

Garbee

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THE WEAVER

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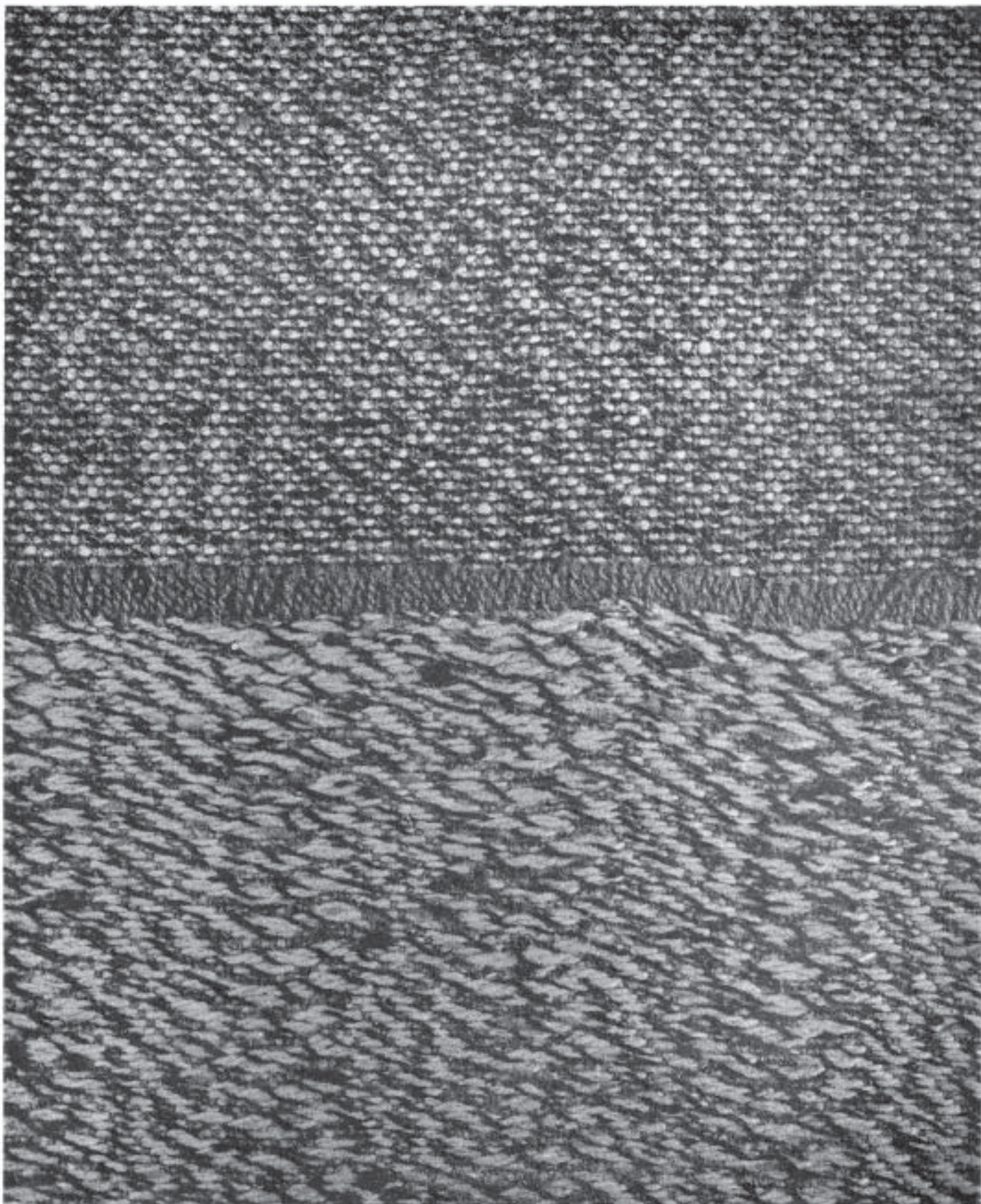


ILLUSTRATION No. 1

The Creation of Smart Fabrics

PART ONE

BY MRS. MARIA STEINHOFF

IT IS ALWAYS an exciting thing to write about hand-weaving. Endless are the possibilities inspired by weaving, and endless are the ideas which can be accomplished by it.

Let us talk in the first article of the practical questions with which the hand-weaver is confronted. In the second article we will deal purely with the creative aspects of weaving.

What are the reasons for producing hand-weaving? Do we not overlook the practical and artistic value of the hand-weaving of today?

There are many people who believe that hand-weaving is a kind of old-fashioned hobby or a practical necessity of only our grandmothers.

The machine can do many things, but not the most important things of all, that is, to think for us. That means in our case the invention of the pattern, the invention of the texture of the desired fabric. All machines which mankind has created are merely amplifications of our body's capabilities. The machine-loom is nothing else than mechanized and magnified potentialities of our hand-loom. We come back always and, in spite of all, to the hand, which has to make the model for the multiplied products of the machine. Human hands and brains have to make and to invent the model for caps, hats, dresses, textiles. Then, a machine is built which repeats the model.

The hand-loom has enormous advantages. It is relatively small, easy to handle, and may be placed in any room. It costs comparatively little. You can buy a marvelous 40-inch wide, 4-harness hand-loom for about \$80, and out of this initial expense you can produce all kinds of fabrics made by a dignified and interesting process, that of weaving. We all know very well what it means to wear a dress made out of a beautiful and fine material. And we also know that many women among us cannot afford to buy this sort of material because it is simply too expensive. But, if you have your own loom, with a certain skill, taste and patience, your fabrics will become as valuable as those produced by Rodier, Bianchini, Scotland woolens which run from \$7 to \$15 a yard. Your expense for such a material will be only about \$2.00 to \$4.50 a yard at the top price.

If you compare your cost with the top prices of Rodier's materials, then you can see that you are working for yourself at a third of the expense, and you wear the material which ordinarily is only for the "Four Hundred." For instance, yarns like Bernat Fiesta, Bouclé de Laine, Chaumée, give you materials which you can buy only in the most expensive shops.

Do not forget that you can also mix the expensive yarns

with the cheaper ones, and have a magnificent result.

There is another economical aspect to mention. If you wear a dress made from a good, beautiful fabric, this dress will last for several seasons, especially if the cut is a perfect and classic one.

Cheap material does not last. Precious material always looks astonishingly modern. Have you not observed, for instance, that Mme. Lanvin creates the simplest fashions for the most beautiful and expensive materials? Being a great artist, she knows very well that the modelling of a good dress is conditioned, first of all, by the characteristics of the material itself. The material of the dress makes it "haute couture."

But this is not the final argument which I make in favor of hand-weaving. There is another one.

You know very well that knitting has become the most popular handicraft everywhere. It takes usually from four to six weeks to make a knitted dress. Have you ever thought how fast weaving can be done? If you only take two hours a day, and if you make in these two hours only half a yard of material, then within ten days you will produce five yards of a fabric, which is enough for a dress. Is this not a striking fact?

I like to stress this circumstance because a lot of people think that weaving is an endless undertaking.

Now, I hear you whisper: "It is all right with the quality of my material. But what about Rodier's taste and mine, in producing the pattern?"

Let me answer the following: Rodier's materials are made by human beings like you. There are no mysterious circumstances which make them create such beautiful things. But the only difference between you and them is that they tried out and experimented with these ideas, while you probably did not think or dare to do it. Do you seriously believe that God gave the gifts only to one or two nations, or to one or two people?

We will discuss this problem later in the second article. But until you read this article, do not take anything for granted with respect to your inferiority complex.

I presume that my suggestions will make you anxious to start to weave. The usual question is: What shall I do? How shall I start? How shall I apply my technical knowledge of hand-weaving?

When you have decided what kind of object you intend to produce, the first problem should be to settle the question of the right application of threads. Here we hit upon a basic rule. This rule can be explained by a simple formula.

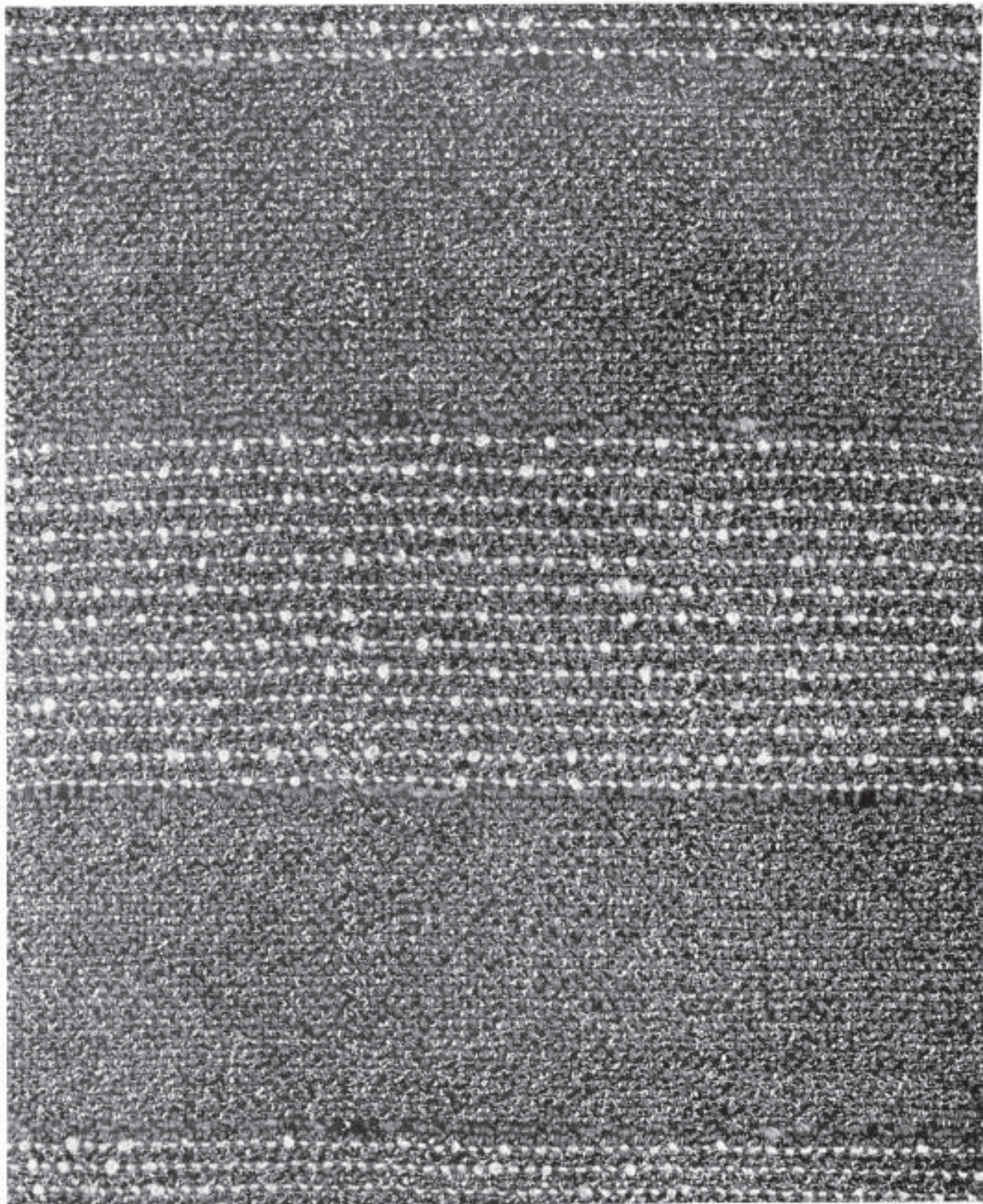


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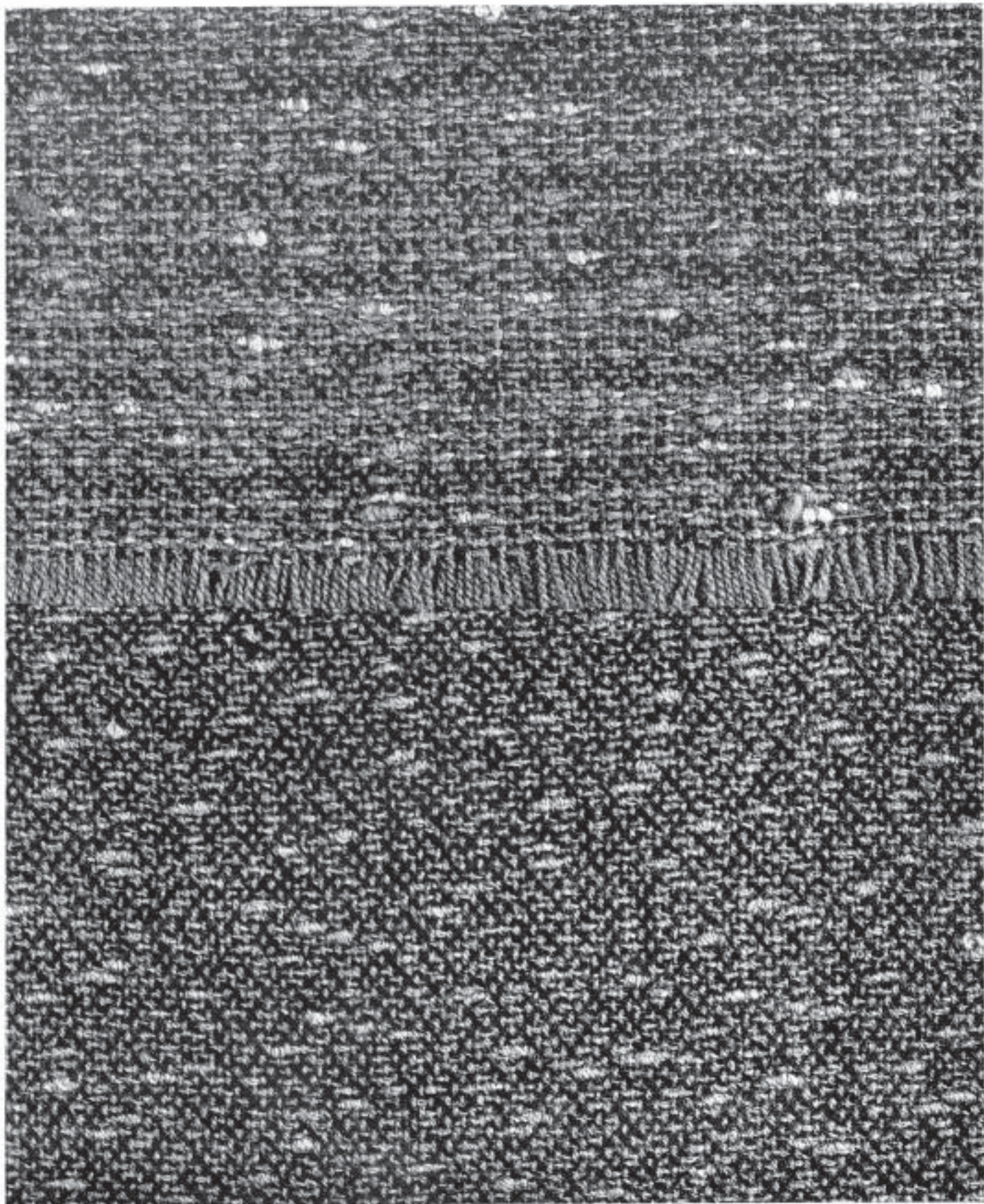


