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MAKING YOUR OWN HAT

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*Reprint*

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### THE AIM OF THE BULLETIN

The aim of this bulletin is not to make professional milliners of the local leaders and other people who will make use of the subject matter. Rather, it is to give the reader an understanding of the principles of selection and renovation of materials, together with a study of the basic principles of color, line and construction. With this knowledge gained, it is hoped that the women will not only be able to select more wisely but will also be enabled to remodel or to make a new hat.

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# MAKING YOUR OWN HAT

WILHELMINA E. JACOBSON, Clothing Specialist

**W**HILE THIS BULLETIN gives all the information that a woman would require for making her own hat, such a woman would find the process tedious if she undertook to make the hat simply by reading and following the directions herein contained. Before the bulletin is used it is intended that the extension clothing specialist or the county home demonstration agent shall have held classes in the locality concerned. Local leaders who are privileged to attend these classes will pass the information on to their neighbors by holding other classes, and here the bulletin will play its intended part. Herein are contained all the essential facts presented by the specialists. The bulletin will enable the local leader to reproduce the instructions given, it will enable the home demonstration agent to take up and carry on the specialist's suggestions, and it will be a guide to each woman in her own home in making hats after she has seen with her own eyes how simple and easy the hat-making process really is.

## THE PLAN OF THE BULLETIN

The bulletin is arranged in three parts. First comes a study of equipment necessary, including tools and materials. This first part includes instructions also on renovation of old materials so that they may be used in new hats. The second section is a study of design, dealing with principles of line, texture, and color. These principles will be applied in the making of paper shapes so that each wearer may make the hat that will be most becoming to her. The third part of the bulletin describes fundamentals in construction, taking up millinery stitches, the making of the skeleton foundation hat, and the solid foundation hat. The many variations of these foundation hats are not dealt with in the bulletin.

## EQUIPMENT NEEDED

In working on hats, as on any kind of sewing, it is important to have the right kind of sewing equipment in good condition and to have all the tools needed in a convenient place. For efficient millinery work the following equipment is necessary:

*Needles:* There are two kinds of needles. First, there are those with round eyes, as: "sharps", which are long and slender; "betweens", which are shorter; "blunts", which are short and thick; and milliner's needles, which are very long and slender.



The second kind are the long-eyed—i. e., embroidery or crewel, darning, tapestry, and bodkin needles. These sewing needles range in number from 1 to 12, No. 1 being the coarsest and No. 12 the finest.

*Pins:* Pins should have sharp points. Cheap pins are not worth buying; they injure the material by making holes or by pulling the threads when the points are blunt. They may also leave dark spots on light materials.

*Thimbles:* Thimbles of silver, aluminum, or celluloid are best; brass thimbles should not be used. The thimble should be worn on the third finger of the right hand.

*Tape Measure:* Tape measures are usually 60 inches long and from  $\frac{3}{8}$  to  $\frac{1}{2}$  inch wide. They vary in quality and are not always accurate. When sewing use the same tape measure for all measuring.

*Pin Cushion:* A small cushion made of cloth which is filled with curled hair is best.

*Emery Bag:* Every person who sews should have an emery bag in which to scour the needles when they become rough, or when they squeak, or stick in the material.

*Pliers:* Pliers are used for cutting, bending, and twisting wire when making frames.

*Shears and Scissors:* Shears are six inches in length or longer, while scissors range from three to five inches. The two finger loops for holding the scissors are of the same size, while in the case of shears one loop is longer than the other. Shears are used for cutting materials, while scissors are used for cutting thread and for all kinds of small work.

*Thread:* If the best results are to be obtained in sewing one must use the most suitable needle and thread on each material. There are three kinds of thread—cotton, linen, and silk.

Black and white cotton thread ranges from No. 8 to No. 250, while colored cotton thread ranges from No. 30 to No. 80. Linen thread ranges from No. 25 to No. 250, and sewing silk from E to 000. Use the following table as your guide in selecting the suitable needles and thread for the different materials:

### NEEDLES AND THREAD FOR GIVEN MATERIALS

*Drillings and Very Coarse Denim*—Needles, 1 to 3; thread, 8 to 25 cotton, 40 to 60 linen.

*Heavy Woolens, Buckram*—Needle, 4; thread, 24 to 36 cotton, 60 to 80 linen.

*Heavy Clothing*—Needle, 5; thread, 36 to 40 cotton, D sewing silk.

*Sheetings, Heavy Muslin and Shirtings*—Needle, 6; thread, 40 to 60 cotton, C sewing silk.

*Silk and General Domestic Goods*—Needle, 7; thread, 60 to 80 cotton, A and B sewing silk.

*Soft Silks, Muslins and Linens*—Needle, 8; thread, 70 to 90 cotton, A and B sewing silk.

*Sheer Muslins and Lawns*—Needle, 9; thread, 80 to 100 cotton, 0 sewing silk.

*Very Sheer Linens, Organdies and Chiffons*—Needle, 10 to 12; thread, 100 to 150 cotton, 00 to 000 sewing silk.

## MATERIALS

### For Foundations and Covering

A great variety of materials is used in the construction of hats. Only a few of these will be dealt with here. The kinds of wire most commonly used will be described first, then the foundation materials, and finally the braids and straws.

## WIRES

*Brace Wire* is ordinarily used for the making of frames. Size 21 is most commonly employed for this purpose. This wire is also used in making the solid foundation hats, such as buckrams. This wire may be had in black, white, or colors.

*Ribbon Wire* of two kinds can be purchased. The first is made by pasting two pieces of muslin together with two or more small wires between. The second is made by weaving the wire in with the warp and woof threads. Ribbon wire is used for stiffening ribbon, bows, and ends, etc.

*Spring Wire* is much stronger than brace wire. It may be had covered or not. It is used mostly for the edgewire of hats not having brace wires, commonly called halo hats.

*Tie Wire* is a very fine wire which is either covered or not covered. It is wound on spools while the other wires are prepared in coils. Tie wire is used for fastening wires together, also for the making of flowers.

## SOLID FOUNDATION MATERIALS

*Buckram* is a loosely woven, stiff material. The two-ply buckram commonly used is made of two pieces of material pasted together. It is stiffened with sizing.

*Crinoline* is a loosely woven, single-ply material. It is used for brims, crowns, and binding of wired edges.



*Panama Cloth* is a closely woven muslin material, which is not as stiff as buckram. It may be used for making the entire hat or for rolled edges on hats made of other foundation materials.

*Rice Net* is a single-ply, loosely woven material. It is used for hats of less stiffness and lighter weight than buckram hats.

### BRAIDS AND STRAW HATS

*The finer Milan Straw Braid* is made of seven strands. It is soft and can be bent without breaking. This braid is a little more than  $\frac{1}{8}$  of an inch wide.

*Hemp Braids* vary from about the same width as the milan braids to a greater width. This straw is light weight with a natural stiffness together with pliability. It resists moisture and takes dyes very readily.

*Lisere* is a very shiny, stiff, narrow braid. It is easily broken. It is sewed into hats either by machine or by hand.

*Leghorn Braid* is made with a close, strong weave. The quality of the straw gives the hat strength and stiffness, but still it is pliable enough so that it will bend very readily.

*Panama Hats* are made in one piece. The straw is of a light weight. It is flexible, strong, and of a cream white color. It stands very hard wear.

*Horsehair Braid* is made, as the name suggests, from the hair of manes and tails of horses. The braid is stiff, glossy, and of light weight. It resembles lace-work.

*Pyroxylin* is an imitation of horsehair braid. It is made of an artificial silk product. The fibre of pyroxylin braid is not quite so stiff, nor so perfectly rounded as hair, nor as elastic when bent and released. Pyroxylin is the lightest weight of all braids and therefore well adapted for use in hats for elderly women.

The braids used for summer hats are such as have been mentioned—i. e., the straw braids, and imitations, as pyroxylin. The braids used for winter hats have a heavier appearance and are made of silk, cotton, or wool.

### HOW TO RENOVATE MATERIALS

*Cleaning Milan, Hemp, and Rough Straw Hats:* In one pint of warm water dissolve one tablespoonful of oxalic acid and apply this to the straw by means of a brush. Begin with the crown, brushing all grooves and creases very briskly to take out the dirt. When the crown is cleaned, wash it with clear water, holding the hat over a basin and sopping the surface with a cloth. This rinsing with clear water is necessary because of the strength

of the acid, which attacks the straw fibres if not removed at once. After rinsing the surface with clear water, dry it with a cloth. Proceed with the upper brim then the under brim in the same way.

If the hat gets out of shape, remold it by shaping with the hands or by pressing when nearly dry. To press the crown of a straw hat, it is best to use a hat mold, or a bowl, or bucket padded into desired form. Place the hat over the mold and press it with a moderately hot iron over a heavy dampened cloth. Be careful not to have the iron too hot, as the straw scorches very readily.

*Cleaning Panama Hats:* Make a good solution of white soap and warm water. Wash the surface of the hat by using a brush or cloth, then rinse in warm water.

*How to Stiffen Straw Hats:* To one cup of boiling water add two level tablespoonfuls of gum arabic. Stir while boiling until the powder is entirely dissolved, which takes about 20 minutes. Let this cool, then apply to the hat with a cloth or brush. This preparation may be used on any straw of any color.

*To Bleach Straw Hats:* Make a mixture of salt and lemon juice and apply it to the straw. After it is dry, brush off the salt. If the hat is badly sunburnt it will be more satisfactory to dye it. This can be done by the use of any of the commercial dyes.

*Tinting:* Light colored feathers, ribbons, laces, etc., may be made darker in color or may be changed by means of tube oil paints and gasoline. Mix the paint and gasoline, then immerse the article to be tinted, or paint by using a bristle brush. To dry the article, shake it in the open air. To get the desired color, refer to "principles of color" as presented in this bulletin.

*Cleaning Ribbon:* Ribbons may be cleaned in high test gasoline or in a bath of soapy, warm water. The soap should not be rubbed directly on the ribbon. Wash the ribbons by squeezing in several soap baths, then rinsing in several water baths. They may be pressed as follows: *First Method:* Place the damp ribbon between several thicknesses of paper and press with a moderately hot iron. *Second Method:* Cover a bottle with cotton or linen material, then around this place the ribbon, winding it around and around.

