TABLET WEAVING

By MABEL W. PEACH

With an Introduction by H. H. Peach

DRYAD HANDICRAFTS

42 ST. NICHOLAS STREET, LEICESTER

INTRODUCTION.

TABLET weaving, apart from being one of the oldest of the weaving trafts, has much to recommend it for the amateur and as a school craft. It can be carried out with the minimum of apparatus and gives an endless variety of pattern that can only be achieved otherwise by the most highly complicated machinery, no other form of braid weaving giving such opportunities. The braids made can be used for belts, dress decoration, or anything requiring strong straps. In Burma and India, for instance, tablet woven braids are used for tying up the sacred books and have quotations from their scriptures worked on them. Examples of these can be seen at the India Office Library and the British Museum. In eastern countries tablet weaving is used for making various forms of harness for horses, camels, etc., also sword belts and armour fastenings.

In America, tablet weaving has been developed very largely owing to its value for Occupational Therapy, especially in nerve cases, where interest and concentration are essential. It is so simple to teach and the whole apparatus and braids can be carried about in the pocket, hooked on to a buttonhole and the back of a chair, and thus carried on at any odd moment. At a school in Paris, it was used as a method for teaching the children (five or six years old) to count as well as to weave.

Since the Dryad Works published "Tablet Weaving: An Old Peasant Craft," by H. Pralle in 1920, which was the first book in the English language on this method, the interest in the subject has brought together a considerable amount of information on its widespread use and its antiquity. During the excavations at Oseberg in Norway of a tumulus, a Viking ship was found which had been used as a burying place of a lady of high rank, probably a queen, who died about the middle of the ninth century. The lady and her servant were laid in a special burial chamber in the

ship and supplied with the most complete equipment for future life yet known in northern paganism. Among these things were a set of tablets and threads for tablet weaving. These are described in a publication issued by Professor Brogger, of the Christiania University Museum (see illustration, p. 16).

Sir William Flinders Petrie has found numerous pieces of tablet woven braid at Qua El Kebir, etc., belonging to the sixth century A.D.*. Pieces are also exhibited in the Musée Guimet, Paris, belonging to the same period and

found at Antinoe.

The writer has seen examples of this method of weaving from Serbia, Greece, Sweden, Russia, Persia, Bagdad, India, Burma and Java.

Several Indian examples can be seen as edges to shawls in the Indian museum, South Kensington, generally woven

with gold and silver threads introduced.

A number of small books have been published on the method suggesting different types of loom, and Messrs. A. H. Lee and Sons of Birkenhead have applied the method to a small foot-power machine and produced some very

pleasant braids for upholstery work.

In the introduction to "Tablet Weaving," by H. Pralle, mention was made of Messrs. Gennep and Jéquier's book, "Le Tissage aux Cartons et son utilisation décorative dans l'Egypte ancienne," which was written to prove that the beautiful Rameses belt in the Liverpool museum was made by tablet weaving. It was originally claimed by Mr. Thorold D. Lee † that the belt was woven on a loom, and this was finally proved to be correct, by Mrs. G. M. Crowfoot and H. Ling Roth, I though they have not proved that tablet weaving was unknown to the Egyptians, and the

^{*} See "Ancient Egypt," December, 1924. "A Tablet Woven Band," G. M.

Crowfoot.

† See "Annals of Archæology and Anthropology," Vol. V., Nos. 1 and 2.

"The Linen Girdle of Rameses III."

‡ See "Annals of Archæology and Anthropology," University of Liverpool,

Vol. X., Nos. 1 and 2, 1923.

chevron patterned belts on so many of the statues of

Egyptian kings do suggest tablet woven braids.

That tablet weaving was known to the Romans is referred to by Margarethe Lehmann-Filhés* who gives illustrations of bone tablets, and the writer was shown some small triangular bone tablets of the Roman period by Dr. Muller, of Grenoble, which and been found at Vienne about 1922.

Tablets are often made in the East from dry, roughlytanned leathers. Some Burmese tablets in the Dryad collection are leather lacquered to make them run smoothly (see page 13). Algerian ones are of old playing cards with

holes burnt through them.