ILLUSTRATION No. 3



ILLUSTRATION No. 4

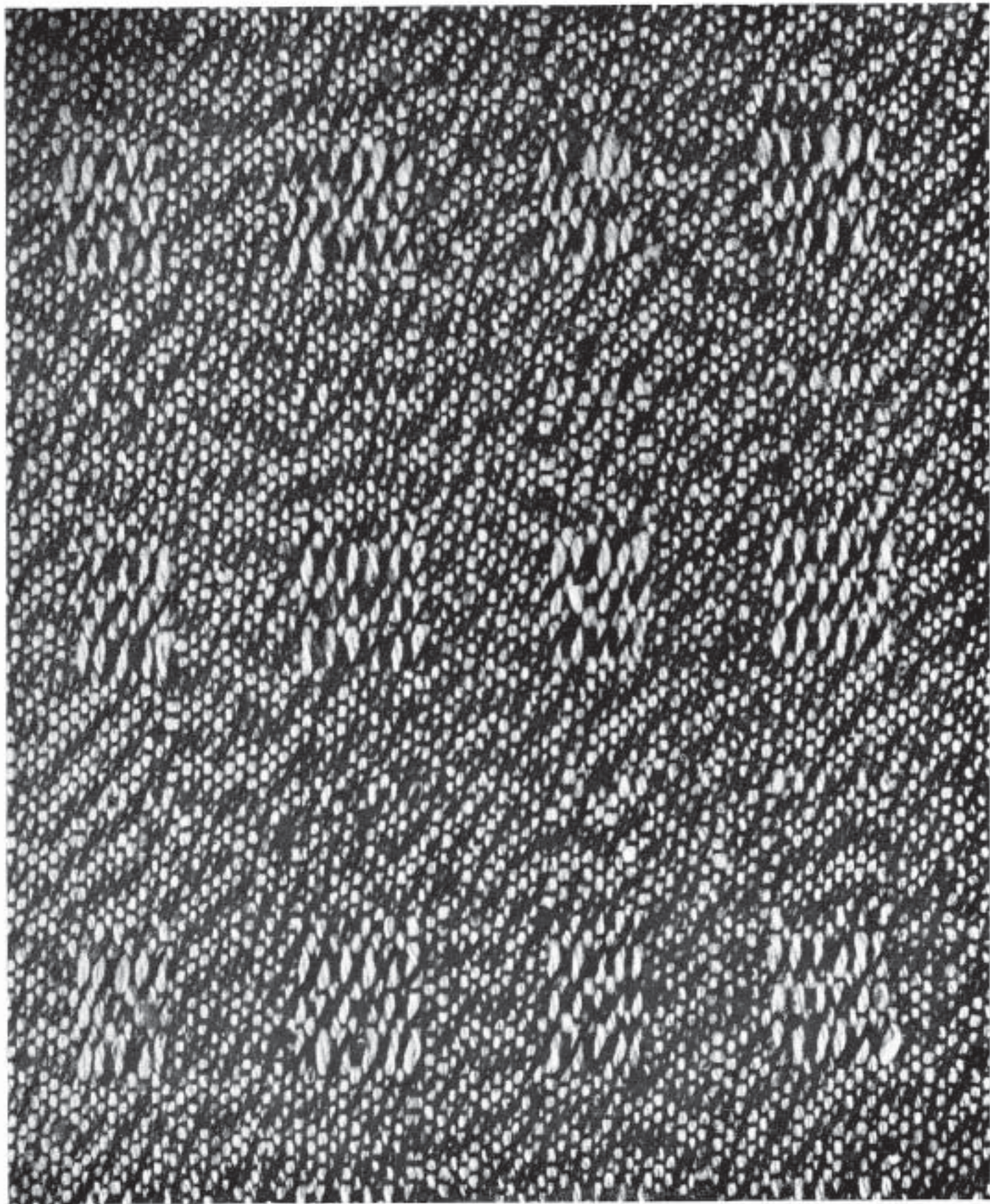


ILLUSTRATION NO. 5

Do we have to follow the tradition of not mixing different kinds of threads, or can we mix them? The older generation of weavers still cling to the formula of not mixing different kinds of threads in the same material. In discussing this problem, I cannot do better than quote a fragment of an article from the famous French fashion magazine, *Le Jardin des Modes*, March 16, 1935, page 114:

“The inexhaustible spirit of invention of the weavers makes it more and more difficult to speak separately about certain fabrics. There no longer exists a distinct frontier between one and another material. The marvelous wealth of creative possibilities of weaving permits the application of any procedure whatsoever to a certain fabric which, until now, has been strictly reserved for a definite material. As there is now linen made of wool, so serge (a twilled woolen fabric) is made of linen and also tweeds of cotton. Furthermore, rare are woolens without a few threads of Albene. Also, linen is mostly mixed with wool. Therefore, all mixtures are possible.

What would the old biblical legislator who prescribed: “Thou shall not a garment mingle of linen and woolen” (Leviticus XIX, 19) think about that? He would be speechless.

So you see that the future development of weaving opens perspectives of new possibilities that only a few years ago nobody would have dreamed of.

We have now so many different threads at our disposal that their enumeration would go far beyond the limits of this article.

Now, I should like to discuss a few of my woven patterns which you may find illustrated in this article.

Illustration No. 1 shows two samples. The upper one is a material for a skirt, the lower one is designed for either a jacket or a coat, or both to match with the skirt. There is also the possibility of using the upper pattern for jacket and skirt. The lower pattern is designed for the coat; so we have altogether a smart three-piece suit.

The threads are Bernat French Tweed, for the filler. The warp is Bernat Weaving Special. The general coloring is of a tan shade, in which tiny, brightly vibrating color spots are interwoven. The threading of both samples has been conceived for a new combination which gives a very attractive interplay of rectangular lines with round waves. This disposition gives full sway to the texture.

Illustration No. 2 gives the pattern for a dress material for sport and town wear. Threads: The warp is the same as that of Illustration No. 1. The filler is Bernat Chaumée, Bouclé de Laine, Blue Weaving Special, French Tweed Bouclé.

The pattern belongs to the plaid type. Very fine lines make the squares. Bernat Blue Weaving Special and Tweed Bouclé divide the vertical directions of the pattern, belonging, therefore, to the warp. Chaumée and Bouclé de Laine, French Tweed and Tweed Bouclé make the harmony of the filler. I created the pattern purposely with many different threads so as to show that fine color harmonies in weaving are produced like those of painting, that is by the interception or confrontation of many correlated shades.

Illustration No. 3 gives you a pattern for a suit in electric blue, for jacket the upper one, for skirt the lower one. Threads: The warp is made of Bernat Afghan. The filler is Bernat Fair Isle Tweed and Bernat French Tweed. The knots of sparkling colors within the texture of the threads give a most distinguished vivid accent to the weaving.

By the way, colored knots, imbedded in yarns, have the tendency to make patterns on their own. They start to become cumbersome. You must realize these knots as a virtue but not as a defect. Practically speaking, invent a threading which gives a small pattern which interrupts any cluster of knots.

Illustration No. 4: Cotton mixed with wool, created for light summer dresses. Warp: Bernat Perle Cotton in gold, yellow and white. Filler: Chaumée in Navy Blue, Parchment and Pencilwood. The mixture of the colors gives a nacre shimmering. The dress made of this material is suitable for many occasions, because of its practical coloring and smart pattern.

Illustration No. 5: Splendid fabric for the fall. Colors: Greyish blue with red, orange, and green tiny color spots. Warp: Bernat Weaving Special. Filler: French Tweed. The threading, like in Illustration No. 1, is invented to give a slightly circular motion to the rigid horizontality of the filler.

With respect to the threading mentioned above, I should like to mention that it was always the desire of high standard threading, to overcome the purely geometrical and rectangular direction of weaving.

Here we have overcome this rigidity, innate in purely geometrical weaving and this by circular movements, brought about by refined graduations of the threading.

The Hindu weavers of Lombok and the highly cultured Islands of the Sunda solved this problem by dyeing the transitions on warp plus filler on the place where their fine taste and subtle eyes needed the most minute discriminations.

The color problem applied to weaving will be treated in the second article.

American Yarns... An Inspiration for Weavers

PART TWO

BY MRS. MARIA STEINHOFF

LET US DISCUSS the most complex problem, that of the creative inspiration of the weaver. It is not easy to analyze the mysterious process, which gives birth to any art creation — the fusion of the engendering spirit with the material, which in our case is the thread.

First, there is an emotional urge, flashing through the mind, wandering around for the discovery of its material embodiment. The first help to your thoughts is either the object to be formed, or remembrances of materials, their texture, their structural flavor. The most decisive moment for any realization is the actual touch with the material — the decision to choose the first thread. It is like in music. The first sound initiates the sequence of all the following sounds.

It is like in painting. The first color put on the canvas decides the sequence of all other colors. In weaving, if the first thread has been chosen, the others follow, obeying an inner drive, an irresistible one if the weaver has all his heart and soul at work.

A true composer's emotions are intimately bound up with the sensation of sounds and their interactions. In music no concept of sounds is possible which could not originate from musical instruments.

Briefly, at the moment of creation, the composer's inner ear hears sounds of instruments. What sound is for the composer, color is for the weaver. The flavor of the sound, given by instruments, is for the weaver's world the thread with its texture.

Therein lies the deepest truth of creative weaving. Threads are like flowers, of which no one is like another. How could I describe with words the thousands of textures of threads! Some are shining, round and smooth like the polished skin of serpents. Others are coarse, pointed or round. Capricious knots interrupt the flow of their hairy surfaces. Some of them look at you with eyes like your pet dog. They have spots of colors, coming and going.

It is the interplay of textures which makes their joyous dance of approaching or of contrasting with each other. The best marriages are those where the two parties are different but nice to each other. So it is with weaving. Contrasting textures, amalgamated in one expression, give the pep. A fundamental rule of creative art has always been that of contrasts. There can be no hills where there are no valleys. Coarse yarns like to be mingled with smooth ones. Twisted threads need their more evenly flowing companions.

Are you aware that I am speaking of many things, of yarns, textures, music love and flowers, but nothing of "the

pattern"? How often am I asked how to come to the pattern, whether I make a previous drawing before starting to weave or not?

A true pattern is the outcome of an interplay of color and texture of definite yarns, and this applies to a certain purpose.

Naturally you can make a previous drawing, but only if you have experience enough not to see the paper and color pencils of your drawing but to visualize the actual weaving you are intending to produce.

In the industries, the pattern is given on paper because the designers do not know how to weave. But there is always a weaver who knows how to translate from the paper to the yarn.

If you have to work out weaving for a special case, e.g. a hanging for a certain window, then you must make a plan for motif repetition, before beginning to weave, like an architect makes plans before building his house. There is no weaving without repetition. Weaving without repetition is tapestry. The repetition is the backbone of any woven thing. How should the repetition be understood?

First of all, you have to have a creative idea which can be repeated. If you do not have it, there is nothing to repeat.

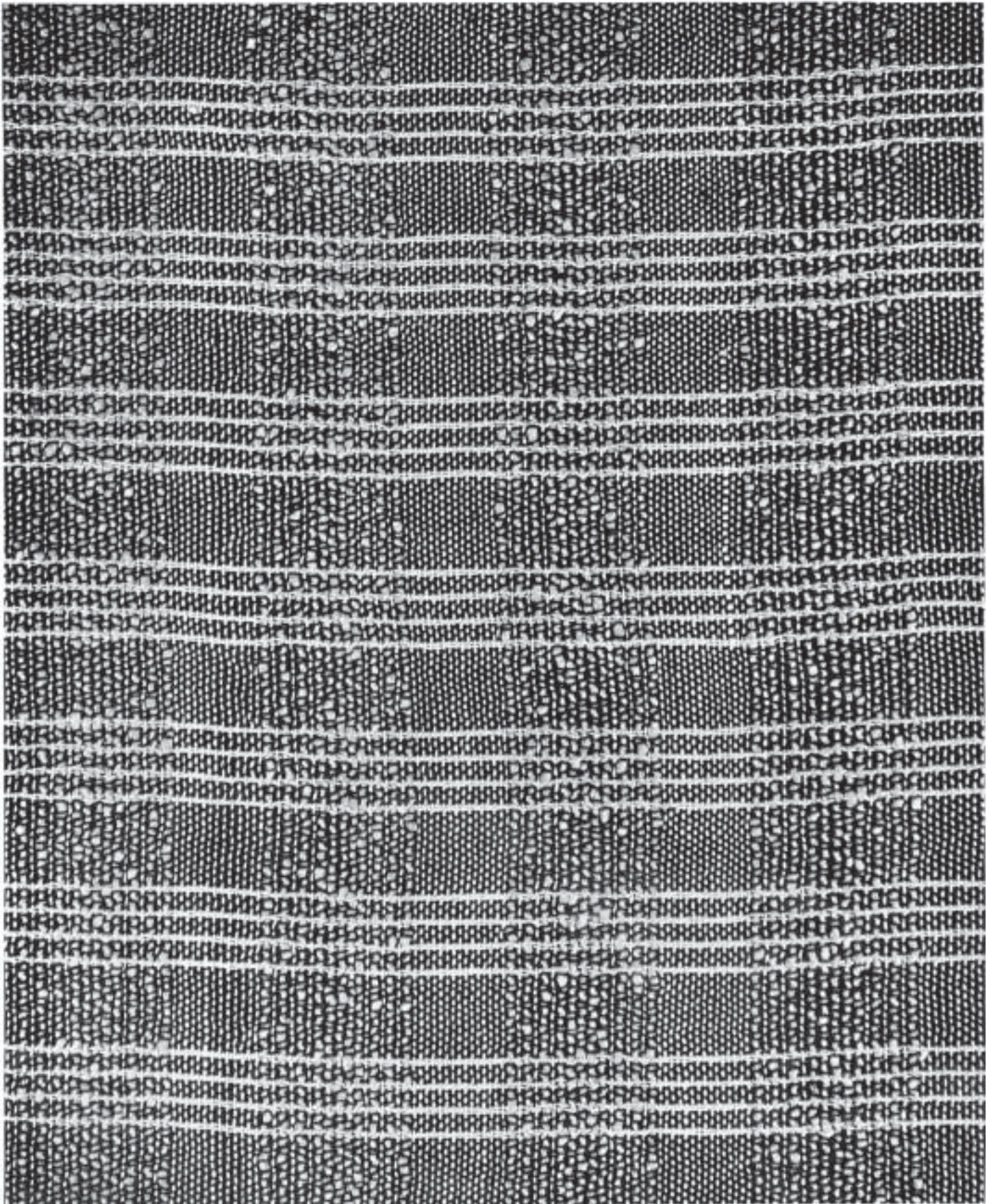
Let us go on. If you have something worthy to repeat, then think only of that which architects call the scale. A necktie needs another scale of repetition than a hanging. First of all, please start to observe the scale of everything belonging to our art.

