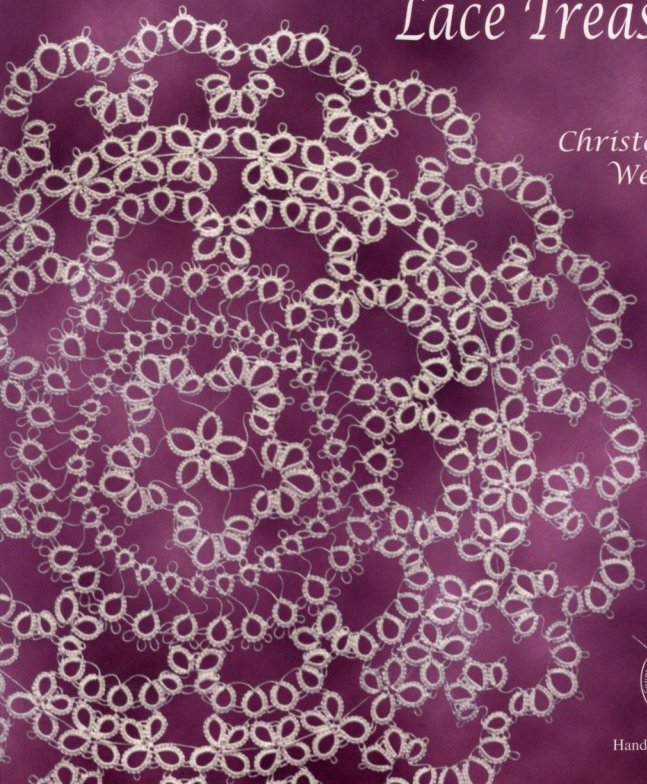
TATTING

60 Original Lace Treasures

Christel Weidmann



Handy Hands Tatting

Handy Hands, Inc.

Tatting 60 Original Lace Treasures

by

Christel Weidmann

Printed in the United State of America.
ISBN 1-883432-08-1

Handy Hands, Inc., is delighted to bring you this inspiring collection of contemporary tatting by Swiss lace artist Christel Weidmann. In it, you will find 60 designs to tat using your needle or shuttle and a wealth of ideas that develop your skill and versatility as a tatter.

Imaginative lace makers have a talent for assembling designs from fragments of ideas and adapting them to all manner of new uses. A cluster of rings and picots in an antique edging, for example, may inspire the graceful center of a magnificent new doily. A medallion, with a few creative adjustments, may become a charming insert or edging for lingerie, linens or a holiday trim. The secret lies, perhaps, in constantly asking "What if…?" and exploring new ideas.

Expanding your Tatting Horizons

Christel Weidmann is just such a designer. Her imagination has led her to a world of fresh and fanciful tatted pieces. Her skill as a teacher enables her to share with you, by example, techniques for combining small lace elements into larger pieces. She also shows you, again by example, how to adapt straight-edge laces to fit curves or corners, convert a circular pattern into an oval, and more, all by adding or subtracting double stitches in a pattern. Using these techniques, you can develop new designs using favorite edging and medallion patterns that you have on hand.

Most of all, as you tat Christel's designs, you will develop confidence and skill, learning to ask "What if…?" as a way of exploring and developing your own talent.

If you are needle tatting, you will use both the Ring and Chain Method and the Ring and Thread Method. If these techniques are new to you, or you would like to refresh your skills, see Handy Hands' *Learn Needle-Tatting Step by Step.*

The instructions call for Sizes 30, 40 or 80 traditional white tatting thread, and tatted pieces are shown actual size in the photos. Change the size of the thread (to Sizes 10 or 20, for example) to change the size of your tatting, facilitate mastering the designs, or respond to your own desire to know "What if…?" Using larger or smaller threads, different colors, or changing a few double stitches here and there will help you begin to create tatted treasures of your own.

About the Author

Christel Weidmann is a long-time tatter who shares her ideas and skills with students in her native Switzerland. She developed the idea for this book 15 years ago, as a way of demonstrating to students how small pieces of tatting, such as parts of pretty edgings or delicate medallions, could be altered and combined to create larger pieces—doilies, place mats, and other decorative laces, for example.

Like her Swiss students, you will begin with simple motifs that in themselves make wonderful holiday designs, accents for personal or home accessories, even special-occasion treasures. (Imagine, for example, a lacy medallion atop a ring-bearer's pillow—what a perfect gift for a beloved bride!) Then you will progress to putting together these designs into larger, more complex pieces. It is an exciting, challenging exercise, one you are sure to find rewarding and fun.

About Handy Hands

Pattern books, threads, tools and accessories for needle and shuttle tatting are available from Handy Hands, Inc. For a free catalog, send three first-class stamps along with your request to Handy Hands Inc., 577 N 1800 E Rd, Paxton, IL 60957. Or visit the Handy Hands' Inc. website, www.hhtatting.com.

ABBREVIATIONS AND DEFINITIONS

Ch = Chain
Cl = Close
CR = Center Ring
Ds = Double Stitch
IR = Inner Ring
OTR = Outer Ring
P or - = Picot
R = Ring
Rw = Reverse work
SR = Small Ring
\+ = Join

Clover Cluster = three (3) consecutive rings, with no thread space between them.

Cluster = a group of rings and chains that make a design that is repeated.

(Floating) R for shuttle tatters = Change to second shuttle to make the ring, then return to the first shuttle.

(Floating) R for needle tatters = See pages 4-5 for instructions.

Needle tatters note: When the pattern calls for repeated chains, tat as follows: after all the double stitches (for the chain) are on the needle, slide the stitches off the needle, snug them tight (do not tie a knot), then join and continue to the next Ch.

CONTENTS

This book has been translated into English and rewritten for American tatters. Additional instructions and tips are included, to enable beginning, intermediate and advanced shuttle and needle tatters to work the patterns with ease.

About This Book **2**

Abbreviations & Definitions . **3**

Floating Ring (needle tatting) **4**

Selecting Threads **6**

Medallions & Snowflakes **7**

Edgings **15-17, 22**

Doilies **48**

For Needle Tatters—How to Tat a Floating Ring

Some of the patterns in this book call for a floating ring—a design element that features one or more rings atop a chain. The chain, in this case, continues without the customary break.

Instructions below explain how to create the floating ring.
This method must be used whenever you see a photograph of a pattern that shows the ring or rings floating on top a chain and the chain is not split.

Refer to the photographs opposite as you work. The right side of each photograph is the needle thread side; the left side of the photograph is the ball thread side.

First, work off the ball in the normal way.
R = 10-10 Cl. Rw.

Ch = 6, take the stitches off the needle, do not tie a knot. Refer to Photo #1.

- Pull about 3 yards of thread off the ball (ball thread) and cut.
- Un-thread the needle and re-thread it using the end that you have just cut off the ball. See Photo #2.
- Your needle should now be threaded on the ball thread side (on the left in Photo #2).

Next, make double stitches and picots as follows:
(Floating) R = 2-2-2-2 Cl. (Shown in Photo #2.) Take the stitches off the needle, making a ring *without* going up through the loop. (Shown in Photo #3).

If you have to go up through the loop, you have threaded incorrectly or used the wrong thread; unravel your work and begin again.

- Un-thread the needle; re-thread it on the other side (needle thread), as shown in Photo #3.

Make the following Ch:
Ch = 3 (see Photo #3). Slide the stitches off the needle. Do not tie a knot.

- Un-thread the needle and re-thread using the ball thread.

Make the following double stitches:
(Floating) R = 2-2-2-2 Cl. Take the stitches off the needle as before, which should make a ring. See Photo #4.

- Un-thread the needle; re-thread using the needle thread.

Work the following Ch:
Ch = 3, take the stitches off the needle. Do not tie a knot (see Photo #4).

Tip: When tatting the floating ring, you will need to cut more than 3 yards of thread at a time. To avoid tangled (knotted up) thread as you work, be careful not to cut more than you can handle at one time.

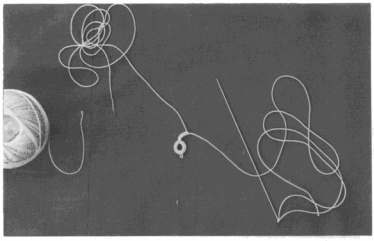
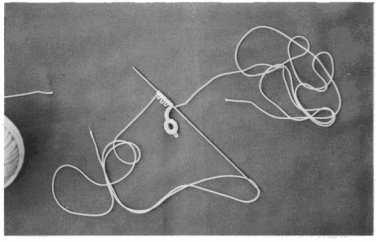


Photo # 1

Photo # 2



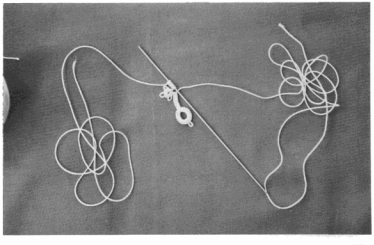
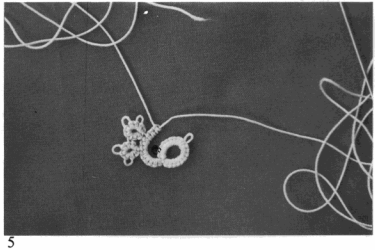


Photo # 3

Photo # 4



SELECTING THREADS FOR YOUR PROJECTS

All the projects in this book are shown actual size, and all have been tatted using DMC thread. Choosing alternate threads is easier when you know something about the way thread is manufactured and labeled.

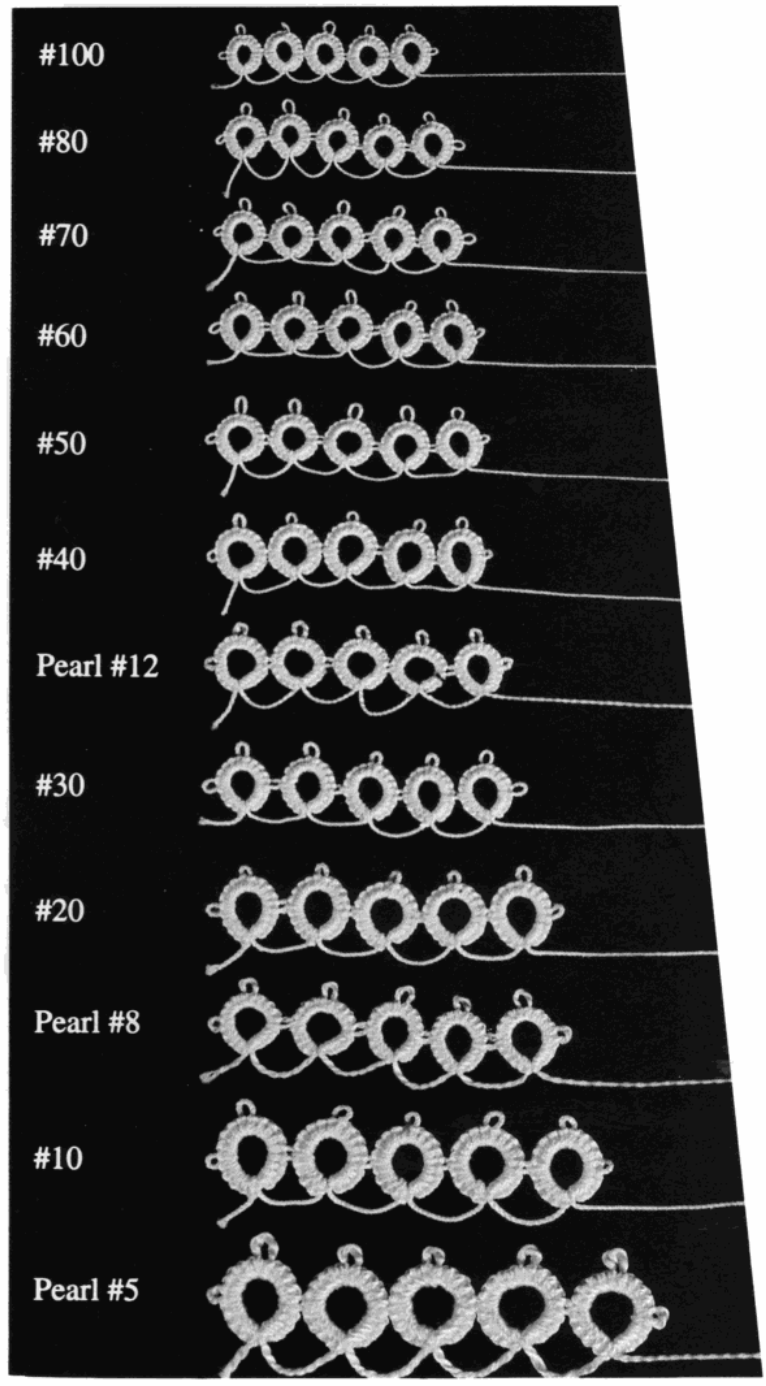
Mercerizing during the manufacturing process makes thread more receptive to dyeing so it accepts and holds color well and is almost always colorfast. It also adds strength and shine, so the thread has a lovely luster and can stand up to years, even generations, of wear. Mercerized thread is smooth, easy to work with, and durable—just what you want for your tatting projects.

Hold your thread up to a bright light and look at the fuzz along the strand. The less fuzz there is, the more the thread has been gas-singed (which smoothes and strengthens it). Thread with less fuzz will continue to look nice after repeated washings. Use the smoothest threads for your heirlooms.

Thread size relates to thickness. The higher or larger the *number* of the thread, the finer it is. In the chart at right, tatting and crochet threads are shown in graduated sizes from the finest at the top (#100) to the thickest at the bottom (Pearl cotton #5). Pearl #12 is approximately the same thickness as Size 40 tatting or crochet thread, while Pearl #8, approximates #20 crochet cotton.

"True" tatting threads are considered to be Sizes 70 and 80 (very fine). All other size threads on the market are referred to as "crochet cotton."

Changing the thread size in a pattern changes the size of the design.

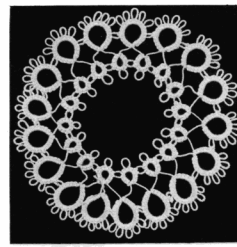


For example, a doily pattern may call for Size 70 thread. If you work the same pattern in Size 10 thread, the finished design will be considerably larger than a doily.

Six-cord (cordonnet) thread, considered a very high quality cotton thread, consists of tightly twisted plies (six in all). Strong and firm, it is suitable for heirlooms, frequently laundered wearables, and decorative designs. Six-cord threads include Handy Hands' Size 50 Cordonnet Cotton, Flora, Manuela, DMC Cordonnet, DMC Tatting Cotton and Anchor Mez.

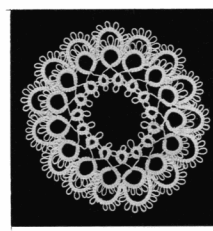
Design 1 Thread DMC No. 30 1 Shuttle/Ring & Thread Method

SR = 3-2-2-3 Cl. Rw. Leave 1/4" space after all rings
LR = 5-3-2-2-2-2-3-5 Cl. Rw.
SR = 3+(last picot of Prev. SR)2-2-3 Cl. Rw.
LR = 5+(last picot of Prev. LR)3-2-2-2-2-3-5 Cl. Rw.
Repeat the last SR and LR made until you have 16 SR's and 16 LR's.
SR = 3+(last picot of Prev. SR)2-2+(first picot of first SR made)3 Cl. Rw.
LR = 5+(last picot of Prev. LR)3-2-2-2-2-3+(first picot of first LR made)5 Cl. Rw. Join to beginning.



Design 2 Thread DMC No. 80 Shuttle and Ball/Ring & Chain Method

Row 1 = Work design 1 above with a total of 15 SR's and 15 LR's.
Row 2 = Join to any joining picot between the LR's of row 1.
Needle tatters: After every chain take the stitches off the needle, snug tight, do not tie a knot, join, and continue.
Ch = 3-2-2-2-2-2-2-2-2-3+(next joining picot between large rings).
Ch = 3+(to picot of Prev. Ch) 2-2-2-2-2-2-2-2- 3 +(next joining picot between the large rings).
Repeat the last Ch around, be sure and join the last picot to the first chain-picot made.
Join to the beginning.

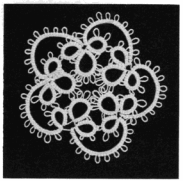


Design 3 Thread DMC No. 80 Shuttle and Ball/ Ring & Chain Method

Clover Cluster A: SR = 5-3-3-3-5 Cl.
LR = 5+(last picot of Prev. SR)3-2-2-2-2-3-5 Cl.
SR = 5+(last picot of Prev. LR)3-3-3-5 Cl. Rw.
Ch = 3-3-3-3-3-3-3-3-3-3-3 Rw.

Clover Cluster B: SR = 5-3-3+(join to third picot of Prev. SR) 3-5 Cl.
LR = 5+(last picot of Prev. ring)3+(to second picot of Prev. LR) 2-2-2-2-3-5 Cl.
SR = 5+(last picot of Prev. LR)3-3-3-5 Cl. Rw.
Ch = 3-3-3-3-3-3-3-3-3-3-3 Rw.
Repeat the clover cluster B for a total of 4 clover clusters.

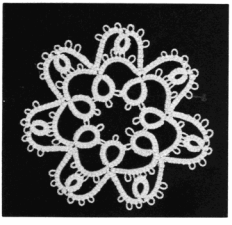
Clover Cluster C: SR = 5-3-3+(join to third picot of Prev. SR) 3-5 Cl.
LR = 5+(last picot of Prev. SR)3+(to second picot of Prev. LR) 2-2-2-2+(to second picot of first LR made)3-5 Cl.
SR = 5+(last picot of Prev. LR)3+(to third picot of first SR made)3-3-5 Cl Rw.
Ch = 3-3-3-3-3-3-3-3-3-3-3 Rw.
Join to the beginning.



Design 4 Thread DMC No. 30 Shuttle and Ball/Ring & Chain Method

Round 1: R = 7-3-3-7 Cl. Rw.
Ch = 4-2-2-2-4 Rw.
R = 7+(last picot of Prev ring)3-3-7 Cl. Rw.
Ch = 4-2-2-2-4 Rw.
Repeat the last R and Ch made around for a total of 6 R's and 6 Ch's.
R = 7+(last picot of Prev ring)3-3+(first picot of first ring made)7 Cl Rw.
Ch = 4-2-2-2-4 Rw. Join to beginning. DO NOT CUT keep working.

Round 2: *Ch = 6-2-2-1 Rw.
R = 5+(to second picot on chain of Prev. round) 2
+(to next picot on chain) 5 Cl Rw.
Ch = 1-2-2-6+(to base of R of round 1).*
Repeat from * to * around. Join to the beginning.



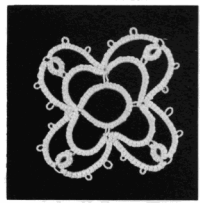
Design 5 Thread DMC No. 30 Shuttle and ball/Ring & Chain Method

Needle Tatters: When doing chain after chain take the double stitches off the needle, snug tight, do not tie a knot, join and continue.

CR = 10-10-10-10 Cl Rw.

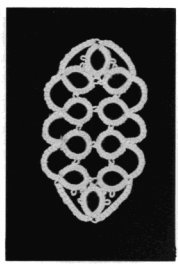
Round 1: Ch = 8-8+(to picot of center ring).
Ch = Leave a 1/16" space 8-8+(next picot of CR).
Ch = Leave a 1/16" space 8-8+(next picot of CR).
Ch = Leave a 1/16" space 8-8+(the base of the CR). DO NOT CUT keep working.

Round 2: *Ch = 5-5-5 Rw.
R = 5+(to P of center chain of Prev. round) 5 Cl. Rw.
Ch =Leave a 1/16" space 5-5-5
+(to space between chains of Prev. round).*
Repeat from * to * around. Join to the beginning.



Design 6 Thread DMC No 30 Shuttle and Ball/Ring & Chain Method

R = 6-6-6-6 Cl. Rw.
Ch = 12 Rw.
R = 6+(last P of Prev. R) 6-6-6 Cl. Rw.
Ch = 12 Rw.
R = 6+(last P of Prev. R) 6-3-3-6 Cl. Rw.
Ch = 12 Rw.
R = 6-3+(second to last P of Prev. R)3+(center P of Prev. R)3-3-6 Cl. Rw.
Ch = 12 Rw.
R = 6-3+(last P of Prev R)3+(center P of Prev. R) 6-6 Cl. Rw.
Ch = 12 Rw.
R = 6+(last P of Prev. R)6+(center P of corresponding R)6-6 Cl. Rw.
Ch = 12 Rw.
R = 6+(last P Prev. R) 6+(center P of corresponding R) 6-6 Cl.Rw.
Ch = 12 Rw.
R = 6+(last P of Prev.R) 6-3-3-6 Cl. Rw.
Ch = 12 Rw.
R = 6-3+(second to last P of Prev. R)3+(center P of Prev. R)3-3-6 Cl. Rw.
Ch =12 Rw.
R = 6-3+(second to last P of Prev. R)3+(center P of Prev. R)6-6 Cl. Rw.
Ch = 12 Rw.
Join to the beginning.



Design 7 Thread DMC No. 80 1 Shuttle/Ring & Thread Method

Inner Cluster A: Has 5 rings, leave 1/16" space after each ring unless stated.
R = 7-2-5 Cl. .
R = 6+(last P of Prev. R) 3-3-6 Cl.
CR = 7+(last P of Prev. R) 4-4-7 Cl.
R = 6+(last P of Prev. CR) 3-3-6 Cl.
R = 5+(last P of Prev. R) 2-7 Cl. Rw:

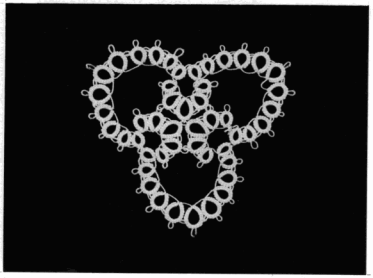
Outer Cluster B: Has 11 rings, leave 1/8" space after each ring unless stated.
R = 7-2-5 Cl.
*R = 5+(last P of Prev.R) 2-2-5 Cl.
R =6+(last P of Prev. R) 3-3-6 Cl.
R =6+(last P of Prev. R) 3-3-6 Cl.
R =7+(last P of Prev. R) 4-4-7 Cl.
Repeat the last ring made 2 more times
R =6+(last P of Prev. R) 3-3-6 Cl.
R =6+(last P of Prev. R) 3-3-6 Cl.
R = 5+(last P of Prev.R) 2-2-5 Cl.
R = 5+(last P of Prev. R)2-7 Cl. Rw.*

Inner Cluster C: Has 5 rings, leave 1/16" space after each ring unless stated.
R = 7-2-5 Cl.
R = 6+(last P of Prev. R) 3-3-6 Cl.
CR = 7+(last P of Prev. R) 4+(to center P of last CR)4-7 Cl.
R = 6+(last P of Prev. CR) 3-3-6 Cl.
R = 5+(last P of Prev. R) 2-7 Cl. Rw.

