# The HANDICRAFTER

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# THE HANDICRAFTER

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# Editorial

THE tools of the craftsmen have always evidenced great diversification and inventiveness; but the question exists as to how the tool affects the artistry of the craft. The answer is obscured, but there seem to be indications that good tools and well-prepared working materials can count for much in artistry. Innate genius and patience have often surmounted the obstacles of clumsy tools and crude materials; but more often the quality of the tool and the material have enhanced the beauty of the finished piece.

As an example of craftsmen building on patience there are the weavings of Peruvians of the Pre-Incan period. These gorgeous weaves are in yarns spun to gossamer weight, so fine that they can be hardly duplicated by the most complicated machinery of the modern spinning mill. Yet the Peruvian craftsmen probably had the crudest of hand-spinning frames. For craftsmen working with efficiency and inventiveness we have the wonderful school of metal workers that plied their craft in Medieval Germany. They carried the metal arts further than other races, had the best equipment, and produced the most gorgeous examples of the art.

Perhaps race has had much to do with the relationship between the tool and the artistry. Primitive races like the Indians compensated for their mechanical failings with extraordinary patience and a capability of creating aesthetically beautiful things in simple design conceptions. The European, with his Egypto-Greek background, tracked another path. Our ancestry has funded us with a scientific bent that reaches into our arts. Also we have leaned towards natural forms which require more finesse, delicate lines, and diverse color. Our tendency has been towards specialization, and throughout history we find that craft centers flourished, carving reputations for themselves in beauty of product coupled with greater skill in producing. Their productive ability lay as much in the quality of the materials used and the efficiency of the tools as in the power of their hands. Florence was famous for woolen

Publishers Photo Service, N. Y.

GREECE

*Spinning in the most primitive way is still a familiar sight in the interior of Greece*

*Publishers' Photo Service, N. Y.*

U. S. A. — ARIZONA — CANYON DE SCHELLY

*A Navajo girl weaving a rug. Notice the design at the bottom of the weave. Time is no object; each strand of the weave is hammered close by a curved hardwood stick. The better the weave, the closer and heavier the finished product*

*Publishers' Photo Service, N. Y.*

CZECHOSLOVAKIA

*Weaving cloth in one of the rural homes*

*Publishers' Photo Service, N. Y.*

EGYPT — CAIRO

*Natives spinning yarn*

cloths, having closely guarded secrets on finishing; Nuremburg was a center for the metal craftsmen creating works in metal that made the fifteenth-century burgher wonder how human hands could produce things so delicate and beautifully finished; the Gobelin works of the eighteenth century wove tapestry that were miracles of color because they had made such rapid strides forward in the chemistry of dyeing.

At the Cheng Te Chen works in China were produced history's most exquisite porcelains. These immense works were a hive of industry and comparable to the extensive ceramic factories of today; undoubtedly they were efficient, as skilful in the cleaning of the clay, as able in the grinding of colors; science was at their elbow yet their products suffered in nowise.

The history of Navajo blanket weaving furnishes an interesting sidelight on the value of good working materials. The finest blankets are the so-called "Bayeta" type woven of yarn ravellings from Spanish broadcloth. The Indians, with their lack of skill and crude equipment, were never able to spin such soft, lustrous yarns as were contained in the Bayeta cloth, and with their home dyes could not create such exquisite colors. The inability to secure this cloth and the importation of the poor Germantown yarns gradually brought retrogression to the glorious art of blanket weaving and thwarted the artistic expression of a gifted people.

The right tools and good working materials have always been of advantage to craftsmen though they do not necessarily lead to beautiful work. The most exquisite of our ivories are Byzantine and Romanesque — ivories that were probably fashioned with clumsy tools. The artistic genius of the craftsmen, however, overcame the handicap of the tool. These early craftsmen had genius in design and confined their efforts to simple motifs that did not require fine cutting. Their simplicity of design was the happy medium for ivory, and with all the skill displayed by later craftsmen in cutting ivory there has never been an equal display of artistic genius.

The comparative importance of the tool to the craftsmen has come in the forefront with the advent of the machine age. In the past inventiveness in the crafts was accepted without question; now we pause and ask if we are not simulating the machine. Many craftsmen would have us shy away from the improved tool and revert to primitive methods. To adopt this course is to stifle progress. If the craftsmen of the past were helped by improved tools, so can we aid ourselves so long as we make our efficiency subservient to our artistic bent.

Countries like Germany and France are making tremendous forward strides in the development of crafts; much of their success has come from clever adaptation of scientific methods. In England there has been a tendency to revert to the past in design and method; but a comparison of modern English work with that of Continental craftsmen leaves England far in the background so far as enterprise and aesthetic ability are concerned. The Continental craftsmen have succeeded in making their arts a part of modern life, using invention, new materials, departures in design, to achieve this happy result. German craftsmen are producing glass that is equal to the finest of Bohemian, Chinese, or Roman productions; their success lies in the adaptation of every scientific advance to their craft. In France, Rodier is creating fabrics that are equal to the gorgeous brocades and velvets of the seventeenth and eighteenth centuries.

These craftsmen have found that they can adhere to craft standards and yet utilize invention and technical aids. So can we, for our goal should be the development of flourishing crafts with no thought of comparison in a past. We cannot live a double life that would enable us on one side to be a citizen of this hurrying, scientific world and on the other be steeped in the centuries gone by. Just as the Continental craftsmen are utilizing a modern age and remain great craftsmen, so can our workers attain a similar goal if our mood is receptive and our ideals right.

*Editorial Note.* — The tapestry illustrated on cover page is the "Flight into Egypt," woven by the famous Swedish weaver, Sara Mattsson.

# *Before the Potter's Wheel*

BY MARIE DIDELOT

MANY, many years ago, perhaps thousands, maybe more and perhaps fewer years ago, a tribe of pottery-making Indians lived in the Mimbres Valley in the southern part of New Mexico. They made their bowls so beautiful that even today nothing in the southwest, ancient or modern, surpasses them, and it might almost be said that their pottery is more beautiful than that of any other prehistoric tribe in North America. Effigy vases, jars, ladles and dippers, pitchers and bowls — these are among the things fashioned from their clay. Some of the bowls had narrow necks, others were so shaped as to be wider at the top than at any other point. Naturalistic designs of animals, conventionalized figures of man, or geometric patterns adorn the outside of the narrow-necked bottles, and the inside of the low, wide-necked bowls.

*A beautiful water pitcher used by the primitive tribe in the Mimbres Valley*

Bowls of white clay decorated with red or black shading into brown, dozens of them to a household, were used by the Indian women to help them care for the wants of their savage family. Big bowls, little bowls so small that little Indian girls may have played house with them, medium-sized bowls, bowls for many different purposes, hundreds of them to a village, speak well for the industry of the primitive Indian woman.

There came a day, a circumstance, something — and the primitive man left his home, his village, left behind him all his precious pottery, his earthen jars, deserted his home and his dead. No one has ever traced him to his destination. Where he went, or why he went, remains an unsolved mystery. Century after century passed, his village became covered over with shifting desert sands, and he himself was forgotten. The weight of many tons of dirt upon it cracked his pottery, the pottery that still stands where he placed it centuries ago the morning he left his village never to return.

Nor was it disturbed until modern man discovered it. The most recent archeologist to probe into the culture of this primitive man is Dr. Albert E. Jenks, head of the Department of Anthropology at the University of Minnesota. Indian beads, home and village sites, their tools — all these things are found in limited quantities, and only his pottery is found in great abundance. Slowly the broken pieces of shard are reconstructed into complete bowls, and once more the red man's pottery is brought to the attention of mankind.

But to the white man, accustomed to flawless machine-made products, these pieces of shard fitted together into completed bowls, represent in an ineffective way, the art of this mysterious tribe. His geometric designs, his child-like reproductions of fish, deer, antelope, turkey, quail, grasshopper, and many other animals which he paints upon his bowls catch the modern's attention but do not hold it, because the modern had little to do in the making of the bowl.

It remained for Miss Gertrude Ross, instructor in crafts at the University of Minnesota, to give meaning to the ancient art, and to show the modern how he might adapt it to his own needs. The

*A Student Bowl*
*Fishes swimming around the edge of a bowl excavated from the Mimbres Valley furnished the inspiration for this student*

*A Student Bowl*
*Just as the Mimbres people combined geometric design with animal figures, so this student uses a geometric design with a duck in the center*

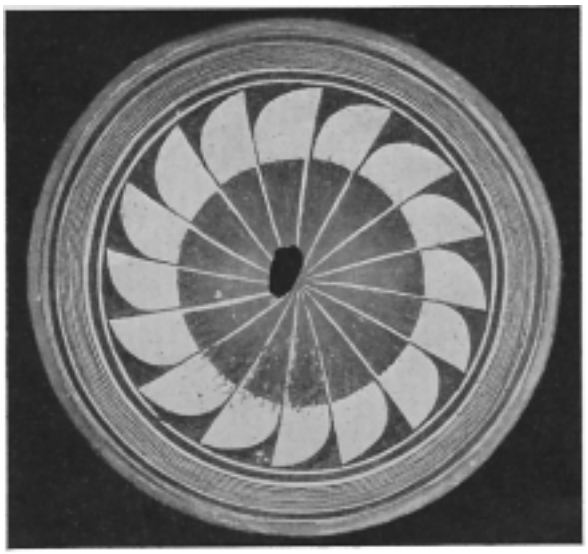
*A Student Bowl*
*Same bowl as above*

*A Student Bowl*
*An adaptation of the geometric design along the outer edge of a bowl*

*Household pot covered with a stone in position as found under floor against a room wall. Mimbres Expedition*

*No two bowls are exactly alike. Geometric designs, all expressing the feeling of the individual potter, were painted on the outside of bowls*

*A University of Minnesota student's interpretation of the Mimbres pottery*



*From the Jenks collection of Mimbres Valley pottery*
*An interesting geometric design*

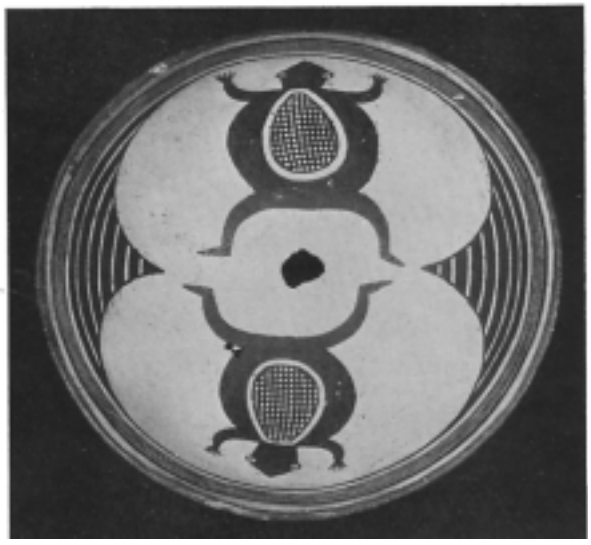
*A lizard, or at least its equivalent, from the Dr. Jenks collection of Mimbres Valley pottery*

*A pair of frogs adorn this bowl, which is also in the Dr. Jenks collection of the Mimbres Valley pottery*

problem of decorating pottery is an old one — it confronts the child and the adult. There seemed to be no type of design that would delight the potter, regardless of her age.

One day Miss Ross stopped before a collection of bowls from the Mimbres Valley and in them saw the answer to her problem. A deer with both eyes on one side of its head, a bird whose tail points skyward from its body instead of along the horizon, a frog, all arms and legs, were among the figures painted upon the pieces of pottery. There were also geometric designs of all kinds. A child-like simplicity characterized all the pieces, a simplicity which pleased children and adults. Since that day, little boys and girls in summer camps, University students, and high school teachers have thrilled at the idea of making pottery that resembled so closely the work of the early prehistoric Indian. The younger children delight in the animal figures, while the older potters prefer to work out geometric designs. As far as possible, the technique of the Indian is used in modeling, in designing, and in firing.

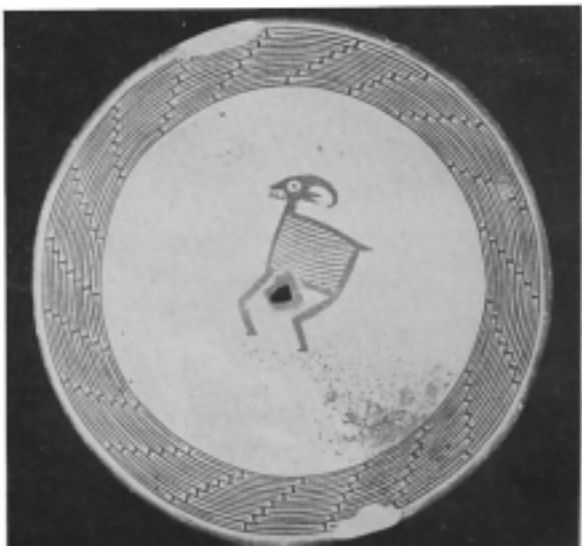
While the Indian had first to collect his clay and prepare it before it could be used in making his bowls, the modern potter has only to obtain the clay from a dealer and see that, in making his bowls, he keeps his clay moist. No potter's wheel helped the primitive man in the Mimbres Valley to shape his bowl, but, building coil on coil, he would see his vessel slowly take shape before him. When ears or handles were to be added, small coils of stiffened shaped clay were set in holes bored through the vessel, clinched inside, and joints smoothed over. So, too, does the modern craftsman see his bowl take shape from the coils of white or gray clay that he has rolled. After he has pinched and patted, shaped and molded to his satisfaction,



*No two bowls are exactly alike, even among those with geometric designs. This is one bowl from the Jenks collection*

*A bird, one of the most simple bowls taken from the Mimbres Valley under the supervision of Dr. Jenks*

*Bowls buried with their owner were "Killed" by boring a hole in the center. With the exception of the kill hole, many of the bowls are in a state of perfect preservation. This crude animal figure is on one of the bowls excavated from the Mimbres Valley by Dr. Albert E. Jenks of the University of Minnesota*



and while the clay is still damp, the decorations are painted on.

Black or red are the customary colors used, for it is these colors that were used by the primitive man whose art the modern craftsman is duplicating. While water colors, or oil paints in which some enamel has been mixed, can be used, mineral colors are the most satisfactory. The color is mixed with water to which a little gum arabic is added. Pulverized white clay may be mixed with the color oxide in order to lighten the tint. This mixture can be painted upon the damp clay.

When the design is completed, the bowl is allowed to dry in the sun or near a camp fire until the clay is leather hard, a process that takes between two and three hours. Then it is possible, by rubbing with the back of a spoon, to give the color a lustre that will not be changed by the firing. After the colored area is worked, the whole bowl should be polished with the back of the spoon or with a smooth pebble. Both the inside and the outside of the bowl were worked by the Indian potter.