The beaters used in the Balkans are of iron (see illustration, page 15), in Burma of heavy wood, very much heavier than what is used in the schools here. At the Dryad Works there is a small collection of tablet weaving apparatus, braids, etc., which can always be seen on application.

BIBLIOGRAPHY

The following are a few books and articles on the subject and additions to the list will be welcomed:—

"Uber Brettchenweberei." Margarethe Lehmann-Filhés. Dietrich Reimer (Ernst Vohsen), Berlin, 1901.

"Bulletin van het Koloniaal Museum te Haarlem. No. 29." "Het Weven in Nederlandsch-Indie." J. A. Loèber, Jr. H. de Bussy, Amsterdam, 1903. (See Tablet Weaving, page 61.)

"The Linen Girdle of Rameses III." Thorold D. Lee, B.Sc. From the Annals of Archæology and Anthro-

pology, Vol. V., Nos. 1 and 2.

"Note on the Linen Girdle of Rameses III." By C. F. Lehmann-Haupt. From the Annals of Archæology and Anthropology, Vol. VII., Nos. 1 and 2, 1914.

^{*} See "Uber Brettchenweberei." Berlin, 1901.

"Fataburen." Kulturhistorisk Tidskrift. Haft 4, 1915. Nordiska Museet. Dr. Gustaf Upmark, Museets Styres-

man. (Page 214, article by Maria Collin.)

"Le Tissage aux Cartons et son utilisation décorative dans l'Egypte Ancienne." Par A. van Gennep et G. Jéquier. 1916. (A copy of this book is in the library at the Victoria and Albert Museum, South Kensington.)

"Tablet Weaving," An Old Peasant Craft. H. Pralle, Hamburg, 1920. Published by Dryad Works, Leicester.

"Weben über Brettchen." H. Pralle. Pfeil-Verlag,

Hamburg. 1921.

"Annals of Archæology and Anthropology." University of Liverpool. Vol. X., Nos. 1-2, 1923. Issued by the Institute of Archaeology. Edited by T. E. Peet.

"Weaving with Small Appliances." Book II. "Tablet Weaving." Luther Hooper. Sir I. Pitman and Sons,

Ltd., London, 1923.
"Ancient Egypt." December, 1924. Part IV., Editor, Prof. Sir Flinders Petrie. (See page 98, "A Tablet Woven Band." G. M. Crowfoot.)

"Vobachs Handarbeitsbücher." No. 16. "Brettchenweberei." K. Sturm. W. Vobach and Co., Leipzig.

"Abhandlungen des Hamburgischen Kolonialinstituts." Band XXVII. "Die Mazigh-Völker Ethnographischen Notizen aus Sud-Tunesien." Dr. F. Stuhlmann. Hamburg 1914.

"Et Tekstilfund i Myr fra nomersk jern alder Stavangers

Museums a arsheften. 1921-24." Hans Dedekam. "Om Brickband." Vivi Sylwan. Ur Forvannen 1921. The following list of names for tablet weaving in dif-

ferent parts of the world may be of interest:—

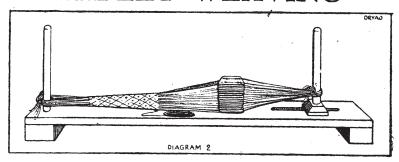
German—Brettchen Norwegian—Spjellvaev.

Old Scandinavian— Weberei.

French—Tissage à cartons. Llada spjoldum. Swedish—Brickband. Icelandic—Spjeld-vaefudur.

Dutch—Kaartweverij. Macassar—Giling-Kera.

TABLET WEAVING



A number of books have been published lately on Tablet Weaving. This booklet is not an attempt to replace them, but aims to explain simply and practically the elements of this method of weaving. Having mastered these the student may proceed to the more advanced works.

Tablet weaving is, as its name suggests, a method of weaving with small tablets or cards in place of the usual heddles and treadles of the familiar handloom weaving. The warp threads pass through holes in the corners of these tablets forming a shed through which the weft thread passes. By using various colours in some definite order, in threading the tablets and turning these in a regular sequence, many variations of pattern can be made.