To explain how to approach these problems, let us take as an example the artistic organization of the dress from the point of view of application of pattern.

The dress is never an accomplishment in itself, like a painting or a sculpture, but it comes only into being if it is worn, worn by a certain person. Seen from another angle, we can state that the main function of a dress is the emphasis of the bodily beauties of women. As the average woman has undoubtedly many beauties, but not all of them, the dress has always to correct defects. Those defects can be lessened only by the right and conscious application of form and color.

As we previously mentioned, the form of a dress is not so much conditioned by the cut as by the texture of the material. Each material has its special kind of draping on the body. The draping conditions the aspect of a style (cut). That means the form of the dress is mainly conditioned by the material, and not the material by the style.

But the omnipotent factor in dressmaking is the color of the dress and its arrangement — the pattern.



The main point consists of the problem of the color distribution on the material with respect to its application. This problem is a purely creative one because in it is in-

involved the creation of the pattern itself. You will understand me easily if you kindly forget that a pattern is something for which you are looking in books, and, if it seems to

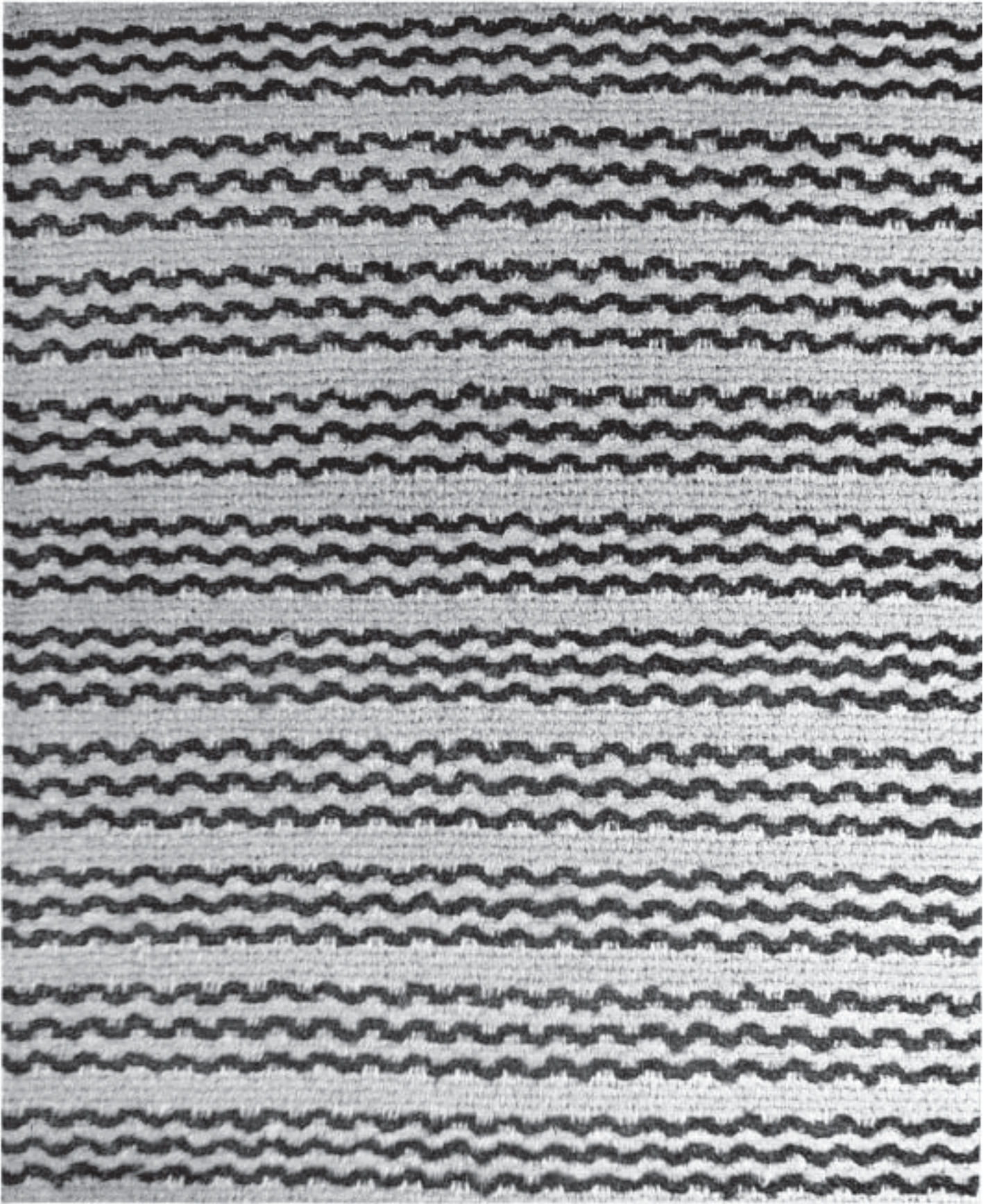


ILLUSTRATION NO. 2

be nice, you take it. No, a thousand times no. We have arrived at the essence of weaving.

The pattern is born by the interplay of the shape of a
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feminine body with its color of hair and complexion and the purpose of the dress (evening dress, sport suit, etc.).

You understand well: A pattern is the outcome of these

conditions and not a previously fixed ornamental arrangement, superimposed on the dress to be conceived.

Look! There is a charming girl, but her thorax is too long. You apply a vertical pattern, or you spread out isolated color spots on your fabric. This is entirely wrong. What she needs as pattern is a horizontal circulating motif whose width of stripes depends not on what you may have seen similar in a book or a store, but only on the amount of inches the thorax is high and of the extent of the stomach to the breast.

In general, stripes and corresponding patterns have to be applied to bodies with defects of length; that means if the legs are too long for the upper body. If the legs are too short, stripes are a fatal mistake. Irregular or repeating color spots as pattern are advantageous for lean or slim bodies. The slimmer the body, the larger should be the color spots of the pattern. For stout persons, no pattern is the best. Here we have to consider the general color as much as possible. Colors which contain yellow or red produce in us a feeling of expansion. Colors containing greenish blue diminish a volume if we like to make it less apparent. The ideal pattern in this case is the pattern created by texture.

Two different yarns used in any rhythm whatsoever will give you beautiful results. It also works well with overlong bodies. English people have a fine sense for that. Therefore you find the English weaving mostly consisting of texture and not of pattern.

There are many roads which lead to Rome, but only one that leads a weaver to a creative, new pattern. Dare a fancy! First, make your own threading. It will be always more interesting than an old outworn one, copied from a book. And you will have much more satisfaction than by slavishly copying alien accomplishments. This done, start to weave. Your first impression will be that your invention is far from being new. Everywhere, in books or in department stores, you will see again your invention. You will become discouraged.

For ages and ages, millions of weavers have been at work. How can I do something new? But you are wrong. Think of music, it has only 64 sounds, and there is no end to their variations, from Palestrina to Strawinsky.

We weavers have many thousands of sounds, our color shades. Music has only thirty-two instruments. Weavers have many hundreds of them, the threads, with their most different textures.

The truth is that in weaving, if you are not out for copying, no repetition is possible. A little bit of a different texture, a slightly different change in the warps, a different color shade one next to another, and a new pattern has been born. In time, your eyes start to see all those things better, and then you will change from your discouragement into creative courage.

Please, try this out: Make a warp of five yards. Start to weave the most different ideas on the one and the same threading. You will be astonished what variety of pattern you will obtain when you change only the texture of your yarns.

I feel it would be an omission not to mention a current which from time to time comes to the surface. I mean what

is called "adaption of folk art motifs to American design."

Ornamental motifs are not born by playing around with nice scrolls, but they are the deepest expression of human emotional rhythms, and different with races and religions. Furthermore, all those "exotic" (Hindu, Mexican, Peruvian, Turkish) motifs are born of rural populations, therefore corresponding to a rural spirit of color scales.

The American rhythm of life is quite different; this makes a fundamental difference. A New Yorker or Bostonian would never think of arranging his home in the style of the Bavarian alpine peasants, so we cannot wear any other peasant weavings, be they from Bavaria or Peru.

We come now to the problem of color. I can only touch this problem in its main points.

First, let us lay bare one of the most popular mistakes which lead to creative sterility. You can hear, very often: "I do not like blue, but lilac purple is wonderful." Like the children have to overcome the measles, a creative weaver has to overcome the sentimentalist sickness, to like certain colors and to dislike others. A color in itself, seen from the viewpoint of creative weaving, is meaningless. A color comes into being only by juxtaposition with another color. Mostly, the problem of harmonizing colors starts with the harmonious combination of three colors. It is never a question what colors you are using, but how you are harmonizing them. Seen from this creative angle, a color comes only into its full bloom when the neighbor color or colors have been put on.

Certainly, the artistic application of color is conditioned by taste. But it would be a mistake to believe that taste alone, or your taste, could solve the problem of creating and selling handwoven products. I like to approach this problem by making a few remarks and suggestions which could help weavers to sell their products with success.

The use of colors extends in two directions: Use of color as the expression of variety and taste, and the use of color as the heightening of the object's spatial expression. Let us discuss only the first form of expression in color: that of taste or variety.

Color has merely the effect of variety if we place those colors next to each other which evoke our joy in color-tones. Consequently, colors which are joined only with an eye to their variegated nature are an expression of taste. This taste can coincide with a personal preference, or it can be the favored expression of a national or regional character. The expression of personal taste determines the choice of the purchaser of a necktie, of silk stuffs, or cloths for furniture. The personal taste of the purchaser determines the color of the object.

The collective taste, either of a regional or national character, determines the coloring in folk-art and folk-lore.

We see how completely different coloring in Old-Mexican art is from that in Inca art.

If we examine this question more closely, we see that there is still another distinction in collective taste. This is, in general, the distinction in taste between a rural and an urban population. The taste of rural people in their coloring prefers a gay variety. City people prefer muted colors. Gay colors correspond to a primeval joy in colors; muted colors



ILLUSTRATION No. 3

are the expression of a more subtle taste. Joyous colors can be seen in the gayly decorated clothing of the Slavic peasant-woman. Color as the expression of a subtle taste can be seen

in all the show-windows of stores in the city; shirts, neckties, hats and gloves are of similar colors in all their various shades. The expression of distinguished taste in the interior

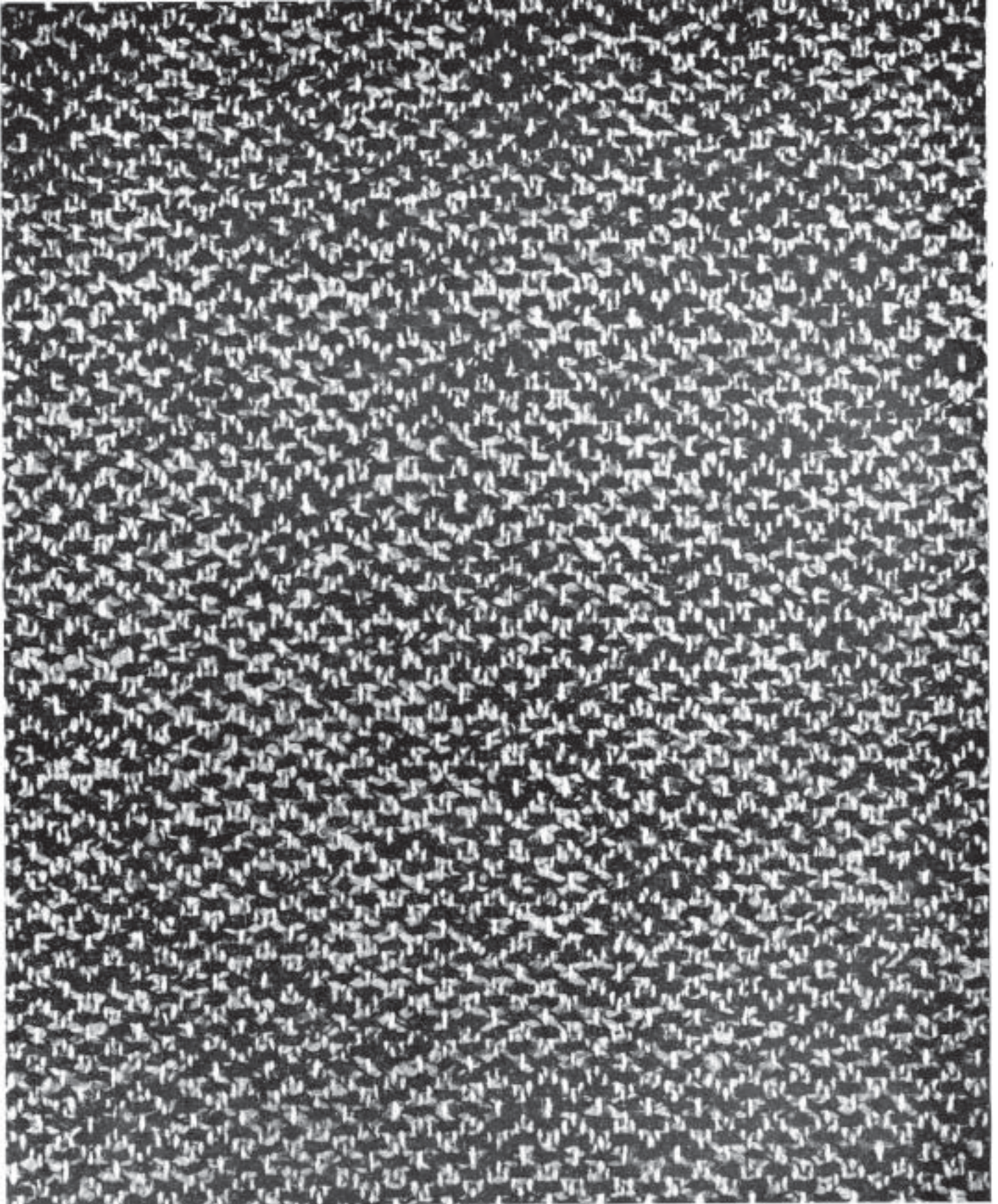


ILLUSTRATION No. 4

arrangement of clubs approaches complete monotony of colors, corresponding to an expression of impersonal boredom.

Peasant, primitive coloring is obtained by placing colors together which are strongly contrasted in value. Coloring appropriate for the distinctive taste of urban life is obtained

by placing colors together which have, of course, different qualities (red, green, etc.). Nevertheless, these qualities are of such a kind that they take away as little of the light-impression as possible from each other. To give the laws for applying these colors would lead us too far afield. Yet we see that coloring can be considered from the viewpoint of taste, both purely individual and collective. Commercially, this circumstance is made possible because of the psychosis of the masses for colors in styles. The problem of color applied to weaving is closely related to that of color as an expression of taste. The pattern of weaving corresponds also either to a personal taste or to a collective one.

The artistic means of creating ornament in patterns is based on the following:

The individual color-spots can be either formless, that is, without representational content (silk-stuffs) or with representational content (rugs, tapestries, gobelins). They must be created in such a way that the spots of color are in quantitative and qualitative harmony with each other. That means that the colors must not only harmonize in their tones. The size and the surface extension of the spots of color must also be in scale, corresponding to the character of the spot of color (necktie, dress, wall-hangings).