A geometric design is usually painted on the outside of bowls in cases where the pottery is of the narrow-neck variety, while the animal forms are customary on the inside of bowls in which the diameter across the top is wider than at any other point, although in some cases the geometric designs were used. Since heat has the effect of changing certain colors, a color chart for the mineral dyes is valuable. The following chart indicates how to secure the most common colors:

Green:

Warm green: use red oxide of copper.

Cold green: use black oxide of copper.

Dark green: use black oxide of copper and potassium.

Brown:
Dull brown: use red oxide of iron.
Dark brown: use black oxide of iron.
Claret brown: use maroon.
Blue: Use oxide of cobalt.
Yellow: Use raw sienna.
Red: Use burnt sienna.
White: Use pipe clay.

There is still another method of decorating the piece of pottery, a method not customary among this tribe of Indians, but a method that finds favor with the modern potter. An inlay may be inserted. A square end modeling tool is used to cut out the design to the depth of one sixteenth of an inch, when the bowl is a trifle softer than leather hard, the masses being sketched in outline. A full strength underglaze is mixed with clay, usually in equal amounts of clay and underglaze, although the actual amount depends upon the tint desired. The two are mixed with water to the consistency of modeling clay and ground thoroughly with a palette knife on glass. Small portions are rolled into coils in proportion to the size of the grooves, sufficient water being first painted into the groove with a brush to moisten the clay. The design is filled to the surface level. When it is dry, the surface is scraped smooth with a straight edge steel tool.

This method may require two firings of the pottery, because after the bowl is fired a transparent glaze may be put on and fired, although if the bowl is polished, a glaze is not essential. When the design is painted on, it is not necessary to glaze the bowl, and for that reason only one fire is required.

Man's choice of design is restricted only by the bounds of nature and his own imagination. For one who loves to forget himself in a maze of geometric designs, his design is limited by his own ability.

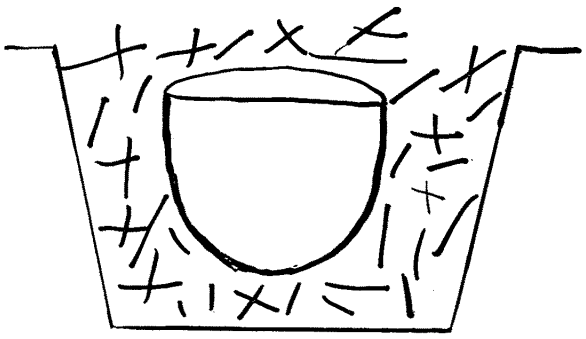
After the design is put on, and after it has dried for three hours, the clay can be polished gently with a smooth stone or the back of a spoon. Then it is once more placed in the sun or near a fire to dry out every bit of moisture that is contained in the clay. It may dry until the next day before it is fired.

When there is no kiln available, the old Indian "Bean-Hole method" is excellent. A pit is dug into the ground, and on the bottom of the pit small pieces of wood, bark, and dry grasses are strewn, and made into a bed of live coals. All the pottery pieces to be fired are placed in an iron or clay kettle, the large pieces on the bottom, the small ones on top, touching or not, as it makes no difference when the articles are not glazed. A cover is placed loosely on the pot, and the precious cargo is let down into the pit. Bark, wood and grass are placed on the top, and on all sides of the kettle, the fire is lighted and kept burning from five to eight hours. Slowly the fire is allowed to die down, and when the kettle has at last become cool the pottery is removed. That which is taken from the kettle rivals the ancient beauty of the Mimbres pottery.

There is still another simple out-door method of firing pottery that was practised by the Cherokee Indians. Their bowls were made with the same artistic care as those made by the Mimbres people, and when the bowl was about ready to be fired it was placed before the camp-fire for three hours. It was in this manner that much of the moisture was dried out gradually, while if the pottery were put right into the fire, the intense heat would force the moisture out so quickly that the bowl would crack.

At the end of that time, a small hole is dug into the ground and filled with corn cobs. The bowl is inverted over the corn-cob fire, and when it comes out after three-fourths of an hour, it has a black and glistening surface. This method is not as satisfactory as the "bean hole method" since only one piece of pottery can be fired at a time.

While the aborigine prized pottery for its utilitarian value, pottery was also his art and religion. In it he combined the three fundamental artistic principles of rhythm, balance and harmony. Among many of the tribes, the geometric designs came to have a religious significance. Modern man still finds some of his emotional needs satisfied through the creation of fine pieces of pottery.



*Ground Pit. The Indian "bean hole method" for firing pottery is easily duplicated*

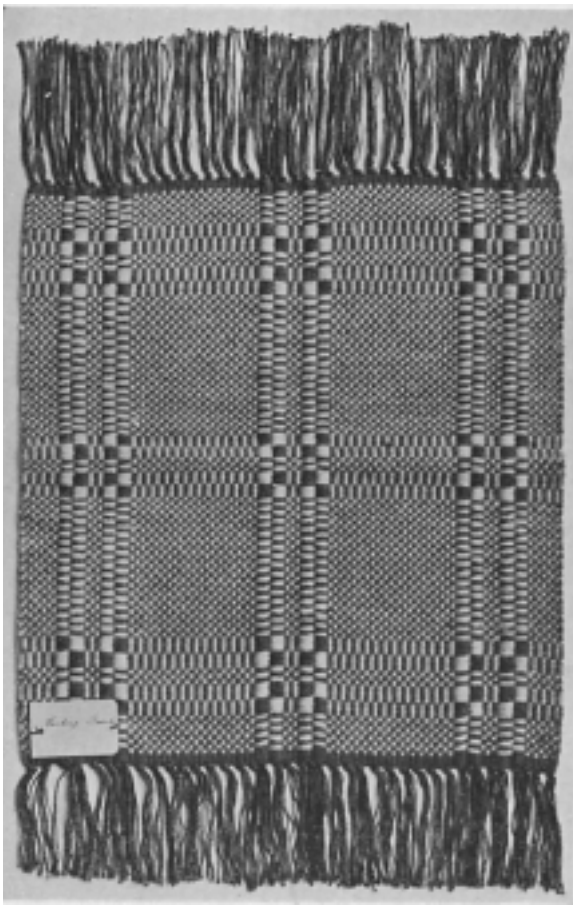
# *Weaving Four-Harness Patterns on a Two-Harness Loom*

BY AGNES K. NIELSEN

*The weavings illustrating this article were all done at King's Park State Hospital, King's Park, L. I., N. Y.*

FOR the sake of variety, why not weave some four-harness patterns on your two-harness loom? Very goodi mitations can be made of the two-block patterns, and of course they are limited to those. This weaving is done with two differently colored shuttles simply by alternating the blocks. As there is no "tabby," the finished weaving is not as substantial as the four-harness weave, but the blocks are not very large and the material is good for most household uses.

Directions are given for threading and treadling five well-known patterns. Just as in the four-harness weave, many variations are possible in all of the patterns, and with the "Monk's Belt" the possibilities are endless. The sampler illustrates a few variations. Only the "square" weaving of the other patterns are shown.



*Lasting Beauty*

These pieces were all woven on a carpet warp. "Lasting Beauty," "Four O'Clock," and "Queen's Patch" were set 13 threads to the inch. "Window Sash" or "Sugar Loaf" was set 16 threads to the inch. With finer warp set 20 threads to the inch, this would make a good substantial upholstery material. "Monk's Belt" is sleyed differently, as the illustration shows; if it were sleyed one thread in each dent, the result would not be anything like "Monk's Belt," as the narrow bars would not be the same width.

To weave "Monk's Belt" with an inlaid center as illustrated, commence as follows:

With one shuttle dark red novelty yarn and the other tan perle, weave two and one-half repeats. Carry the red on as usual, draw the tan in two and one-half repeats, then substitute black perle for the center and complete the shot with tan for the last two and one-half repeats. Weave with these three colors until enough is woven for a dark center, always taking care to wrap both the black and the tan threads around the same warp thread, or the result will be a disfiguring slit on each side. Then to complete the square, weave two and one-half repeats with the red and tan shuttles.

Draperies woven in one color with two colors for borders at top and bottom would harmonize well with other furnishings, while the center woven in the two colors in a stripe effect with the borders woven "square" would be another pleasing change from the usual all-over pattern. A rearrangement of "Lasting Beauty" would make a good rug to supplement other furnishings woven in "Monk's Belt," as the first mentioned design is really the latter enlarged. A suggestion for an arrangement of this pattern for a rug is given.

When weaving any of these patterns, be sure to start the next block on the same shed on which the

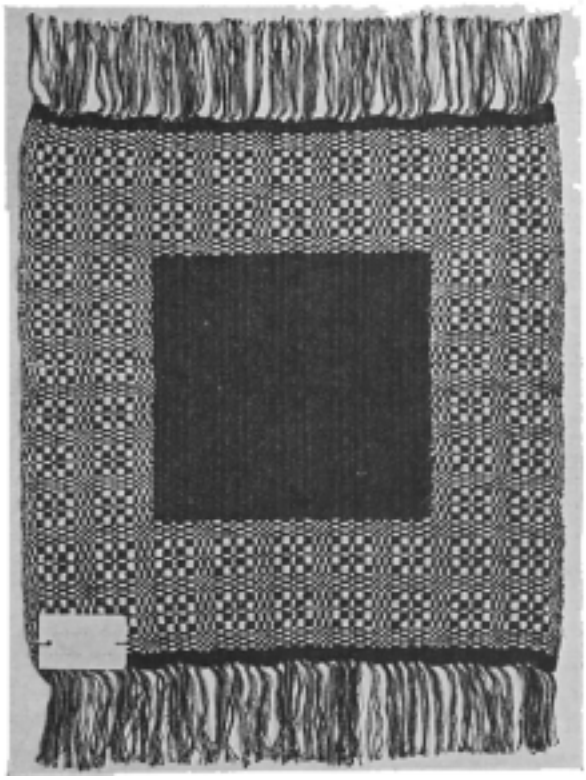
*Sugar Loaf or Window Sash*

last block was finished, in order to avoid a color streak in the weaving. These pieces, if woven with cotton, would make good furnishings for the bedroom, dining room, or porch; if woven with wool in suitable colors, they would be ideal for the living room or den. As a wall hanging, the "Queen's Patch" would be fine where a quiet effect is desired, while the "Four O'Clock" would give a gay impression, as it is a pattern that cannot be subdued even with somber colors.

Four-harness weaving on a two-harness loom gives beautiful results for the time spent on it, and, in the absence of facilities for weaving real four-harness designs when desired, it is found that bedspreads, couch covers and draperies can be woven quite as well and even more quickly by the methods outlined above than can be done on a four-harness loom.

QUEEN'S PATCH

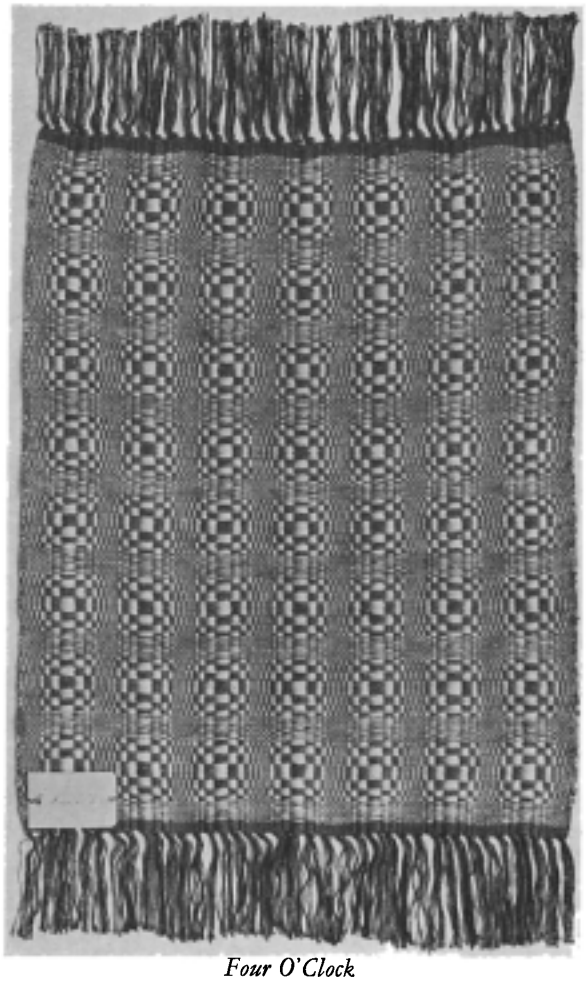
| | | | |
|---|---|---|---|
| Treadle 2 d. | | Treadle 1 d. | |
| " 1 l. | 11 times | " 2 l. | |
| " 1 d. | | " 2 d. | 4 times |
| " 2 l. | | " 1 l. | |
| " 2 d. | | " 1 d. | |
| " 1 l. | | " 2 l. | |
| " 1 d. | 4 times | " 2 d. | 4 times |
| " 2 l. | | " 1 l. | |
| " 2 d. | | " 1 d. | 4 times |
| " 1 l. | | " 2 l. | |
| " 1 d. | 4 times | " 2 d. | 4 times |
| " 2 l. | | " 1 l. | |
| " 2 d. | 4 times | " 1 d. | |
| " 1 l. | | " 2 l. | |
| " 1 d. | | " 2 d. | 4 times |
| " 2 l. | | " 1 l. | |
| " 2 d. | 4 times | " 1 d. | |
| " 1 l. | | " 2 l. | |
| " 1 d. | | " 2 d. | 4 times |
| " 2 l. | | " 1 l. | |
| " 2 d. | 4 times | " 1 d. | 4 times |
| " 1 l. | | " 2 l. | |
| " 1 d. | 4 times | " 2 d. | |
| " 2 l. | | " 1 l. | |
| " 2 d. | 4 times | " 1 d. | 4 times |
| " 1 l. | | " 2 l. | |



*Monks Belt, Inlaid Center*

### Monk's Belt

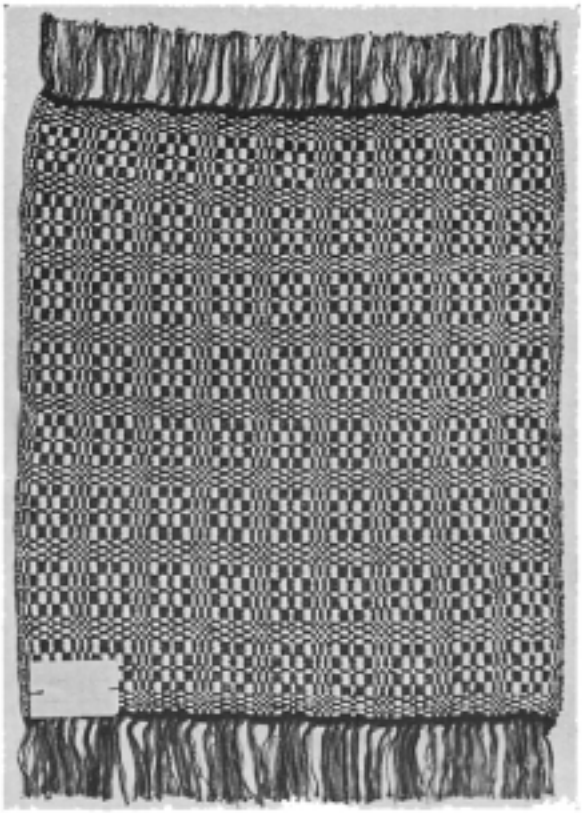
| | | | | |
|---|---|---|---|---|
| Treadle 1 d. | 5 times | | " 2 d. | 2 times |
| " 2 l. | | | " 1 l. | |
| " 2 d. | 5 times | | " 1 d. | 2 times |
| " 1 l. | | | " 2 l. | |
| " 1 d. | 2 times | | " 2 d. | 2 times |
| " 2 l. | | | " 1 l. | |
| " 2 d. | 5 times | | " 1 d. | 2 times |
| " 1 l. | | | " 2 l. | |
| " 1 d. | 5 times | | " 2 d. | 2 times |
| " 2 l. | | | " 1 l. | |