Tablet weaving differs from most other methods of weaving as all colour is in the warp. The weft thread is not seen except a very little at the edges of the weaving.

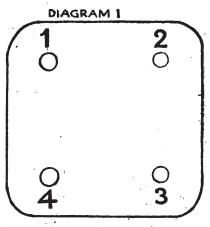
It is most suited to narrow bands, and trimmings, making a very strong braid suitable for braces, tennis belts, ties, etc.

MATERIALS AND APPLIANCES REQUIRED. THREADS.

Strong, fine threads such as cotton, silk, etc., are most suitable. The weft thread should be a little finer than the warp thread. Wool can be used if it is tightly spun but is bulky if many tablets are used.

TABLETS.

The tablets or cards most generally used are 2" square, rounded at the corners with a hole at each corner. They can be of any thin, smooth material, but it must be strong and not easily bent. A beginner will find thick card very suitable, and may make them herself, but the ideal material is celluloid.



For convenience in threading when various colours are used and to mark the direction in which the tablets are turned, the holes must be numbered as shown in illustration. The width of the braid depends on the number of these tablets used. This will be fully understood later.

SHUTTLE.

This is required for holding the weft thread in passing it through the warp. A tatting shuttle is useful for the purpose.

BEATER.

For this purpose a bone paper cutter is quite satisfactory, but any similar object will do. In Eastern countries where this weaving is practised heavy beaters are used.

LOOM OR SOME SUBSTITUTE to which the ends of the warp threads can be secured.

Only a very simple apparatus is necessary. An illustration of a simple loom is shown in diagram 2 on page 6. The ends of the warp threads are fastened to the two upright posts which are fixed to a board. At one end of the board a slot is made and the post is fitted underneath with a small thumbscrew, so that it can be adjusted as required to

tighten the warp. Perhaps, however, one of the most convenient and usual positions for weaving is to fasten the warp threads to a ring attached to the weaver's belt while the other ends are tied to any hook on a wall or table as the weaver may contrive, so that the braid is directly in front and the tablets are turned towards and away from the weaver.

Ping-pong posts attached to a long table are also useful, and in this case the ends of the warp are fastened to the posts in the same way as with the loom.

Where the loom or ping-pong posts are used the weaver may prefer to work with the braid in a sideways position as shown in the illustration of the loom, so that the tablets are turned to the left and right instead of towards and away from the weaver.

For convenience throughout the book, the turning of the tablets will be referred to as towards the right or left as the case may be.

THREADING AND TURNING THE TABLETS.

A little explanation and practice in the threading and turning of the tablets would be useful before starting to weave an actual braid.

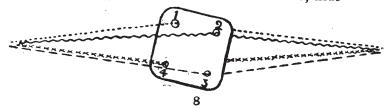
Thread a tablet as follows:—

A blue thread through hole No. 1; shown on diagram by a dotted line.

A yellow thread through hole No. 2; shown on diagram by a wavy line.

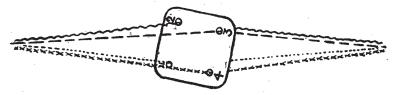
A green thread through hole No. 3; shown on diagram by a broken line.

A red thread through hole No. 4; shown on diagram by a line of crosses, and secure them at both ends, thus



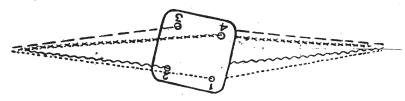
and pass a weft thread through the shed, separating the threads 1 and 2 from threads 3 and 4.

Now turn the tablet one quarter-turn to the left, bringing No. 1 hole in the place of No. 4 hole, and No. 2 hole in the place of No. 1 hole, etc., thus



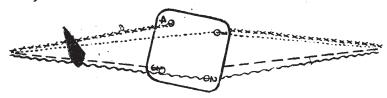
and pass a weft thread through the shed, separating threads Nos. 2 and 3 from threads Nos. 1 and 4.