*Cleaning Laces:* Baste the lace to a piece of muslin. Place this in a bath of soap suds, and squeeze it in this solution till clean. *Do not rub.* Then rinse and place between dry cloths or white blotting paper to dry. If the muslin is stretched and pinned to the ironing board, the lace will not have to be pressed with an iron.



*Cleaning White Ostrich Feathers:* This can be done in high test gasoline, as for dry cleaning. Place the feather in the gasoline. Squeeze the flues between the fingers, moving from the stem toward the tips. When the feather is clean, rinse in clean gasoline to which has been added two tablespoonsful of wheat flour to each pint of gasoline. Shake the feather in the air till dry.

*Cleaning Dark Colored Ostrich Feathers:* This can be done in wood alcohol instead of gasoline. The process of cleaning is the same as for white feathers, except that the flour is not added in the rinsing.

*Curling Ostrich Feathers:* Shake the feathers over a jet of steam, then proceed to curl the flues with a case knife. Take a few flues between the thumb and case knife and draw the knife outward from the stem. Curl only the tips of the flues or one-half the length of them.

*Steaming Velvets:* Turn the hot flat iron upside down, and on it place a single thickness of heavy cloth which has been wrung out of water. Place the velvet wrong side down on the iron and brush it in one direction or pat with a soft brush.

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## THE WELL DRESSED WOMAN

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ANNA E. PRANGE, Specialist in Costume Design

A WELL DRESSED WOMAN is one who first of all realizes and appreciates the value and meaning of personality. Personality has been defined as "the outward expression of that undefinable quality known as Individuality." A woman will develop her personality by making it express in the fullest sense her highest and best aspirations. In order to enable her to attain her pursuits, to make friends and success, she will clothe the body, which is the dwelling place of personality, with agreeable and proper raiment—raiment that will not hamper but will be a stimulus to higher purposes, raiment that is an asset to her personality and is worthy of the part it plays in representing her to others as an individual, as a character.

A truly well dressed woman is never conspicuous or uncomfortable and seldom self-conscious, no matter where she may be. She has the consciousness of having made an intelligent selection, which frees her mind for other interests in life. She never wears a costume that dominates her personality. No matter whether she be rich or poor she will, with simplicity and sincerity, let her costume be an outward expression of her individuality, becoming and in harmony with herself, with the occasion, and with her station in life.



## COSTUME INFLUENCED BY FASHION

Fashion and fad exist chiefly because of woman's constant desire for "something different" and because of commercial interests. Fashion is really nothing more nor less than the predominance of a style. It is valuable because it unifies dress. A style that stays with us long enough to admit of study and elimination of its defects usually results in a thing of true beauty and serves as a guide well worth following. This may be illustrated by the simple, beautiful, and sane street costume of today.

Unfortunately, however, fashion is not always based on common sense nor on the principles which result in true beauty. Each new fashion so rapidly follows the preceding one that novelty rather than artistry, extravagance, adulteration, high prices, and loss of personality are its results. The women who blindly and slavishly attempt to follow in its train are kept fairly gasping for breath in their mad desire to appear always in "the latest fad". No matter how ridiculous they may look, they are "fashionable". No one would wish to ignore fashion entirely but no sane woman will make herself a slave to fashion. Appropriateness, simplicity, sincerity, restraint, and decency are fundamentals which serve as a keynote to good dressing. Only when a fashion embraces these is it wise to follow it.

## ARTISTIC COSTUME BASED ON ART PRINCIPLES

From a standpoint of design a person is viewed as a picture—as *one large design*, every part of which is in harmony and in keeping with every other part. This design is made up of subordinate designs, such as, first of all, the woman herself as seen in line and color and as a living personality; arrangement of hair; general grooming; and the garments, such as hat, dress, coat, suit, gloves, shoes, furs; and the various accessories, as the handbag and jewelry. The sum total of the materials used to build up this picture is called "costume", and the building up or planning of such "pictures" is called "costume design". Every "picture" has a center of interest or tells a story. Personality and character, pictured primarily in the face, constitute the center of interest in this picture.

A beautiful costume is judged by the same laws of art as a beautiful painting or a splendid structure in architecture. Each is a design. In each are considered the relationships of areas, lines, and colors, and their conformity to certain laws.

It is from the big out-of-doors, from Nature itself, that the human race has learned to appreciate true beauty. The proportions and arrangement of masses, the ever-changing color har-

monies that Nature holds before us as an eye picture have such a strong human appeal that no one has ever tired of them. When the same truths are applied to the things that *man* makes, they too have the same human appeal—they are truly beautiful.

Countless art treasures have come to us, down thru the ages, all of which have lived because they were good, because they had this appeal to human nature. By the world in general these masterpieces have been worshiped blindly as results only, but the world's great critics, the artists and craftsmen, have turned to them for inspiration. They have sought to get behind or underneath, to discover the principles upon which these old masters based their work. From the knowledge gained thru study by these men, fundamental principles have been discovered and reduced to simple working rules, which may be known and understood by all. No claim is made that a knowledge of these principles will enable everyone to produce a work of art, but such knowledge embraces the basic truths on which the world's greatest art developed, and it will be the means of cultivating appreciation. It may not enable all to design beautiful hats and clothes, but it will at least enable us to judge whether our clothes are beautiful or otherwise. Everyone should be able to judge for himself in this matter—at least he should not be entirely dependent upon the judgment of others. Right selection is an economy. Ignorance is no excuse for poor dressing.

The principles upon which costume design are based are:

### STRUCTURAL ELEMENTS OF DESIGN

1. Line—as the boundary of space.
2. Dark and light—the quantity of light.
3. Color—the quality of light. (Note last part of bulletin on color.)

### PRINCIPLES FOR CREATING DESIGN HARMONIES

*Opposition:* The meeting of two lines at right angles, producing a severe harmony. Oppositional lines are used in the

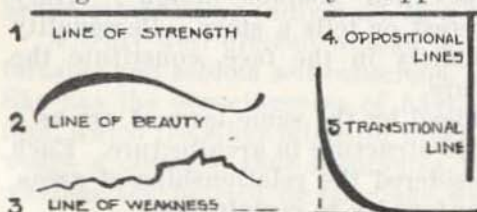


Figure 1

strictly tailored mannish suit and in the plain sailor hat. They suggest strength, dignity and positiveness.

*Transition:* The addition of a curved line to lines of opposition, to soften and unite. The curved line is one of grace and beauty. In costume these lines are produced by the use of soft materials, embroidery designs, and the like.

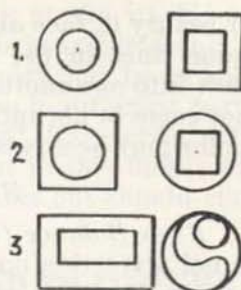


## CONSISTENT SHAPES

These combinations of shapes are most harmonious—so much so that they are monotonous and uninteresting.

These combinations are most inharmonious, so that they appear erratic and unrelated.

Variety in spacing of related shapes, such as here they appear unrelated.



## CONSISTENT SIZES

There is so much difference in these sizes that they appear unrelated.

These are too nearly of the same size, appearing monotonous and uninteresting.

Pleasing variety in sizes, creating interest.

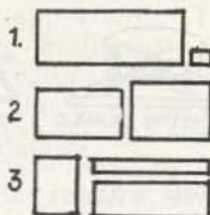


Figure 2

*Proportion:* The pleasing relation of the parts of an object to each other and to the object as a whole. The charm of pleasing proportion is its quality of interest. Interest is gained thru variety and by: (a) A line arrangement or spacing which divides the object into parts (shapes and sizes) which have sufficient likeness to enable the mind to recognize their proportion. Note Fig. 2. (b) The division of the object into parts or the combination of shapes and sizes whose proportion is not recognized too easily. There must be enough difference to give interest. Note Fig. 2. Example: Mathematical divisions, such as division into three or four parts, are detected at once. They are monotonous and uninteresting. The human figure is an example of fine proportion, and the costumes which have been considered beautiful thru the ages, regardless of fashion, are those which have conformed to the structural lines and natural divisions of the body.

Subtle relationships are most interesting. The study of Greek art which was based upon this principle has led to the following law: "Two lines or areas are comparable, interesting, subtle, and desirable when one is between one-half and two-thirds the length or area of the other."

*Repetition:* The repeating of a line or shape or color in rhythmical order to produce a pattern. A peculiar characteristic of a line is that when the eye once rests upon it, it tends to follow the direction of the line; this is why the most skillfully designed curves seem to grow out of each other. Such lines are said to have rhythm like a flowing melody in a song. The lines



of beauty in face and figure may be emphasized by repeating the same lines in the costume. The curved lines should seem to flow into one another or to grow out of one another; they should not come to abrupt stops but go on invisibly in the imagination. Color may be stressed in the same way.

### *Balance (From Side to Side)*

*Even Balance (bissymmetric):* The repose that results from equal attraction on each side of an axis. Example: If a hat is exactly the same on one side as on the other, trimming and all, it is said to be symmetrical. (Note Fig. 3.) Such a hat should



Figure 3

never be worn by a person with irregular features. For instance, a very pretty girl, whose nose is slightly to one side cannot wear a symmetrical hat nor can she part her hair in the

middle without calling attention to the irregular feature.

*Uneven Balance (occult):* A balance of feeling resulting from spacing and importance of large and small masses. By a well balanced hat is meant one in which the weight or mass on one side balances that on the other. For instance, if there is a mass of trimming on one side, there should be more brim on the other side to balance it. The proper placing of spots of color does much in securing balance. A bright bit of color which attracts the attention may outweigh a larger mass on the opposite side of the hat. Note Fig. 3.

*Balance (up and down):* A design which is lighter at the top and darker and heavier toward the base is restful and well balanced. This order of arrangement in nature is illustrated by the light sky, the darker trees and mountains, and finally the still darker color of the ground. For this reason a dark waist with a light skirt is bad, and white shoes with a dark dress are distracting.

*Movement:* This is the principle which leads the eye consecutively through a design or composition. By creating spots of interest by means of line, color, or value contrast, the eye may be caused to move consecutively from one thing to another, leading to the face, hands, feet, general coloring, or any part or parts where emphasis is desired.

