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Title: Encyclopedia of Needlework
Author: Thérèse de Dillmont
Release date: March 8, 2007 [eBook \#20776] Most recently updated: April 10, 2021

Language: English

## ENCYCLOPEDIA

OF

## NEEDLEWORK

## BY

THÉRÈSE DE DILLMONT


ENGLISH EDITION

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French edition Fr. 5.75
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## Preface.

The absolute want of any comprehensive book on needlework-such an one as contains both verbal and pictorial descriptions of everything included under the name of needlework-has led me to put into the serviceable form of an Encyclopedia, all the knowledge and experience, which years of unceasing study and practice have enabled me to accumulate on the subject, with the hope that diligent female workers of all ages, may be able, by its means to instruct themselves in every branch of plain and fancy needlework
All the patterns given, even the most insignificant, were worked afresh for the purpose, and thus, not merely faithful representations, but also lucid and intelligible explanations of the same, are secured.

In order that my readers may have something besides the dull theory, the work is enlivened by a number of useful patterns, some new, some derived from the artistic productions of such countries and epochs as have become famous by special excellence in the domain of needlework.
Though, at first sight, the reproduction of many of these patterns may seem to present insuperable difficulties, they will, after a careful study of the text, and exact attention to the directions given, prove easy to carry out.

Many of these interesting designs are drawn from private collections, whose owners, with great kindness, placed their treasures at my disposal, to copy and borrow from at discretion, for which I desire to take the present opportunity, of tendering them my warmest thanks.
The choice of colours and material-a difficult matter to many-my readers will find rendered comparatively easy to them by the notes affixed to the illustrations; and I may point out, that most of the patterns were worked with D.M.C cottons, which enjoy the well-earned reputation of being, the very best of their kind, in the market of the world.

Experience has convinced me that, in many instances, these cottons may with advantage take the place of wool, linen thread, and even silk.
If this work meet with indulgent judges, and prove really useful, I shall find ample reward in that fact for the trouble and difficulties that have unavoidably attended its completion.


[^0]
## Plain Sewing.

Many, on opening the Encyclopedia of needlework will be disposed to exclaim as they read the heading of this first section: What is the use of describing all the old well-known stitches, when machines have so nearly superseded the slower process of hand-sewing? To this our reply is that, of all kinds of needlework, Plain Sewing needs to be most thoroughly learned, as being the foundation of all. Those who are able to employ others to work for them, should at least know how to distinguish good work from bad, and those who are in less fortunate circumstances, have to be taught how to work for themselves.

Position of the body and hands.-Before describing different kinds of stitches, a word should be said as to the position of the body and hands when at work. Long experience has convinced me that no kind of needlework necessitates a stooping or cramped attitude. To obviate which, see that your chair and table suit each other in height, and that you so hold your work as hardly to need to bend your head at all. The practice of fastening the work to the knee, besides being ungraceful, is injurious to the health.
Needles.-These should be of the best quality. To test a needle, try to break it; if it resist, and then break clean in two, the steel is good; if it bend without breaking, or break without any resistance, it is bad. Never use a bent needle, it makes ugly and irregular stitches, and see that the eye, whether round or egg-shaped, be well-drilled, that it may not fray or cut the thread. Long or half-long needles are the best for white work, long ones for dress-making, and longer ones still, with long eyes, for darning. A stock of each, from No 5 to 12, is advised. The needle should always be a little thicker than the thread, to make an easy passage for it through the stuff.

To keep needles from rusting, strew a little stone alum in the packets, and workers whose hands are apt to get damp, should have a small box of it handy, to powder their fingers with. Blackened needles can be made quite bright again by drawing them through an emery cushion.
Scissors.-Scissors are a very important accessory of the work-table, and two varieties are indispensable; a pair of large ones for cutting-out, with one point blunt and the other sharp, the latter to be always held downwards; and a pair of smaller ones with two sharp points. The handles should be large and round; if at all tight, they tire and disfigure the hand.
Thimble.-Steel thimbles are the best; bone are very liable to break, and silver ones are not deeply enough pitted, to hold the needle. A thimble should be light, with a rounded top and flat rim.
The thread.-Except for tacking, your thread should never be more than from 40 to $50 \mathrm{c} / \mathrm{m}$. long. ${ }^{[1]}$ If the thread is in skeins, it does not matter which end you begin with, but if you use reeled cotton, thread your needle with the end that points to the reel, when you cut it; as the other end will split, and unravel, when twisted from left to right, which is generally done, to facilitate the process of threading. The cotton should always be cut, as it is weakened by breaking.
Knotting the thread into the needle (fig. 1).-When the thread becomes inconveniently short, and you do not want take a fresh one, it may be knotted into the needle, thus: bring it round the forefinger close to the needle, cross it on the inside next to the finger, hold the crossed threads fast, with the thumb draw the needle out through the loop thus formed, and tighten the loop round both ends.


Fig. 1. Knotting the thread into the needle.
Materials.-For tacking, use Coton à coudre D.M.C qualité supérieure (black and gold stamp) Nos. 2 to 6.[A] For hand-sewing, Fil d'Alsace D.M.C Nos. 30 to $700,{ }^{[\mathrm{A}]}$ and Fil à dentelle D.M.C, balls or reels, Nos. 25 to $100[\mathrm{~A}]$ will be found most useful. For machine-work: Câblé 6 fils pour machines D.M.C, Nos. 30 to $300,[$ A] black and white, or white and blue stamp. These can also be used for hand-work. Both these and the lace-thread (Fil à dentelle) on reels, are superfine in quality. The medium sizes are the most useful; but the only suitable ones for very fine and delicate fabrics are the Fil à dentelle D.M.C, and Fil d'Alsace, and the latter only is manufactured in the higher numbers.

All these threads are to be had, wound in balls, or on reels, the buyer may make his own choice; balls are apt to get tangled, but the cotton preserves its roundness better than when it is wound on reels. Linen is generally sewn with linen-thread, but Fil à dentelle and the Fil d'Alsace are very good substitutes.
Position of the hands (fig. 2).-The stuff, fastened to a cushion, must be held with the left hand, which should neither rest on the table, nor on the cushion, the needle must be held between the thumb and forefinger, of the right hand, and the middle finger, armed with the thimble, pushes the needle far enough through the stuff, for the other fingers to take hold of it and draw it out; the thread then comes to lie between the fourth and fifth fingers in the form of a loop, which must be tightened gradually to avoid its knotting.


Fig. 2. Position of the hands.
Position of the hands without cushion (fig. 3).—When the work cannot be fastened to a cushion it should be held between the forefinger and the thumb, and left hanging down, over the other fingers. If it need to be more firmly held, draw it between the fourth and fifth fingers, which will prevent it from getting puckered or dragged.


Fig. 3. Position of the hands without cushion.
Stitches.-Plain-Sewing comprises 4 varieties of stitches, (1) running, (2) back-stitching, (3) hemming and (4) top or oversewing.
(1) Running-stitch (fig. 4).-This is the simplest and easiest of all. Pass the needle in and out of the material, at regular intervals, in a horizontal direction, taking up three or four threads at a time. If the stuff allow, several stitches may be taken on the needle at once, before the thread is drawn out. Running-stitch is used for plain seams, for joining light materials, for making gathers and for hems.


Fig. 4. Running-stitch.
(2) Back-stitch (fig. 그).-Insert the needle, and draw it out six threads further on, carry your thread back, from left to right, and insert the needle three threads back from the point at which it was last drawn out, and bring it out six threads beyond. Stitching and back-stitching are better and more quickly done by machine than by hand.


Fig. 5. Back-stitch.
Stitching (fig. 6).-The production of a row of back-stitches, that exactly meet one another, constitutes what is called stitching. Only one stitch can be made at a time, and the needle must be put in, exactly at the point where it was drawn out to form the preceding back-stitch, and brought out as many threads further on as were covered by the last back-stitch. The beauty of stitching depends on the uniform length of the stitches, and the straightness of the line formed, to ensure which it is necessary to count the threads for each stitch, and to draw a thread to mark the line. If you have to stitch in a slanting line across the stuff, or the stuff be such as to render the drawing of a thread impossible, a coloured tacking thread should be run in first, to as a guide.


Fig. 6. Stitching.
Stitched hem (fig. 7).-Make a double turning, as for a hem, draw a thread two or three threads above the edge of the first turning, and do your stitching through all three layers of stuff; the right side will be that on which you form your stitches.


Fig. 7. Stitched hem.
(3) Hemming-stitch (fig. 8).-To make a good hem, your stuff must be cut in the line of the thread. Highly dressed stuffs, such as linen and calico; should be rubbed in the hand, to soften them, before the hem is laid. Your first turning should not be more than $2 \mathrm{~m} / \mathrm{m}$. wide; turn down the whole length of your hem, and then make the second turning of the same width, so that the raw edge is enclosed between two layers of stuff.


## Fig. 8. Hemming-stitch.

Narrow hems do not need to be tacked, but wide ones, where the first turning should only be just wide enough to prevent the edge from fraying, ought always to be. In hemming you insert the needle and thread directed in a slanting position towards you, just below the edge of the hem, and push it out two threads above, and so on to the end, setting the stitches, two or three threads apart, in a continuous straight line. To ensure the hem being straight, a thread may be drawn to mark the line for the second turning, but it is not a good plan, especially in shirt-making, as the edge of the stuff, too apt in any case, to cut and fray, is, thereby, still further weakened. Hems in woollen materials, which will not take a bend, can only be laid and tacked, bit by bit. In making, what are called rolled hems, the needle must be slipped in, so as only to pierce the first turning, in order that the stitches may not be visible on the outside.

Flat seam (fig. 9).-Lay your two edges, whether straight or slanting, exactly even, tack them together with stitches $2 \mathrm{c} / \mathrm{m}$. long, distant 1 to $2 \mathrm{c} / \mathrm{m}$. from the edge, and then back-stitch them by machine or by hand, following the tacking-thread. Cut off half the inner edge, turn the outer one in, as for a hem and sew it down with hemming-stitches.


Fig. 9. Flat seam.
Smooth the seam underneath with the forefinger as you go, to make it lie quite flat. Beginners should flatten down the seam with their thimbles, or with the handle of the scissors, before they begin to hem, as the outer and wider edge is very apt to get pushed up and bulge over, in the sewing, which hides the stitches.

Rounded seam.-Back-stitch your two edges together, as above directed, then cut off the inner edge to a width of four threads, and roll the outer one in, with the left thumb, till the raw edge is quite hidden, hemming as you roll. This kind of seam, on the wrong side, looks like a fine cord, laid on, and is used in making the finer qualities of underclothing.

Fastening threads off, and on (fig. 10). - Knots should be avoided in white work. To fasten on, in hemming, turn the needle backwards with the point up, take one stitch, and stroke and work the end of the thread in, underneath the turning. To fasten on, in back-stitching or running, make one stitch with the new thread, then take both ends and lay them down together to the left, and work over them, so that they wind in, and out of the next few stitches.


Fig. 10. Fastening threads off and ON.
(4) Top or over-sewing stitch (fig. 11).-This stitch is used for joining selvedges together. To keep the two pieces even, it is better, either to tack or pin them together first. Insert the needle, from right to left, under the first thread of the selvedge, and through both edges, and sew from right to left, setting your stitches not more than three threads apart. The thread must not be drawn too tightly, so that when the seam is finished and flattened with the thimble, the selvedges may lie, side by side.


Fig. 11. Top or over-sewing stitch.
Another kind of sewing-stitch (fig. 12) -For dress-seams and patching; sew left to right, tacking or pinning the edges together first, and holding them tightly with the thumb and finger, to keep perfectly even.


Fig. 12. Another kind of Sewingstitch.
Antique or old-German seam (figs. 13 and 14).-Tack or pin the selvedges together as above, then, pointing your needle upwards from below, insert it, two threads from the selvedge, first on the wrong side, then on the right, first through one selvedge, then through the other, setting the stitches two threads apart. In this manner, the thread crosses itself, between the two selvedges, and a perfectly flat seam is produced. Seams of this kind occur in old embroidered linen articles, where the stuff was too narrow to allow for any other. A similar stitch, fig. 14, only slanting, instead of quite straight, as in fig. 13, is used in making sheets.


## Antique or

OLD-GERMAN
SEAM.

Fig. 14. AntiQue
OR OLD GERMAN
SEAM.

French double seam (fig. 15).-For joining such stuffs as fray, use the so-called French-seam.
Run your two pieces of stuff together, the wrong sides touching, and the edges perfectly even, then turn them round just at the seam, so that the right sides come together inside, and the two raw edges are enclosed between, and run them together again. See that no threads are visible on the outside. This seam is used chiefly in dress-making, for joining slight materials together which cannot be kept from fraying by any other means.


Fig. 15. French DOUBLE-SEAM.

Hemmed double seam (figs. 16 and 17).-Turn in the two raw edges, and lay them one upon the other, so that the one next the forefinger, lies slightly higher than the one next the thumb. Insert the needle, not upwards from below but first into the upper edge, and then, slightly slanting, into the lower one. This seam is used in dress-making, for fastening down linings. Fig. 17 shows another kind of double seam, where the two edges are laid together, turned in twice, and hemmed in the ordinary manner, with the sole difference, that the needle has to pass through a sixfold layer of stuff.


Fig. 16. Hemmed DOUBLE-SEAM.