True creative weaving is, like true music, the expression of inner, emotional rhythms. It does not mean covering warps with pattern or ornaments borrowed from the past.

These rhythms, expressing in weaving as well as music the emotional rhythms of men, live in us today as formerly. However, on this fact is based an extraordinarily important factor which we can describe thus: Why is one pattern pleasing to the public, and another not? Why does the general public often prefer one pattern to another? Why is the pattern preferred by the public sometimes a good one, sometimes a bad one? How should patterns be designed which can be sold? You can see that these are important enough problems from the standpoint of creative patterns.

First of all, we assume that the attractive nature of the patterns to which the public has been accustomed for some times does not enter into discussion. I mean stabilized historical pattern.

The rather more important question is why the public will either buy or not buy a newly designed pattern. A weaver comes to the manufacturer with a sample. The manufacturer is as a rule helpless, because he is afraid to decide. As a rule, he never knows whether the pattern will please or not. Naturally we assume that the pattern in question is an artistically excellent one. If it is a question of a really new pattern, the manufacturer must rely simply upon some vague kind of judgment as to whether it pleases him or not. Then this excellent pattern is executed and it does not sell. What is the reason? The reason is that neither the artist nor the manufacturer knows what is really at the basis of a new pattern. We are certainly not concerned with whether the artist who produced the pattern has expressed himself in an individual creation which has taken his fancy, and which, therefore, he seeks to impose upon the manufacturer. Also we are not concerned with whether the pattern pleased the

manufacturer or not. The one and only thing that matters is whether this pattern corresponds to the contemporary, inner rhythms of the public.

If the pattern corresponds to the inner rhythms of the public it will sell, whether it is good or bad.

The public has no definite taste, because it has no definite aesthetic point of view. Whether that is a good or bad thing we cannot here discuss. But the public has, nevertheless, something which we usually pass by inattentively: the public has instinct. This instinct comes from the inherited rhythms which live in its soul. If we would only have these things in mind, if our schools investigated and discovered not only bodies and intelligence but also the spiritual rhythms of both young and old, then we would come upon very marvelous results. We would discover things which would make the future of weaving and art of national expression. Weaving will not then be engaged on the wrong track of copying, but on the living path of creation.

There are a few illustrations of my weavings.

Illustration No. 1: Material for summer dress, very light quality. The warp is Bernat Black Linen Warp and Baby Pink Perle Cotton, mercerized. The filler is made of Baby Pink Perle Cotton, mercerized, Bernat Kool-Knit, Cherry Blossom. The general effect is one of a pale wine purple with some fine dark lines. The mixture of colors fits almost any complexion and hair color.

Illustration No. 2: The texture of this material is of an unusual soft quality. It has been created for summer dresses. The warp consists of Bernat White Fabri. The filler is Bernat Gray and Black Mousseux. The effect is a vibrating white-black play of colors.

Illustration No. 3: For sport coats, summer wear. Warp: Bernat Perle Cotton in gold, yellow and white. Filler: Flammelle and Kool-Knit. The Henna color of the Kool-Knit makes with the knots of the Flammelle (yellow) a very attractive and unusual color combination, heightened by the different textures of the yarns.

Illustration No. 4: For suits and coats (fall and spring). Warp: Bernat White Fabri. Filler is Bernat Fiesta and Mousseux. Thanks to the most attractive color combinations of the Fiesta yarn, the surface of the material gives a wonderful harmony of variegated coloring. The black yarn unifies the sparkling color character of the material.

Illustration No. 5: This picture has been introduced to show the draping qualities of my materials. More and more, soft qualities are in vogue. There are very beautiful Scotch materials on the market which are less in demand because of the stiffness of draping. The materials represented on this photograph show you the marvelous draping qualities of Bernat yarns. (*See front cover.*)

The illustrations are only a few representatives of all the innumerable possibilities of pattern invention, coloring and textures. Slumbering treasures of beauty and wealth of creative weaving characterize the wonders which yarns disclose.

Look at them intimately. Combine certain yarns you think the best if put together. Then, go to the loom and try them out. You will feel happiness, the compensation of all creative efforts.

Knotted Pile Rugs

BY MARY M. ATWATER

PILE FABRICS of all kinds have a special depth and richness of effect that give them a peculiar charm. They are produced in three chief ways, some of which have been explained in a previous article in *THE HANDICRAFTER*.

Velvets and "terry" fabrics are made by using two warps, — a foundation warp for the backing and a pile warp, which must be at least four times as long as the foundation warp. The pile is produced by weaving gauge-rods, under the pile warp only, followed by a few foundation shots of plain tabby. When a few inches have been woven the pile is cut with a special knife that runs along a groove in the top of the gauge-rods, and the rods are then withdrawn. Uncut velvet and terry are made in the same way, smooth round wires or rods being used that may be taken out without cutting. The foundation for these fabrics must be very firmly beaten up to hold the pile which otherwise might catch and pull out, especially when uncut, as is occasionally demonstrated by a poor quality bath towel.

Much velvet is still woven by hand, especially in England, but usually as a trade. Not much work of the kind is done by the handicraftsmen.

The second system of making pile fabrics is to pick up the pile in the weft material. This method is used for tufted weaving, and the pile is usually left uncut. An imitation of this style of weaving is the tufted bedspread now so much made in the South. The tufting material in these is simply pulled through a woven fabric with a hook. Hooked rugs are similar in technique.

In all the above fabrics the pile is held in the backing simply by crowding the foundation weft close enough together to hold it. A far more durable fabric is that of the Oriental rugs. In these the tufting material is tied in a knot over the threads of the warp and cannot possibly pull out. We all know the beauty and value of Oriental rugs, but few among us have the courage to attempt this work. Perhaps, too, we feel that the rich and intricate Oriental patterns belong by nature to the country from which they come. To make a slavish copy is never very interesting to a craftsman, and to adapt or alter these patterns in any fundamental way spoils them. The technique itself, however, is simple enough and when used in patterns of a wholly different type gives very beautiful results. The simpler, bolder, decorative forms in vogue today lend themselves, too, to the use of coarser materials, so that the labor is not so great. There are few among us who would care to devote a whole year or several years to the production of a single rug.

In the Oriental technique the tufting material is

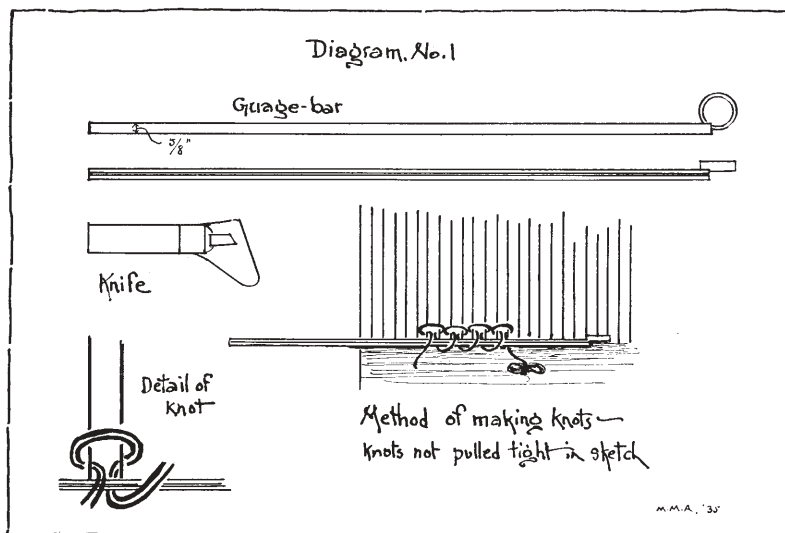
cut in short lengths and knotted, the pile being sheared off after it is woven in. In France many tufted rugs are being made in this manner.

There is, however, a quicker method for producing exactly the same result. This is a Swedish technique that offers the craftsman an interesting and not too laborious method for making knotted pile rugs of the highest quality. This technique is not generally familiar to American hand-weavers. It deserves to be better known, and to that end the following detailed directions have been prepared.

This type of weaving can be done on a simple two-harness loom, but the loom used should not be of flimsy construction. This weave requires heavy beating for good results. Two pieces of special equipment are required in addition to the loom — a gauge-bar with a slot, and a special knife to cut the pile. Details of these will be found on the accompanying diagram. The gauge-bar should be a few inches longer than the width of the proposed rug, and as a rule it is advisable to have two or more bars, for small and large rugs. The depth of the pile depends on the width of the bar. The width indicated on the diagram — five-sixteenths inches — is a good width for general use. A French rug seen at an exhibition some time ago was done in three different depths of pile, giving a raised pattern effect. This might be found an interesting effect for rugs done all in the same color.

The best warp for these pile rugs is a fairly coarse linen or tow warp, about the grist of a No. 3 Perle cotton. Ordinary carpet warp is not strong enough and should not be used. The warp should be set at 10 or 12 ends to the inch.

For weft material a coarse wool yarn of good quality should be used. Bernat's "Zephyr" or "Peasant" yarns are recommended. Finer yarns can also be used if doubled to sufficient



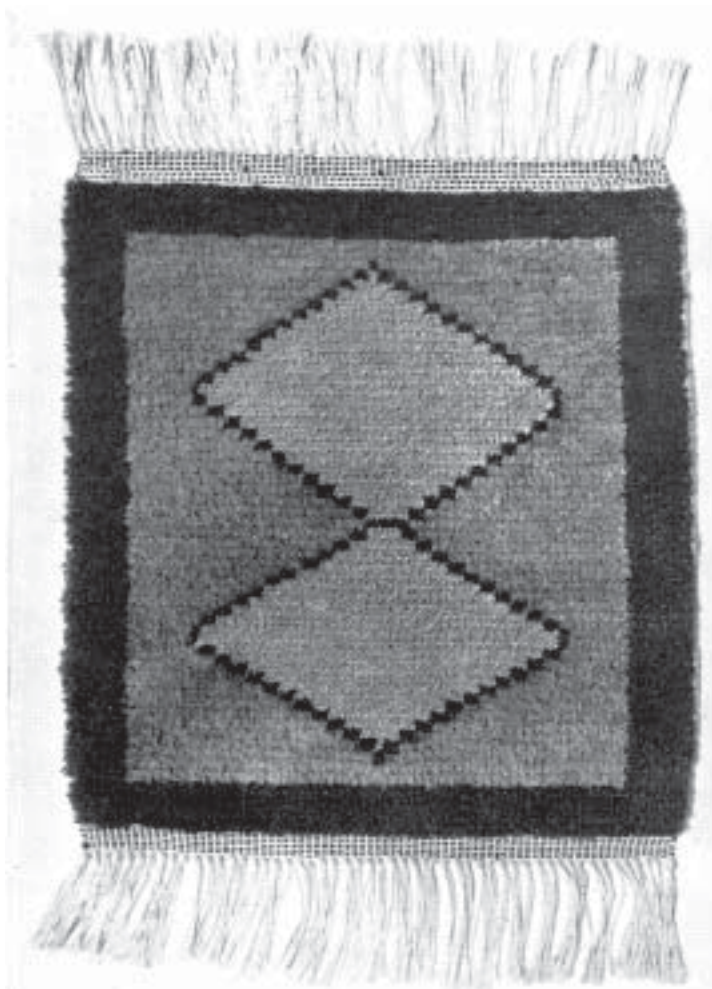


ILLUSTRATION No. 1
Knotted pile rug, woven by Mrs. W. P. Gregory

thickness. The Zephyr weight yarn should be used single for tabby shots and doubled for pile. The material for the tabby weaving should be carried on a shuttle as usual, but the pile weft is used in convenient lengths — say two to four yards — not wound on a shuttle but simply rolled together in a loose ball, as illustrated on the diagram.

In selecting a pattern for knotted weaving it is well to select a very simple design for the first piece. Plain geometric forms are very effective when worked out in a well-chosen color combination. The small rug illustrated — Illustration

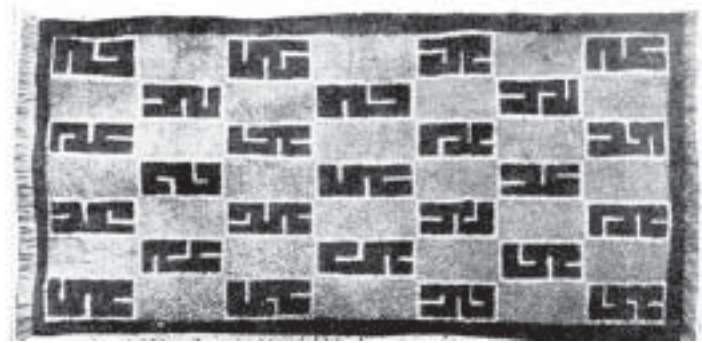


ILLUSTRATION No. 2
Knotted pile rug, designed by Paul Haeserts

No. 1 — was done in brown, tan and burnt orange. The illustration shows clearly enough the arrangement of the colors.

Quite elaborate designs can be done in this technique also. Straight lines, however, lend themselves better to the technique than curves or diagonal lines. For ease of execution it is well to lay out the design on cross-section paper and allow one, two or more knots to each space of the paper, according to the desired width of the piece. Each knot, as will be seen, is tied over two warp-threads. If the design, for instance, covers 80 squares of the paper in width and two knots are allowed to each space, 320 warp-ends will be required. To this number should be added twelve additional threads for edges. These threads, six on each side, are left unknotted to prevent the curling under of the edges that otherwise tends to result.

The process of weaving is as follows: First weave a plain tabby heading in foundation weft — single strand. Then set the gauge-bar on the warp, slotted edge up, allowing it to project some distance to the left side of the loom with the ring end to the right. Take a double strand of pile-weft, in the shade desired for the bottom border of the rug and tie the first knot over the seventh and eighth warp-threads, counting from the left-hand edge. To do this, carry the small ball of yarn under the seventh thread from right to left, over the seventh and eighth threads from left to right, and

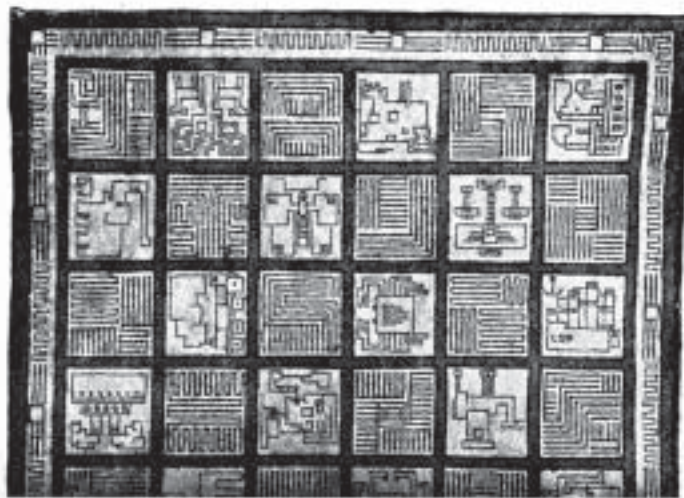


ILLUSTRATION No. 3
Knotted pile rug designed by Paul Haeserts

under the eighth thread from right to left. Draw the knot tight. Pass the yarn under the gauge-bar and over. Tie the second knot in exactly the same way, over the ninth and tenth threads of the warp. Proceed in this manner all across the web, omitting the last six threads of the warp. Draw the bar along toward the right as the work proceeds.

