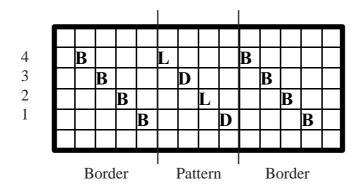
# ANDEAN WEAVING

# ON A 4-SHAFT LOOM

WITH DIRECT TIE-UP



**ELWYN KENN** 



Repeat for required number of threads for borders and pattern.

#### WARPING

Wind single warps for the borders. For the pattern area two threads are wound together, 1 Dark and 1 Light.

The pattern area is the number of squares on the graph - each with a dark and a light thread.

Warp with a cross and tie to the back roller beam.

For a 4-shaft loom thread shafts 1 and 3 with DARK threads and shafts 2 and 4 with LIGHT threads. The reed is not used.

#### **WEAVING**

For this and all the following patterns the weft shuttle is wound with the same yarn and the same colour used for the outside edge warps of the borders.

Weave several rows of dark and light horizontal bars using Shed 1 (1.3 Dark) the Shed 2 (2,4 Light). Beat each row firmly.

If the next row of the pattern has Dark floats, end with a Dark bar. If working Light floats then end with a Light bar.

#### TO BEGIN THE PATTERN

#### TO WORK A PATTERN WITH DARK FLOATS

Open Shed 1 (1.3 Dark) and pass the weft through. Using a pick-up stick, pick up the Dark threads according to the pattern. Open Shed 2 (2,4 Light) and push the pick-up stick containing the picked up Dark threads back toward the heddles. Pass the weft through the new shed (Light threads and the picked up Dark threads). Repeat.

#### TO WORK A PATTERN WITH LIGHT FLOATS

Open Shed 2 (2,4 Light) and pass the weft through. Pick up the Light threads according to the pattern. Open Shed 1 (1,3 Dark) and push the pick-up stick containing the picked up Light threads back toward the heddles. Pass the weft through the new shed (Dark threads and the picked up Light threads). Repeat.

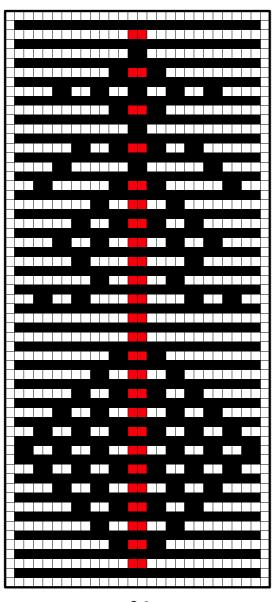
#### WARPING

DARK FLOAT PATTERN

For the borders wind 4 single warps in Black, 4 in Red and then 4 in Black for each border.

The graph for the pattern area is 26 squares. Wind together 12 Black and White, 2 Black and Red and then 12 Black and White warps.

Work following the directions on page 1.



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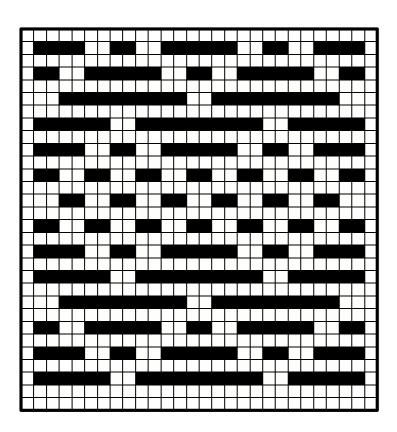
Adapted from a pattern by Mary M Atwater



#### WARPING

LIGHT FLOAT PATTERN

For the borders wind 8 single warps in Navy for each border. The graph for the pattern area is 26 squares. Wind together 26 Navy and 26 White warps. Repeat the pattern graph. Work following the directions on page 1.



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#### WARPING

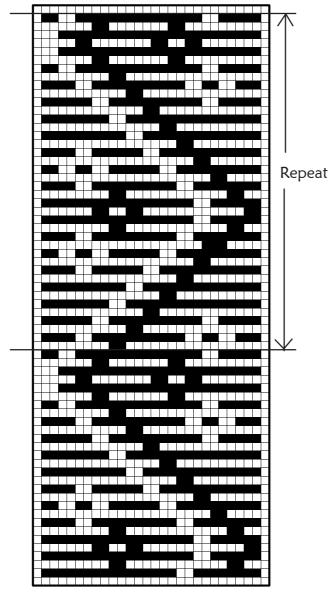
DARK AND LIGHT FLOAT PATTERN

For the borders wind 8 single warps in Navy for each border.

The graph for the pattern area is 26 squares.

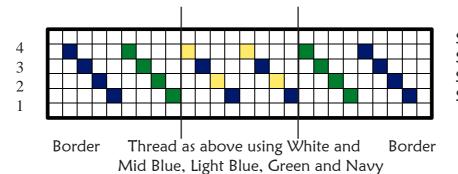
Wind together 26 Navy and 26 White warps.

Work following the directions on page 1 picking up either dark or light warps on every alternate row according to the pattern.





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Shed 1 (DARK) Shafts 1,3 - L to R Shed 2 (LIGHT) Shafts 2,4 - R to L

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#### WARPING

For the border wind 4 single warps in Navy and 4 single warps in Green.

The pattern area is the number of squares on the graph (22) - each with a white and a coloured thread.