Turn the tablet a second time one quarter-turn to the left thus,



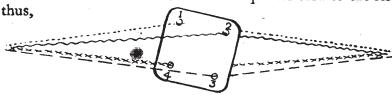
and pass a weft thread through the shed, separating threads Nos. 3 and 4 from threads Nos. 2 and 1.

Turn the tablet a third time one quarter-turn to the left thus,



and pass a weft thread through the shed, separating threads Nos. 4 and 1 from Nos. 3 and 2.

Turn the tablet a fourth time one quarter-turn to the left



and the tablet is in its first position once more, and all the threads have been fastened into the band by the weft threads. Therefore, in all tablet weaving, each time the position of the holes is altered, i.e., after each quarter-turn, the weft thread must pass through the warp, making one row of weaving, so that actually each hole in the tablet is responsible for one row of weaving. It will be seen that just as this one tablet has been turned, so twelve, twenty or more tablets, placed side by side, may also be turned, and with a little practice quite readily together.

To WEAVE.

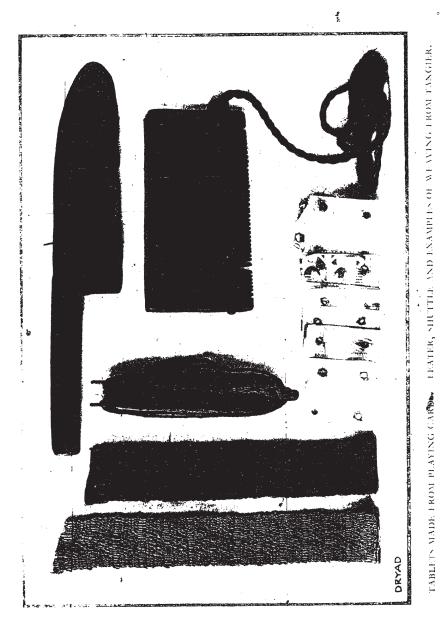
The best way to learn to weave is to begin with some simple pattern with a few tablets only, and here is given as a first example what is often called the two-way weaving, the tablets being threaded in such a way that a band can be woven with one colour on one side and another colour on the other. Other variations are also possible with this same threading which will be explained later.

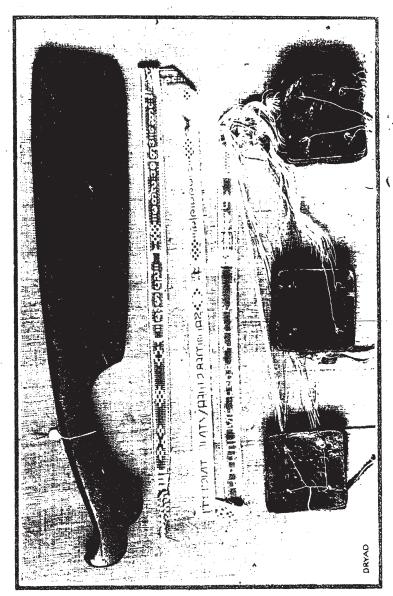
Thread twelve tablets with two threads of the same colour (say black) through holes 1 and 2, and with two threads of the same colour (say white) through holes 3 and 4, placing the tablets one on top of the other with the numbers in the position shown in diagram 3, ready for fixing the ends of the warp strands to the loom or belt of the weaver. In the latter case they will be in an upright position as shown in diagram 4.

The small portion of weaving on both diagrams is only included to show at which end the weaving is started.

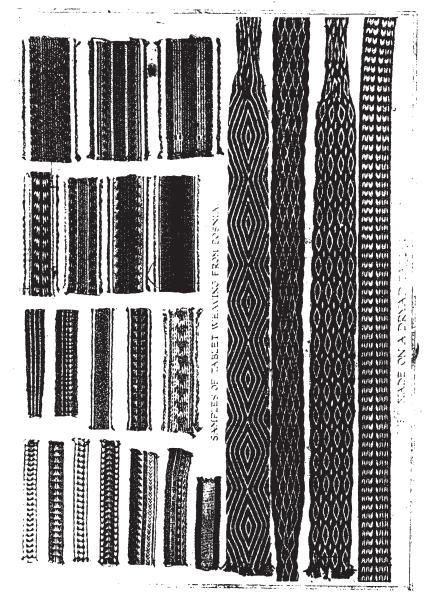


CAMEL GIRTH FROM BIKANIR.
PARTLY WOVEN BY TABLET WEAVING.