When all the knots in the row have been tied, beat very heavily with the batten to drive the knots down hard against the heading. Now weave three tabby shots in foundation yarn, beating very firmly. The quality of these rugs depends very much on the closeness of the work. It is impossible to beat too hard.

Now release the gauge-bar by cutting the pile with the special knife.

The next row of knots, and all succeeding rows, are made in exactly the same way, with changes of color as indicated on the pattern one is following.

No great skill in weaving is required for the making of these rugs, and a beginner need not hesitate to attempt the work. The essentials are a proper choice of materials, a good design and good combination of colors, exactness in following the design and in tying the knots, and a good hard pound with the batten.

By using a finer warp and a silk weft over a heavy wire instead of a gauge-bar, an effect like uncut velvet could be produced in this technique. Finer yarns than those suggested



“ART ET DECORATION”

ILLUSTRATION No. 4
Knotted pile rug designed by Paul Haeserts

for rugs, over a narrower gauge-bar, and a fairly fine cotton or linen warp could be used for the making of table pieces, footstool tops, cushion covers and the like. Large bags would be interesting done in a combination of pile and ordinary pattern weaving. Inset figures in pile knots could be introduced with handsome effect in drapery fabrics. Many other uses for the technique will readily suggest themselves to the weaver. This is a weave that permits very free play to the imagination and will be enjoyed especially by those who like to make their own designs without the geometrical restraints of the more formal “four-harness overshot” and “summer and winter” styles of pattern weaving.

On Diagram No. 2 are given four simple designs for knotted pile weaving. All four are designed on a sixteen-space width. For a small rug, warp 236 ends, and allow seven knots to each space of the pattern. At ten threads to the inch this makes a rug $23\frac{1}{2}$ ” wide. (This number of warp-ends allows for six unknotted warp-threads on each side, as explained in the notes.)

For a wider rug, warp 332 ends and allow ten knots to each space of the pattern. This will make a rug 33” wide. In a similar manner other widths may be obtained.

The designs have been worked out as for three or four colors. The blank spaces indicate the lightest color, the black squares the darkest color, and the hatched squares the intermediate shades.

The amount of yarn required varies greatly with the depth of pile and the closeness of the weaving. The more firmly the fabric is beaten up the better the rug, of course. An allowance of from one pound and a half to two pounds of yarn to the square yard should ordinarily suffice.

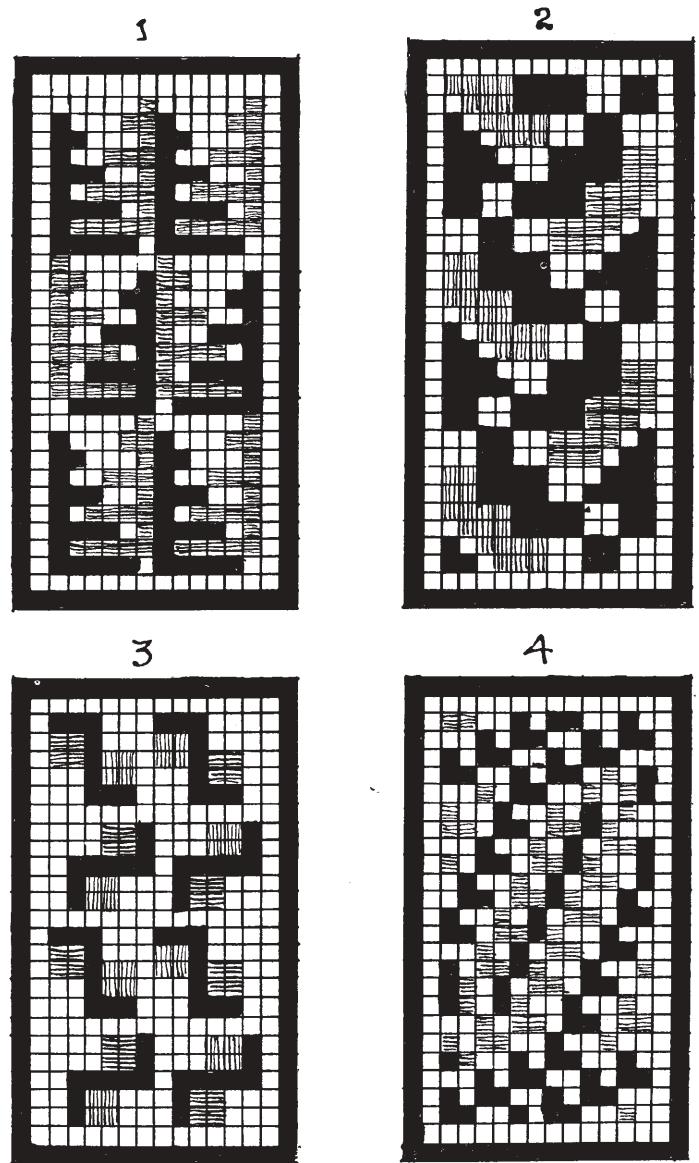


DIAGRAM No. 2

Sixth Annual Weaving Institute at Penland

BY BONNIE WILLIS FORD

THE sixth annual Weaving Institute conducted at Penland, North Carolina, by Mr. Edward F. Worst of Chicago, from August 12th to August 24th, proved to be one of the most successful sessions that has ever been held. Students came far in advance of Mr. Worst's course to take the preliminary training offered by the Penland School of Handicrafts under the leadership of Miss Lucy Morgan of Penland. The instruction actually covered, therefore, a period of about four weeks, from July 30th to August 24th. There was a total of eighty-three students in attendance, representing twenty-two states and the District of Columbia. This number far surpassed the attendance of any of the five former years. Sixty out of the eighty-three students came from places distant from Penland, the remaining twenty-three being local Penland people. Fourteen different professions were represented. Students from four different government Indian schools were in attendance including two native Sioux Indian girls from the Pine Ridge Indian Reservation, Pine Ridge, South Dakota. Leaves for these people came through the Washington Office of Indian affairs and, in some cases, arrangements were made by the government for part of their expenses.

Courses in the following subjects were offered: weaving, pottery, jewelry-making, metal work, leather-tooling, wool spinning, flax spinning, carding, basketry, chair-seating, bookbinding, and vegetable-dyeing. Emphasis was, of course, placed upon the weaving, which was under the direct

tutelage of Mr. Worst, assisted by Miss Lucy Morgan, Miss Georgie Morgan, Mr. Howard Ford, and other Penland weavers. Mr. Clyde P. Miller of Milton, New York, expert professional silver- and goldsmith, gave his services in the teaching of jewelry-making, metal work, and leather-tooling, and his classes proved very popular. Mr. Miller's interest was aroused by one of the Institute students of last year, and those responsible for the Institute feel that they have secured for this particular type of instruction one of the best teachers it is possible to obtain. Mr. Miller, like Mr. Worst, contributes his services without charge. Penland feels that in Mr. Miller it has found a friend second only to Mr. Worst. Wool and flax spinning, carding, vegetable-dyeing, and chair-seating were taught by local people whose knowledge of these crafts was handed down to them by their ancestors.

As in former years, the classes were conducted informally from eight-thirty in the morning until five-thirty in the afternoon. As in other years, too, even these long hours were not long enough for some eager students who worked before breakfast and after supper. There was one general assembly period during each day in which Mr. Worst gave lectures and instruction in the reading and writing of drafts and in cloth analysis. The looms were arranged for a great variety of patterns and designs, ranging from simple four-harness patterns to very intricate many-harness weaves.

The writer wishes that it might be possible to convey through printed pages some of the enthusiasm shown by the group. One of the most gratifying things connected with all of the six Institutes has been the fact that there have been gathered during these years, from the four corners of the continent, people who, by their very presence, enthusiasm, and good sportsmanship have created such a spirit of good fellowship on the Penland hill top as to be felt long after they returned to their widely-separated places of abode and work. Lasting friendships, cherished associations with each other and with the local Penland people, expert instruction under one of America's



The Edward F. Worst Crafts House, August, 1935

leading authorities on hand-weaving, treasured memories of hill-top experiences have been among the "souvenirs" people have carried away from the Penland Institutes.

This year's group — how they revelled in the beauty of the countryside; how they enjoyed the walks "up to the Ellis's," always rewarded by genuine hospitality, apple cider, and cold buttermilk from the quaint old spring house; how they grew contrite and delighted at Aunt Harriet's gentle scoldings when she told them they were spinning threads large enough for calf ropes! A trip to Hoot Owl Holler to hear Doc Hoppas tell stories, pick the banjo, and sing mountain ballads furnished table conversation for the next meal. There were jaunts to many another of the homes of the mountain neighbors; trips to Roby Buchanan's mill on Rock Creek, where they watched him cut and polish native semi-precious stones and grind corn at the same time by the power of an old water wheel; motor excursions to Blowing Rock, Chimney Rock, Linville and Asheville by way of the beautiful Buck Creek road, and pleasant strolls through winding trails around Penland. In the evenings, many members of the group shared with the others knowledge of a par-

ticular craft in which they were interested. One student devoted several of her evenings to teaching the group how to do cardboard weaving, another taught the making of chair seats with corn shucks, and another demonstrated the making and use of the Indian loom and how to weave on it. All were anxious to share their experiences with the others.

Other evenings were devoted to demonstrations and programs arranged by the Penland hosts. Mrs. Joy Kime Benton, well-known artist and craftswoman of Hendersonville, North Carolina, who makes picture tapestries out of old rags with a hook such as is used in the making of hooked rugs, exhibited her work one evening and talked to the group about it. Mrs. Benton's pieces have won grand prizes in exhibitions all over the United States and in Canada. Mrs. Wilma Stone Viner, skilled tapestry weaver and vegetable-dyer of Saluda, North Carolina, exhibited her work one day during the course, and Mr. Burnley Weaver of Biltmore, North Carolina, gave a demonstration of block printing and exhibited his block prints on another evening. Mr. Weaver, in addition to his work as a block-print artist, operates an exclusive printing shop in Biltmore in which he prints spe-



The 1935 Weaving Institute



Weavers at work on the porch as well as indoors

cial editions of books and Christmas and gift cards. Mr. Stuart Nye, maker of costume jewelry, also of Biltmore, and Mr. Roby Buchanan of Hawk, North Carolina, appeared before the Institute with samples of their handiwork. This is the first time an attempt has been made to present North Carolina talent in the arts and crafts, but it proved of so much interest that, as time goes on, more efforts will be made to have North Carolina artists and craftsmen become identified with the Weaving Institutes.

There were two programs presented which might be termed as extra-curricular activities in that they did not deal directly with the crafts. One evening, Miss Bessie Trimble and Miss Angelique High White Man, Indian girls from the Sioux Indian Reservation at Pine Ridge, South Dakota, delighted the entire Institute membership with a program of native Indian songs and dances. Miss Trimble and Miss High White Man wore elaborate costumes made of buckskin and profusely beaded by the Indians on the reservation. The other evening was "Penland evening" on which, at their request, the students of the Institute heard the story of the Penland weavers — the story of Lucy Morgan, who for twelve years has been bringing beauty and economic independence and artistic craftsmanship into the lives of the people around Penland; the story of how Mr. Worst became interested in Penland, of how he came to give the first Institute, and of how he has been coming every summer since to give others; the story of how the Penland weavers and potters went to the World's Fair in Chicago, and, best of all, of how the 1934 Weaving Institute made a dream come true for Lucy Morgan and her associates by starting the building fund for the new Edward F. Worst Crafts House. The group was told about the happiest day the Penland hill top has ever known. It was a heavenly spring day in last May, when the trees had just put on their new green and the whole mountain side was redolent with the glory of the springtime. It was a

day on which neighbors and friends from far and near were gathered for the log-raising of the new house — a house which when completed will serve as headquarters for the Weaving Institutes and as a local crafts, health, and recreational center — a house which, it is hoped, will also serve as a national laboratory where people from all parts of the country may come to work and play from April to October.

Much activity had been going on around Penland since the members of the last Institute combined their resources to make a permanent home for the Penland School of Handicrafts, and to do honor to Mr. Worst by creating as a tribute to his unselfish spirit of service this fitting monument. Just three and one-half months after this happy day of the log-

raising, the members of the 1935 Institute were hearing the story in the beautiful, though unfinished, weaving room of this amazing faith house. For every board and nail, from its beginning until the time in July when its unfinished rooms were used for the first time, had been put into the house on faith and with small, unsolicited gifts from many friends and neighbors everywhere. That evening, when the story was being told, was an occasion almost equal to that of the log-raising. It was only the rough shell of the building which is to be, but the roof was on, and the magnificent gray stone fireplace and chimney were built, and forty-eight looms were set up in the unfinished rooms. No doors or windows graced the house as yet, but the Institute heard the magical story in front of the first fire that had ever been in the building, and the students no doubt wondered how the former sessions had ever been held on the delapidated porch of old Ridgeway Hall.

After that night, there was much whispering and many conferences among the group — open meetings, too, were held in which the students discussed what their part should be toward the completion of the new house which they must have felt by now belonged to them, too. One day they presented the following resolutions:

"We, the members of the 1935 Weaving Institute in making our contribution to the building fund for the Edward F. Worst Crafts House, like to feel that we are doing at least a little to help in the splendid work which Miss Morgan is carrying on here as well as having a part in this inspiring building which is being erected in Mr. Worst's honor. Since the doors and windows seem to be the pressing need at this time, the 1935 Institute decided to concentrate its efforts toward that project. In this way we are perpetuating the Penland Association. As we leave here, we take with us the feeling of beauty and peace instilled by the Carolina mountains and their people."

A few days afterward, we who work all the year at Penland were thrilled beyond expression when we walked down the corridors of our dream building and saw placards on the openings for the windows reading: "New York," "Chicago," "Missouri," "Virginia," "North Carolina," etc., etc.; indicating that those windows would be furnished by people from those places. So, in addition to its shell, and roof and fireplace, the building is soon to have windows. Is it any wonder that these Institutes carry us over difficult days when the winter closes us in with our own problems? The other day one of this year's students who has been coming for three years in succession wrote back to say: "I don't know what we should do without a Penland to go to every summer where we can play and do the work we want to do."

Because of the interest manifested by numbers of Chicago and New York teachers in the annual Penland Weaving Institutes, special sessions are being arranged particularly for them during the spring vacations of the schools in these cities. This arrangement is made possible due to the retirement of Mr. Worst from his position as Supervisor of Handwork in the public schools of Chicago, and it is hoped that it will enable many people to come to Penland at this time of year for the courses conducted by Mr. Worst when they perhaps could not come during the regular session in August, and will, at the same time, relieve the congested conditions of the August Institute. An effort is being made by Mr. Worst to have the Penland School of Handicrafts become affiliated with Lewis Institute in Chicago in order that Chicago

teachers who work with him at Penland may be given academic credit for such work through Lewis Institute.