Fig. 17. Open HEMMED DOUBLESEAM.

Gathering (fig. 18).-Gathers are made with running-stitches of perfectly equal length; take up and leave three or four threads, alternately, and instead of holding the stuff fast with your thumb, push it on to the needle as you go, and draw up your thread after every four or five stitches.


Fig. 18. Gathering.
Stroking gathers (fig. 19).-When you have run in your gathering thread, draw it up tight, and make it fast round the finger of your left hand, and then stroke down the gathers with a strong needle, so that they lie evenly side by side, pushing each gather, in stroking it, under your left thumb, whilst you support the stuff at the back with your other fingers.


Fig. 19. Stroking gathers.
Running in a second gathering thread (fig. 20). -This is to fix the gathers after they have been stroked, and should be run in 1 or $2 \mathrm{c} / \mathrm{m}$. below the first thread, according to the kind of stuff, and the purpose it is intended for: take up five or six gathers at a time, and draw your two threads perfectly even, that the gathers may be straight to the line of the thread.


Fig. 20. Running in a second gatheringthread.

Sewing on gathers (fig. 21).-To distribute the fullness equally, divide the gathered portion of material, and the band, or plain piece, on to which it is to be sewn, into equal parts, and pin the two together at corresponding distances, the gathered portion under the plain, and hem each gather to the band or plain piece, sloping the needle to make the thread slant, and slipping it through the upper threads only of the gathers.


## Fig. 21. Sewing on

gathers.
Whipping (fig. 22).-Whipping is another form of gathering, used for fine materials. With the thumb and forefinger of the left hand, roll the edge over towards you, into a very tight thin roll, insert the needle on the inside of the roll next the thumb, and bring it out on the outside next the forefinger, at very regular distances, and draw up the thread slightly, from time to time, to form the gathers.


Fig. 22. Whipping.
Ornamental hem (fig. 23). For an ornamental hem, make a turning, 2 or $3 \mathrm{c} / \mathrm{m}$. deep, and run in a thread, with small runningstitches up and down, as shown in fig. 23. By slightly drawing the thread, the straight edge will be made to look as if it were scalloped.


Fig. 23. Ornamental
HEM.
Sewing on cord (fig. $\underline{24}$ ).-For sewing on cord, use strong thread, either Fil d'Alsace D.M.C, Fil à dentelle D.M.C or Câblé 6 fils D.M.C No. $25,30,35$ or $40 .[$ A] Be careful not to stretch the cord, but to hold it in, as you sew it, as it invariably shrinks more than the stuff in the first washing. Fasten it with hemming stitches to the edge of the turning, taking care that it does not get twisted.


Fig. 24. Sewing
on Cord.
Sewing on flaps (fig. 25). -These should be back-stitched on to the right side of the article they are to be affixed to, quite close to the edge, then folded over in half, and hemmed down on the wrong side. Like the cord, the flap must, in the process, be held in very firmly with the left hand. Though the back-stitching could be more quickly done by machine, hand-work is here preferable, as the holding in cannot be done by machine.


Fig. 25. Sewing on flaps.
Sewing on tape-loops (figs. $\underline{26}$ and $\underline{27}$ ). -These, in the case of the coarser articles of household linen, are generally fastened to the corners. Lay the ends of your piece of tape, which should be from 15 to $17 \mathrm{c} / \mathrm{m}$. long, side by side, turn in and hem them down, on three sides: the loop should be so folded as to form a three-cornered point, shewn in the illustration. Join the two edges of the tape together in the middle with a few cross-stitches, and stitch the edge of the hem of the article to the loop, on the right side.


Fig. 26. Sewing on tape-Loops to THE CORNER.


Fig. 27. Sewing on tape-loops in the middle of the article.

Fig. 27 shows how to sew on a loop in the middle of an article, the two ends separately, one on one side, the other on the other.
Strings and loops for fine under-linen (fig. 28). -Sew these on, likewise, on the wrong side of the article, hemming down the ends, and fastening them on the right side, with two rows of stitching crossing each other, and a third row along the edge.


Fig. 28. Strings and loops on fine under-linen.
Button-holes in linen (fig. 29).-Cut your hole perfectly straight, and of exactly, the diameter of the button, having previously marked out the place for it, with two rows of running-stitches, two or three threads apart. Put in your needle at the back of the slit, and take up about three threads, bring the working thread round, from right to left under the point of the needle, and draw the needle out through the loop, so that the little knot comes at the edge of the slit, and so on to the end, working from the lower left-hand corner to the right. Then make a bar of button-hole stitching across each end, the knotted edge towards the slit.


Fig. 29. Button-
HOLES IN LINEN.
Button holes in dress materials (fig. 30).-Mark out and cut them as above described; if however, the material be liable to fray, wet the slit as soon as you have cut it, with liquid gum, and lay a strand of strong thread along the edge to make your stitches over; one end of dress button-holes must be round, the stitches diverging like rays from the centre, and when you have worked the second side, thread the needle with the loose strand, and pull it slightly, to straighten the edges; then fasten off, and close the button-hole with a straight bar of stitches across the other end, as in fig. $\underline{29}$.


Fig. 30. Button-
holes in dressmaterials.

Sewing on buttons (figs. 31 and 32 ).-To sew linen, or webbed buttons on to underclothing, fasten in your thread with a stitch or two, at the place where the button is to be; bring the needle out through the middle of the button, and make eight stitches, diverging from the centre like a star, and if you like, encircle them by a row of stitching, as in fig. 32. This done, bring the needle out between the stuff and the button, and twist the cotton six or seven times round it, then push the needle through to the wrong side, and fasten off.


Fig. 31. Sewing on linen buttons.


Fig. 32. Sewing
on webbed buttons.

Binding slits (figs. $\underline{33}, \underline{34}, \underline{35}, \underline{36}$ ). -Nothing is more apt to tear than a slit whether it be hemmed or merely bound. To prevent this, make a semicircle of button-hole stitches at the bottom of the slit, and above that, to connect the two sides, a bridge of several threads, covered with button-hole stitches.

In fig. 33 , we show a hemmed slit, and in figs. 34 and 35 , are two slits backed the one with a narrow, the other, with a broad piece of the material, cut on the cross.


Binding slits WITH HEM.


Fig. 35. Binding slits with broad BAND.

Binding slits WITH PIECE ON CROSS.


Fig. 36. Strengthening
sLits with gusset.

In under-linen, it often so happens that two selvedges meet at the slit, which renders binding unnecessary; in that case take a small square of stuff, turn in the raw edges, top-sew it into the slit on two sides, turn in the other two, fold over on the bias, and hem them down over the top-sewing, as shewn in fig. 36. Such little squares of material, inserted into a slit or seam, to prevent its tearing, are called gussets.
Sewing on piping (fig. 37). Piping is a border, consisting of a cord or bobbin, folded into a stripe of material, cut on the cross, and affixed to the edge of an article to give it more strength and finish. It is a good substitute for a hem or binding on a bias edge, which by means of the cord, can be held in, and prevented from stretching. Cut your stripes diagonally, across the web of the stuff, and very even; run them together, lay the cord or bobbin along the stripe, on the wrong side, $5 \mathrm{~m} / \mathrm{m}$. from the edge, fold the edge over, and tack the cord lightly in. Then lay it on the raw edge of the article, with the cord towards you, and with all the raw edges turned away from you. Back-stitch the piping to the edge, keeping close to the cord. Then turn the article round, fold in the raw outside edge over the others, and hem it down like an ordinary hem.


Fig. 37. Sewing on PIPING.

Fixing whale-bones (fig. 38).-Before slipping the whalebone into its case or fold of stuff, pierce holes in it, top and bottom, with a red hot stiletto. Through these holes, make your stitches, diverging like rays or crossing each other as shown in fig. 38.


Fig. 38.
Fixing
whale-
BONES.
Herring-boning (fig. 39).-This stitch is chiefly used for seams in flannel, and for overcasting dress-seams, and takes the place of hemming, for fastening down the raw edges of a seam that has been run or stitched, without turning them in. Herringboning is done from left to right, and forms two rows of stitches. Insert the needle from right to left, and make a stitch first above, and then below the edge, the threads crossing each other diagonally, as shewn in fig. 39.


Fig. 39. Herring-boning

## Next Chapter.

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## FOOTNOTES:

[1] Our readers should be provided with a French metre, with the English yard marked on the back for purposes of comparison.
[A] See at the end of the concluding chapter, the table of numbers and sizes and the list of colours of the D.M.C threads and cottons.


SPECIMENS OF PATTERN DARNS.

## Mending.

The mending of wearing-apparel and house-linen, though often an ungrateful task, is yet a very necessary one, to which every female hand ought to be carefully trained. How best to disguise and repair the wear and tear of use or accident is quite as valuable an art, as that of making new things.
Under the head of mending, we include the strengthening and replacing of the worn and broken threads of a fabric, and fitting in of new stuff in the place of that which is torn or damaged. The former is called darning, the latter, patching.

Darning.-When only a few of the warp or woof threads are torn or missing, a darn will repair the mischief, provided the surrounding parts be sound. When the damage is more extensive, the piece must be cut out.

In some cases the warp of the stuff itself can be used for darning, otherwise thread as much like the stuff as possible should be chosen.

Materials suitable for mending.-Coton à repriser D.M.C is used for most kinds of darning. It can be had in 18 different sizes, from Nos. 8 to 100, white and unbleached, and in all the colours of the D.M.C colour-card in Nos. 12, 25 and 50.

It is but very slightly twisted and can be split or used double, if necessary, according to the material. For all the coarser articles of house-linen, unbleached cotton is the best, and for the finer white fabrics, Coton surfin D.M.C Nos. 110, 120 and $150[\mathrm{~A}]$. This cotton, which is not the least twisted, and is to be had both white and unbleached, can be used, by subdividing it, for darning the finest cambric.

Varieties of darning.-These are four, (1) Linen darning, (2) Damask darning, (3) Satin or Twill darning, and (4) Invisible darning, called also, Fine-drawing.
(1) Linen Darning (figs. $\underline{40}$ and $\underline{41}$ ). -All darns should be made on the wrong side of the stuff, excepting fig. $\underline{54}$, which it is sometimes better to make on the right side. The longitudinal running, to form the warp, must be made first. The thread must not be drawn tightly in running your stitches backwards and forwards, and be careful to leave loops at each turning, to allow for the shrinking of the thread in the washing, without its pulling the darn together.


Fig. 40. Linen darning. Drawing in the warp THREADS.

Run your needle in, about one $\mathrm{c} / \mathrm{m}$. above the damaged part, take up one or two threads of the stuff and miss the same number, working straight to a thread; on reaching the hole, carry your cotton straight across it, take up alternate threads beyond, and proceed as before. Continue the rows backwards and forwards, taking up in each row, the threads left in the preceding one. Turn the work round and do the same for the woof; alternately taking up and leaving the warp threads, where the cotton crosses the hole. The threads must lie so alone both ways, that the darn, when completed, replaces the original web. The threads are only drawn so far apart in the illustrations, for the sake of clearness.


Fig. 41. Linen darning.
Drawing in the woof threads.
When the material to be darned does not admit of a fleecy thread, such as Coton à repriser D.M.C, one that as nearly as possible matches the material, should be chosen from the D.M.C cottons.[A]

Diagonal linen darning (fig. 42).-Darns are sometimes begun from the corner, so as to form a diagonal web, but they are then much more visible than when they are worked straight to a thread, and therefore not advisable.


Fig. 42. Diagonal linen DARNiNG.
(2) Satin or twill darning (fig. 43).-By twill darning, the damaged web of any twilled or diagonal material can be restored. It would be impossible to enumerate all the varieties of twilled stuffs, but the illustrations and accompanying directions will enable the worker to imitate them all.


Fig. 43. Satin or twill darning.
Begin, as in ordinary darning by running in the warp threads, then take up one thread, and miss three. In every succeeding row, advance one thread in the same direction. Or, miss one thread of the stuff and take up two, and as before, advance, one thread in the same direction, every succeeding row. The order in which threads should be missed and taken up, must depend on the web which the darn is intended to imitate.

When the original is a coloured stuff, it is advisable to make a specimen darn first, on a larger scale, so that you may be more sure of obtaining a correct copy of the original web.
(3) Damask darning (figs. $\underline{44}, \underline{45}, \underline{46}, \underline{47}, \underline{48}, \underline{49}$ ). -A damask darn is begun in the same way as all other darns are; the pattern is formed by the cross-runnings and will vary with the number of warp threads taken up and missed, in each successive running. The woven design which you are to copy with your needle must therefore be carefully examined first.

Figs. 44 and 45 show the wrong and right sides of a damask darn, in process of being made.


Fig. 44. Damask darning. Wrong side.


Fig. 45. Damask darning. Right side.

Fig. 46 represents a completed one. In the case of coloured webs, a light shade of cotton is generally used for the warp, one that matches the stuff, for the shot or woof.


Fig. 46. Damask
darning. Covered
ground.
Figs. 47 and 48 , illustrate two specimens of darning, formerly done in the convents, from which it will be seen, that the warp and the woof were first drawn in with rather fine thread and the pattern then worked into this foundation with coarser, or else coloured thread. When this kind of darn is in two colours, take, for the darker shade, Coton à broder D.M.C, or Coton à repriser D.M.C, which are both of them to be had in all the bright and faded shades, to match alike both old and new linen.