The pattern area has two warps wound together. Wind the following colours together with White.

4 warps Navy
3 warps Mid Blue.
3 warps Light Blue.
2 warps Green.
3 warps Light Blue.
3 warps Mid Blue.
4 warps Navy.

Wind 4 single warps in Green and 4 single warps in Navy.

Warp with a cross and tie to the back roller beam.

Thread the heddles with these 60 threads.

#### WEAVING

Open Shed 1 (Dark) and pass the weft from LEFT to RIGHT.

To begin the pattern open Shed 2 (LIGHT). Pass the weft from RIGHT to LEFT.

<u>1st Pattern row</u> Using a pick-up stick select the pattern warps from Shed 2 (LIGHT) according to the pattern.

Open Shed 1 (DARK) and push the pick-up stick containing the picked up pattern warps from Shed 2 back toward the heddles.

Pass the weft through the new shed (Shed 1 and the picked up pattern warps from Shed 2) from LEFT to RIGHT.

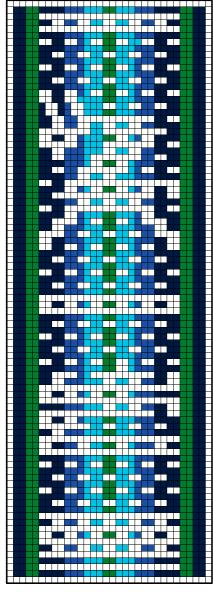
<u>2nd Pattern row</u> Using a pick-up stick select the pattern warps from Shed 1 (DARK) according to the pattern.

Open Shed 2 (LIGHT) and push the pick-up stick containing the picked up pattern warps from Shed 1 back toward the heddles.

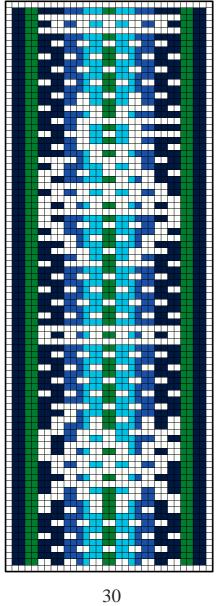
Pass the weft through the new shed (Shed 2 and the picked up pattern warps from Shed 1) from RIGHT to LEFT.

Continue to weave according to the graph, working 1st and 2nd pattern rows as required.

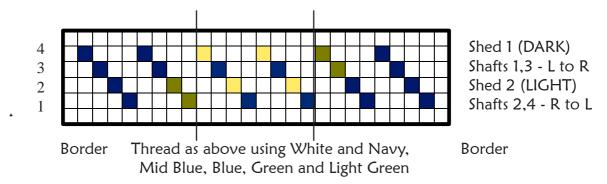
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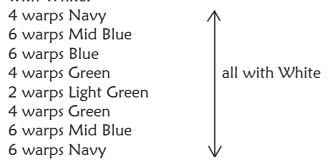


#### WARPING

For the borders wind 6 single warps in Navy and 2 single warps in Green.

The pattern area is the number of squares on the graph (42) - each with a white and a coloured thread.

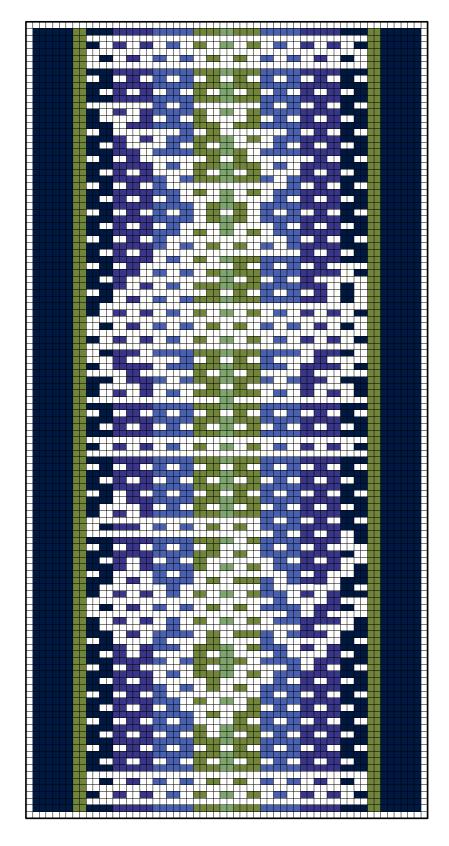
The pattern area has two warps wound together. Wind the following colours together with White.



Warp with a cross and tie to the back roller beam.

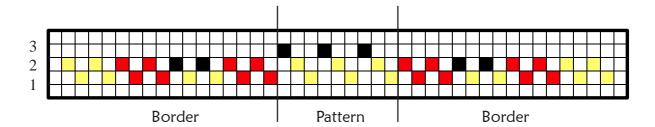
Thread the heddles with these threads.

Work following the directions on page 5.





### SUPPLEMENTARY WARP ON A 4-SHAFT LOOM



#### WARPING

For the borders wind 4 single warps in White, 4 in Red then 1 White and 1 Black warp 4 times (8 threads) finishing the borders with 4 Red warps.

The pattern area is the number of squares on the graph (38), each with 2 ground warps and one suplementary warp. The pattern area has 3 warps wound together.

The ground weave uses Shaft 1 and Shaft 2 alternately. Shaft 3 is used for the supplementary pattern warps.