Outer Cluster D: Has 11 rings, leave 1/8" space after each ring unless stated.
R = 7+(last P of the last R of outer cluster made) 2-5 Cl.
Repeat from * to * of Outer Cluster B.

Inner Cluster E: Has 5 rings, leave 1/16" space after each ring unless stated.
Repeat Inner Cluster C one time.

Outer Cluster F: Has 11 rings, leave 1/8" space after each ring unless stated.
Repeat Outer Cluster B. **Expect** when making the last ring do R = 5+(last P of Prev. R)2+(first P of first R made)7 Cl. Rw.



Design 8 Pearl cotton 2 Shuttles/ Ring & Chain Method

R = 8-8-8-8 Cl. Rw.
Ch =24+(center P of last R).
Ch = 5 Rw.
R = 5-5-5-5 Cl. Rw.
Ch = 18 +(center P of last R).
Ch = 5 Rw.
R = 4-4-4-4 Cl. Rw.
Ch = 12+(center P of last R).
Ch = 5 Rw.
R = 2-2-2-2 Cl. Rw.
Ch = 7.

(Floating) Outer R = 3-3 Cl.
Ch = 7+(to base of last R).
Ch = 5+(to center P of next R).
Ch = 12+(to base of same R).
Ch = 5+(to center P of next R).
Ch = 18+(to base of same ring).
Ch = 5+(to center P of next R).
Ch = 24+(to base of same ring).

Knot all threads together and cut approx. 1 inch.

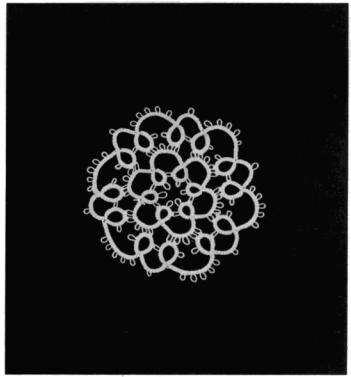
Design 9 Thread DMC No. 80 Shuttle and Ball/ Ring & Chain Method

Round 1:

R = 5-3-3-5 Cl. Rw.
Ch = 4-2-2-2-2-4 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.
Repeat the last Ch and R made around for a total of 5 R's and 4 Ch's.
Ch = 4-2-2-2-2-4 Rw.
R = 5+(last P of Prev. R)3-3+(first P of first R made)5 Cl. Rw.
Ch = 4-2-2-2-2-4 Rw. Join to the beginning.

Round 2:

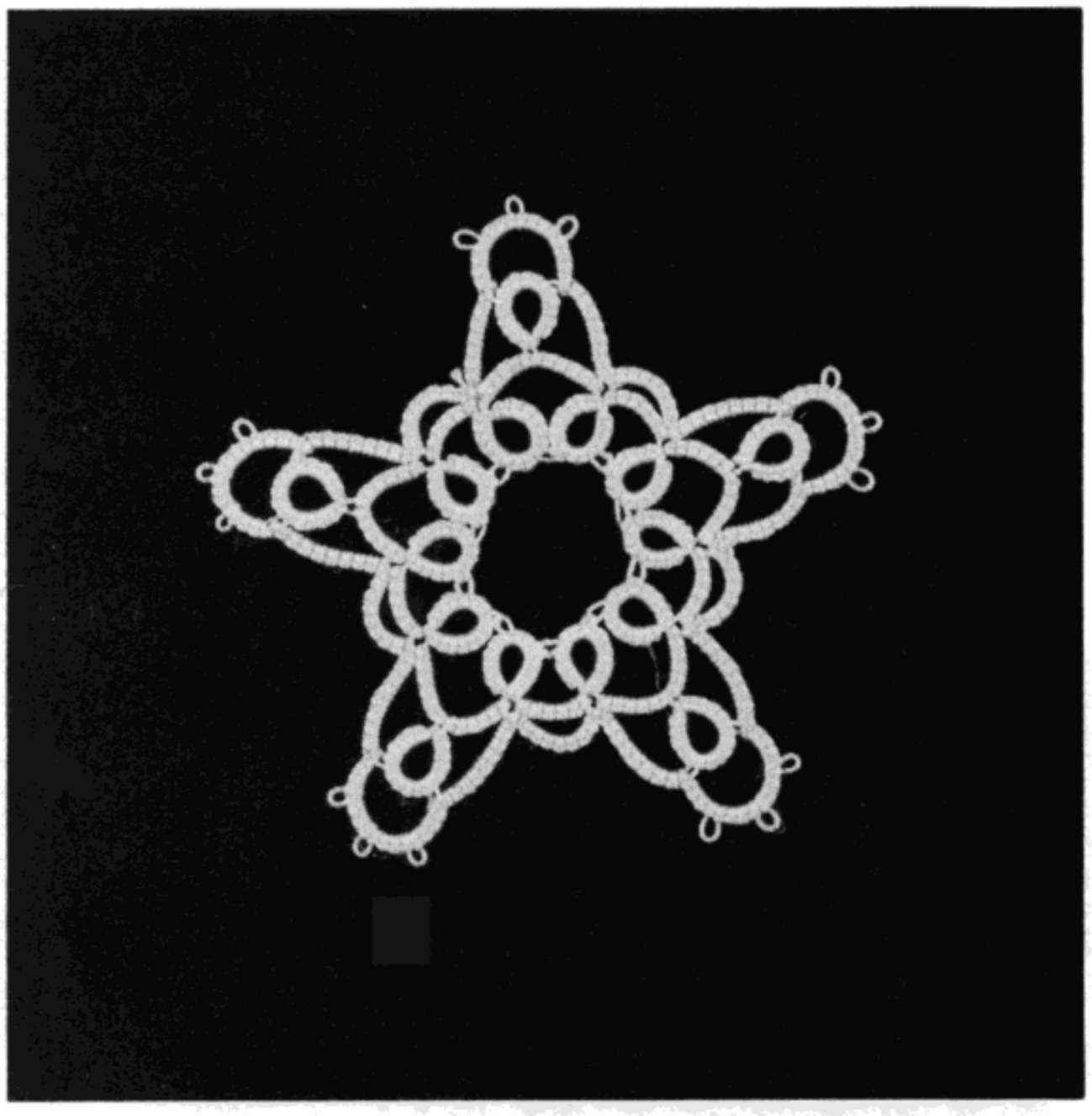
R = 6-4+(to first P of Ch of round 1)2+(to second P of same Ch)4-6 Cl. Rw.
*Ch = 5-3-3-3-3-3 Rw.
R = 6-4+(to fourth P of same Ch)
2+(to fifth P of same Ch)4-6 Cl. Rw.
Ch = 6-6 Rw.
R = 6+(last P of Prev. Ch) 4+(to first P of next chain of round 1)
2+(to second P of Ch)4-6 Cl. Rw. *
Repeat from * to * around for a total of 11 R's made.
Ch = 5-3-3-3-3-3 Rw.
R = 6-4+(to fourth P of same Ch) 2+(to fifth P of same Ch) 4+(first P of first R made)6 Cl. Rw.
Ch = 6-6 Rw.
Join to the beginning.



Design 10 Thread DMC No. 30 2 Shuttles/ Ring & Chain Method

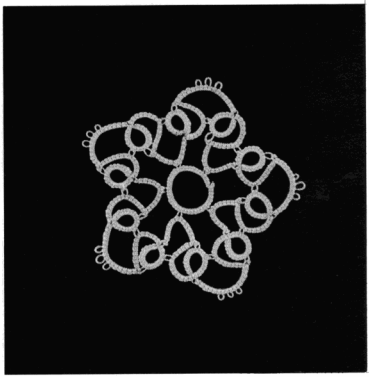
Round 1: CR = 5-3-8 Cl. Rw.
*Ch = 6
(Floating) R =6-6-6 Cl.
Ch = 6 Rw.
CR = 8+(last p of Prev. CR) 3-5 Cl.Rw.
Ch = 6 Rw.
CR =5+(last P of Prev. CR) 3-8 Cl.Rw.*
Repeat from * to * for a total of 9 CR.
Ch = 6
(Floating) R = 6-6-6 Cl.
Ch = 6
CR = 8+(last p of Prev. CR) 3+(to the first P of the first CR)5 Cl. Rw.
Ch = 6 do not cut continue.

Round 2: *Needle Tatters; take double stitches off the needle, snug tight, join, do not tie a knot, continue.*
Ch = 8+(to P of R) 4-4-4-4+(to next P of same R) 8+(between CR and Ch of round 1).
Ch =8+(between next Ch and CR).
Repeat around.

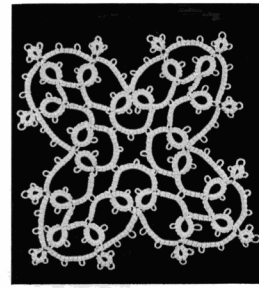


Design 11 Thread DMC No. 30 2 Shuttles/Ring & Chain Method

R = 7-3-10 Cl. Rw.
Ch = 8-6 +(last P of Prev R)Rw.
Ch = 6.
(Floating) IR = 10-10-10-10-10
Ch = 6 Rw.
*R = 3+ (to the only free P of last Ch)7-10 Cl. Rw.
Ch = 6-8+(last P of Prev. R)Rw.
Outer Ch = 6-2-2-6 Rw.
R = 7+(Free P of Ch)3-7 Cl. Rw.
Ch = 8-6+(to last P of Prev. R) Rw.
Ch = 6+(to P of IR) 6 *
Repeat from * to * 3 more times for a total of 4 outer Ch's.
R = 3+ (last free P of last Ch)7-10 Cl. Rw.
Ch = 6+(to first P of first R)8+(last P of Prev. ring)Rw.
Outer Ch = 6-2-2-6 Rw.
Join to the beginning.



Design 12 Thread DMC No. 30 Shuttle and Ball (2 Shuttles)/ Ring & Chain Method

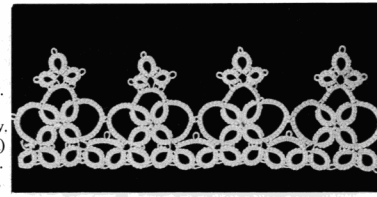


Round 1: R= 4-4-4-4 Cl. Rw.
*Ch = 4-4 Rw.
R = 4-4-4-4 Cl. Rw.
Ch = 4 Rw.
Outer R = 4-4-4-4 Cl. Rw.
Ch = 4 Rw.
R = 4-4-4-4 Cl. Rw.
Ch = 4+(to corresponding P of Ch) 4 Rw.
R = 4-4-4-4 Cl. Rw.*
Inner Ch = 4-4-4-4 Rw.
R = 4-4+(center P of Prev. R)4-4 Rw.
Repeat from * to * 1 more time.
Inner Ch = 4+(to last P of inner Ch)4-4-4 Rw.
R = 4-4+(center P of Prev. R)4-4 Rw.
Repeat from * to * 1 more time.
Inner Ch = 4+(to last P of inner Ch)4-4-4 Rw
R = 4-4+(center P of Prev. R)4-4 Rw.
Repeat from * to * 1 last time. **Except** for the last R be sure and join the center P to the center P of first R made.
Inner Ch = 4+(to last P of inner Ch)4-4+(to first P of first inner R)4 Rw.
Join to the beginning.

Round 2: *2 Shuttles*
First join into the center picot of the last rings that were joined.
Ch = 4-4-4+(center P of next ring)
(Floating) R = 2-2-2-2 Cl.
Repeat last Ch and R around. Join to the beginning.

Design 13 Thread DMC No. 30 2 Shuttles/Ring & Chain Method

R = 8-5-3 Cl.
*LR = 3+(last P of Prev. R)5-5-3 Cl.
IR = 3+(last P of Prev. R)5, Long P, 8 Cl. Rw.
Ch = 8-8 Rw.
IR = 8+(to Long P of Prev. IR)8 Cl. Rw.
Ch = 3-3.
(Floating) R = 2+(last P of Prev.Ch)3-3-2 Cl.
(Floating) LR = 2+(last P of Prev. R)5-5-2 Cl.
(Floating) R = 2+(last P of Prev. LR)3-3-2 Cl.
Ch = 2+(last P of Prev. R)3 Rw.
IR = 8+(center P of last IR)8 Cl. Rw.
Ch = 8-8 Rw.
IR = 8+(center P of last IR)8 Cl. Rw.
R = 8 +(center P of corresponding R) 5-3 Cl.
R = 3+(last P of Prev. R)5-8 Cl. Rw.
Ch = 5-5 Rw.
R = 8+(last P of Prev. LR)5-3 Cl.*
Repeat from * to * for desired length.



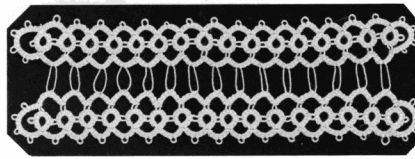
Design 14 Thread DMC No. 30, 1-Knitting Needle No.4 — Shuttle and Ball /Ring & Chain Method

Row 1: R = 3-3-3-3 Cl. Rw.
Ch = 3-3 Rw.
R = 3+(last P of Prev. R)3-3-3 Cl. Rw.
Repeat the last Ch and R for desired length
Ch = 3-3-3-3-3+(center P of last R)

Chain-Row 1: Ch = 3-(work long P over knitting-needle) 3+(center P of next R)
Needle tatters, take the double stitches off the needle, snug tight, do not tie a knot, join, continue.
Repeat last chain to length.
Ch = 3-3-3-3-3+(center P of last R). Join to the beginning.

Row 2: Repeat Row 1 not the Chain-Row 1.

Chain-Row 2: Ch = 3+(to long P that was made with knitting-needle) 3+(center P of next R).
Repeat last chain to length.
Ch = 3-3-3-3-3+(center P of last R) join to the beginning.



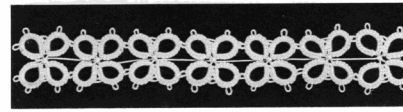
Design 15 Thread DMC No. 30 — 1 Shuttle/Ring & Thread Method

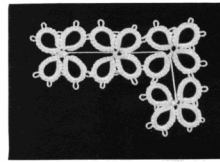
Cluster 1 R = 8-4-4-4 Cl. Rw. Do not leave a space unless stated.
IR = 8-4-4-4 Cl.
IR = 4+(last P of Prev. IR) 4-4-8 Cl. Rw.
R = 4+(first P of first R made) 4-4-8 Cl.
Lead the thread under all rings, take up a loop with the crochet hook, slide the shuttle or needle through it and tighten it, leave about an 1 1/4" space of thread.

Cluster 2 R = 8+(to corresponding P of fourth R) 4-4-4 Cl. Rw.
IR = 8+(to corresponding P of third IR) 4-4-4 Cl.
IR = 4+(last P of Prev. IR) 4-4-8 Cl. Rw.
R = 4+(first P of first R made) 4-4-8 Cl.
Lead the thread as stated above, leave 1 1/4" space of thread. Repeat Cluster 2 for desired length.

Corner IR = 8+(to second P of Prev. IR)4-8 Cl. Rw.
R = 8+(to second P of Prev. Outer R)4-4-4 Cl. Rw.
R = 4 +(last P of Prev. R)4-4-4-4 Cl. Rw.
R = 4 +(last P of Prev. R)4-4-8 Cl. Rw.

Lead the thread as stated above, leave 1 1/4" space of thread. Continue with Cluster 2 above and add corners as needed. Photo top next page.

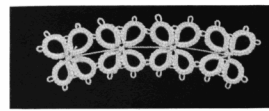




Design 16 Thread DMC No. 30 1 Shuttle/Ring & Thread Method

Cluster 1 R = 8-4-4-4 Cl. Rw. Do not leave a space unless stated.
IR = 7-4-3-4 Cl.
IR = 4+(last P of Prev. IR) 3-4-7 Cl. Rw.
R = 4+(first P of first ring made) 4-4-8 Cl.
Lead the threads and thread space as stated above in design 15.

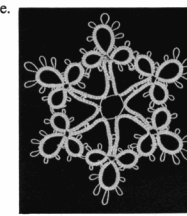
Cluster 2 R = 8+(to corresponding P of fourth IR) 4-4-4 Cl. Rw.
IR = 7+(to corresponding P of third R)) 4-3-4 Cl.
IR = 4+(last P of Prev. IR) 3-4-7 Cl. Rw.
R = 4+(first P of first ring made) 4-4-8 Cl.
Lead the threads and thread space as stated above. Continue with Cluster 2 for desired length.



Design 17 Thread DMC No. 80 Shuttle and Ball/Ring & Chain Method

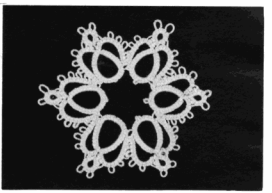
R = 3-3-3-3-3-3 Cl. Rw.
Ch = 6-6, long P, 6-6 Rw.

Clover Cluster R = 3-3-3+(center of Prev. R.)3-3-3 Cl. Do not leave thread space unless stated
LR = 3+(last P of Prev. R)3-3-3-3-3-3 Cl. Rw.
R = 3+(last P of Prev. R)3-3-3-3-3 Cl. Rw.
Ch = 6+(last P of Prev. Ch)6+(to long P of Prev. Ch) 6-6 Rw.
Repeat Clover Cluster and Ch, 4 more times for a total of 5 LR. **Except** the last Ch join last P to the first P of first Ch made.
R = 3+(last P of Prev. R)3-3-3-3-3 Cl. Rw.
LR = 3+(last P of Prev. R)3-3-3-3-3-3
+(first P of first R made)3 Cl. Rw.



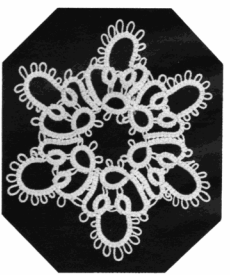
Design 18 Thread DMC No. 30 2 Shuttles/Ring & Chain Method

LR = 10-4-4-10 Cl. Rw.
(Floating) SR = 2-2-2-2-2 Cl. DO not reverse
*Ch =2+(last P of SR) 2-2-2-2-4+(last P of LR)
Ch = 4+(last P of Prev. Ch)2-2-2-2-2 DO not reverse
(Floating) SR = 2+(last P of Ch) 2-2-2-2 Cl. Rw.
LR = 10+(last joined P of Prev. LR) 4-4-10 Cl. Rw.*
Repeat from * to * for a total of 5 LR.
Ch =2+(last P of SR) 2-2-2-2-4+(last P of LR)
Ch = 4+(last P of Prev. Ch)2-2-2-2-2 DO not reverse.
(Floating) SR = 2+(last P of Ch) 2-2-2-2 Cl. Rw.
LR = 10+(last joining P of Prev. LR) 4-4+(first P of first R made)10 Cl. Rw
Ch = 2+(last P of SR) 2-2-2-2-4+(last Joining P of LR)
Ch = 4+(last P of Prev. Ch)2-2-2-2-2
Join to beginning.



Design 19 Thread DMC No. 30 Shuttle and Ball/Ring & Chain Method

IR = 3-3-3-4-4-4 Cl. Rw.
Ch = 4-4-2-2 Rw.
*SR = 6+(last P of IR) 3-3 Cl. Rw.
Long Ch = 2-2-2-2-2-2-2-2-2-2 Rw.
SR = 3+(last P of Prev. SR) 3+(to second P of IR) 6 Cl. Rw.
Ch = 2-2-4-4+(center P of IR)
IR = 3-3-3-4-4-4 Cl. Rw.
Ch = 4+(last P of Prev. Ch)4+(next P of Prev. Ch) 2-2 Rw.*
Repeat from * to * for a total of 6 IR.
SR = 6+(last P of IR) 3-3 Cl. Rw.
Long Ch = 2-2-2-2-2-2-2-2-2-2 Rw.
SR = 3+(last P of Prev. SR) 3+(to second P of IR) 6 Cl. Rw.
Ch = 2-2+(to second P of first Ch made)
4+(to next P of same Ch) 4+(to center P of Prev.
IR, then Join to base of first IR made).



Design 20 Thread DMC No. 30 2 Shuttles /Ring and Chain Method

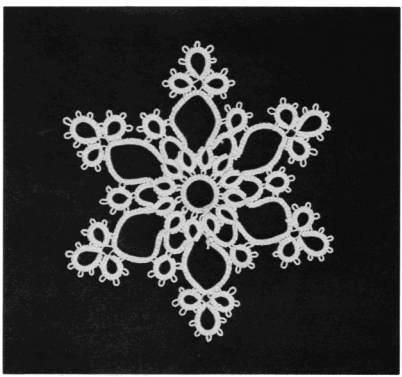
CR = 2-3-3-3-3-3-3-3-3-3-3-1 Cl. (Cut and tie or do a Split Ring)
IR = 4-4+(to P of CR) 4-4 Cl. Rw.
Ch = 5
(Floating) R = 3-3-3-3-3-3 Cl.
Ch = 5 Rw.
*IR = 4+(last P of Prev. IR) 4+(next P of CR) 4-4 Cl. Rw.
Long Ch = 7+(last P of R) 7-3

Cluster A:

(Floating)R = 3+(last P of Prev.Ch) 3-3-3-3-3 Cl. Do not leave a space unless stated.
(Floating)LR = 3+(last P of Prev. R) 3-3-3-3-3-3 Cl.
(Floating)R = 3+(last P of Prev. LR)3-3-3-3-3 Cl.
Long Ch = 3+(last P of Prev. R) 7-7 Rw.
IR = 4+(last P of Prev. IR) 4+(next P of CR) 4-4 Cl. Rw.
Ch = 5
(Floating)R = 3+(last P of Long Ch)3-3-3-3-3 Cl.
Ch = 5 Rw.*
Repeat from * to * four more times for a total of 11 IR.
IR = 4+(last P of Prev. IR) 4+(next P of CR)4(first P of first IR made)4 Cl. Rw.
Long Ch = 7+(last P of R) 7-3

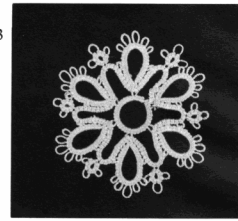
Cluster B:

(Floating)R = 3+(last P of Prev.Ch) 3-3-3-3-3 Cl.
(Floating)LR = 3+(last P of Prev. R) 3-3-3-3-3-3 Cl
(Floating)R = 3+(last P of Prev. LR)3-3-3-3-3 Cl.
Long Ch = 3+(last P of Prev. R) 7+(first P of first R made)7 Rw.
Join to the beginning.



