate much and do not return to their original position, the material would not stand much strain and would pull out at the seams.

(5) ***Light Test.*** Hold the sample to the light and observe the closeness of the threads. In a firm well woven cloth the threads should be even, straight, lie parallel, and be close together.

Quality of Yarns. Yarns vary in quality according to the length, diameter, elasticity,

and strength of the fibers, and the twist and ply of the yarn.

Wool yarns are of two kinds—worsted and woolen. A worsted yarn is usually made of longer fibers than woolen yarn and is therefore stronger. It is also combed, which causes the fibers to lie parallel in the yarn; while woolen yarns are carded, causing the fibers to lie crisscross. Cloths made of worsted yarns will wear better than those made of woolen yarn. They are, however, likely to wear shiny. Shoddy is wool which has been recovered from old garments and reworked or made over into new material. In the process it loses a good deal of its original elasticity and many of the fibers are crushed and broken. If the original wool was a very good grade, the shoddy may still make a better material and give better service than a poor grade of virgin wool. A poor shoddy because of its short torn fibers has a dead feel, has very little strength, and will tear easily.

The strongest silk yarns are made of groups of long continuous filaments which lie parallel and are well twisted. A yarn of carded spun silk or short filaments may be woven to give good service but is not as strong.

Likewise the best grades of cotton yarns are the well twisted plied yarns, made of long-stapled combed fibers.

Pull out single warp and filling yarns from

your sample of cloth and examine carefully the evenness, twist, ply, elasticity, and strength. Untwist a yarn and examine the arrangement of the fibers. Then gently pull the fibers apart, being careful not to tear them, and observe their length.

Finish and Weighting. A material is often weighted and finished with foreign substances to give it more body and the appearance of a very good grade of goods when in reality it is very poor.

A woolen fabric is sometimes weighted and finished with a mass of very short wool fibers from clippings called flocks. These are sprinkled thickly over the surface and pressed well into the cloth. Then the cloth is filled and finished. This makes it thicker and heavier but the little fibers soon rub and brush off with wear and leave a threadbare, miserable looking fabric. If a sample of cloth is rubbed and brushed thoroughly any surface finish of this kind is quickly revealed.

Most silk materials are weighted more or less with tin salts or other metallic salts. Burn a sample of silk cloth. If it is heavily weighted, an ash retaining the original weave and form of the silk will remain. A pure silk leaves almost no ash when burned. Many soft silks are finished with gelatin, dextrin, or some gluelike substance. Such silks easily spot with water.

Cotton fabrics are frequently padded or filled with starch, clay, or other chemicals. If such a material is rubbed thoroughly between the fingers some of the filling will be removed.

Detecting Yarn Dyed and Piece Dyed Fabrics. The way in which materials are dyed makes a difference in their value. There are wool dyed, yarn dyed, and piece dyed fabrics. Have you ever noticed that a piece of woolen material may look like a solid color at a distance and when you examine it or put it under a magnifying glass that there are several colors in the yarn? This is a piece of wool dyed goods. The wool was dyed before it was spun into the yarn. Blue and red wool twisted into one piece of yarn will give a very pretty purple. You can tell wool dyed goods by raveling out and untwisting a piece of the yarn. Some of the very best worsteds and coatings are wool dyed.

The great mass of woolen goods are yarn dyed. That means that after the yarn is spun it is dyed before it is woven into the cloth. This makes a very good material but each fiber of the yarn hasn't the life nor the elasticity that a wool dyed fiber has. If you ravel a piece of yarn dyed goods and untwist a piece of the yarn, the fibers will all be one color and they will cling together and will not spring apart as in a wool dyed goods.

Piece dyed fabrics are dyed after the cloth is woven. Cheaper grades of woolens are piece dyed. If you untwist the yarn of a piece dyed fabric you are apt to find fibers here and there in the center of the yarn that are not dyed.

Cotton materials are either yarn dyed, piece dyed or printed. The same is true of linens. Where the pattern is woven in the goods, such as a checked or striped gingham, the material is yarn dyed. Chambrays are also yarn dyed, while percales are piece dyed. You can tell the difference by raveling the threads. As a general rule the yarn dyed goods will hold its color better than a piece dyed goods.