#### TO WEAVE A LIGHT BACKGROUND WITH A DARK PATTERN

#### Light Ground

Begin the weaving on the left-hand side of the braid.

Open Shaft 1, pass the weft from left to right, then open Shaft 2 and pass the weft from right to left.

#### Dark Pattern Bands

Single Row.

Shaft 3 raises the Dark warps. Beat these warps, then raise Shaft 1 (1 and 3 together). Pass the weft through the shed. Continue using Shaft 2 for the next light row.

Shaft 2 is used with Shaft 3 when the dark band is to be worked from the right. Double Row.

Open Shaft 3, beat, then open Shaft 1 (1 and 3 together). Pass the weft, then open Shaft 2 (Shaft 2 and 3 together) and pass the weft. If the band is to be worked from the right then first open Shaft 2 and then Shaft 1.

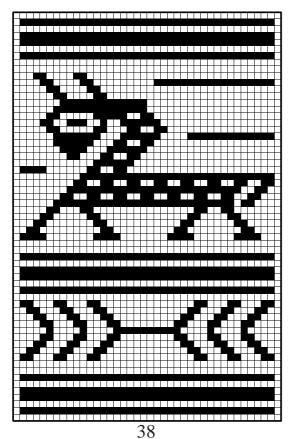
#### TO BEGIN THE PATTERN

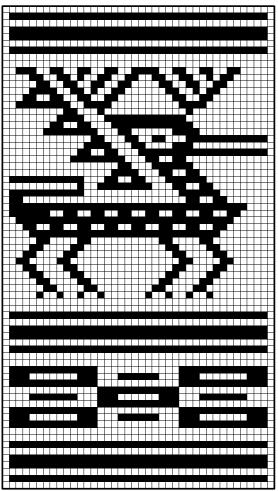
Open Shaft 3 raising the dark pattern warps. Using a pick-up stick pick 1st Pattern row up the warps required for the pattern, then close Shaft 3 and open Shaft 1. Push the pickup stick back toward the heddles. Pass the weft through the ground warp and the picked up pattern warps from left to right. Remove the stick and beat well.

Open Shaft 3 and pick up the pattern warps for the next row. Close 2nd Pattern row Shaft 3. Open Shaft 2 and push the stick back toward the heddles. Pass the weft through the ground warp and the picked up pattern warps from right to left. Remove the stick and beat well.

Shaft 1 and Shaft 2 are worked alternately for the ground weave. The pattern is worked using the 1st or 2nd pattern row as required for the ground weave.

## SUPPLEMENTARY WARP ON A 4-SHAFT LOOM

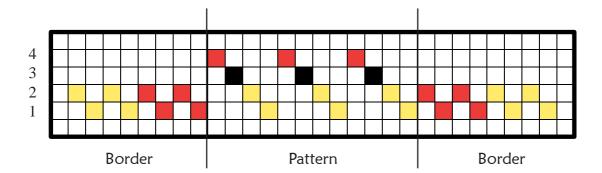






Adapted from a pattern by Mary M  $\,$  Atwater

## 2 COLOUR SUPPLEMENTARY WARP



#### WARPING

For the borders wind 4 single warps in White and 4 single warps in Tan.

The pattern area is the number of squares on the graph (20), each with 2 ground warps and 2 supplementary warps. The pattern area has 4 warps wound together.

The ground weave uses Shaft 1 and Shaft 2 alternately. Shaft 3 is used for the first supplementary warp and Shaft 4 is used for the second supplementary warp.

#### WEAVING THE GROUND

Begin the weaving on the left-hand side of the braid.

Open Shaft 1, pass the weft from left to right, then open Shaft 2 and pass the weft from right to left.

#### TO BEGIN THE PATTERN USING 2 SUPPLEMENTARY COLOURS

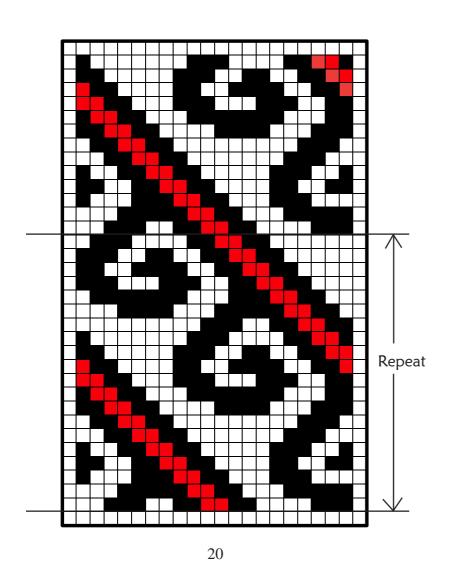
Open the shaft for the first colour (Shaft 3). Using a pick-up stick pick up the the first coloured warps required for the pattern.

Open the shaft with the 2nd colour (Shaft 4) and pick up the second coloured warps required with a second pick-up stick.

Close the sheds and open the next ground row (either Shaft 1 or Shaft 2). Push the pickup sticks back toward the heddles. Pass the weft through the ground warps and the picked up pattern warps.

Remove the sticks and beat well. Repeat.

