RICH AND REGAL
I think that this name fits very well this beautiful all silk fabric, which is woven in a 7 harness Summer and Winter weave.

PLAN FOR WEAVING THIS FABRIC:
1. Repeat the border four times
2. Repeat the pattern 4 times
3. Repeat the border or plain weave area 4 times.
4. Repeat the pattern 4 times.
Continue with this sequence over and over for the width desired.

WARP: The Warp is a 4 ply smooth, spun silk from Scotland. That is where we purchased it. The color is Bisquit Beige.

WEFT: There are two threads used in the weft, one a pattern thread, and the other a binder or tabby. The binder or tabby thread is the 4 ply smooth fine spun silk, Bisquit Beige. The heavier pattern thread is a heavy, 3 ply, smooth, spun silk in natural. It is actually a 24 ply with each of the three heavier ends being 8 ends of a finer thread all twisted together.

REED USED:
A 12 dent reed was used, and it was sleyed 4 ends per dent, or 48 threads per inch.

TIE-UP DRAFT:

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DRAFTS AND DESIGNS:
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VOLUME 19, NUMBER 1, September, 1976

THREADING DRAFT:

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Border Pattern

TREADLING SEQUENCE:
Please note that in this tie-up and treadling that in the pattern weaving, you alternate step on 2 treadles at one time, and then one treadle for the next shot. Then, in the plain weave areas between patterns, you step only on one treadle at a time. Here is the sequence as we treadled it.

1. Treadle X --- 1 time, beige
2. Treadle A --- 1 time, beige
3. Treadle Y --- 1 time, beige
4. Treadle B --- 1 time, beige

Repeat this over and over a total of eight times, or until you have 32 shots. This is the plain area between patterns.

Then you treadle the pattern area.

1. Treadle 1 and X -- 1 time, natural
2. Treadle A--------- 1 time, beige
3. Treadle 1 and Y -- 1 time, natural
4. Treadle B--------- 1 time, beige
5. Treadle 2 and X -- 1 time, natural
6. Treadle A--------- 1 time, beige
7. Treadle 2 and Y -- 1 time, natural
8. Treadle B--------- 1 time, beige
9. Treadle 3 and X -- 1 time, natural
10. Treadle A-------- 1 time, beige
11. Treadle 3 and Y -- 1 time, natural
12. Treadle B-------- 1 time, beige
13. Treadle 4 and X -- 1 time, natural
14. Treadle A-------- 1 time, beige
15. Treadle 4 and Y -- 1 time, natural
16. Treadle B-------- 1 time, beige
17. Treadle 4 and X -- 1 time, natural
18. Treadle A-------- 1 time, beige
19. Treadle 4 and Y -- 1 time, natural
20. Treadle B-------- 1 time, beige
21. Treadle 3 and X -- 1 time, natural
22. Treadle A-------- 1 time, beige
23. Treadle 3 and Y -- 1 time, natural
24. Treadle B-------- 1 time, beige
25. Treadle 2 and X -- 1 time, natural
26. Treadle A-------- 1 time, beige
27. Treadle 2 and Y -- 1 time, natural
28. Treadle B-------- 1 time, beige
29. Treadle 1 and X -- 1 time, natural
30. Treadle A-------- 1 time, beige
31. Treadle 1 and Y -- 1 time, natural
32. Treadle B-------- 1 time, beige

NEXT, repeat 1 to 32 three more times, or you have 128 shots in each complete pattern repeat.

Then, start over at the beginning of the treadling again, with the X, A, Y, B treadling repeated 8 times for the plain weave areas between patterns.

COST OF THE THREADS USED:
The fine 4 ply spun silk used in the warp is available in 10 colors, and we have a free sample sheet upon request. It is $1.00 per ounce, or $16.00 per lb. It has 12,800 yards per pound, about the equivalent of a 30/2 cotton in size, and you can purchase it on 4 oz. tubes of 3200 yards for $4.00.

The heavy, natural, 3 ply spun silk is an extra nice quality spun silk. It comes on 1½ lb. cones, has 1600 yards per pound, and while it lasts, it is $9.60 per lb. We just have about 50 lbs. of this one left.

COST OF THE FABRIC:
We had a 12 yard warp, 40" wide, and we used 1 lbs. 15 oz. of the Bisquit Beige silk in the warp. Thus, the total warp cost was $21.00 or the cost per yard was $2.59 per yard.

In the weft, we used 14 oz. of the bisquit beige silk, and 6 pounds of the heavier, 3 ply, natural, spun silk. This made the total weft cost for 10-1/2 yard come to $71.60. So, the weft cost per yard was $6.82 per yard.

Thus, the total fabric cost is $9.41 per yard.

WARP COST PER YARD---------- $ 2.59
WEFT COST PER YARD---------- 6.82

Fabric cost per yard ----- $ 9.41
THE TWILL THAT JACK BUILT:

This month's sample was designed by Mr. Jack Womersley, the weaving instructor at Bradford College, Bradford, England. He was visiting our shop and giving a two week's workshop this summer and he stayed an extra two weeks, designing some samples for our two bulletins, Warp and Weft, and Drafts and Designs.