*Four O'Clock*

### Lasting Beauty

| | |
|---|---|
| Treadle 1 d. | 8 times |
| " 2 l. | |
| " 2 d. | 8 times |
| " 1 l. | |
| " 1 d. | 2 times |
| " 2 l. | |
| " 2 d. | 2 times |
| " 1 l. | |
| " 1 d. | 2 times |
| " 2 l. | |

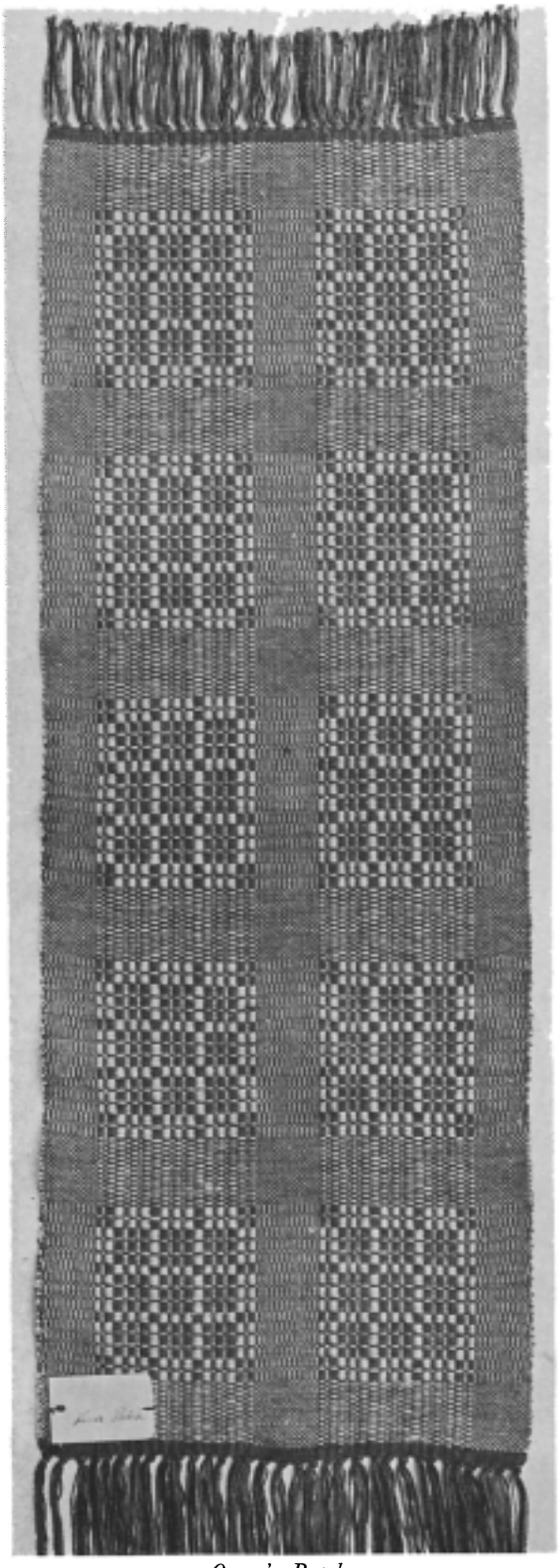


*Monks Belt, Woven Square*

| | | |
|---|---|---|
| Treadle 2 d. | 8 times | |
| " 1 l. | | |
| " 1 d. | 8 times | |
| " 2 l. | | |
| " 2 d. | 2 times | 13 times |
| " 1 l. | | |
| " 1 d. | 2 times | |
| " 2 l. | | |
| " 2 d. | 2 times | |
| " 1 l. | | |

### Window Sash

| | | |
|---|---|---|
| Treadle 1 d. | 5 times | 4 times |
| " 2 l. | | |
| " 2 d. | 2 times | |
| " 1 l. | | |
| " 1 d. | 5 times | |
| " 2 l. | | |
| " 2 d. | 3 times | 4 times |
| " 1 l. | | |
| " 1 d. | 1 time | |
| " 2 l. | | |
| " 2 d. | 3 times | |
| " 1 l. | | |



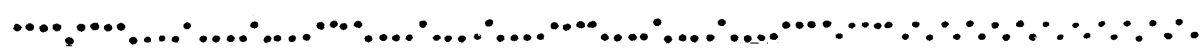
*Queen's Patch*

*Monks Belt, Sampler*

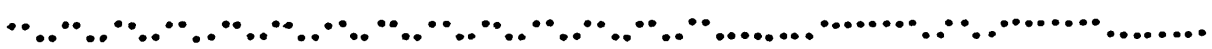
## Four O'Clock

| | | | |
|---|---|---|---|
| Treadle 1 l. | | Treadle 2 l. | |
| " 2 d. | 4 times | " 1 d. | 4 times |
| " 2 l. | | " 1 l. | |
| " 1 d. | | " 2 d. | |
| " 1 l. | 3 times | " 2 l. | 3 times |
| " 2 d. | | " 1 d. | |
| " 2 l. | 4 times | " 1 l. | 4 times |
| " 1 d. | | " 2 d. | |
| " 1 l. | 5 times | " 2 l. | 5 times |
| " 2 d. | | " 1 d. | |
| " 2 l. | 8 times | " 1 l. | 8 times |
| " 1 d. | | " 2 d. | |
| " 1 l. | 5 times | " 2 l. | 5 times |
| " 2 d. | | " 1 d. | |
| " 2 l. | 4 times | " 1 l. | 4 times |
| " 1 d. | | " 2 d. | |
| " 1 l. | 3 times | " 2 l. | 3 times |
| " 2 d. | | " 1 d. | |

## QUEEN'S PATCH

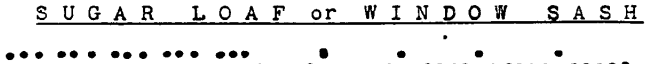


## LASTING BEAUTY

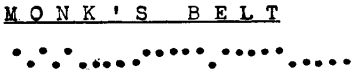


## FOUR O'CLOCK

## SUGAR LOAF or WINDOW SASH

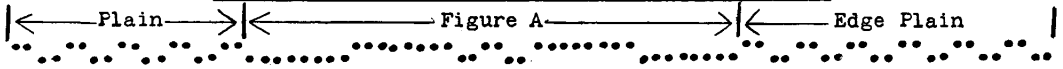


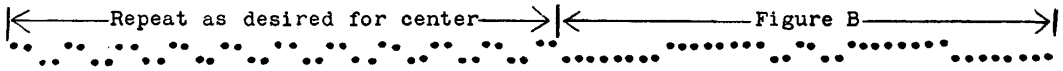
## MONK'S BELT



## The sleying of MONK'S BELT

## LASTING BEAUTY arranged for a Rug




## Repeat Border for the Other Side

Agnes K. Nielsen

*Adaptation of Draft for Two-Harness loom warp*

# A Wood-Carver of New Mexico

BY HELEN CRAMP

IN New Mexico the footpath has become the burro trail; the burro trail, the wagon road; and the wagon road, the automobile highway. But it is not exactly a highway that leads up from Santa Fe through Chimayo and into Cordova. Only those travelers with very good cars and a taste for the roller-coaster make the trip.

They are rewarded by seeing one of the most interesting Spanish villages in New Mexico, so remote and inaccessible in the mountains that time has almost stood still since the first coming of the Spanish. Here American ways and American products have penetrated very little. To be sure, some of the more business-like among the people have sold the old doors and carved pillars from their houses to grace newer American buildings in Sante Fe; but the beautiful old flat-roofed houses still ornament rather than disfigure the landscape, and the people still follow their simple agricultural life.

*José Dolores Lopez is a father and a grandfather greatly loved and honored by his family. Stimulated by his example a number of the younger members of the family have become wood-carvers, too*

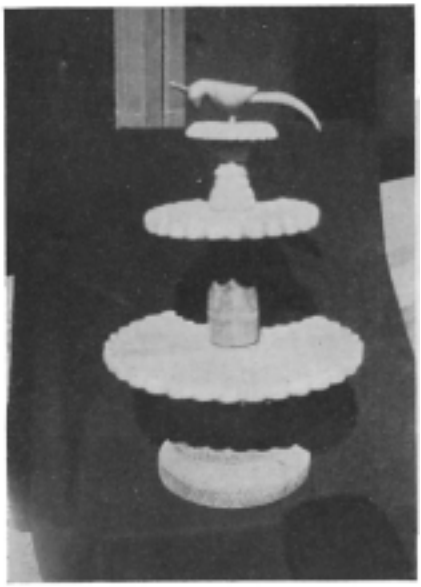
José Dolores Lopez is a farmer first and a wood-carver afterward, as is natural among peasant people. When he is not busy with his farm he amuses himself with whittling. For years this had been his custom. Finally he was discovered by Mary Austin and Frank Applegate and other members of the Spanish Colonial Arts Society of Santa Fe. Since then his hands have been much busier, as his carvings have sold to tourists and orders for furniture have flowed in. His patience and industry seem endless, and his humor never-failing. Nor do ideas ever seem to be lacking: he is always trying something new, adding some playful touch to things that he is repeating. This is where the creative quality comes in and makes him distinct from other workers who may be as skillful technically but who lack this impregnating genius.

While a great deal of primitive carving is heavy in its effect, everything that José Lopez does shows a light touch. Many of the birds he carves actually seem to be flying. His animals scarcely touch the ground. And no one but he can create the peculiar lace-like effect of carved spindle doors: one almost forgets that they are wood.

His work, like the work of all real artists, shows a steady development. The things he is doing now are much more interesting on the whole than those he did when he first began taking prizes at the Spanish Fair about five years ago. No doubt an appreciative buyer has his influence in this development, but also there is the steady advance of a master workman. The carvings in relief are deeper and firmer and the designs are simpler and more unified. Occasionally he carves an animal so simplified in outline that it suggests the work of the most modern American or European sculptor. Many artists and a number of different organizations are interested in José Dolores Lopez, and his work has been exhibited in New York, Chicago and San Francisco. These things please, but do not alter the course of an essentially simple, faithful and industrious man.

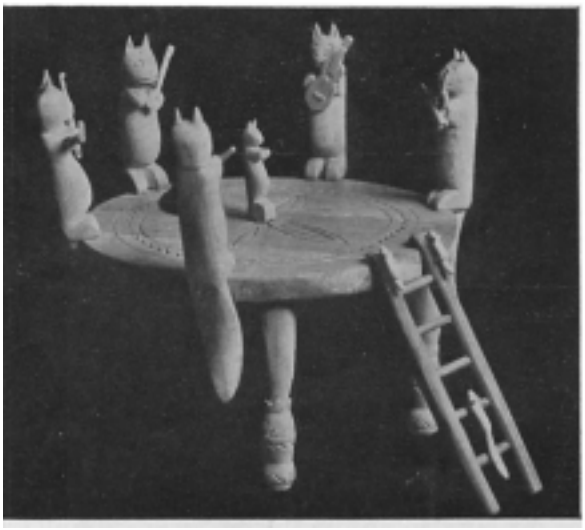
*Lazy Susan carved by José Delores Lopez; table and chair of modern native design*

*A group of carvings from the hand of José Delores Lopez. A play spirit runs through all his work and gives it a rich variety*

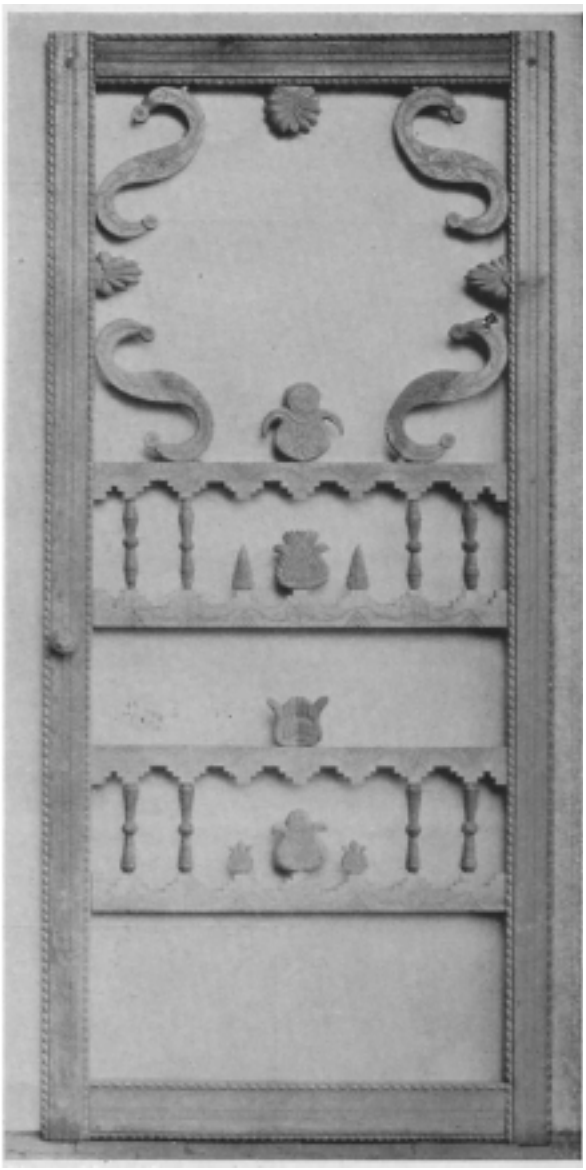


*Bird carving by Jose Delores Lopez*

*The church at Cordova is a fine example of the old Spanish Colonial architecture. Here on Good Friday the Penitentes of whom José Delores Lopez is a leader, gather for some of their ceremonies*



*Wood carving by José Delores Lopez*



Photograph by Ansell Adams

*A wood door carved by José Delores Lopez*

# *Tapestry Weaving: Its History and Technique*

BY LUTHER HOOPER

A GREAT variety of woven materials, which are made and sold today, are called "Tapestry" by the manufacturers who make and the dealers who sell them; but they have no right to the name. They are for the most part cheap, machine-made fabrics intended for furnishing and upholstery work: they are made on machine looms more or less in imitation of real tapestry and are constructed of extremely perishable materials.