Fig. 47.
Damask
darning on
needle-made
Ground.


Fig. 48.
Damask
darning on
needle-made GROUND.

Fig. 49, which is executed in two colours, and is likewise copied from an old work on darning, shows you the manner in which a dice-pattern is to be reproduced.

(4) Darning, lost in the ground (fig. 50). - A kind of darn used for repairing rents, the edges of which fit exactly into one another. Neither the torn threads of the material nor the rough edges must be cut off; the torn part is to be tacked upon a piece of oil-cloth, wrong side uppermost, and the edges, drawn together by a thread, run in backwards, and forwards, across them. The stitches must be set as closely together as possible, and regularly inverted, as in every other darn. A much finer thread relatively than that of which the material is composed should, in all cases be used for darning. In this instance also, for the sake of greater distinctness, the size of the thread has been magnified in the illustration. Coton surfin D.M.C, will be found the best for darning both calico and linen.


Fig. 50. Darning lost in THE GROUND.
Fine drawing (fig. 51).-The art of making invisible darns in cloth, though such a useful one, is all but unknown. It is a tedious process and one which, though easy enough to understand, requires great care in the execution.


Fig. 51. Fine drawing.
Use as fine a needle as possible and thread it with hair, instead of silk, or any other kind of fibre. Red and white hair is the strongest, and stronger than the ravellings of the stuff. Of course the hair has first to be carefully cleansed from grease. Pare the edges of the rent, on the right sides, quite clean and even, with a razor, so that both rent and stitches may be lost in the hairy surface of the cloth. Scissors do not cut so closely, and are liable moreover, to disturb the nap, and render the darn more visible. When this is done, fit the edges exactly together, and overcast them. Then thread a needle with a hair by the root, and slip it in, 2 or $3 \mathrm{~m} / \mathrm{m}$. from the one edge and back again pointed towards you, through the other, so that, neither needle nor hair, are visible on either side. The stitches should be set slightly slanting and must be quite lost in the thickness of the cloth. The needle must always be put in, exactly at the place where it came out, and the hair not be too tightly drawn.
When the darn is finished, lay the article on a bare table, or ironing-board, cover it with a damp cloth, and iron it. The sharpest eye will fail to detect a rent, when carefully darned in this manner.

Patching.-As we have already said, when the defective part is past darning, it must be cut out, and a new piece of stuff inserted in its place. If the garment be no longer new, it should be patched with a slighter material than that of which it was originally made. The patch should be of the same shape, and cut the same way of the stuff, as the piece it is to replace, it should also be, just so much larger, as to allow for the turnings in, and can either be top-sewn, or else, run and felled in.
Back-stitching and felling in a patch (fig. 52).—Tack in the new piece, so that its edges overlap the edges of the hole. The back-stitching must be done on the article itself, as this renders it easier to do the corners neatly. The hem is turned down on to the patch. Make a little snip at the corners with your scissors to prevent puckering. The back-stitching should form a right angle at each corner.


Fig. 52. Back-stitching
and felling in a patch.
Top-sewing in a patch (fig. $\underline{53}$ ).-To do this, the edges of the hole and of the patch, must first be turned in, and either overcast or hemmed, to prevent their fraying, after which, sew the two edges together. The raw edges may also be turned in with herring-boning as in fig. 39, putting the needle, only through one layer of stuff.


Fig. 53. Top-sewing in a ратсн.

Drawing in a patch (fig. $\underline{54}$ ).-Take a square piece of the original stuff, 5 or $6 \mathrm{c} / \mathrm{m}$. larger each way, than the hole it is to fill, draw out threads on all the four sides, till the piece exactly matches the hole, and tack it into its place. Thread a very fine needle with the two ends of a thread of silk or Fil d'Alsace D.M.C No. 700, run it in at the corner of the stuff, and draw it out, leaving a loop behind. Into this loop, slip the first of the threads, which as it were, form a fringe to the patch, and tighten the loop round it, and so on with each thread, alternately taking up and leaving threads in the stuff, as in ordinary darning.


Fig. 54. Drawing in a patch.
To put a patch into a thin material, in this manner, you must darn in the threads, a good long way, into the material, in order that the double layer of threads may be less visible.

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## FOOTNOTES:

[A] See at the end of the concluding chapter, the table of numbers and sizes and the list of colours of the D.M.C threads and cottons.


Stripe of cut open-work on white linen.

## Single and cut Open-work.

The above heading comprises every sort of needle-work, to which the drawing out of threads is a preliminary. By sewing over the single threads that remain, and drawing them together in different ways, an infinite variety of patterns can be produced. Many pretty combinations also, can be made of open-work, cross-stitch, and other kinds of embroidery.
Materials suitable for open-work.-For all the coarser stuffs, such as Holbein-linen, Java and linen-canvas and the like, now in such favour for the imitation of old needlework, it will be best to use: Fil a pointer D.M.C, No. $30[\mathrm{~A}]$ and Cordonnet 6 fils D.M.C, Nos. 10 to $20,[\mathrm{~A}]$ and for the finer stuffs, such as antique-linen and linen-gauze; Cordonnet 6 fils D.M.C Nos. 50 to 150 , $[A]$ Fil d'Alsace D.M.C, Nos. 20 to 100, and Fil à dentelle D.M.C, Nos. 25 to 80.
Coloured patterns can also be executed in open-work, with Coton à broder D.M.C Nos. 16 to 35 , and Coton à repriser D.M.C, Nos. 25 to $50{ }^{[A]}$.

The two different kinds of open-work.-The one is called, single open-work, the Italian Punto tirato, in which the first step is to draw out one layer of threads; the other, cut open-work, the Italian Punto tagliato, for which, both the warp, and the woof threads, have to be drawn out.
Single open-work (Punto tirato).-This, in its simplest form, is the ornamental latticed hem, in common use where something rather more decorative than an ordinary hem (fig. 8 ) is required, and consists in drawing out one layer of threads, either the warp or the woof.
Single hem-stitch (fig. 55).-Draw out, according to the coarseness of the stuff, two or four threads, below the edge of the turning, and tack your hem down to the line thus drawn. Fasten your thread in to the left, and work your hem from right to left, taking up three or four cross-threads at a time, and inserting your needle, immediately above, into the folded hem, three or four threads from the edge, and then drawing it out.


Fig. 55. Single hem-stitch.
The same stitch is used for preventing the fringes, that serve as a finish to so many articles of house-linen, from ravelling.
Second hem-stitch (fig. 56).-Prepare your hem as for fig. 55, and work from left to right; with this difference, that after drawing two or three cross-threads together, from right to left, you skip the same number of perpendicular threads you took up below, and insert your needle downwards from above, bringing it out at the bottom edge of the hem.


Fig. 56. Second hem-stitch.
These stitches, which can be used for the right side also, form a kind of little tress, along the edge of the hem.
Ladder stitch hem (fig. ${ }^{57}$ ). Complete the hem, as already directed in fig. $\underline{55}$, then draw out three or five threads more, turn the work round, and repeat the process, taking up the same clusters of threads which you took up in the first row of stitches, thus forming little perpendicular bars.


Fig. 57. Ladder stitch hem.
Double hem-stitch (fig. 58). Begin as in fig. $\underline{55}$, forming your clusters of an even number of threads; and then, in making your second row of stitches, draw half the threads of one cluster, and half of the next together, thereby making them slant, first one way and then the other.


Fig. 58. Double hem-stitch.
Antique hem-stitch (figs. $\underline{59}, \underline{60}, \underline{61}$ and 62). In the old, elaborate, linen needlework, we often meet two kinds of hemstitching seldom found in modern books on needle-work. Figs. 59 to 62 are magnified representations of the same. At the necessary depth for forming a narrow hem, a thread is drawn, in the case of very fine textures where the edge is rolled, not laid; then fasten in the working thread at the left, and work the stitches from left to right. Passing your needle, from right to left, under three or four threads, draw the thread round the cluster and carry your needle on, through as many threads of the upper layer of stuff, as you took up below, so that the stitch may always emerge from the middle of the cluster.


Fig. 59. Antique hem-stitch. Wrong SIDE.


Fig. 60. Antique hem-stitch. Right
SIDE.
above, but the stitches are worked from right to left, and the thread is carried round the little roll, so that, as shown in fig. 62 , it is visible on both sides of the hem. The needle does not enter the stuff, but is carried back at once, from the outside, and put in again between two clusters of threads.


Fig. 61. Antique hem-stitch. Wrong


Fig. 62. Antique hem-stitch. Right SIDE.

Slanting hem-stitch (figs. 63 and 64).-Bring out your needle and thread, two or three threads above the edge of the turning, between the first and second of the three cross-threads that compose the cluster, and then slip it under the cluster, from right to left. The loop must lie in front of the needle. When you have drawn up the stitch, put the needle in, one thread further on, and take up two threads. Fig. $\underline{64}$ shows the stitch on the right side.


Fig. 63. Slanting hem-stitch. Wrong SIDE.


Fig. 64. Slanting hem-stitch. Right SIDE.

Double-rowed ornamental seam (figs. $65,66,67$ ).-Begin with any one of the hems already described, then counting as many threads downwards, as are clustered together in the first row, draw out a second thread, and cluster the perpendicular threads in this second line together, as shown in figs. 65 and 66 . On the right side the stitch is straight (fig. 67). Coloured cottons should be used for all the above patterns of hem-stitch, when they are to be introduced into coloured embroideries.


Fig. 65. Double-rowed ornamental seam. Wrong side.


Fig. 66. Double-rowed ornamental seam. Wrong side.


Fig. 67. Double-rowed ornamental seam. Right side.
Single three-rowed open-work (fig. 68).-This, and the following patterns, are suitable for the headings of hems, and for connecting stripes of embroidery, and are also often used instead of lace, and lace insertion.


Fig. 68. Single three-rowed open-work.

Fig. 68 will be found specially useful, in cases where the object is, to produce a good deal of effect, at the cost of as little labour as possible. Make six rows of hem-stitching, as in fig. $\underline{55}$; the first and sixth rows to serve as a finish, above and below.

The second and third, after drawing out six threads, the third and fourth after drawing out eight. The clusters must all consist of an even number of threads. The upper and the lower band of open-work is to be copied from fig. 58 , the centre one, from fig. 57. Divide the threads of the perpendicular clusters in two; insert the needle, from left to right, underneath half the second cluster, turn the needle's eye, by a second movement, from left to right, and take up the second part of the first cluster, drawing it under, and at the same time, in front of the first half of the second cluster. Be careful not to draw your thread too tightly.
Open-work with two threads drawn through (fig. 69).—One such wide lane of open-work, between two finishing rows of stitches, may have two threads drawn through it.


Fig. 69. Open-work with two threads drawn through.
Open-work with three threads drawn through (fig. 70). Overcast both edges with single stitches; draw the clusters together in the middle, as in fig. 68; then above and below the middle thread, draw in first one thread and then a second, straight above it, securing the latter with back-stitches to enclose the clusters between two threads.


Fig. 70. Open-work with three threads drawn through.
Clustered open-work (fig. 71).—Draw out from sixteen to eighteen threads, between two hem-stitched edges. Fasten your thread in, $3 \mathrm{~m} / \mathrm{m}$. above the seam-edge, and wind it three times round every two clusters, passing the needle, the third time, under the two first rounds, to fasten the thread. The thread, thus drawn through, must be left rather slack. A second row of stitches, similar to the first, and at the same distance from the bottom edge, completes this pattern. To give it greater strength, you may if you like, work back over the first thread, with a second, taking care to pass it under the knot, which was formed by the first.


Fig. 71. Clustered open-work.
Double-rowed cluster-open-work (fig. 72).-A very good effect can be obtained by making the above stitch in such a manner, as to form groups of three clusters each, between hem-stitched bands of the stuff.


Fig. 72. Double-rowed cluster-open-work.
Turkish cluster open-work (fig. 73).-After portioning off, and sewing up the clusters on one side, draw out twelve or fourteen threads, and make your connecting-stitch and hem, all in one, as follows: bring out the thread before the cluster, and pass it round it, then from right to left, over three horizontal and under four perpendicular threads, again from left to right, over the four threads just passed over, and out at the second cluster; laying it over this, you bring it out behind the first cluster, wind it round the middle of them both, and pass it through, between the overcasting stitches back to the hem; encircle the second cluster with a loop-stitch, and carry your thread again over three horizontal and four perpendicular threads, and upwards, slanting underneath the stuff, out in front of the next cluster.


Fig. 73. Turkish cluster open-work.
Open-work with darning stitch (fig. 74).-Draw out from eight to twelve threads, according to the quality of the stuff. Insert your needle and thread between two clusters, and pass it, as if you were darning, backwards and forwards over them, until they are encased half way down with stitches. In so doing, work with the eye of the needle forward, and the point towards your thimble. To pass to the next cluster, take one stitch back, under the one just darned, and bring your thread underneath the threads of the stuff, to the second cluster.


Fig. 74. Open-work with darning stitch.
Open-work in three colours (fig. 75).-This pattern which is to be done in the same way as fig. 74, requires the drawing out of, at least, eighteen threads. Every cross-line of three clusters is to be worked in one colour. The colours may all be different, or you may if you prefer, take shades of the same colour.