WARP:

Our warp thread was 18/2 worsted in two colors. #35 Creme Green and #12, Light Avocado.

WEFT:

The weft thread is the same 18/2 worsted as used in the warp, but we used just one color in the weft, color #36, Blue Green.

REED USED:

A 15 dent reed was used, and it was double sleyed, 2 ends per dent, or 30 threads per inch.

THREADING DRAFT:

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Sample on next page

KEY TO COLORS IN THE THREADING DRAFT:

0 - #35, Creme Green 18/2 Worsted
X - #12, Light Avocado 18/2 Worsted
This wool would make a very nice head scarf, and this would be an excellent project for a Christmas gift.

There were really no problems in the weaving of this fabric. I'd recommend a firm, medium, even double beat; once with your shed open, and change to the next shed, and then beat again.

This sample has not been washed, but I would suggest that you wash it in warm water, allow to drip dry, and then steam press with a steam iron. You should do this before you make it up into any garment.

In weaving, we lost about 3” in width, as it was 37” when it came off the loom, from the original 40” warp. You would probably then use another inch in the washing, so you would have about a 36” wide fabric. You should plan for this accordingly. The use of a temple or stretcher would probably gain you an extra inch or two in width.

It was such a delight for us to have Mr. Jack Womersley with us this summer for the workshop. Most of participated felt it was the best workshop we had ever had. The designs that he created for us before returning to England are an excellent memory of his visit.

TREADLING SEQUENCE:

There are 24 shots in each pattern repeat. Here is the treadling.

1. Treadle # 1, 2/18's Blue Green
2. Treadle # 2, 2/18's Blue Green
3. Treadle # 1, 2/18's Blue Green
4. Treadle # 2, 2/18's Blue Green
5. Treadle # 1, 2/18's Blue Green
6. Treadle # 2, 2/18's Blue Green
7. Treadle # 3, 2/18's Blue Green
8. Treadle # 4, 2/18's Blue Green
9. Treadle # 5, 2/18's Blue Green
10. Treadle # 4, 2/18's Blue Green
11. Treadle # 3, 2/18's Blue Green
12. Treadle # 4, 2/18's Blue Green
13. Treadle # 5, 2/18's Blue Green
14. Treadle # 6, 2/18's Blue Green
15. Treadle # 5, 2/18's Blue Green
16. Treadle # 6, 2/18's Blue Green
17. Treadle # 5, 2/18's Blue Green
18. Treadle # 6, 2/18's Blue Green
19. Treadle # 7, 2/18's Blue Green
20. Treadle # 8, 2/18's Blue Green
21. Treadle # 7, 2/18's Blue Green
22. Treadle # 8, 2/18's Blue Green
23. Treadle # 7, 2/18's Blue Green
24. Treadle # 8, 2/18's Blue Green

End of one complete pattern repeat. Repeat over and over as desired.
A SECOND VARIATION OF THE TWILL THAT JACK BUILT.

During our workshops, Mr. Womersley emphasized how we can get so many different variations from one set-up, and so we are showing you this month, a sample from the same warp that was used last month, the same weft, and just a different treadling is used in this sample.

WARP:
Our warp thread was 18/2 worsted in two colors, # 35 Creme Green, and # 12, Light Avocado.

WEFT:
The weft thread is also 2/18's worsted in color # 36 Blue Green.

REED USED:
A 15 Dent reed was used, and it was sleyed 2 ends per dent or 30 ends per inch.

THREADING DRAFT:

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KEY TO COLORS USED IN THE DRAFT ABOVE:
- 0 -- # 35, Creme Green, 18/2 Worsted
- X -- # 12, Light Avocado, 18/2 Worsted
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VOLUME 19, Number 3, November, 1976

TIE-UP DRAFT:

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COST OF THE THREADS USED:
The 2/18's worsted comes in 39 colors, has 4800 to 5,000 yards per lb., is available on 1/2 lb. cones at $9.60 lb.

COST OF THE FABRIC:
We had a 12-1/2 yard warp, 40" wide and sleyed 30 ends per inch. It took 1 lb. 6 oz. of # 35 Crema Green and it took 1 lb. 8 oz. of # 12 Light Avocado worsted. The total warp cost was $27.60, or the cost per yard was $2.20 per yard.

In the weft, we used 2 lbs. 12 oz. of Blue Green # 36 Worsted, which costs $2.12 per yard.

WARP COST PER YARD, 40" wide--- $2.20
WEFT COST PER YARD -------------- 2.12

FABRICLING COST PER YARD ----------- $4.32

TREADING SEQUENCE:
There are 14 shots in each pattern repeat. Here is the treadling.
1. Treadle # 1 - 2/18's Blue Green
2. Treadle # 2 - 2/18's Blue Green
3. Treadle # 3 - 2/18's Blue Green
4. Treadle # 4 - 2/18's Blue Green
5. Treadle # 5 - 2/18's Blue Green
6. Treadle # 6 - 2/18's Blue Green
7. Treadle # 7 - 2/18's Blue Green
8. Treadle # 8 - 2/18's Blue Green
9. Treadle # 9 - 2/18's Blue Green
10. Treadle # 10 - 2/18's Blue Green
11. Treadle # 11 - 2/18's Blue Green
12. Treadle # 12 - 2/18's Blue Green
13. Treadle # 13 - 2/18's Blue Green
14. Treadle # 14 - 2/18's Blue Green

End of one complete pattern repeat. Repeat over and over as desired.