Real tapestry, on the contrary, is a solidly woven, durable, artistic, handmade textile, which has been specially known by that name ever since it was introduced from the East by the Merchant Adventurers of Italy. It soon became highly valued in all European countries in the Middle Ages, and in the workshops of the Netherlands was carried to its highest pitch of perfection, the most famous artists of the time being employed to make designs for the work.

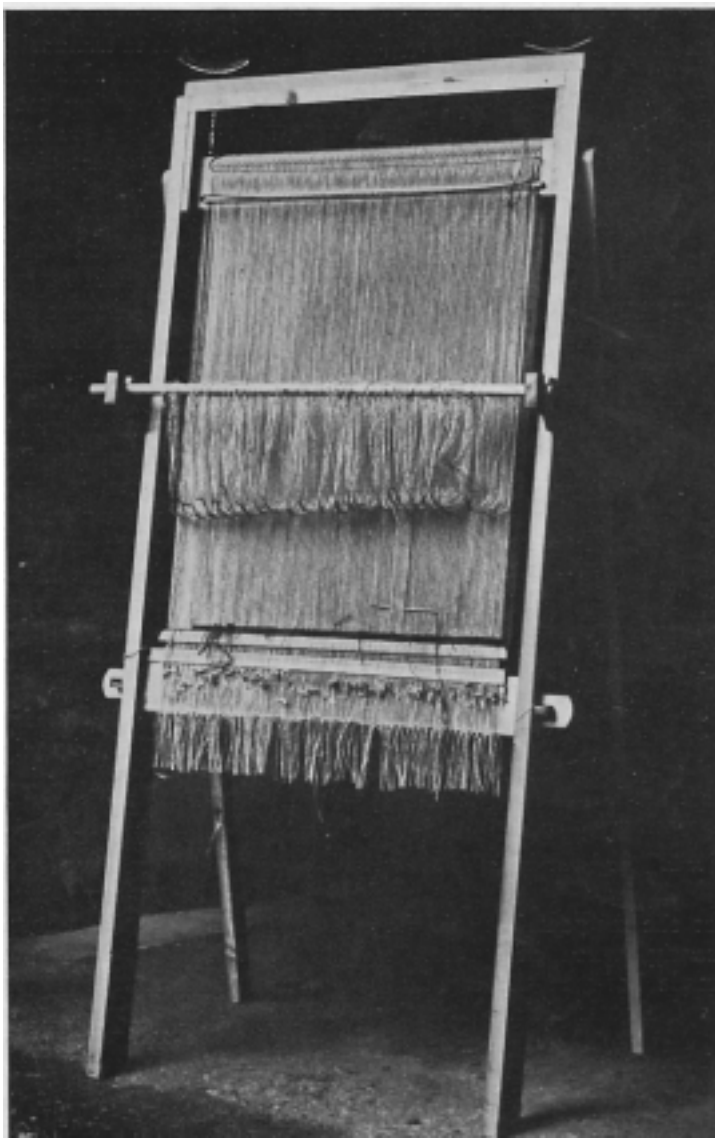


*Figure 1*
*Tapestry loom set ready for work*

The name *Tapestry* is derived from Greek, Latin, Italian, and French words, all of which signify a carpet, covering, or hanging. It was natural, therefore, that the materials used in early times for covering the inner walls of the great houses and palaces of the nobility and gentry, which were woven in the same manner as the gorgeous fabrics imported from the East, should have been called "tapestry" or "carpet work."

There is a peculiarity in the texture of tapestry weaving which has hitherto rendered it impossible to imitate it with success by means of any method but pure and simple handicraft. No shuttle or other implement, whether impelled delicately by hand or driven with great force by steam power, for carrying the weft into its place between the alternating groups of warp strings, is delicate or discriminating enough to supersede the skilful weaver's hand. This technical point must

*Figure 2*
*The tapestry is 32" x 20" and was woven in the author's studio*

be left unexplained for the moment but will be fully dealt with presently, when an important comparison will be made between the essential technique of tapestry and that of plain automatic weaving.

There is no other branch of textile art which affords so much scope and freedom of design to the artist as tapestry weaving, for there are no "repeats of design" to be considered as in more automatic weaving. The whole surface of a piece of tapestry, however large, is a kind of woven mosaic consisting of small patches of plain weaving in many colors and various shapes which are gradually built up, one above the other, and interwoven on a foundation of warp threads very tightly and evenly stretched on a simple, strong, upright frame which is the only considerable appliance necessary for the work. Moreover, however elaborate the design may be, the actual weaving is of the most primitive nature, being of the texture technically called the "plain tabby weave."

Designs for tapestry weaving have to be most carefully and exactly planned out, and the edges or contours of the shapes forming the composition have to be clearly defined and determined before the weaving can begin, as no alterations can be made, except with the greatest difficulty, after each portion of the design, beginning at the bottom edge, is gradually piled upward and finished as it will remain for good.

A great deal of the wealth both of ancient and mediaeval times consisted of precious hangings, coverings or garments, the materials of which were either woven in the tapestry manner or woven in plain, open, tabby texture and decorated with painting or needlework, the more close and durable tapestry being the most highly valued. As, however, the knowledge of automatic pattern weaving and the variety of textures to which the extremely fine silken thread naturally lends itself spread from China, its original source, to Byzantium, Persia, Arabia and, finally, through Italy or Spain to the whole of Europe, the use of tapestry weaving for garments declined, but tapestry weaving for furniture, hangings and coverings flourished more and more, both in the East and West, and reached its highest point of development in the seventeenth, eighteenth and nineteenth centuries, as witnessed by the splendid specimens of the tapestry weaver's handicraft preserved in almost their original splendor for our study and delight in the various national museums, historic houses and private collections of today.

Before proceeding to examine the few characteristic specimens of tapestry weaving, chosen for illustrations to this article, woven in very early as well as in later and quite modern times, it is necessary to define clearly the difference between appliances for, and the techniques of tapestry weaving and ordinary weaving, whether the latter be by

hand or power; and, also, to point out the contrast between the simplicity of the tapestry loom and the complexity of the fittings and appliances of even the ordinary loom actuated by foot power, with its ever-changing mechanical automatic devices for the production of different textures and repeating designs.

The loom for tapestry weaving, whatever the size and scale of the work, always remains the same in principle, and its only requirements are to stand very firmly in a more or less upright position, bear the extraordinary high tension of a multitude of strings without giving way in the least at any part, and to allow the tension to be under command of the weaver to slacken or increase at will. No automatic devices are necessary for opening the sheds, no shuttle for introducing the weft into the opened shed, and no power but the skilful hand of the weaver with its delicate, sensitive fingers is needed for producing the most elaborate designs.

The photograph of such a frame, mounted and prepared for weaving tapestry panels or small carpet work, is shown at Figure 1.

The frame is prepared for weaving a panel of tapestry 2 feet 8 inches by 1 foot 10 inches: the same size exactly as the panel or floral design, a photograph of which is reproduced in Figure 2. This piece was designed and, unfortunately, left partly finished by a late pupil of the author's; later it was completed by the author himself. This form of loom would also be perfectly adapted for weaving such a small tapestry carpet or kelein as the subject of the illustration No. 3, which is 6 feet long by 1 foot 10 inches in width.

The warp with which the loom is mounted consists of very slightly spun three-fold, flat seaming twine, which is extremely pliable and quite heavy, which is an advantage in the case of carpet weaving; it is also free from the harshness of highly twisted cord, whether of flax or cotton; it is also uninfluenced by the changes of weather. The count of the warp is 12 threads to 1 inch and it must, of course, be very evenly distributed.

As a means to the even distribution of the warp across the loom, a double row of small, smooth, wire pins (see letter K, Figure 4) driven into the movable stretcher near the top of the frame, neatly takes the place of the reed of the ordinary loom, and has the advantage of allowing different counts of warp to be mounted without changing the spacing of the ¼-inch divisions, which answer to the dents of a reed. When the warp is being arranged great care has to be taken to make sure that the same number of threads are in each space between the pins, whatever the count may be, before covering the projecting row of pins with the grooved cap shown at letter A in the working drawing of the whole loom (Figure 4). The *lease* or cross in the warp by means of which the twines of the warp are kept from overlapping each other, which is common to all looms however simple or elaborate, is shown just below the reed in Figure 1. The cross has been taken by means of a large packing needle, such as that left in the warp at the lower part where a

*Figure* 3
*Carpet designed and executed by the author, assisted by several pupils*

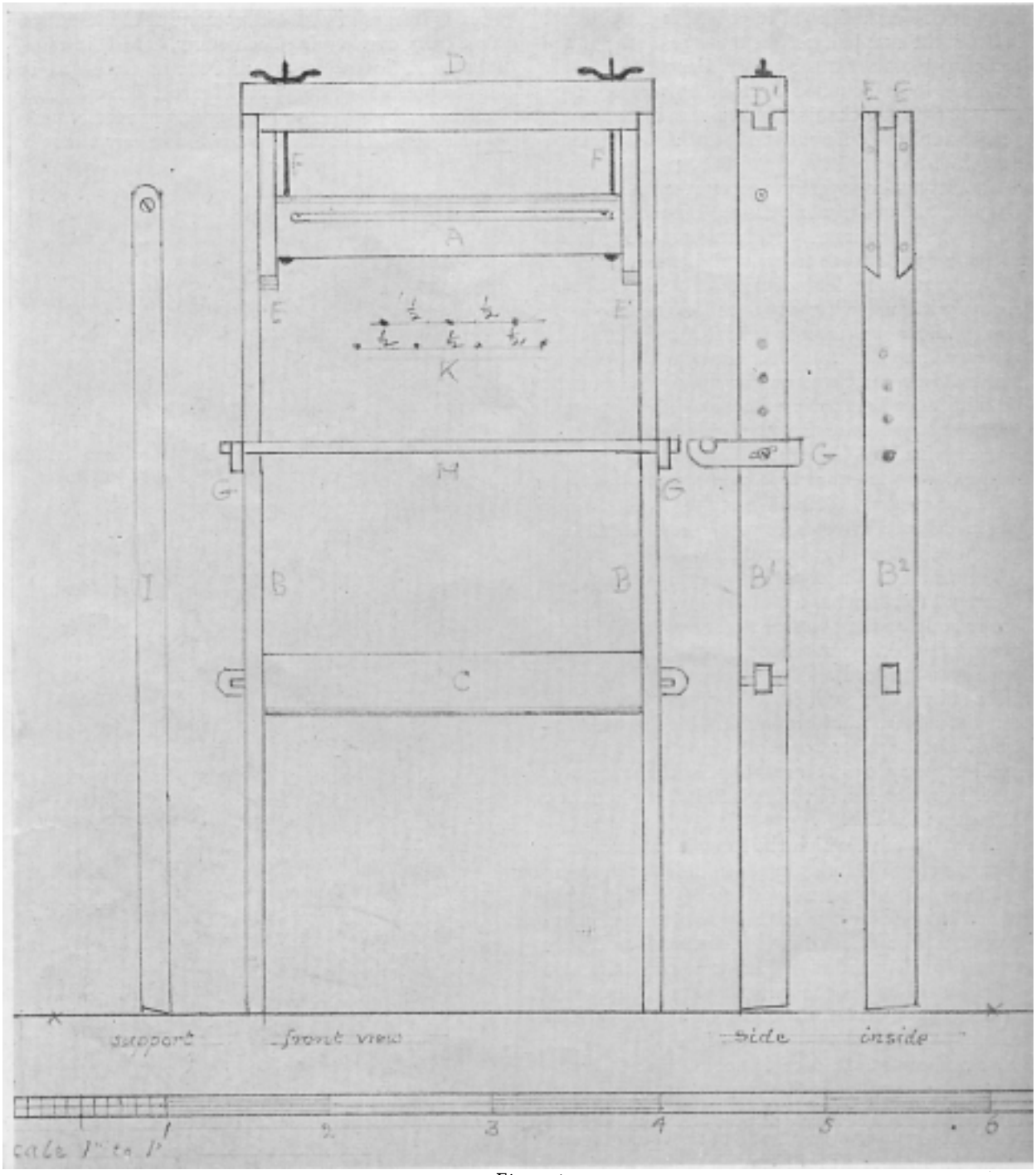



*Figure 4*
*Working drawing of tapestry loom to scale 1" to 1'*

short strip of tapestry has been woven, threaded with a strong, fine, colored cord. The passage of the needle over and under alternate warp twines from right to left and backwards from left to right has left the crossing threads of warp between the weft as in tabby weaving. In this returning shed a half-inch pointed, wooden rod has been inserted. The rod being permanently fixed in its position will keep the same shed open with sufficient clearness for the expert weaver to find it with ease and pass his needle through it in any part of the warp below that place.

Passing downwards from the cross-rod, the next thing to notice is the heald rod supporting the

*Figure 5*
*Tapestry woven ornaments from a robe of Amenhetep II found in the tomb of Hrothing IV. Amenhetep reigned in Egypt B.C. 1500*

healds, which are looped, one by one, *between each of the front twines to those at the back.* By means of these healds the second opening for a tabby shed can always be made at any local part of the warp, or right across the loom. When all the healds are in place and found quite correct they are tied in groups of 10s, or any regular number for convenience of counting. Making the healds and looping them both to the back twines of the warp and also to the heald rod will be described when the section dealing with the technique of the subject is reached.

Notwithstanding that the tapestry loom, as will have been seen from the photograph of the mounted one (Figure 1), is an appliance of the greatest simplicity, it must not be supposed that it does not need to be very carefully constructed in order to meet the special requirements of the work for which it is intended. The most obvious quality needful is that of strength in the wooden frame, so that it will bear without bending or twisting the surprisingly great and constant tension which the warp twines have to bear all the time the work is in progress. The strain on every twine is from 5 to 10 pounds weight, according to the length of warp between the top and bottom of the frame. The next very important qualification for the loom-frame is that it must be exactly rectangular: if it be in the least degree out of square, by so much the tapestry or carpet woven on it, however truly and carefully worked in all its details, cannot be correct in this particular. Many of the Eastern carpets, which are marvels of minute detail and patient labor, are conspicuous for this defect, evidently owing to the rough and careless construction of the looms on which they have been woven. Two further qualifications which affect the comfort of the weaver when at work are: that the

*Figure 7*
*Part of the border of an old Flemish Tapestry, 16th Century*

loom is so designed to firmly stand alone in an upright position, or to lean steadily against a convenient wall, and that it must be perfectly rigid and unshakeable. The loom should also be so designed that the weaver can sit in comfort at his work and have no difficulty in regulating the tension of the warp or the height of his work in the loom, as it slowly grows upward from the bottom edge.

Should the work be of such a size as to require a longer length of warp than *one and a half times* the capacity as to height of the stretching frame, a pair of strong rollers and ratchets with pawls must be added which will, of course, considerably modify the design and construction of the loom. This will be dealt with when the weaving of large and perhaps more important hangings and carpets is under consideration.