Fig. 75. Open-work in three colours.
Colours: Bleu-Indigo 311, 322, 334, Brun-Caroubier 354, 303, 357, or Rouge-Géranium 349, 351, 352. [A]

Open-work insertion (figs. $\underline{76}$ and 77).-For both these, the edges are to be overcast, and the darning stitches packed sufficiently closely together, for the threads of the stuff to be entirely covered.


Fig. 76. Open-work insertion.


Fig. 77. Open-work insertion.
Fig. 76 requires the drawing out of eighteen threads, fig. 77 , of thirty. Both admit of several colours being used.
Open-work insertion (fig. 78).-After drawing out sixteen or eighteen threads, bind both sides with stitches made over four horizontal and four perpendicular threads, as follows; make one back-stitch over four disengaged threads, then bring up your thread from right to left, over four horizontal and under four perpendicular threads, back over the four last threads, and draw it out beside the next cluster. The clusters, as they now stand, are bound together in the middle, three by three, with darningstitches. The thread must be fastened in and cut off, after each group is finished.


Fig. 78. Open-work insertion.
Open-work insertion (fig. 79).-First bind the two edges with stitches, in the ordinary way. At the last stitch introduce the thread slanting, according to the dotted line, pass it under four horizontal and three perpendicular threads of the stuff and draw it out; then over three threads from right to left, and back under the same, from left to right, and out again; over four horizontal threads, and, under and again over, three perpendicular ones; for the next stitch, you again follow the dotted slanting line.


Fig. 79. Open-work insertion.
Then make the darning stitch over nine threads, or three clusters. At half their length, you leave out three threads, first on the right, then on the left, whilst in the other half, you, in a similar manner, take in three; so that you have two darned and two undarned clusters, standing opposite each other. Finally, you overcast the single clusters, and connect every two with a lockstitch, as shown in the accompanying illustration.

Open-work insertion (fig. 80).-Draw out twenty threads, overcast both edges with stitches, made over three threads. Then, make slanting stitches, proceeding out from these, over three, six and nine threads respectively, all three terminating in a perpendicular line, one below the other.


Fig. 80. Open-work insertion.
For the open-work, twist the thread five times, quite tightly round and round one cluster, bring it to the edge, between the second and third clusters, and connect these by means of six darning-stitches to and fro: join the first and second clusters in the same way by twelve stitches, and finish, by twisting the thread five times round the remaining length of the first cluster. The second half of the open-work figure is carried out in a similar manner over the third and fourth clusters.
Open-work insertion in four colours (fig. 81).—Draw out, from twenty-five to thirty threads. The outside figures are executed over six clusters, of three threads each, in a dark and light shade alternately of the same colour. Each of the middle figures combines three clusters of the two figures above it, and may be executed, either in a different colour altogether, or in a lighter shade of the one employed in the top row. The little star in the centre should be worked in dark red, or black.


Fig. 81. Open-work insertion in four colours.
Materials: Coton à broder D.M.C No. 20, or Cordonnet 6 fils D.M.C Nos. 15 to 30. [A]
Colours: Rouge-Turc 321, Bleu-Indigo 312, 334, Noir grand Teint 310.[A]

Open-work insertions (figs. 82, 83, 84).-For each of these draw out forty threads. Fig. 82 worked in white, and RougeGrenat clair 309, comprises fourteen clusters, of four threads each. Begin at the top of the big pyramid, so that the threads which you run in, can be more closely crowded together.


Fig. 82. Open-work insertion.
In fig. 83, the two rows of short clusters are worked in Gris-Tilleul moyen, and, Gris-Tilleul clair, 392 and 330; [A] the pyramid of steps, in Brun-Chamois moyen, $324 ;[\mathrm{A}]$ the three inner clusters in Brim-Chamois très clair, 418. One figure consists of fourteen clusters, of three threads each.


Fig. 83. Open-work insertion.
Fig. 84 also is to be worked in three colours; the light squares in unbleached cotton, the middle figure in Bleu-Indigo très clair, 334, the large squares on either side in Brun-Cuir clair 432. Each figure contains eighteen clusters, of three threads each.


Fig. 84. Open-work insertion.
Open-work insertion with spiders (fig. 85). -The edges are to be herring-boned, as described in fig. 39 . In the middle, the so-called spiders are made, over every group of four clusters. The thread that runs out from the spider, passes over two clusters and under one, and then three or four times, over and under the clusters, as in darning, and so back, under the spider, at the place at which it was drawn in, and then on, to the next four strands of thread.


Fig. 85. Open-work insertion with spiders.
Three-rowed open-work (fig. 86).-Draw out five threads for the narrow stripe, and from fourteen to sixteen for the wide one. Each cluster should consist of four threads. The narrow bands between, are to be herring-boned on either side. The dotted line shows the course of the thread, on the wrong side. Then unite each separate cluster in the middle, with a back-stitch, as shown in the illustration, and finally, join every group of four clusters together, with three stitches, and make a spider in the middle of the open-work, at the point where the threads intersect each other.


Fig. 86. Three-rowed open-work.
Open-work insertion with rings (fig. 87).-Bind the edges on both sides, with straight, two-sided, stitches. Take, for this, Coton à broder D.M.C, No. 30, (embroidery cotton), using it double. Draw out, from twenty-four to thirty threads. Wind your thread six or seven times round the middle of each cluster of nine threads, and then make darning-stitches, above and below, to a length of $3 \mathrm{~m} / \mathrm{m}$. When you have completed two clusters, join them together, by four interlocked stitches; wind your thread three times round the single thread, and sew it over with close stitches.


Fig. 87. Open-work insertion with rings.
Open-work insertion with spiders (fig. 88).-Draw out twenty-four threads. Ornament the two edges with half-spiders. You begin these over two threads, and go on taking in others, to the number of eight. The whole spider in the middle, is made as above described.


Fig. 88. Open-work insertion with spiders.
Open-work insertion (figs. $\underline{89}$ and $\underline{90}$ ). -The beauty of this otherwise simple pattern, lies in the peculiar knot, with which the edges of the stuff are ornamented.


Fig. 89. Open-work insertion.
Carry the working thread, as shown in fig. 90, from right to left, (see the description of the right side) over and under four threads; then bring the needle back, under the thread which lies slanting, form a loop with the forefinger of the left hand, slip it on to the needle, and draw it up close to the first stitch; pull the needle through the knot, and proceed to the next stitch.
The illustration explains how the open-work in the middle should be carried out.


Fig. 90. Explanation of the stitch for fig. $8 \underline{89}$.
Open-work with winding stitch (fig. 91).-For this pattern, which is a very laborious one to work, draw out twenty-eight threads. Bind the edges with two-sided stitches, over two, three, four and five threads, respectively. For the middle figures, you must reckon four threads for the clusters, round which the working thread is tightly twisted, eight for the darned clusters, ornamented with picots (see fig. 165), and sixteen for the rectangular rosettes, in two colours.

Make a loose spider over the threads, as a background for the rosette. Work the picots in a different colour from the cluster, and the rosettes, likewise, in two colours. The connecting loops between the figures should be made as you go along, the thread being always carried back into the loop just made.


Fig. 91. Open-work with winding stitch.
Cutting out threads at the corners (figs. $\underline{92} \underline{93} \underline{\underline{94}} \underline{\underline{95}} \underline{\text { ). If you want to carry a latticed-hem or a simple open-work pattern, }}$ round a corner, you must cut and loosen the threads, on both sides, about one c/m. from the edge of the hem, as seen in fig. $\underline{92}$. The loose threads can be pushed into the turning, and the edge button-holed, as in fig. 93.
If however, on the other hand, the stitching be continued without interruption, as indicated in the upper part of fig. $\underline{94}$, the loose threads must be brought to the wrong side, and as represented in the lower part of fig. $\underline{94}$, fastened down with a few stitches.


Fig. 92. The cutting and loosening of the threads at the corners.


Fig. 94. Bordering the disengaged edge with hem-stitching, the threads being turned over


Fig. 93. The over casting of the disengaged edge at the corner, the threads being turned in within the HEM.


Fig. 95. Filling in the corner with a SPIDER, and continuation of the LATTICE-WORK THENCE.

Cut open-work (Punto tagliato).-For cut open-work, threads have to be drawn out both ways, the number of course to depend on the pattern. Threads, left between others that have been cut out, serve as a foundation on which a great variety of stitches can be worked. Stuffs, equally coarse in the warp and woof, should be chosen for all cut open-work, for then the empty spaces that remain, where threads have been drawn out both ways, will be perfectly square.

Drawing out threads both ways (fig. $\underline{96}$ ).-The same number of threads must be drawn out each way; most patterns require the same number of threads to be left as are drawn out. In fig. 96 , three threads have been drawn out and three left.


Fig. 96. Drawing out threads both ways, WITHOUT REGARD TO THE EDGES.

Cutting out threads (fig. 97).-We often meet with cut open-work patterns, set in another kind of embroidery. In such cases, the threads that are to be cut out, must be cut a few millimetres within the edge, and then drawn out, so that there may be a frame of the stuff left intact outside.


Fig. 97. Cutting out threads, in the middle of the stuff.

Button-holing the raw edges (fig. 98). -In very fine linen textures, the threads can simply be cut out, but in the case of coarser stuffs, and when a pattern ends in steps as in figs. $\underline{103}, \underline{104}, \underline{105}$, the raw edges must be button-holed as in fig. $\underline{98}$, or 99.


Fig. 98. Button-holing the raw edges of cut open-work.

Overcasting the raw edges (fig. 99).—Cording the raw edges, is even better than button-holing them. Count the number of threads carefully that have to be cut out, run in a thread to mark the pattern, and then only, cut the threads through, at least two threads within the line.


Fig. 99. Overcasting the raw EDGES OF CUT OPEN-WORK.

Overcasting the trellised ground (fig. 100). -If you only have a small surface to embroider, you can draw out all the threads at once. But in the case of a large piece of work it is better to begin by removing the threads in one direction only, and completing all the little bars, one way first; after which you draw out the threads the other way and embroider those you leave. In this way you will secure greater equality and finish in your work.


Fig. 100. Overcasting the trellised ground.

Ground for square, fig. 105 (figs. 101 and 102).—Finish the first row of bars along the edge completely, to begin with. In the second row, overcast the bar, down to half its length, then carry your thread over two empty spaces, see the letter a, come back to the bar, overcasting the thread which you threw across first, and passing the needle under the bars of the stuff. In the second rows that intersect the first, marked by letter $b$, the threads meet in the middle of the empty space.

In fig. 102, finish the bars, overcast both ways first, and then fill in the ground with interlaced threads, worked row by row, throwing the thread from one square to the other as you go, and doubling it, as you return. For the bars, see the chapters on net embroidery, and Irish lace.


Fig. 101. Lattice-ground for SQUARE IN FIG. 105, SHOWING


Fig. 102. Lattice-ground for

Lattice-ground and damask stitch for square, fig. 105 (fig. 103).-Our illustration shows a third kind of openwork ground with one corner in damask stitch, of the square represented in fig. 105. The little bars which intersect each square crossways, are made in two divisions, by carrying the thread to the opposite bar and back. In the same way, the second thread is carried over the first. The damask stitches are described in the next chapter, in figs. 143 and 144.


Fig. 103. Lattice-ground with a portion of square, fig. 105.
Lattice-ground and damask stitches for square, fig. 105 (fig. 104).—Damask, or gobelin stitches, are given in figs. 152, 153, 154. The ground of this part of the square (fig. 104) is adorned with narrow bars, worked in darning stitch. From the centre of one bar, proceed three bars made on three foundation-threads, and a fourth made on two, on account of the passage to the next bar.


Fig. 104. Lattice-ground and damask stitch for SQUARE, FIG. 105.

Quarter of the square in single and cut open-work, and damask-stitch (fig. 105).-Original size $48 \mathrm{c} / \mathrm{m}$. square. This handsome square is worked in unbleached cotton on a white ground; it may also be worked in colours. A very good effect is produced by using Chiné d'or D.M.C ${ }^{[A]}$ red, blue, or green for the gobelin stitch, and a uniform pale tint for the cut open-work.
Figs. 101, 102, 103, 104 illustrate in detail, one quarter of the square, which is represented here one third of the original size. The centre piece (fig. 104) is bordered by four stripes, two long and two short; the former containing two lozenge-shaped openwork figures separated and finished off by damask stitches; the latter, only one such figure. For the insertion in single openwork, that recurs three times, you will find a variety of designs in figs. $\underline{81}, \underline{82}, \underline{83}, \underline{84}, \underline{87}, \underline{88}$.


Fig. 105. Quarter of the square in single and cut open-work, and DAMASK STITCH.

Original size 48 c/m. square.
Materials suitable for Holbein linen: Fil à pointer D.M.C No. 15 or 20, and Coton à repriser D.M.C No. 25. [A]

For antique linen: Fil à dentelle D.M.C No. 25 or 30, or Cordonnet 6 fils D.M.C No. 50, 60, or 70, and Coton à repriser D.M.C No. 50 or, in place of the latter, Coton à broder surfin D.M.C No. 190.[A]

Drawing in the pattern (fig. 106).-Darning in the threads, as you do into a net foundation is a slower process and one that requires greater skill than drawing them in. The illustration shows the proper order and direction of stitches for Fig. 108. In this case likewise, the little bars must be finished, before the actual pattern is filled in.