*Subordination:* Arrangement of lines, masses, or color so that one dominates, so that there is a leading thought or dominant mass. This gives unity. In costume the personality should constitute this dominant mass; all lines, colors and contrasts should be subordinate to it.

*Unity:* A unit in design is that to which nothing can be added and from which nothing can be taken without interfering

materially with the beauty and the meaning of the whole. A hat is a unit in itself but when it is worn it is considered only a part of a bigger unit—the whole costume. Unity may be secured by repetition of the same line, color, or texture in different parts of the costume, such as hat, shoes, and dress. The personality of the wearer should be the center of interest in this unit. All other details should be kept subordinate to this but should contribute toward the beauty of the whole.

### HAT IN RELATION TO WARDROBE AND TO COSTUME

It is not always the woman spending the most time and money on her wardrobe who makes the best appearance. It is the woman who does her planning and buying intelligently who is well dressed at all times. Whether her wardrobe be large or small, simple or elaborate, does not matter. She has chosen so carefully the garments she has that there is harmony and beauty in each necessary combination. When a hat is selected its relation to the wardrobe must be considered very carefully, for no matter how much beauty it may possess as a hat, or how becoming it may be, if it does not seem to be a part of the whole costume with which it is worn, it has failed in its function. When the woman is clever enough to economize by designing and making her own hats, or when the budget allows several hats for the season or the year, the problem is not a difficult one to solve, but when only one new hat may be had for the year or perhaps two years, much more careful thought is required.

The hat selected should not be a picture hat, for this would not look well on the street, nor should it be a strictly tailored hat, as a mannish sailor, for this would be too severe to wear with a costume on more dressy occasions. Neither should it be one very conspicuous in style or color. Her friends would soon tire of "the same old red hat with everything she wears".

The hat for general wear should be durable not only in material but also in style, so that it may be worn for more than one season without appearing shabby. To be durable in style is only another way of saying that it must be conservative in every way—quiet colors, simple and becoming lines, so that it will be appropriate for all occasions and will harmonize with any costume with which it is to be worn. The most economical woman will buy the best material, take good care of it, and if possible make the hat herself. It is always safe to have the hat and dress or suit of the same color. To give variety and interest in this case the hat may be a little darker or lighter and of different material. If in the design of the costume contrasting or small bright spots of color have been used, some of these colors or perhaps all of them may be repeated in the hat.



Attractive sports hats are often made of the same material as the dress or suit. Organdy hats with organdy dresses are very good and of little cost to the woman or girl who makes her own hats. Some part of the costume should always be echoed in the hat in order to make it a part of the "whole design". This may be done in color, line or material.

### HAT IN RELATION TO THE OCCASION

No matter how much beauty a hat may possess as a unit or how becoming it is, or how well it harmonizes with the whole costume, if it is not suitable for the occasion upon which it is worn, it is not in good taste. A large picture hat of brilliant colors, extreme design, and made of materials, such as lace, malines, or brocaded silk and perishable flowers or feathers, is inappropriate for general street wear, for traveling, motoring, or as a sports hat. Unless afternoon or evening functions are attended no hat of this type would be needed. A brightly colored sports hat worn to church would be as much out of keeping with the occasion as a hat with a loose veil would be on the tennis court. Choice tempered with common sense, and an appreciation of true beauty are the safest guides to follow.

### HAT IN RELATION TO THE WEARER

*Hat in Relation to the Figure:* A carefully chosen hat must be suited to the figure. Selection of the hat should be made while one is standing before a mirror large enough to reflect the entire figure. The woman who designs and makes her own hats should study the hat in the same way. The figure of average size and proportions presents no serious problems. The short, stout woman, however, would have to confine her choice to the type of hat which would emphasize height. What kind of hat should she choose if she wishes to emphasize her height? How can

the tall slender woman recognize a hat that shortens her height? Study Fig. 4.

The lines in Figure 4 are equal in length. Which seems to be the longest? Which seems the shortest? Why? No. 2 seems longest because the eye is carried upward in an unbroken line. Does it seem that way to you? This principle solves many problems in the designing of costumes and gowns, to a very great extent, the selection of a hat.

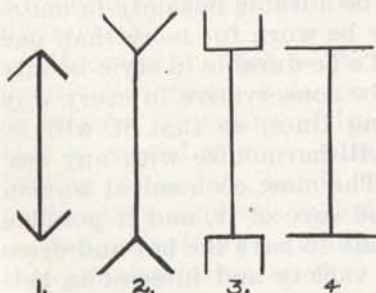


Figure 4. These lines are equal in length. Which seems longest? Shortest? The answer will help you decide which style of hat will make you seem tall or short.



Study Fig. 5A. The vertical line might represent the figure and the added lines those of the hat. Which of the figures in Fig. 5A seems the tallest? Which the shortest? Why? Regard-

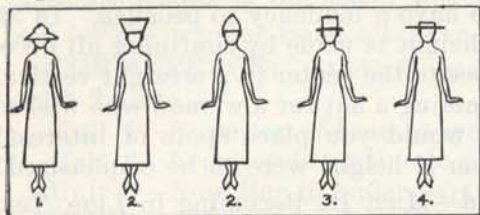


Figure 5A. These hats are shaped on the principles of lines 1, 2, 3 and 4, in Figure 4. Note the effect on apparent height of the wearer.

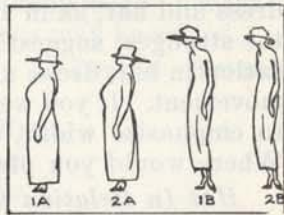


Figure 5B. Hats 1A and 2B are in good balance with the figure. Hats 2A and 1B are bad.

less of fashion hats may always be classified according to this principle. These four are very definite types and of course many variations and combinations are made from them. Which type of hat do you think best for you? Take a fashion book and classify all the hats according to this principle.

The brim of the hat must balance the figure as seen from the front, side, and back. Note Fig. 5B.

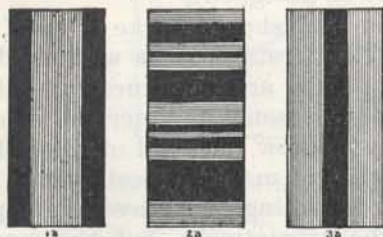


Figure 6. These oblongs are equal in size and proportion. Which seems broadest? Which longest? When the same principle is applied to the human figure, which seems broadest? Tallest?



Study Fig. 6. Which oblong seems the broadest? Which the longest? Why? No. 2a seems the broadest because there is nothing to make the eye travel up and down, but the horizontal movement is very strong. In No. 1a the dark vertical lines are placed toward the outside, which give an idea of height but at the same time calls attention to the outer edge of the mass, giving a more definite impression of width than does oblong 3a where the vertical line is placed in the center. There is nothing here to distract the eye from its vertical course. Since the whole interest is directed toward the center in an up and down movement, the outside is not observed and not much idea of width is formed. The outside mass is unobstrusive and is more easily lost in the background.

The application of this principle to the figure is shown in Fig. 6, 1b, 2b and 3b. Study them carefully. The sizes and

proportions of these figures are identical. Do they seem so? The horizontal lines in 2b produce the strongest broadening effect. Lines of decoration placed toward the outside in both dress and hat, as in 1b, also have a tendency to broaden. In 3b the strongest suggestion of height is made by confining all decoration in hat, dress, and shoes to the center in a straight vertical movement. If you were trimming a hat for a woman who wished to emphasize width, where would you place spots of interest? Where would you place them if height were to be emphasized?

*Hat In Relation to Head—Must Be Becoming in Line, Texture, and Color:* Altho the proportion of the whole figure is taken into consideration when a hat is selected, a careful study of its relation to the head and neck only will be made here. The same principles applied here may be applied to the rest of the figure. The question is often asked, "With so many hats from which to choose, each different from the other, and with each season offering new creations, how can I tell what is becoming to me?" The answer is simple—a becoming hat is one that emphasizes the best features of the wearer and by doing this throws into the background the undesirable ones. Again you may ask, "Just how can such a hat be designed?"

First of all, every woman and girl should make a careful study of her physical makeup and understand it as well as she does her disposition—its strong points and weaknesses. She should study herself in the same impersonal manner in which she studies other people. She should know the kind of lines she can most successfully wear, the types of material best suited to her, and the colors that are most becoming. The average type of figure is not difficult to clothe attractively, but the more extreme types, the slender, the stout, and the extremely angular need careful attention. So often, however, a woman does not know just how to classify herself and sometimes it happens that she knows where she belongs, but she does not like to admit to herself that she is angular, or stout, or perhaps sallow. A stout woman of good proportions when dressed in proper lines, materials, and color is just as attractive as the tall, slender woman. She simply represents another type. Thru careful choice of color sallowness may not be noticeable.

Before a becoming hat can be designed or selected, the woman must analyze herself as to line, texture, and color. The methods for classification, together with examples of bad and good lines, materials, and colors for each type, are herewith given:

*Line:* Altho there are no two people exactly alike in appearance, they may in a general way and for the sake of study be placed in the four following classes: The average, the tall and



slender, the short and stout, and the angular. There will, no doubt, be as many variations and combinations of these types as there are people in the world, but with a knowledge of what is best for the extreme types all other problems may be solved.

**THE AVERAGE:** Study diagram Fig. 7. Length—3 units; width 2 units.

Unit 1—From top of head to eyebrow line.

Unit 2—From eyebrow line to nose line.

Unit 3—Nose line to under part of chin.

Unit 4—Chin to pit of neck.

Ear—One unit long, from eyebrow line to nose line.

Depth of socket—One-third unit.

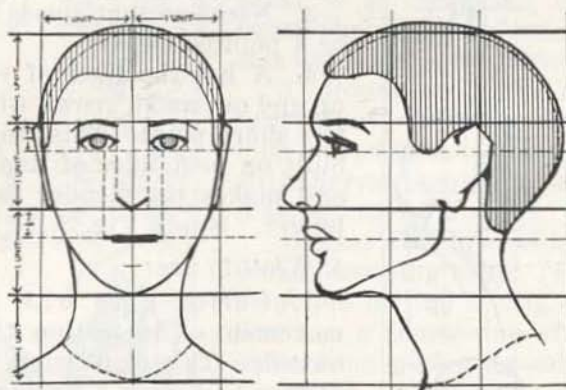


Figure 7. Proportion of Average Head. The woman of average proportions has a wider choice of styles than she who varies greatly from the average. These average proportions are explained in the accompanying text.