In conclusion for this section of our subject, the necessary directions for building a tapestry loom for small panels and carpets such as those of Figures 2 and 3 (see Figures 1 and 4) must be given as briefly as possible.

The drawing (Figure 4) is made exactly to scale, 1 inch to the foot, and consists of nine separate parts in all: (1) The stretcher bar A; (2) two upright posts B, B, $B^1$, $B^2$; (3) a strong tie or cross-piece C; (4) a very strong top bar D, $D^1$; (5) two pieces forming a slot between them E, E, E, E; (6) brackets for headle-rod G, G, G; (7) headle-rod H, and (9) back support for frame, enabling it to stand alone, slightly sloping backwards like an artist's easel.

The frame, in all its parts, must be of hard wood which must be well seasoned, and the various parts should be cut out some time before they are fitted together so as to prove that they will not bend, or twist out of shape, when the loom is finished. All the parts except the top bar D, the stretcher bar A, the cross bar C, the support I, and the brackets G, are made of wood 1 inch by 3½ inches. The bars C and A are 1 inch by 5 inches, and the top bar D, $D^1$, having to be very solid, must be 4 inches by 3 inches and be cut and shaped as shown at $D^1$, so as to fit exactly into the top of each of the side posts B, B, as in the side view of a post marked $B^1$.

*(Continued on page 40)*

*Figure 8*
*The Harrow School Lion. Woven on a Table loom 18" x 10"*

# *Something New in Pewter*

BY ALMA W. LEWIS

PEWTER is one of the most delightful as well as the easiest of metals to work with and the present vogue for it adds to the pleasure we find in making a piece for our own or a friend's use. I know of nothing easier to work with when making gifts, and nothing more desirable, considering the beauty of the finished product.

Card table numbers, book ends, vases, plates on glass or metal forms, boxes, fruit dishes, desk sets and many other things may be made, but care must be taken that heat will not come near them as the flame of a match might burn a hole in this soft metal.

*General Example of Pewter*

You may buy the metal in sheets thirteen inches wide, gauge .008, known to the trade as "Britannia Metal." It looks like thin sheets of very soft tin, and can be cut with ordinary shears. You may buy plain metal book ends and use them for forms after removing any paint or enamel that may be on them, or you may have the tinsmith make them in the size and shape you wish, as well as vase and other forms, or you may make them yourself of galvanized iron if you are an adept in soldering. The fruit dish shown in the illustration is made from a cake box.

Make your tools yourself from nut picks that may be gotten in any ten-cent store. A fine file, some fine sandpaper or emery cloth, shears, a few cents' worth of hydrochloric acid, nitric acid, powdered pumice stone, some beeswax and paraffine, metal glue, and a small bottle of light lacquer such as is used on brass and in some of the clay and gesso work, are the necessary equipment. Add to these a couple of bottles — two-ounce is a good size — some soft old cloths and a piece of double-faced Canton flannel or table padding to use as a pad to work on, and you are ready to begin.

*Tools.* — Only two are needed beside shears and a fine file. Of course a pencil and ruler must be handy. Leave one nut pick practically as it is, just curving it a bit more, keeping the point sharp but not sharp enough to cut the pewter. The other is flattened like illustration 2b, and then curved again like the side view, 2a. Wrap the handles with adhesive to make them an easy size to handle.

For an example we will make book ends. These forms, made of galvanized iron, stand four inches high and five and one-half inches wide. Each form is made of a piece of galvanized iron five and one-half inches wide and eleven inches long, bent to leave one side of the base one inch wide and the other two inches wide. They are soldered together to make them firm, and may be made by the tinsmith. The pewter to cover them is cut six and one-half inches wide and twelve and one-half or thirteen inches long. The latter will just take a strip six and one-half inches wide off one end of a sheet of pewter.

Designs may be found among embroidery, china painting or other patterns, or may be made especially for the piece. After a little experimenting you will be able to pick the designs best suited to this work. Usually bold designs with little detail are best. A repeat motif often works out well if properly spaced. Have your pattern on tough, preferably transparent paper. We use architect's tracing paper or a tough typewriter paper. For these book ends the design must fit the space five and one-half inches wide and four inches high. It is wise to draw this size space and fit the design in it before trying to fit the design on the pewter.

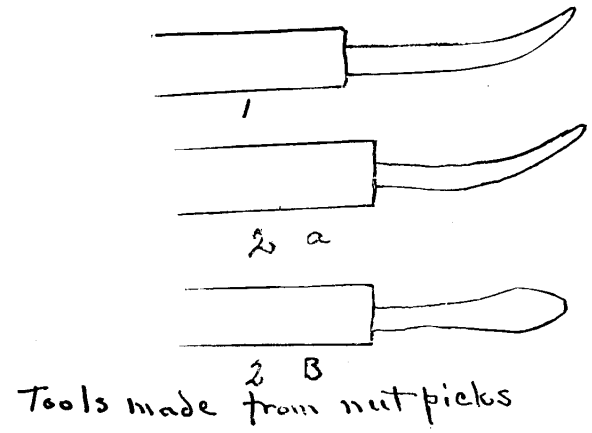



*Figure 1*

*Figure 2*
*Tracing pattern on pewter*

Place the design over the strip of pewter with the bottom one and one-half inches from one end of the strip of pewter, fasten with paper clips to hold it in place, lay on the cloth pad before referred to, and trace the pattern with tool No. 1, being careful to press hard enough to show the pattern, but not hard enough to press through the pewter. Remove the design and go over the lines showing on the pewter carefully. Turn the pewter over and trace the design again about one sixteenth of an inch inside the first tracing with the same tool.

With the second tool press very carefully the parts you want raised in the design. In this case it is the flowers and leaves. The pewter is so soft, care must be taken not to press holes in it. Better go over the design twice. When the reverse side looks as it should to you, it is time to fill the raised parts with the wax mixture. Unless these parts are filled in some way there is danger of depressing them. Take a tin that can be heated and place in it equal parts of beeswax and paraffine and melt. With a spoon (we use small tin ones with the sides bent up so they will pour better), fill the hollows with the melted wax. Any wax running over the edges of the pattern may be scraped off with a knife as it cools.

Prepare the acid baths as follows: to one part of hydrochloric acid add four parts water, pour in one bottle and label. To one part of nitric acid add three parts water, pour in another bottle and label. Keep both bottles corked when not in use. Tear pieces of soft old cloth in four- or five-inch squares for use with these acid baths. Pour some of the hydrochloric solution on a cloth and wipe over the pewter, also the form with it. This is to clean them of any grease or finger marks that would prevent the glue from sticking.

Place the pewter over the form, fitting it carefully in place, and glue with metal glue. There are several brands on the market, but we have found the Calle Pour Metaux from de L'Artisan Practique, Paris, the best for this purpose. Fit the back of the book end first, but bring the design into the correct position. Turn the edges of the pewter over the edges of the form and cut off carefully, after gluing. Bring the front, with the design, over into place and glue. Cut off the surplus on the edges, press down firmly with tool No. 2 and let stand until glue is set. Large paper clips will be found very helpful in holding the pewter while these processes are taking place. Turn the pewter over the edges of the base, press down with tool No. 2, and glue.

The edges of the top, which you pressed into place after cutting, may now be filed a bit, and the file marks removed with the fine sandpaper or emery cloth.

Clean again with the hydrochloric solution and apply the nitric solution with another cloth, doing one side at a time. This should turn the piece black fairly quickly. If it does not, increase the amount of nitric acid in the solution. Begin at once to polish with the powdered pumice stone on another cloth, rubbing off as much of the black as is necessary to get the desired effect. At present, the tendency is to keep the pewter light and silvery-looking with just enough dark to bring out the design. The pumice stone will polish it and give it a satiny look. Be very careful not to get any finger marks on

*Figure 3*
*Filling with wax*

*Figure 4*
*Placing pewter over form*

it, and apply the lacquer with another cloth as soon as possible, and let dry.

Your book end is ready to use as soon as you have glued a piece of felt on the bottom to protect table tops. Cut this felt a trifle larger than the bottom of the book end to allow for shrinkage when the paste is applied to it. Use any good library paste, and after it is dry, trim off any superfluous felt.

Card-table numbers may be made with either letters or numbers and backed with felt. These may be made from scraps of pewter left from larger projects. The vase illustrated is two and five-eighths by two and five-eighths and eight and one-half inches tall. A pickle bottle may be dropped inside to hold water. A smaller size vase may be made to fit a smaller bottle.

Glass plates may be used as forms for the pewter, but should first be given several coats of aluminum paint on the inside so the wax filling of the design will not show through. Be careful to keep the edges of the pewter which come over the edges of the plate evenly trimmed.

Desk sets consisting of desk pad, blotter and letter rack may be made. For women we have used rose color blotting paper with good success, while for men we found black very good.

And now, can't you think of many, many things you may make of pewter in this manner? There are so many tin cans and boxes coming into our homes today that can be used as forms with little or no alteration. The work is fascinating as it develops under our fingers. Best of all, if we want something saleable, this is it!

NOTE. — If pewter cannot be obtained locally it can be ordered from National Lead Company, 722 Chestnut Street, St. Louis, Mo.

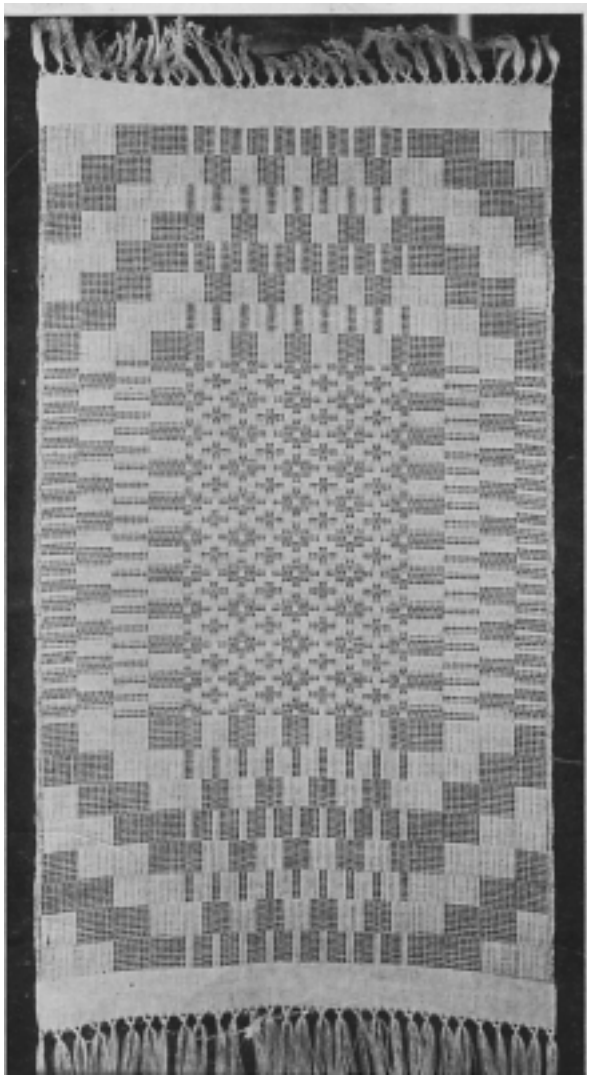
*Figure 5*
*Polishing with pumice stone*

*Figure 6*
*Lacquering finished article*

# *An Appreciation of "Jaemtlandsväev"*

BY RUBY V. HARSTINE

APPRECIATION is a factor which if properly used can become a very valuable force. It often not only acknowledges a debt for some pleasure received, but acts as a stimulus to inspire new creative attempts. For this reason, as a foreword to the technical description of several cotton runners recently woven which this article will later describe, an appreciation is extended for the "Crackle Weave" drafts which were described by Mary N. Atwater in former numbers of THE HANDICRAFTER. There is a trite but true old saying, "The proof of the pudding is in the eating." If we interpret this, in weaving language, it would read, "The proof of the draft is in the weaving." Also, it might be added that the proof of the value of a magazine is not whether it is read the month it leaves the press and is then discarded, but whether its contents are valuable enough to be preserved for future reference. Several cotton runners just woven on the "Diamond" and "Right and Left" Crackle Weave "set-ups" have been a pleasure to execute, and the finished results seem lovely enough for a written record. Since the drafts used were published in THE HANDICRAFTER some time ago, perhaps the same drafts accompanied by recent interpretations in materials, treadling, and finishes can be re-submitted with the idea that they may perhaps be useful to many of the new subscribers of THE HANDICRAFTER who are not fortunate enough to possess the old numbers which contained Mary N. Atwater's articles.



*Cotton Runner No. 1*
*Warp, cotton No. 20/2 white; weft, red perle cotton No. 5. Pattern set up, crackle weave, diamond pattern. Draft given in "The Handicrafter," January–December, 1928*

"Crackle Weave" is by no means new, but, to quote Mary N. Atwater, is a name coined to describe a weave known as Jaemtlandsväev, which we have inherited from Scandinavia. The runner (described as No. 1) woven on the "Diamond" pattern draft revealed the fact that this type of weaving has many practical advantages. It is a reversible material alike on both sides. In design it has unique, almost lace-like qualities of light and dark contrasts which are very pleasing. Its small overskips or floats make it a valuable type of weave for materials such as towels or table linen which must be frequently laundered. For rugs, coverlets, and upholstery materials it is also a very excellent type of weave.

As a suggestion to other weavers, a few of the ways (other than the cotton towels later to be described) that the Diamond Crackle Weave draft has been used in our studio might be mentioned. Upon a carpet chain warp, sleyed 15 threads to the inch, 36 inches wide, several rugs were woven. Different results were obtained by varying the weft materials. Stockings

*Cotton Runner No. 2*

*Warp, cream colored mercerized perle No. 20; weft, No. 5 perle cotton, yellow. Pattern, left and right crackle weave. In "The Handicrafter," January–February, 1931*

cut and dyed in Turkey red dye, combined with black stockings used as a border, produced an inexpensive but striking rug. Another time, several jolly plaid rugs were worked out, using tan, green, henna, and black cotton roving combined with a stripe combination of tan, brown, orange, yellow and red carpet chain warp. Following these a number of bedroom rugs and bath mats were woven of cotton chenille. It was found that possibilities for original design combinations, of treadling, materials, and color are unlimited. In addition, this weave produces rugs which are fairly heavy and durable.

Later, two couch coverlets of unusual charm were woven, using this same draft. In threading for the coverlet the border unit was repeated twice on the right-hand side and omitted on the left-hand side. Sixteen repeats of the diamond motif were set up. The coverlets were woven in two strips which were matched together. For the first coverlet, Emile Bernat's Fabri yarn, set 36 to the inch, was used for the warp. If the draft is studied the border will be found to consist of four separate units. In planning the warp for the border area, a different color combination for each area was planned and chained. As the border was repeated twice, this gave eight variations of color, which were as follows:

Alternating threads of

1. Blue, green, henna, violet.
2. Blue, green, tan, violet.
3. Blue, green, henna, tan.
4. Blue, yellow, violet, tan.
5. Blue, green, henna, yellow.
6. Blue, green, violet, tan.
7. Blue, green, yellow, tan,
8. Blue, green, tan, yellow.