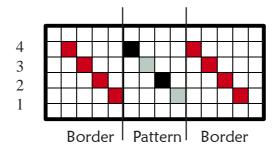
## 2 COLOUR SUPPLEMENTARY WARP





Adapted from a pattern by Cason and Cahlander (The Art of Bolivian Highland Weaving 1976)

### WARP SUBSTITUTION ON A 4-SHAFT LOOM



Shed 1 - 1,3 Left to Right

Shed 2 - 2,4 Right to Left

Repeat threading the heddles for borders and the pattern as required

#### WARPING

When following the chart for warp substitution the number of pattern squares on the graph is multiplied by 4. This pattern has 24 squares.

For the border wind 4 single warps in Black, 4 in Red then 4 in Black.

For the pattern area wind together 20 double warps in Black and White, 8 double warps in Red and 20 double warps in Black and White.

For the second border wind 4 Black, 4 Red and 4 Black single warps.

Warp with a cross and tie to the back roller beam.

Thread the heddles with these threads.

You can choose to have either a Dark or a Light background when working from the pattern chart.

The pattern is charted using the diamond grid.

#### WEAVING

#### TO WORK DARK OR LIGHT ROWS BETWEEN PATTERNS.

Begin from the left side of the band.

1st row Open Shed 1,3. Place a stick under the border warps.

Open Shaft 2 (DARK) or Shaft 1 (LIGHT) and place a stick under the pattern warps (not the border warps).

Open Shed 1,3 again and push both sticks back toward the heddles, lift the sticks and pass the weft from LEFT to RIGHT through the new shed and beat.

<u>2nd row</u> Open Shed 2,4. Place a stick under the border warps.

Open Shaft 4 (DARK) or Shaft 3 (LIGHT) and place a stick under the pattern warps (not the border warps) .

Open Shed 2,4 again and push both sticks back toward the heddles, lift the sticks and pass the weft from RIGHT to LEFT through the new shed and beat.

### WARP SUBSTITUTION ON A 4-SHAFT LOOM

#### TO WORK THE PATTERN WITH A LIGHT BACKGOUND AND A DARK PATTERN.

RIGHT POINT ROW - Rows on the diamond grid which point to the right (rows 1,3 ---).

<u>1st row</u> Open Shed 1,3. Place a stick under the border threads.

Open Shaft 2 (DARK). Select the Dark pattern warps from the chart and place a stick under (not the border warps).

Open Shaft 1 (LIGHT). Select the Light background warps from the chart and place a stick under (not the border warps).

Push the 3 sticks back toward the heddles, lift the sticks and pass the weft from LEFT to RIGHT throught the new shed.

Clear any sticky warps to make certain the shed is clear.

LEFT POINT ROW - Alternate rows on the diamond grid (rows 2,4 ---).

<u>2nd row</u> Open Shed 2,4. Place a stick under the border warps.

Open Shaft 4 (DARK). Select the Dark pattern warps from the chart and place a stick under (not the border warps).

Open Shaft 3 (LIGHT). Select the Light background warps from the chart and place a stick under (not the border warps).

Push the 3 sticks back toward the heddles, lift the sticks and pass the weft from RIGHT to LEFT through the new shed.

#### TO WORK THE PATTERN WITH A DARK BACKGROUND AND A LIGHT PATTERN

#### RIGHT POINT ROW

<u>Ist row</u> Open Shed 1,3 and place a stick under the border warps.

Open Shaft 1. Select LIGHT pattern warps and place a stick under.

Open Shaft 2. Select DARK background warps and place a stick under.

Push the 3 sticks back toward the heddles and pass the weft from LEFT to RIGHT.

#### LEFT POINT ROW

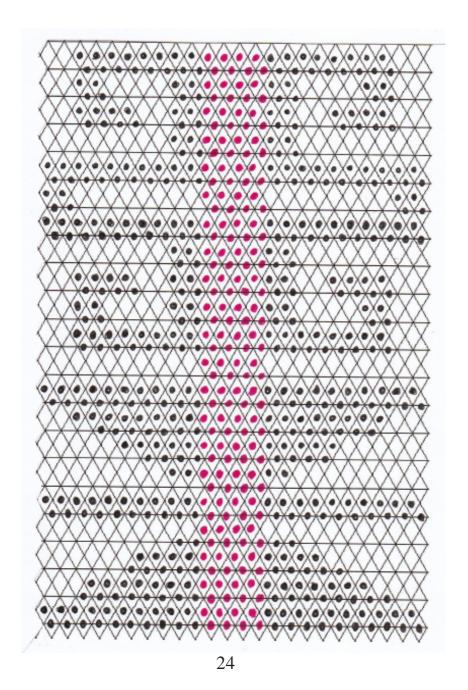
<u>2nd row</u> Open Shed 2,4 and place a stick under the border warps.

Open Shaft 3. Select LIGHT pattern warps and place a stick under.

Open Shaft 4. Select DARK background warps and place a stick under.

Push the 3 sticks back toward the heddles and pass the weft from RIGHT to LEFT.

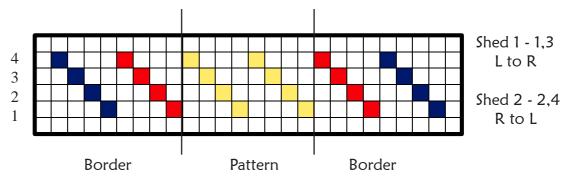
## WARP SUBSTITUTION ON A 4-SHAFT LOOM





Adapted from a Mapuche man's belt from Chile

### SUPPLEMENTARY WEFT ON A 4-SHAFT LOOM



#### WARPING

White warp faced plain weave forms the pattern and supplementary weft floats cover the background. The reverse side of the band is white as the supplementary weft is hidden inside the shed when not used.