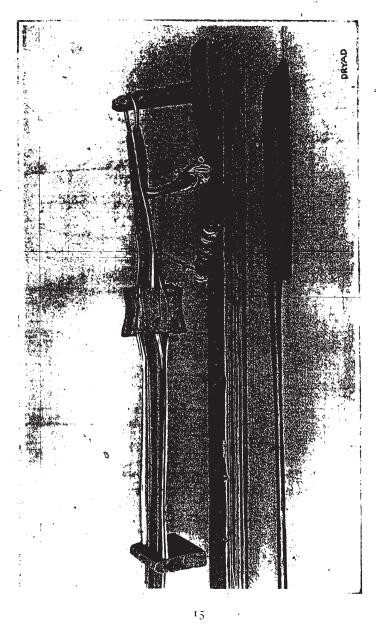




BENID, INCHRID HAHHIR TABILLS, AND WOODIN BLAILE, IRON BLEATA.

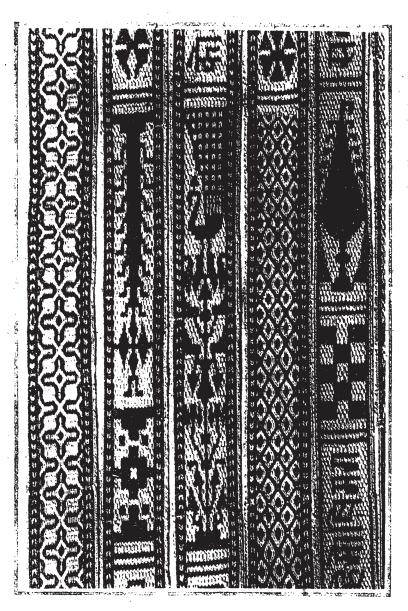


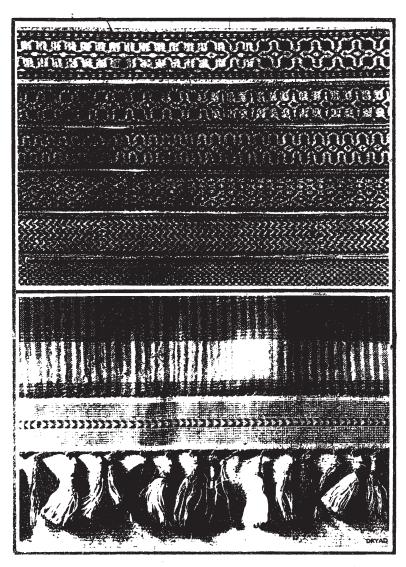
TABLET WEAVING FROM BONNIA, AND THE MADE ON DREAD FOOM,





10

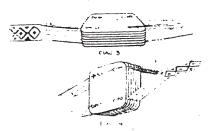




ROSE CARREL VEAVING FROM INDIA. ROSE EVELT BRAID ON SHAWL LINDIA).

Secure the ends ready for weaving.

If a loom or ping-pong posts are used, they are tied tightly round the posts so that the warp threads are quite taut, and



if a ring attached to a belt as already mentioned is used, then they must be tied securely to the ring at one end and to a hook at the other.

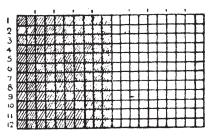
Pass the weft thread through the shed. Now turn the tablets first two

quarter-turns to the left, and then two quarter-turns to the right, passing the weft thread through the shed after each quarter-turn, and beating the rows of weaving close together with the beater.

If this is continued, the woven band will be black on one side and white on the other.