ABOUT THIS FABRIC:
While weaving this fabric, we noticed that it seemed to weave all right, but it seemed to be streaked. We tried to eliminate this, but the more we tried to get rid of this, the more we noticed it. We were about ready to give up several times. It seems like tension on the bobbin had more to do with it than warp tension. We measured the pattern with dividers in different places and they would be just the same, but one portion would appear darker than the next. So, you might see streaks in a large piece of this, but we did the best we could.

This streaking does not show up in the samples particularly, and with the proper washing and pressing, a portion of this will disappear. You should hand wash your fabric in warm water, allow to drip dry, and then press with a steam iron.

And it is important to develop a rhythm in your weaving, having an even, firm, and regular double beat. The more even or uniform your beat, the less the streak will appear.

We thought this would make interesting tie fabric, especially if it was cut on the bias as the zigzag effect against the parallel stripes in the warp colors has an exciting electric quality that could be exploited if thrown at an angle. You could also use this design in a decorative fabric such as pillows, tea cozies, table runners, etc.

WEAVES AND PATTERN DRAFTING, by John Tovey. This is an outstanding book, and we at Robin and Russ Handweavers are now the U.S.A. distributors for it. There are just a limited number of copies left, and the price is $11.95 plus postage & insurance.

The serious weaver will find this book an outstanding one, and we are so pleased that we were able to locate some 400 copies and purchase them. This book tends to approach textiles and weaving and drafting as it is done in the textile industry.

And this method of drafting and developing weaves is clearly and concisely explained in all details.

Order your copy now.
WALNUTS

Both the color and shape of this design reminds us of walnuts. There are many walnut orchards in the area around McMinnville and they are harvested about this time of year.

This is another of the shadow weaves developed by Marian Powell that we have featured before in Drafts and Designs. The patterns are published in "1000 plus Patterns in 4, 6, and 8 Harness Shadow Weaves" which is available from us at $7.95 plus postage.

WARP:

For our warp we used a 8/2 worsted in two colors, one a natural and the other a cinnamon brown.

WEFT:

In the weft we used the same 8/2 worsted as we used in the warp. We used the same natural color and a darker shade of brown.

KEY TO COLORS IN THE THREADING DRAFT:

0 - Natural 8/2 worsted
X - Cinnamon Brown 8/2 worsted

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REED USED:

We used a 10 dent reed and sleyed it alternately one and two threads per dent. The natural yarn was doubled, two to a heddle and two to a dent, so all the brown threads were threaded one per dent, and all the natural threads two per dent. This gave us 15 threads per inch.
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VOLUME 19, NUMBER 4, DECEMBER, 1976

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ABOUT THE FABRIC:

We designed this fabric for use as a travel blanket to keep in the car, but it would work fine for many different uses.

There were no problems weaving. I used a firm, strong, even, double beat, once with the shed open and once again with the shed changed.

Please note that the natural 2/3's worsted is doubled on the bobbin, that is, 2 ends wound together. However, the brown 2/3's worsted is just wound singly on the bobbin.

Also, note that in the threading, you have 2 natural on the same harness, and then 1 brown on the next harness, and 2 natural, and 1 brown etc. You can do either of two things. You can use 2 heddles, one for each of the natural threads as is shown in the threading draft, or you could also put 2 ends of natural in the same heddle. We felt in this case, it was easier to use the two heddles.

TREADLING SEQUENCE:

There are 52 shots in each pattern repeat. Here is the treadling.

1. Treadle #1 - 8/2's Dark Brown
2. Treadle #2 - 8/2's Natural
3. Treadle #3 - 8/2's Dark Brown
4. Treadle #4 - 8/2's Natural
5. Treadle #5 - 8/2's Dark Brown
6. Treadle #6 - 8/2's Natural
7. Treadle #7 - 8/2's Dark Brown

8. Treadle #8 - 8/2's Natural
9. Treadle #2 - 8/2's Dark Brown
10. Treadle #1 - 8/2's Natural
11. Treadle #4 - 8/2's Dark Brown
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59. Treadle #8 - 8/2's Dark Brown
60. Treadle #7 - 8/2's Natural
61. Treadle #8 - 8/2's Dark Brown
62. Treadle #7 - 8/2's Natural

This is the end of one complete pattern repeat. Repeat over and over as desired.
FIRE AND WATER

Here we have a luxurious evening skirt fabric in Summer and Winter weave. This sample shows how versatile the Summer and Winter system can be, with an exciting combination of threads and colors, and an unusual tie-up to create this striking motif.