2 wefts are used - a ground weft and a supplementary weft. The ground weft shuttle is wound with the same yarn and the same colour used for the outside edge warps of the borders. A thicker yarn or a double strand is used for the supplementary weft.

The pattern is charted using the diamond grid.

When following the chart for supplementary weft the number of pattern squares on the graph is multiplied by 2. This pattern has 14 pattern squares.

For the border wind 4 Blue then 4 Red single warps.

For the pattern area wind 28 single warps in White.

For the second border wind 4 Red then 4 Blue single warps.

Warp with a cross and tie to the back roller beam.

Thread the heddles with these threads.

#### WEAVING

Weave a few rows of plain weave ending with Shed 2 (2,4). On this last row insert the supplementary weft from Left to Right ready to weave the pattern. Pass the ground weft through the shed from Right to Left. Both wefts are passed through the warps in the same shed but from the opposite direction.

#### **RIGHT POINT ROW**

Open Shed 1 (1,3). Using a pick-up stick pick up the border warps and the white warps according to the pattern. Lift the stick and pass the supplementary weft through these warps from Right to Left. Open Shed 1 again and pass the ground weft from Left to Right.

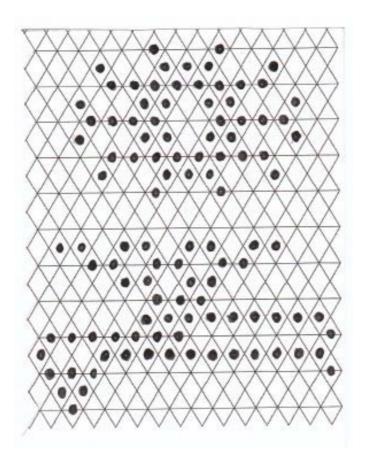
#### LEFT POINT ROW

Open Shed 2 (2,4) and pick up the border warps and the white warps according to the pattern. Pass the supplementary weft through from Left to right. Open Shed 2 again and pass the ground weft from Right to Left.

Beat well on each row to ensure that the supplementary wefts cover the ground weave.

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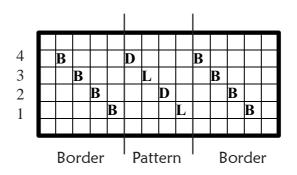
## SUPPLEMENTARY WEFT ON A 4-SHAFT LOOM





Adapted from patterns by Marijke van Epen (The Unknown Tablet Weaving 2002)

### ONE-WEFT DOUBLE WEAVE ON A 4-SHAFT LOOM



Repeat for the required number of warps for the borders and the pattern

#### WARPING

When following a chart for one-weft double weave the number of pattern squares on the graph, plus the borders, is multiplied by 4.

For the border wind 4 double warps (8 threads) in Navy and 4 double warps (8 threads) in Green. This pattern has 20 pattern squares.

For the pattern area wind together 40 double warps (40 Navy and 40 White).

For the second border wind 4 double warps in Green and 4 double warps in Navy.

When the heddles are threaded the LIGHT warps are to the RIGHT of the DARK warps.

Warp with a cross and tie to the back roller beam.

The heddles are threaded as the diagram. The reed is not used.

The pattern is charted using the diamond grid.

#### WEAVING

#### TO WORK LIGHT ROWS BETWEEN PATTERNS

#### RIGHT POINT ROW

1st row UPPER LAYER

SHAFT 1. Raises the light warps and the border warps of the upper layer.

Pass the weft from RIGHT TO LEFT through the upper shed.

2nd row LOWER LAYER

SHAFTS 1,3,4. Pass the weft from LEFT TO RIGHT through the lower shed.

Open Shed (3,4) and beat.

#### LEFT POINT ROW

3rd row UPPER LAYER

SHAFT 3. Raises the light warps and the border warps of the upper layer.

Pass the weft from RIGHT TO LEFT through the upper shed.

4th row LOWER LAYER

SHAFTS 1,2,3. Pass the weft from LEFT TO RIGHT through the lower shed.

Open Shed (1,2) and beat.

Repeat.

#### TO WORK DARK ROWS BETWEEN PATTERNS

UPPER LAYER RIGHT POINT ROW. SHAFT 2. Weft from RIGHT to LEFT.

LOWER LAYER SHAFTS 2,3,4. Weft from LEFT TO RIGHT. Open Shed (3,4) and beat.

UPPER LAYER LEFT POINT ROW. SHAFT 4. Weft from RIGHT TO LEFT.

LOWER LAYER SHAFTS 1,2,4. Weft from LEFT TO RIGHT. Open Shed (1,2) and beat.

## ONE-WEFT DOUBLE WEAVE ON A 4-SHAFT LOOM

#### PICKING UP THE PATTERN

#### LIGHT BACKGROUND, DARK PATTERN

#### RIGHT POINT ROW

#### 1st row UPPER LAYER

SHAFT 1. Place a hand under the light warps and the border warps. Keep holding these warps and press SHAFT 2. Close SHAFT 1.