Color Tests. Is the material fast color? Have you ever had a coat that faded in streaks from exposure to sunlight, or a dress that faded so badly in the first washing that it looked like an old one? Few dyes are fast to light, water, washing and crocking. Woolen fabrics used in coats and dresses should be fast to light and water but not necessarily to washing. A gingham should be fast to washing.

To test wool and silk fabrics for fastness to water, twist a piece of material with a piece of white muslin. Place it in warm water and allow it to stand for one-half hour. If the color bleeds into the white, it is not fast.

To test for fastness to washing, wash a sample of material in hot soapsuds, rinse, and dry. Compare the color with that of the original goods.

To test for fastness to crocking, cover the eraser of a lead pencil with a white cloth. Blow on it and rub the colored sample. The color should not rub off.

RENOVATING NOTES

Dry Cleaning.—Dry cleaning implies cleaning without the use of water. Much of the dirt adhering to garments is held by oil or grease. If this is dissolved the dirt is loosened and readily removed. The best solvents for oil and grease that are cheap enough to use in large quantities are gasoline, benzine, and benzole. Any one of these liquids is satisfactory for cleaning providing it shows no oily deposit or foreign matter.

Caution: All of these solvents are very inflammable and form explosive mixtures with air. They should be used out-of-doors. If you use them in a room, have all the windows open and do not have a fire or flame in the room.

Just dipping a garment up and down in gasoline or a cleaning fluid does not clean the garment thoroughly. All dry cleaning establishments use a gasoline soap or powder which is especially prepared for this purpose. You can buy them at any drug store. You will

obtain the best result by having three containers filled with gasoline or the cleaning fluid. The containers should be large enough to give room for rubbing the garment. Put the gasoline soap or dry cleaning powder into the first container and wash the garment in this. The soap or powder acts merely as soap would in water. Rinse the garment thoroughly in the other two containers. This process will remove grease spots and ordinary dirt but not stains. Hang the garment in the open air and allow it to remain there until the gasoline or solvent has evaporated. If a strong odor remains, hang the garment over a radiator or register so that hot air can penetrate the fabric and carry away the odor.

Carbon tetrachloride which can be obtained in any drug store is a very excellent solvent for removing oil and grease spots. It is absolutely safe since it cannot burn or explode but is too expensive to use in large quantities.

To Clean and Freshen Velvet. Dry clean velvet according to the general directions given for dry cleaning. Brushing velvet with a soft brush against the pile while in the cleaning fluid will help to remove the dirt and grease spots. Water spots or creases which are due to flattened pile may be removed by steaming. Remove the lid from a steaming tea kettle, then holding the velvet taut over the escaping steam, brush gently with a soft brush against the pile. Work quickly for

the steam should not be allowed to condense on the velvet. Or, the velvet may be evenly moistened on the wrong side, then gently brushed while being moved slowly over the smooth surface of a hot flat iron placed on end.

To Clean Lace and Chiffon Veils. Veils may be dry cleaned but dry cleaning will not remove creases and wrinkles. The following method will make them look like new. Make a suds from a good grade of neutral soap and warm water. Wash the veil in this by dipping it up and down and gently squeezing the suds through it. Rinse thoroughly in warm water. Squeeze out the water, then smooth it out on a clean cloth over a carpet or on the top of a bed. Carefully pull into shape and pin along the edges so that the veil will be slightly stretched and have its original shape and size, then allow to dry.

REMOVAL OF STAINS

Since the substances causing spots and stains are various and differ in composition, the reagents used in removing them must also be various. While an agent may remove one kind of stain perfectly, it may tend to set another kind. For this reason it is helpful to know the cause of the stain. If the cause is not known examine the spot carefully and judge whether it is grease, paint, dye, fruit stain, grass stain, or of some other

nature. Even the same kind of stain cannot always be removed by the same agent. All inks are not made of exactly the same chemicals and therefore cannot always be removed by the same agent. I can say, however, that all stains are removed more easily when fresh.