Design 21 Thread DMC No. 30 2 Shuttles/Ring and Chain Method

CR = 6-6-6-6-6-6-6 Cl. Leave 1/16" space.
LR = 3-3-5-2-2-2-2-5-3-3 Cl.
*Ch = 3+(last P of Prev. LR)3+(next P of Prev. LR)3
(Floating) SR = 2-2-2-2 Cl.
Continue-Ch = 3-3-3+(join to next P of CR)
(Floating) LR=3+(last P of Prev. Ch)3+(last P of Prev. Ch)
5-2-2-2-2-5-3-3 Cl. (join to same P of CR)*
Repeat from * to * for a total of 6 LR's.
Ch = 3+(last P of Prev. Ch)3+(next P of Prev. Ch)3
(Floating) SR = 2-2-2-2 Cl.
Continue-Ch = 3+(second P of first LR)
3+(next P of first LR)3. Join to the beginning.

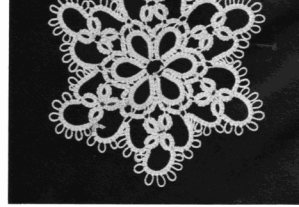


Design 22 Thread DMC No. 30 2 Shuttles/Ring and Chain Method

Round 1: R = 5-3-3-3-3-5 Cl. Make rings in this round as close as possible
R = 5+(last P of Prev. R)3-3-3-3-5 Cl.
Repeat last R for a total of 5 rings.
R = 5+(last P of Prev.R)3-3-3-3+(first P of first R made)5 Cl.
Join to the beginning.

Round 2: Ch = (First join in center P of round 1) 3+(to next P of round 1).
(Floating)*R = 5-5 Cl
Ch = 3+(to joining P between two rings of Prev. round) 3+(next picot of round 1).
(Floating)R = 5+(center P of Prev. R) 5 Cl.
Ch = 3+(next free picot of round 1, leave small space for P)3+(next picot of round 1).
Repeat from * to * around. Join to beginning. Do not cut continue to Round 3.

Round 3: Ch 2-2-2-2-2 Rw.
**R = 5+(to center P of R's of Round 2) 5 Cl. Rw.
Ch = 2-2-2-2-2-2-2-2 Rw.
R = 5+(to center small P of same R's) 5 Cl. Rw.
Ch = 2-2-2-2-2+(small P on Ch of Round 2) 2+(last P of Prev. Ch) 2-2-2-2 Rw.**
Repeat from ** to ** around. Join to the beginning.

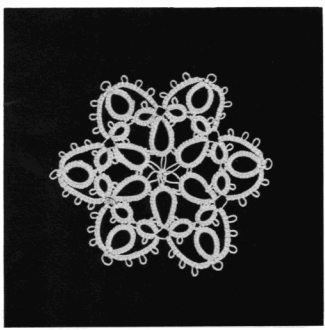


Design 23 Thread DMC No. 30 Shuttle and Ball/Ring & Chain Method

Clover Cluster SR = 3-5-5-3 Cl. Do not leave a space after R's unless stated.
LR = 3+(last P of Prev. SR) 7-3, long P, 3-7-3 Cl.
SR = 3+(last P of Prev. LR) 5-5-3 Cl. Rw.
*Ch = 3-3-3-3 Rw.
R = 12+(center P of Prev. SR) 12 Cl.
Ch = 1-1+(join to the base of Prev.R)3-3-3-3 Rw.

Clover Cluster SR = 3-5+(to center joining P of Prev. SR) 5-3 Cl.
LR = 3+(last P of Prev. SR)7+(to forth P of Prev. LR)3, long P, 3-7-3 Cl.
Note: the LP is not joined yet
SR = 3+(last P of Prev. LR) 5-5-3 Cl. Rw.*
Repeat from * to * for a total of 5 clover clusters
Ch = 3-3-3-3 Rw.
R = 12+(center P of Prev. SR) 12 Cl.
Ch = 1-1+(join to base of Prev.R)3-3-3-3 Rw.

Clover Cluster SR = 3-5+(to center joining P of Prev. SR) 5-3 Cl.
LR = 3+(last P of Prev. SR)7+(fourth P of Prev. LR)3, (take up all 5 P's with crochethook join, leave the same space so that a long Picot is formed. or needle tatters run the tatting needle through all the long Picots and then make a long Picot), 3+(second P of first LR made)7-3 Cl.
SR = 3+(last P of Prev. LR) 5+(center P of first SR made)5-3 Cl. Rw.
Ch = 3-3-3-3 Rw.
R = 12+(center joining P of Prev. SR) 12 Cl.
Ch = 1-1+(join to base of Prev.R)3-3-3-3 Rw.
Join to the beginning.

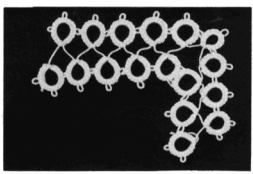


Design 24 Thread DMC No. 30 1 Shuttle/Ring and Thread Method

IR = 5-5-5-5 Cl.Rw.
R = 5-5-5-5 Cl.Rw. Leave 1/4" between all rings
*IR = 5+(to last P of Prev. IR made) 5-5-5 Cl. Rw.
R = 5+(to last P of Prev R made) 5-5-5 Cl. Rw.*
Repeat from * to * for desired length.

Corner:

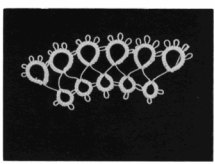
IR = 5+(to last P of Prev. IR made) 5-5-5 Cl. Rw.
R = 5+(to last P of Prev. R)5-5-5 Cl. Leave 1/4" space.
R = 2+(last P of Prev. R)5-5-2 Cl. Leave 1/4" space.
R = 5+(last P of Prev. R)5-5-5 Cl. Rw.
IR =5+(last P of Prev. IR)5+(center P of same IR) 5-5 Cl. Rw.
R = 5+(to last P of Prev R made) 5-5-5 Cl. Rw.
Continue from * to * for desired length and add corners as needed.



Design 25 Thread DMC No. 80 1 Shuttle/Ring & Thread Method

Curved lace for a diameter of approx. 5 inches.

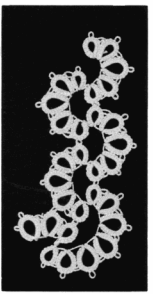
LR = 7-3-3-3-3-7 Cl. Rw. Leave 1/4" between all rings
SR = 4-4-4-4 Cl. Rw.
LR = 7+(to last P of Prev. LR) 3-3-3-3-7 Cl. Rw.
SR = 4+(to last P of Prev. R) 4-4-4 Cl. Rw.
Repeat the last LR and SR for desired length.



Design 26 Thread DMC No. 30 1 Shuttle/Ring and Thread Method

Outer Cluster A: R = 7-2-5 Cl. Leave 1/16" space after all rings unless stated.
R = 6+(last P of Prev. R)3-3-6 Cl.
R = 7+(last P of Prev. R)4-4-7 Cl.
R = 6+(last P of Prev. R)3-3-6 Cl.
R = 5+(last P of Prev. R)2-7 Cl. Rw.

Inner Cluster B: IR = 7-2-5 Cl.
*IR = 6+(last P of Prev. R)3-3-6 Cl.
IR = 7+(last P of Prev. R)4-4-7 Cl. (Omit for curve)
IR = 6+(last P of Prev. R)3-3-6 Cl.
IR = 5+(last P of Prev. R)2-7 Cl. Rw.



Outer Cluster C: R = 7+(to last P of the Prev. R of outer cluster A) 2-5 Cl.
R = 6+(last P of Prev. R)3-3-6 Cl.
R = 7+(last P of Prev. R)4-4-7 Cl.
R = 6+(last P of Prev. R)3-3-6 Cl.
R = 5+(last P of Prev. R2-7 Cl. Rw.
IR = 7+(to last P of the Prev. IR) 2-5 Cl. *
Repeat from * to * for desired length.

If a corner is desired on the last repeat stop at the end of the Inner Cluster.

Corner if desired

R = 7+(to last P of the Prev. R of outer cluster)2-5 Cl.
R = 6+(last P of Prev. R)3-3-6 Cl.
R = 7+(last P of Prev. R) 4-4-7 Cl.
Repeat the last ring 2 more times
R = 6+(last P of Prev. R)3-3-6 Cl.
R = 5+(last P of Prev. R2-7 Cl. Rw.
IR =7+(last P of Prev. IR) 2-5 Cl.
IR = 6+(last P of Prev. R)3+(center P of next IR) 3-6 Cl. Leave 1/16" space
IR = 7+(last P of Prev. R)4-4-7 Cl.
IR = 6+(last P of Prev. R)3-3-6 Cl.
IR = 5+(last P of Prev. R2-7 Cl. Rw.
Do Outer Cluster C.
Repeat from * to * above for desired length.

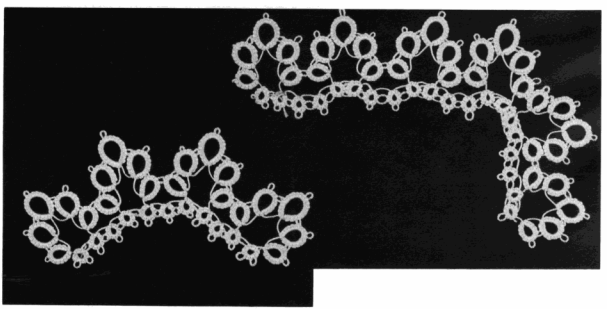
Curving of pattern Diameter will vary
Follow the pattern above. Omitting the one line marked above.
There is 4 IR's instead of 5 IR's rings.

Design 27 Thread DMC No. 30 1 Shuttle/Ring & Thread Method

SR = 2-2-2-2 Cl. Rw. Leave 1/8" space after each ring unless stated.
R = 7-2-5 Cl.
*R = 3+(last P of Prev. R)6-3-6 Cl.
LR = 4+(last P of Prev. R)7-7-4 Cl.
R = 6+(last P of Prev. R)3-6-3 Cl.
R = 5+(last P of Prev. R)2-7 Cl. Rw.
SR = 2+(last P of Prev SR)2-2-2 Cl. Leave 1/16" space
SR = 2+(last P of Prev SR) 2-2-2 Cl Leave 1/16" space (omit for curved pattern below)
SR = 2+(last P of Prev. SR)2-2-2 Cl. Leave 1/16" space
SR = 2+(last P of Prev. SR)2-2-2 Cl. Leave 1/16" space
R = 7+(last P of Prev. R)2-5 Cl.*
Repeat from * to * for desired length

Corner: R = 3+(last P of Prev. R)6-3-6 Cl. Leave 1/ 8" space after each ring unless stated.
LR = 4+(last P of Prev. R)7-7-4 Cl.
R = 6+(last P of Prev. R)3-6-3 Cl.
R = 5+(last P of Prev. R)2-3-4 Cl. Rw.
SR = 2+(last P of Prev. SR)2+(next P of same SR)2-2 Cl. Do not leave a space
SR = 2+(last P of Prev. SR)2+(next P of same SR)2-2 Cl. Leave 1/16" space
R = 4+(last P of Prev. R)3-2-5 Cl. Rw.
R = 3+(last P of Prev. R)6-3-6 Cl.
LR = 4+(last P of Prev. R)7-7-4 Cl.
R = 6+(last P of Prev. R)3-6-3 Cl.
R = 5+(last P of Prev. R)2-7 Cl. Rw.
SR = 2+(last P of Prev SR)2+(next P of same SR)2-2 Cl. Leave 1/16" space
SR = 2+(last P of Prev SR) 2-2-2 Cl Leave 1/16" space
SR = 2+(last P of Prev. SR)2-2-2 Cl. Leave 1/16" space
SR = 2+(last P of Prev. SR)2-2-2 Cl. Leave 1/16" space
R = 7+(last P of Prev. R)2-5 Cl.
Repeat from * to * again for desired length.

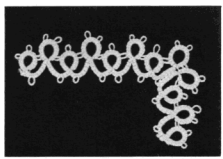
Curved Pattern Curved lace for a diameter of approx. 13 – 25 inches.
Follow pattern above except omit the SR marked above.



Design 28 Thread DMC No. 40 Shuttle and Ball/Ring & Chain Method

R = 5-3-3-5 Cl. Rw.
*Ch = 2-5 Rw.
R = 2+(last P of Prev. R)5-3-5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.*
Repeat from * to * for desired length

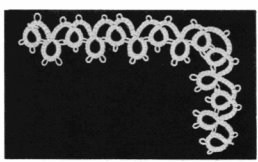
Corner: Ch = 1-5 Rw.
R = 2+(last P of Prev. R)5-3-5-2 Cl. Do not reverse.
R = 2+(last P of Prev. R)5-3-5-2 Cl. Rw.
Ch = 5+(last p of Prev. Ch)1 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.
Repeat from * to * for desired length.



Design 29 Thread DMC No. 40 Shuttle and Ball/Ring & Chain Method

R = 5-3-3-5 Cl. Rw.
*Ch = 2-5 Rw.
R = 2+(last P of Prev. R)5-3-5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.*
Repeat from * to * for desired length

Corner: Ch = 5-5 Rw.
R = 5+(last P of Prev. R)3+(next P of same R)3-5 Cl. Rw.
Ch = 2-5 Rw.
R = 2+(last P of Prev. R)5-3-5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.
Repeat from * to * above for desired length.



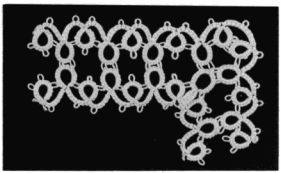
Design 30 Thread DMC No. 30 Shuttle and Ball/Ring & Chain Method

Inner Row 1: R = 5-3-3-5 Cl. Rw.
*Ch = 2-5 Rw.
LR = 2+(last P of Prev. R)5-3-5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. LR)3-3-5 Cl. Rw.*
Repeat from * to * for desired length

Corner:
Ch = First leave a 1/16" space first for a P, 5 Rw.
LR = 2+(last P of Prev. R)5-3-3-5-2 Cl. Rw.
Ch = 5+(last P of Prev. Ch) Rw.
R = 5+(last P of Prev. LR)3-3-5 Cl. Rw.
Repeat from * to * for desired length.

Outer Row 2: R = 5-3-3-5 Cl. Rw.
Ch = 2-5 Rw.
*LR = 2+(last P of Prev. R)5+(to second P of LR of Row 1)
3+(to next P of same LR) 5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.
Ch = 2-5 Rw.*
Repeat from * to * for desired length.

Corner: LR = 2+(last P of Prev. R) 5+(second P of corner LR of row 1)
3+(next P of same LR)5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. LR)3-3-5 Cl. Rw.
Ch = 5-5 Rw.
R = 5+(last P of Prev. R)3+(next P of same R)3-5 Cl. Rw.
Ch = 2-5 Rw.
LR = 2+(last P of Prev. R)5+(same joining P of LR)3+(next P of same LR)5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.
Ch = 2-5 Rw.*
Repeat from * to * around.



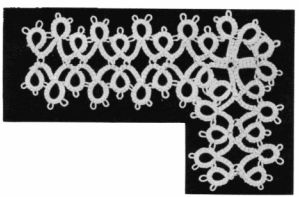
Design 31 Thread DMC No. 30 Shuttle and Ball/Ring & Chain Method

Inner Row 1: R = 5-3-3-5 Cl. Rw.
*Ch = 2-5 Rw.
LR = 2+(last P of Prev. R)5-3-5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. LR)3-3-5 Cl. Rw.*
Repeat from * to * for desired length

Corner: Ch = 5, long P, 5 Cl. Rw.
R = 5+(last P of Prev. R)3+(next p of same R)3-5 Cl. Rw.
Ch = 2-5 Rw.
LR = 2+(last P of Prev. R)5+(second P of Prev. LR)3-5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. LR)3-3-5 Cl. Rw.
Repeat for * to * for desired length.

Outer Row 2: R = 5-3-3-5 Cl. Rw.
**Ch = 2+(to corresponding P of Ch of inner row 1)5 Rw.
LR = 2+(last P of Prev. R)5-3-5-2 Cl Rw
Ch = 5+(to next P of Ch of inner row 1)2 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.**
Repeat from ** to ** for desired length.

Corner: Ch = 5+(to corresponding P of corner Ch of row 1)5 Rw.
R = 2+(last P of Prev. R)5-3-5-2 Cl. Do not leave a space
R = 2+(last P of Prev. R)5-3-5-2 Cl.
Ch = 5+(to same joined P of corner Ch of Row 1)5 Rw.
R = 2+(last P of Prev. R)5+(next P of same R) 3-5-2 Cl. Do not leave a space.
R = 2+(last P of Prev. R)5-3-5-2 Cl. Rw.
Ch = 5+(to same joined P of corner Ch of Row 1) 5 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.
Repeat from * to * for desired length.



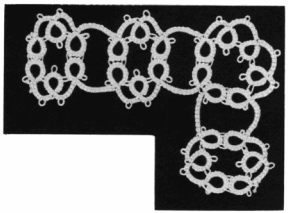
Design 32 Thread DMC No. 40 Shuttle and Ball/Ring & Chain Method

Inner Row: LR = 2-5-3-5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. LR)3-3-5 Cl. Rw.
Ch = 2-5 Rw.
LR = 2+(last P of Prev. R)5-3-5-2 Cl. Rw.
Long-Ch = 10 Rw.
Repeat inner row for desired length.

Corner: LR = 2-5-3-5-2 Cl. Do not leave a space.
LR = 2+(last P of Prev. LR)5-3-5-2 Cl. Rw.
Long-Ch = 10 Rw.
Repeat inner row for desired length.

Outer Row: R = 2-5+(first P of LR of inner row)3+(next P of same LR) 5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. R)3-5-2 Cl. Rw.
Ch = 2-5 Rw.
R = 2+(last P of Prev. R)5+(first P of next LR of inner row)
3+(next P of same LR) 5-2 Cl. Rw.
Long-Ch = 10 Rw.
Repeat Outer Row for desired length

Corner: R = 2-5+(first corner P of LR of inner row)3+(next P of same corner LR) 5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.
Ch = 5-5 Rw
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.
Ch = 5-5 Rw
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.
Ch = 2-5 Rw.
R = 2+(first P of Prev. R)5+(first P of next corner LR)3+
(next P of same corner LR) 5-2 Cl. Rw.
Long-Ch = 10 Rw.
Repeat Outer Row for desired length.

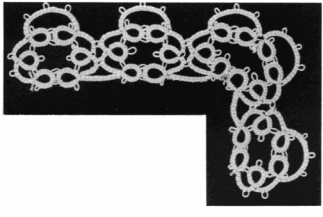


Design 33 Thread DMC No. 40 2 Shuttles/Ring & Chain Method

Cluster 1: R = 2-5-3-5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.
Ch = 2-5 Rw.
R = 2+(last p of Prev. R)5-3-5-2 Cl. Rw.
Ch = 5-5-5-5 Rw.
R = 2-5+(second to last P of Prev. R)3+(next P of same R)5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.
Ch = 2-5 Rw.
R = 2+(last P of Prev. R) 5+(second to last P of first R in cluster made)
3+(next P of same R)5-2 Cl. Do not reverse.
Ch = 10 Do not reverse.

Cluster 2: R = 2-5-3-5-2 Cl. Rw.
Ch = 5+(corresponding P of chain of Prev cluster) 2 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.
Ch = 2+(corresponding P of chain of Prev. cluster)5 Rw.
R = 2+(last P of Prev. R)5-3-5-2 Cl. Rw.
Ch = 5-5-5-5 Rw.
R = 2-5+(second to last P of Prev. R)3+(next P of same R)5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.
Ch = 2-5 Rw.
R = 2+(last P of Prev. R) 5+(second to last P of first R in cluster)
3+(next P of same R)5-2 Cl. Do not Reverse.
Ch = 10 Do not reverse.
Repeat Cluster 2 for desired length.

Corner: R = 2-5-3-5-2 Cl. Rw.
Ch = 5+(corresponding P of chain of Prev cluster) 2 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.
Ch = 2+(corresponding P of chain of Prev. cluster)5 Rw.
R = 2+(last P of Prev. R)5-3-5-2 Cl. Rw.
Ch = 5-5-5-5 Rw.
R = 2-5+(second to last P of Prev. R)3+(next P of same. R)5-2 Cl. Do not reverse.
R = 2+(last P of Prev. R) 5-3-5-2 Cl. Rw.
Ch = 5-5-5-5 Rw.
R = 2-5+(second to last P of Prev. R)
3+(next P of same R)5-2 Cl.
Ch = 5-2 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.
Ch = 2-5 Rw.
R = 2+(last P of Prev. R)
5-3+(to second P of first R in cluster)3+(next P of same R)
5-2 Cl. Do not Rw.
Ch = 10 Do not Rw.
Repeat Cluster 2
for desired length.



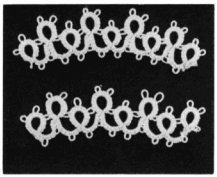
Design 34 Thread DMC No. 40 Shuttle and Ball/Ring & Chain Method

Curved lace for a diameter of approx. 3 1/2 - 5 1/2 inches.

R = 5-3-3-5 Cl. Rw.
*Ch = 2-2-3 Rw.
R = 2+(last P of Prev. R)5-3-5-2 Cl. Rw.
Ch = 3+(last P of Prev. Ch)2-2 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw. *
Repeat from * to * for desired length

Curved lace for a diameter of approx. 9 inches.

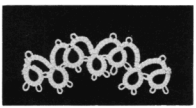
R = 5-3-3-5 Cl. Rw.
*Ch = 2-3-2 Rw.
R = 2+(last P of Prev. R)5-3-5-2 Cl. Rw.
Ch = 2+(last P of Prev. Ch)3-2 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw. *
Repeat from * to * for desired length



Design 35 Thread DMC No. 40 Shuttle and Ball/Ring & Chain Method

Curved lace for varies diameters.

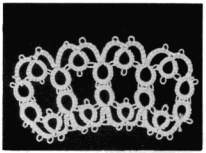
R = 5-3-3-5 Cl. Rw.
*Ch = 2-6 Rw.
R = 2+(last P of Prev. R)5-3-5-2 Cl. Rw.
Ch = 6-2 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.*
Repeat from * to * for desired length.



Design 36 Thread DMC No. 40 Shuttle and Ball/Ring & Chain Method

Curved lace for a diameter of approx. 3 1/2 - 5 1/2 inches.