Mr. Worst will be at Penland for three weeks in the spring, beginning April 13th and ending May 2nd. The first week of this time, April 13th to April 18th, inclusive, is being planned for New York teachers, and the last week, April 27th to May 2nd, for the Chicago teachers. During the intervening week, April 18th to April 27th, Mr. Worst will devote his time to the local people in and around Penland and to people particularly from the State of North Carolina. These special sessions, however, will not be confined alone to Chicago and New York teachers and to people from North Carolina, but may be attended by anyone who is interested in coming to Penland at this time of year.

Opportunity will be given during the spring sessions for instruction in a variety of other crafts, such as the spinning of wool and flax, carding, vegetable-dyeing, basketry, chair-seating, simple bookbinding, and possibly jewelry-making, metal work, and pottery. The making of hearth brooms will be taught for the first time.

It is a great boost to Penland, now that Mr. Worst's time is his own, that he is willing to spend more of it here.

In August, 1936, the seventh annual Weaving Institute will be held with Mr. Worst's course extending over a period of three weeks instead of two, and with the preliminary instruction in elementary weaving being offered as usual during the week prior to Mr. Worst's coming. Mr. Miller will continue the work in jewelry-making and metal work.



Forty-eight looms were in use in the unfinished rooms of the Crafts House

Simple Draw-Loom Weaving

ON A FOUR-HARNESS LOOM

BY NELLIE SARGENT JOHNSON

THE STUDY of the method of weaving simple draw-loom patterns on a four-harness loom should be of interest to hand-weavers for several reasons. First, it is a method which has been used but very little in this country, and second, because of the very simple way in which a regular four-harness loom may be equipped to weave in this manner. Also it opens up an entirely new field for the creation of interesting original designs.

This form of weaving, with the use of shed sticks, is an ancient technique, and in Sweden it is termed "Upphamta," or double harness weaving.

The following quotation taken from the book, "Swedish Textiles," by Emelie von Walterstorff, gives the derivation and meaning of "Upphamta" as follows: "The name

'Upphamta' is derived from the lifting of the shafts, as is also 'lyfetäcke' (Vastergotland); from the shed rods it is called 'skidtäcke' (Blekinge); 'fjoläkla' (Smaland), and 'skälblad' (shed rod); from the shafts or sticks 'pinaklä (de),' 'kåppaklä (de)'; and 'viratäcke' (Scania) from *Vigre*, meaning switch. From the design, the 'Upphamta' bed cover in Scania is sometimes called 'assatäcke,' or 'stenkaketäcke.' From the use for which it was intended, 'Bunkatäcke'; in Norrland and Dalecarlia, 'Prastruta,' 'förhörsduk'; in Dalecarlia also 'himmelsakla' when used as a canopy."

This quotation has been given because it is sometimes a help to be able to know to what kind of weaving these Scandinavian authors refer. Last summer in a small town in Wisconsin, the author was privileged to see some of this type of weaving in some very ancient bed covers from Norway. But, unfortunately, it was not possible to obtain photographs of these. As this form of weaving has no name in this country, but is done on the principle of draw-loom weaving, it seems that the easiest name to use for it would be simple draw-loom weaving on a four-harness loom, or, if you prefer it, the Swedish name of "Upphamta."

Because most looms are generally equipped with only short-eyed heddles, the procedure in this article will be described for this type of loom. The Swedish method of weaving in this technique requires a loom equipped with long-eyed heddles, at least $1\frac{1}{2}$ " eyes, and the shed sticks or dowel rods, as they are used in this case, are set at the back of the loom. Illustration No. 1 shows a loom equipped in this way, with the shed-stick dowel rods in place on the supporting frame to hold them up off of the warp threads. If your loom has short heddle eyes — and this is very important — this supporting frame for the shed-stick dowel rods must be attached to the side loom uprights so that it comes toward the front of the loom, and be sure that it does not interfere with the reed and batten. If you only use a pattern for the pick-up which needs four shed-stick dowel rods, you will not need to add any supporting frame to hold them up, as they will not be heavy enough to weigh down the warp threads. So for a short-eyed heddle, four-harness loom, all the extra equipment which you will need will be four flat pick-up sticks about an inch and a half wide, and as long in length, plus two or more inches, as the width of the fabric you are weaving; and also four $\frac{1}{2}$ " dowel rods the length of the width of the loom, and a ball of firm cotton or linen twine with which to tie up the groups of pick-up pattern threads to these dowel rods, or pattern shed sticks.

Because of the interest which has been expressed by nearly everyone who has seen it, in the table runner shown at

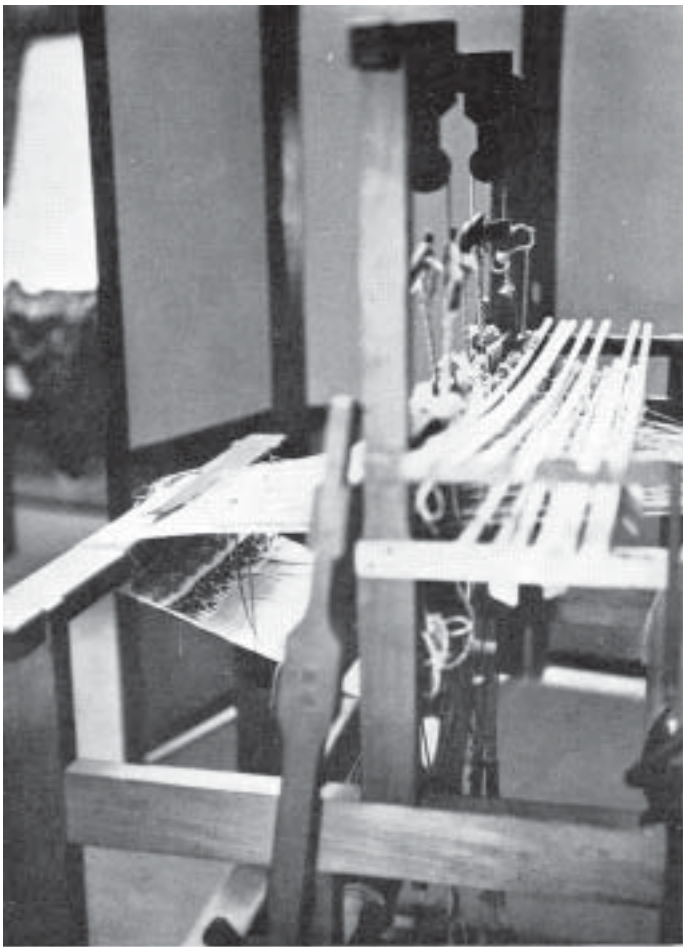


ILLUSTRATION NO. 1

Loom equipped with shed stick dowel rods showing frame supporting them

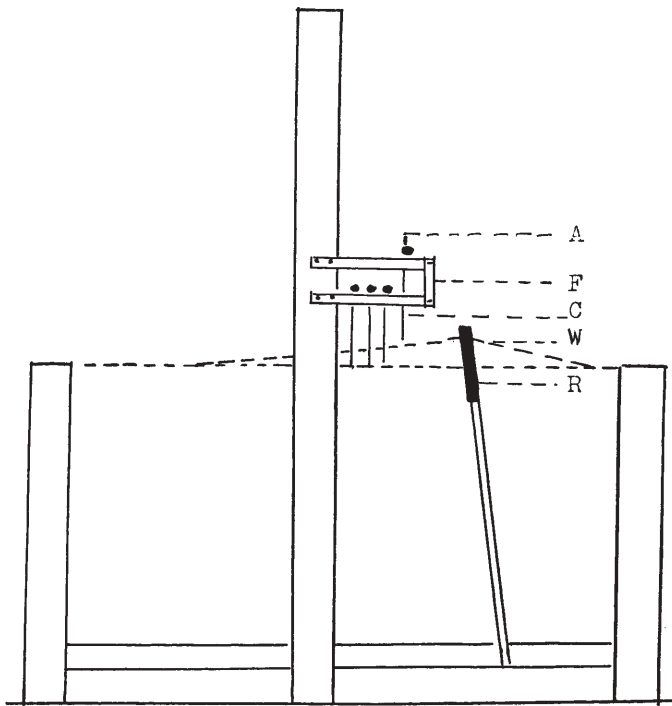


ILLUSTRATION No. 1-A

(a) Dowel rod shed stick No. 1 raised; (f) Frame holding dowel rods; (c) Cords attached to warp threads; (w) Warp threads raised by rod No. 1; (r) Reed and batten of loom

Illustration No. 2, this will be described in detail. The reason why this particular runner has been of interest is first because of its unusual color arrangement, and second to weavers, because its design and style is so different from the ordinary type of hand-weaving generally found in this country.

Description of weaving of table runner at No. 2:

Warp: Use Bernat's 40/2 natural linen, 24/3 cotton, or No. 20 mercerized cotton in natural or beige color. Plan to set this at 24 threads to the inch, or 2 threads through each dent of a 12-dent reed.

Weft: Double strands of Bernat's fabri yarn in brown, henna, orange, orange-yellow, and yellow.

Threading Draft: Any pattern draft may be used which is generally used on any four-harness loom, provided it has a plain tabby shed; or any of the simple threading drafts may be used as given at Illustration No. 3, if desired. The draft used in this case was the simple Herringbone threading at (A). Thread the warp on the four-harnesses in the usual way for the full width of the loom. Sley the reed, and tie up the warp to the front cloth beam as for regular four-harness weaving. Then weave two inches of plain tabby weaving with weft like the warp.

Now we are ready to pick up the pattern on the flat pick-up sticks. Illustration No. 4 shows several different patterns similar to those in some of the Swedish books, but they are original arrangements which have been worked out especially for this particular method of weaving this technique on a four-harness loom with short-eyed heddles. If you study these pick-up pattern drafts you will see how very easy it would be to work out many other variations from these simple arrangements for four shed sticks. And because of the

lack of this kind of pattern, even in the Swedish books, an entirely new field for the designing of this type of weaving is opened up. Pattern (A), (C), and (D) are planned for four shed sticks. Pattern (C) can be used as a repeat as given, or from A to B may be used as a border, and B to C used for a repeat for the center. Draft (D), as given, is just one half of the pattern repeat for the entire width, so that the center of the design is at C. This pattern draft particularly shows how a great deal of pattern interest may be obtained by writing the pattern without many small repeats.

Using pattern Draft (A) of Illustration No. 4, take a flat pick-up stick, and *in front of the reed, pick up* on this 2 warp threads for each *cross* on the draft, and *skip over* 2 warp thread for each *space*. So for stick No. 1, start and pick up the 22nd and 23rd threads from the right edge, for the first cross on the bottom row of the pattern. This makes a plain border on the edge of the pattern weaving.

To continue picking up, skip 4 threads, pick up 4, skip 2, pick up 10, skip 2, pick up 6, skip 2, pick up 10, skip 2, pick up 4, skip 4, pick up 2, skip 4 threads. This finishes the first row of the border, then continue from B to D which is repeated as many times as desired for the center of the runner: pick up 2, skip 6, pick up 6, skip 6 threads and repeat. Care must be taken to have the warp threads counted so that the center warp thread will come at the point C of the pattern. When the required number of border repeats are picked up, repeat from B to A for the border for the left edge. Then leave

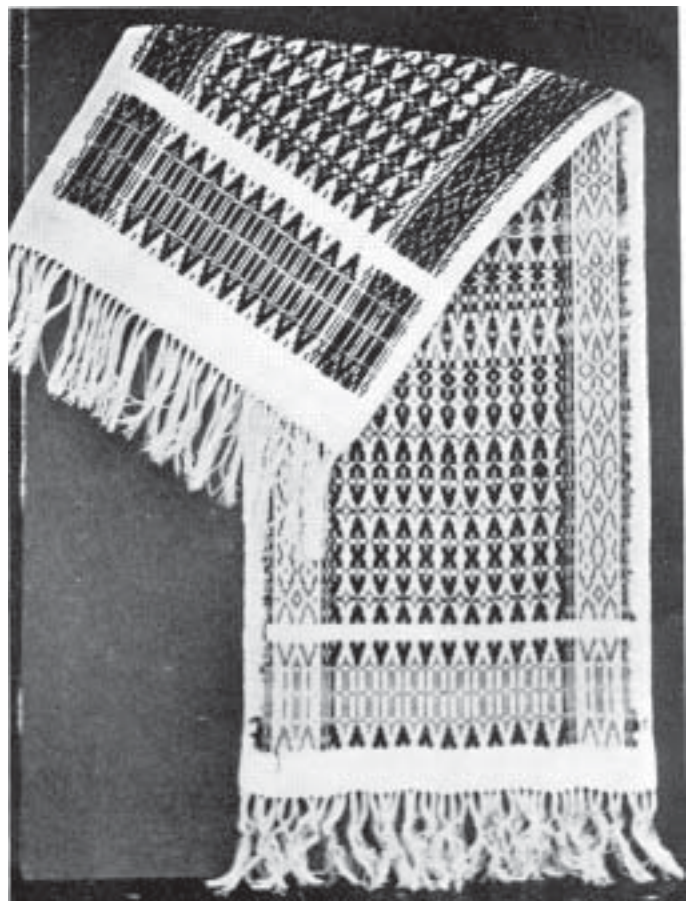


ILLUSTRATION No. 2

Table runner woven by the Simple Draw-Loom Method on a four-harness loom

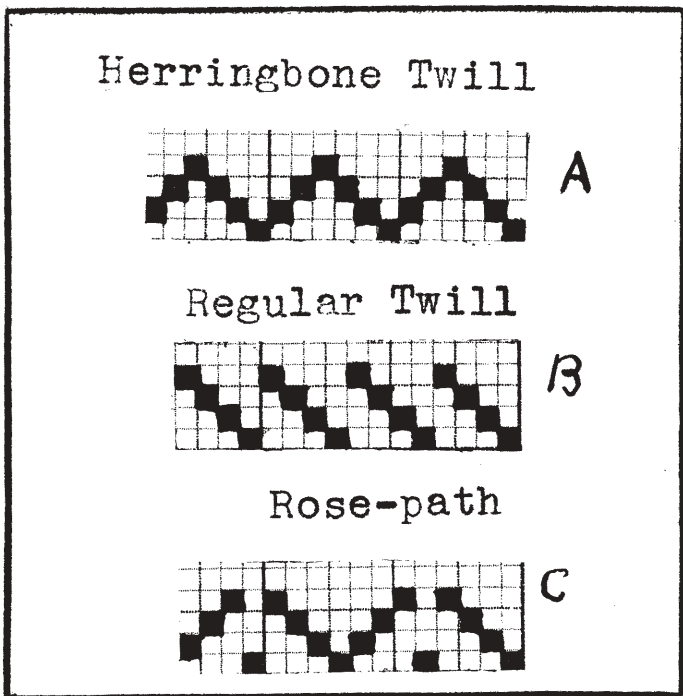


ILLUSTRATION No. 3
Regular 4-Harness threading drafts

pick-up stick No. 1 in as it is, and proceed to pick up the pattern for the second row in the same way, then do rows 3 and 4 in the same way. When row 4 is finished, turn the flat pick-up stick on edge, and in this shed, *back* of the reed, *in front* of the harnesses, place another shed stick. Then proceed to tie up all of the groups of two threads each which are resting on *top* of this last shed stick, to one of the 1/2" dowel rods. The easiest way to do this is to throw a shot of heavy twine from right to left in this same shed, fasten the end of it to the left end of the dowel rod, leaving the right end loose. Pull up a loop of the twine around the dowel rod, so that when it is pulled up it will draw up all the threads on top of the shed stick; hence the name draw-loom type of weaving. Then the right end of the twine may be fastened to the right end of the dowel rod, and a strip of adhesive tape put all across the

dowel rod to hold the loops in place. Then turn flat pick-up stick No. 3 on edge, and in the shed thus made, back of the reed, insert another shed stick, and proceed to tie up the groups of two threads each on top of this stick to dowel rod No. 2. Do the same thing for flat stick No. 2 and No. 1, then you have all your four dowel rods tied up, so that when you pull them up they will raise the pattern shed you desire. These rods may be pulled up in any order you wish, and a shot of plain tabby weaving should be thrown after each shot of pattern weft to hold the pattern together, as in regular over-shot weaving. The numbers 1, 2, 3, and 4 in the description of the weaving of the table runner in Illustration No. 2 refer to the order in which these dowel-rod pattern sheds are raised, and to the number of shots on each: for instance, 1-4x Br means dowel rod No. 1 raised 4 times for four shots of brown pattern weft with alternate shots of plain tabby like the warp between each pattern shot.