Fig. 106. Drawing in the pattern. (Explanation of fig. 108)
Darning in the threads (fig. 107) - In old needle-work we often find the pattern reserved, that is, left blank and outlined by the grounding. As it is difficult, especially in executing minute, and delicate figures, to withdraw the threads partially, without injuring the linen foundation, they are withdrawn throughout, and new ones drawn in, to form the pattern. To explain this more clearly, the original threads of the material are represented in a lighter shade than the new ones that are drawn in; the course of the stitches is indicated in a darker shade.


Fig. 107. Darning in the threads. (Explanation of fig. 109).

Broad insertion in cut open-work, with the pattern drawn in (fig. 108). -This insertion, suitable according to the foundation it is worked on, for the decoration either of curtains, table-covers, bed-linen or underclothing, is made as shown in fig. 106 . If intended for the decoration of any article made of white linen, we recommend unbleached materials for the latticework, and bleached for the pattern, to bring it out in strong relief.


Fig. 108. Broad insertion in cut open-work, with pattern drawn in.
Insertion in cut open-work, with pattern darned in (fig. 109).-This insertion can be introduced into any kind of linen material, and used for ornamenting towels, aprons, bed-linen and table-linen. When it is used to connect bands of cross-stitch embroidery, the open-work should be of the same colour as the embroidery, and the pattern worked in white or unbleached cotton, to correspond with the foundation. In fig. 109, the pattern is half as large again as in the original.


Fig. 109. Insertion in cut open-work, with PATTERN DARNED IN

Materials-For Holbein linen: Fil à pointer D.M.C No. 15 or 20, Cordonnet 6 fils D.M.C

No. 8, 10 or 15 for the bars.-Coton à tricoter D.M.C No. 16 or Coton à repriser D.M.C No. 12 or 25 for darning or drawing in the pattern.

For finer linens: Fil à dentelle D.M.C Nos. 25 to 30, or Cordonnet 6 fils D.M.C Nos. 25 to 40 for the bars and Coton à repriser D.M.C No. 50 for darning or drawing in the pattern.
Cut open-work pattern (figs. 110 and 111).-This pattern, more of the nature of lace than any of the former, is well adapted for trimming, not only household articles but also church furniture, altar-cloths and the like, which are required to wash, as it can be worked in any width.

Fig. 110, a magnified representation of the work in process of execution, shows alternately, ten threads withdrawn each way and six left, with open spaces between. The arcs are worked over three carefully laid threads, carried across from the middle of one bar to the middle of the bar at right angles to it, the wheels on the other hand are begun and finished at the same corner. Overcast the cut edges, and hem-stitch the outside layer of stuff (figs. 61 and 62 ).


Fig. 110. Cut openwork pattern.
Fig. 111 in process of execution.


Fig. 111. Cut open-work pattern.
Materials: Fil à pointer D.M.C No. 20 or 30, Cordonnet 6 fils D.M.C Nos. 15 to 50 or Fil à dentelle D.M.C Nos. 25 to 50 .

Greek cut open-work pattern (fig. 112).-After the foregoing explanations, no difficulty will be found in copying the beautiful Greek cut open-work pattern, illustrated in fig. 112. Here, we have in the original, 48 threads drawn out in the middle, both ways, from one straight bar to another, (these bars being darned) with open spaces between; and in the lower and narrower division, 21 threads drawn out each way. The cut edges, from bar to bar, are hem-stitched on both sides, leaving four threads of the stuff between.

The long bars, in the second figure, are button holed on both sides, those with the picots, on one side only.


Fig. 112. Greek cut open-work pattern.
Materials: Cordonnet 6 fils D.M.C Nos. 25 to 50, Fil d'Alsace D.M.C Nos. 20 to 100 or Fil à dentelle D.M.C Nos. 25 to 50.

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## FOOTNOTES:

[A] See, at the end of the concluding chapter, the table of numbers and sizes and the list of colours of the D.M.C threads and cottons.


Net stripe, in imitation of brussels lace.

## Net and damask stitches.

Many net embroidery patterns and damask stitches consist of a combination of ordinary running and darning, others of chain, stem and cross stitch

Net embroidery.-All these kinds of stitches can be worked on the coarse Greek net, as it is called, as well as on the finest quality of real Brussels net.

Stripes of net, finished off with button-hole edging, and ornamented with one or other of the following patterns, make very pretty washing laces and the like; net laid upon Irish point and converted by needlework into a lace ground, makes an excellent substitute for a hand-made ground, which demands much labour and time.

Materials suitable for net embroidery.-The choice of material must be determined by the quality of the net and the effect to be produced. For a coarse make of net and a very marked pattern, the lowest numbers of D.M.C cottons, or the narrowest braids, such as Soutache D.M.C Nos. 1, 2, 3 should be used; if the net be fine and the pattern a delicate one, then the higher numbers of the following are preferable: Coton à tricoter D.M.C Nos. 8 to 20, Coton à repriser D.M.C Nos. 25 to 70, Coton à broder D.M.C Nos. 16 to 50, Fil à dentelle D.M.C Nos. 25 to 50 , Coton à broder surfin D.M.C Nos. 100, 120, 150. The latter must be adjusted to the required size before being used, that is to say as many strands of it removed, as is necessary in order to reduce it to the proper thickness.

Tracing with running stitches (fig. 113).-Have your pattern traced on linen or paper; tack the net upon it, and copy it carefully on the net with running stitches. As in darning, the stitches must run first above and then beneath, alternating in each succeeding row. At the turn of the lines, the stitches cross each other, as shown in the illustration.


Fig. 113. Tracing with running stitches.
Net pattern (fig. 114).-Here too the pattern is traced with running stitches, which are run in on both sides of each row of meshes. The thread is carried first to the right, and then to the left, under every alternate bar of the net and out again Between the first and second rows, one thread of the foundation must be left uncovered. In the next row, the thread is carried back again, so that it encircles each mesh. In the third row, the thread passes under the same bar of net as in the second, the threads touching each other. The fourth row is a repetition of the first.


Fig. 114. Net pattern.
Net pattern (fig. 115).-This consists of two rows of stitches. In the first, the single stitches run diagonally from left to right, over and under a mesh; in the second row the triple stitches, also carried diagonally across a mesh, lie from right to left.


Fig. 115. Net pattern.
Net pattern (fig. 116).-Begin with a double row, as in fig. 114; this is followed by a row of cross-stitch, touching the others, for which the thread has to be carried, first under one of the straight bars of the mesh and then diagonally, across it. A second, similar row of stitches backwards, completes the crosses. This can be further varied by the introduction of a row of triple stitches, after the double row, as in fig. 115, and the repetition of the two first only.


Fig. 116. Net pattern.
These rows can also be worked in two colours, or in white thread and washing gold.
Net pattern (fig. 117).-Begin at the top, carrying the thread, first under and then over two bars and a mesh, and then underneath as before. In the second as in the first row, the threads must be drawn in, so that 4 threads always meet in one mesh, and two run parallel to each other through the same mesh.


Fig. 117. Net pattern.
Net pattern (fig. 118).-This pattern, which resembles fig. 117 in the execution, is thickened by triple stitches. Above, where in the preceding row three threads were laid, the thread should be single.


## Fig. 118. Net pattern.

Very pretty varieties are to be obtained by the introduction of several colours. Take white, for instance, for the first row, and different shades of the same colour for the second, third, fourth and fifth rows; such as, Bleu-Lapis 345, 344, 343, 333, 342,[A] or Rouge-Cardinal 348, 305, 304, 347, 346, ${ }^{[A]}$ or Rouge-Géranium, Brun-Caroubier or any other colour that is absolutely fast.

Net pattern (fig. 119).-After one row of cross-stitch, such as was described in fig. 116, add a second, carrying the thread under the bar that lies between the first stitches, so that the two rows only cover three threads of the net. The close bands of cross-stitch must be divided from each other by one row of net bars.


Fig. 119. Net pattern.
Net pattern (fig. 120).-Draw the thread twice backwards and forwards, as in darning, through one row of meshes. In the next, make four stitches over one mesh and two bars. After the fourth stitch, the thread is carried forward under two bars to the next group. The meshes filled in thus are divided from each other by two double rows of darning stitches. Here you may introduce a variety in the colour, using either white and unbleached, or unbleached and pale blue, or some other combination of the kind.


Fig. 120. Net pattern.
Net pattern (fig. 121).-Make three diagonal stitches over three bars and two meshes, then returning to the mesh out of which the first stitches come, make three more in the opposite direction. In the second row, the stitches meet in the same mesh as those of the first.


Fig. 121. Net pattern.
Net pattern (fig. 122).-Carry the thread upwards from below, over a bar of the net, then pass it horizontally under another bar and carrying it downwards, pass it under a diagonal bar and cover the other three. In the second row, your loops must be turned the opposite way. When the whole foundation is finished, run a thread over the whole surface and overcast it. A good effect is produced by using white and unbleached cottons, in alternate rows.


Fig. 122. Net pattern.
Net pattern (fig. 123). -This pattern consists of one row of overcasting, one of stitches like those described in fig. 114, and one of cross-stitch, as in fig. 39, running diagonally across the stuff. Besides the cottons already mentioned, washing gold thread (Or fin D.M.C pour la broderie), may be used for the overcasting. Dead gold introduced into simple needlework of this kind enlivens it extremely.


Fig. 123. Net pattern.
Net pattern (fig. 124).-Three kinds of stitches are required for this pattern. In the first row the stitch lies crossed underneath the net; in the second, 3 stitches are made over one mesh, the first and the last of which are carried across three meshes. In the third row, button-hole stitches are carried from right to left over two diagonal bars, in such a manner that the thread is drawn through the mesh facing the loops, and the next stitch comes out under the loop of the preceding one.


Fig. 124. Net pattern.
Net pattern (fig. 125).-Fill in every other diagonal row of meshes with chain stitch, inserting the needle into the same mesh it came out of, so that the thread lies in front of the needle, in a loop. The rows of chain stitch may be made with two or three rows of meshes between them. Even the diagonal lines by themselves, make a very pretty foundation for other stitches.


Fig. 125. Net pattern.
Net pattern (fig. 126).-The first row worked from left to right, consists of three loop stitches upwards and three downwards, each over one bar. In the second row, divided from the first by one row of stitches, the inner loops must be turned towards each other; in the third, the outer ones. Any of the stitches, already described, can be introduced into this pattern to enliven it.


Fig. 126. Net pattern.
Net insertions (figs. 127 and 128). -These two, as well as the subsequent patterns, are most of them worked in darning stitch and simple overcasting.
The scallops in fig. 127 are formed of darning stitches, over 4, 3, 2 and 1 mesh, respectively. In the intervening space, which is five meshes wide, the stitch shown in fig. 118, may be introduced.


Fig. 127. Net insertion.
In repeating the pattern, the stitches forming the scallops, must be made to run in the opposite direction. Instead of the thread, simply drawn through the middle, little stars like those described in fig. 134, have a very pretty effect.
In fig. 128, the thread is first carried round one mesh and then on to the next scallop. In the second scallop, which turns the opposite way, the thread is carried once more round the last mesh after the pyramid is completed, and then on, to the next figure.


Fig. 128. Net insertion.
Net pattern (fig. 129).-This checked pattern is also worked in darning stitch. Carry the thread, as in fig. 125, through every second row of meshes. When the bottom rows are all finished, the upper ones are worked across them in the same way. Here the stitches may, if preferred, be distributed more sparingly. But if they are set wider apart, the spaces between should be filled up in some way. Little dots, made of Coton à repriser D.M.C, will answer the purpose best.


Fig. 129. Net pattern.
Net insertions (figs. $130,131,132$ ).-These three patterns are specially suitable, for insertions, neck-tie lappets and the like, in the place of crochet, pillow, and other kinds of lace. Both design and stitch are clearly enough represented in the subjoined figure for further explanation to be unnecessary. All three should be worked with rather coarse cotton, and Soutache D.M.C[A] (braid) drawn in, produces an excellent effect.


Fig. 131. Net insertion.


Fig. 132. Net insertion.
Net pattern (fig. 133).-These delicate little figures can be worked into a close pattern, or can be strewn singly over the surface. The closer you set the stitches, the more clear and distinct the stars will be. The thread must be drawn in to the centre mesh from without, so as to be invisible if possible, and then back again to the outside when the stitches are finished.


Fig. 133. Net pattern.
Net pattern (fig. 134).-These flowerets have a very pretty effect, set either singly, or in double or triple rows, and are very useful for filling up gaps or supplementing rows.


Fig. 134. Net pattern.
Net pattern (fig. 135).-These star-shaped figures, their longest stitch covering three straight bars and two meshes, the shortest, three diagonal bars and two meshes, may like the above flowerets, be ranged closely together in rows, so that four stitches, two horizontal and two vertical ones, meet in one mesh. Cotton of two colours should be used, in order that the figures may be distinct from each other: white and unbleached are the best, in cases where bright colours would be unsuitable.


Fig. 135. Net pattern.
Net insertion (fig. 136).-These diamonds make a very pretty grounding either set separately, or in a continuous pattern. The design is slight, nevertheless, when it is worked in coarse cotton, the effect is exceedingly handsome, especially if the inside, in addition to the star here given, be enriched with ordinary darning-stitches, worked in fine gold thread, as we have already mentioned.