Before attempting to remove a stain study the nature of the fabric—its weight, weave, fiber and color.

A firmly woven fabric may stand hard rubbing or laundering while a light weight, delicate, loosely woven one will not; the slightest rubbing of such a cloth may displace the threads permanently and cause an ugly spot more unsightly than the stain.

A wool or silk fabric may stand laundering if the water is neither hot nor cold, but neither wool nor silk will stand wringing or twisting.

Hot water always felts or shrinks wool and may turn silk yellow.

Wool and silk are destroyed by alkalies while most acids will not injure them unless allowed to dry in the fiber.

Cotton and linen may be boiled—strong alkalies will not injure them unless allowed to dry in the fibers, while strong acids will readily destroy them. Weak acids may be used on them if used quickly and then neutralized.

If a garment has color, attention must be given to that. Often a spot could be easily removed but for the color. Merely soaking it in water may cause it to bleed; or again, though the color is fast to water, the dye may be such that it will be affected by the chemical which would take out the spot. Dyes are of endless variety and variously affected by the same chemical; and since it is not possible to know from its color, the nature of the dye, the only thing to do is to try out the reagents to be used in removing the stain on an unexposed portion of the garment, for example, on the underside of the hem.

Reagents Used for Removing Spots and Stains

Absorbents
Blotting Paper
Chalk
Starch
Cornmeal
Bran

These absorbents are often used for preliminary treatment to remove large quantities of staining substance. For example, if a bottle of ink is spilled, most of the ink can be absorbed quickly with cornmeal or bran. Blood may be absorbed with starch, grease or wax with blotting paper and a hot iron. After such treatment, the remaining stain may have to be removed by other methods.

Solvents
Water
Organic Solvents
Gasoline
Benzine
Benzole
Turpentine
Alcohol
Chloroform
Ether
Carbon Tetrachloride

Water is the universal solvent. However, it often affects the finish of the cloth and will not readily dissolve substances such as grease or oils, in which case organic solvents (such as gasoline, alcohol, or ether) should be used.

Acids and Alkalies
Acids
Oxalic—Saturated solution
Acetic—10% solution
Lemon Juice
Vinegar
Alkalies
Ammonia—Dilute
Sodium bicarbonate (Baking soda)
Ammonium carbonate

Any acid will neutralize or destroy the action of any alkaline substance and vice versa. Therefore, if a garment has been spotted with an acid substance, touch the spots with ammonia. If spotted with alkali, touch the spots with dilute oxalic or acetic acid.

Bleaching Agents
Hydrogen Peroxide

This may be used on all fibers. It is especially suitable for silk and wool.

Borax

Use only on cotton or linen.

Javelle Water

Use only on cotton or linen. Javelle Water may be purchased at the drug store, or it may be made as follows:

1 lb. sodium carbonate (Sal Soda)
¼ lb. chloride of lime
2 qts. cold water
Allow this mixture to stand for several hours. Then pour off the clear liquid for use. Keep in a dark place.

To obtain the most satisfactory results apply Javelle water to a stain and allow it to remain for about a minute, then treat it with oxalic acid. Let stand for a few seconds and rinse thoroughly.

Methods for Applying Reagents. There are three methods for removing stains—laundering, sponging and spotting. The method chosen will be determined by the nature of the spot or stain, and the fabric.

Laundering. Soak the stain for several hours in cold water, if cotton or linen; or lukewarm water, if wool or silk. Rub with a neutral soap if necessary, then launder the garment in the usual way. This method can be used only if the color is fast.

Sponging. Place the stained material wrong side up on a pad made of several thicknesses of clean white soft cloth or blotter. This is the best method for applying solvents, such as gasoline, carbon tetrachloride, and benzole. The cloth or blotter will absorb any

superfluous liquid as well as any grease or substance to be removed and also prevent spreading. Sponge the spot gently with a soft white cloth; or better, with a piece of material like the garment if it is colored, for it may prevent the removal of color from the garment. Change the pad as soon as it becomes soiled.