Inner Row: LR = 2-5-3-5-2 Cl Rw
Ch = 3-2-1 Cl Rw
*R = 5+(last P of Prev. R)2-2-5 Cl Rw
Ch = 1-2-3 Cl Rw
LR = 2+(last P of Prev. R)5-3-5-2 Cl Rw
Ch = 3+(last P of Prev. Ch)2-1 Rw.*
Repeat from * to * for desired length.



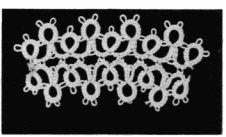
Outer Row: LR = 2-5+(second to last P of LR of Inner Row)
3+(next P of same LR)5-2 Cl. Rw.
**Ch = 6-2 Rw.
R = 5+(last P of Prev. LR)3-3-5 Cl. Rw.
Ch = 2-6 Rw
LR = 2(last P of Prev. R)5+(second to last P of LR of Inner Row)
3+(next P of same LR)5-2 Cl. Rw.**
Repeat from * *to * * for desired length

Design 37 Thread DMC No. 40 Shuttle and Ball/Ring & Chain Method

Curve lace for a diameter of approx. 5 1/2 - 8 inches

Inner Row: R = 5-3-3-5 Cl. Rw.
Ch = 2-2-3 Rw.
*R = 2+(last P of Prev. R)5-3-5-2 Cl. Rw.
Ch = 3+(last P of Prev. Ch)2-2 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.
Ch = 2-2-3 Rw. *
Repeat from * to * for desired length.

Outer Row: R = 5-3-3-5 Cl. Rw.
Ch = 2+(to corresponding P of Ch of Inner Row)2-3 Rw.
**R = 2+(last P of Prev. R)5-3-5-2 Cl. Rw.
Ch = 3+(last P of Prev. Ch)2+(to next P of Ch of Inner Row)2 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.
Ch = 2-2-3 Rw. **
Repeat from ** to ** for desired length.

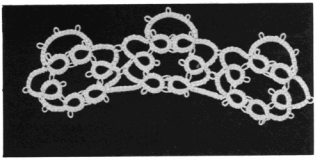


Design 38 Thread DMC No. 40 2 Shuttles/Ring & Chain Method

Curve lace for a diameter of approx. 5 inches

Cluster 1: R = 2-5-3-5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.
Ch = 4-7 Rw.
R = 2+(last p of Prev. R)5-3-5-2 Cl. Rw.
Ch = 5-5-5-5 Rw.
R = 2-5+(second to last P of Prev. R)3+(next P of same R)5-2 Cl. Rw.
Ch = 7-4 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.
Ch = 2-5 Rw.
R = 2+(last P of Prev. R) 5+(second to last P of first R in cluster made)
3+(next P of same R)5-2 Cl. Do not reverse
Ch = 8 Do not reverse.

Cluster 2: R = 2-5-3-5-2 Cl. Rw.
Ch = 5+(corresponding P of chain of Prev cluster) 2 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.
Ch = 4+(corresponding P of chain of Prev. cluster)7 Rw.
R = 2+(last P of Prev. R)5-3-5-2 Cl. Rw.
Ch = 5-5-5-5 Rw.
R = 2-5+(second to last P of Prev. R)3+(next P of same R)5-2 Cl. Rw.
Ch = 7-4 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.
Ch = 2-5 Rw.
R = 2+(last P of Prev. R)5+(second to last P of first R in cluster)
3+(next P of same R)5-2 Cl. Do not reverse
Ch = 8 Do not reverse.
Repeat Cluster 2 for desired length.

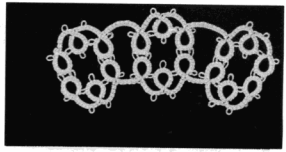


Design 39 Thread DMC No. 40 Shuttle and Ball/Ring & Chain Method

Curved for a lace of diameter approx. 3 1/2 - 5 1/2 inches

Inner Row: LR = 2-5-3-5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. LR)3-3-5 Cl. Rw.
Ch = 2-5 Rw.
LR = 2+(last P of Prev. R)5-3-5-2 Cl. Rw.
Ch = 5 Rw.
Repeat Inner Row for desired length

Outer Row: LR = 2-5+(second to last P of LR of inner row)3+(next P of same LR) 5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. LR)3-3-5 Cl. Rw.
Ch = 2-5 Rw.
R = 2+(last P of Prev. R)5+(second to last P of LR of inner row) 3+(next P of same LR) 5-2 Cl. Rw.
Ch = 10 Rw.
Repeat Outer Row for desired length.

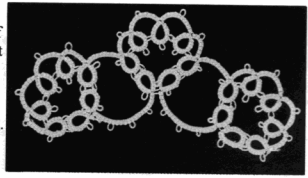


Design 40 Thread DMC No. 40 Shuttle and Ball/Ring & Chain Method

Curved lace for a diameter of approx. 3 1/2 - 4 1/2 inches

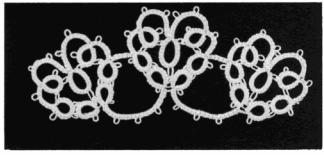
Inner Row: R(a) = 2-5-3-5-2 Cl. Do not leave a space
R(b)= 2+(last P of Prev. R(a))5-3-5-2 Cl. Rw.
Ch = 5-5-5-5 Rw.
Repeat Inner Row for desired length.

Outer Row: R = 2-5+(second to last P of R(a)of inner row)3+ (next P of same R)5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.
Ch = 5-5 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.
Ch = 5-5 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.
Ch = 2-5 Rw.
R = 2+(last P of Prev. R)5+(second P of R(a)of inner row)3+(next P of same R)5-2 Cl. Rw.
Ch = 10 Rw.
Repeat Outer Row for desired length.



Design 41 Thread DMC No. 40 Shuttle and Ball/Ring & Chain Method

Curve lace for a diameter of approx. 5 1/2 inches.



Outer Row: R(a) = 2-5-3-5-2 Cl.Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.
Ch = 5-5-5 Rw.
LR = 2+(center P of Prev. R)8, long P, 8-2 Cl. Rw.
Ch = 5-5-5 Rw.
R = 5-3+(last P of Prev. LR) 3-5 Cl. Rw.
Ch = 2-5 Rw.
R(b) = 2+(last P of Prev. R)5-3-5-2 Cl. Rw.
Ch = 5 Rw.
Repeat Outer Row for desired length

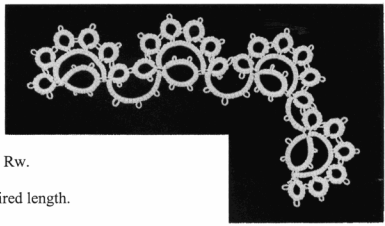
Inner Row: R = 2-5+(second P of R(a) of outer row)3+(next P of same R) 5+(center P of LR of outer row) 3 Cl Rw. Do not leave a space.
R = 2+(same center joining P of LR of outer row) 5+(second p of R(b) of outer row) 3+(next P of same R)) 5-2 Cl. Rw.
Ch = 5-5-5-5 Rw.
Repeat Inner Row for desired length.

Design 42 Thread DMC No. 40 2 Shuttles/Ring & Chain Method

*CR = 5-5-5-5-5-5 Cl. Rw.
(Floating) R = 3-5-3 Cl. **Except** on repeats do R = 3-5+(to center P of Prev. R)5-3 Cl.
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5-(to center P of CR)
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl. Rw.
Inner Ch = 5-5-5-5 Rw.*
Repeat from * to * for desired length.

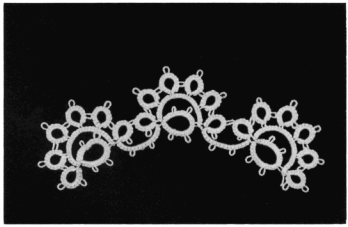
Corner: CR = 5-5-5-5-5-5 Cl. Rw.
(Floating) R = 3-5+(to center P of Prev. R)5-3 Cl.)
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5-(to center P of CR)
(Floating) R = 3+(last P of Prev. R)5-3-5 Cl. Rw.
Inner Ch = 5-5
CR = 5-5-5-5-5-5 Cl. Rw.

(Floating) R = 5+(last P of Prev. R)3+(next P of same R)5-3 Cl. Rw.
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5-(to center P of CR)
(Floating) R = 3+(last P of Prev. R)5-3-5 Cl. Rw.
Inner Ch = 5-5-5-5 Rw.*
Repeat from * to * for desired length.



Design 43 Thread DMC No. 40 2 Shuttles/Ring & Chain Method

*CR = 5-5-5-5-5-5 Cl. Rw.
(Floating) R = 3-5-5-3 Cl. **Except** on repeats do R = 3-5+(to center P of Prev. R)5-3 Cl.
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5-(to center P of CR)
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl. Rw.
Inner Ch = 5-5-5 Rw.*
Repeat from * to * for desired length.



Design 44 Thread DMC No. 30 2 Shuttles/ Ring & Chain Method

Photograph on page 39, top left.

Row 1:

Cluster: IR = 4-7-7-4 Cl. Rw.
Ch = 3
(Floating) R = 2-2-2-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl. (**Except** on repeats do R = 2+(last P of Prev. R) 2+(last P of Prev. LR)2-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)3-3-2 Cl. (**Except** on repeats do R = 2+(last P of Prev. R) 2+(center joining P of Prev. LR)2-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
IR = 12+(center P of Prev. IR)4-8 Cl. Rw.
Ch = 3
(Floating) R = 2+(last P of Prev. R)4-4-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R4-4-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)4-4-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R3-3-2 Cl.
IR = 8+(last P of Prev. IR)4+(center joining P of same IR) 12 Cl. Rw.
Ch = 3
(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 3+ (to the base of first IR made)
Long Ch = 6-6-6 Rw.
LR = 8+(center P of 13th R made)4+(center P of next R) 4-8 Cl. Rw.
Long Ch = 6-6-6 Rw.
Repeat Cluster for desired length.

Row 2: (If desired) First join in center P of the forth R.
Needle tatters: Pull stitches of needle, snug tight, do not tie a knot, join and continue.
Ch = 4-4+(center P of next R)
Repeat last Ch 6 more times.
Ch = 4+(center joining P of LR)4+(next P of R of next cluster)
Repeat above for desired length.

Design 45 Thread DMC No. 30 2 Shuttles/ Ring & Chain Method

Photograph on page 39, bottom design.

Cluster: IR = 10-10 Cl. Rw.
Ch = 6

(Floating) R = 2-2-2-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)2-2-2 Cl. **Except** on repeats do R = 2+(last P of Prev. R) 2+(joining P of last LR) 2-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
IR = 12+(center P of Prev. IR)4-8 Cl. Rw.
Ch = 3

(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R4-4-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R3-3-2 Cl.
IR = 8+(last P of Prev. IR)4+(center joining P of same IR) 12 Cl. Rw.
Ch = 3

(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 6+(to the base of first IR made)
Long Ch = 6-6-6 Rw.
LR = 8+(center P of 2nd to the last R of Prev. Cluster made)8 Cl. Rw.
Long Ch = 6-6-6 Rw.

Repeat Cluster for desired length.

Design 46 Thread DMC No. 30 2 Shuttles/ Ring & Chain Method

Corner for design 45. Photograph on page 39, top right.

Cluster 1: R = 10-10 Cl. Rw.
Ch = 6

(Floating) R = 2-2-2-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
*Ch = 3

(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
IR = 12+(center P of Prev. IR)4-8 Cl. Rw.
Ch = 3

(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R4-4-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R3-3-2 Cl.
IR = 8+(last P of Prev. IR)4+(center joining P of same IR) 12 Cl. Rw.
Ch = 3

(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 3

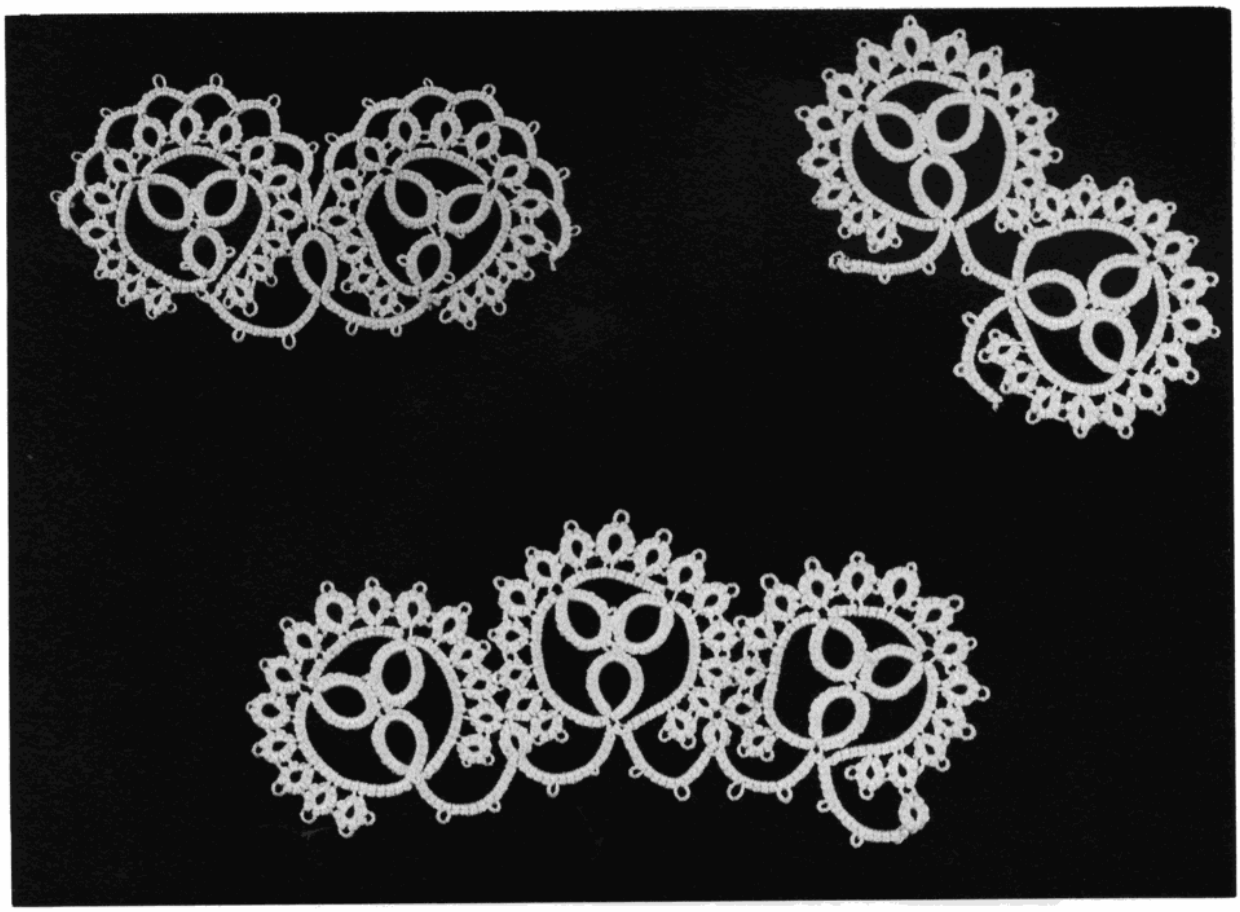
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 6+ (to the base of first IR made)*
Long Ch = 5-5 Cl. Rw.

Cluster 2: IR = 10-10 Cl. Rw.
Ch = 6+(to center P of last R made of Prev. Cluster)3
R = 2-2+(center joining P of 2nd R of Prev. Cluster)2 Cl.
Repeat from * to * one time
Long Ch = 6-6-6 Rw.

In-between R = 5+(center P of second to the last R made)4+(center P of next R) 4-8 Cl. Rw.
Long Ch = 6-6-6 Rw.
Repeat design 51 for desired length.



Design 47 Thread DMC No. 30 2 Shuttles\ Ring & Chain Method

Needle tatters, when there are several chains in a row take the stitches off needle, snug tight, do not tie a knot, join and continue.

Cluster 1: LR = 5-5-5-5-5-5-5 Cl. Rw.
Ch = 5-5+(first P of LR). **Except** on repeats do Ch = 5+(center P of last R of Prev. cluster)5+(first P of LR).
Ch = 5-5+(next P of same LR)
Ch = 5
(Floating) R = 3+(center P of Ch)1-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl. (**Except** on repeats do R = 2+(last P of Prev. R)2+(center P of 5th R of Prev. cluster)2-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)4-4-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev R)1-3 Cl.
Ch = 5+ (same joining P of LR).
Ch = 5+(last P of Prev. R) 5+(next P of same LR).
Ch = 5-5+(next P of same LR) Rw. Shuttle tatters, change shuttle.
In-between Ch = 5-5 leave small space for a picot. Rw. Shuttle tatters, change shuttle.

Cluster 2: Ch = 6
(Floating) R = 3+ (center P of Ch of Prev. cluster)1-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev R)3+(center P of 2nd R of Prev. Cluster)2-2 Cl
Ch = 3
(Floating) R = 2+(last P of Prev. R)4-4-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev R)1-3 Cl.
Ch = 6+(small P left of In-between Ch) Rw. Shuttle tatters, change shuttle.
In-between Ch = 5-5 Rw. Shuttle tatters, change shuttles.
Repeat Cluster 1 and cluster 2 for desired length.

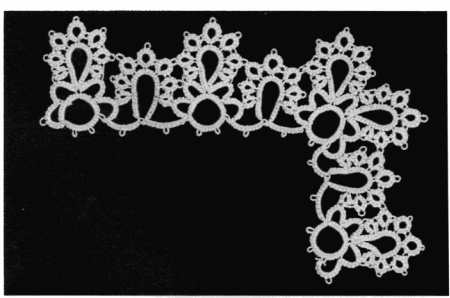
Corner:

Cluster A: LR = 5-5-5-5-5-5-5 Cl. Rw.
Ch =5+(center P of last R of Prev. cluster)5+(last P of LR).
Ch = 5-5+(next P of same LR)
Ch = 5
(Floating) R = 3+(center P of Ch)1-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)2+(center P of the 5th R of Prev. cluster)2-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)4-4-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev R)1-3 Cl.
Ch = 5+ (joining P of same LR).
Ch = 5+(center P of last R)5+(next P of LR)

Cluster B: Ch = 5
(Floating) R = 2+(joining P of R of Prev. Cluster)1-3 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)2-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)4-4-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev R)1-3 Cl.
Ch = 5+(last joining P of same LR)5+(next P of same LR)
Ch = 5+(last P of Prev. R)5+(next P of same LR). Rw.
In-between Ch = 5-5 Rw.

Repeat Cluster 2 and Cluster 1 for desired length.



Design 48 Thread DMC No. 30 2 Shuttles\ Ring & Chain Method

Curve lace for a diameter of approx. 3 -5 inches.

Needle tatters, when there are several chains in a row take the stitches off needle, snug tight, do not tie a knot, join and continue.

Row 1:

Cluster 1: LR = 5-5-5-5-5-5-5 Cl. Rw.
Ch = 5-5+(first P of LR). (**Except** on repeats do Ch = 5+(to joining P of R's of Prev. Cluster)5+(first P of LR).
Ch = 5-5+(next P of same LR)
Ch = 5
(Floating) R = 3+(center P of Ch)1-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)4-4-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev R)1-3 Cl.
Ch = 5+ (last joining P of same LR).
Ch = 5+(last P of Prev. R) 5+(next P of same LR).
Ch = 5-5+(next P of same LR) Rw. Shuttle tatters, change shuttle.
In-between Ch = 5-5 leave small space for a picot. Rw. Shuttle tatters, change shuttle.

Cluster 2:
(Floating) R = 5+(center P of Ch)5
Ch = 5
(Floating) R = 3+ (last joining P of same Ch)1-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev R)3-2-2 Cl
Ch = 3
(Floating) R = 2+(last P of Prev. R)4-4-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev R)1-3 Cl.
Ch = 6+(small P left of In-between Ch)
(Floating) R = 5+(last P of Prev. R)5 Cl. Rw.
In-between Ch = 5-5 Rw. Shuttle tatters, change shuttles.

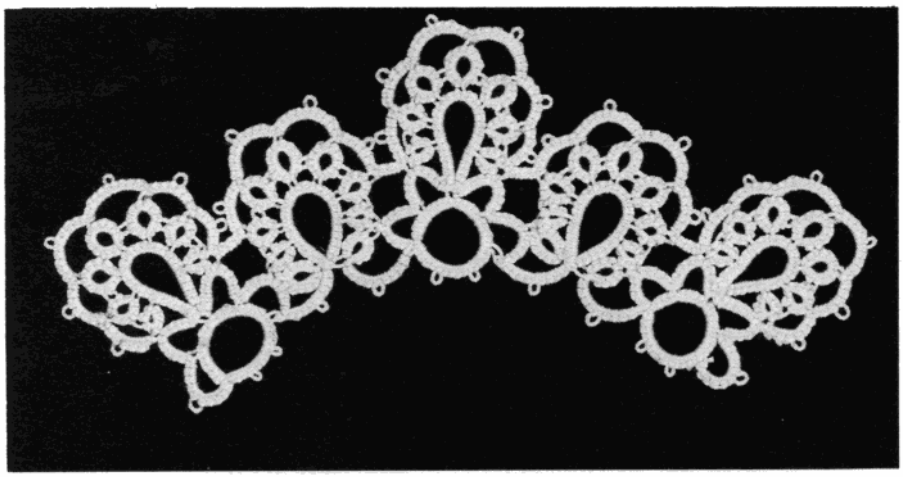
Repeat Cluster 1 and cluster 2 for desired length.

Row 2: Optional

First join into the joining P of R and Ch.

Ch = 3-3+(center P of next R of row 1)
Ch = 3-3+(center P of next R of row 1).
Ch = 5-5+(center P of next R of row 1).
Ch = 5-5+(center P of next R of row 1).
Ch = 3-3+(center P of next R of row 1).
Ch = 3-3+(joining P of R and Ch).
Ch = 3+(center P of 3rd R of next cluster of row 1).
Ch = 3-3+(center P of next R of row 1).
Ch = 5-5+(center P of next R of row 1).
Ch = 5-5+(center P of next R of row 1).
Ch = 3-3+(center P of next R of row 1).
Ch = 3+(to joining P of R and Ch)

Repeat Row 2 for desired length.



Design 49 Thread DMC No. 30 2 Shuttles\ Ring & Chain Method

Curve lace for a diameter of approx. 3 -6 1/2 inches.