Fig. 136. Net insertion.
Net tracery with border (fig. 137).-In order to bring out the pattern and the colours, use instead of cotton, Soutache D.M.C, or Lacets surfins D.M.C. Both are to be had in all the colours, given in the list of colours of the D.M.C threads and cottons. The little border can be used in conjunction with any of the preceding patterns, but care must be taken not to let it get twisted in the working. To prevent this, slip a coarse needle under the last stitch, and draw the braid flat over it.


Fig. 137. Net tracery with braids.
Materials: Soutache D.M.C No. 2 in Bleu-Indigo 334 and Rouge-
Turc 321.

Broad net lace tracery (fig. 138). -The pattern of this pretty lace must first be transferred to stout paper, or oil-cloth. All the leaves and stalks, and the button-holing round the open centres of the flowers, are worked in a pale green, the two bottom flowers in Turkey red, the star-shaped one in blue, the calyx in which the stalks unite, in dark red, and the little bells, in the lightest green.


Fig. 138. Broad net lace tracery.
Materials: Coton à broder D.M.C No. 30, 35 or 40.-Colours: Rouge-Turc 321, Rouge-Cardinal 346, Bleu-Indigo 322, GrisTilleul 393 and Vert-Pistache 369.

Net darning.-We conclude with some directions for darning net, a valuable art, by means of which many a curious piece of old needlework is preserved. Coarse and fine net are all darned in the same way.
Laying the first thread (fig. 139).-Tack the net which is to be darned, closely to the defective part, upon either oil-cloth or coloured paper and cut the edges straight to the thread; Your thread must be of exactly the same size, as that of which the net is made. It takes three rows of stitches to imitate the net ground; in the first place, as shown in fig. 139, cross-threads must be laid from side to side, carried as in darning, a little beyond the edges of the hole and so as to surround each mesh with a slanting stitch.


Fig. 139. Net darning. Laying the first thread.

Laying the second thread (fig. 140).-Secondly, beginning from one corner, threads are laid diagonally across the first layer. The cross-threads of the foundation are encircled by a stitch, made from right to left, the needle is then carried under the next horizontal bar, and the first layer of threads is overcast with similar stitches.


Fig. 140. Net darning. Laying the second thread.
Laying the third thread (fig. 141).-Thirdly, threads are carried across the second and first layers. They must start, far enough from the edge, for the second layer of threads to be overcast at the same time, so that there may be no loose threads left on the wrong side. In this third journey, every diagonal thread of the foundation is to be encircled with a stitch, taken upwards from below, the cut edges being strengthened in the same way. Then, to form the little cross in the fabric, the thread must be conducted by means of a second stitch, under the single horizontal thread, outwards, to the next-diagonal thread.


Fig. 141. Net darning. Laying the THIRD THREAD.

In places where the net is worn, it can be strengthened in the same manner, the stitches being made the way of the stuff.
Damask stitches.-As a rule the pattern is simply outlined with stem and cord stitch, and the inside spaces are left plain. In spite of the time this simple tracing takes to do, the effect is rather poor and scanty. If however, the inside of the leaves and flowers, be filled in with damask stitch, the result is very handsome.

Not only can the following stitches, which are suitable for any linen coarse or fine, be used for this kind of embroidery, but most of the net and lace patterns too, and these combined with button-holing and flat stitch produce charming effects.
Materials suitable for damask stitches.-All the threads and cottons used for net work can also be used for damask stitches, according to the material and the kind of work. We will enumerate them once more: Coton à tricoter D.M.C Nos. 8 to 20, Coton à repriser D.M.C Nos. 25 to 70 , Coton à broder D.M.C Nos. 16 to 50 , Fil à dentelle D.M.C Nos. 25 to 50, Coton à broder surfin D.M.C Nos. 100, 120, 150.[A]
This kind of embroidery is generally done with a very coarse needle, to press the threads of the stuff closely together and make the light spaces between, which appear in many of the following illustrations.

First pattern (fig. 142).-Carry the needle in a slanting direction over three threads and bring it out, from right to left, under three perpendicular ones, then again slanting, over three threads, from left to right, and out again underneath three horizontal ones, downwards from above. Thus the first stitch lies across, from right to left, the second, lengthways. On the wrong side, the stitch forms a regular succession of steps.


Fig. 142. First pattern
Second pattern (fig. 143).-This is worked exactly in the same manner as fig. 142, only that the second row of stitches touches the first, so that two threads enter and issue from the same hole.


Fig. 143. Second pattern
Third pattern (fig. 144).-Though at first sight, this stitch is very like the Holbein or stroke stitch, it is very different in the execution. It is worked in two rows, to and fro; in the first, you make all the vertical stitches side by side in the width of the stuff, drawing your thread very tightly, in the second, coming back, you make the horizontal stitches in a straight line, at right angles to the first stitches. On the wrong side the stitches are crossed; they in thin stuffs, show through, and quite alter the appearance of the right side.


Fig. 144. Third pattern.
Fourth, pattern (fig. 145).-In the first row, the thread is carried slanting upwards from right to left, over two threads, then downwards under two. Coming back, the stitches must be set the opposite way, so that four threads meet in one hole.


Fig. 145. Fourth pattern.
Fifth pattern (fig. 146).-This is worked like fig. 145 , only that the stitches must cover three threads each way. In the second row, you take up one thread on the right and two on the left, to form your stitches.


Fig. 146. Fifth pattern.
Sixth pattern (fig. 147).-Here, the stitches form a chess-board pattern. You begin with a diagonal stitch over two threads and bring your needle up again into the same line it started from. The second stitch covers three threads, the third six, the fourth eight; the next three decrease, successively in length, in the same proportion.


Fig. 147. Sixth pattern.
Seventh pattern (fig. 148).-Two kinds of cotton have to be used for this pattern, one of them soft and flat, like Colon à repriser D.M.C ${ }^{[A]}$ (darning cotton) or Coton à tricoter D.M.C (knitting cotton) ${ }^{[\mathrm{A}]}$ for the flat stitches, and the other strongly twisted, like Cordonnet 6 fils D.M.C No. 8, 10, 12 or $15,[\mathrm{~A}]$ for the cross stitches.


Fig. 148. Seventh pattern.
The five flat stitches cover three threads in width and six in height, and lie from right to left and from left to right. In the second row, which must be two threads distant from the first, the stitches must lie in the contrary direction. In the lozengeshaped space between, make four cross stitches, over four threads in height and two in width.

Eighth pattern (figs. 149 and 150).-Make five stitches over 8 horizontal threads, miss 6 threads and make another 5 stitches. The groups of long stitches above and beneath the first row, encroach over two threads of the first group, so that a space of only four threads remains between two groups. The stitch between these groups is generally known as the rococo stitch.


Fig. 149. Eighth pattern.
Bring out your needle between the third and fourth of these threads, and insert it again above, drawing it out afterwards between the second and third horizontal thread, and securing the first stitch with a back stitch. Make the three remaining stitches, as explained in fig. 150.


Fig. 150.
Explanation of
THE ROCOCO STITCH IN FIG. 149.

Ninth pattern (fig. 151).-This consists of straight bands of flat stitches, covering three threads each way, with spaces 8 threads wide between, ornamented with a small pattern in stroke stitch, (see chapter on Tapestry and Linen embroidery).


Fig. 151. Ninth pattern.
Damask stitch for figs. 103 and 105 (fig. 152). -The stitches, here represented on a large scale, form the border to the square in cut open-work in fig. 105. The long diagonal stitches, on either side, can be made to look fuller and more distinct, by using a soft, coarse cotton.


Fig. 152. Damask stitch for figs. 103 and 105.
second for the long inside one. Fig. 153 is clear enough to need no explanation; with reference to fig. $\underline{154}$, it is however as well to point out that the shortest stitch should cover 4 threads and the longest 12, the rest is easily learnt from the illustration. This is a very suitable design for the decoration of large surfaces and combines well with any running diagonal pattern, when it can be made to form a large star which can be worked as a separate figure.


Fig. 153. Tenth pattern. Damask stitch for figs. 104 and 105.


Fig. 154. Eleventh pattern. Damask stitch for fig. 105.

Twelfth pattern (fig. 155).-In cases where this and the following stitches are to be executed on a light, transparent stuff, it is best to use a very strongly twisted thread, such as Fil d'Alsace D.M.C[A] or, Fil à dentelle D.M.C[A] instead of a softer and looser material. A stiff thread compresses the threads of the stuff better and the open spaces, thus made in it, are rendered more visible.


Fig. 155. Twelfth pattern.
Count 6 threads vertically, put in the needle and draw it through from right to left, underneath 3 diagonal threads. For the next stitch, carry it upwards over 6 threads, and back under 3 . The second row is worked back over the first in the same way. Leave 6 threads between each row.
Thirteenth pattern (fig. 156).-Carry the thread, from right to left over four vertical threads, and under the same number of horizontal ones. The second row of stitches touches the first, so that the thread it is worked with seems to be drawn through under the same threads of the stuff, as the one the first row was worked with.


Fig. 156. Thirteenth pattern.
Fourteenth pattern (fig. 157).-Here, the stitches, contrary to those in fig. 147, are set vertically. The first stitch covers 2 threads, the second 6 , the third 10 , the fourth 14 , the fifth 18 . The longest stitches of two checks always meet in the same hole.


Fig. 157. Fourteenth pattern.
Fifteenth pattern (fig. 158).-Cover the whole expanse with rows of stitches, such as are described in fig. 155, with intervals of 12 threads between them.


Fig. 158. Fifteenth pattern.
These rows are intersected by others, to which the thread is passed, from between the sixth and seventh of the 12 threads between the first rows. Where the stitches of the two rows meet, the working thread of the second row must be drawn through, under that of the first.

Sixteenth pattern (fig. 159).-Between every two rows of cross-stitch, leave an interval of 6 threads, counting those on each side of the rows. Over these 6 threads work 2 rows, as shown in fig. 148, but so, that in the second, the lower stitch of the first row and the upper one of the second, cover the same threads.


Fig. 159. Sixteenth pattern.
Seventeenth pattern (fig. 160).-This consists of stripes, 4 stitches wide, like those of fig. 155, with 3 threads between, which are overcast in the ordinary manner.


Fig. 160. Seventeenth pattern.
Eighteenth pattern (fig. 161).-Small squares of 7 stitches, inclined alternately, to the right and left, and so formed, that the longest stitch of one square is crossed by the first short stitch of the next, so that a space only 6 threads wide and 4 long, remains uncovered. The intervening stripes are filled with 3 rows of overcasting stitches, covering 2 threads each way.


Fig. 161. Eighteenth pattern.
Nineteenth pattern (fig. 162).-The steps formed by this pattern are 11 stitches high, and 11 wide, and each stitch covers 4 threads.


Fig. 162. Nineteenth pattern.
Eight threads intervene between each row of steps, which are covered at the bend, by a square of stitches, from the last of which, the thread is carried on at once, to the four single stitches.
Twentieth pattern (fig. 163).-The 4 squares set opposite to each other, with 2 threads between, are edged all round by 3 rows of overcasting.


Fig. 163. Twentieth pattern.
Twenty-first pattern (fig. 164).-Begin by rows of stitches, like those described in fig. 155, over 4 and 2 threads, with 4 threads between, not counting those covered with cross-stitch. Between the two rows of cross-stitch, join 6 threads together by a back-stitch, and carry your thread over the two last of the 6 , to the 2 first of the next cluster. The narrow diagonal stripes are separated by 24 threads, exclusive of those covered by the cross-stitches. These spaces are filled in with squares, 10 threads wide and 10 long, formed by back-stitches crossed on the wrong side.


Fig. 164. Twenty-first pattern.
Twenty-second pattern (fig. 165).-In the closer stuffs, of a coarse texture, the threads of which do not admit of being drawn together, as you can those, of a loose thin stuff, where, by simply pulling your thread a little tighter you get open spaces, you must begin by cutting out every fourth or fifth thread. After which, you overcast all the rows, first one way, and then the other, with stitches covering 4 threads, each way. On this foundation with strong, loosely-twisted cotton, Coton à broder D.M.C or Coton à tricoter D.M.C No. $25,30,35$, or 40 , make long stitches, as indicated in the illustration.


Fig. 165. Twenty-second pattern.
Twenty-third pattern (fig. 166.)—From the point where the thread comes out of the stuff, make 16 stitches, four times over, all coming out of the same hole, over $8,6,4$ and 6 threads, thus forming a star. Leave an interval of four threads between the stars, and unite the intervening threads by cross-stitches one way, and whip-stitches, the other.


Fig. 166. Twenty-third pattern.
Twenty-fourth pattern (fig. 167).-Make a succession of diagonal stitches, increasing in length, and advancing one thread at a time, until the seventh stitch covers seven threads, and completes the triangle. Then begin a second triangle on the nearest, adjacent thread.


Fig. 167. Twenty-fourth pattern.
Twenty-fifth pattern (fig. 168).-Cover your whole surface with squares of 16 stitches, as in fig. 147 , and fill in the intervening squares with 23 stitches, all radiating from one centre.


Fig. 168. Twenty-fifth pattern.
Twenty-sixth pattern (fig. 169).-Diagonal trellised stripes, made as indicated in fig. 165, and overcast, form the ground. Twelve threads are to be left between the stripes, upon which, work six-cornered, lozenge-shaped groups of stitches, set at right angles to each other, in diagonal rows.