Spotting. This method is best when chemical reagents must be used. One should work quickly, for most of them will injure fabrics more or less if allowed to remain in contact any length of time. Place the stained fabric over a pad of soft white cloth or blotter and apply a few drops of the chemical with a medicine dropper. After a few moments rinse thoroughly with clear water. If necessary repeat the process but be sure always to rinse thoroughly. Instead of using the pad, the stained portion of the fabric may be gently stretched over a small bowl.

Specific Spots and Stains

Acid Substances sometimes change or destroy the color of dyed materials in which case the color can often be restored by neutralizing the acid with an alkali. Acids rarely stain white fabrics but can injure the fibers.

(1) Rinse the spot with water, then neutralize the acid with ammonia. Rinse again thoroughly.

(2) Sprinkle the stain on both sides with sodium bicarbonate (baking soda) and moisten with water and allow to stand. Rinse with water.

(3) Ammonium carbonate may be used in the same way.

Alkalies may also change or destroy the color of the fabric or will destroy silk and wool. Rinse the spots thoroughly and apply one of the following agents:

(1) Lemon juice—as long as the spot is alkaline lemon juice will remain yellow in color, but the color will disappear when the spot becomes acid.

(2) Vinegar.

(3) Dilute acetic acid.

Rinse thoroughly after using reagent.

Blood is of a protein nature. Heat coagulates proteins, therefore, hot water will set blood stains if applied before the protein is removed. Use one of the following:

(1) Cold water—soak the stain in cold or lukewarm water until it turns light brown in color. Then wash in hot soap suds as in ordinary laundering. Stains on wool and silk should be sponged with lukewarm water.

(2) Ammonia (for washable materials)—Add two tablespoonfuls of household

ammonia to one gallon of water. Soak the stains in this and then launder.

(3) Hydrogen peroxide—This will often remove the last trace of a stain, and can be used on wool and silk providing it does not change the color of the fabric.

(4) Javelle Water—May be used as a last resort.

Candle Wax consists of paraffin and a dye. Cover the spot with a blotting paper and press with a warm iron. This will remove most of the paraffin. Then sponge with alcohol or some other organic solvent to remove the coloring matter.

Coffee can be removed by the use of one of the following agents:

(1) Boiling water poured from a height. This is effective in removing fresh stains from cotton or linen.

(2) Sponge silk or wool with lukewarm water. If a grease spot from cream remains, sponge with an organic solvent.

(3) Ordinary laundering will remove most coffee stains.

Chocolate or Cocoa can be removed as follows:

(1) Ordinary laundering.

(2) Borax and cold water—This method can be applied only to washable material. Sprinkle the stain with borax and soak in cold water. Rinse in boiling water.

(3) Sponge with lukewarm water. Any grease spots remaining may be removed by sponging with an organic solvent.

Fruit Stains—at least, nearly all of them—when fresh can be removed by boiling water. They are difficult to remove when dry. Most of them are set by alkalies, therefore it is wise to avoid the use of soap.

(1) Boiling water for white or fast colored fabrics. Stretch the stained material over a bowl and pour boiling water upon it from a height. A little rubbing between treatments may help.

(2) Warm water for silk or wool. Sponge the stain.

(3) Lemon juice and sunlight.

(4) Dilute acetic acid or oxalic acid. Apply the acid solution and then treat with boiling water.

(5) Hydrogen peroxide made very slightly alkaline with ammonia. This can be used on silk and wool after sponging with warm water.

(6) Javelle water—Use only on cotton and linen.

Grass or foliage stains are due to the green coloring matter, the chlorophyl, in the plants. This is soluble in alcohol and other organic solvents but is insoluble in water.

(1) Alcohol—Apply by sponging.

(2) Hot water and soap as in ordinary laundering will often mechanically remove the stain.

Grease can be removed by one of the following:

(1) Warm water and soap as in ordinary laundering will remove grease spots from washable materials.

(2) Absorbents—Blotting paper, French chalk or white talcum powder will remove much of the grease from a delicate fabric; cornmeal or salt are good for rugs or coarse materials. Spread a layer of the absorbent material over the stain and work it about gently; then shake or brush it off and repeat until the stain is removed.