WARP:
We used just one type of thread in the warp. This was a black, slubby, 7/1 c.c. Douppioni silk.

WEFT:
The tabby thread was made up of two different elements: a single thread of the black Douppioni silk that we used in the warp, and the other part of the tabby was a space dyed, supported 1/64 metallic, in a color combination called Water Reflections. We wound two metallic threads and one silk thread together on the bobbin.

The pattern thread was made up of 20/2 Egyptian cotton. We wound eight ends together on the bobbin, in three different shades. Four ends were Red #44, two ends were Begonia #76, two ends were Siesta #92.

REED:
We used a 10 dent reed. There was a special sleying of the reed. For most of the pattern, it was sleyed 2 per dent, but for the doubled threads in the blocks on harness eight, it was sleyed 4 per dent.

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KEY TO THREADS IN THE THREADING DRAFT:
X = single end of silk
0 = doubled end of silk
DRAFTS AND DESIGNS:
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VOLUME 19, Number 5, January 1977

TIE-UP DRAFT:

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ABOUT THE FABRIC:

I was a little dubious about using the black silk as a warp. It is a singleply and has such a little twist, especially at the slubs, that it comes apart fairly easily with any uneven tension. When it came to the weaving, though, I was pleasantly surprised. It did separate at the slubs, but only twice in the center on the whole 14 yard warp, and a couple of times at the selvage, which will happen with heavier yarn anyway. I would not recommend anyone using it if they are chain warping their loom, but the sectional warping method that we use keeps the ends in order and with even tension.

From our 14 yard warp, we ended up with 11 yards 26 inches, so 2 yards 10 inches were taken up in weaving and lost to loom. We put on a 41½" wide warp, and the finished fabric off the loom measures 40", so only 1½" were taken up across the width. It will shrink when washed, so should be washed with warm soapy water before being made up.

TREADING SEQUENCE:

1. Treadle A - 7/1 silk & doubled metallic
2. Treadle 1 & x - 20/2 cotton
3. Treadle B - 7/1 silk & doubled metallic
4. Treadle 1 & y - 20/2 cotton
   Repeat this block twice.
5. Treadle A - 7/1 silk & doubled metallic
6. Treadle 2 & x - 20/2 cotton
7. Treadle B - 7/1 silk & doubled metallic
8. Treadle 2 & y - 20/2 cotton
   Repeat this block twice.
9. Treadle A - 7/1 silk & doubled metallic
10. Treadle 3 & x - 20/2 cotton
11. Treadle B - 7/1 silk & doubled metallic
12. Treadle 3 & y - 20/2 cotton
   Repeat this block twice.
13. Treadle A - 7/1 silk & doubled metallic
14. Treadle 4 & x - 20/2 cotton
15. Treadle B - 7/1 silk & doubled metallic
16. Treadle 4 & y - 20/2 cotton
   Repeat this block four times.
17. Treadle A - 7/1 silk & doubled metallic
18. Treadle 3 & x - 20/2 cotton
19. Treadle B - 7/1 silk & doubled metallic
20. Treadle 3 & y - 20/2 cotton
   Repeat this block twice.
21. Treadle A - 7/1 silk & doubled metallic
22. Treadle 2 & x - 20/2 cotton
23. Treadle B - 7/1 silk & doubled metallic
24. Treadle 2 & y - 20/2 cotton
   Repeat this block twice.
25. Treadle A - 7/1 silk & doubled metallic
26. Treadle 1 & x - 20/2 cotton
27. Treadle B - 7/1 silk & doubled metallic
28. Treadle 1 & y - 20/2 cotton
   Repeat this block twice.
29. Treadle A - 7/1 silk & doubled metallic
30. Treadle 5 & x - 20/2 cotton
31. Treadle B - 7/1 silk & doubled metallic
32. Treadle 5 & y - 20/2 cotton
   Repeat this block four times.
33. Treadle A - 7/1 silk & doubled metallic
34. Treadle 6 & x - 20/2 cotton
35. Treadle B - 7/1 silk & doubled metallic
36. Treadle 6 & y - 20/2 cotton
   Repeat this block three times.
37. Treadle A - 7/1 silk & doubled metallic
38. Treadle 5 & x - 20/2 cotton
39. Treadle B - 7/1 silk & doubled metallic
40. Treadle 5 & y - 20/2 cotton
   Repeat this block four times.

This is the end of one complete pattern repeat. There are a total of 108 picks in one complete pattern. Repeat this sequence over and over as desired.

COST OF THE FABRIC:

We used 2 lb. 11 oz. of the Douppioni silk in our 14 yard warp. At $6.00 per pound, this makes the cost of our warp $16.12. We used 4 lb. 12 oz. of the 23/2 cotton in the weft. This is $3.50 per pound, so the pattern weft cost $40.38. The tabby weft used 12 oz. of the metallic thread. This is sold by the spool, with about 12 oz. on each spool, which cost $6.00. The tabby weft also used 1½ oz. black Douppioni silk, which at $6.00 per pound works out at $3.62.