If you wish the colours to exchange places, when the tablets are in their original position turn them two quarter-turns to the right at first, and then two to the left.

If the weaving is examined, it will be seen that of all the four threads passing through the four holes of each tablet only one is visible on the surface of the finished braid. Therefore, each tablet is only responsible for one warp, thread in the width of the



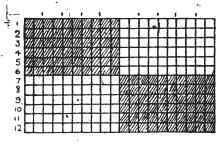
PATTERN I.

braid, so that if twelve tablets were used, the braid would have 12 warp threads showing. This is important in planning patterns as will be seen later.

As the weaving progresses, it will gradually get out of reach, so that the woven piece must occasionally be rolled up and fastened securely.

2. With the tablets in the original position, see diagram 3, leave the first six tablets untouched, but before beginning to weave, turn the remaining six tablets two quarter-turns to the right, thus reversing the position of the black and white threads. Then weaving as before with two quarter-turns to the left and two quarter-turns to the right, will produce a band half black and half white on both sides.

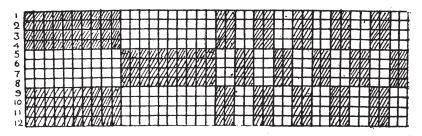
The colour can be reversed as in pattern 1.



PATTERN 2.

3. With the tablets in the original position, diagram 3 before weaving, turn the four middle tablets two quarter-turns to the right, thus reversing the position of the black and white threads in these four tablets. Then weaving as before with two

quarter-turns to the left and two quarter-turns to the right, will produce a woven band with a black stripe at each edge and a white stripe in the middle on one side, and white stripes at each edge and a black stripe in the middle on the other side.



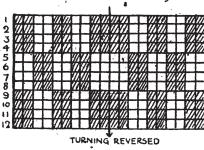
PATTERN 3.

To reverse the stripes when the tablets are in the original position, turn the tablets two quarter-turns to the right first, and then two to the left.

If turning is continued in one direction, a chequer

pattern is produced as on previous page.

When the threads have become too tightly twisted through being turned in one direction only, reverse the turning. In order to avoid an interruption of the pattern which will occur if the tablets are immediately reversed (these having been turned in one direction and now occupying their original position), turn one more quarter-turn in whichever direction the tablets have been turned and then reverse. See illustration 3a.



PATTERN 3A.

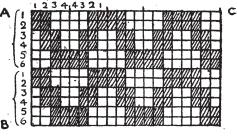
4. Let all the tablets occupy their original position. Leaving tablets 1 and 2 as they are, turn tablets 3 and 4 one... quarter-turn to the right, and tablets 5 and 6 two quarter-turns to the right. Repeat from beginning for the other six tablets. leaving 7 and 8 in their

original position like tablets 1 and 2, and turning tablets 9 and 10 and tablets 11 and 12 like tablets 3 and 4 and 5 and 6 respectively. Then four quarter-turns to the left and four quarter-turns to the right produce an undulating pattern of black lines on one side.

On the reverse side the undulating line

will be white.

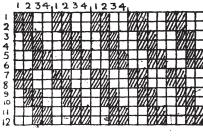
In all the foregoing illustrations, it will be seen that each square in the width of the braid, that is from A to B, see 4, represents one tablet,



and that twelve tablets have been used; also that each square in the length of the braid, that is from A to.C, represents one of the four holes in the tablets.

This shows the beginner how tablet weaving patterns can be planned on squared paper, and how easily the tablets can be threaded to produce a given pattern when this is understood.

4a. In the last pattern, if the turning of the tablets had not been reversed after four quarter-turns to the left, but

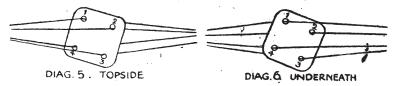


PATTERN 4A.

had been continued to the left only, the following pattern would result, see 4a.

So far, only one method of threading the tablets has been given, see diagram 5, in which the tablet was threaded through the holes from the top

side of the tablet. They can, however, be threaded from the underneath of the tablet as shown in diagram 6.