Fig. 169. Twenty-sixth pattern.
Twenty-seventh pattern (fig. 170).-We conclude our chapter with a circular design, which combines a variety of stitches, and introduces our workers to two new patterns, as well as to an advantageous way of hiding the junction of several kinds of stitches by semicircles of button-hole stitching.


Fig. 170. Twenty-seventh pattern.

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## FOOTNOTES:

[A] See at the end of the concluding chapter, the table of numbers and sizes and the list of colours of the D.M.C threads and cottons.


Stripe in flat and raised satin stitch, and madeira embroidery.

## White Embroidery.

We have retained the familiar term, white embroidery, for this kind of needlework, for convenience sake, in spite of its inaccuracy, now that coloured materials are quite as much used for it as white.
It is executed, either on a backing of oil-cloth, or in an embroidery frame, called «tambour-frame». Only skilful workers can dispense with these, for an untrained hand can hardly avoid puckering. If you work without a foundation, the material must be held, quite smoothly over the forefinger, so that the threads lie perfectly straight, otherwise, the pattern is very apt to get pulled out of shape in the working. With your three other fingers you hold the material fast, the thumb resting on the work itself, beyond the outline of the pattern, which must be turned towards the worker. It is always the outside line of a pattern that is drawn in double lines, that should be turned towards the palm of the hand.

Tracing patterns.-Patterns are generally to be had ready traced, but as it is often necessary to repeat, enlarge, or reduce them, descriptions of several modes of doing so, will be found at the end of the concluding chapter.

Materials.-A loose, soft make of cotton, the looser the better, and very little twisted, is the best material for embroidery. We recommend for white embroidery in general, Coton à broder D.M.C Nos. 16 to 150 ; for monograms on cambric, Coton à broder surfin D.M.C Nos. 100, 120, 150; CA$]$ and for English or Madeira embroidery, Coton Madeira D.M.C Nos. 40, 50 , $60 ;{ }^{[\mathrm{A}]}$ for padding, or raising the embroidery, all the different kinds of Coton à repriser D.M.C ${ }^{[A]}$ can be used.

Outlining and padding.-The outlining of a pattern is a very important preliminary. A want of precision in the ultimate effect is often due, merely to careless outlining. This part of the work should be done with rather a coarser cotton than the embroidery itself. Fasten in the thread by a few running stitches, never with a knot, a rule to be observed also in embroidering, except in very rare cases. Finish off your thread by drawing it through the tracing stitches, or through some part of the pattern that is already finished. Fill in the spaces between the lines with a padding of run threads, run loosely, and so that they lie thickly and solidly in the centre, and shade off on both sides. The fullness, and roundness of embroidery, depends on the firmness of this sub-stratum of threads. The outlining and the padding of the different rounded and pointed scallops, as well as of other figures that occur in white embroidery, are illustrated in figs. $\underline{181}, \underline{182}, \underline{183}, \underline{184}, \underline{185}, \underline{187}, \underline{189}, \underline{190}$ and $\underline{191}$.
Blanket, or button-hole stitch (fig. 171).-Work from left to right; run in a foundation line, hold down the working thread below the run line with the right thumb; insert the needle above and bring it out below the run line but above the working thread; tighten the loop thus formed, without drawing up the stuff, and continue in this manner, setting your stitches closely and regularly, side by side.


Fig. 171. Blanket, or Button-hole stitch.
Straight stem stitch (fig. 172).-Work from left to right. The needle must always be inserted above the run thread, and brought out underneath it. In the case of a very delicate pattern, take up only just as much stuff as the run thread covers.


Fig. 172. Straight stem
stitch.
Sloping stem stitch (fig. 173).-Work without a run thread; insert the needle from right to left in a slanting direction, under 1 or 2 horizontal threads, and 5 or 6 perpendicular ones; so that each stitch reaches halfway back to the last.


Fig. 173. Sloping stem Stitch.

This kind of stem stitch is chiefly used for the fine upstrokes of letters and numbers, and for linen embroidery.
Back-stitching (fig. 174).-Back-stitching, that is small, even stitches set closely together, is done from right to left, along a straight line, and is chiefly used for filling in the centres of letters, leaves and flowers.


Fig. 174. Backstitching.

Crossed back-stitch (figs. 175 and 176).-Used, generally speaking, only for very transparent materials; it forms a close seam of cross-stitch, on the wrong side, and two straight rows of back-stitching on the right. To work, insert the needle as if for an ordinary back-stitch, pass it under the stuff, sloping it a little towards the second outline of the pattern, and draw it out almost in front of the first stitch. After making a back-stitch, pass the needle up again under the stuff and bring it out at the spot where the next stitch is to be.


Fig. 175. Crossed back-stitch. Right side.


Fig. 176. Crossed backstitch. Wrong side.

Fig. 176 shows the interlacing of the stitches on the wrong side, and the way in which this stitch, when it is used for filling in centres, can be worked on the right side.
Simple knot stitch (fig. 177). This consists of two back-stitches, side by side, covering the same threads; it is chiefly used for filling in leaves, embroidered on very thin materials, or in conjunction with flat stitch.


Fig. 177. Simple knot stitch.

Twisted knot stitch (fig. 178). To work hold the working thread down with the thumb close to the spot where you first brought it out, twist it twice round the needle, turn the needle round from left to right, following the direction indicated by the arrow, pass it through the fabric at the place which is marked by a dot, and draw it out at the place where the next stitch is to be.


Fig. 178. Twisted knot stitch.
Post stitch (fig. 179).-Something like knot stitch and much used for patterns, composed of small flowers and leaves, where it often takes the place of raised satin stitch. The illustration represents five leaves finished, and the sixth in process of being worked.


Fig. 179. Post stitch.

To work, bring the needle up from the back and twist the thread round it as many times as the length of the stitch requires, hold the left thumb on the species of curl thus formed, and passing the needle and thread through it, insert it at the end of the leaf where it first came out, and draw it out at the right place for the next stitch.
Button-hole bars (fig. 180).-When a pattern is ornamented with open-work bars, begin by tracing the outside parallel lines. Then button-hole the whole lower line and the upper one, till you come to the place where the first bar is to be; then you carry your thread across and bring up the needle from below through one of the loops, as, shown in the figure; lay three threads in this manner, inserting your needle the third time one loop further on. Then cover the three threads thickly with button-holing.


Fig. 180. Button-hole BARS.

Different kinds of scallops (figs. 181, 182, 183). -The outlining, padding and button-holing of these scallops is executed in the manner already described. Be careful to adapt the length of the stitches to the shape and size of the scallops. If they are pointed (figs. 182, 183), the stitches will have to be set very closely together on the inner line, and a little play allowed them on the outer, to come exactly to the point, which should be very sharply defined.


Fig. 181. Round, button-holed scallops.


Fig. 182. Large, pointed, button-holed scallops.


Fig. 183. Small, pointed, button-holed scallops.
Rose scallops (figs. $\underline{184}$ and 185).-These are, large button-holed scallops with indented edges, in the one case, rounded at
the top and sharply pointed at the join; in the other, pointed at the top, and joined at the bottom by a straight bar of buttonholing.


Fig. 184. Rounded rose scallops.


Fig. 185. Pointed rose scallops.
Eyelet holes (figs. 186, 187, 188).-Outline the eyelet holes very carefully first by running a thread round them, then cut out the enclosed stuff with a sharp pair of finely pointed scissors, and edge the hole with plain overcasting stitches, worked from left to right.


Fig. 186. Overcast eyelet holes.
When you have a long row of eyelet holes to make, outline the upper and lower halves alternately, first on one side and then on the other, using two threads, and then overcast them in the same way. The double crossing of the working threads between the eyelet holes makes them much stronger, than if each hole were finished off separately, and the thread passed underneath from one to the other.


Fig. 187. Button-holed shaded eyelet holes.


Fig. 188. Shaded eyelet holes half overcast, half button-holed.
The lower halves of shaded eyelet holes, (see figs. 187 and 188), are worked with very short stitches, and the upper halves with long ones; they may be edged entirely, either with button-holing or overcasting, or half with one and half with the other.
Six leaves in raised satin stitch (fig. 189).-Raised satin stitch is chiefly used for working flowers, leaves, petals, dots, initials and monograms. After tracing the outline of the design, fill in the centres with a padding of long, close stitches for which you can again take Coton à repriser D.M.C ${ }^{[A]}$ and then, beginning always at the point of the leaf, see letter A, cover it with flat, perfectly even stitches, worked from right-to-left. B illustrates a leaf, divided through the middle by a line of overcasting; C, one with a corded vein; D, a divided leaf worked in sloping satin stitch; E, a leaf, with a corded vein and framed in sloping satin stitch; F, a leaf worked half in satin stitch, half in back-stitch and straight stem stitch.


Fig. 189. Six leaves in raised satin stitch.
Leaves and flowers of all descriptions, can be executed in any of these stitches, and in different combinations of the same.
Six ways of making dots (fig. 190).-Dots, when they are well made, are exceedingly effective in white embroidery, particularly if they are worked in a variety of stitches. Dot A is worked in raised satin stitch; B, in raised satin stitch, framed in back stitch; C, in raised satin stitch, framed in twisted knot stitch; D is composed of several post stitches of different lengths, set in a frame of stem stitches; E is worked in back-stitch, and F consists of a small eyelet hole, with a corded setting, which forms the centre.


Fig. 190. Six ways of making dots.
Venetian embroidery (fig. 191).-Scallops, worked in very high relief, called Venetian embroidery, are an imitation on stuff of Venetian lace.

Real Venetian point is entirely needle-made; in the embroidered imitations of it, the stuff takes the place of the needle-made lace foundation. To make it more like the original however, the ground is seldom left plain, but is covered with fancy stitches, such as are represented in the illustration, or with one or other of the damask stitches in figs. 146 to $\underline{170}$. The button-hole bars may be made with or without picots. A full description of the latter will be found in the chapters on net embroidery, and Irish lace. The space to be button-holed, must be well padded, for thereon depends the roundness of the embroidery. For this purpose take 6 or 8 threads of Coton à repriser D.M.C No. $25,[\mathrm{~A}]$ and fasten them down on to the pattern with loose stitches, laying on extra threads, and cutting them gradually away, according to the width the line is to be. The stuff underneath the bars should only be cut away when the embroidery is quite finished.


Fig. 191. Venetian embroidery.
Renaissance embroidery (figs. 192 and 193).-This is the term applied, more especially in France, to embroidery patterns, which are worked entirely in button-holing, and connected by button-hole bars without picots, as shewn in the two accompanying figures. The outside edge in fig. 193, is embellished with picots, described in the chapters just referred to.


Fig. 192. Renaissance embroidery.


Fig. 193. Renaissance embroidery.
Richelieu embroidery (fig. 194).-The name given to embroidery of a similar kind to the former, but in which the connecting bars, instead of being left plain as they are in the Renaissance embroidery, are ornamented with picots


Fig. 194. Richelieu embroidery.
Madeira work (figs. 195, 196, 197).-This kind of embroidery, which consists chiefly of eyelet holes, and is distinguished for the excellence of its workmanship used to be known as English, but is now generally called Madeira work, from the island where it originated. The scallops in figs. 195 and 197, are bordered with shaded eyelet holes, worked half in button-hole stitch, half in overcasting; the finely scalloped edge, in fig. 196, is entirely button-holed. In working eyelet holes, the material must always be turned in, up to the inside line, and completely worked in, underneath the in order that no loose threads may be visible on the wrong side.


Fig. 196. Madeira work.
Materials: Coton Madeira D.M.C No. 40, 50 or 60. (Special cotton for Madeira work) ${ }^{[A]}$


Fig. 197. Madeira-work.
Materials: Coton Madeira D.M.C No. 40, 50 or 60. (Special cotton for Madeira-work).

Swiss embroidery frame (fig. 198).-Letters, monograms, coronets and the like, require extreme care in the working, and can only be really well done in a frame. The round Swiss frame, or tambour frame, is the one most commonly used. It consists of two wooden hoops, fitting loosely into each other; the inner one, fastened to a support with a wooden screw let into the lower part of it, with which to fasten the frame to the table. The outside hoop is loose.

Place the fabric to be embroidered over the smaller hoop, the pattern in the middle, and press the other down over it so that it is tightly stretched and fixed between the two hoops
A leathern strap with holes and a buckle, sometimes takes the place of the second hoop.


Fig. 198. Swiss embroidery frame.
Ordinary embroidery frame (fig. 199).-Tambour frames can only be used for embroidering pocket-handkerchiefs and other small articles; all larger work has to be done in an ordinary frame. Sew a piece of strong stuff into the frame, stretch it as tightly and evenly as possible, and cut out a square in the middle to the size of the pattern. Then tack your work in underneath, straight to the thread, dividing it out carefully with pins first, to ensure its being set in perfectly evenly. Roll or fold up the rest of the stuff over the edges of the frame, and secure it with a few stitches or pins, to keep it out of the way of your hand as you work.


Fig. 199. Ordinary embroidery frame.
Alphabets for monograms (figs. 200 to 205).-On account of the difficulty of devising a good monogram for marking underlinen, we subjoin two alphabets, by the aid of which our workers will be able to compose their own.