Mouth line—One-third unit down from nose.

Width of eye—One-fifth of width of head.

Width of nose—One-fifth of width of head.

Space between the eyes as wide as the eye.

Study your own face and neck. Is it of average proportion? Is it wider? shorter? longer? narrower? In which group or groups can you be placed? The woman of average height and proportions naturally has more latitude in the choice of hats than have either of the following types given. The style of hair dress and the type of hat may be left to her personal preference. She may wear any type of neck line, provided her neck is well developed.

The desirable lines of the face and neck are emphasized by (1) repetition; (2) contrast.

*Law of Repetition* applied to the tall slender type, the short stout type and the angular type. The proportions of heads in Figures 8, 9, and 10, 1a and 2a; 1b and 2b; 1c and 2c, respectively,



are identical. The difference of appearance is due to effect of hair line, neck line, and lines of hat. The distance between construction lines represents one unit.

**THE SLENDER:** Fig. 8—Tall, slender person with narrow face and long thin neck. Notice that the head is three units long and less than two units wide.

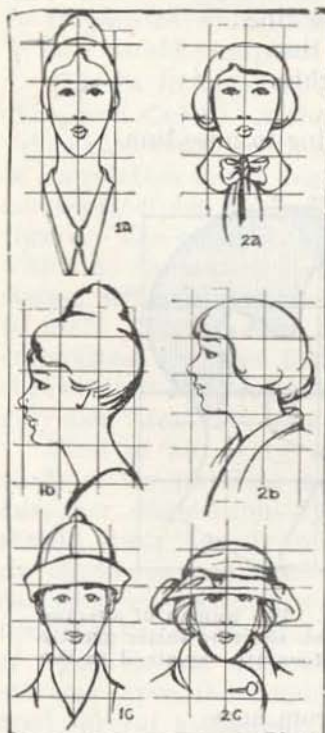


Figure 8. Proportions of the woman of slender type. In each of these pairs, the two faces are the same. Height is emphasized in 1a, 1b and 1c by hair line, neck line and hat. Width and roundness are stressed in 2a, 2b and 2c.

distance between shoulders and hair line—hence the neck seems shorter and not so thin. A chin collar on coats and furs also shortens the neck.

4. Hat with low crown and soft, drooping brim of medium width. Built on principles of line 1, Fig. 4. This shortens the distance between the hat and shoulders and it makes the face seem wider and more round. Soft materials such as velvet, duvetyn, fur and trimmings such as ostrich feathers lend softness and fullness to the face.

#### *What to avoid:*

1. Vertical and straight lines near center.
2. Hair line that adds to height and gives no suggestion of width and roundness. Note Fig. 8, 1a and 1b.
3. Neckline that comes to a point or a pointed collar.
4. A hat the lines of which lead up and out and a crown which comes to a sharp point. This kind of hat is built on principles of line 2, Fig. 4, and makes the slender face appear longer. Study Fig. 8, 1c.

#### *What to use:*

1. Curved lines with horizontal movement—decoration toward the outside. This emphasizes roundness of face and gives a feeling of width.
2. Hair line full at the side and worn somewhat low over the forehead. Hair over ears makes the neck seem shorter. The hair parted at the side makes the eye travel from side to side, hence gives width. The general outline of the hair should suggest roundness. Note Fig. 8, 2a and 2b.

3. Neckline to repeat roundness in face. High collar to cover thin neck or rolling collar which shortens

**THE STOUT:** Short, stout person with round face and very short neck. Notice that the face is more than two units wide and less than three units long.

*What to avoid:*

1. Horizontal lines and curves that repeat roundness of the face. Decoration toward outside.

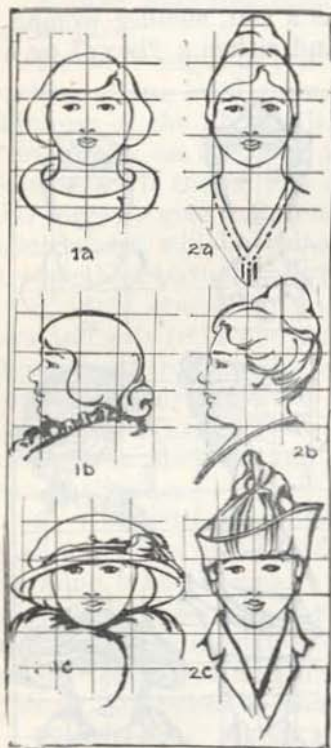


Figure 9. Proportions of the woman of stout type. In each pair the two faces are the same, but in the figures on the left roundness and width are emphasized by hair line, neck line, and hat, whereas the effect of height is produced by the lines in figures on the right.

2. Hair puffed at the side gives width and roundness to shape of head. Hair parted at the side and brought down low over the forehead cuts height. When hair is brought over the ears and is dressed low on neck, it shortens the distance between shoulders and hair line and in this case covers the entire neck.

3. Round neck lines, high or rolling collars, frills of any kind, or long-haired furs, make the neck seem still shorter because a part or all of it is cut off from view.

4. Hat with low, wide crown and broad, drooping brim. (Hat built on principle of line 1, Fig. 4.) Every line has a shortening effect, at the same time giving broadness. Note Fig. 9, 1c.

*What to use:*

1. Vertical and straight lines. Decoration near center. This causes the eye to travel up and down, giving an impression of height instead of width.

2. Hair dressed high on top of head. Not much of the forehead covered. If hair is parted at all it should be near the center because the point gives an added suggestion of length to the face. The hair should be worn close at the side, leaving the ears uncovered or letting just a little

hair fall softly over the top of the ear. One thinks of the distance between the neck lines and the hair line as belonging to the neck. When the ear is uncovered it makes the neck seem longer. Note 2b.

3. Neck line that comes to a point at center. If collar is used it should follow the same line, come close to the neck at



sides, and should not roll. Decoration should lead toward center. Short-haired furs, such as sealskin, mink, and moleskin are most suitable because they are not very bulky.

4. Hat built on principle of line 2, Fig. 4, page 14. A close-fitting hat, the lines of which lead out and upward. A high crown gives height and a brim irregular in shape is better than a round one because it does not repeat the roundness of the head.

**THE ANGULAR:** Frequently this is a tall, slender woman. She has sharp features, pointed nose, and either a "boxy" or a pointed chin. Her cheeks are somewhat hollow and her neck is quite long and thin. When to this are added a drooping mouth and hard, severe expression, much care and thought are required in the choice of lines.

*What to avoid:*

1. Points and angles of any kind. Stiff materials, such as a stiff satin with high lustre. It looks cold and unsociable on a woman of this type.

2. A hair line which gives an angular shape to the head. Note Fig. 10, 1a—it is nearly a perfect triangle, whereas the line over the forehead is nearly square. The hair should not be brought to a sharp point on top of the head. The hair brought straight back above the ears and dressed high in the back causes the neck to appear longer and an opportunity whereby one might make the cheeks seem a bit fuller is lost.

3. Neck line or flat collar that comes to any kind of point or points is bad. Any severe decoration, such as geometric designs or pointed motifs or pointed lace around the neck, are bad because the points and angles of the face and neck are repeated and therefore emphasized.

4. A severely tailored or mannish hat. A hat with square crown and a brim that repeats points. Trimmings such as quills, pointed bows, or perhaps a cut steel buckle should not be used because they emphasize the undesirable lines of the face and

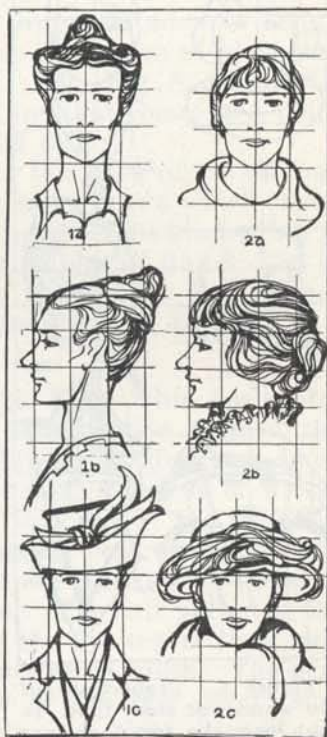


Figure 10. The angular type. In each pair of faces the features are the same, but angles and pointed features are emphasized by hair line, neck line, and hat in 1a, 1b, and 1c, whereas softness and roundness are brought out in the companion figures.



make the expression seem more severe. A very large hat makes the face seem thin and small, and, by deepening shadows in the face, emphasizes angularity.

*What to use:*

1. Soft materials to soften expression, curves which repeat roundness of face and make one forget the angles.
2. Any hair line that gives a softening and rounding effect to the face.

The hair might be puffed a little at the side, making the whole outline of the head round instead of angular. The length and thinness of the neck will not be noticed so much if the hair is dressed low on the neck and a part or all of the ear is covered. Sometimes if the hair is naturally very straight, a slight artificial wave to give a softening effect around the face will be very much worth while. Unless this can be done in such a way that it resembles natural wavy hair, it is better to leave it uncurled.

3. Soft, round lines around the neck. Rolling or high collars and soft frills are good. If lace is used a pattern should be chosen with round motifs instead of angular or pointed. This applies to any kind of ornamentation around the neck line. Long-haired furs, such as fox, are appropriate because they cover up most of the neck and give additional softness to the expression of the face.

4. Hat with soft crown and soft, medium-sized brim. It is possible that a turban of soft lines might be worn. A slightly drooping brim, especially one with a facing of a light, becoming color, is good because the reflection of light and color upon the face gives a suggestion of fullness. Soft trimmings, such as ostrich feathers, fur, graceful bows of light weight materials, or ribbons. Bunches of small flowers of soft coloring and texture.