(3) Organic solvents—Carbon tetrachloride and chloroform are excellent grease solvents. Benzole is also very good. Sponge the stain gently with

the solvent over a pad until dry to prevent leaving a ring.

Inks for writing vary widely in composition, therefore, no one agent will remove all ink stains.

(1) Absorbents—If a large quantity of ink is spilled, spread cornmeal, salt, French chalk, bran, or talcum powder thickly over the spot. This will absorb the ink and prevent it from spreading. Renew the absorbent as it becomes soiled. When the dry absorbent ceases to take up the ink make it into a paste with water and apply.

(2) Milk—Soak the stain for a day or so in milk, changing the milk when it becomes discolored.

(3) Oxalic Acid—Apply oxalic acid and allow to stand for a minute, then rinse with water. Add a few drops of ammonia and rinse again thoroughly. Repeat if necessary.

(4) Hydrogen peroxide — Occasionally this is helpful.

(5) Javelle water—Apply Javelle water and allow it to act for about a minute. Then apply oxalic acid. Rinse thoroughly. Repeat this treatment as many times as is necessary.

Iodine stains can be removed with:

(1) Ammonia.

(2) Alcohol.

(3) Boiling for five or ten minutes (if on a wash material).

Iron rust stains are treated thus:

(1) Oxalic acid—Apply oxalic acid, a few drops at a time until the stain appears a bright yellow, then rinse thoroughly with hot water. Neutralize any remaining acid with ammonia and rinse again.

(2) Lemon juice and salt—Sprinkle the stain with salt, moisten with lemon juice, and place in the sun. Add more lemon juice and salt from time to time. Wash thoroughly.

Meat juices and gravies are similar to blood stains, therefore use the same precautions and methods for removing them. Grease spots sometimes remain after the meat stains are removed. Remove these with organic solvents.

Mildew is removed as follows:

(1) Soap and water as in ordinary laundering, then bleach in the sun.

(2) Sour milk—Soak the stains over night and then place in the sun. Repeat the treatment several times.

(3) Lemon juice—Moisten the stain with lemon juice and hang in the sun.

(4) Javelle water—This is most effective for old stains. Apply the Javelle water and allow it to remain on the stain for one minute. Then apply oxalic acid. Rinse thoroughly. Repeat the treatment if necessary.

Milk and Cream spots are similar to those from blood and meat juices. They contain protein.

(1) Cold or lukewarm water should be used to remove the protein. Follow this treatment with hot water and soap.

(2) Cold or lukewarm water followed by chloroform, carbon tetrachloride, gasoline, or other grease solvent.

Mud spots should be brushed carefully before treating and then one of the following agents applied:

(1) Soap and water as in laundering.

(2) Alcohol, gasoline or benzine.

Paint and Varnish should be treated by scraping off as much of the paint or varnish as possible and then apply one of the following agents:

(1) Soap and water will often wash out fresh stains.

(2) Turpentine—Sponge the stains with turpentine and rinse with turpentine.

(3) Carbon tetrachloride, chloroform, or benzole.

(4) A mixture of benzole and alcohol.

Perspiration often changes the color of a fabric, which color can sometimes be restored. While the perspiration from most of the body is acid, that from the armpits is alkaline. Therefore, use a weak acid or weak alkali to neutralize it according to the source.

To remove perspiration stains from white goods:

(1) Soap and water, then hang in the sun.

(2) Javelle water.

Tar, Road Oil, Etc., can be removed by the following:

(1) Turpentine.

(2) Turpentine, followed by washing in soap and hot water.

(3) Benzole.

(4) Carbon tetrachloride.

(5) Lard. Rub the lard into the stain, then wash in hot soapsuds.

Tea should be treated as follows:

(1) Borax and boiling water. Soak in a borax solution, then rinse in boiling water.

(2) Strong soap solution. Boil the stain in this solution.

(3) Lemon juice and sunlight.

(4) Javelle water.