Row 1:

Cluster 1: LR = 5-5-5-5-5-5-5 Cl. Rw.
Ch = 5-5+(first P of LR). (**Except** on repeats do Ch = 5+((last P of Prev. R) 5+(first P of LR).
Ch = 5-5+(next P of same LR)
Ch = 5
(Floating) R = 3+(center P of Ch)1-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)4-4-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev R)1-3 Cl.
Ch = 5+ (last joining P of same LR).
Ch = 5+(last P of Prev. R) 5+(next P of same LR).
Ch = 5-5+(next P of same LR) Rw. Shuttle tatters, change shuttle.

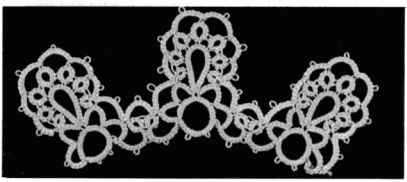
Small Cluster 2: Ch = 5-3-2 Rw.
R = 5+(center P of Ch of Prev. Cluster)3-2 Cl. Do not leave a space.
R = 2+(last P of Prev. R)3-5. Cl Rw.
Ch = 2+(last P of Prev. Ch)3-5.

Repeat Cluster 1 and Small Cluster 2 for desired length.

Row 2: Optional *Needle tatters, take the stitches off needle, snug tight, do not tie a knot, join and continue.*

First join into the joining P of R and Ch. of first cluster
Ch = 3-3+(center P of next R of row 1).
Ch = 3-3+(center P of next R of row 1).
Ch = 5-5+(center P of next R of row 1).
Ch = 5-5+(center P of next R of row 1).
Ch = 3-3+(center P of next R of row 1).
Ch = 3-3+(joining P of R and Ch of row 1).
Ch = 5-5+(next joining P of R and Ch at end of cluster)
Ch = 5-5+(next joining P of R and Ch at beginning of next cluster)

Repeat from the first Ch around the edging.



Design 50 Thread DMC No. 30 Shuttle and Ball/Ring & Chain Method

Row 1: R = 6-6-6-6 Cl. Rw.
Ch = 6 Rw.
R = 6+(last P of Prev. R) 6-6-6 Cl. Rw.
Ch = first leave 1/16" space for small P, 6 Rw.
Repeat row 1 for desired length.

Corner: R = 6+6-6-6 Cl. Rw.
Ch = 6-6 Rw.
R = 6+(last P of Prev. R)6+(next P of same R) 6-6 Cl. Rw.
Repeat Row 1 above for desired length

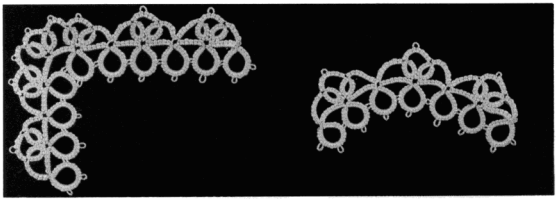
Row 2: First join to the small P of Ch of row 1
Ch = 6 Rw.
R = 6+(next small P of Ch of row 1) 6 Cl. Rw.
Ch = 3-3 Rw.
R = 6+(to the same small P of Ch)6 Cl. Rw.
Ch = 6+(next small P of Ch of row 1)Rw. **Except** going into the corner omit this line, and do corner below.
Repeat row 2 for desired length.

Corner: Ch = 3-3 Rw.
R = 6+(next P of Ch of row 1) 6 Cl. Rw.
Ch = 3-3 Rw.
R = 6+(to the same P of Ch)6 Cl. Rw.
Ch = 3-3 Rw.
R = 6+(next small P of Ch of row 1) 6 Cl. Rw.
Ch = 3-3 Rw.
R = 6+(to the same small P of Ch)6 Cl. Rw.
Repeat Row 2 for desired length.

Curved Edging

Row 1: R = 6-6-6-6 Cl. Rw.
Ch = 8 Rw.
R = 6+(last P of Prev. R) 6-6-6 Cl. Rw.
Ch = first leave 1/16" space for small P, 8 Rw.
Repeat for desired length.

Row 2: First join to the small P of Ch of row 1
Ch = 8 Rw.
R = 6+(next small P of Ch of row 1) 6 Cl. Rw.
Ch = 3-3 Rw.
R = 6+(to the same small P of Ch)6 Cl. Rw.
Ch = 8+(next small P of Ch of row 1)Rw.



Design 51 Thread DMC No. 30 2 Shuttles\ Ring & Chain Method

Needle tatters: For some of the chains take the stitches off needle, snug tight, join, do not tie a knot, continue.

Row 1:

Cluster 1: LR = 5-5-5-5-5-5-5 Cl. Rw.
Ch = 5-5+(first P of LR). **Except** on repeats do Ch = 5+(last P of Prev. R) 5+(first P of LR).
Ch = 5-5+(next P of same LR)
Ch = 5

(Floating) R = 3+(center P of Ch)1-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)4-4-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev R)1-3 Cl.
Ch = 5+ (same joining P of same LR).
Ch = 5+(last P of Prev. R) 5+(next P of same LR).
Ch = 5-5+(next P of same LR) Rw. Shuttle tatters, change shuttle.

Small Cluster 2: Ch = 5-5 Rw.

(Floating) R = 5+(center P of Ch of Prev. Cluster)3-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)3-5. Cl
Ch = 3

(Floating) R = 2+(last P of Prev. R)3-5. Cl Rw.
Ch = 5-5

Repeat Cluster 1 and Small Cluster 2 for desired length.

Corner:

Cluster 1: LR = 5-5-5-5-5-5-5-5-5 Cl. Rw.
Ch = 5+(last P of Prev. R)5+(first P of LR).
Ch = 5-5+(next P of same LR)
*Ch = 5

(Floating) R = 3+(center P of Ch)1-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)2-2-2 Cl. (**Except** on repeat do R = 2+(last P of Prev. R)2+(center P of corresponding R of Prev. cluster)2-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)4-4-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.
Ch = 3

(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.
Ch = 3

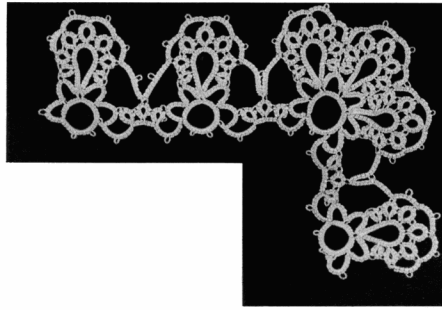
(Floating) R = 2+(last P of Prev. R)1-3 Cl.
Ch = 5+ (same joining P of same LR).
Ch = 5+(last P of Prev. R)5+(next P of LR)*
Repeat from * to * two more times.
Ch = 5-5+(next P of same LR) Rw. Shuttle tatters, change shuttle.
Repeat small cluster 2 and cluster 1 for desired length.

Row 2: Optional

First join to center P of second R of row 1.
**Ch = 3-3+(center P of next R of row 1).
Ch = 5-5+(center P of next R of row 1).
Ch = 5-5+(center P of next R of row 1).
Ch = 3-3+(center P of next R of row 1).
Long Ch = 5-5+(center P of second R of small cluster of row 1).
Long Ch = 5-5+(center P of second R of next Cluster) of row 1).**
Repeat from ** to ** around. For the corners, follow instructions below.
(Except going into the corner do the last Long Ch as follows
Long Ch = 5+(last P of Prev. Long Ch)5+(center P of second R of corner cluster of row 1).

Corner:

Ch = 3-3+(center P of next R of row 1).
†Ch = 5-5+(center P of next R of row 1).
Ch = 5-5+(center P of next R of row 1).
Ch = 3-3+(to joining P of R's between corner clusters).
Ch = 3+(last P of Prev. Ch)3+(center P of next R of row 1).†
Repeat from † to † one more time.
Ch = 5-5+(center P of next R of row 1).
Ch = 5-5+(center P of next R of row 1).
Ch = 3-3+(center P of next R of row 1).
Long Ch = 5-5+(center P of second R of small cluster of row 1).
Long Ch = 5+(last P of Prev. Ch)5+(center P of second R of next cluster of row 1).
Repeat for * to * above.



Design 52 Thread DMC No. 80 1 Shuttle/Ring & Thread Method

Round 1:
Outer Cluster
IR = 10-(long P) 10 Cl. Rw. Leave 1/4" space
R = 7-2-5 Cl Leave 1/16" space after rings unless stated.
*R = 6+(last P of Prev. R)3-3-6 Cl.
LR = 7+(last P of Prev R)4-4-7 Cl.
R = 6+(last P of Prev. R)3-3-6 Cl.
R = 5+(last P of Prev. R)2-7 Cl. Rw. **Except** on the 5th cluster do R= 2+(last p of first R made)2-7 Cl. Rw.

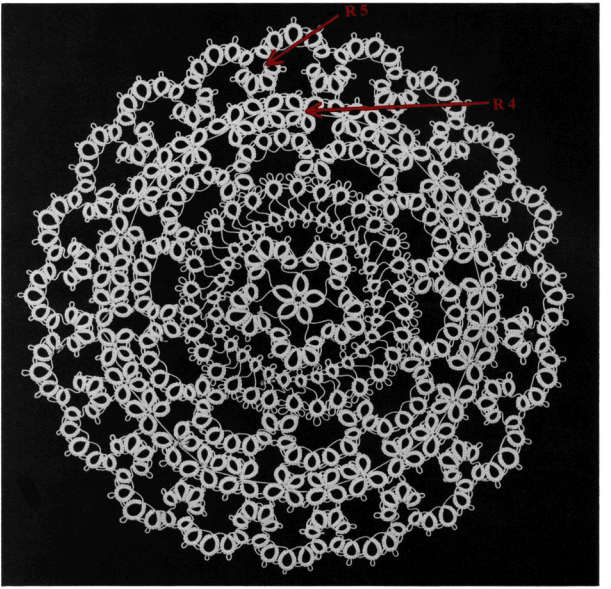
Outer Cluster
IR = 10+(center P of Prev. IR)10 Cl. Rw.
R = 7+ (last P of Prev R)5-2 Cl. Rw. *
Repeat from * to * for a total of 5 total outer clusters.

Round 2 :
IR = 4-3-3-4 Cl. Rw. Leave 1/4" between rings on this round.
R = 4-2-2-2-2-4 Cl. Rw.
**IR = 4+(to last P of Prev. IR made) 3+(center P of LR of Prev. round)3-4 Cl. Rw.
R = 4+(to last P of Prev R made) 2-2-2-2-4 Cl. Rw.
IR = 4+(to last P of Prev. IR made) 3-3-4 Cl. Rw.
R = 4+(to last P of Prev R made) 2-2-2-2-4 Cl. Rw.
IR = 4+(to last P of Prev. IR made) 3-3-4 Cl. Rw.
R = 4+(to last P of Prev R made) 2-2-2-2-4 Cl. Rw.
IR = 4+(to last P of Prev. IR made) 3-3-4 Cl. Rw.
R = 4+(to last P of Prev R made) 2-2-2-2-4 Cl. Rw.
IR = 4+(to last P of Prev. IR made) 3-3-4 Cl. Rw.
R = 4+(to last P of Prev R made) 2-2-2-2-4 Cl. Rw. **Except** the very last repeat do R = 4+(to last P of Prev R made) 2-2-2-2+(to first P of first R made)4 Cl. Rw.
IR = 4+(to last P of Prev. IR made) 3-3-4 Cl. Rw.** **Except** the very last repeat do IR = 4+(to last P of Prev. IR made) 3-3+(to first P of first IR made)4 Cl. Rw. Leave 1/4" space join to the beginning.
Repeat from ** to ** around.

Round 3:
IR = 10+(center P on LR of round 2)7-3 Cl. Do not leave a space
IR = 3+(last P of Prev. IR) 7+(to center P of next R of round 2)10 Cl. Rw. Leave 1/4" space.
R = 7-2-5 Cl. Do not leave a space
***OTR = 6+(last P of Prev. R)3-3-6 Cl. Leave 1/8" space unless stated
OTR = 7+(last P of Prev OTR)3-3-7 Cl.
OTR = 7+(last P of Prev. OTR)3-3-7 Cl.
OTR = 6+((last P of Prev. OTR)3-3-7 Cl.
R = 5+(last P of Prev. OTR)2-7 Cl. Rw. **Except** on the last repeat do R = 5+(last P of Prev. OTR)2+(first P of the first R made)7 Cl. Rw. Leave 1/8" space. Join to the beginning.
IR = 10+(skip one ring and then join to center P of Ring of round 2) 7-3 Cl.
IR = 3+(last P of Prev. IR) 7+(to center P of next R of round 2) 10 Cl. Rw.
R = 7+(last P of Prev. R)2-5 Cl. Do not leave a space.***
Repeat from *** to *** around. Join to the beginning.

Round 4:
Cluster 1:
†IR = 8+(center P of first OTR of round 3)3-5 Cl. Rw. Leave 1/16" space
R (a) = 10-3-4-3 Cl Do not leave a space **Except** on repeats do R (a) = 10+(last P of Prev. cluster R(b))3-4-3 Cl Do not leave a space.
R (b) = 3+(last P of Prev. R)4-3-10 Cl Rw.

Continue on page 50.



Adapted from the following designs; 7, 16, 25, 26.

IR = 5+(last P of Prev. IR)3+(center P of next OTR of round 3)8 Cl

Lead the thread under all rings, take up a loop with the crochet hook, slide the shuttle or needle through it and tighten it, leave about an 1 1/4" space of thread.

Cluster 2: IR = 8+(center P of same second OTR of round 3)3-5 Cl. Rw. Leave 1/16" space
R (a) = 10+(last P of Prev. cluster R(b))3-4-3 Cl. Rw
R (b) = 3+(last P of Prev. R)4-3-10 Cl. Rw.
IR = 5+(last P of Prev. IR)3+(center P of third OTR of round 3)8 Cl.

Lead the thread under all rings, take up a loop with the crochet hook, slide the shuttle or needle through it and tighten it, leave about an 1 1/4" space of thread.

Cluster 3: IR = 8+(center P of same third OTR of round 3)3-5 Cl. Rw. Leave 1/16" space
R(a) = 10+(last P of Prev. cluster R(b))4-3-10 Cl. Rw.
R(b) = 3+(last P of Prev. R)4-3-10 Cl Rw. (On the very last repeat be sure and join last P to the first P of the first R(a) made.)
IR = 5+(last P of Prev. IR)3+(center P of fourth OTR of round 3)8 Cl.†

Lead the thread under all rings, take up a loop with the crochet hook, slide the shuttle or needle through it and tighten it, leave about an 1 1/4" space of thread.

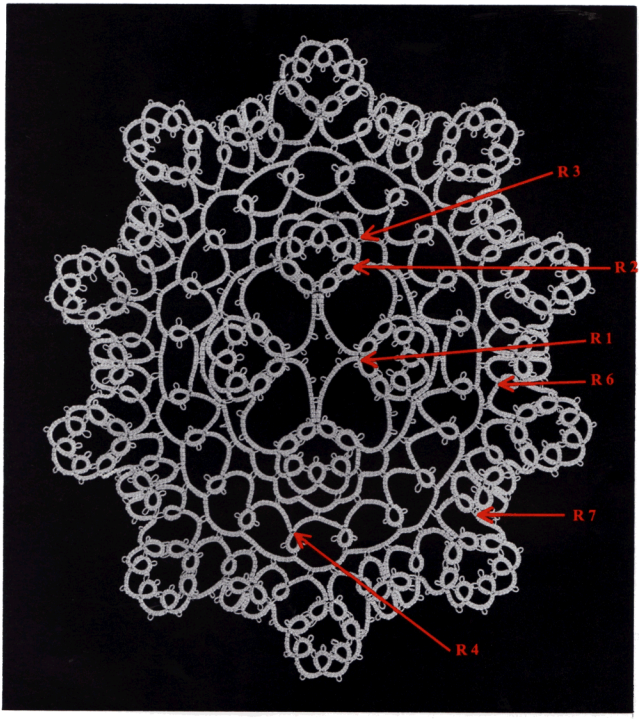
Repeat from † to † around.

Round 5: †† IR = 7-2-5 Cl. Leave 1/16" space
IR = 6+(last P of Prev. IR) 3+(to second P of R(a) of round 3)3-6 Cl. Leave 1/16" space
IR = 6+(last P of Prev. IR)3+(to second p of R(b) of round 3)3-6 Cl Leave 1/16" space
IR = 5+(last P of Prev. IR)2-7 Cl. Rw. Leave 1/8" space after rings unless stated
R = 7-2-5 Cl. **Except** on repeats do R = 7+(last P of Prev. R)2-5 Cl.
R = 6+(last P of Prev. R)3-3-6 Cl.
R = 7+(last P of Prev. R)4-4-7 Cl
R = 6+(last P of Prev. R)3-3-6 Cl.
R = 5+(last P of Prev. R2-7 Cl. Rw.
IR = 7-2-5 Cl. Leave 1/16" space
IR = 6+(last P of Prev. IR) 3+(to second P of R(b) of round 3) Note: that R(a) was skipped 3-6 Cl. Leave 1/16" space
IR = 6+(last P of Prev. IR)3+(to second p of R(a) of round 3)3-6 Cl Leave 1/16" space
IR = 5+(last P of Prev. IR)2-7 Cl. Rw.
R = 7+(last P of Prev. R)2-5 Cl.
R = 6+(last P of Prev. R)3-3-6 Cl.
R = 7+(last P of Prev. R)4-4-7 Cl
R = 6+(last P of Prev. R)3-3-6 Cl.
R = 5+(last P of Prev. R)2-7 Cl. Rw. †† **Except** on the very last ring join the last P to the first P of the first R made.

Repeat from †† to †† around. Join to the beginning.

Shuttle Tatters: For tatting place-mats it is advantageous to have several shuttles. The large rounds should be started with a filled shuttle to avoid needless knotting. Half-filled shuttles can be used for small central motifs or to finish a large round. Further you facilitate the work by marking the start on the reverse with a colored thread.

Design 53



Adapted from design 40.

Design 53 Thread DMC No. 40, Shuttle and ball/Ring & Chain Method

Round 1: R(a) = 2-5-3-5-2 Cl. Do not leave a space.
R (b) =2+(last p of Prev. R)5-3-5-2 Cl. Rw.
Ch = 5-5-5-5 Rw.
*R(a) = 2-5-3-5-2 Cl. Do not leave a space.
R (b) =2+(last p of Prev. R)5-3-5-2 Cl. Rw.
Ch = 5+(last P of Prev. Ch)5-5-5 Rw. *
Repeat from * to * one more time. Join to the beginning.

Round 2:
Cluster 1: R = 2-5+(second P of R(a) of Prev. round)3+(next P of same R) 5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. R) 3-3-5 Cl. Rw.
Ch = 5-5 Rw.
R = 5+(last P of Prev. R) 3-3-5 Cl. Rw.
Ch = 5-5 Rw.
R = 5+(last P of Prev. R) 3-3-5 Cl. Rw.
Ch = 2-5 Rw.
R = 2+(last P of Prev. R)5+(second P of R(b) of Prev. round)3+(next P same R) 5-2 Cl. Rw.
Long Ch = 5-5-5-5 Rw.
Repeat Cluster 1 for a total of four clusters. Join to the beginning.

Round 3:
Needle tatters-pull the double stitches off the needle, snug tight, join, do not tie a knot and continue.
First join into the picot of Ch of Prev. round.
*Ch = 5-5+(next P of Ch of Prev. round)
Ch = 5-5+(next P of Ch of Prev. round)
Ch = 5-5+(next P of Ch of Prev. round)
Ch= 5-5+(first P of Long Ch of Prev. round)
Long Ch = 5-5-5+(next P of Ch (not long chain) of Prev. round) Leave a small space for P.
Ch = 5+(next P of Ch of Prev. round)
Ch = 5-5+ (next P of Ch of Prev. round)
Ch = 5+ (next P of Ch of Prev. round). Leave a small space for a picot.
Long Ch= 5-5-5+ (third P of Long Ch of Prev. round)
Ch = 5-5+(next p of Ch of Prev. round) *
Repeat from * to * one more time. Join to the beginning.

Round 4: R = 4-4-4 Cl. Rw.
Ch = 8+(to P of Ch of Prev. round)8 Rw.
R = 4-4-4 Cl. Rw.
Ch = 8+(next P of Ch of Prev. round)8 Rw.
R = 4-4-4 Cl. Rw.
Ch = 8+(next P of Ch of Prev. round)8 Rw.
R = 4-4-4 Cl. Rw.
Ch = 8+(next P of Ch of Prev. round)8 Rw.
R = 4-4-4 Cl. Rw.
Ch = 8+(skip P then join to next P of Ch of Prev. round)8 Rw.
R = 4-4-4 Cl. Rw.
Ch = 8+(next P of Ch of Prev. round)8 Rw.
R = 4-4-4 Cl. Rw.
Ch = 8+(next P of Ch of Prev. round) 8 Rw.
R = 4-4-4 Cl. Rw.

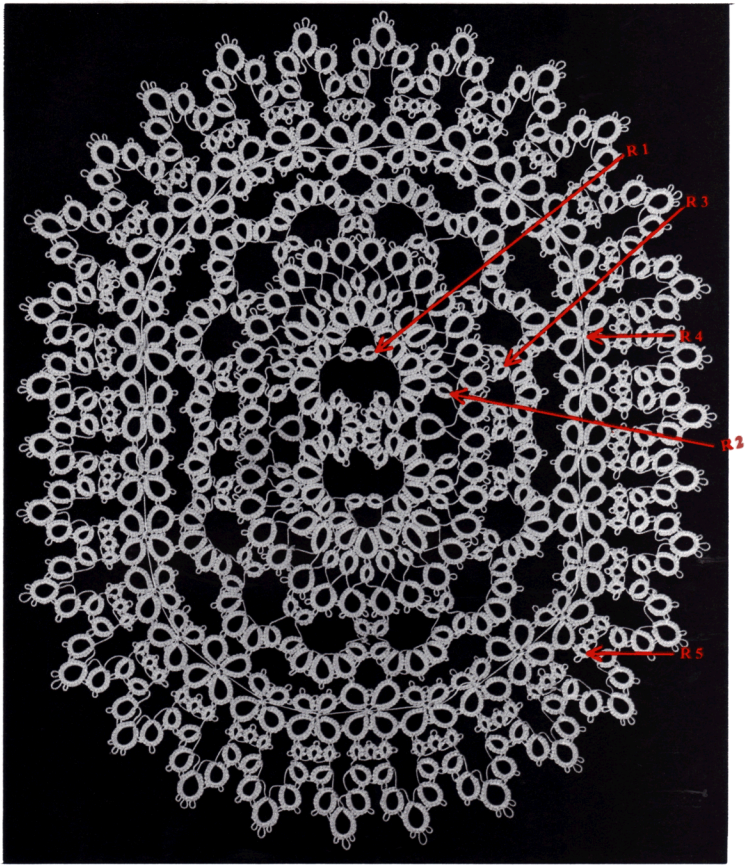
Ch = 8+(skip P join to next P of Ch of Prev. round)8 Rw.
R = 4-4-4 Cl. Rw.
Ch = 8+(next P of Ch of Prev. round) 8 Rw.
Repeat from beginning. Join to the beginning

Round 5: Join to the center P of R of round 4.
Ch = 5-5-5+(center p of next R of round 4).
Needle tatters: pull stitches off the needle, snug tight, join, do not tie a knot, continue.