**PROFILES:** Three types of profile are shown in Fig. 11. No. 1 represents the snub nose. Notice the lines of the hat and how many times they repeat and emphasize the turned up lines of the nose. No. 1a is the same face. Study the profile carefully. Does the nose seem to turn up as much as it does in No. 1? Notice that each line in 1a is quite straight and turns down to counteract the upturning curve of the nose.

No. 2 represents a woman with a prominent chin, denoting determination. This extremely mannish type of woman is often seen in the business world of today. If she wishes to emphasize her masculine qualities she can do so by wearing a plain, straight sailor hat, severe hair dress, and mannish collar. Notice the effect upon the same face produced by a hat every line of which is a curve, by a hair line, and a collar or fur that lends softness to the face. Note 2a.

The profile represented in No. 3 is quite a common one, that of the large, hooklike nose and the receding forehead and chin, with long, unattractive neck and rounding shoulders. The line of the nose is emphasized by the repetition of the same curve in the brim of the hat, in the beak of the bird, and in every feather. Notice that the shape of the crown, as suggested by the feathers, is a continuation of the nose line, which makes the nose have greater prominence. The shortness of the brim in the back and the length in front throw the weight forward and make her appear more round shouldered.

### TYPES OF HATS

From a standpoint of line, all hats may be placed in three large groups, as follows:

1. The sailor type—note Fig. 12, 1 and 1a. This type is built on the principle of line 3, Fig. 4.

2. The hat with the turned up brim. In this group are included the turbans that follow this general outline. Note Fig. 12, 2 and 2a. This is built on the principle of Fig. 4, line 2.

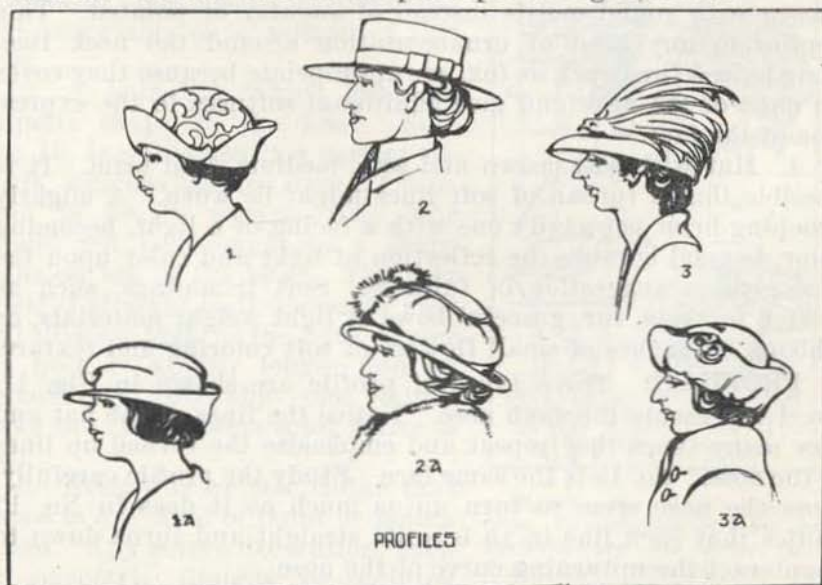


Figure 11. The upturned nose in Picture No. 1 is emphasized by the upward lines in the hat; the same face in 1a loses its unpleasant lines because they are counteracted by the lines of the hat. Likewise in No. 2 severe lines of the face are rendered more severe by the severe lines of the hat; whereas in 2a soft lines of the hat soften the severity of the face. In No. 3 lines of the hat repeat and emphasize unpleasant lines of the face and neck; whereas the undesirable effect of the same lines is mitigated in No. 3a.

3. The hat with the drooping brim. This group includes turbans with very narrow, drooping brims. Note Fig. 12, 3 and 3a. This type is built on principles of Fig. 4, line 1.



It will be noticed that in Fig. 12, hats 1, 2, and 3, the silhouette or general outline is made up of the hat itself, whereas in hats 1a, 2a, and 3a, it is to a great extent made up of the trimming.

### TRIMMING AS A PART OF THE HAT

Many hats of today are designed in such a way that little or no ornamentation or trimming is necessary. The shape in itself is made interesting. This is often done by combining two contrasting materials such as velvet and brocaded silks; taffeta and straw; georgette and satin. Sometimes the whole hat forms a bright spot as a part of the costume, but more often the color of the hat is kept in quiet, neutral tones and the bit of bright color or certain texture in the costume is echoed in the hat in the form of trimming.

One should first make a careful study of just what colors are needed and then apply the result to the hat in the form of trimming, such as decoration in stitchery, conventional flowers, ornaments made of beads or ribbons. This type of trimming is usually quite flat, its purpose being that of beautifying the shape already present. Note Fig. 12, hats 1, 2, and 3. Sometimes, however, the trimming is used in such a way that it helps to carry out the outline or silhouette of the hat, such as the feathers and ribbon



Figure 12

used on hats in Fig. 12, 1a, 2a, and 3a. Such ornaments should first of all be selected with much care, so that they harmonize

with the hat in line texture and color. Secondly, it is of great importance to place them properly on the hat so that the lines of the trimming flow in and seem a part of the hat shape. Note Fig. 12, 2a and 3a. The purpose of decorative design in the form of trimming is to emphasize or enrich the structural design of the hat. It should seem to be a part of the hat, not merely "stuck on". Only good trimmings should be used, however simple they may be. Cheap ones are worse than none at all.

### VEILS

Nowhere do fashion and fad have such superior reign as in the realm of veils. Is there a woman who would consider her appearance improved by having a big, black design, resembling a spider, painted in the middle of her cheek or perhaps across one side of her mouth? No, she would not; but she would pay a big price for a veil with a design equally unattractive, and altho her face might look so distorted that her friends would find difficulty in recognizing her, she would feel perfectly happy in wearing it, because she would be "fashionable". Note Fig. 13, 2.

Another ultra-fashionable type of veil is illustrated in Fig. 13, 1. Surely it does not add to the attractiveness of a woman to cut off a part of her face with a heavy, black line. It might be fashionable but there is no more beauty in it than there would be in a bandage placed across the same part of the face.



Figure 13. Veils 1 and 2 have distorting effect on the face. Veil 3 is of a good type.

The veil has its place in the wardrobe and there is no reason why it should not be a thing of beauty. The veil serves as a protection for the skin, and in some cases for the eyes, and keeps the hair neat and tidy. For some women a veil is almost a necessity when traveling, shopping, or motoring. When the veil is brought over the brim, it should be worn only with a medium-sized or small hat. There is no great need for a veil at night; in fact, it can be worn with comfort only during the day. Any veil with a heavy pattern which covers a part of the face and has a distorting effect should be avoided. Not only are large dots hard



on the eyes, but the appearance they give to the face is sometimes pitiful.

The average woman will find most becoming a veil with a fine mesh; and if pattern, spots, or dots are used at all, those that are so fine that neither expression nor outline of the face is lost should be chosen. Note Fig. 13, 3. The most used colors for veils are black, gray, and blue. A soft blue veil absorbs sallowness of the skin. Only the very clear skinned woman can wear the golden brown, tan, and green veils, for they make the skin seem darker and give an added quality of yellow to the skin.

### THINGS THAT ARE NEVER IN GOOD TASTE

Fashion's dictates sometimes are far from being artistic. These dictates are followed by women who do not recognize the artistic or by those who would rather be fashionably than artistically dressed.

The following are general truths which always should be observed by women of all types, regardless of fashion:

1. The crown of a hat should more or less follow the shape of the head. It should not only fit the head but it should look as tho it does.

2. The brim never should be broader than the shoulders because so broad a brim makes the person seem topheavy.

3. A hat should not be worn so far over the face that the eyes cannot be seen. Not only is such a practice uncomfortable to the wearer, but it covers the most interesting and often the most beautiful part of the face—the eyes, the center of interest. When the eyes are covered with the hat, one has a feeling of talking to the hat rather than to the woman.

4. Extreme lines leading away from the head, such as freakishly large bows or very long quills or long "ears" made of velvet, should be avoided. Any extreme hat that will call attention to itself rather than add to the beauty of the wearer is undesirable.

5. Decoration should not be too realistic, such as a feather hat that looks so much like the bird that one might expect it to breathe or to fly away, or perhaps a rose that looks so real that one wonders what keeps it from withering. "This is not art. It is natural history and botany illustration in museum effect." The purpose of decoration is to beautify. This may be done in color, line, and value contrast. There are three types of motif used in decoration. 1. The naturalistic motif strives to imitate some natural object. This is rarely successful because there is so seldom a suitable place for it. 2. The abstract motif does not have its source in nature. Beauty is obtained by space and line arrangement often resulting in geometric forms. In millinery this type of design may be applied in the various ornamental

stitches. 3. The conventional motif takes a natural thing and attempts to translate it into form and color which harmonize with the material and the shape to be decorated.

6. A hat that is perched on top of the head in such a way that it seems insecure, resembles a "lid" and does not seem a part of the head as it should. Neither should it be tipped back too far nor worn too far on one side of the head. Much depends upon the individuality of the wearer and the style of hat, but in general it is safe to wear the hat in a straight line just above the eyebrows.

### TEXTURE OF MATERIALS

Consideration of texture of materials in relation to individuals must not be omitted. Texture is that quality of an object which seems to convey the idea of how it feels, such as softness, stiffness, coarseness, and hardness. One finds this quality in the weaves of different textiles, in the appearance of braided straws, in feathers and other materials. It is this sense of fitness in textural feeling that forbids the use of coarser, heavier, and more resisting fabrics with soft, impressionable and destructible silks, georgette, and malines. Material often governs the design of a hat. Soft materials, such as crepe, velvets, satins, and soft taffetas, lend themselves well to beautiful lines in folds and draperies. They are used when soft lines are desired as a frame for the face and when the hat is to be worn with a costume of similar texture and line. When straight, severe lines are wanted the heavy materials are more suitable. Furthermore, all textures are not becoming to all people. The woman with fine grained skin, delicately chiseled features, fine silky hair, who has perhaps a reserved personality, would find materials of fine weave, giving a suggestion of daintiness, softness, and refinement most becoming to her. On the other hand, the woman with a coarse grained skin, coarser hair, large features—the athletic type—would find the coarser weave and heavier fabrics more suitable and in better harmony with her personality.