It is easy to count the background warps and transfer them to your right hand. Pick up the dark pattern warps according to the pattern, remembering to drop the correct light threads. LIGHT threads are to the RIGHT of the DARK threads. Place the beater in this shed and leave. Pass the weft from RIGHT TO LEFT through the upper shed.

#### 2nd row LOWER LAYER

Open Shed (3,4). Push the beater back toward the heddles. This raises 3 sheds leaving the lower layer to drop easily underneath. Pass the weft from LEFT TO RIGHT through the lower shed. Take out the beater and place in the Shed (3,4) and beat.

#### LEFT POINT ROW

#### UPPER LAYER 3rd row

SHAFT 3. Place a hand under the light warps and the border warps. Keep holding these warps and press SHAFT 4. Close SHAFT 3 and pick up dark pattern warps as before. Place the beater in this shed and leave.

Pass the weft from RIGHT TO LEFT through the upper shed.

#### 4th row LOWER LAYER

Open Shed (1,2). Push the beater back toward the heddles. This makes the lower layer drop easily underneath. Pass the weft from LEFT TO RIGHT through the lower shed. Take out the beater, place in Shed (1,2) and beat.

#### DARK BACKGROUND, LIGHT PATTERN

#### RIGHT POINT ROW

#### 1st row UPPER LAYER

SHAFT 2. Place a hand under the dark warps and the border warps. Keep holding these warps and press SHAFT 1. Close SHAFT 2. Pick up the light pattern warps and place the beater in the shed and leave. Pass the weft from RIGHT TO LEFT through the upper shed.

#### 2nd row LOWER LAYER

Open Shed (3,4). Push the beater back toward the heddles. This makes the lower layer drop easily underneath. Pass the weft from LEFT TO RIGHT through the lower shed. Take out the beater and place in the Shed (3,4) and beat.

#### LEFT POINT ROW

#### 3rd row UPPER LAYER

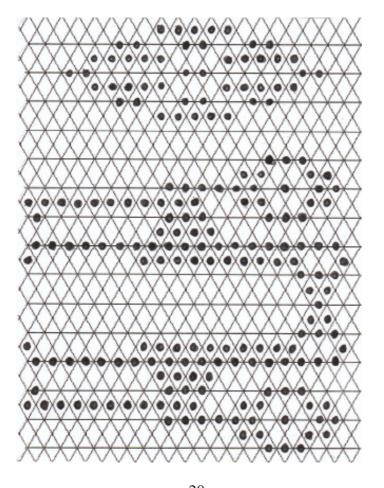
SHAFT 4. Place a hand under the dark warps and the border warps. Keep holding these warps and press SHAFT 3. Close SHAFT 4 and pick up light pattern warps as before. Place beater in this shed and leave. Pass the weft from RIGHT TO LEFT through the upper shed. © Elwyn Kenn 2012

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## ONE-WEFT DOUBLE WEAVE ON A 4-SHAFT LOOM

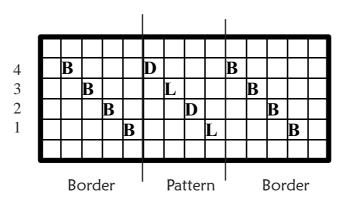
### 4th row LOWER LAYER

Open Shed (1,2). Push the beater back toward the heddles. This makes the lower layer drop easily underneath. Pass the weft from LEFT TO RIGHT through the lower shed. Take out the beater and place in Shed (1,2) and beat. Repeat these 4 rows.





### 2- WEFT DOUBLE WEAVE ON A 4-SHAFT LOOM



Repeat for the required number of warps for the borders and for the pattern

#### WARPING

When following a chart for 2-weft double weave the number of pattern squares on the graph is multiplied by 4. This pattern has 28 pattern squares.

For the borders wind 4 single warps in Black, 8 Tan, 2 Black, 4 White and 2 Black.

For the pattern area wind together 56 double warps (56 Black and 56 White).

When the heddles are threaded the LIGHT warps are to the RIGHT of the DARK warps. Warp with a cross and tie to the back roller beam.

The heddles are threaded as the diagram. The reed is not used.

The pattern is charted using the diamond grid.

#### TO WORK LIGHT OR DARK ROWS BETWEEN PATTERNS

Main weft (Border colour) - Weaves across the warps from one edge to the other and weaves the upper layer of double weave and the borders.

Secondary weft (Background colour) - Weaves the lower layer of pattern area.

#### RIGHT POINT ROW

1st row UPPER LAYER

SHAFTS 1,3 Hold the border warps of this shed on a stick.

SHAFT 1 (2). Place a stick under the light (dark) warps of the upper layer. Push both sticks back toward the heddles. Lift both sticks and pass the MAIN weft from RIGHT TO LEFT through the borders and the light (dark) warps, beat.

Remove the border stick but leave the stick under the pattern threads.

### 2nd row LOWER LAYER

SHAFTS 3,4. Place a stick under the pattern warps NOT the borders. Push both sticks back toward the heddles. Lift both sticks together and pass the SECONDARY weft from RIGHT TO LEFT through the new shed. Remove both sticks. SHAFTS 1,2,3 beat, then 1 (2) again and beat.

#### LEFT POINT ROW

3rd row UPPER LAYER

SHAFTS 2,4 Hold border warps of this shed on a stick.