So our total warp cost was $16.12 and our total weft cost was $57.62.

WARP COST PER YARD, 41½" wide ............ $1.15
WEFT COST PER YARD ....................... $4.12
FABRIC COST PER YARD .................... $5.27
MOTHER OF PEARL PINK

This month's sample is a beautiful all silk shirt fabric in a twelve harness twill.

WARP USED

The warp was made up of a smooth, 8-ply, spun silk. It has about 7500 yards to the pound. We used it in two colors; Ivory White, and Apple Blossom Pink.

WEFT USED

In the weft, we used the same two colors of the 8-ply spun silk that we used in the warp.

REED USED

We used a 15 dent reed and sleyed it two ends per dent, giving us a total of 30 ends per inch.

THREADING DRAFT

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KEY TO THREADS USED IN THREADING DRAFT:

0 = 8 ply silk, Ivory White
X = 8 ply silk, Apple Blossom Pink
DRAFTS AND DESIGNS:
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VOLUME 12, Number 6. February 1977

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TREADLING

The treadling sequence is a straight twill progression from treadle #1 through treadle #12; the first twelve with the Ivory White, and the next twelve with Apple Blossom Pink.

ABOUT THE FABRIC

I found this beautiful quality silk the last time I was in England. It was single ply and I had it 3 plied, so it would be more practical for handweavers to use for a warp.

It works very well as warp. The only problem we ran into was that occasionally one of the 8 threads in the silk would break, and this broken strand would peel back with the reed and gather in a knot at the weaving line. So we would either cut it out or pull it back up and cement it back into place. This didn't happen often enough to present a real problem, and generally the 8 ply silk worked very well.

You should use an even, firm, double beat. Beat once with the shed open, then change to the next shed, and beat again.

I used a fairly tight tension on the warp. This was because one of the harnesses tended to raise itself for some reason. When I had the tension tighter, this didn't happen. It may have been a problem with the loom I was using, so you will have to see for yourself if this problem occurs on your loom.

Another thing you will have to watch out for in the warp, is that there are a number of knots in this silk. You can just leave them in, or take them apart and cement them. They don't catch in the reed, so either way is fine.

This sample was washed in a machine with warm, soapy water, allowed to drip dry, and then was steam pressed. It was 40" wide in the reed, 38" wide after weaving, and 37" wide after washing. We put a 14 yard warp on the loom, and wove 13 1/3 yards. Off the loom, the fabric measures 12 yards 30 inches in length, before washing.

We first used this pattern in the second issue of Drafts and Designs, back in October of 1958. We used just one color, though, for warp and weft. It was a 12/3 spun silk, sett at 36 threads per inch. We thought you would like to see a variation of this interesting twill, and there must be many of you who do not have all our back issues, so this will be entirely new for you. We made up a woman's dress and man's sport shirts out of that fabric. They looked very good, and have worn very well over the years. The seams should be stitched or bound, as there is a tendency for the silk to unravel.

We have this silk in just these two colors, Ivory White, and Apple Blossom Pink. It has 7,500 yards per pound and comes on 1/2 lb. cones. We have a limited amount of this silk. We have in stock just 25 pounds of each color and will not be able to order any more.

It is difficult to obtain silk in colors these days. If you wanted to use this pattern and have a good selection of colors to choose from, you might consider weaving it in 20/2 Egyptian cotton, in any of 90 colors, for warp sett at 36 ends per inch, and/or weft. This pattern would also make a very effective wedding dress material.

COST OF THE FABRIC

In the warp, we used 1 lb. 2 oz. of each color, so the warp took 2 lb. 4 oz. The cost of the silk is $12.00 per pound so the cost of the warp works out to be $27.00 for the 14 yards.

In the weft, we used 1 lb. 7 oz. of each color, so we used 2 lb. 14 oz. all together in the weft. This comes to $34.50 for total cost of the weft.

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<td>Total Fabric Cost per Yard</td>
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drafts and designs

a guide for 5 to 12 harness weaves

VOLUME 19, Number 7. MARCH 1977

CRYSTAL LACE
This month's sample is an all linen fabric in an eight harness Swedish Lace. It would look good as draperies, or for table linens, either as place mats or a table cloth.

WARP USED
The warp was a size 20/2 linen in two colors; a natural and a bleached white, threaded alternately.

WEFT USED
For the weft we used the same 20/2 linen that we used in the warp, but in just one of the colors, the bleached white.

REED USED
We used a 12 dent reed and sleyed it two per dent, making 24 ends per inch.

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KEY TO THREADS IN THREADING DRAFT
O = 20/2 linen, Natural
X = 20/2 linen, Bleached White

Sample on next page
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VOLUME 19, NUMBER 7. MARCH 1977

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TREADLING

This is a single shuttle weave, and it
is woven in blocks. Each block in this
design is woven once, and form a simple
twill progression. I will write out each
block on one line, by treadle number, so
that it will be easier to understand and
memorize. Treadle as follows:

1. 2,3,2,3,2,1, 8. 2,8,2,8,2,1,
2. 2,4,2,4,2,1, 9. 2,7,2,7,2,1,
3. 2,5,2,5,2,1, 10. 2,6,2,6,2,1,
4. 2,6,2,6,2,1, 11. 2,5,2,5,2,1,
5. 2,7,2,7,2,1, 12. 2,4,2,4,2,1,
6. 2,8,2,8,2,1, 13. 2,3,2,3,2,1,
7. 2,9,2,9,2,1, 14. 2,9,2,9,2,1,

This is the end of one complete pattern
repeat. There are 84 picks in one repeat.
Repeat this sequence over and over as
desired.