Actual order for the lifting of the shed-stick dowel rods for the weaving of Illustration No. 2:

Wide border on each end: Dowel-rod shed stick: 4-4x DBr, 3-4x, 2-4x, 1-2x, 4-2x Y, 1-2x DBr, 1-4x RO, 1-4x O, 1-4x OY, 4-2x Y; center, of wide border, repeat back to beginning in same order. Then weave one inch of plain tabby like the warp, and continue the pattern for the center as follows: 4-4x DBr, 3-4x, 2-2x, 1-2x; 4-2x RO; 1-2x DBr, 2-2x, 3-4x, 4-4x; 1-3x RO; 4-4x, 3-4x, 4-4x, 1-3x; 4-4x DBr, 3-4x, 1-2x; 4-2x RO; 1-2x DBr, 2-3x, 3-4x, 4-4x; 1-3x RO; 4-4x DBr; 4 once RO, 3 once, 2 once, 1 once; 4-4x DBr, 3-4x, 2-2x, 1-2x; 4-2x OY; 1-2x DBr, 2-2x, 3-4x, 4-4x; 4 once OY, 3 once, 2 once, 1 once, 2 once, 3 once, 4 once; 4-4x DBr, 1-2x RO, 2-2x, 3-2x, 4-2x, 3-2x, 2-2x, 1-2x; 4-4x DBr, 1-4x; 2-3x RO, 3-3x OY; 4-3x Y; 3-3x OY; 2-3x O; 1-4x DBr, 4-4x, 1-4x, 4-4x; 1 once RO, 2 once, 3 once, 4 once, 3 once, 2 once, 1 once; 4-4x DBr; 1-3x O, 2-3x O; 3-3x OY, 4-3x, 1-2x, 2-2x; 3-2x Y, 4-4x Y; center of runner, repeat back to the border in the same order, then repeat the wide border for the opposite end of the runner. In these directions DBr means dark brown fabri yarn, RO means red-orange or henna color, O means orange, OY orange-yellow, and Y for yellow.

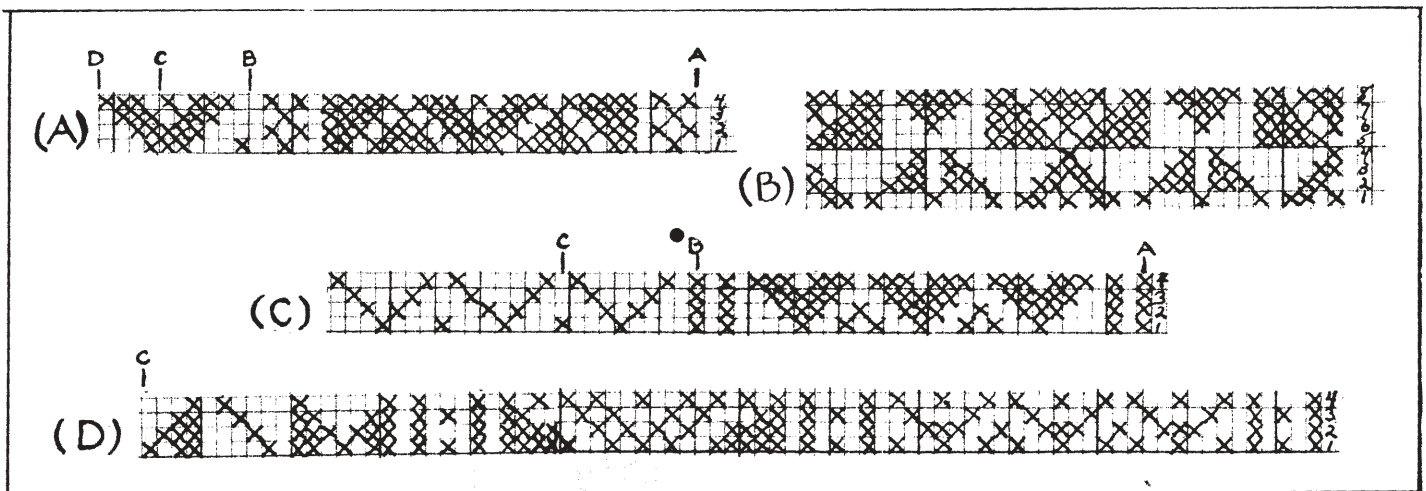


ILLUSTRATION No. 4
Drafts for the Pickup Pattern on shed sticks



ILLUSTRATION No. 5
Border of runner woven after the Italian manner

Another runner which is also very effective, and quite different in character from the one described above, may be woven of dark green heavy linen floss, and light green, for the pattern weft shots, and either light green or light blue weaving special for the tabby all the way through. This piece is not illustrated but is very similar in design to the one described above.

To weave this, proceed as follows: Border (A) — With dark green, one shot on each shed: 4, 3, 2, 1, 2, 3, 4, then five shots of plain tabby.

Border (B) — Continue: 4-4x DG, 4 once LG; 1-3x DG; 1 once LG; 2-3x DG; 2-2x LG; 3 once DG; 3-3x LG; 4-4x LG, 1-2x DG; 2-3x; 3-4x LG, one shot of dark green on each of the following sheds: 4, 1, 2, 3, 4, center of border, repeat in same order back to beginning of the pattern, then five shots of plain tabby, then repeat Border (A).

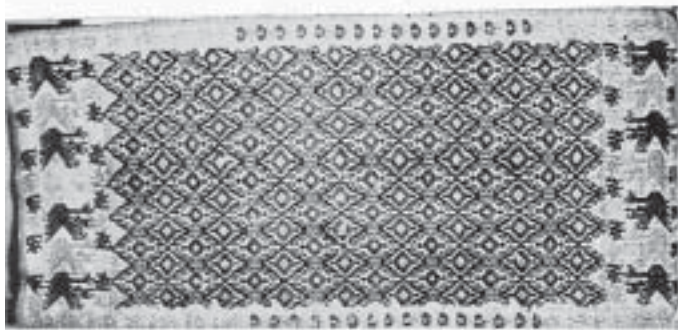


ILLUSTRATION No. 6
Antique Italian table runner

Now Border (C) — 4-6x DG; 1-6x; 2-4x LG; 2 once DG; 3-5x LG; 3-2x DG; 4-4x LG; 2 once DG; 1 once DG; 4 once DG; 3 once DG; 2-3x LG; center of Border (C). Repeat back to the beginning of Border (C), then Border (D) repeated for a length of 10'' for the center of the runner with the lifting of the shed sticks as follows: 3 once LG; 2 once LG; 1-2x LG; 2 once LG; 3 once LG; 4-4x DG. This completes the directions for one half of the runner. Repeat back in the same order for the other half.

At Illustration No. 5 is shown the end of another runner, woven by the author of this article. This is woven after the manner of the Italian design, on a four-harness loom in this same type of technique. Illustration No. 6 shows an antique Italian table runner from the textile collection of the Uni-



ILLUSTRATION No. 7
Blue and white Swedish linen runner

versity of Wisconsin, which inspired the weaving of the piece shown at No. 5. This antique piece was woven of a heavy homespun yarn in old gold, blue, and brown.

Two other fabrics from this collection are shown at Illustrations Nos. 7 and 8. The one at No. 7 is a Swedish runner in blue and white linen, and No. 8 is a cotton fabric from Guatemala, with the pattern in purple, red and orange silk.

From the illustrations of this type of technique, in the woven fabrics, you will see that this method of weaving simple draw-loom patterns on a four-harness loom offers an entirely new field for experiment and design. It has been a pleasure to offer it to you as a practical way of weaving unusual fabrics that are different. And the simple way in which a four-harness loom may be equipped in order to weave it, makes it of much interest to every weaver.



ILLUSTRATION No. 8
Guatemalan runner of cotton and silk

ender, rose and blue — all dull shades.
 Tabby, Shetland yarn, black.

(X)

Treadle: 2, 12 times, gold
 4, 4 times, plum
 3, 4 times, plum
 4, 4 times, plum
 2, 2 times, green
 3, 4 times, lavender
 4, 4 times, lavender
 3, 4 times, lavender
 2, 2 times, green
 4, 4 times, plum
 3, 4 times, plum
 4, 4 times, plum
 2, 12 times, gold

(Y)

4, 4 times, green
 3, 4 times, green
 4, 4 times, green
 2, 2 times, rose
 3, 4 times, blue
 4, 4 times, blue
 3, 4 times, blue
 2, 2 times, rose
 4, 4 times, green
 3, 4 times, green
 4, 4 times, green
 2, 12 times, gold

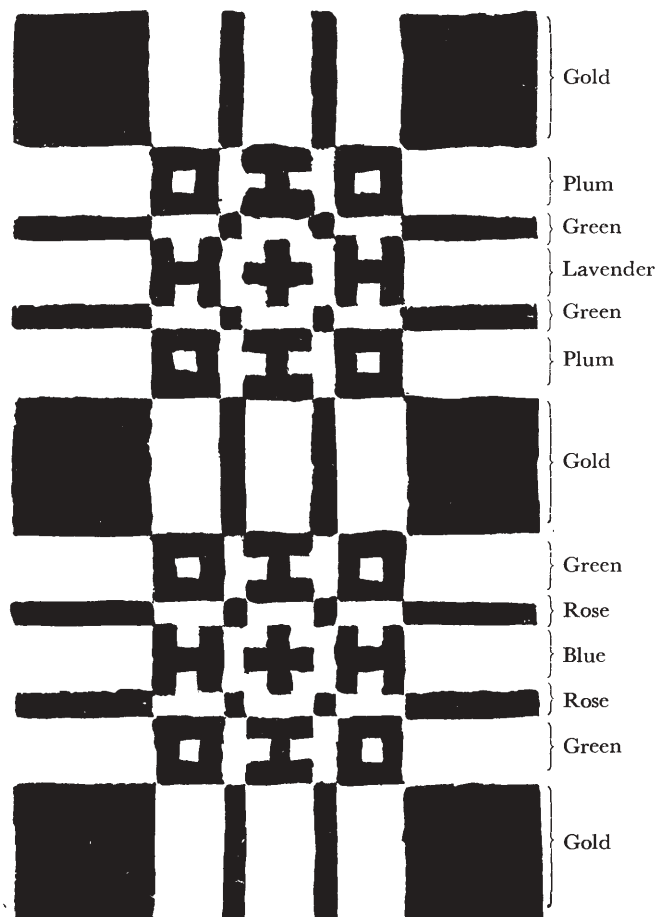
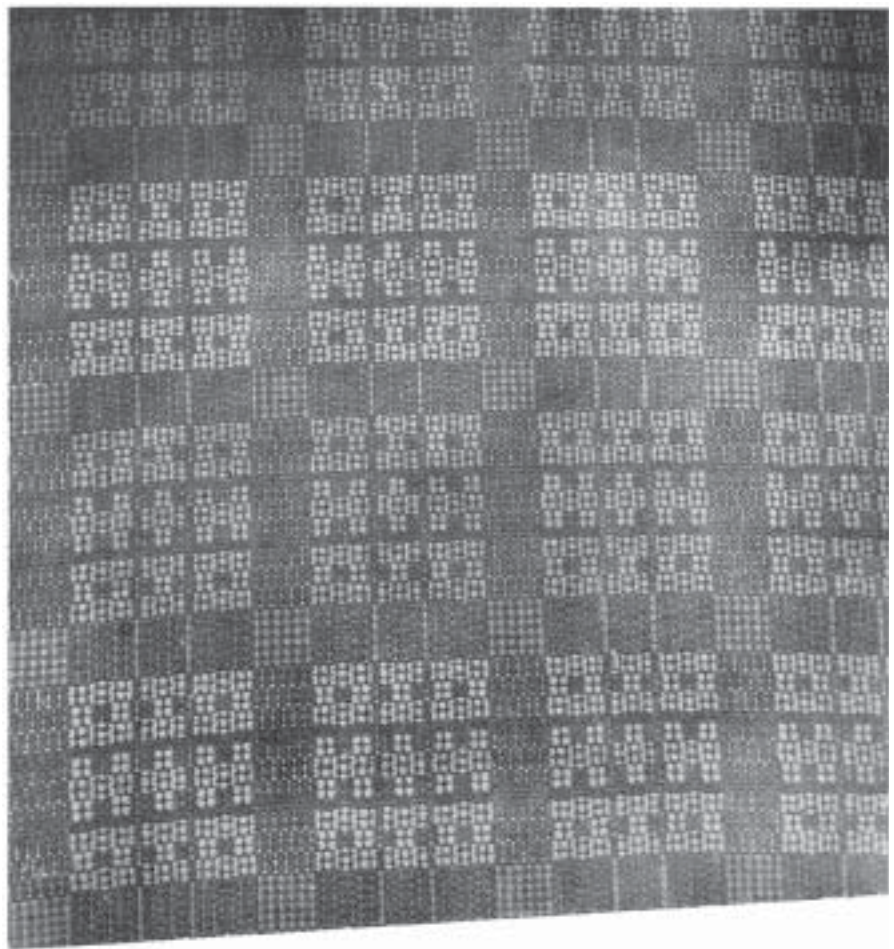
(Z)

Repeat from (Y) to (Z) twice, then from (X) to (Y).

Having come into possession of a quantity of real home-spun yarn of a rather harsh quality that still had something of a feeling of sentiment attached to it, I divided it into two equal portions and dyed part a soft yellow and the other part a dull orange, and used this with black carpet warp set at 15 ends to the inch in the reed and a finer yarn in plum color for the tabby, to make a needed pair of drapes. Casting about for a rather bold type of design in keeping with the coarseness of the materials, I worked out a variation of "Star of the Sea" in Summer and Winter weave on six harnesses. Using this draft as I arranged it, one repeat of the threading with a narrow border on each side made the desired width. The draft as shown at (A) gives the arrangement and number of threading units. Each unit, as is usual in these drafts, represents four warp-ends. On the tie-up as given, the first four units would be threaded one-three-two-three, one-four-two-four, one-five-two-five and one-six-two-six. An experienced weaver will find it easier to follow the treadling from the draft than from written directions, only keeping the proportions and squaring the blocks.