Round 6: *SR = 6-6 Cl. Rw.
Ch = 5+(first P of Ch of round 5)7 Rw.
R(a) = 2-5+(last p of SR)3-5-2 Cl. Do not leave a space after all rings.
R(b) = 2+(last P of Prev. R)5-3-5-2 Cl. Rw.
Ch = 7+(next P of same Ch of round 5)5 Rw.
SR = 6+(center p of Prev. R) 6 Cl. Rw.
Ch = 5+(first P of Ch of round 5) 7 Rw.
R(a) = 2-5-3-5-2 Cl.
R(b) = 2+(last P of Prev. R)5-3-5-2 Cl. Rw.
Ch = 5+(next P of same Ch of round 5)7 Rw.*
Repeat from * to * around. Join to the beginning.

Round 7: First join to center P of SR of round 6
**Ch = 5-5-5+(the joining P between two R's)
Ch = 5+ (last P of Ch)5-5+(center p of SR of round 6)
Ch = 5-5 Rw.

Cluster R = 2-5+(second P of R(a) of round 6)3+(next P of same R(a) of round 6)5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.
Ch = 5-5 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.
Ch = 5-5 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl. Rw.
Ch = 2-5 Rw.
R = 2+(last P of Prev. R)5+(second P of R(b) of round 6)
3+(next P of same R(b))5-2 Cl. Rw.
Ch = 5-5+(the next SR).**
Repeat from ** to ** around. Join to the beginning.



Adapted from the following designs; 15, 25, 26, and 27.

Design 54 Thread DMC No. 30 1 Shuttle/Ring & Thread Method

Round 1: IR = 5-5 Cl. Rw. Leave 1/16" space.
R = 7-2-5 Cl. Leave less than a 1/16" space after rings unless stated.
R = 7+(last P of Prev. R)3-3-7 Cl.
CR = 7+(last P of Prev. R)4-4-7 Cl.
R = 7+(last P of Prev. R)3-3-7 Cl.
R = 5+(last P of Prev. R)2-7 Cl. Rw. Leave 1/16" space
IR = 5+(last P of Prev IR) 5 Cl. Rw. Leave 1/16" space
*R = 7+(last P of Prev. R) 2-5 Cl.
R = 7+(last P of Prev. R)3-3-7 Cl.
CR = 7+(last P of Prev. R)4-4-7 Cl.
R(a) = 7+(last P of Prev. CR)3-3-7 Cl.
R = 5+(last P of Prev. R)2-7 Cl. Rw. Leave 1/16" space
IR = 5-2-3 Cl.
IR = 3+(last P of Prev. IR)2-2-3 Cl.
Center IR = 3+(last P of Prev. IR)2-2-3 Cl. (**Except** on repeats do R = 3+(last P of Prev. IR) 2+(center P of corresponding Center IR)2-3 Cl.).
IR = 3+(last P of Prev. IR)2-2-3 Cl.
IR = 3+(last P of Prev. IR)2-5 Cl Rw.
R = 7+(last P of Prev. corresponding R)2-5 Cl. Rw. Leave 1/16" space
R(b)= 7+(last P of Prev. R)3-3-7 Cl.
CR = 7+(last P of Prev. R)4-4-7 Cl.
R = 7+(last P of Prev. CR)3-3-7 Cl.
R = 5+(last P of Prev. R2-7 Cl. Rw. Leave 1/16" space.*
IR = 5-5 Cl. Rw. Leave 1/16" space.
R = 7+(last P of Prev R) 2-5 Cl.
R = 7+(last P of Prev. R)3-3-7 Cl.
CR = 7+(last P of Prev. R)4-4-7 Cl.
R = 7+(last P of Prev. CR)3-3-7 Cl.
R = 5+(last P of Prev. R)2-7 Cl. Rw. Leave 1/16" space
IR = 5+(last p of Prev. IR)5 Cl.
Repeat from * to * Join to the beginning.

Round 2 : IR = 5+(center P of CR of Round 1)5 Cl. Rw. Leave 1/8" space after rings unless stated.
R = 5-3-3-3-3-5 Cl. Rw.
**IR = 7+(the joining P between CR and R of round 1) 7 Cl. Rw.
R = 5+(last P of Prev. R) 3-3-3-3-5 Cl. Rw.
IR = 5+(center P of next R of Round 1)5 Cl. Rw.
R = 5+(last P of Prev. R) 3-3-3-3-5 Cl. Rw.
IR = 5-5+(skip P, join between R's and to the following join between R's)5-5 Cl. Rw.
R = 5+(last P of Prev. R) 3-3-3-3-5 Cl. Rw.
IR = 5-5+(the same join of last IR) 5-5 Cl. Rw.
R = 5+(last P of Prev. R) 3-3-3-3-5 Cl. Rw.
IR = 5+(center P of next R of Round 1)5 Cl. Rw.
R = 5+(last P of Prev. R) 3-3-3-3-5 Cl. Rw.
IR = 7+(the joining P between R and CR) 7 Cl. Rw.
R = 5+(last P of Prev. R) 3-3-3-3-5 Cl. Rw.
IR = 5+(center P of CR of Round 1)5 Cl. Rw.
R = 5+(last P of Prev. R) 3-3-3-3-5 Cl. Rw.**
Repeat from ** to ** one time.
IR = 7+(to center p of R(a) of Round 1) 7+(to center P of R(b) of Round 1)7 Cl. Rw.

R = 5+(last P of Prev. R)3-3-3-3-5 Cl. Rw.
IR = 5+(center P of CR of Round 1)5 Cl. Rw.
R = 5+(last P of Prev. R) 3-3-3-3-5 Cl. Rw.
Repeat from ** to ** two times.
IR = 7+(to center p of R(a) of Round 1) 7+(to center P of R(b) of Round 1)7 Cl. Rw.
R = 5+(last P of Prev. R) 3-3-3-3+(first P of the first R made)5 Cl. Rw.
Join to the beginning.

Round 3:
†IR = 5+(center P of R of Round 2) 3-2 Cl. Do not Leave a space
IR = 2+(last P of Prev. R) 3+(next center P of R of round 2) 5 Cl. Rw. Leave 1/8" space.
Cluster: R = 7-2-5 Cl. Do not leave a space. (**Except** on repeats R=7+(last P of Prev. R)2-5 Cl.)
R(c) = 5+(last P of Prev. R)3-3-5 Cl. Leave 1/8" space after all rings unless stated.
CR = 6+(last P of Prev. R)4-4-6 Cl.
R(e) = 5+(last P of Prev CR)3-3-5 Cl.
R = 5+(last P of Prev. R)2-7 Cl. Rw.†
Repeat from † to † for a total of 6 clusters.

Small Cluster:
IR = 5+(center P of R of Round 2) 3-2 Cl. Do not Leave a space
IR = 2+(last P of Prev. R) 3+(next center p of R of round 2) 5 Cl. Rw. Leave 1/8" space.
R = 7+(last P of Prev. R)2-5 Cl. Leave 1/16" space
CR = 5+(last P of Prev. R) 3-3-5 Cl. Leave 1/16" space
R = 5+(last P of Prev. R)2-7 Cl. Rw. Leave 1/16" space
Repeat the small outer cluster one more time.
Repeat from † to † for a total of 6 Outer Clusters.
Repeat the small outer cluster two times. **Except** on the last R do R = 5+(last P of Prev. R)2+(first P of first R made)7 Cl. Rw. Leave 1/16" space. Join to the beginning.

Round 4:

Cluster 1: R = 7-5-5-3 Cl. Rw. Do not leave a space after rings unless stated
IR = 7-5+(center P of R(c) of round 3) 5-3 Cl.
IR = 3+(last P of Prev. IR) 5+ (center P of CR of round 3) 5-7 Cl. Rw.
R = 3+(first P of first R made in cluster) 5-5-7 Cl.
Lead the thread under all rings, take up a loop with the crochet hook, slide the shuttle or needle through it and tighten it. Leave 1/2" between clusters.

Cluster 2: R = 7+(last P of last R made of Prev. cluster) 5-5-2 Cl. Rw.
IR = 5+(last P of last IR made) 3-3-2 Cl.
IR = 2+(last P of Prev. IR)3-3-5 Cl. Rw.
R = 2+(last P of Prev. R) 5-5-7 Cl.
Lead the thread under as stated above. Leave 1/2" between Clusters

Cluster 3: Repeat Cluster 2

Cluster 4: R = 7+(last P of last R made) 5-5-3 Cl. Rw. Do not leave a space after rings unless stated
IR = 7+(last P of P of Prev. IR of Prev. cluster) 5+(center P of CR of round 3) 5-3 Cl.
IR = 3+(last P of Prev. IR) 5+ (center P of R(e) of round 3) 5-7 Cl. Rw.
R = 3+(last P of Prev. R) 5-5-7 Cl.
Lead the thread under as stated above. Leave 1/2" between Clusters

Cluster 5: Repeat Cluster 2
Cluster 6: Repeat Cluster 2
Cluster 7: R = 7+(last P of last R made of Prev. cluster) 5-5-2 Cl. Rw. Do not leave a space after rings unless stated.

IR = 7+(last P of Prev. IR of Prev. cluster)5+(center P of R(e) of round 3) 5-2 Cl.
IR = 3+(last P of Prev. IR) 5+ (center P of R(c) next cluster of round 3) 5-7 Cl. Rw.
R = 2+(last P of Prev. R made in cluster) 5-5-7 Cl.
Join together as stated on Prev. cluster. Leave 1/2" between clusters

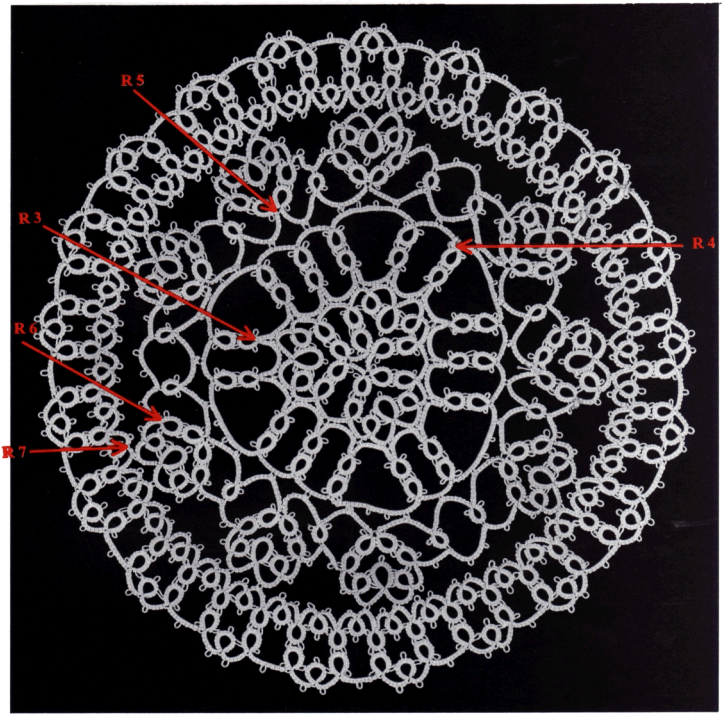
Cluster 8: Repeat Cluster 2
Cluster 9: Repeat Cluster 2
Cluster 10: R = 7+(last P of last R made of Prev. cluster) 5-5-2 Cl. Rw. Do not leave a space after rings.
IR = 7+(last P of Prev. IR of Prev. cluster)5+(center P of R(c) of round 3) 5-2 Cl.
IR = 3+(last P of Prev. IR) 5+ (center P of CR of round 3) 5-7 Cl. Rw.
R = 2+(last P of Prev. R made in cluster) 5-5-7 Cl.
Join together as stated on Prev. cluster. Leave 1/2" between clusters
Cluster 11: Repeat Cluster 2
Cluster 12: Repeat Cluster 2
Cluster 13: Repeat Cluster 4
Cluster 14: Repeat Cluster 2
Cluster 15: Repeat Cluster 2
Cluster 16: Repeat Cluster 10
Cluster 17: Repeat Cluster 2
Cluster 18: Repeat Cluster 2
Cluster 19: Repeat Cluster 4
Cluster 20: Repeat Cluster 2
Cluster 21: Repeat Cluster 2
Cluster 22: Repeat Cluster 7
Cluster 23: Repeat Cluster 2
Cluster 24: Repeat Cluster 2
Cluster 25: Repeat Cluster 10
Cluster 26: Repeat Cluster 2
Cluster 27: Repeat Cluster 2
Cluster 28: Repeat Cluster 4
Cluster 29: Repeat Cluster 2
Cluster 30: Repeat Cluster 2 **Except** be sure to join the last P of the last IR and R to the first P of the first IR and R made. Join to the beginning.

Round 5:

Inner Rings IR = 2-2+(P of first cluster R of round 4)2-2 Cl. Leave 1/16" space after R's unless stated.
IR = 2+(last P of Prev. IR)2-2-2 Cl.
IR = 2+(last P of Prev. IR) 2+(next P of fourth cluster R of round 4)2-2 Cl. Rw.

Outer Cluster 1 R = 7-2-5 Cl. Leave 1/4" space after R's unless stated.
R = 3+(last P of Prev. R)5-3-5 Cl.
CR = 5+(last P of Prev. R)5-2-2-5-5 Cl.
R = 5+(last P of Prev. R)3-5-3 Cl.
R = 5+(last P of Prev. R)2-7 Cl. Rw. Leave 1/16" space
Repeat Inner rings one time.

Outer Cluster 2: R = 7+(last P of Prev. R)2-5 Cl. Leave 1/4" space after R's unless stated.
R = 3+(last P of Prev. R)5-3-5 Cl.
CR = 5+(last P of Prev. R)5-2-2-5-5 Cl.
R = 5+(last P of Prev. R)3-5-3 Cl.
R = 5+(last P of Prev. R)2-7 Cl. Rw. Leave 1/16" space
Repeat Inner rings and Outer Cluster 2 around. **Except** on the last R do R = 5+(last P of Prev. R)2+(to first P of the first R made)7 Cl. Rw. Leave 1/16" space.
Join to the beginning.



Adapted from the following designs; 39 and 41.

Design 55 Thread DMC No. 40 Shuttle and Ball/Ring & Chain Method

Round 1: R(a) = 2-5-3-5-2 Cl. Do not leave a space.
R(b) = 2+(last P of Prev. R)5-3-5-2 Cl. Rw.
Ch = 5 Rw.
Repeat above for a total of 6 R's and 3 Ch's. Join to beginning.

Round 2:

Cluster 1: R = 2-5+(second to the last P of R(a) of Round 1)3+(next P of same ring) 5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. R))3-3-5 Cl .Rw.
Ch = 5-5 Rw.
LR = 2+(last P of Prev. R)5+(next P of same R)5-5-5-2 Cl. Rw.
Ch = 5-5 Rw.
R = 5+(last P of Prev. LR)3+(next P of same LR)3-5 Cl. Rw.
Ch = 2-5 Rw.
R = 2+ (last P of Prev. R)5+(second P of R(b) of Round 1)3+ (next P same R) 5-2 Cl. Rw.
Ch = 5-5 Rw.
Repeat Cluster 1 around for a total of 3 cluster. Join to the beginning.

Round 3:

Cluster 2: R = 2-5-3-5-2 Cl. Rw.
Ch = 3+ (to the P of Ch of Round 2) 8+(next P of next Ch of round 2)3 Rw.
R = 2-5-3-5-2 Cl. Rw.
Ch = 3+ (last joining P of Prev. Ch) 6+(next P of next Ch of round 2)3 Rw.

Cluster 3: R = 2-5-3-5-2 Cl. Rw.
Ch = 3+(last joining P of Prev. Ch) 8+ (to P of next Ch of round 2) 3 Rw.
R = 2-5-3-5-2 Cl. Rw.
Ch = 3+ (last joining P of Prev. Ch)8+ (to P of next Ch of round 2) 3 Rw.
R = 2-5-3-5-2 Cl. Rw.
Ch = 3+ (last joining P of Prev. Ch) 6+ (next P of next Ch of round 2) 3 Rw.
Repeat cluster 2 and cluster 3 around for a total of 15 rings. Join to the beginning.

Round 4: (join on the reverse)

Cluster 4: R = 2-5+(second P of R of round 3)3+(next P of same R)5-2 Cl. Rw.
Ch = 5-5 Rw.
R = 2-5+(second P of next R of round 3)3+(next P of same R) 5-2 Cl. Rw.
Long Ch = 5-5-5-5-5 Rw.

Cluster 5: R = 2-5+(second P of next R of round 3)3+(next P of same R)5-2 Cl. Rw.
Ch = 5-5 Rw.
R = 2-5+(second P of next R of round 3)3+(next P of same R) 5-2 Cl. Rw.
Ch = 5-5 Rw.
R = 2-5+(second P of next R of round 3)3+(next P of same R) 5-2 Cl. Rw.
Long Ch = 5-5-5-5-5 Rw.
Repeat Cluster 4 and Cluster 5 around for a total of 15 rings.
Join to the beginning.

Round 5: R(b) = 2-5-5-2 Cl. Rw.
Ch = 7+(center P of chain of round 4)7 Rw.
*R = 2-5-5-2 Cl. Rw.
Ch = 7+(first P of Long Ch of round 4)7 Rw.
R(a) = 2-5-3-5-2 Cl. Do not leave a space.

R(b) = 2+(last P of Prev. R)5-3-5-2 Cl .Rw.
Ch = 7+(forth P of same Ch of round 4)7 Rw.
R = 2-5-5-2 Cl. Rw.
Ch = 7+(center P of next Ch of round 4)7 Rw.
R = 2-5-5-2 Cl. Rw.
Ch = 7+(first P of Long Ch of round 4)7 Rw.
R(a) = 2-5-3-5-2 Cl. Do not leave a space.
R(b) = 2+(last P of Prev. R)5-3-5-2 Cl .Rw.
Ch = 7+(forth P of same Ch of round 4)7 Rw.
R = 2-5-5-2 Cl. Rw.
Ch = 7+(center P of next Ch or round 4)7 Rw.
R(a) = 2-5-3-5-2 Cl. Do not leave a space. (**Except** on the last repeat this will be the last R.)
R(b) = 2+(last P of Prev. R)5-3-5-2 Cl .Rw.
Ch = 7+(center P of next Ch or round 4)7 Rw. *
Repeat from * to * around. Join to the beginning

Round 6:

Cluster 6: **R = 2-5+(second P of R(a) of Round 5)3+(next P of same ring) 5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. R)3-3-5 Cl .Rw.
Ch = 5-5 Rw.
LR = 2+(last P of Prev. R)5+(next P of same R)5-5-5-2 Cl. Rw.
Ch = 5-5 Rw.
R = 5+(last P of Prev. LR)3+(next P of same LR)3-5 Cl. Rw.
Ch = 2-5 Rw.
R = 2+ (last P of Prev. R)5+(second P of R(b) of Round 5)3+ (next P of same R) 5-2 Cl. Rw.**

In-between: Ch = 2-5+(center P of R of round 5)5-2 Rw.
Repeat from ** to ** one time.
In-between: Ch = 2-5+(center P of R of round 5)5-2 Rw
Repeat from ** to ** one time.
In-between: Ch = 5-5+(center P of R of round 5)5-5-5+(center P of R of round 5)5-5 Rw.
Repeat from ** to ** 1 time.
In-between: Ch = 2-5+(center P of R of round 5)5-2 Rw
Repeat from ** to ** 1 time.
In-between: Ch = 2-5+(center P of R of round 5)5-2 Rw
Repeat from ** to ** 1 time.
In-between: Ch = 5-5+(center P of R of round 5)5-5-5+(center P of R of round 5)5-5 Rw.
Repeat from ** to ** 1 time.
In-between: Ch = 2-5+(center P of R of round 5)5-2 Rw
Repeat from ** to ** 1 time.
In-between: Ch = 2-5+(center P of R of round 5)5-2 Rw
Repeat from ** to ** 1 time.
In-between: Ch = 5-5+(center P of R of round 5)5-5-5+(center P of R of round 5)5-5 Rw.
Join to the beginning.

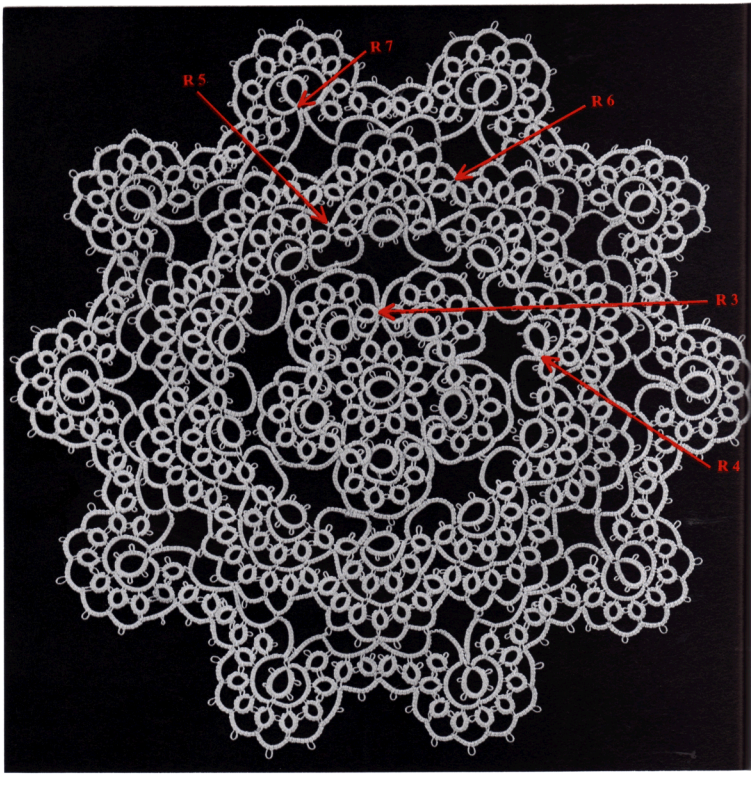
Round 7: R = 5-3-3-5 Cl. Rw.
**Ch = 2+(center P of Ch of round 6) 5 Rw.
LR = 2+(last P of Prev. R)5-3-5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. LR) 3-3-5 Cl. Rw.
Ch = 2+(center P of next Ch of round 6)5 Rw.