The stout woman, by encasing herself in shiny satin or stiff materials, emphasizes her size, and the tall, slender woman looks thinner in soft, thin, clingy materials. The shops offer such a delightful variety of materials, no matter what the predominating style may be, that there is no excuse for using any of them incorrectly.

### CHOOSING THE COLOR

Color should be made to express personality. Often it is made to do this crudely and sometimes even offensively. Many times it serves to express but the foolish desire to attract attention or to be attired in what is considered the latest fashion. Love and appreciation of color should be developed and be made the means



of enhancing real beauty of face and form and used as an aid in clarifying and idealizing plain features of face and figure. Color should charm and delight the observer and fit in harmoniously with the wearer and her surroundings. It should be an expression of one's best thoughts.

*Elements of color:*

Primary—yellow, blue, red.

Secondary—green, purple, orange.

*Attributes of Color:*

Color has three qualities:

Hue—The quality which distinguishes one color from another, the name of the color, as blue or green.

Value—The quality of lightness and darkness, as light blue, dark blue.

Intensity—The quality of brightness or dullness, as bright blue, dull blue.

*Psychology of color:*

Yellow looks most like the sun, so it expresses the quality that the sun seems to give. It stimulates, gives warmth and cheer, and vibrates happiness. It is the reflection of yellow everywhere that makes one feel happier on a sunny day than on a cloudy, gray one. Variations of yellow are ecru, cream, light buff, and taupe.

Red suggests heat and fire. It is associated with excitement, activity, aggression, passion. It stimulates and is irritating. Variations of red are wine color, maroon, Indian red, terra cotta, henna, pink, and old rose.

Blue is the most restful color. Its reactions are coolness, restraint, repose, distance, and dignity. By association one thinks of the blue sky and the cool breezes from the blue waters of the lakes and ocean. Variations of blue are old blue, delft, Alice, royal, cadet, navy, and turquoise.

Green is a combination of the happy qualities of yellow with the coolness and restraint of blue, making it the most livable and usable of all colors. Its restful, soothing, and cooling effect is well illustrated by the large distribution of green in nature. Variations of green are moss, sage, Nile, olive, peacock, and blue-green.

Purple and violet express the combined qualities of red and blue. Objects so distant that they can barely be distinguished, such as distant trees and mountains, appear as a hazy purple. This association has made purple a color of mystery. It is a color much used by secret orders. Its use by the royalty in full brilliancy has made it a color of dignity and grandeur. To some people it is depressing—hence its use for second mourning. The

variations of purple are lilac, lavender, mulberry, London Smoke, and mauve.

Orange, since it is a combination of two warm colors, yellow and red, is the hottest and most aggressive color of all. Because of its aggressiveness, its stimulating, exciting effects, it should be used very carefully and sparingly in its full intensity. A very pleasing and much used variation of orange is brown, which is neutralized orange in a dark shade. Other variations are tans, red buffs, and champagne.

### HARMONIES IN COLOR

Harmonies are dependent upon good spacing, area of color, dark and light, and intensities. Harmony in the combination of colors may be of two kinds: (1) harmony of contrast; (2) harmony of likeness.

*Harmony of Contrast:* This is between colors which are most unlike each other. It is perfect when the colors are complementary or directly opposite in the color wheel, such as blue and orange or yellow and purple. Note the diagram, Fig. 14.

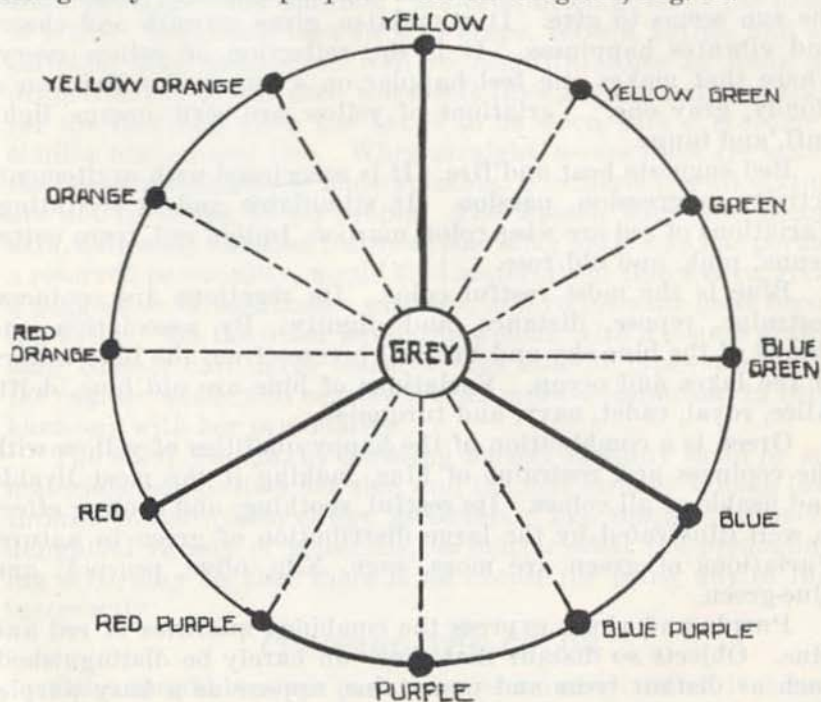


Figure 14

The harmony of opposite colors is very bright if the colors are in full intensity. The grayed tones make a more quiet har-



mony and are therefore much more pleasing. A pleasing harmony of three colors is the triad—any three colors which form a triangle on the color wheel. Examples—yellow, blue and red; green, purple and orange. Note Fig. 14. The grayed tones are much more pleasing than the intense colors, because all colors then have the element of gray in common. The difference in hue gives variety and interest and the gray in them harmonizes and ties them together.

A combination of luminous or warm colors with the somber or cold ones produces good balance and is one of the most pleasing harmonies of color. The warm colors are yellow, orange, red, light green. The cold or somber colors are blue, purple, and dark green.

*Harmony of Likeness* is between colors of the same or related color scales. They may be: *Self Tone*—Different shades or tints of the same color, as light blue and dark blue. A tone lighter than the standard color is properly called a tint, and one darker is called a shade. Pink is a tint of red while crimson is a shade. *Analogous or Family Harmony*—Different hues of the same color, as blue-green and yellow-green and gray-green, which blend because green is dominant.

### General Harmonizing Agents

1. Use areas of white.
2. Use areas of black.
3. Use small areas of bright colors against a great deal of gray.
4. Crossing—one color over another.
5. Interlace—outline one color with another.

### Effect of Colors Upon the Wearer

*Contrast:* When complements or opposite colors are placed side by side they intensify each other. Examples:

Sallow skin is made more yellow by blue purple. Red purple brings out the greenish hue in the skin.

A brilliant skin is made more florid by blue-green or green.

Navy blue brings out yellow lights in brown hair.

Purple strengthens the color of "blonde" hair.

An auburn or "red" haired woman can make her hair seem more brown by wearing blue, more yellow by purple, and more red by blue-green or green.

Hair and eyes that are neither dark nor light and "of no definite color" may be made more colorful by using colors as given above for the different types. Example: Navy blue brings out yellow in the hair—makes eyes seem more blue. By using a very dark color next to the hair it will by contrast make the hair seem light, and vice versa.

*Repetition:* Repetition of any color intensifies itself. Repeat with a color note in the costume the best color in hair, eyes, skin, or lips. Example: Coral color, by repeating the pink of the cheeks and lips, gives an added impression of healthful color.

If two colors having a hue in common are placed side by side, the common hue disappears. Example: Yellow-pink or blue-green, (blue and yellow) are good with a sallow complexion because yellow, the common color, disappears from the skin and it appears less sallow. For this reason all grayed colors have a tendency to brighten color of hair, eyes, skin, etc. The quality of grayness which both possess is lost.

*Black* in large areas absorbs color; it is not good for sallow, colorless skins. It decreases size; therefore it is good for large, stout figures. Black in small quantities as an outline of a design or in small spots of trimming on a costume gives strength to otherwise weak colors. Black, in small spots on a light costume, repeats and strengthens the idea of contrast and the colorless or "no-type" woman may in this way make her hair and eyes seem darker and her skin lighter.

*White* reflects color and is most becoming to all complexions. It increases size; therefore it is good for small figures. A pure white next to a dark skin will by contrast make the skin seem darker. The dark-skinned woman should wear an "off-white" or a cream.

*Intense Colors* are good only on people with strong value contrast and brilliant and clear coloring. Weak or neutral color in hair or eyes is easily overpowered or weakened by intense colors in costume. Because intense colors are aggressive, they increase apparent size; therefore, large women should not wear them. They are inappropriate for general street wear, for church, or, in fact, for any place where the general background is sufficiently gray to make a person clothed in bright colors seem unnecessarily conspicuous.

Bright colors should be used in small quantities for accent or spots of interest and to create certain eye movement. A good rule to follow is: "The larger the area, the more grayed the color should be; the smaller the area, the more intense or brighter the color may be."

*Neutral Colors:* A neutral color, like a neutral person or nation, is one which favors nobody very much and supposedly gets along with all. Neutral or grayed colors are worn more successfully by most people because they absorb gray and cover up defects by their softness. They are restful and pleasing to the eye because they blend into surroundings. They are inconspicuous; therefore are good for large figures. They express dignity, reserve, and refinement.



*Colors for Seasons:* Warm colors and their variations, such as yellow, orange, brown, red, and red-purple suggest excitement and warmth and for this reason are not suitable for hot or warm seasons, but are very desirable for the winter months. Variations of the cool, receding colors, green-blue and purple, are most suitable for summer wear. If these are not becoming light tints or subdued intensities of the warm ones may be used, such as pink, cream, and tan. When any color is neutralized or grayed its suggestion of either warmth or coldness is much lessened.

### TESTS OF A WELL DESIGNED HAT

Is it the kind of hat you need?

Is it fitted to its purpose in line, texture, and color?

Does it harmonize with the garments with which it is to be worn?

Is it suited to your individual type and personality?

Does it serve as the kind of frame you need for your face?

Do the lines, texture, and color bring out the best qualities of your face?

Are the quality of the material and the workmanship such that they add to the beauty of the hat?