Since it was the predominating color note desired, it will be noticed that blue was used with each combination of colors. The warp for the remainder or the center area of the coverlet which contained the diamond repeats was of alternating blue and green threads.

A deep maroon shade of zephyr was used for the weft or pattern sheds. This was bound in by a rich violet shade of homespun yarn used for tabby. The finished result must be seen to be appreciated, for it is hard to describe, and a photograph could not in any way do justice to this coverlet. Since the warp was of wool, closely sleyed in the reed, in the combination of colors just enumerated, the texture and color vibrations thus secured (especially in the border section), with the inter-play of soft blue, green, violet, tan, and yellow, was suggestive of a mellow needlepoint tapestry.

A second coverlet, woven upon gold-colored spun silk warp (also sleyed 36 threads to the inch), was made upon the same Crackle Weave pattern set-up. Strips of silk, sewed hit or miss, like old-fashioned rag carpet rags were utilized for weft. The close way in which this weave binds the warp and weft together enabled us to weave into a durable result, material which might otherwise have been of a very impractical nature. Aside from its quaint charm, when finished, this coverlet had a sentimental value to the person who ordered it woven, because it preserved in a useful way material which her deceased mother had sewed together years ago. The pattern, which is still threaded in one of the looms, is soon to be used for a large order of upholstery material. On another loom the modernistic little border unit of this pattern was set up alone, on a narrow set up, and used effectively for colored linen table doilies. Later, it inspired the weaving of some jaunty sport scarfs with modernistic borders worked out in the colors of the State University. All in all, therefore, after numerous tests with various textures, it might well be said the "Diamond Crackle Weave" is a most versatile pattern.

The "Right and Left" Crackle Weave pattern

was used for runners Nos. 2 and 3. This pattern has an overlapping light and dark balance very different in feeling from the Diamond pattern. The units are block-like and not quite so modernistic. There is no decided border arrangement other than can be obtained by treadling variations at the ends. Two very interesting runners, one in an all-over effect (No. 2 , the other (No. 3) in pick-up weaving, were obtained by using this draft. Cotton textures, especially those of fine, Egyptian cotton, usually have considerable charm for handweaving. This was especially true of the soft, silky, texture obtained by using fine, cream-colored mercerized cotton for these runners. Some textiles which a friend recently brought from Guatemala suggested the idea to try the "pick-up" weaving which was worked out in runner No. 3. This type of weaving affords unlimited opportunity for creative experimentation in design compositions.

On another loom a simple but unique little Swedish pattern draft taken from Sigrid Palmgren's VÄVBOK, No. II, resulted in a number of quaint runners. Although much smaller in area than the Crackle Weave units, this pattern with its small floats, delicate, lace-like texture and variety of treadling possibilities for light and dark values has similar characteristics which make it an appropriate weave for cotton or linen materials which must undergo frequent laundering. Like the "Crackle Weave" it reflects in many ways the sturdy, practical, yet beauty-loving character of those northern races who perhaps first worked out the patterns. It might here be mentioned that the more deeply interested we become in weaving as a craft, the more sensitive we become to the individual aesthetic characteristics and thought relationships which each race of people unconsciously reflects in the product of their looms.

Having thus given, in a general way, the delightful and challenging range of possibilities of these drafts, perhaps the following detailed information might be useful:

### Cotton Runner No. 1

Materials used:

1. Warp — Cotton No. 20 — 2 white.
2. Weft — Pattern-Perle Cotton No. 5, *red*. (Tabby same as warp.)

Pattern set-up:

Crackle Weave.
Diamond pattern. (Given in The Handicrafter, December–January, 1928.)
18-dent reed.
Sley two threads per dent.
Set-up 16½" wide.
Length of woven runner 29".
Treadling used.

Border:

(2 and 3) 16 shots.
(1 " 2) 16 "
(1 " 4) 16 "
(3 " 4) 16 "

Weave two repeats of this treadling for border.

Center Diamond Motif:

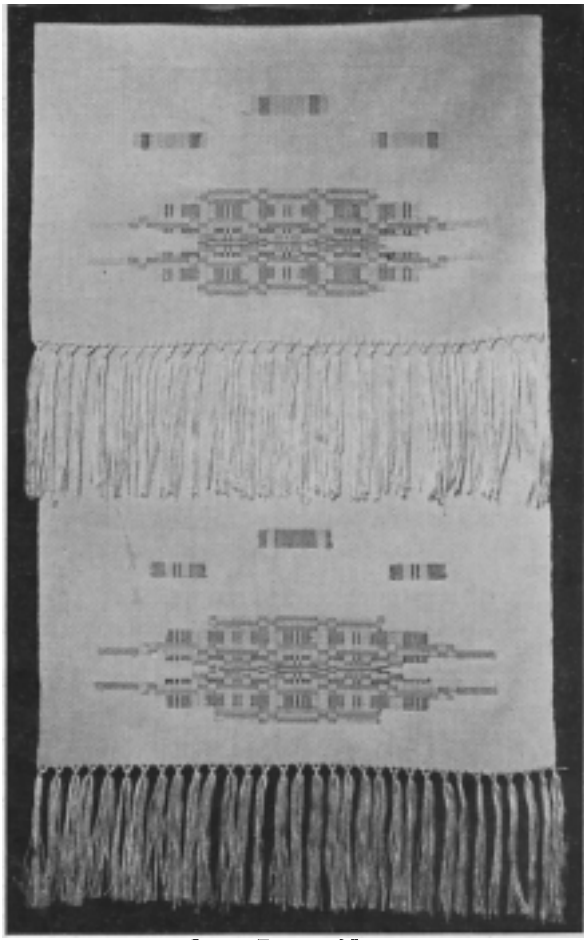
(2 and 3) 3 shots.
(3 " 4) 3 "
(1 " 4) 3 "
(1 " 2) 3 "
(1 " 4) 3 "
(3 " 4) 3 "

Repeat diamond 10 times, then border treadling in reverse order. Finish with double knotted fringe.

### Cotton Runner No. 2

Materials used:

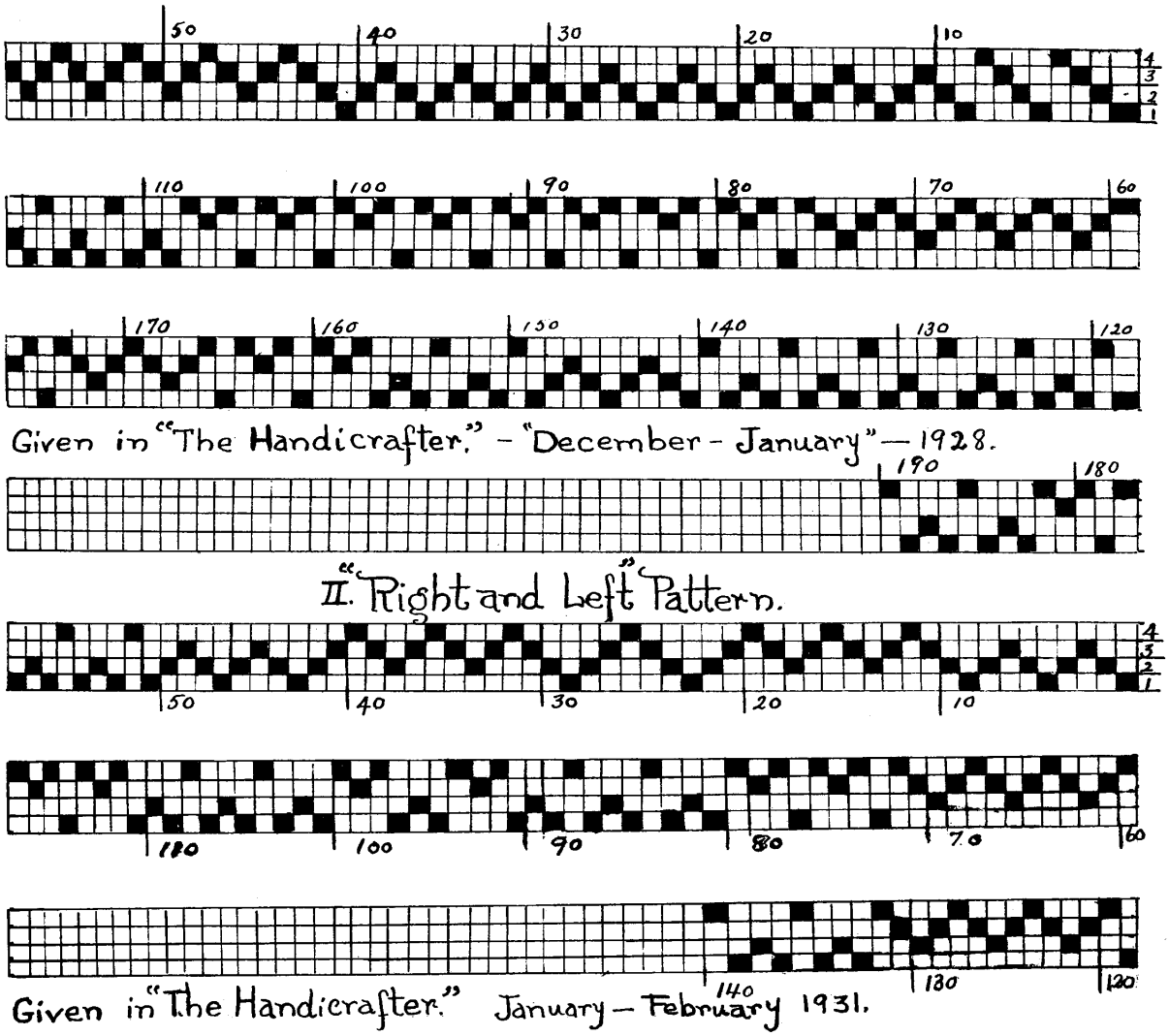
1. Warp—Cream-colored Mercerized Perle No. 20.

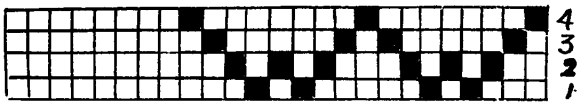


*Cotton Runner No. 3*

*Warp, cream mercerized perle No. 20. Pick up pattern worked out in green, tan, blue, red, black, yellow, and orange linens. Pattern, crackle weave, left and right pattern. In "The Handicrafter," January–February, 1931*

CRACKLE WEAVES. I. "DIAMOND PATTERN"




*A Swedish pattern taken from Sigrid Palmgren's Vävbok II*

2. Weft — Pattern-Perle Cotton No. 5, *yellow*. (Tabby same as warp.)

Pattern set-up.
Crackle Weave.
"Right and Left" pattern. (Given in THE HANDICRAFTER, January–February, 1931.)
18-dent reed.
Sley two threads per dent.
Set-up 17" wide.
Length of finished runner 28½".
Tabby 5" for hem.
Treadling used for pattern.

Border:
1. (2 and 3) 4 shots.
2. (1 " 4) 4 "
3. (2 " 3) 4 "
4. (1 " 4) 4 "
5. (3 " 4) 10 "
6. (1 " 4) 4 "
7. (2 " 3) 4 "
8. (1 " 4) 4 "
9. (3 " 4) 10 "
10. (1 " 4) 4 "
11. (2 " 3) 4 "
12. (1 " 4) 4 "
13. (2 " 3) 4 "

Motif:
14. (1 and 2) 52 shots.
15. (2 " 3) 4 "
16. (1 " 4) 4 "
17. (2 " 3) 4 "

18. (1 and 4) 4 shots
19. (3 " 4) 10 "
20. (1 " 4) 4 "
21. (2 " 3) 4 "
22. (1 " 4) 4 "
23. (2 " 3) 4 "

Repeat motif twice, then treadle (1 and 2) 52. Reverse border.

Finishes:

1. Hem: Hemstitch 2" hem with yellow Perle Cotton.
2. Corners: Buttonhole 24 stitches around corner with yellow Perle Cotton. Add three tiny yellow tassels on each lower corner edge.

### Cotton Runner No. 3

Materials used:

1. Warp — Cream-colored Mercerized Perle No. 20.
2. Weft — Tabby same as warp.

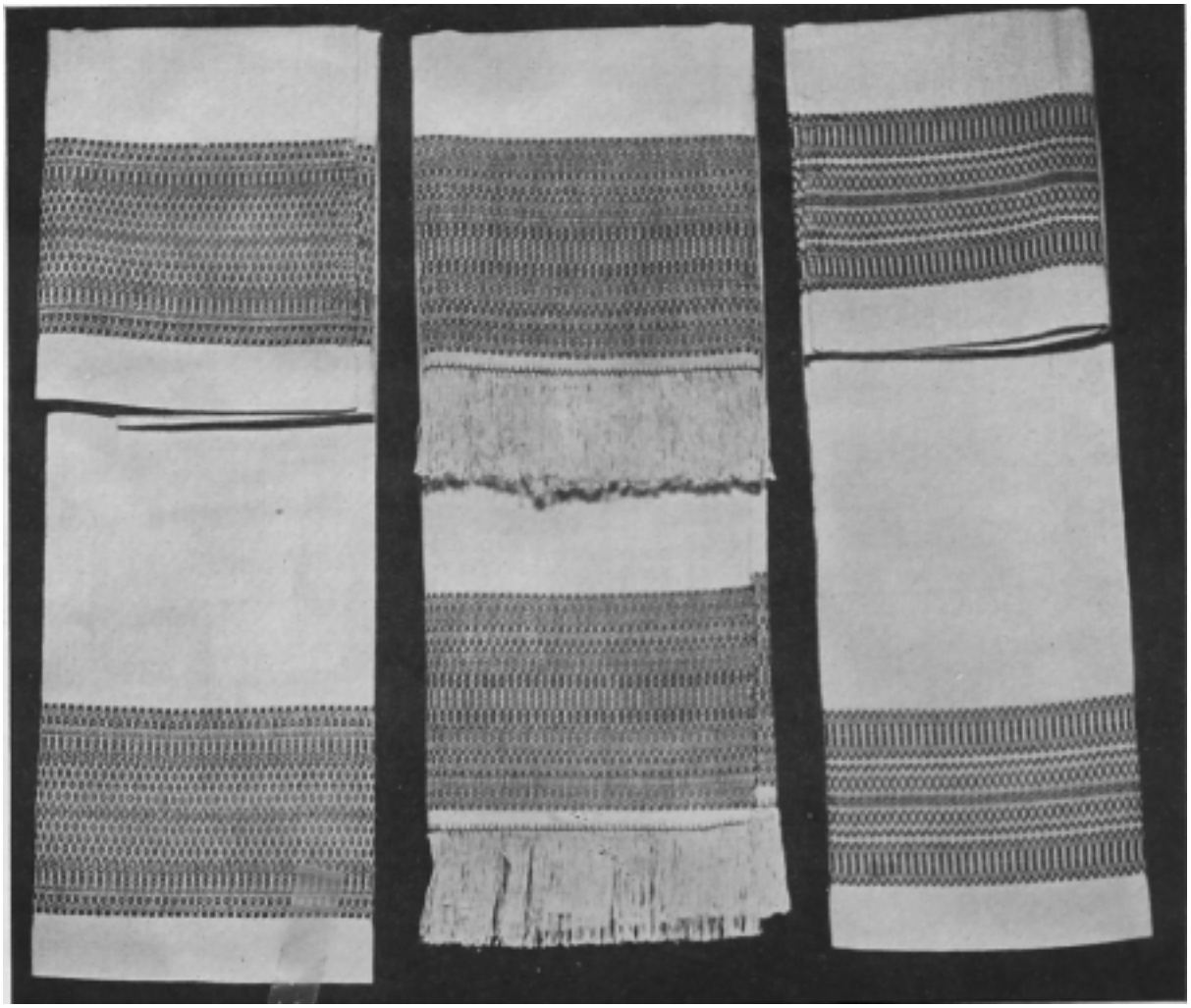
Pattern set-up used for Cotton Runner No. 2: "Right and Left" Crackle. (Pattern in The Handicrafter, January, 1931.)