COST OF FABRIC

This Barbour linen comes to us on ½ kilo tubes
(about 1 lb.) and has 3,000 yards to the pound.
The Natural 20/2 costs $12.00 a pound, and the
Bleached White 20/2 is $13.50 a pound.

In the warp, we used 1 lb. 15 oz. of Natural
at a cost of $23.25, and 1 lb. 14 oz. of Bleached
White at a cost of $25.32. So the cost of the 12
yard warp was $48.57.

The weft used 2 lb. 5 oz. of the Bleached White
at a cost of $31.20.

WARP COST PER YARD (40" wide) .......... $4.05
WEFT COST PER YARD .................... $2.83
FABRIC COST PER YARD .................. $6.88

ABOUT THE FABRIC

It really is a shame that linen is
getting to be so expensive, there really
is nothing quite like it for quality and
elegance in this kind of lace design. The
linen in this sample is one of the finest
quality linens available. It is a wet-
spun linen from the Barbour mills in
Ireland.

A word about this weave system. It is
a multiple harness Swedish Lace, which is
most commonly seen on four harnesses. It
is also known as the Atwater or Atwater-
Bronson Lace System. Drafted as we have it
here, it can easily be extended to any
number of harnesses; eight harnesses weave
six blocks, and each additional harness adds
another block to the design. The tie-up we
have here is a skeleton draft, that is, each
pattern harness is tied individually to one
treadle, (together with the tie-down threads
on harness #1). Treadle #9 is a simple
variation, with two pattern harnesses tied
up together. Of course, many variations can
be worked out just by changing the tie-up;
remember, the more ties you add (i.e., the
more "0"s" in the squares of the draft), the
more plain weave will show up in your fabric.

The lace effect is enhanced considerably
by washing. The samples have been washed,
by machine in warm water, the water then
extracted, and the fabric then steam pressed.
The fabric lost 1" in width and 3/4 yard in
the length after washing. The fabric took in
2" across the width in weaving, and almost
2 yards in length were taken up and lost to
loom.

There are some special factors to consider
when weaving linen, and particularly this
lace system. First, use tissue paper under
your bobbin in the shuttle to eliminate the
problem of the weft linen winding off too
much and getting twisted and stuck in the
shuttle. Use a fairly tight tension on your
warp, and a firm double beat. Linen is very
strong, so you won't run into any problems
with warp threads breaking. It is very
important that you use as even a beat as
possible, as any irregularity in beat shows
up quite a bit on this lace design. Also,
the threads on the pattern harnesses (all
Bleached White threads except those on
harness #1) tended to be quite a bit looser
in tension and sagged in the shed, especially
on treadle #1. This was because those threads
were not being woven in the same way as the
threads on harness #1 and harness #2, so they
were not being taken up at the same rates. To
counteract this, I placed a metal rod under
the pattern threads at the back of the loom,
and put weights on the rod, and this kept
enough tension on these threads to make a
good shed.
SAHARA SANDS
Here is a design for draperies, on eight harnesses, using an attractive space-dyed viscose and a shiney, silky viscose and silk yarn. This is a rather unusual design and looks a lot more complicated and harder to weave than it actually is.

WARP USED
We used two different yarns in the warp. We used a 2 ply yarn that is a combination of tussah silk and viscose in the natural tussah color. The other yarn was a size 15/2 100% viscose. This has a stub to it and is space-dyed in browns, called Sahara.

WEFT USED
We used the same threads in the weft as we used in the warp. The tussah silk and viscose combination was doubled both in warp and weft - two ends through one heddle and two ends wound on the bobbin.

KEY TO THREADS IN THREADING DRAFT
0 = Tussah silk and viscose, doubled
X = 15/2 100% viscose, "Sahara"