Border treadling:

- (a) Treadle 1, once; 2, twice; 1, once — orange.
- (b) Treadle 3, once; 4, twice; 3, once — orange.
- (c) Treadle 5, once; 6, twice; 5, once — orange.
- (d) Treadle 7, once; 8, twice; 7, once — orange.



Repeat the border treading four times — second time in yellow, third time in orange and fourth time in yellow.

Pattern treading:

(e) Treadle 1, once; 2, twice; 1, once — orange. Repeat six times or until the block is squared.

(f) Treadle 3, once; 4, twice; 3, once — yellow. Repeat eight times or until the block is squared.

(g) Treadle 5, once; 6, twice; 5, once — orange. Repeat nine times or until the block is squared.

(h) Treadle 7, once; 8, twice; 7, once — yellow. Repeat ten times or until the block is squared.

Then (g), once; (f), once; (g), once; (h), twice. Repeat

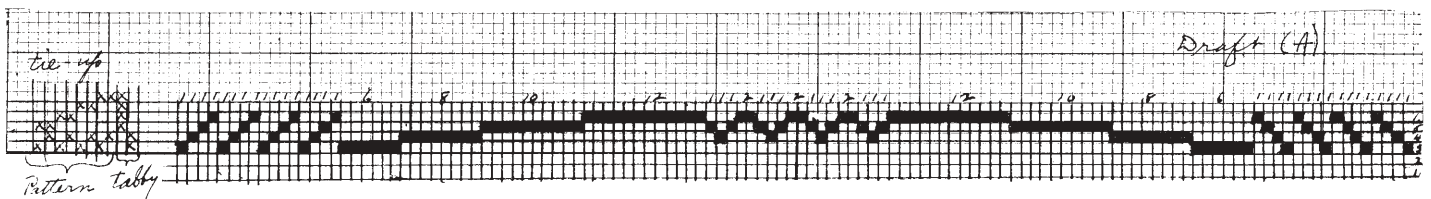
twice, then (g), once; (f), once; (g), once. Then repeat the square blocks (h), (g), (f) and (e) in this inverse order, and this will complete one repeat of the large figure.

Weave one unit each of (b), (c), (b), and then repeat the pattern treading as above twice, making three repeats of the large figure, then weave the border as at the beginning, but in inverse order. (See illustration.)

This arrangement made drapes three yards long and about a yard wide. This pattern may be woven in many different ways. I also used this same design for wool rugs, making two repeats of the large figure, and for bath mats, using white rags. These mats were out of the ordinary and attracted much favorable comment.



Showing right and wrong sides of drapes



Scarves

A BEAUTIFUL neck scarf can be one of the finest examples of modern hand-weaving. The pattern need not be elaborate; in fact, simple patterns are to be preferred in order to place emphasis on the softness and wonderful colors available in wools today. The scarf, however, should be of the proper length and width, and borders should be in the correct proportions.

The following dimensions are suggested for scarves. The small size is recommended especially for women, the intermediate size for either men or women, and the large size for men.

Approximate Width	Warp	Weave*
10 inches	2¼ yards	49 inches
12 "	2½ "	54 "
13 "	2½ "	60 "

The exact width, of course, depends upon the pattern.

One of the best yarns to use for scarves is Lady Helene wool, set at 15 ends to the inch. Sennah, set at 15 ends to the inch, is also satisfactory for those who prefer a lustrous wool, or spun silk floss may be set at 24 ends to the inch.

A description of ten scarves will be given, in order to suggest a few possibilities. These directions can easily be adapted to any width.

SCARF No. 1

Warp: 76 ends
Lady Helene black No. 2394.

Warp: 76 ends Lady Helene white No. 2342, set at 15 ends to the inch. Thread plain twill. See Draft A. Weave 24½ inches tabby with black and 24½ inches tabby with white.

In other words, this scarf is made up of four large blocks. One block is black, two are black and white, and one block is white. This is one of the simplest scarves that can be made and yet it is one of the most effective.

If you do not want to make it in black and white, try Lady

* Allows 4 inches for shrinkage.

Helene peony No. 2338, Jaune Canari white No. 2302 and brown No. 2314. The only restriction is that the two colors chosen should not be too near in value. Two shades of the same color do not give sufficient contrast for this type of scarf.

SCARF No. 2

Warp: Lady Helene brown No. 2314 — 52 ends; Bois de Rose No. 2329 — 52 ends; Jaune Canari No. 2302 — 52 ends set at 15 ends to the inch.

Thread plain twill. Weave tabby as drawn in making each block square.

This scarf is a variation of scarf No. 1, and the same idea might be used to make a scarf five blocks in width. The beauty of this type of scarf depends upon the blending of the colors. Choose one dark color and have the other two colors complement this. Don't try to combine red and green, for example, as red woven over green in a large block would give a dingy, muddy effect. Red and green combine better in a plaid.

Try Lady Helene blue No. 2370, Gris Perle No. 2392 and black No. 2394, or tango cocktail No. 2305, golden poppy No. 2307 and brown No. 2314.

SCARF No. 3

Warp: Lady Helene Jaune Serin No. 2301 or Jaune Canari No. 2302, set 15 ends to the inch. Thread in Ms and Os pat-



Scarf 5

Scarf 9

Scarf 1

tern, using Draft B. Thread:

Selvedge 1234 twice, 8 threads
Draft B twice, 128 threads
Start at beginning first, 32 threads
Selvedge 1234 twice, 8 threads

Treadle 1 once } 32 shots
 3 once }

Treadle B once } 32 shots
 A once }



Scarf 2

Scarf 6

Scarf 4

Repeat for length of scarf. Beat lightly.

This pattern may be varied by warping the two outside blocks and the center block with a dark color and warping the other two blocks with a lighter color. Weft should be of the lighter color. This works out well, e.g., in Lady Helene black No. 2394 and white No. 2342, or Bleu Pompadour No. 2370 and white No. 2342, or brown No. 2314 and Jaune Canari No. 2302.

SCARF NO. 4

Warp: 180 ends as follows:

- Lady Helene brown No. 2314 — 4 ends for selvedge
- *Jaune Canari No. 2302 — 4 ends
- Brown No. 2314 — 3 ends
- Bois de Rose No. 2329 — 2 ends
- Brown No. 2314 — 3 ends

Repeat from star for 172 ends, ending with 4 ends brown No. 2314 for selvedge. Thread in plain twill set at 15 ends to the inch.

For weft use Jaune Canari except for three border stripes. For these use Rouge Framboise No. 2334.

With Jaune Canari, treadle as follows: One shot each on treadles 1, A, 3 and B. Repeat for 4½ inches.

With Rouge Framboise, one shot each on treadles 1, 2, 3 and 4. Repeat for 12 rows.

Repeat pattern with Jaune Canari for 12 rows.

Weave two more twill stripes with 12 rows of pattern between each and then repeat pattern until scarf is 47 inches long. Then repeat twill stripes, ending scarf with 4½ inches of pattern weaving.

SCARF NO. 5

Warp: Lady Helene Porcelain Blue No. 2369.

Weft: Porcelain Blue No. 2369, Chantilly No. 2380 and white No. 2342.

Thread plain twill set at 15 ends to the inch. Weave in tabby 12 shots blue, 8 shots Chantilly and 2 shots white. Repeat for length of scarf.

SCARF NO. 6

Warp: 16 ends Lady Helene camel No. 2312

- 2 ends brown No. 2314
- 2 ends lacquer red No. 2333 } Repeat for 20 ends
- 36 ends camel
- 2 ends brown
- 2 ends lacquer red } Repeat for 36 ends
- 36 ends camel
- 2 ends brown
- 2 ends lacquer red } Repeat for 20 ends
- 16 ends camel.

This makes a total of 180 ends. Set at 15 ends to the inch. Treadle one shot each on treadles 1, A, 3 and B with camel. Repeat for 54 inches.

SCARF NO. 7

Plaids are always cheerful. Try this one:

- Warp: 8 ends Lady Helene Amarna green No. 2382
- 8 ends Rouge Framboise No. 2334
- 4 ends white
- 2 ends Amarna green
- 4 ends white



Scarf 7

Scarf 8

Repeat six times. End with 8 ends Amarna green, or 164 ends in all. Thread in plain twill. Weave as drawn in.

Lady Helene black No. 2394, navy blue No. 2365 or brown No. 2314 might be substituted for the Amarna green.

Scarves should be gay to contrast with dark winter coats. The following scarf is especially nice with a black winter outfit.

SCARF NO. 8

Warp: Lady Helene lacquer red No. 2333 — 155 ends set at 15 ends to the inch.

Thread goose-eye pattern (see Draft C) seven times, 154 ends; beginning thread, 1 end; making 155 ends.

Weave 16 rows tabby with lacquer red. Treadle 1, 2, 3, 2, 1 — one shot each with Lady Helene black. Weave four rows tabby with lacquer red. Still using lacquer red, treadle 1, 2, 3, 4, 1, 2, 3, 4, 1, 2, 3, 2, 1, 4, 3, 2, 1, 4, 3, 2, and repeat once. Weave four rows tabby with lacquer red. With black, treadle 1, 2, 3, 2, 1 — one shot each. Weave tabby with

lacquer red until scarf measures 44½ inches, then repeat border, ending with 16 rows tabby.

This scarf also looks well in Porcelain Blue No. 2369 with navy No. 2365 for the border.

SCARF No. 9

This scarf is an old favorite — the “shepherd’s check.”

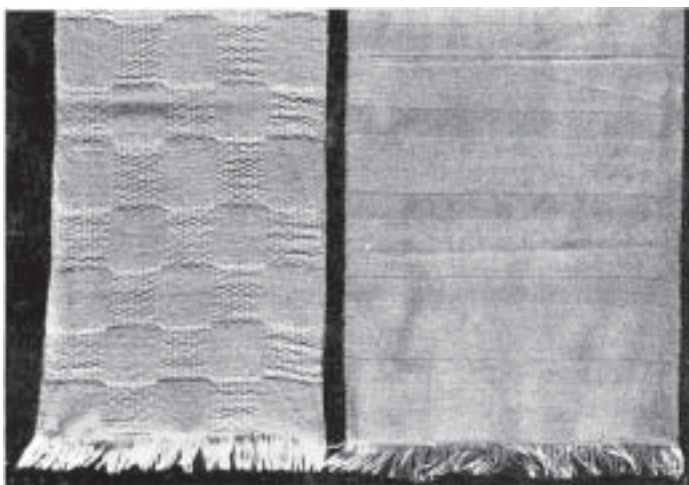
Warp: Lady Helene navy No. 2365 and Lady Helene white — 100 ends of each. See Draft D for threading. Weave in tabby two shots navy, then two shots white for 3½ inches.

Treadle twill border 1, 2, 3, 4 in navy for 12 rows. Weave 10 rows of check and then repeat twill border twice with 10 rows of check between each border. Weave check until scarf measures 54 inches, then repeat border, ending with check for 3½ inches.

SCARF No. 10

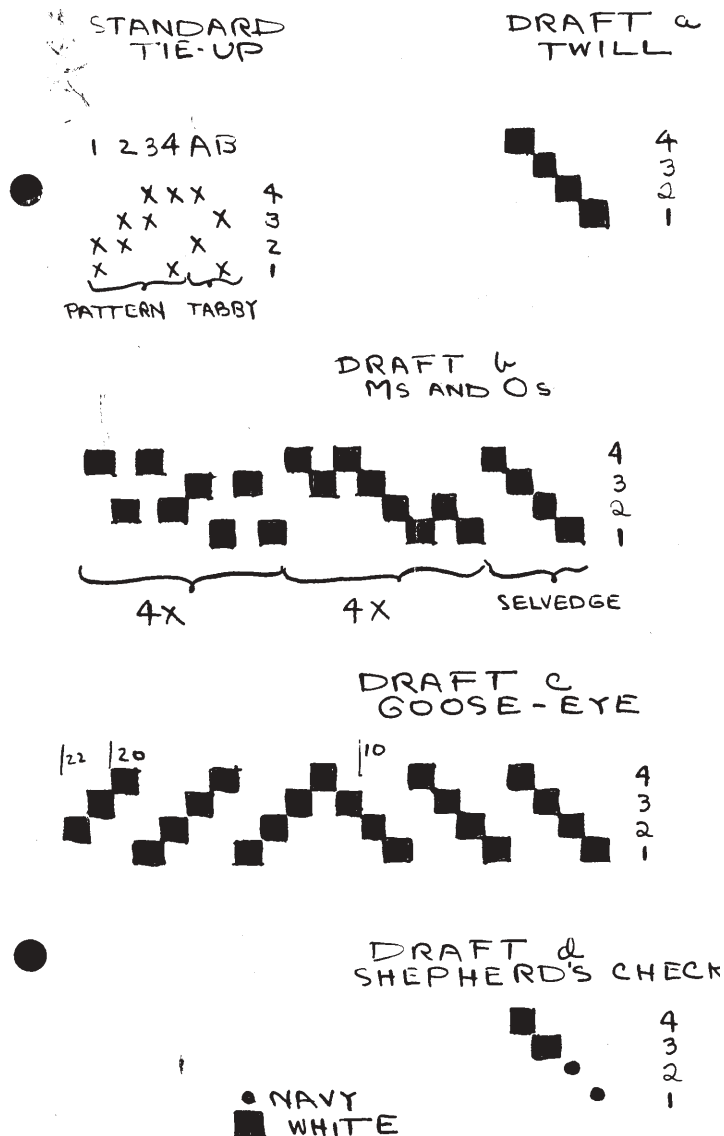
Warp: 300 ends gold spun silk floss set at 24 ends to the inch. Weft: Gold spun silk floss used double. Weave one shot each on treadles 1, A, 3 and B for 2 inches. Weave 1 inch tabby and repeat for 50 inches.

All these scarves were finished with straight ends which were overcast, or else the fringe was tied. Tie two ends at a time with a double knot.



Scarf 10

Scarf 3



The scarves should be washed in soapy lukewarm water using a mild soap. Then rinse and roll for a short time in a turkish towel. Iron until dry. This washing is important and should never be omitted. It not only shrinks the material but also improves the texture.

Announcement

As a special service to readers of THE WEAVER we are planning to have in each issue a “Questions and Answers” department.

Mrs. Mary M. Atwater, author of *The Shuttle-Craft Book of American Hand Weaving* and head of the Shuttle-Craft Guild, will conduct this department. Questions of general interest will be answered in the magazine, and personal replies will be made to all who address their questions to Mrs. Mary M. Atwater, Basin, Montana, enclosing six cents for postage. Questions should be specific and not gen-

eral, and should be listed on a sheet of paper separate from any letter sent with the questions.

It is believed that this service will prove useful especially to weavers in isolated places who often find it difficult to get the information they need. Questions of procedure and technique are constantly coming up in hand-weaving, and the suggestions of an experienced weaver will often save many hours of labor.

Mrs. Atwater has been teaching hand-weaving for many years, and although she does not claim to know all the answers, she knows a great many.