Water spots some materials. The water probably dissolves some of the dressing, distributing it unevenly and, on evaporating, rings remain. The only satisfactory method for removing such spots is to dampen the entire garment and press while damp, or steam it thoroughly.

DYEING MATERIALS

How about the streaked and faded dresses and dresses of an unbecoming color? Do you know how to dye them? There is something so satisfactory in turning the dingy fabrics into smart new shades or subduing the glaring color of a dress that you simply can't wear.

Here are some helps that will save you time and help you to always have good results.

Be Sure the Dye Suits the Goods: Not all dyes are alike. Some dyes are made just for woolen and some just for cotton or linen. Other dyes are good for either an animal or cotton texture. Make sure you know what the texture of your material is. Determine whether it is all wool, cotton, silk or linen, or whether it is a mixture. See Testing Materials page 28. Read the label

on the package of dye and see if the dye is suited to your goods.

Weigh your goods. One package of dye may not be enough. Read the directions on the package and make sure. *Don't skimp your dye if you want a dark shade.*

Wash the Garment Before Dyeing: The garment or material must be washed well before it is dyed. If there are spots of dirt on the material, the dye is apt to settle into them and they will show after the garment is dyed. Wash the garment with soap and water, rinse in clear water. Wring out the garment and *put it into the dye pot while it is wet.*

The Container: Use a large container. Any pot, pan or wash boiler will do that is not galvanized. It is a good plan to put water into the container and the material in, and see if it is sufficiently large so that the material is well covered with the water. There must be room also to stir the goods around and lift it up and spread it around. You need two sticks to lift and stir the goods while it is being dyed. After you have tested the size of the container, wring out the garment or material.

Dissolve the Dye Before Putting in the Material: Put water enough in the container to well cover the goods, and heat the water until it is lukewarm. Then stir in

the dye. Keep stirring until it is all dissolved, which probably will be when the water starts to steam. You can tell if all of the dye is dissolved by taking a spoonful of it up and letting the fluid run off the spoon gradually. If the fluid appears a clear color, and there are no particles in it, the dye is dissolved.

There is danger of the goods spotting if the dye is not dissolved when the material is put in. Put the goods in wet. The cooler the dye is,

the better. If the dye is boiling, it attaches itself quickly to the material, and will settle in spots before you can submerge the whole garment.

Stir the goods continually, lifting it up and pulling it apart, and spreading it out. Do not cram the goods down into the bottom of the dye pot.

Goods Looks Lighter After it is Dried: Remember that the goods will dry very much lighter than it looks in the pot. Wash the goods thoroughly after taking it out of the dye pot. Woolens, cottons and linens ought to be washed with soap and water. Wash silk in clear water. *Keep rinsing until the water runs clear.*

Pressing Before the Goods is Dry: Don't let the wrinkles dry in the garment. Press them off while they are quite damp. Always press woolens from the wrong side or, if you are pressing from the right side, cover the material with a damp cloth. Press silk with a luke warm iron. A hot iron rots it.

To Lighten the Shade: If the goods turns out darker than you anticipated, you can lighten it by washing it in a strong suds made of yellow laundry soap. If this does not give the desired result, boil the material in soapy water, using yellow soap.

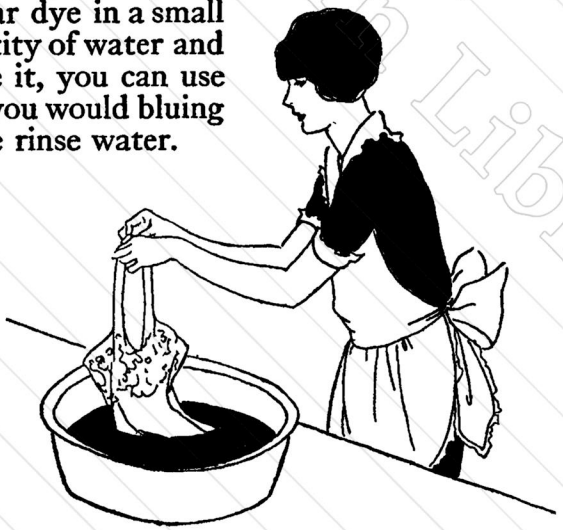
Matching Shades: It is practically impossible to dye goods to exactly match a

shade of another piece of goods. Dye all materials that you want to match at one time.