LR = 2+(last P of Prev. R)5-3-5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. LR) 3-3-5 Cl. Rw.
Ch = 2-5 Rw.
LR = 2+(last P of Prev. R)5-3-5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. LR) 3-3-5 Cl. Rw.
Ch = 2-5 Rw.
LR = 2+(last P of Prev. R)5-3-5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. LR) 3-3-5 Cl. Rw.**
Repeat from ** to ** 2 more times.
†Ch = 2-5 Rw.
LR = 2+(last P of Prev. R)5-3-5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. LR) 3-3-5 Cl. Rw.
Ch = 2-5 Rw.
LR = 2+(last P of Prev. R)5-3-5-2 Cl. Rw.
Ch = 5-2 Rw.
R = 5+(last P of Prev. LR) 3-3-5 Cl. Rw.†
Repeat from ** to ** 3 more times.
Repeat from † to † 1 time.
Repeat from ** to ** 3 more times
Repeat from † to † 1 time. (**Except** omit the last R.) Join to beginning.

Round 8:

Cluster 7: R = 2-5+(second P of LR of round 7)3+(next P of same LR)5-2 Cl. Rw.
Ch =5-2 Rw.
R = 5+(last P of Prev. R) 3-3-5 Cl. Rw.
Ch = 2-5 Rw.
R = 2-5+(second P of next LR of round 7)3+(next P of same LR)5-2 Cl. Rw.
Ch = 5-5 Rw.
Repeat cluster 7 around. Join to beginning.

Design 56



Adapted from design 43.

Design 56 Thread DMC No. 40 2 Shuttles/Ring & Chain Method

Needle tatters, when doing several chains, take the stitches off the needle, snug tight, do not tie a knot, join and continue.

Round 1:
CR = 5-5-5-5-5-5 Cl.
(Floating) R = 3-5-5-3 Cl.
Ch = 4
(Floating) *R = 3+(last P of Prev. R)5-5-3 Cl. **Except** on the 10th Ring do R = 3+(last P of Prev. R)5-5+(first P of first R made)3 Cl.
Ch = 4 *
Repeat from * to * three more times for a total of 5 R's.
Join to the center P of CR
Repeat from * to * five more times for a total of 10 R's.

Round 2:
Cluster 1
CR = 5-5-5-5-5-5 Cl. Rw.
(Floating) R = 3-5,long P,5-3 Cl. **Except** on repeats R = 3-5+(center Long P of Prev. R)5-3 Cl.
Ch = 4
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 4
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 4
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 4
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 4+(to center P of CR)
(Floating) R = 3+(last P of Prev. R)5(long P)5-3 Cl. Rw.
Inner Ch = 6+(Center P of R of round 1)6+(center P of Prev. R)
6+(Center P of R of round 1)6
Repeat Cluster four more times for a total of 5 clusters.

Round 3:
Join in the Long P between the two rings.
**Ch = 12+(center P of R of round 2)
Ch = 5-5+(center P of R of round 2)
Ch = 5-5+ (center P of R of round 2)
Ch = 5-5+(center P of R of round 2)
Ch = 12+(to the joining Long P between two rings).**
Repeat from ** to ** around. Join to the beginning.

Round 4:
CR = 5-5-5-5-5-5 Cl. Rw.
(Floating) R = 3-5,long P,5-3 Cl. (**Except** on repeats R = 3-5+(Long P of Prev. R)5-3 Cl.)
Ch = 4
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 4
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 4
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 4
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 4+(to center P of CR)
(Floating) R = 3+(last P of Prev. R)5(long P)5-3 Cl. Rw.
Inner Ch = 8+(Center P of Ch of round 3) 8 **Except** on every other cluster skip one Ch and join into center P of next Ch, refer to photo).

Repeat round 4 nine more times for a total of 10 clusters.
Join to the beginning.

Round 5: First join in the joining P between two rings in round 4.
**Ch = 8+(center P of next R of round 4).
(Floating) R = 3-5-5-3 Cl. (**Except** on repeats do R = 3-5+(center P of Prev. R)5-3 Cl.)
Ch = 4+(center P of next R of round 4).
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 4+(center P of next R of round 4).
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 4+(center P of next R of round 4).
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 4+(center P of next R of round 4).
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 4+(center P of next R of round 4).
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 4+(center P of next R of round 4).
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 8+(to the joining P between two rings of round 4).**
Repeat from ** to ** around. Join to the beginning.

Round 6 : First join in the joining P between the two R's of round 5
†Inner Ch = 5+(center P of R of round 5)
Ch = 5-5+(center P of R of round 5)
Ch = 5-5+(center P of R of round 5)leave small space for picot.
Ch = 5-5+(center P of R of round 5)
Ch = 5-5+(center P of R of round 5)
Inner Ch = 5+(to joining P between two R's of round 5).†
Repeat from † to † around.

Round 7:
Cluster: CR = 5-5-5-5-5-5 Cl.
Ch = 5
(Floating) R(a) = 3-5-5-3 Cl. **Except** repeats R(a) = 3-5+(to last P of Ch, not inner Ch)5-3 Cl.
Ch = 5
(Floating) R(b) = 3+(last P of Prev. R)5-5-3 Cl. **Except** repeats R(b) = 3+(last P of Prev. R) 5+(to center R(c)5-3 Cl.
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5+(center P of CR) leave a small space for a P.
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5
(Floating) R(b) = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5
(Floating) R(a) = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5+(to the base of the CR)Rw.

Between Cluster Inner Ch = 3-10+(center P of Ch of round 6)Rw. **Except** on repeats Inner Ch's = 3+ (last P of Prev. Inner Ch)10+(center P of Ch of round 6)Rw.

Ch = 5+(center P of last R(a)) 5.

(Floating) R = 3-5+(center p of last R(b))5-3

Ch = 5

(Floating) R = 3+(last P of Prev R)5-5-3 Cl.

Ch = 5+(skip next P join to next small P of Ch of round 6)5

(Floating) R = 3-5+ (center P of Prev. R)5-3 Cl.

Ch = 5

(Floating) R(c) =3+(last P of Prev. R)5-5-3 Cl.

Ch = 5-5+(skip next P join to next P of Ch of round 6)Rw.

Inner Ch = 10-3

Repeat from the beginning of Round 7 for a total of 9 Clusters and 9 Between Clusters. Now repeat just the cluster one time.

Between Cluster: Inner Ch = 3+(last P of Prev. Inner Ch)10+(center P of Ch of round 6)Rw.

Ch = 5+(center P of last R(a)) 5.

(Floating) R = 3-5+(center p of last R(b))5-3

Ch = 5

(Floating) R = 3+(last P of Prev R)5-5-3 Cl.

Ch = 5+(skip next P join to next small P of Ch of round 6)5

(Floating) R = 3-5+ (center P of Prev. R)5-3 Cl.

Ch = 5

(Floating) R(c) =3+(last P of Prev. R)5+(center P of R(b) of first Cluster made)5-3 Cl.

Ch = 5+(to center P of R(a) of first cluster made)5+(skip next P join to next P)Rw.

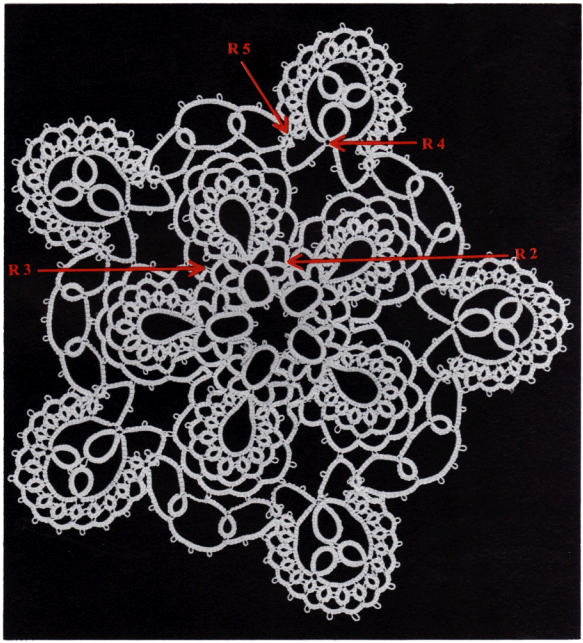
Ch = 10+(first P of first inner Ch made)3. Join to the beginning.

Round 8: When working the Ch around be sure and join to the joining P between two R's. Refer to Photo.

First join into any joining P between two R's of round 7.

Ch = 5-5 +(to next P or joining P of round 7).

Repeat the last Ch around. Join to the beginning.



Adapted from the following designs; 44 and 49.

Design 57: Thread DMC No. 30 2 Shuttles/Ring & Chain Method

Needle tatters: For some chains take the stitches off needle, snug tight,do not tie a knot, join, continue.

Round 1:

Cluster 1: LR = 5-5-5-5-5-5-5-5 Cl. Rw.

*Ch = 5-5+(last P of Prev. LR) **Except** on repeats do Ch = 5+(center P of Ch of Prev. cluster)5+(last P of Prev. LR).

Ch = 5-3-2+(next P of Prev. LR)

Ch = 2+(last P of Prev. Ch)3

(Floating) R = 4+(center P of Ch)2-2 Cl.

Ch = 3

(Floating) R = 2+(last P of Prev. R) 2-2-2 Cl.

Ch = 3

(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.

Ch = 3

(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.

Ch = 3

(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.

Ch = 3

(Floating) R = 2+(last P of Prev. R)4-4-2 Cl.

Ch = 3

(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.

Ch = 3

(Floating) R = 2+(last P of Prev. R)3-3-2 Cl.

Ch = 3

(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.

Ch = 3

(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.

Ch = 3

(Floating) R = 2+(last P of Prev. R)2-2-2 Cl.

Ch = 3-2+(to same joining P of LR)

Ch = 2+(last P of R)3-5+(next P of LR)

Ch = 5-5+(next P of LR) **Except** on Cluster 5 do Ch = 5+(to corresponding P of Cluster 1)5+(next P of LR).

Ch = 5+(next P of LR)5 **Except** on Cluster 5 do Ch = 5+(next joining P of LR)5*

Cluster 2: LR = 5+(last joining P of Ch)5-5-5-5-5-5-5 Cl. Rw

Repeat from * to *

Cluster 3: LR = 5+(last joining P of Ch)5-5-5-5-5-5-5 Cl. Rw

Repeat from * to *

Cluster 4: LR = 5+(last joining P of Ch)5-5-5-5-5-5-5 Cl. Rw

Repeat from * to *

Cluster 5: LR = 5+(last joining P of Ch)5-5+(first P of first LR made)5-5-5-5-5 Cl. Rw

Repeat from * to * Join to the beginning.

Round 2: *(shuttle and ball)*

First join to the joining picot of Ch between clusters, refer to photograph. DO NOT repeat this line.

Ch = 5-5+ (joining P of Ch and R)

Ch = 3-3+(center P of next R)

Ch = 3-3+(center P of next R)

Ch = 3-3+(center P of next R)

Ch = 3-3+(center P of next R)
Ch = 4-4+(center P of next R)
Ch = 4-4+(center P of next R)
Ch = 3-3+(center P of next R)
Ch = 3-3+(center P of next R)
Ch = 3-3+(center P of next R)
Ch = 3-3+(joining P of Ch and R)
Ch = 5-5+(joining P of Ch between clusters)
Repeat Round 2 around. Join to the beginning.

Round 3: *(shuttle and ball)*

First join to the P of Ch, refer to photograph. DO NOT repeat this line.
Ch = 5-5+(skip 1 P, join to the next P of Ch of Round 2)
Ch = 5-5-5+(skip 1 P, join to the next P of Ch of Round 2)
Ch = 5-5+(next P of Ch of Round 2)
Ch = 5-5+(next P of Ch of Round 2)
Ch = 5-5+(next P of Ch of Round 2)
Ch = 5-5-5+(skip 1 P, join to the next P of Ch of Round 2)
Ch = 5-5+(skip 1 P, join to the next P of Ch of Round 2). **Except** on the very last chain do Ch = 5+(to first P of the first Ch made)5+(skip 1 P, join to the next P of Ch of Round 2).
Ch = 3+(to P of next Ch of Round 2)
Repeat Round 3 around. Join to the beginning.

Round 4: *(2 shuttles)*

Cluster 1: LR = 16-16 Cl. Rw.
Ch = 5
(Floating) R = 2-2-2-2 Cl. **Except** on repeats do R = 2-2+(center P of Prev. R)2-2 Cl.
Ch = 3
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl. Rw.
Ch = 3
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl. Rw.
Ch = 3
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl. Rw.
Ch = 3
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl. Rw.
Ch = 3
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl. Rw.
Ch = 3
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl. Rw.
CR = 12+(center P of LR)6-8 Cl. Rw.
Ch = 3
(Floating) R = 2+(last P of Prev. R)3-3-2 Cl. Rw.
CR = 12+(center P of LR)6-8 Cl. Rw.
Ch = 3
(Floating) R = 2+(last P of Prev. R)3-3-2 Cl. Rw.
Ch = 3
(Floating) R = 2+(last P of Prev. R)3-3-2 Cl. Rw.
Ch = 3
(Floating) R = 2+(last P of Prev. R)3-3-2 Cl. Rw.
Ch = 3
CR = 8+(last P of Prev. CR)6+(joining P of LR)12 Cl. Rw.
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl. Rw.
Ch = 3

(Floating) R = 2+(last P of Prev. R)2-2-2 Cl. Rw.
Ch = 3
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl. Rw.
Ch = 3
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl. Rw.
Ch = 3
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl. Rw.
Ch = 3
(Floating) R = 2+(last P of Prev. R)2-2-2 Cl. Rw.
Ch = 5+(to base of LR and Ch) Rw.

Between-Cluster 1: Ch = 5-5+(to second of Ch of Prev Round, refer to photo) 5 Rw.
R = 2-2+(center P of last R) 2-2 Cl. Rw.
Ch = 5+(next P of Ch of Prev. Round) 5 Rw.
R = 8-8 Cl. Rw.
Ch = 5+(next P of Ch of Prev. Round) 5 Rw.
R = 8-8 Cl. Rw.
Ch = 5+ (next P of Ch of Prev. Round) 5 Rw.
R = 2-2-2-2 Cl. Rw.
Ch = 5+(next P of Ch of Prev. Round) 5-5

Cluster 2: Repeat Cluster 1 and Between-Cluster 1.
Cluster 3: Repeat Cluster 1 and Between-Cluster 1.
Cluster 4: Repeat Cluster 1 and Between-Cluster 1.
Cluster 5: Repeat Cluster 1 only.

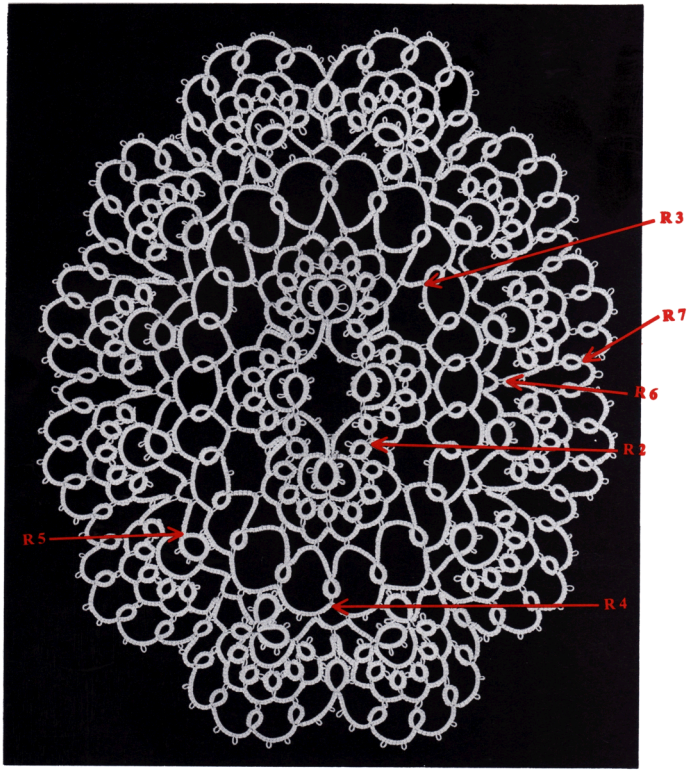
Between-Cluster 2: Ch = 5-5+(to second of Ch of Prev Round, refer to photo) 5 Rw.
R = 2-2+(center P of last R) 2-2 Cl. Rw.
Ch = 5+(next P of Ch of Prev. Round) 5 Rw.
R = 8-8 Cl. Rw.
Ch = 5+(next P of Ch of Prev. Round) 5 Rw.
R = 8-8 Cl. Rw.
Ch = 5+(next P of Ch of Prev. Round) 5 Rw.
R = 2-2+(center P of first R made)2-2 Cl. Rw.
Ch = 5+(next P of Ch of Prev. Round) 5-5 Join to the beginning.

Round 5: *(shuttle and ball)*
First join to the joining P of rings, refer to photograph.

Cluster 1: Ch = 3+(center P of next R of round 4)
Ch = 3-3+(center P of next R of round 4) **Except** on repeats do Ch = 3+(last P of Prev. Ch)3+(center P of next R of round 4).
Ch = 3-3+(center P of next R of round 4)
Repeat last Ch 11 more times.
Ch = 3+(joining P of rings of round 4)

Between-Cluster 1: Ch = 5+(center P of Prev. Ch) 5-5+(center P of R of round 4)
Ch = 5-5-5-5+(center P of next R of round 4)
Ch = 5-5-5+(joining P of rings of round 4) **Except** on the very last Ch do Ch = 5-5+(to center P of first Ch made)5+(joining P of rings of round 4).
Repeat Cluster 1 and Between-Cluster 1 around. Join to the beginning.

Design 58



Adapted from design 43.

Design 58 Thread DMC No. 30 2 Shuttles/Ring & Chain Method

Round 1: *CR = 5-5-5-5-5-5 Cl. Rw.

(Floating) R = 3-5-5-3 Cl. **Except** on repeats do R = 3-5+(center P of Prev. R)5-3 Cl.
Ch = 5

(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5

(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5

(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5

(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5+(to center P of CR)

(Floating) R = 3+(last P of Prev. R)5-5-3 Cl. Rw.
Long Ch = 5-5-5
CR = 5-5-5-5-5-5 Cl. Rw.
Ch = 5

(Floating) R = 3-5+(center P of Prev. R)5-3 Cl.
Ch = 5

(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5

(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5

(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5 +(to center P of CR)

(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5

(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5

(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5

(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5

(Floating) R = 3+(last P of Prev. R)5-5-3 Cl. (**Except** on repeat do R = 3+(last P of Prev. R) 5+(to center P of first R made)5-3 Cl.

Ch = 5+(to the base of last CR) Rw
Long Ch = 5 +(to last P of Prev. Long Ch.)5-5*
Repeat from * to * 1 time. Join to the beginning.

Round 2: First join to the joining P between two R's

Needle Tatters: Pull the stitches off the needle, snug tight, do not tie a knot, join and continue.

**Ch = 5-5+(center P of R of round 1).
Ch = 5-5+(center P of next R of round 1).
Ch = 5-5+(center P of next R of round 1).
Ch = 5-5+(center P of next R of round 1).
Ch = 5-5+(to joining P of two R's of round 1). (**Except** on **Last** repeat do Ch 5+(first P of Ch of round 1)5. Join to the beginning.
Ch = 5+(last P of Prev. Ch)5+(center P of next R of round 1). **
Repeat from ** to ** around.

Round 3: *Shuttle tatters, use shuttle and ball.*

R = 7-7 Cl. Rw.

Ch = 5+(to P of Ch of round 2, refer to photo)8 Rw.
R = 7-7 Cl. Rw.
Ch = 8+(to P of Ch of round 2) 8 Rw.
R = 7-7 Cl. Rw.
Ch = 8+(to P of Ch of round 2) 8 Rw.
R = 7-7 Cl. Rw.
Ch = 8+(to P of Ch of round 2) 8 Rw.
R = 7-7 Cl. Rw.
Ch = 8+(to P of Ch of round 2) 8 Rw.
R = 7-7 Cl. Rw.
Ch = 8+(to P of Ch of round 2) 5 Rw.
R = 7-7 Cl. Rw.
Ch = 5-5 Rw
R = 7-7 Cl. Rw.
Ch = 5+ (to P of Ch of round 5) 5 Rw
R = 7-7 Cl. Rw.
Ch = 5+ (to P of Ch of round 5) 5 Rw
R = 7-7 Cl. Rw.
Ch = 5+ (to P of Ch of round 5) 5 Rw
R = 7-7 Cl. Rw.
Ch = 5-5 Rw.

Repeat round 3 one more time. Join to beginning.

Round 4: To start first join to center P of R of round 3 refer to Photo.

Needle tatters pull stitches off needle, snug tight, join, do not tie a knot, continue.

Long Ch = 5-5-5-5 +(next center P of R of round 3).
Long Ch = 5-5-5-5+(next center P of R of round 3).
Ch = 5-5-5+(next center P of R of round 3).
Ch = 5-5-5+(next center P of R of round 3).
Ch = 5-5-5+(next center P of R of round 3).
Ch = 5-5-5+(next center P of R of round 3).
Ch = 5-5-5+(next center P of R of round 3).
Ch = 5-5-5+(next center P of R of round 3).
Ch = 5-5-5+(next center P of R of round 3).
Long Ch = 5-5-5-5 +(next center P of R of round 3).
Long Ch = 5-5-5-5+(next center P of R of round 3).

Repeat round 4 one more time. Join to the beginning.

Round 5: *Shuttle tatter, use 2 shuttles.*

Cluster 1: CR = 5+(first P of Ch of round 5, refer to photo)5+(next P same Ch)5-5-5-5 Cl. Rw.
Ch = 5
(Floating) R = 3-5-5-3 Cl.
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5+(center P of Prev. CR)
Long Ch = 8+(next P of Ch of round 4)5-5+(next P of same Ch)8 Rw.