Is it artistic or merely fashionable?

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## MAKING THE HAT

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WILHELMINA E. JACOBSON, Clothing Specialist

WITH THE MATERIAL at hand and the design chosen, next comes the actual making of the hat. Workmanship can either make or mar the well-designed hat in line, texture, or color. The hat that is handled too much in the process of making loses its shape and the materials may become wrinkled or old-looking, or may lose their bright appearance. The seams or stitches used in the making of the hat mark it as the *homemade* or the *handmade* hat. The stitches, together with the making of the paper pattern, and the construction and covering of the skeleton foundation and the solid foundation hat are here described.

### STITCHES USED IN MILLINERY

Millinery work cannot be done easily and quickly unless the right stitches are used in the right places. The following are the stitches most commonly used in millinery work:

*Basting Stitches* are of even or uneven lengths and are used for holding materials together temporarily or permanently, as when binding the edge of a buckram shape.

*A Running Stitch* is a series of short stitches used for gathering and also used for seams where there is little strain.

*Backstitching:* The stitches do not meet on the right side but overlap on the wrong side. The back stitch is not as strong as the machine stitch but is stronger than the running stitch.

*Catch Stitch:* This stitch is taken alternately from the hem to the material. It is used for hemming silks, velvets, etc.

*Overcasting:* This is a loose, diagonal stitch taken over edges, as when sewing the edgewire on the hat.

*Stab Stitch:* This may be a regular or an irregular stitch. It is used when sewing on trimming, etc. The needle is pushed thru to the wrong side, then brought back to the right side, and so on.

*Slip Stitch:* This is made by taking a stitch in the under side of the fold of the hem, then a stitch in the material. It is used where invisible sewing is desired.

*Zigzag Stitch:* This is an elongated hemming stitch. It is used when sewing the top covering of the brim to the under part of the foundation brim.

## PAPER PATTERN

### Even-Sided Brim

1. Take a square piece of paper, tissue or newspaper, 16 inches by 16 inches.

2. Fold it in four, making a square.

3. Fold it in a triangle, again and again, keeping all cut edges at top and only cut edges at top.

4. With tape measure, measure from point one-half the width you want your hat and mark on both sides and cut, as 8 inches.

5. Open to half, mark sides, front and back.

6. Measure from center  $3\frac{1}{2}$  inches to either side and  $4\frac{1}{2}$  inches to front and back. Mark with a pencil.

7. Take your head size measure tight and add  $1\frac{1}{2}$  inches. Measure 2 inches if measuring for wire brim.

8. Measure the wire this length and dent. Cut 2 inches beyond. Lap these 2 inches and tie with tie wire or thread.

9. Make this circle into oval 7 inches by 9 inches, or to suit your head.

10. Place the wire on the paper, making corresponding points of wire meet those on the paper. Draw pencil line around inside of wire.

11. Cut open in back. To make brim even all way around fold in four, pin and measure width of narrowest point of brim. Measure the rest of the brim this width.

12. Cut head size on pencil mark.



13. To make it droop or turn up, take  $\frac{1}{4}$ -inch darts in outer edge. Do not alter head size. For an even droop take darts in front, back and sides. Pin these darts.

14. Lay this tissue paper pattern as it now is on heavy paper and pin.

15. Mark head size line and back.

16. Cut one inch inside head size line and  $\frac{1}{2}$ -inch on either side of back and cut outer edge exactly as the pattern.

17. Cut tabs in head size  $\frac{1}{2}$ -inch apart.

18. Pin together in back and try on.

### Oval Brim

Do as for Even-Sided Brim in Nos. 1, 2, 3, 4, 5.

5. Open to fourths.

6. In front and back measure down on sides toward the head size 1 inch and mark with pencil.

7. From sides measure 1 inch on circumference and mark.

8. Join these two points.

9. To get this curve even, measure space between the front-and-back and the point 1 inch in from sides, in four. The first line, namely, front-and-back, is 1 inch, the next  $\frac{3}{4}$ -inch in from circumference; half way across is  $\frac{1}{2}$ -inch and the next  $\frac{1}{4}$ -inch in from the circumference. This makes an even curve. Join these points with pencil line and cut.

10. Follow the rest of the instructions for the even-sided brim, beginning with No. 6.

### Uneven Sided Brim

1. Follow directions for Even-Sided Brim to No. 6.

2. Move center line 2 inches toward the back.

3. Proceed as for even-sided brim, beginning with No. 6.

## CROWNS

### Straight Side Crown

1. Cut a piece of tissue paper the length of your head plus 1 inch (for lapping) by the height you want your crown.

2. Lay pattern on stiff paper and cut.

### Curved Side Crown

1. Do as for straight side crown.

2. Fold in half, then in three.

3. Cut to within  $\frac{3}{4}$ -inch of bottom.

4. Lap these over  $\frac{1}{8}$ -inch (or more or less according to the slant you want) and join. Take in same amount on both sides of back.

### Sectional Crown—Four Sections

1. Cut paper one-fourth of head size plus 1 inch wide, by the height you want your crown, the other way. Fold in two from head size to top of crown and cut curve.

### Child's Oval Crown

Take sheet of paper 18x18, fold as for brim, cut as for brim, making it as large as desired. To make oval, fold in four, cutting off 1 inch on sides. Follow directions for oval brim No. 9.

### THE SKELETON FOUNDATION HAT

The wire frame may be copied after the paper shape or after a hat, or an original design may be made with the wire. Wire shapes may be used as a foundation for all transparent materials, as malines, georgettes, etc. They may also be covered with mull or some light weight material to which the straw braid may be sewed.

A transparent hat of georgette can be made as follows:

*Wire Shape:* Make the headsize wire 2 inches larger than the tight headsize. Make a brace wire in the same way, but  $\frac{1}{2}$ -inch smaller. Cut 8 support wires, 1 for front of hat, 1 for back, 2 for sides, and four half way between front and sides and back and sides. Take each wire 4 inches longer than the corresponding width of the paper brim. Take the headsize wire and twist the back support wire around it where the lap occurs, leaving 2 inches extending on the inside of the headsize. Do likewise with the remaining 7 support wires, spacing them equally around the headsize wire. Bend the 2-inch piece of wire at a distance of  $\frac{3}{4}$  inches from the headsize. Do this to all. Take the brace wire, and to this, twist the  $1\frac{1}{4}$  inches of the 8 support wires. Do not shorten the  $\frac{3}{4}$ -inch by allowing it to make the twist. Cut off the remaining short end and press down with the pliers. Measure each support wire the exact length of the corresponding length of the paper shape and bend up at this point. Measure the outer edge of the paper shape, measure a wire this length, add 2 inches for lapping, and cut. Fasten this lap with tie wire. Fasten the support wires to the edge wire at the points corresponding with paper shape. Cut off short ends and press down with pliers.

*Wire Crown:* Make the headsize wire  $\frac{1}{2}$ -inch larger than the headsize wire in the brim. Measure the length of the paper crown from front to back and from side to side. Then measure from half way between front and side to half way between back and side. Cut 4 support wires each 4 inches longer than these measurements. Bend these wires 2 inches from each end. Twist them around the headsize wire in front, back and at sides, and half way between. Measure the distance around the crown about



3 inches above the headsize wire. Cut a wire 2 inches longer than this measurement. Fasten the lap with the tie wire and fasten this brace wire to the crown at about 3 inches above the headsize wire with the tie wire. Two more brace wires may be necessary.

*Covering the Hat with Light Weight Material as Georgette:* If the frame is white it may be tinted the color of the material by using oil paints and gasoline, water colors, or ink. Fit the material to the under brim, as in a buckram hat, then cut. Another piece like this may be cut, using the one cut as a pattern. One would be for facing, the other for the top of the brim. Sew the material in the back with a plain seam. Place the top covering piece on the brim, pin to the headsize and then to the edgewire. Place the other piece on the bottom of the brim and pin it to the headsize and edgewire. Sew the two pieces together just above the headsize wire and again above the top or brace wire. Turn this facing over the edgewire, sew close to the wire with a running stitch, and cut off extra material to within  $\frac{1}{8}$ -inch of the seam.

*Finishing Edge of Hat Brim with Bias Extension Fold:* Cut a bias strip twice the width of the fold wanted, plus  $\frac{1}{2}$ -inch. Pin this double strip on the upper edge of the hat. Cut off and sew the seam in the back. Press this seam. Sew this fold to the brim. Turn the top covering of the hat over a wire and pin it directly over the edgewire. Sew this with a short running stitch.

*Different Ways of Finishing the Edge of the Brim:* Sew the top and bottom coverings of the hat together directly outside the edgewire. Cut off this edge to within  $\frac{1}{8}$ -inch of the seam, then overcast to hold the material more securely. This edge may be finished with wool or silk embroidery, with a bias fold of the material or with braid. If the braid is brittle, as the lisere braid, dampen it in water or with a wet cloth, before sewing it to the hat.

*To Cover the Crown, Making It a Plain Covered Crown:* Cut 2 pieces of georgette crepe, taking them 1 inch longer and wider than the crown from front to back and from side to side. Place these on the crown, pinning them over the headsize wire in front, back and at sides, also half way between these points after stretching them to eliminate most of the fullness. Sew this with the running stitch directly above the headsize wire. Cut off the raw edges to within  $\frac{1}{4}$ -inch of the seam. Place the crown on the brim and fasten it to the brim with the stab stitch. One thickness of georgette instead of two may be used if desired.

Trim the hat, observing the principles given in the discussion of design.

Line the hat with a circular lining. To make this, cut the material in an oval shape, having the dimensions of the crown, from front to back, and from side to side. Turn the edge in and gather. Sew the lining into the hat with a slip stitch.

### THE SOLID FOUNDATION HAT

Buckram, tho it makes a rather stiff looking hat, is the easiest foundation material to make into hats. Such materials as velvet may be glued to it, or if thinner materials are used, the frame may first be covered with cotton wadding or some soft material. If soft rolls are desired, willow, panama cloth, or crinoline may be used. Rice net makes a light weight hat and serves as a good foundation for straw braid. Only the buckram hat will be described in this group of lessons. Hats of the other foundation materials may be made according to the same directions.