18-dent reed.
Sley two threads per dent.
Set-up 17" wide.
Length of finished runner 36".
Pick up pattern in end as follows:
Tabby 36 shots.

1. (2 and 3) 4 shots
2. (1 " 4) 4 "
3. (2 " 3) 4 "

Tan linen warp No. 250 used double. Begin to pick in 5½" from selvage.

4. (3 and 4) 10 shots
   Green linen warp No. 218 used double. Begin to pick in 4" from selvage.
5. (2 and 3) 4 shots
   Yellow linen weaver No. 237 used double. Pick in 3¼" from selvage.



*Cotton Runners Nos. 4, 5 and 6*
*Warp, Egyptian cotton 24/3. Border patterns, mercerized perle cotton No. 5. Pattern, set up. Swedish draft*

6. (1 and 4) 4 shots
   Orange linen weaver No. 239 used double.
   Pick in 2″ from selvage.
7. (3 and 4) 4 shots
   Red linen weaver No. 247 used double.
   Pick in 4″ from selvage.
8. (1 and 2) 4 shots
   Blue linen weaver No. 206 used double.
   Pick in 5½″ from selvage.
9. (2 and 3) 2 shots
   Black linen weaver used double.
   Pick in 5¾″ from selvage.
10. (1 and 2) 2 shots
    Black linen weaver used double.
    Pick in 5½″ from selvage.
11. Reverse above treadling "pick-ups."
12. Tabby with Cream Cotton 36 shots.
13. Pick up two side spots 3¾″ from selvage, picking in one motif of (2 and 3) 12 shots. Using red linen weaver on one side and orange linen weaver on the balancing side.
14. Tabby 16 shots.
15. Pick in a center motif in green using (2 and 3) 14 shots.
16. Tabby center of runner, then reverse. Pick up treadling on opposite end.
17. Finish with 5″ double knotted fringe.

### Towel No. 4

Materials used:
1. Warp — Egyptian Cotton 24/3.
2. Weft — Same as warp.
3. Pattern for border — worked out in Perle Cotton No. 5 in rich tones of red, violet, yellow and black.
4. Pattern set-up — Swedish Draft.
5. 18-dent reed.
   Sley two threads per dent.
6. Set-up 18″ wide.
7. Finished length 27½″.
8. Width of border 4″.
9. Treadling variations for the border were intricate, diamond or twill effects worked out with a rich interplay of jewel-like colors, reminiscent of a medieval stained-glass window.
10. Finish with "linen hem."

### Towel No. 5

Materials used:
1. Warp — Egyptian Cotton 24/3.
2. Weft — Same as warp.
3. Pattern for border worked out in a more vigorous peasant-like interpretation, in strong primary shades of red, blue, and yellow, of No. 5 Perle Cotton.
4. Pattern set-up — Swedish Draft same as for Towel No. 4.
5. Width of border, 4″.
6. Finished with a quaint fringe held in place by a row of red buttonhole stitches.

### Cotton Runner No. 6

Materials used:
1. Warp — Egyptian Cotton 24/3.
2. Weft — Same as warp.
3. The pattern border of this runner was worked out in brilliant shades of yellow, red, and black Perle Cotton No. 5.

Pattern set-up:
Swedish Draft.
18-dent reed.
Sley two threads to dent.
Set-up 18″.
Finished length 27″.
Border pattern 3½″.

Treadling:

(a) (1 and 2) 1, (2 " 3) 1, (3 " 4) 1 — black
(b) (1 " 4) 1, (2 " 3) 1 — yellow
(c) (1 " 2) 8 — red
(d) (2 " 3) 1, (1 " 4) 1 — yellow
(e) (1 " 2), (2 " 3), (3 " 4) — black

Tabby 3 white.
Repeat (e).

(1 and 4) 1 — yellow
(f) (1 and 2) 1, (2 " 3) 1, (3 " 4) 2, (2 " 3) 1, (1 " 2) 1 — red
(1 and 4) 1 — yellow
(g) (2 and 3) 1 yellow, (1 " 4) 1 black, (2 " 3) 1 yellow, (1 " 4) 1 black, (2 " 3) 1 yellow — center

Reverse back to complete border.

# Treasures from the Scrap Box

BY ALINE LEUTERT

EVERY now and then the craftsman, whether he does a great deal of work or only a little, takes a look at his scraps and wonders what to do about it. Those bits of leather, paper and cloth of a size just a little too large to be thrown away continue to accumulate in ever mounting numbers, and the day finally comes when they must be disposed of in one way or another.

Confronted by this problem in the busy holiday season I found a way to utilize my scraps in two articles, one of which proved to be a best seller in a gift sale while the other filled a long-felt need in my own studio.

From leather scraps averaging two by five inches in size and bits of heavy colored paper left from Christmas card making, I fashioned the little bookmark shown in Figure 1, and when it was slipped onto a card bearing the appropriate little verse shown in Figure 2, and placed in a holiday box of the proper size, it became the ideal "small gift."

*Figure 3*
*"Art Glass" lamp shade made from the colored scraps of envelope paper*

To make the bookmark cut a cardboard pattern in the dagger shape illustrated and, using a sharp penknife or shirt cutter's knife, cut as many pieces of leather as you wish bookmarks. You will find that this shape is at once interesting, easy to cut and of a size that lends itself well to the precious little leather scraps that are usually "not quite big enough."

Make a paper pattern of the design and the pointed slit which slips over the book page and trace it onto the leather with graphite paper. With a steel straight edge and a sharp knife, carefully cut out the units shown in black in Figure 1, being sure that the knife does not slip and cut the remaining straps.

Using the cardboard pattern cut a piece from the heavy colored paper and also one from a lining leather scrap. If the leather is to be colored it should be done at this stage of the process before the parts of the bookmark are combined, both because it would be difficult to dye the leather without getting the pigment on the paper showing through the cut-out portion and because the fickleness of leather dyes makes it advisable to delay combining them with other colors until after they have been applied.

Any coloring process that is ordinarily used on leather may be employed in decorating the bookmark, or it may be left in the natural shade. The paper in the bookmark may be of any harmonizing color, but must be brilliant. I found that the Christmas reds and greens which the holiday cards had contributed to the scrap box were very effective when used with the natural colored leather.

Coat the back of the cut-out leather piece with glue, making sure the straps in the design are thoroughly covered, but that the glue on them is not so thick that it will ooze out when the paper is applied. Stick the cut-out leather to the heavy paper piece so that the glazed side of the paper shows through the pattern, and glue the lining leather to the other side of the paper.

When the glue has set cut the slit, taking the

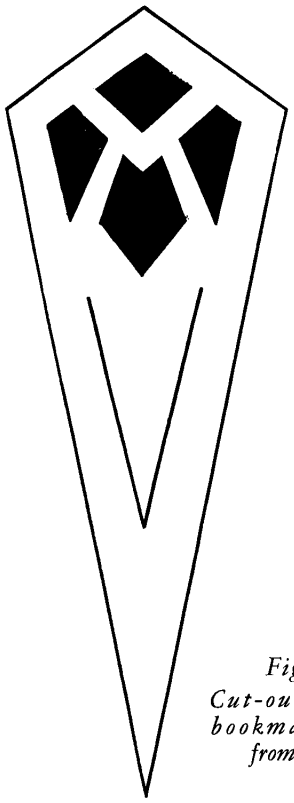


*Figure 1*
*Cut-out leather bookmark made from scraps*

greatest care to avoid mutilating the point, running into the design or producing ragged edges. The slit must be clean cut and clear through leather, paper and lining leather. Polish the bookmark, back and front, and it is ready to be boxed.

The other "scrap-user" is the lamp shade pictured in Figure 3. For some time I had been needing a large shade and I had even gone so far as to purchase a frame, but somehow the ordinary ways of decorating lamp shades did not seem to suit the particular situation. Imagine my joy, then, upon finding that the very small scraps of colored paper remaining from envelope cutting could be combined with common wrapping paper to produce just the shade I had been needing.

To make a shade like the one illustrated you will need only a large six-sided frame, some wrapping paper that is reasonably smooth, colored paper scraps of a stock that is not too heavy, library paste and a mixture consisting of one part each of linseed oil and turpentine.

Using the frame as a guide, cut three pieces of wrapping paper of a shape to fit alternate sides, making each piece three fourths of an inch larger than the frame section on all four sides. A frame which curves as the one pictured is all right, but one which curves inward either on the uprights or cross pieces cannot be used.

Now cut enough three-quarter inch squares from the colored paper to cover the three wrapping paper sections, as illustrated in Figure 4. On mine I used three colors — red, green and blue — there being twice as many red squares as either green or blue. Any harmonizing colors may be used if the one which reflects light most clearly and beautifully is allowed to predominate.

Cutting and applying so many small bits of paper is not the task it appears to be if an absolutely accurate square pattern is cut from cardboard and used in the cutting of the paper squares. When the squares are accurate they can be arranged on the wrapping paper without any guide lines simply by setting the row of light ones across the top of the section and building the others around them. It is a good idea to leave the squares along the edges untrimmed (paste them lightly on the inner corners only) until the sections are on the frame, as they then can be trimmed more evenly.

To apply the decorated paper section, slit it in to a depth of three fourths of an inch on all four sides, as shown in Figure 4, lay it face down on the work table and paste the slit edges around the uprights and onto the back of the wrapping paper itself, pasting only a few tabs at a time and making sure they are quite firmly stuck before going to the next group.

When the three alternate sections of the frame are covered with the square-decorated paper, cut three solid sections, as shown in Figure 5, from paper similar to either of the two colors used in the smaller number on the squared sections. That is, if your color scheme is like mine, with red predomi-

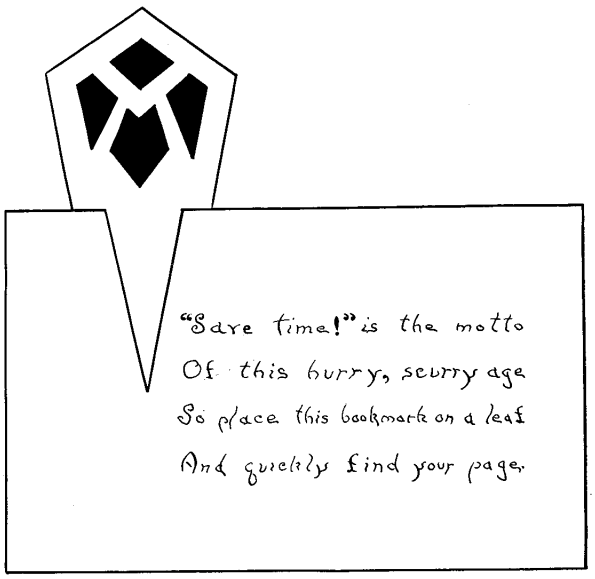



Fig. 2

*Bookmark attached to card bearing verse and ready to be boxed for gift. A plain rather than a decorated card was used for the verse to avoid detracting from the bookmark itself*

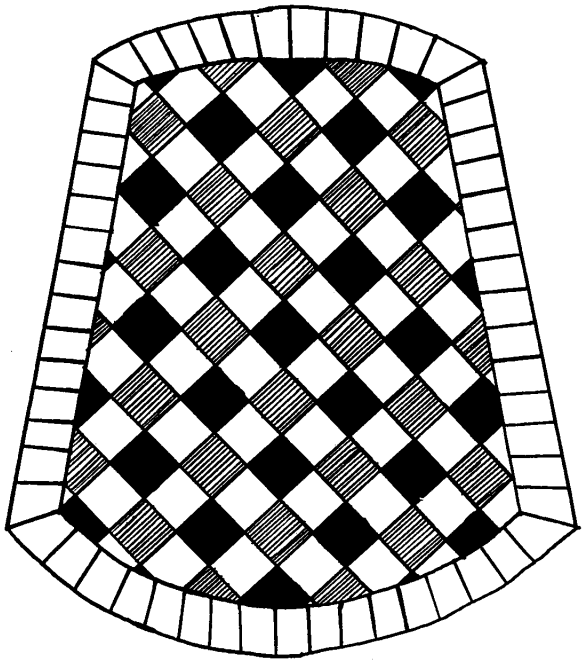


Fig. 4

□ = Red ▒ = Green ■ = Blue

*Square section of lamp shade with slit marginal extension for applying to frame*

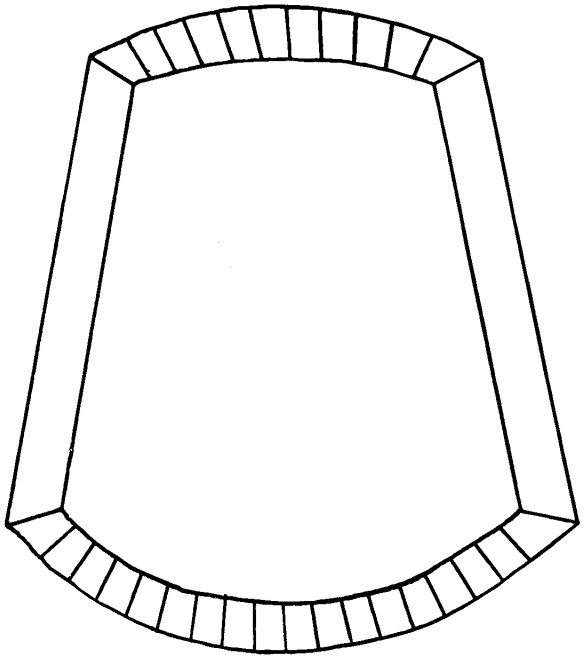


Fig. 5

*Solid section of lamp with marginal extension slit at top and bottom and left in one piece on the sides*

nating in the squared sections, the solid-colored sections must be either green or blue. I used green, and it proved very effective.