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TREADING

1. Treadle #1 - Sahara 15/2 viscose
2. Treadle #3 - Sahara 15/2 viscose
3. Treadle #1 - Sahara 15/2 viscose
4. Treadle #3 - Sahara 15/2 viscose
5. Treadle #2 - Sahara 15/2 viscose
6. Treadle #4 - Sahara 15/2 viscose
7. Treadle #2 - Sahara 15/2 viscose
8. Treadle #4 - Sahara 15/2 viscose
9. Treadle #7 - Tussah silk/viscose
10. Treadle #8 - Tussah silk/viscose
11. Treadle #5 - Tussah silk/viscose
12. Treadle #6 - Tussah silk/viscose
13. Treadle #7 - Tussah silk/viscose
14. Treadle #6 - Tussah silk/viscose
15. Treadle #5 - Tussah silk/viscose
16. Treadle #8 - Tussah silk/viscose
17. Treadle #7 - Tussah silk/viscose
18. Treadle #2 - Sahara 15/2 viscose
19. Treadle #4 - Sahara 15/2 viscose
20. Treadle #2 - Sahara 15/2 viscose
21. Treadle #4 - Sahara 15/2 viscose
22. Treadle #1 - Sahara 15/2 viscose
23. Treadle #3 - Sahara 15/2 viscose
24. Treadle #1 - Sahara 15/2 viscose
25. Treadle #3 - Sahara 15/2 viscose
26. Treadle #5 - Tussah silk/viscose
27. Treadle #6 - Tussah silk/viscose
28. Treadle #7 - Tussah silk/viscose
29. Treadle #6 - Tussah silk/viscose
30. Treadle #5 - Tussah silk/viscose

This is the end of one complete pattern repeat. Repeat over and over as desired.

ABOUT THE FABRIC

This fabric was no problem at all to weave. It moved fairly fast and I had no problems with warp breakage or sticking.

The Sahara viscose is one of a range of six space dyed rayons I bought in Scotland. Space dyed yarns are hard to find here in the States, but are quite popular in Great Britain. We have a number of different space dyed yarns from over there and they certainly make interesting effects in weaves. A space dyed yarn is more costly to produce, as it has to go through the dying process three times, or more.

The finished yardage measured 12 yards 24 inches, so 1 yard 12 inches were lost to loom and taken up in weaving from the 14 yard warp. The take-up in width was small, barely an inch. The samples have not been washed. You should machine or hand wash your finished fabric before it is made up.

We recommend this fabric for use as drapes. Note the rather long warp float if you are planning to use this design for other purposes. It is reversible if you don't mind the slightly deflecting warp threads on the back.
CHANTILLY CORD
Here is a design for upholstery fabric utilizing the Bedford Cord system.

WARP USED
The warp was made up of yarns from our range of worsteds from Scotland. We used size 2/18's for the two cords. One was in Chantilly Green #13 and the other cord was Creme Green #35. The warp ends between the cords, known as the stitching ends, were 2/18 worsted in Dark Navy Blue #3. The padding ends were of 2/12 worsted. One was two ends of Bleached White #11 and the other was four ends of Chantilly Green #13.

WEFT USED
The weft was made up of 2/12 worsted, all wound double on the bobbin. We used three colors: Golden Brown #34, Vienna Tan #38, and Dark Navy Blue #3.

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KEY TO THREADS IN THREADING DRAFT
N = 2/18, Dark Navy Blue - 1 end
G = 2/18, Chantilly Green - 1 end
C = 2/18, Creme Green - 1 end
O = 2/12, Bleached White - 2 ends
X = 2/12, Chantilly Green - 4 ends
REED USED

We used an 18 dent reed and sleyed it in an irregular way. One pattern repeat, which consists of 28 ends and 2 padding ends, were sleyed into 16 dents, which is almost one inch. Here are the 16 dents:

1. 2/18 worsted, Creme Green - 2 ends
2. 2/18 worsted, Creme Green - 2 ends
3. 2/18 worsted, Creme Green - 2 ends
4. 2/18 worsted, Creme Green - 2 ends
5. 2/12 worsted, Chantilly Green - 4 ends and 2/18 worsted Creme Green - 2 ends
6. 2/18 worsted, Creme Green - 2 ends
7. 2/18 worsted, Creme Green - 2 ends
8. 2/18 worsted, Creme Green - 2 ends
9. 2/18 worsted, Dark Navy Blue - 1 end
10. 2/18 worsted, Dark Navy Blue - 1 end
11. 2/18 worsted, Chantilly Green - 2 ends
12. 2/18 worsted, Chantilly Green - 2 ends
13. 2/12 worsted, Bleached White - 2 ends and 2/18 worsted, Chantilly Green - 2 ends
14. 2/18 worsted, Chantilly Green - 2 ends
15. 2/18 worsted, Dark Navy Blue - 1 end
16. 2/18 worsted, Dark Navy Blue - 1 end

ABOUT THE FABRIC

Be warned, the Bedford Cord system uses a great deal of yarn, resulting in a fabric that is both heavy and expensive. The weave is really so handsome and versatile I think it is well worth it. Also, it takes a long time to weave, as you weave only one cord at a time with each pick.

I had a little trouble with the warp ends sticking together as they are so closely sleyed. I just had to pay close attention to my warp and try to catch the clinging ends. Also, I wound with as much tension on the warp as it would take.

We put on a warp 14 yards long and 39 inches wide in the reed. The finished fabric measures 11 yards 30 inches, and 36½ inches wide. The Bedford Cord usually takes in quite a bit in width, so you must allow for that.

COST OF THE FABRIC

In the warp we used 1 lb. 1 oz. of Chantilly Green, 2 lb. 1½ oz. of Creme Green, and 8½ oz. of Dark Navy Blue, all in 2/18. We used 12 oz. of Chantilly Green and 6½ oz. of Bleached White in 2/12. Thus, the total warp came to 4 lb. 12 oz. Both the 2/12 and the 2/18 cost $9.60 per pound.