LR = 5-5+(to third P of same Ch)5-5+(first P of next Ch of round 4)5-5.Cl

Cluster 2: CR = 5-5-5-5-5-5 Cl. Rw
(Floating) R = 3-5-5-3 Cl.
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl
Ch = 5 +(center P of Prev. CR)
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl
Long Ch = 8+(last P of same Ch)5-5+(first P of next Ch of round 4)8.Cl

Cluster 3: CR = 5+(first P of Ch of round 5)5+(next P of same Ch)5-5-5-5 Cl. Rw
(Floating) R = 3-5-5-3 Cl.
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
Ch = 5+(center P of Prev. CR)
(Floating) R = 3+(last P of Prev. R)5-5-3 Cl.
LR = 5-5+(third P of same Ch)5-5+(first P of next Ch of round 4)5-5 Cl. Rw.
Long Ch = 8+(next P of same Ch)5-5+(next P of same Ch)8.Cl

Cluster 4: Repeat Cluster 1
Cluster 5: Repeat Cluster 1
Cluster 6: Repeat Cluster 1
Cluster 7: Repeat Cluster 1
Cluster 8: Repeat Cluster 2
Cluster 9: Repeat Cluster 3
Cluster 10: Repeat Cluster 1
Cluster 11: Repeat Cluster 1
Cluster 12: Repeat Cluster 1
Join to the beginning.

Round 6: First join into P of Ch, refer to photo.
Needle tatters: Pull stitches off needle, snug tight, join, do not tie a knot, continue.
Ch = 5-5+(center P of R of round 5)
***Ch = 5-5+(center P of R of round 5)
Ch = 5-5+(center P of R of round 5)
Ch = 5-5+(center P of R of round 5)
Ch = 5-5+(center P of R of round 5)
Ch = 5-5+(to P of in-between Ch of round 5)
Ch = 5+(last P of Prev. Ch)5+(center P of R of round 5)***
Repeat from *** to *** around. Join to the beginning.

Round 7:

Group 1: R = 7+(center P of Ch of round 6, refer to photo.) 7 Cl. Rw.
Ch = 5-5-5 Rw.
R = 7+(center P of Ch of round 6) 7 Cl. Rw.
Ch = 5-5-5 Rw.
R = 7+(center P of Ch of round 6) 7 Cl. Rw.
Ch = 5-5-5 Rw.
R = 7+(center P of Ch of round 6) 7 Cl. Rw.
Ch = 5-5 Rw.
R = 7+(to joining P of Ch of round 6) 7 Cl. Rw.
Ch = 5-5 Rw.

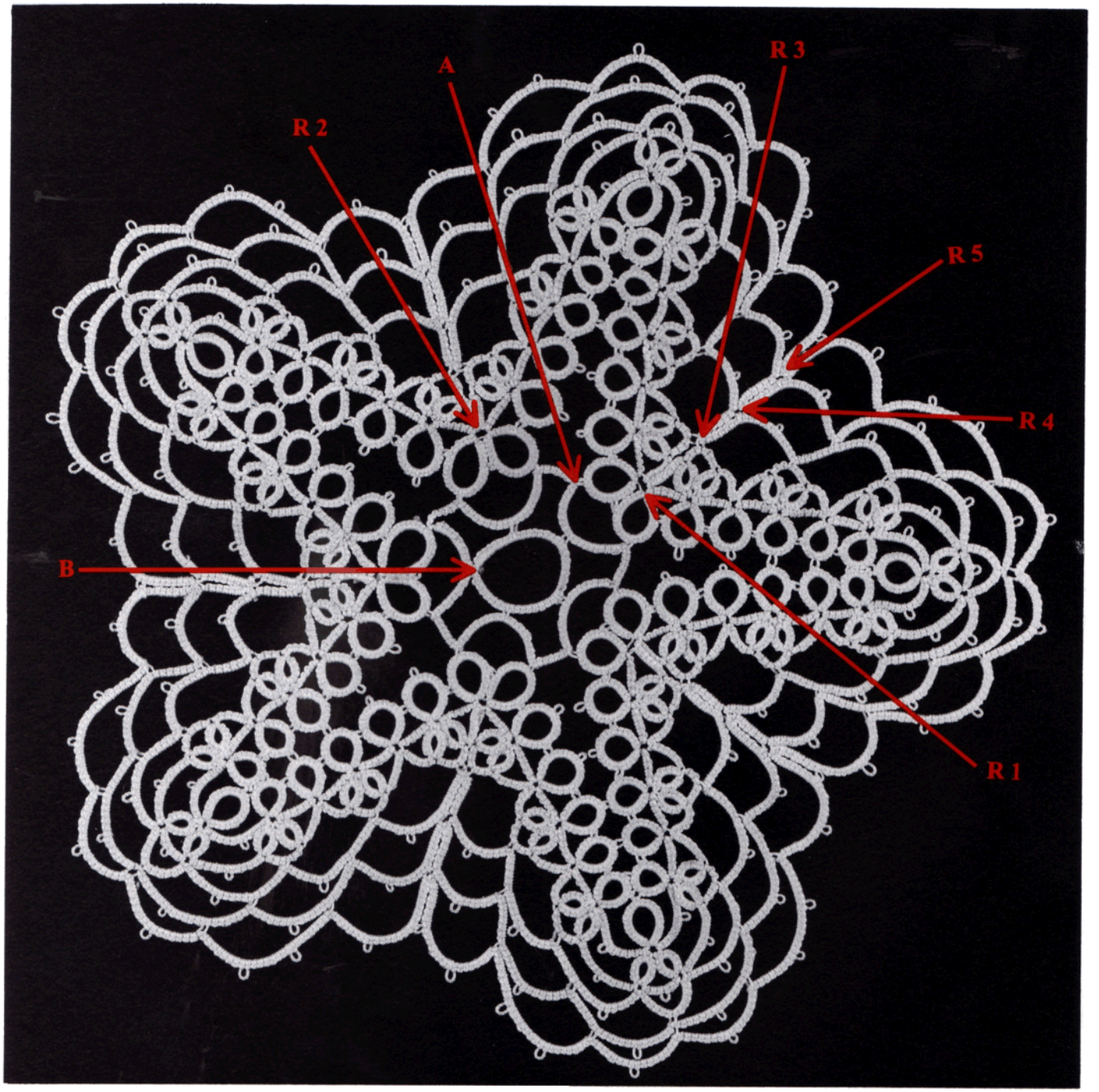
Group 2: R = 7+(center P of Ch of round 6, refer to photo.) 7 Cl. Rw.
Ch = 5-5-5 Rw.
R = 7+(center P of Ch of round 6) 7 Cl. Rw.
Ch = 5-5-5 Rw.
R = 7+(center P of Ch of round 6) 7 Cl. Rw.
Ch = 5-5-5 Rw.
R = 7+(center P of Ch of round 6) 7 Cl. Rw.
Ch = 5-5-5 Rw.
LR = 5+(center P of Ch of round 6)5-5+(to joining P of Ch of round 6)
5-5+(center P of Ch of round 6)5 Cl. Rw.
Ch = 5-5-5 Rw.

Group 3: Repeat Group 1

Group 4: R = 7+(center P of Ch of round 6, refer to photo.) 7 Cl. Rw.
Ch = 5-5-5 Rw.
R = 7+(center P of Ch of round 6) 7 Cl. Rw.
Ch = 5-5-5 Rw.
R = 7+(center P of Ch of round 6) 7 Cl. Rw.
Ch = 5-5-5 Rw.
R = 7+(center P of Ch of round 6) 7 Cl. Rw.
Ch = 5-5 Rw.

Group 5: Repeat Group 4
Group 6: Repeat Group 4
Group 7: Repeat Group 1
Group 8: Repeat Group 2
Group 9: Repeat Group 1
Group 10: Repeat Group 4
Group 11: Repeat Group 4
Group 12: Repeat Group 4
Join to the beginning.

Design 59



Adapted from design 50.

Design 59: Thread DMC No. 30 Shuttle and Ball/Ring & Chain Method

Round 1: Star made first then center is filled in.

Side 1: IR = 6-8-8-6 Cl. Rw. **Except** on repeats do IR = 6+(last P of Prev. IR)8-8-6 Cl. Rw.
Ch = 6 Rw.
R = 6+(last P of Prev. R) 7-7-6 Cl. Rw.
Ch = First leave 1/8" small P, 6 Rw.
R = 6+(last P of Prev. R)6-6-6 Cl. Rw.
Ch = First leave 1/8" small P, 6 Rw.

R = 6+(last P of Prev. R)5-5-6 Cl. Rw.
Ch = First leave 1/8" small P, 6 Rw.
R = 6+(last P of Prev. R)4-4-6 Cl. Rw.
Ch = First leave 1/8" small P, 6 Rw.
R = 6+(last P of Prev. R)3-3-6 Cl. Rw.
Tip Ch = First leave 1/8" small P, 6-6 Rw.
Tip R = 12+(last P of Prev. R) 12 Cl. Rw.
Tip Ch = First leave 1/8" small P, 6-6 Rw.

Opposite side 1: R = 6+(to joining P of Prev. Tip R)3+(center P of corresponding R)3-6 Cl. Rw.
Ch = First leave 1/8" small P, 6 Rw.
R = 6+(last P of Prev. R)4+(center P of corresponding R)4-6 Cl. Rw.
Ch = First leave 1/8" small P, 6 Rw.
R = 6+(last P of Prev. R)5+(center P of corresponding R)5-6 Cl. Rw.
Ch = First leave 1/8" small P, 6 Rw.
R = 6+(last P of Prev. R)6-6-6 Cl. Rw.
Ch = First leave 1/8" small P, 6 Rw.
R = 6+(last P of Prev. R) 7-7-6 Cl. Rw.
Ch = First leave 1/8" small P, 6 Rw.
IR = 6+(last P of Prev. R)8-8-6 Cl. Rw. Do not leave a space.
Repeat Side 1 & opposite side 1 four more times. Join to beginning.

Inside A: Refer to photograph for starting.
First join to center P of IR. If needed fold the working place-mat by half.
Ch = 6+(center P of next IR)
Ch = 10-10+(center p of next IR)
Repeat the last 2 chains around. Join to the beginning.

Inside B: Refer to photograph for starting.
First join to center P of inside chain
Ch = 10+(center P of next Ch)
Ch = 10+(center P of next Ch)
Ch = 10+(center P of next Ch)
Ch = 10+(center P of next Ch)
Ch = 10 join to the beginning.

Round 2: First join between two rings, refer to photograph.
Cluster 1: Ch = 6 Rw.
R = 6+(small P of Ch of round 1) 6 Cl. Rw.
Inner Ch = 3-3 Rw.
R = 6+(same small P of Ch) 6 Cl. Rw.
Ch = 6+(next small P of Ch of round 1)
Cluster 2: *Ch = 6 Rw.
R = 6+(small P of Ch of round 1) 6 Cl. Rw.
Ch = 3-3 Rw.
R = 6+(same small P of Ch) 6 Cl. Rw.
Ch = 6+(next small P of Ch of round 1)
Cluster 3: R = 6+(small P of Ch of round 1) 6 Cl. Rw.
Ch = 3-3 Rw.
R = 6+(same small P of Ch) 6 Cl. Rw.
Long Ch = 6-6 Rw.
R = 6+(small P of Ch of round 1) 6 Cl. Rw.
Ch = first leave a 1/8" small P, 3-3 Rw.
R = 6+(same small P of Ch) 6 Cl. Rw.

Long Ch = first leave a 1/8" small P, 6-6 Rw.
R = 6+(small P of Ch of round 1) 6 Cl. Rw.
Ch = 3-3 Rw.
R = 6+(same small P of Ch) 6 Cl. Rw.
Ch = 6+(next small P of Ch of round 1)

Cluster 4: Repeat Cluster 2

Cluster 5: Ch = 6 Rw.
R = 6+(small P of Ch of round 1) 6 Cl. Rw.

Inner Ch = 3-3 Rw. **Except** on the very last inner Ch do Inner Ch = 3+(to P of first inner Ch made.)
R = 6+(same small P of Ch) 6 Cl. Rw.
Ch = 6+(small P between rings round 1). **Except** on the very last Ch do Ch = 6+(join to the beginning).

Cluster 6: Ch = 6 Rw.
R = 6+(small P of Ch of round 1) 6 Cl. Rw.

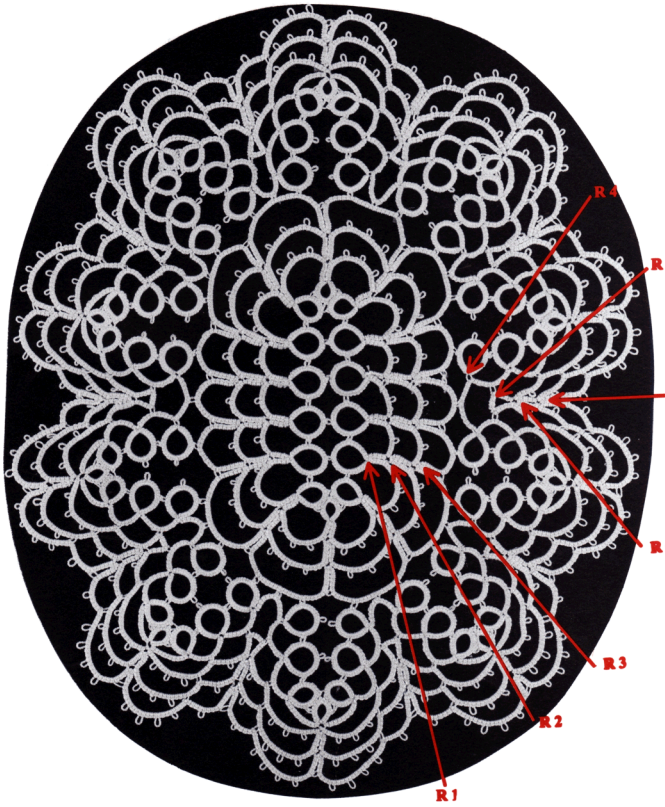
Inner Ch = 3+(to center P of Prev. Inner Ch)3 Rw.
R = 6+(same small P of Ch) 6 Cl. Rw.
Ch = 6+(small P between Ch of round 1).*
Repeat from * to * around. Join to the beginning.

Round 3: Refer to the photograph for the joins.
First join to the inner Ch of round 2.
Ch = 6-6-6+(to center p of Ch of next cluster) **Except on repeats do Ch = 6+(last P of Prev. Ch)6-6+(to center p of Ch of next cluster).
Ch = 6-6-6+(to center P of Ch of next cluster)
Ch = 6-6-6+(skip P join to small P of Ch of next cluster)
Tip Ch = 6-6+(to small P of Ch of cluster)
Ch = 6-6-6+(skip P join to center p of Ch of next cluster)
Ch = 6-6-6+(to center P of Ch of next cluster)
Ch = 6-6-6+(to center joining P of inner Ch). **
Repeat from ** to ** around. Join to the beginning.

Round 4: Refer to the photograph for the joins.
First join to the joining Ch of round 3.
†Ch = 7-7-7+(first P of Ch of round 3) **Except** on repeats do Ch = 7+(last P of Prev. Ch)7-7+(first P of Ch of round 3).
Ch = 7-7-7+(first P of next Ch of round 3)
Ch = 7-7-7+(center P of next Ch of round 3)
Ch = first leave 1/8" small picot, 7-7-7+(second P of Ch of round 3)
Ch = 7-7-7+(second P of Ch of round 3)
Ch = 7-7-7+(to joining P of Ch of round 3) †
Repeat from † to † around. Join to the beginning.

Round 5: Refer to the photograph for the joins.
First join to the joining Ch of round 4.
††Ch = 8-8-8+(skip P join to next P of Ch of round 4) **Except** on repeats do Ch = 8+(last P of Prev. Ch)8-8+(first P of Ch of round 4).
Ch = 8-8-8+(skip P join to next P of Ch of round 4)
Ch = 8-8+(skip P join to small P of Ch of round 4)
Ch = 8-8-8+(skip P join to next P of Ch of round 4)
Ch = 8-8-8+(skip P join to next P of Ch of round 4)
Ch = 8-8-8+(skip P join to joining P of Ch's of round 4)††
Repeat from †† to †† around. Join to the beginning.

Design 60



Adapted from design 6.

Design 60 Thread DMC No. 30 Shuttle and Ball/Ring & Chain Method

Round 1:

R = 8-8-8-8 Cl. Rw.
Ch = 4-4-4-4 Rw.
R = 8+(last P of Prev. R)8-8-8 Cl. Rw.
Ch = 4+(last P of Prev. Ch)4-4-4 Rw.
R = 8+(last P of Prev. R)8-8-8 Cl. Rw.
Ch = 4+(last P of Prev. Ch)4-4-4 Rw.
R = 8+(last P of Prev. R) 8-8-8 Cl. Rw.
*Ch = 4+(last P of Prev. Ch) 4-4-4-4-4 Rw.
R = 6+(last P of Prev. R)6, large P, 6, large P, 6 Cl. Rw.
Ch = 4+(last P of Prev. Ch)4-4-4-4-4 Rw.
End-R = 4+(last P of Prev. R)4+(next P of Prev R) 4, large P, 4 Cl. Rw.
Ch = 4+(last P of Prev. Ch)4-4-4-4-4 Rw.
R = 6+(last P of Prev. R)6+(joining P of Prev. R) 6-6 Cl. Rw.*
Ch = 4+(last P of Prev. Ch)4-4-4-4-4 Rw.
R = 8+(last P of Prev. R) 8+(to center P of corresponding R)8-8 Cl. Rw.
Ch = 4+(last P of Prev. Ch)4-4-4 Rw.
R = 8+(last P of Prev. R)8+(to center P of corresponding R)8-8 Cl. Rw.
Ch = 4+(last P of Prev. Ch)4-4-4 Rw.
R = 8+(last P of Prev. R)8+(to center P of corresponding R)8-8 Cl. Rw.
Ch = 4+(last P of Prev. Ch)4-4-4 Rw.
R = 8+(last P of Prev. R) 8+(to center P of corresponding R)8-8 Cl. Rw.
Repeat from * to * one time.
Ch = 4+(last P of Prev. Ch)4-4-4-4-+(first P of first Ch made)4 Rw.
Join to the beginning.

Round 2: First join to the joining P of Ch's.

Ch = 5-5-5-5+(next joining P of Ch's of round 1)
**Ch = 5+(last P of Prev. Ch)5-5-5+(next joining P of Ch's of round 1)
Ch = 5+(last P of Prev. Ch)5-5-5+(next joining P of Ch's of round 1)
Ch = 5+(last P of Prev. Ch)5-5-5-5-5+(next joining P of Ch's of round 1)
Ch = 5+(last P of Prev. Ch)5-5-5-5-5+(next joining P of Ch's of round 1)
Ch = 5+(last P of Prev. Ch)5-5-5-5-5+(next joining P of Ch's of round 1)**
Ch = 5+(last P of Prev. Ch)5-5-5-5-5+(next joining P of Ch's of round 1)
Ch = 5+(last P of Prev. Ch)5-5-5+(next joining P of Ch's of round 1)
Repeat from ** to ** one time.
Ch = 5+(last P of Prev. Ch)5-5-5-5+(first P of first Ch made)5.
Join to the beginning.

Round 3: First join to the joining P of Ch's.

Ch = 6-6-6-6+(next joining P of Ch's of round 2).
†Ch = 6+(last P of Prev. Ch)6-6-6+(next joining P of Ch's of round 2).
Ch = 6+(last P of Prev. Ch)6-6-6+(next joining P of Ch's of round 2).
Ch = 6+(last P of Prev. Ch)6-6-6-6-6+(next joining P of Ch's of round 2).
Ch = 6+(last P of Prev. Ch)6-6-6-6-6+(next joining P of Ch's of round 2).
Ch = 6+(last P of Prev. Ch)6-6-6-6-6+(next joining P of Ch's of round 2).†
Ch = 6+(last P of Prev. Ch)6-6-6-6-6+(next joining P of Ch's of round 2).
Ch = 6+(last P of Prev. Ch)6-6-6+(next joining P of Ch's of round 2).
Repeat from † to † one time.
Ch = 6+(last P of Prev. Ch)6-6-6-6+(first P of first Ch made)6.
Join to the beginning.

Round 4: *(2 Shuttles)*

Cluster 1: R = 8+(center P of Ch or round 3)8-8-8 Cl. Rw.
Ch = 5-5 Rw.
R = 8+(last P of Prev. R) 8-8-8 Cl. Rw.
Ch = 5-5 Rw.
R = 6+(last P of Prev. R)6-6-6 Cl. Rw.
Ch = 10 Rw.
End-R = 4+(last P of Prev. R)4+(center P of Prev. R) 4-4 Cl. Rw.
Ch = first leave 1/8" space for small picot, 10 Rw.
R = 6+(last P of Prev. R))6+(to joining P of Prev. R) 6-6 Cl. Rw.
Ch = 5-5 Rw.
R = 8+(last P of Prev. R)8-8-8 Cl. Rw.
Ch = 5-5 Rw.
R = 8+(last P of Prev. R)8-8+(next P of Ch of round 3)8 Cl. Rw.
Between Ch = 6+(next P of Ch of round 3)6.
Repeat cluster 1 of round 4 around for a total of 10 clusters. Join to the beginning.

Round 5: *(shuttle and ball)*

First join to center P of Ch of round 4, refer to photograph.

Cluster 1: Ch = 4-4-4+(next P of Ch of round 4) **Except** on repeats do Ch = 4+(last P of Prev. R)4-4+(next P of Ch of round 4).
Ch = 4-4-4-4-4 +(small P of Ch of round 4)
Ch = first leave small P, 4-4-4-4-4+(next P of Ch of round 4)
Ch = 4-4-4+(next P of Ch of round 4) **Except** on the very last Ch do Ch = 4-4+(first P of first Ch made)4+(next P of Ch of round 4).
Between Ch = 3+(next P of Ch of round 4)
Repeat round 5 cluster 1 around. Join to the beginning.

Round 6: First join to joining P of Ch's, refer to photograph.

Cluster 1: Ch = 4-4-4+(first P of Ch of Prev. round) **Except** on repeats do Ch = 4+(last P of Prev. Ch)4-4+(first P of Ch of Prev. round).
Ch = 4-4-4-4-4-4+(to small P of Ch of Prev. round)
Ch = 4+(last P of Prev. Ch)4-4-4-4-4+(forth P of Ch of Prev. round)
Ch = 4-4-4+ (joining P of Ch of Prev. round) **Except** on the very last Ch do Ch = 4-4 +(first P of first Ch made)4+(next P of Ch of Prev. round).
Repeat round 6 cluster 1 around. Join to the beginning.

7.Round: Repeat round 6

ISBN 1-883432-08-1