The solid-colored sections are a little more difficult to apply than the others, but the job can be done quite neatly if the worker is careful. Slit the three-fourths inch edge as shown in Figure 5 and, placing the frame face down on the table, place the section to be applied on the inside. Remember to work from the outside with the squared sections and from the inside with the solid ones. When the paper is in place, slip the tabs at the top and bottom under the rods of the frame one at a time, and keep the vertical unslit edges on the inside. The section is now firmly in place and can be pasted easily. Stick the uncut edges to the backs of the adjoining sections first; then paste the tabs over the rods at top and bottom as you did with the squared sections.

When the shade has been coated inside and out with the oil mixture it has a translucence that makes it look like stained glass when the light is shining through it. For this reason no finish of any kind is used around the edges or inside, the tailored simplicity of the plain edge and the quaint charm of the alternate colored and brown sections on the inside setting off the art-glass effect so that a lamp shade at once lovely and individual is the result.

# A School of Tapestry Weaving in New York

THE founding of a school of tapestry in New York is a very fortunate and desirable thing for Americans, as it will aid in a national expression in handicraft.

The school being one which teaches all the age-old techniques of tapestry and applies them to modern artistic expression is particularly suited to this "new" country and this new age. Americans are not bound to past traditions and have new things to say in art, to preserve in tapestry.

The director of the school, Geza G. Foldes is a Hungarian artist weaver who founded the Royal Vienna Tapestry Factory and who has restored Gobelins in museums and palaces of central Europe.

Mr. Foldes founded his first school in 1918 at Ujpest in his native Hungary. When it was well established and running smoothly, he was called to Bratislavia by the new Czecho-Slovakian government to create and carry out an enduring symbol of the economic freedom of the new state. The tapestry was completed in five months and now hangs in ministry of industry in Bratislavia. This was in 1920. From there his reputation spread to Vienna where he was invited to take part in a state-sponsored competition. He was fortunate enough to be responsible for the winning tapestry, and so was commissioned to found the Royal Vienna Tapestry Factory in the royal palace. There he trained fifty craftsmen in the various tapestry techniques.

After firmly establishing and directing the institution, above mentioned, Mr. Foldes then turned his energies to a private atelier in Vienna which he conducted until 1926. He left Vienna to work for the museums and palaces throughout Germany.

After completing this task in Germany, he worked in Paris and Madrid during 1930. Then he came to the United States where he founded his school of tapestry weaving, the first of its kind in this country, in the Greenwich House which is affiliated with Columbia University in New York, during the summer of 1931. His sincere desire to initiate a movement which would lead to a worth-while native expression led him to introduce and teach this authentic and noble craft to a class of fifty-five students without tuition. The success of this class encouraged him to pursue this course further in new quarters at the Grand Central Palace, New York, where he has established his present school.

*Fragment of a cartoon for a tapestry five and a half feet high by eight feet wide. Subject: Modern Music. Mr. Geza Gilbert Foldes, director of the school of Art Weaving in Grand Central Palace, is seen discussing details of the execution with his assistant*

In Europe the study of tapestry comprises twelve different techniques. All of these are interesting and valuable to acquire and are part of the education of every weaver of tapestry. For the training of adults in America who look forward to being professional tapestry weavers or teachers as well as amateurs in the art, Mr. Foldes has prepared an intensive course of the four most important techniques. These are taught in graded sequence. In some respects they include features of other techniques not included in the course whenever they serve as a better preparation for the technique which follows.

The first technique presented to the novice is the oldest, the most primitive. It is Greek Sumak. It is carried out on a simple wooden frame which the student threads with a coarse warp of cotton

or wool a given number to the inch. The design is drawn on squared paper and mounted on cardboard. This the weaver follows line for line, counting the number of squares for each change of color. This is a very simple technique to acquire and is suitable for the carrying out of designs of large and smaller areas more abstract in character.

The Swedish technique is the next to be taken up. It is worked on a similar frame but with a finer warp. It produces a very sturdy and yet fine-looking ribbed textile. The design is traced on the warp and each motive is worked separately on the wrong side. Any form can be brought out except the fine detail and shading of figure work.

The Khilim technique is the next to be studied. The one which Mr. Foldes teaches in this course is modified to embody features which provide the best practice and preparation for the French which follows. In this modified Khilim a device is used for changing the shed. Interlocking is still adhered to.

In the French, the final technique, the goal of the weaver, there is no interlocking. By this time the work is perfectly even, and where the openings occur they are sewn up by hand afterwards. The design is traced on the warp and is carried out on the wrong side. This technique is the quintessence of the weaver's art. The finest pictures and shadings of the portraits of the old school may be executed to the last detail with great freedom in this technique.

Tapestry weaving has always been an art of expression and pictorial depiction, reaching an acme of development in many parts of the world. All of us are familiar with European tapestry, but few of us realize that variations of the tapestry weave were used in countries like Peru, Greece, and China for their grandest artistic expression in the field of textiles. The art of tapestry towers above other branches of the textile art, as it allows for untrammeled design play with the simplest of equipment. Also its technique is so flexible that any type of design is adaptable to it, whether it be the simple geometrics as found in Pre-Inca Peruvian dress bands or the gorgeous figure panoply of a Gothic religious hanging. Now that a modern style is in emergence, the art of tapestry weaving will play an important rôle.

*A section of a class at work on tapestries in the School of Art Weaving at the Grand Central Palace, New York. The director, Mr. Geza Gilbert Foldes, is seen helping a student select the wools. On the wall a fragment of a large cartoon for a tapestry for a modern music room is visible*

To develop tapestry weaving in this country, teachers are needed, and Mr. Foldes has unusual talents for pioneering in this field. His thorough training in various branches of tapestry and design enables him to give the student training from the ground up. In conducting the school, Mr. Foldes has in mind to train teachers who can convey the art to others as well as instil the groundings of tapestry weaving in students who will weave for themselves or for the art market.

# Book Reviews

HOMESPUN HANDICRAFTS — *Ella Shannon Bowles.* (Published by Lippincott Company.) Price, $3.00.

THOSE who have enjoyed Mrs. Bowles's "About Antiques" will hail with delight her latest book, "Homespun Handicrafts." She has undoubtedly won a considerable number of converts to a love and appreciation of the days and ways of our ancestors. Through her eyes these by-gone years come again to life and we are given a glimpse of the beauty, not alone of the crafts of times past, but of the necessity and the means by which such beauty was accomplished. "Homespun Handicrafts" deals with the pioneer crafts. Readers of the HANDICRAFTER who have taken pleasure in Mrs. Bowles's articles on Basket Making and Home Rug Making, will be glad to find these articles with others in book form.

## *Book Reviews*

THE SHUTTLECRAFT RECIPE BOOK — 25 Recipes fully illustrated and binder with index pages. Price $2.50 (orders can be sent to the Handicrafter for this book).

THE weaver has always felt a need for what is aptly called a recipe; adequate enough in text and illustration for a craftsman to carry out a specific project whether it be a set of draperies, a linen luncheon set, or a wool rug. Books on weaving that have heretofore appeared were not specific on these points — they covered the mechanics of weaving thoroughly and dilated on drafts and textures but did not delve into actual woven projects.

To overcome this, to tell the weaver how to set up the design, what warp to use, what color combination, and how to finish the piece — that is a part of the task Mrs. Atwater set herself to. In preparing the recipes she had the aid of her Guild members and this group of 25 recipes is but a forerunner of additional ones that will appear later. It is a valuable contribution to the weaving library and as it broadens in its scope, it should be of immense aid to weavers. Through it they can keep in touch with new texture developments and get a fund of ideas for their own work.

NOTE: The Handicrafter will fill orders for this first instalment of the Recipe Book — the price is $2.50.

COPING SAW WORK — *Ben W. Johnson.* Manual Arts Press, Peoria, Ill. Price, 40 cents.

THIS pamphlet gives an exhaustive résumé of coping saw work as a craft project for children in grade schools, and the craft is suitable for children in camps or in the home. Coping saw work enables the child to fashion toys, animals, and doll house furniture with ease. The tools needed are few and cheap wood is used. This pamphlet is very thorough and contains working diagrams and design illustrations.

TAPESTRY WEAVING: ITS HISTORY AND TECHNIQUE

*(Continued from page 24)*

The stretching bar C must fit exactly into the slots, one of which is shown at the top of the inside view of the side post $B^2$, and the long bolts F, F, with wing-knuts connecting the bar D and the stretching bar A together, must be very strong. The bolt, screw-worm and matrix of the wing-knut must be perfectly fitted one to the other so that the stretching bar can be moved very gradually for tightening or loosening the warp.

The bracket for the headle-rod is fixed by a small bolt and wing-knut to the side post of the loom, and can be moved higher as the work proceeds, extra holes being provided in the post for that purpose.

The cross-bar C is fixed very firmly between the posts and held there by means of wedges, as shown in the drawing.

EDITOR'S NOTE. — Figure 6 was the cover illustration in the December, 1931, HANDICRAFTER.



RUMFORD PRESS
CONCORD, N. H.

# THE KIRCHER LOOM

## is a frame with a specially designed reed attachment for creating the shed, and it takes long lengths of warp

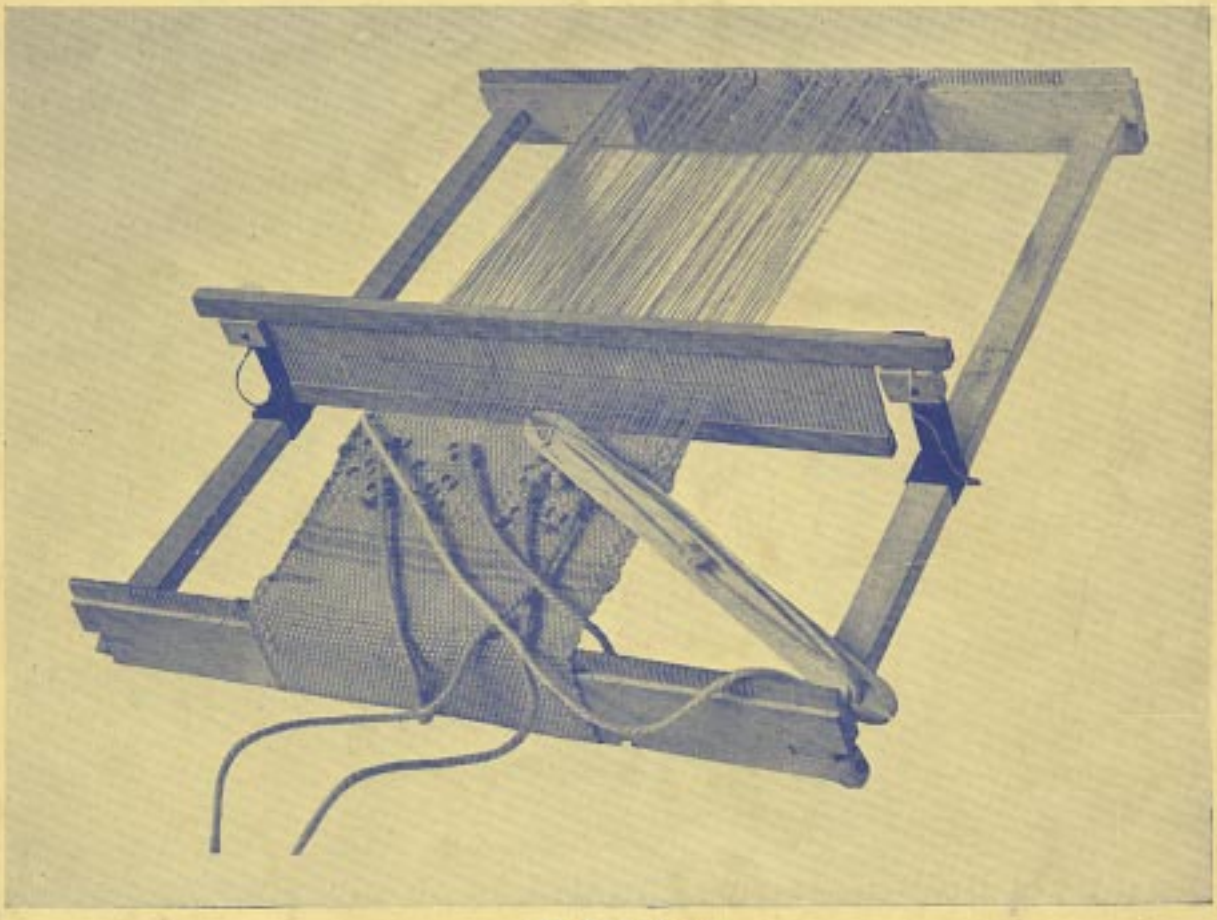
THE KIRCHER LOOM can be worked when it is rested against a table or a desk; to create the shed it is only necessary to raise and lower the reed bar, which also acts as a serviceable beater.

The Kircher loom is suitable for the classroom, occupational therapy department, home, and child's playroom. The weaver can use it for any type of two-shed weaving like tapestry, laid-in weaves, Swedish weaves, and plain stripe work.

The loom comes in three sizes, and is supplied in knock-down form. With each loom we supply a shuttle and an instruction manual which gives all necessary information on putting the loom together, warping it, and the mechanics of weaving. This loom takes eight warp threads to the inch.

Prices for the KIRCHER LOOMS are as follows (shipping charges are extra):

**No. A, 14 inches in width..... $3.75**



*The Kircher loom*

**No. B, 20 inches in width..... $5.25**
**No. C, 28 inches in width..... 7.00**

On single orders for one dozen looms or more, there is a discount of 15 per cent from list prices.

*Special rates to dealers and weaving teachers — write for details.*

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OF INTEREST TO ALL OWNERS OF

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Saves all the tedious work of warping.

Makes "threading in" very much easier and quicker.

No "cross" to lose.

Simplifies the "threading in" of narrow patterns. Simply put on the beam as many spools as are required for the desired width.

Cuts down the number of "run bys" and saves warp.

Provides easy means of checking the "threading in" process with the pattern draft.

Warp is wound so perfectly on spool that a uniform tension and alignment of each thread is maintained the full length of warp.

Spools are interchangeable on all Structo Artcraft Looms.

(Patent Applied For)

Illustration above shows 10 spools on the beam all ready to place in Structo Artcraft 20-inch Loom.

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Each individual spool perfectly wound with 60 warp ends. Warp purchased on these spools at a cost no greater than for beams wound in the old way.

### STEEL BEAM

This unit consisting of beam, ratchet, and crank, is all that is required to equip any No. 600 or No. 420 Structo Artcraft Loom for using the Ready-Warped spools, at small cost.

Steel beam for No. 600 Loom has capacity of ten spools.

Steel beam for No. 420 Loom has capacity of seven spools.

Special steel beam for No. 240 Loom (not illustrated). Capacity four spools.

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