Then by threading the tablets alternately one from the top side and one from the underneath side, it will produce a plait-like or chain effect in the weaving.

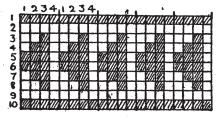
Two tablets threaded thus at the edge of a braid in the same colour make a good border, and as reversing the cards at short intervals makes a bad edge, some weavers prefer to turn the border tablets separately from the pattern, as long as possible in one direction.

In all patterns in which the lower half of the pattern is a repeat of the above half in reverse order, as in the following patterns illustrated, the tablets for the top half of the braid should be threaded from the top side, and the tablets for the

bottom half from the underneath, as in this way the pattern lines will be found to meet better in the centre.

In all these threadings a different pattern results on the reverse side of the braid.

5. Take the following pattern. Ten tablets are re-



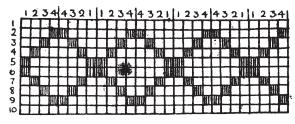
PATTERN 5.

quired for this pattern, and they are threaded as below, starting with No. 10 tablet so that when the threading is finished, No. 1 tablet is on top and No. 10 the bottom of the pile of tablets, not forgetting, as already mentioned, to

place them so that No. 1 hole is in the position shown in diagram 3.

| | | Holes. | | |
|----------|---------|---------|--------|--------|
| Tablets. | No. 1. | No. 2. | No. 3. | No. 4. |
| ı | . black | black | black | black |
| 2 | . white | white | white | white |
| 3 | . white | white | black | white |
| 4 | . white | black | black | white |
| 5 | . black | black ' | black | white |
| 6 | . black | black | black | white |
| 7 | . white | black | black | white |
| 8 | . white | white | black | white |
| 9 | . white | white | white | white |
| 10 , | . black | black | black | black |

In this pattern the tablets are turned four quarter-turns to the left five times in succession. This will cause he warp threads to become tightly twisted at the opposite end and these may either be untwisted and tied up again, or the tablets may be turned an equal number of times to the right. Where the reverse turn is made, however, the following reverse pattern will result.

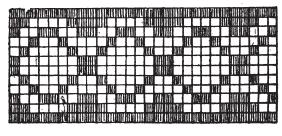


6. Another simple pattern is given here.

Thread as follows, beginning again with No. 10 tablet.

PATTERN 6.

| | | | Holes. | | |
|----------|---|--------|--------|--------|--------|
| Tablets. | | No. 1. | No. 2. | No. 3. | No. 4. |
| I . | | white | white- | white | white |
| 2 | | white | white | white | black |
| 3 | | white | white | black | white |
| 4 | | white | black | white | white |
| 5 | | black | white | white | white |
| 6 | ٠ | black | white | white | white |
| 7 | | white | black | white | white |
| 8 | | white | white | black | white |
| 9 | | white | white | white | black |
| 10 | | white | white | white | white |



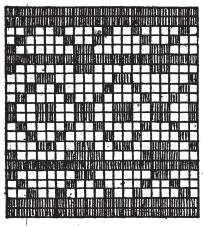
PATTERN GA.

Turn four quarter - turns to the left and four quarterturns to the right.

This pattern may be still further developed with the addi-

tion of more tablets on either side as shown in diagrams 6A and 6B.

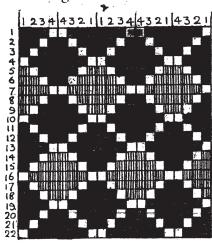
In all the foregoing patterns for simplicity only two colours have been suggested. It will readily be seen what



- a variety of patterns several different colours will produce.
- 7. The following pattern is effective in three colours, and is threaded as follows, beginning from No. 12 tablet, so that No. 1 tablet is on top of the pile of tablets when they are threaded.

PATTERN 6B. 1234 43211234 PATTERN 7. Holes.12 Thread Tablets. No. 1. No. 2. No. 3. No. 4. from brown brown brown brown I vellow above. brown green brown brown yellow green brown green brown brown yellow brown yellow . brown green yellow brown green brown yellow Thread brown green brown brown yellow from brown green below green brown yellow brown 9 yellow 10 brown green brown yellow brown green brown 11 brown brown brown, brown 12

Turn four quarter-turns to the left and four quarter turns to the right.