SHAFT 3 (4). Place a stick under the warps of the upper layer. Push both sticks back toward the heddles. Lift both sticks and pass the MAIN weft from LEFT TO RIGHT through the borders and the light (dark) warps, beat,

Remove the border stick but leave the stick under the pattern threads.

### 2-WEFT DOUBLE WEAVE - PICKING UP THE PATTERN

#### 4th row LOWER LAYER

SHAFTS 1,2. Place a stick under the pattern warps NOT the borders. Push both sticks back toward the heddles. Lift both sticks together and pass the SECONDARY weft from LEFT TO RIGHT through the new shed. Remove both sticks. SHAFTS 1,3,4 beat, then 3 (4) again and beat. Repeat these 4 rows.

#### LIGHT BACKGROUND, DARK PATTERN.

#### RIGHT POINT ROW

#### 1st row <u>UPPER LAYER</u>

SHAFTS I, 3. Hold border warps on a stick.

SHAFT 1 Place a hand to hold light warps then press SHAFT 2. Close SHAFT 1. Pick up the dark pattern warps and the light background warps according to the graph and hold on a stick. Remember to drop the correct light threads. LIGHT threads are to the RIGHT of the DARK threads. Push both sticks back toward the heddles. Lift both sticks and pass the MAIN weft from RIGHT TO LEFT through borders and the pattern warps. Remove the border stick but leave the stick under the pattern warps.

#### 2nd row LOWER LAYER

SHAFTS 3,4. Place a stick under the pattern warps NOT the borders. Push the sticks back toward the heddles. Lift both sticks and pass the SECONDARY weft from RIGHT TO LEFT through the new shed.

Remove both sticks. SHAFTS 1,2,3 beat, then 1 again and beat.

#### LEFT POINT ROW

#### 3rd row UPPER LAYER

SHAFTS 2,4 Hold border warps on a stick.

SHAFT 3. Hold light warps then press SHAFT 4. Close SHAFT 3. Pick up the pattern warps according to the graph and hold on a stick. Push both sticks back toward the heddles. Lift both sticks and pass the MAIN weft from LEFT TO RIGHT through the borders and pattern warps.

Remove the border stick but leave the stick under the pattern warps.

#### 4th row LOWER LAYER

SHAFTS 1,2. Place a stick under the pattern warps NOT the borders. Push both sticks back toward the heddles. Lift both sticks and pass the SECONDARY weft from LEFT TO RIGHT through the new shed.

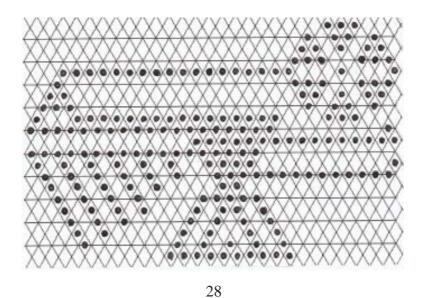
Remove both sticks. SHAFTS 1,3,4 beat, then 3 again and beat.

Repeat these 4 rows.

Tie a loose loop around all the border warps to separate them from the pattern warps. The loop must be large enough to allow the sheds to open to their full extent. This will help when picking up the border warps for each upper layer.

2- weft double weave has a dark background with a light pattern on the reverse side of the braid.

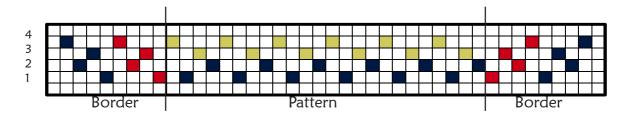
## 2-WEFT DOUBLE WEAVE ON A 4-SHAFT LOOM







### INTERMESH ON A 4-SHAFT LOOM



#### TO WORK THE PATTERN WITH A LIGHT BACKGROUND AND A DARK PATTERN

#### WARPING

For the borders wind single warps in multiples of 4 and thread as the diagram above. For the pattern area wind a LIGHT and a DARK warp together as required. As the pattern graph has 30 squares for the pattern you must wind 30 Dark and 30 Light warps. There must be the same number of double warps as the number of squares on the chart. Warp with a cross and tie to the back roller beam.

The above threading will produce a band with a LIGHT background and DARK pattern. The DARK warps are to the RIGHT of the LIGHT warps. It will have a double border. To work a pattern with a dark background and a light pattern you will need to reverse the colours when threading of the heddles changing the dark warps to light and light warps to dark. The light warps will be to the right of the dark warps.

#### TO WORK PLAIN INTERMESH

<u>SHED 1</u> - Shaft 2 and Shaft 4 (Dark warp at the right edge)-- Weft from Left to Right. <u>PATTERN SHED</u> - Shaft 3 and Shaft 4 -- Weft Right to Left.

<u>SHED 2</u> - Shaft 1 and Shaft 3 (Light warp at the right edge)-- Weft from Left to Right. Alternate the Pattern Shed with Sheds 1 and Shed 2.

#### WEAVING A PATTERN

#### Reading the pattern chart

The chart has pattern rows which alternate with two tie-down rows (Shed 1 and Shed 2). The pattern is picked up according to the chart from the pattern rows only.

The DARK warps are to the RIGHT of the LIGHT warps. When picking up the DARK pattern warps you must always drop it's LIGHT partner.

Shafts 1 and 2 raise all the DARK warps and Shafts 3 and 4 raise all the LIGHT warps.