If Goods is Streaked: The best results will be obtained if you dye it a darker shade of its original color. If you try to dye it a different color, the streaks will probably show.

Cold Water Dyeing: This means coloring without the boiling process. It is satisfactory for light shades, and is especially good for tinting silks.

There are many good cold water dyes and soaps on the market, or you can use the regular dye. If you dissolve a quantity of the regular dye in a small quantity of water and bottle it, you can use it as you would bluing in the rinse water.



Choosing the Color: The original color of the goods influences the new color. You can't dye a piece of goods a lighter shade of any color. For instance, it is impossible to dye navy blue a medium or light shade of red. The result would be purple, as blue and red combined make a purple.

Here is a little chart of colors that will tell you just what to expect when you are dying over an old shade:

Red dye on yellow material gives scarlet.

Pink dye on light yellow material gives shell pink.

Red dye on an orange material gives a light bright red.

Pink dye on an orange material gives a coral pink.

Red dye on brown material gives a red henna.

Red dye on dark blue material gives purple.

Pink dye on light blue material gives lavender.

Red dye on purple material gives a reddish purple.

Red dye on green goods gives brown.

Red dye on gray goods gives a dull red.

Red dye on taupe goods gives a darker red.

Blue dye on yellow goods gives green.

Blue dye on orange goods gives greenish blue.

Blue dye on brown goods gives dull blue.

Light blue dye on light yellow gives Nile green.

Blue dye on green goods gives bottle green.

Blue dye on purple goods gives a bluish purple.

Yellow dye on brown goods gives golden brown.

Yellow dye on purple goods gives greenish brown.

Yellow dye on green goods gives bright green.

Brown dye on orange goods gives tobacco brown.

Brown dye on purple goods gives chocolate brown.

Brown dye on green goods gives olive green.

Orange dye on purple goods gives light reddish brown.

Orange dye on green material gives myrtle green.

Green dye on purple material gives dull dark green.

The same result holds true if you reverse the colors above, that is, using yellow dye on red goods produces scarlet, and so on down the table. It will give you the key to mixing

colors, too. If you mix red and yellow dye, it will dye white goods scarlet, etc.

Natural silks such as pongee will not take a jet black. It is wise not to attempt to dye them black. They take an unattractive blue black.

Overdyeing: By overdyeing, I mean dyeing over an old shade. These are a few of the safe choices you may make: Black will cover any color. However, the original color of the goods will influence the kind of black that you produce. For instance, if you dye red material black, you are apt to get a rusty black. In order to counteract this, add the complementary color to the black dye. In this case, it would mean adding green to the red dye. You know when you mix complementary colors in equal proportions and in their brightest shades, it produces black.

Navy blue will cover almost any shade except black.

Dark brown will cover any color except black.

Dark green will cover any medium or light shade.

Garnet will cover any medium shade except navy blue.

Light blue, light green, pink or yellow will only cover white or a very delicate shade.

Purple will cover only light shades.

Orange will cover only very pale shades or white.

Gray will cover only white.

Bleaching: If you want to remove the color in cotton or linen goods before dyeing them, try this plan: boil the goods for one hour in a solution of strong washing powder or sal soda. Rinse thoroughly. Then add a teaspoonful of baking soda and teaspoonful of chloride of lime to a quart of boiling water. Soak the material in this solution until the color is sufficiently removed. Rinse thoroughly and spread in the sun to dry. Then boil the material to remove any of the lime. It must be remembered that this process will weaken the fiber of the material somewhat.

Woolen materials or silk can be bleached by sulphur fumes. This can be done by hanging the material or garments in a closet and burning a sulphur candle under them. The sulphur candles sold for disinfecting will do. Remember in doing this, that the sulphur fumes are poisonous. Do not go into the closet until it is well aired.