PATTERN 8.

8. This pattern for a broader braid is taken from the French book on Tablet Weaving (Le Tissage aux Cartons) by A. von Gennep and G. Jéquier.

It is threaded as follows, beginning with No. 22 tablet, so that No. 1 tablet is on top of the pile of tablets when the threading is completed.

| | * 1 * * * | LICIT O. | | | |
|----------|-----------|----------|--------|--------|--------|
| | ٠ | | Holes. | • | |
| Tablets. | . 3 | No. 1. | No. 2. | Nó. 3. | No. 4. |
| I | • • • | black | black | black | white |
| 2 | • • • | black | black | white | black |
| 3 | | black | white | black | black |
| R | | | | | |
| 4 | • • • | white | black | black | black |
| 5 | ••• | red ' | white | black | black |
| 6 | ` | red | red | white | black |
| R | | | | | |
| 7 | • • • | red | red | red | white |
| 8 | • • • | red | red | white | black |
| 9 " | | red | white | black | black |
| R | | | | | |
| 10 | • • • | white | black | black | black |
| II | • • • | black | white | black | black |
| I 2 | • • • | black | black | white | black |
| | | | | | |

| R | | | | | |
|--------|--------|-----------|--------------|-------------|---------|
| 13 | • • • | black | black | black | white |
| 14 | ••• | black | black | white | red . |
| 15 | • • • | black | white | re d | red |
| R | | | | | |
| 16 | ••• | white | red | red | red |
| 17 | ••• | black | white | red | red |
| 18 | | black | black | white | red |
| R | | * * | | | |
| 19 | ••• | black | black | black | white |
| 20 | ••• | black | black | white | black |
| 21 | ••• | black | white | black | black |
| 22 | | white | black | black | black |
| Thursd | م ماله | Come Come | . 4-1-1-4- C | | . 1 . 7 |

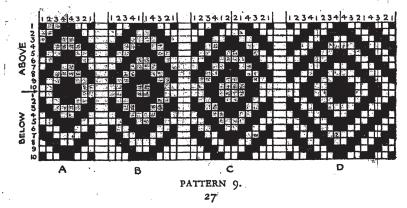
Thread the first four tablets from above and the next three from below, continuing threading three from above and three from below throughout. Turn four quarterturns to the left and four quarter-turns to the right.

9. The following illustration shows the variation in pattern that can be got by varying the number of times the tablets are turned in one direction.

A, B, C, and D are all threaded alike, but A is turned four quarter-turns to the left and four to the right.

B. is turned five turns to the left and five to the right. C is turned six turns to the left and six to the right.

D is turned eight turns to the left and eight to the right.



When weaving try to follow the pattern, and do not depend entirely on counting. It is easy to get confused at first and tablet weaving is not easy to undo. If a mistake has been made, cut the weft thread and untwist each tablet to the correct position.

Arrange the tablets so that all the holes 1, 2, 3 and 4 are above one another. If one tablet then gets out of place,

the mistake is easily corrected.

There are many ways of finishing the braids, according to the use that is to be made of them. One of the best ways is to leave a fringe, knotting the threads loosely to prevent unravelling, or braiding a number of threads and then knotting them.

These first steps to Tablet Weaving will no doubt inspire the learner to pursue the craft still further. An infinite variety of pattern and method are possible that only practice

and experience can discover.

All necessary materials and appliances for Tablet Weaving can be obtained from the Dryad Handicrafts, including the loom as illustrated, ping-pong posts, tablets, beaters, shuttles, and special mercerised cotton in a good range of colours. Materials and looms for other kinds of hand weaving are supplied, also materials for numerous other crafts. Particulars of these will be found in their Handicraft Catalogue, which can be obtained post free 2d. from the

DRYAD HANDICRAFTS, 42, ST. NICHOLAS STREET, LEICESTER