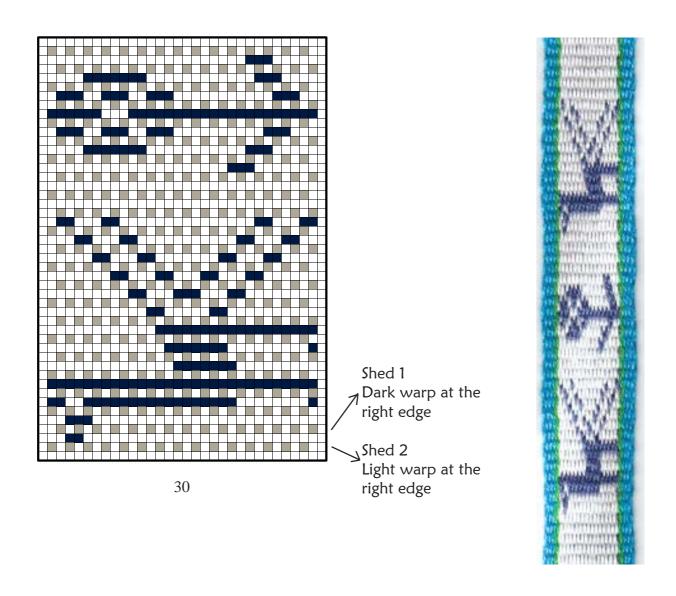
#### PICKING UP THE PATTERN

<u>SHED 1</u> - Open Shafts 2,4 (Dark warp at the right edge) -- Weft from LEFT to RIGHT.

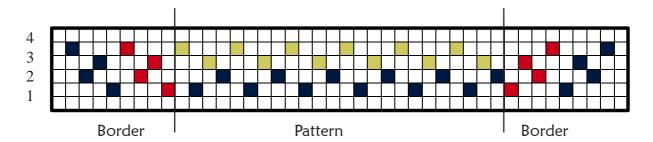
<u>PATTERN SHED</u> - Open Shafts 3,4 Place a hand under to hold the borders and the pattern warps. Close Shafts 3,4 then open Shafts 1,2. Pick up the pattern according to the chart. Weft from RIGHT to LEFT through the new shed.

<u>SHED 2</u> - Open Shafts 1,3 (Light warp at the right edge) -- Weft from LEFT TO RIGHT. 24

## INTERMESH ON A 4-SHAFT LOOM



## MODIFIED INTERMESH ON A 4-SHAFT LOOM



#### TO WORK THE PATTERN WITH A LIGHT BACKGROUND AND A DARK PATTERN

#### WARPING

For the borders wind single warps in multiples of 4 and thread as the diagram above. For the pattern area wind a LIGHT and a DARK warp together for the required number of squares on the pattern graph.

Warp with a cross and tie to the back roller beam.

The DARK warps are to the RIGHT of the LIGHT warps. When picking up the pattern warps you must always drop the complementary partner. The threading will produce a band with a LIGHT background and DARK pattern.

Working with alternate ODD and EVEN rows will produce a band with single borders. Shafts 1 and 2 raise all the DARK warps and Shafts 3 and 4 raise all the LIGHT warps.

#### TO WORK PLAIN INTERMESH BETWEEN PATTERNS

<u>SHED 1</u> - (Dark warp at the right edge). Open Shafts 1,2. Hold the border warps on a stick. Close Shafts 1,2 then open Shafts 2,4. Hold the pattern warps on a stick then push both sticks back toward the heddles. Weft from LEFT to RIGHT through the new shed. PATTERN SHED - Shafts 3,4. Weft from RIGHT to LEFT.

<u>SHED 2</u> - (Light warp at the right edge). Open Shafts 1,2. Hold the border warps on a stick. Close Shafts 1,2 then open Shafts 1,3. Hold the pattern warps on a stick then push both sticks back toward the heddles. Weft from LEFT to RIGHT through the new shed. Alternate the Pattern Shed with Sheds 1 and Shed 2.

#### PICKING UP THE PATTERN

For Modified Intermesh the pattern must be picked up on every row.

#### 1. ODD ROWS

Open Shafts 1,2 (DARK warps). Hold the border and pattern warps. Close Shafts 1,2 then open Shafts 3,4 (LIGHT warps).

Pick up the pattern according to the chart.

Weft from LEFT to RIGHT through the new shed.

#### 2. EVEN ROWS

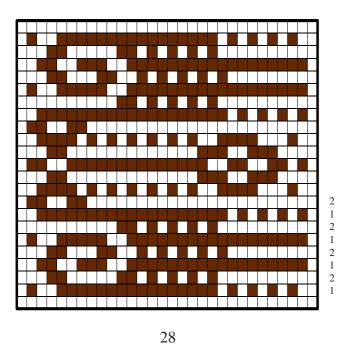
Open Shafts 3,4 (LIGHT warps). Hold the border and pattern warps. Close Shafts 3,4 then open Shafts 1,2 (DARK warps).

Pick up the pattern according to the chart.

Weft from RIGHT to LEFT through the new shed.

## MODIFIED INTERMESH ON A 4-SHAFT LOOM

### WEAVING A BAND WITH A LIGHT BACKGROUND AND DARK PATTERN





Adapted from a pattern by Cason and Cahlander (The Art of Bolivian Highland Weaving 1976)