*Making the Brim:* First press the buckram on the smooth side until it is flat. Then lay the paper pattern on the buckram with center front on bias. If the hat turns down, have the smooth side of the buckram on top. If the hat turns up, have the smooth side down. Mark with a pencil the headsize and on either side of the back, according to the pattern. Cut 1 inch inside of the headsize line for tabs, and  $\frac{1}{2}$ -inch on either side of back for lapping. Cut exactly as the pattern on the outer edge. Remove the pattern, lap the buckram in the back as allowed for, and pin. Place the headsize wire on top of the hat, allowing joining of the wire to come in the back. Caution: Be sure the wire is not too wide from side to side. The average width is  $7\frac{1}{2}$  inches. The average length is from 8 to 9 inches. Cut one tab in the back, cutting to the pencil mark, or if the wire is larger or smaller than to the pencil mark, cut to the wire. Make the tab about  $\frac{1}{2}$ -inch wide. Turn this up and pin thru it, then over the wire and into the brim to hold the wire in place. Do the same in front and two sides, also half way between front and sides, and back and sides. Caution: Be sure the headsize has the shape of your head, just where you wear your hat.

Sew the headsize wire to the buckram as follows: Begin in the back, take stitches over the wire, keeping them close to either side of the wire. Let the slanting stitch come on the under side. Take stitches  $\frac{1}{4}$ -inch apart and take two stitches in the same place every fourth stitch. Finish sewing on the headsize wire. Sew up the back lap, sewing on either side of the lap. Cut the rest of the tabs in the headsize and turn them up to position. Be sure they turn right at the wire.

Wire the outer edge. Begin in the back, placing wire on top of the brim and sew to the edge with an overcasting stitch. Sew



from right to left, keeping the wire close to the edge, but on top of the brim. Take  $\frac{1}{4}$ -inch stitches, keeping them close to the wire on the inner side, and for every fourth stitch take two stitches in the same place, then cut off the wire. Allow it to lap 2 inches in the back. Finish with the overcast stitch. The wire may be measured around the edge and cut before beginning to sew. When sewing the wire around the edge, straighten the wire so the curve is the same as that of the edge of the brim. To do this, draw the wire between the thumb and two first fingers. Be careful not to nick the wire.

*Making the Crown:* Press the buckram and lay the pattern on it as for the brim, center front on the bias if possible; mark with pencil on either side of back. Cut, allowing  $\frac{1}{2}$ -inch on either side of the back for lapping, then cut the top and bottom of the sides as the pattern. Be sure the crown is  $\frac{1}{2}$ -inch larger than the headsize when lapped in the back because the crown should fit outside the headsize wire of the brim.

Make a headsize wire  $\frac{1}{2}$ -inch larger than the one in the brim. Lap the crown in the back and pin, having the smooth side of the buckram out. Sew the wire on the lower edge, as was done on the edgewire of the brim. Start sewing beyond the lap, so that it may be changed if the crown is not the same size as the wire. Sew the wire on the outside of the crown and sew up the back lap.

Pin the crown on the brim by inserting the pins thru the tabs from the inside, then thru the crown and on thru the brim. Try the hat on to determine whether or not the crown is the right height to be becoming. Cut off the top of the crown to suit, and wire it as on the outer edge of the brim. Bind the crown at the top and bottom; also bind the edgewire of the brim as follows: Cut a  $\frac{3}{4}$ -inch bias strip of crinoline or some soft material. Stretch the strip lengthwise and bind the edge. Sew it on with the stab stitch; that is, the needle goes thru from the wrong side to the right, then back to wrong side, etc. The stitch looks like a basting stitch. If the crinoline has to be pieced, do so by lapping the strips when sewing to the edge.

*Crown Top:* Shape the crown so it fits the head, then place the top on a piece of crinoline, with center front on the bias. Hold it in place and draw a pencil mark on the inside of the crown. Remove the crown and cut 1 inch outside the pencil line, then fold and mark the center front and back and sides. Press the top crown. Gather all the way around,  $\frac{1}{4}$ -inch from the edge.

Mark center front, back and side at the top of the side crown. Pin the top crown to the side crown at corresponding points, letting the top crown slip on inside of side crown. Adjust the height of crown top to suit, and pin in as many other places as needed. Sew this to side crown with stab stitches.

To press the crinoline top crown, place many thicknesses of damp cloth over the curved fingers of the left hand. Place the crown over the hand and another cloth on top of the crown. Press with the iron following the curve of the top, using a rocking motion.

### COVERING THE BUCKRAM HAT

*Covering the Top Brim with a Fitted Piece of Material:* First, pin the bias corner of the material to the center front edge of the underneath part of the brim, placing the right side of the goods or pile of velvet toward the brim; then pin it in the center front at headsize. Smooth the material to either side and pin in outer edge and headsize. Continue doing this until the back is reached. Be sure that at least  $\frac{3}{4}$ -inch of material extends beyond the edge of the brim at all places.

Pin together in the back for the seam, cutting off the surplus of material in the back, leaving  $\frac{1}{4}$ -inch on either side for the seam. Cut one inch inside of the headsize wire for tabs. Cut these tabs as on buckram but cut them to within  $\frac{1}{4}$ -inch of the headsize wire. If the material is georgette or similar material, leave  $\frac{1}{2}$ -inch. Cut all around the outer edge, leaving  $\frac{3}{4}$ -inch. Take the material off the brim and mark for the seams in the back. If the facing is to be fitted at the top, take the pins out in the back seam. Lay this fitted top on a piece of material, right sides facing each other. Cut this exactly the same as top covering. The covering may be cut by using the paper pattern. Sew the seam in the back, either by machine or hand, then press the seam, and the entire covering if needed. Place the material on the top of the brim, seam to the back, then pin in place around the edge. If the material draws around the headsize, the tabs may have to be cut deeper. Sew around the headsize with the stab stitch  $\frac{1}{8}$ -inch above the headsize wire.

Cut all around the edge, leaving  $\frac{1}{4}$ -inch. *This must be exact.* Sew this edge down to the under side of the brim with zigzag stitch. Milliner's glue may be used to fasten the material to the brim if it will not fit smoothly.

*Covering the Crown: (The Two-Piece Crown):* Cut a bias or straight piece of material 6, 8, or 10 inches wide, depending on the amount of fullness desired crushed down on the side crown. Cut this piece the length of the headsize plus  $\frac{1}{2}$ -inch for seam. Stitch the seam in the back. If the material is on the straight, the seam will be straight up and down the back; if on the bias, the seam may run diagonally across the back. Press this seam and material if needed.

Cut a wire 14 to 16 inches long. Lap it 2 inches and tie with tie wire. Gather the top of the side crown over this wire. Be



careful not to pull this gathering thread too tight, so the material will drop straight down from the wire instead of standing out from the wire. Turn this side crown inside out and pin a piece of material across the top after the wire is shaped to make it oval—that is, a little longer than it is wide. Turn the crown to the right side again and sew the crown top to the side crown, taking stitches where the gathering stitches are taken.

*Putting Crown and Brim Together:* Pin the buckram crown to the brim at the top and bottom of the tabs. The facing can be put in before the crown is sewed on. Put the crown just made of material over the buckram foundation, getting center front to center front. Turn this side crown under  $\frac{1}{4}$ -inch and pin it to the bottom of the buckram crown. Sew this to the bottom of the crown with a slip stitch.

This material may be sewed to the crown by turning the  $\frac{1}{4}$ -inch over a wire and pinning in place all around, and lapping the wire 2 inches in the back. Sew it to the crown with a wire stitch—that is, bring the needle out just above the wire, near the back. Take  $\frac{1}{4}$ -inch stitch and take the needle thru to the wrong side; bring it out again almost in the same place. Continue in this way. Stroke the needle along the stitches to make them sink underneath the wire.

*Putting in the Facing:* The Straight Piece Facing: Cut a straight piece of material as long as the circumference of the hat and  $1\frac{1}{4}$  inches wider than the widest point of the brim. This piece may be on the straight of the material or on the bias. Measure this material around the circumference, stretching it as you measure. Sew the seam in the back and press. Slip the edge of this material over a wire and pin to edge of the brim. Pin all the way around. Lap the wire 2 inches in the back. Pin the other edge of the material to the headsize.

Sew around the outer edge of the brim as around the crown with a wire stitch, except instead of the needle going thru to the wrong side of the crown, the needle comes out on outside of wire; catch the top covering of the brim when the needle goes back to the right side of the facing. Continue around the brim. Sew the facing to the headsize. The facing may be plaited or gathered.

*Trimming the Hat:* Follow instruction as given under "Trimming as a Part of the Hat".

*Lining the Hat:* Make the cap lining in the same way the crown was made, except use cord instead of wire, and make the width of the lining the depth of the hat plus about 2 inches. To line, turn in the edge of the lining and pin in place in the hat. Sew it to the hat with a slip stitch.

*Methods of Covering the Brim and Crown of a Hat:* There are any number of methods used for covering hat brims. These may be classed into three general groups as: The fitted covering, the spiral covering, and the shirred or plaited covering.

The edge of the fitted covering of the brim may be finished with a fold, a binding, a puffed edge, or with a wire. The top or facing may be finished with a flange or a scalloped edge.

The spiral covering is made by sewing narrow strips to the hat, beginning at the edgewire and continuing around and around to the headsize. These strips may be shirred, plaited or put on plain. Material such as lace, ribbon, bias strips of silk, chiffon, etc., may be used. The bias strips may be corded and sewed to the hat.

The shirred or plaited covering is put on straight from the crown to the edge of the brim. It may be plain at the edgewire and shirred at the headsize, or shirred at both edgewire and headsize. Shirring with or without headings between the edge and the headsize may be used.

The crown may be made of any of the materials used for the brim. The plain crown is made of an oval piece of material stretched over the crown and gathered over the edgewire. The spiral crown may be made in the same way as the spiral brim, beginning either at the center top, or at the edgewire. The shirred or plaited crown may be made by shirring or plaiting the material to fit the crown. The two-piece crown is made of a side crown and top crown. The draped crown may be made by simply draping a piece of material in various ways or it may be finished with loops, bows or folds of the material. The molded crown is made by fitting a piece of material over a crown mold or another crown.