The weft used 3 lb. 14 oz. of 2/12 Golden Brown, 3 lb. 2 oz. of 2/12 Vienna Tan, and 7½ oz. of Dark Navy Blue 2/12. So the total weft came to 7 lb. 7½ oz., also at $9.60 per pound.

WARP COST PER YARD ...................... $3.25
WEFT COST PER YARD ...................... $5.12
FABRIC COST PER YARD .................... $8.37
PIECES OF EIGHT

The colors in this upholstery fabric remind us of old gold coins, like the hidden treasure they were hunting for in Treasure Island. This design has an appearance of an antique piece of fabric, perhaps something from the East or from a European castle.

WARP USED

The warp was made up of 100% Viscose rayon. This yarn is size 15/2, has a slub to it and is space dyed. We used two different colors of this yarn in the warp. One is space dyed in browns, from a light beige to a dark chocolate, and is called Sahara Sands. The other color is called Autumn in Oregon and the colors go from yellow and gold to dark green and olive.

WEFT USED

In the weft we used one of the yarns that we used in the warp. This was the Sahara Sands viscose rayon. This was woven alternately with a black 7/1 Douppioni silk. This silk also has a textured look to it, but is quite dull whereas the viscose has some luster.

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KEY TO THREADS IN THREADING DRAFT

X = 100% Viscose rayon, Autumn in Oregon
0 = 100% Viscose rayon, Sahara
TIE-UP DRAFT

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ABOUT THE FABRIC

This is one sample that must be seen as yardage to be fully appreciated. The effect of the space dyed yarns can be seen best over a few yards, the streaks of colors are really outstanding and the Sahara Sands in the weft also adds more subtle variation to the facinating mixture of tones.

We tried some other wefts when working on this sample, but this worked by far the best. We tried two browns in 10/2 cotton, Aztec and Golden Brown. These are close to the browns in the viscose and they blend in well. However, we found that this made the stripes stand out considerably and intensified the colors. Using the black and alternating with the Sahara made the effect more subtle.

You should use a very firm beat when weaving this fabric. I think that an even heavier beat could have been used for these samples; I would like to see the weft packed in tighter.

I think this fabric is best suited for draperies. It has great draping qualities and, as I mentioned, the fabric is seen at it's best over a large area. The reverse side is quite interesting too; I don't think it would need to be lined. It would work well as upholstery, for pillows, and would make a handsome table runner. It could also be made up into clothing, but you should be aware that it creases badly.

COST OF THE FABRIC

In the warp, which was 14 yards long, we used 3 lb. 5 oz. of Autumn in Oregon and the same amount, 3 lb. 5 oz., of Sahara. This space dyed viscose yarn sells for $6.00 per pound, so the total cost of the warp was $39.80, which comes to $2.84 per yard.

The weft took 1 lb. 8 oz. of the black Douppioni silk and 1 lb. 5 oz. of the viscose Sahara. The Douppioni silk also sells for $6.00 per pound. So the total weight of the weft comes to 2 lb. 13 oz. which costs $16.94. This works out at $3.21 per yard.

WARP COST PER YARD .......... $2.84
WEFT COST PER YARD .......... $3.21
FABRIC COST PER YARD .......... $4.05

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REED USED
We used a 12 dent reed and double sleyed it, or 2 ends per dent, resulting in 24 ends to the inch.

TREADING SEQUENCE
You may want to rearrange the tie-up so that the treadling sequence is not balanced (by placing treadle #1 after treadle #6) but this is the way we wove this piece and it worked out fine, so this is the way I'm giving it to you. Also, the order in which the two weft threads go could be changed without altering the effect of the fabric very much. In other words, you could start this sequence with a pick of Sahara Sands on treadle #4 and then alternate with the silk.

Treadle as follows:
1. Treadle #4 - 7/1 Black Douppioni silk
2. Treadle #5 - 15/2 Viscose, Sahara Sands
3. Treadle #3 - 7/1 Black Douppioni silk
4. Treadle #6 - 15/2 Viscose, Sahara Sands
5. Treadle #2 - 7/1 Black Douppioni silk
6. Treadle #1 - 15/2 Viscose, Sahara Sands

This is the end of one complete pattern repeat. Repeat over and over as desired.

ABOUT THE THREADS USED
Douppioni silk is made from silk wound from twin cocoons, so two filaments are wound off as one. It has a dull textured appearance and a very soft feel to it. Even though it is single ply it is fairly strong, and we have even used it as warp in a past Drafts and Designs sample. It comes to us from Italy on skeins of 4 to 8 oz., with about 5,600 yards to the pound.

We are especially pleased with the effect of the space dyed viscose rayons. This really is an excellent yarn and a very good example of how sophisticated the man-made fibers have become. This has come to us on 2 to 3 pound cones and we can wind off ½ lb. tubes. It has about 3,800 yards to the pound.