The letters are of a good medium size, which can be magnified or reduced according to the worker's own taste.
For any such modifications, we would again draw our reader's attention to the directions given in the concluding chapter. The three first plates represent large wide letters, intended to contain or encompass the more elongated ones, represented in the fourth and fifth plates, figs. $\underline{203}$ and 204.

The interlacing of the letters requires to be carefully done, and our workers should study the following specimens, so as to learn the stitches also, which are most suitable for this branch of embroidery.


Fig. 200. Alphabets for monograms. Outside letters A to $\mathbf{H}$.


Fig. 201. Alphabets for monograms. Outside letters $\mathbf{J}$ to $\mathbf{Q}$.


Fig. 202. Alphabets for monograms. Outside Letters $\mathbf{R}$ to $\mathbf{Y}$.


Fig. 203. Alphabets for monograms. Inside
letters A to $\mathbf{L}$.


Fig. 204. Alphabets for monograms. Inside letters $\mathrm{M}_{\text {to }} \mathbf{X}$.


Fig. 205. Alphabets for monograms. Last inside and outside letters.

Monogram composed of letters A and D (fig. 206).-Here, letter A is worked in flat satin stitch, in Bleu-Indigo 312, and set in stem stitch, worked in Rouge-Turc 321. D as a contrast to A, is embroidered in transverse bars, the left part in pale blue and white, the right in pale blue and dark blue. The little ornaments may be worked according to fancy, either in white, or in one of the given colours.


Fig. 206.
Monogram
COMPOSED OF
letters A and D
dRawn from the alphabets of monograms.
Materials: Coton
à broder D.M.C
Nos. 100 to 150.
Colours: BleuIndigo 334,
Rouge-Turc 321
and white. [A]
Monogram composed of letters $\mathbf{V}$ and $\mathbf{S}$ (fig. 207). -The flat satin stitch in both letters is worked in white; the setting, is in red, in short stem stitch, or if preferred, in knotted back stitch.


Fig. 207.
Monogram COMPOSED OF letters V and S dRawn from the alphabets of mONOGRAMS.
Materials: Coton
à broder D.M.C

Monogram composed of letters $\mathbf{R}$ and $\mathbf{C}$ (fig. 208). -These are worked in black and grey, for mourning; the way $C$ is divided, admits of a variety in the stitch; for instance, the back-stitches, in the illustration, may be replaced by very small eyelet holes.


Fig. 208.
Monogram
COMPOSED OF
letters $\mathbf{R}$ and $\mathbf{C}$
DRAWN FROM THE
alphabets of
moNograms.
Materials: Fil à
dentelle D.M.C
No. 150.
Colours: Gris-
Cendre 318 and Noir grand Teint 310.

Monogram composed of letters G and E (fig. 209). -The flat satin stitching and back-stitching in E, and the stem-stitched edges of $G$ are worked in white Coton à broder D.M.C; the inside of $G$ in ivory white Coton surfin D.M.C.


Fig. 209.
Monogram
COMPOSED OF
letters G and E
drawn from the alphabets of monograms.
Materials: Coton
à broder D.M.C
No. 120 white
and Coton
surfin D.M.C
No. 120,
unbleached.
Border in Gobelin stitch (fig. 210).-Gobelin embroidery is merely raised satin stitch, worked directly upon the pattern, without any foundation, or padding. The effectiveness of this kind of embroidery, which appears so complicated and is really so easy, and the many ways in which it can be utilised, soon brought it into favour. It can be worked on the article itself, or on stripes, laid on afterwards, with a hem-stitch bordering. The original of fig. 210 was in blue and red; Bleu Indigo 312 for the grounding, Rouge-Turc 321, for the setting in stem-stitch. The herring-boning along the edges of the pattern, top and bottom, is also in red.


Fig. 210. Border in gobelin stitch.
Materials: Coton à broder D.M.C No. 35 in two different colours such as: Bleu-Indigo 312 and Rouge-Cardinal 304, Rouge-Grenat 358 and 309 or, Gris-Tilleul 393 and Rouge-Cardinal 305.[A]
Should a different selection of colours be made, it is important to remember that in all cases a sharp contrast is desirable.
Alphabet and numerals, left blank, and outlined by the grounding, worked in Gobelin stitch (figs. $\underline{211}$ to 215).


Fig. 211. Alphabet left blank and outlined by


Fig. 212. Alphabet left blank and outlined by the grounding. Letters $\mathbf{O}$ to $\mathbf{Z}$.


Fig. 213. Letter O, from the alphabet given in figs. 211 and 212.


Fig. 214. Numerals left blank and outlined by the grounding.

The border worked in Gobelin stitch, illustrated in fig. 210, suggested to us the idea of an alphabet and numerals, to be executed in a similar style, left blank, that is to say, and outlined by a grounding in Gobelin stitch, which are better suited to embroideries of the kind than those generally used. Our limited space prevents us from giving all the letters in the diagonal position they are intended to occupy on the article itself. O and $W$ only, are represented in the right position. No difficulty will be found in copying the other letters, in giving them the proper direction.


Fig. 215. Letter W, from the alphabet given in fig. $\underline{211}$ and 212.

In order to economize room, J and H are represented in one square, but they are easily distinguishable from each other.
Fig. 214 represents the numerals, executed in the same way. We should like to draw our readers attention to a few other ways in which letters and numerals may be outlined by the background; for example, the solid parts can be worked either in plain or twisted knot stitch (figs. 177 and 178); in very fine chain stitch; in old German knot or bead stitch (fig. 873 ), or even in piqué embroidery (fig. 877).

Border outlined by grounding, worked in Gobelin and stem stitch (fig. 216). The grounding of this pattern is worked on stiff white linen, and entirely in Rouge-Turc 321, and the outlining in Noir grand Teint 310. The same pattern can equally well be worked on gauzes and other transparent stuffs, but with Coton à repriser, instead of Coton à broder D.M.C, for the solid parts. Two shades of Rouge-Grenat, one dark and one very light, may be taken instead, or two of Jaune-Rouille, or of VioletMauve, employing always the lighter shade for the grounding and the darker for the setting.


Fig. 216. Border, outlined by the grounding worked in gobelin and stem stitch.
First part.


Fig. 216. Second part.
Materials: Coton à broder D.M.C No. 50.-Colours: Rouge-Turc 321 and Noir grand Teint 310.[A]

Be careful, in the grounding, not to make the red stitches near the edge, longer than they are represented in the illustration and to set the black stem stitches as close as possible to the grounding.

The pattern, which could only be reproduced in the original size, had to be divided in two, to fit the page. In copying it, join the $A$ and B of the first part to the A and B of the second; the same in fig. 217, each time the pattern is repeated, the flowers are to droop from the + as seen from the position of the buds in the first part, at the beginning of the drawing.

Flower garland in different kinds of stitches (figs. 217 and 218).-Most of the stitches, described at the beginning of this chapter, will be found in this graceful garland, in the execution of which a considerable variety of colours can be introduced. The rose-buds may be worked in two shades of Vert-Pistache and of Rouge-Grenat, in the stitches described in figs. 173, 177, 189 A ; the forget-me-nots, in two or even three shades of Bleu-Indigo, in raised satin stitch and knotted stitch; the slender green leaves in Vert-de-gris, or Gris-Tilleul, the stamens in Jaune-Citron, and the stalks of the roses in Brun-Acajou.


B
Fig. 217. Flower-garland in different kinds of stitches.
First part.
A


Fig. 217. Second part.
Materials: Coton à broder D.M.C No. 40.
Colours: Rouge-Grenat 326 and 335, Bleu-Indigo 312 and 334 , Vert-Pistache 319 and 320, Vert-de-gris 474 and 475, Brun-Acajou 301, Jaune-citron 446


Fig. 218. Showing the working of the outside STITCHES IN FIG. 217.

The border that completes this charming pattern, consists of four rows of button holing, worked in four colours. The first row in our illustration is worked in pale pink, followed by three shades of green, the palest of which is used for the second row of stitches.

When these rows are worked upon a satine or cambric foundation, it is advisable to begin by making a small drawing, in which the height of the stitches and the distance between them is accurately marked out, then prick the pattern through and pounce it upon the material beneath.
When they are worked on a material, the threads of which can be counted no such precaution is necessary.
Insertion in Gobelin and stem stitch (fig. 219).-Owing to the shortness of the stitches, this pattern is easier to work than the foregoing ones. The little flowers are embroidered alternately in dark and light red; the setting varies to correspond, the light red flower being set in dark red, and vice versa. The interior of the leaves is in light green and the setting, as well as the connecting bars, in dark green.


Fig. 219. Insertion in gobelin and stem stitch. Materials: Coton à broder D.M.C No. 35-Colours: Rouge-Cardinal 347 and Rouge-Géranium 352 with Gris-Tilleul 392 and 331, or Bleu-Indigo 312 and 334 with Vert-Mousse 469 and 471, or VioletMauve 375 and 376 with Jaune-Rouille 364 365.[A]

Stripes of embroidery with lace insertion between (fig. 220). -We conclude this chapter, by showing how stripes of embroidery can be used alone, or in conjunction, either with bands of open-work, or lace, crochet, or net insertion. Such combinations are useful for ornamenting aprons, table-cloths, curtains etc., every description in short of household linen and of children's garments. One great advantage, moreover, which stripes of this kind, have over larger pieces of embroidery is that they require neither frame nor pillow, nor wearisome counting of stitches, but can be worked in the hand, at all times and places.


Fig. 220. Stripes of embroidery with insertion between.

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## FOOTNOTES:

[A] See at the end of the concluding chapter, the table of numbers and sizes and the list of colours of the D.M.C threads and cottons.


STRIPE OF GOLD Embroidery in gold thread, purl, and flattened gold wire.

## Flat stitch and Gold embroidery.

The terms, flat stitch and gold embroidery, suggest as a rule, needle-work upon rich materials, such as velvet, brocade, plush and the like.

Nevertheless, a great deal of beautiful embroidery is to be met with, in silk and gold thread upon quite common stuffs; Persian and Moorish embroidery for instance, both remarkable for their delicacy and minuteness, and executed upon ordinary linen, or cotton fabrics.

As a fact, the material is quite a secondary matter; almost any will do equally well as a foundation, for the stitches described in these pages. Flat stitch, and some of the other stitches used in gold embroidery, can be worked with any kind of thread, but best of all with the D.M.C cottons.
Flat stitch embroidery.-Decorative designs, and conventional flowers, are the most suitable for flat stitch embroidery; a faithful representation of natural flowers should not be attempted, unless it be so well executed, as to produce the effect of a painting and thus possess real artistic merit.
Encroaching flat stitch (fig. 221).-Small delicate flowers, leaves, and arabesques, should in preference, be worked either in straight flat stitch (figs. 189 and 190) or in encroaching flat stitch. The stitches should all be of equal length, the length to be determined by the quality of the thread; a fine thread necessitating short, and a coarse one, long stitches. The stitches should run, one into the other, as shown in the illustration. They are worked in rows, those of the second row encroaching on those of the first, and fitting into one another.


Fig. 221. Encroaching
satin stitch.
Work your flowers and leaves from the point, never from the calyx or stalk. If they are to be shaded, begin by choosing the right shade for the outside edge, varying the depth according to the light in which the object is supposed to be placed. The stitches should always follow the direction of the drawing.

Oriental stitch (figs. $\underline{222}, \underline{223}, \underline{224}$ ). -The three following stitches, which we have grouped under one heading, are known also, under the name of Renaissance or Arabic stitches. We have used the term Oriental, because they are to be met with in almost all Oriental needlework and probably derive their origin from Asia, whose inhabitants have, at all times, been renowned for the beauty of their embroideries.


Fig. 222.
Oriental stitch.
These kind of stitches are only suitable for large, bold designs. Draw in the vertical threads first; in working with a soft, silky material, to economise thread, and prevent the embroidery from becoming too heavy, you can begin your second stitch close to where the first ended.


Fig. 223.
Oriental stitch.
But if the thread be one that is liable to twist, take it back underneath the stuff and begin your next stitch in a line with the first, so that all the stitches of the first layer, which form the grounding, are carried from the top to the bottom. The same directions apply to figs. $\underline{223}, \underline{224}$ and $\underline{226}$.


Fig. 224. Oriental
stitch.
When you have laid your vertical threads, stretch threads horizontally across, and fasten them down with isolated stitches, set six vertical threads apart. The position of these fastening stitches on the transverse threads must alternate in each row, as indicated in fig. 222.
For fig. 223, make a similar grounding to the one above described, laying the horizontal threads a little closer together, and making the fastening stitches over two threads.

In fig. 224 , the second threads are carried diagonally across the foundation-threads, and the fastening stitches are given a similar direction.

For these stitches, use either one material only, a fleecy thread like Coton à repriser D.M.C for instance, or else two, such as

Coton à repriser D.M.C for the grounding, and a material with a strong twist like Cordonnet 6 fils D.M.C or Fil à pointer D.M.C for the stem stitch.

Plaited stitch (fig. 225).-When the vertical stitches are laid, a kind of plait is formed in the following way. Pass the thread three times, alternately under and over three foundation threads. To do this very accurately, you must take the thread back, underneath, to its starting-point; and consequently, always make your stitch from right to left.


Fig. 225. Plaited
STITCH.
If you have chosen a washing material, and D.M.C cottons to work with, use one colour of cotton for the foundation, and Chiné d'or D.M.C No. 30, for the plaited stitch.

Mosaic stitch (fig. 226). - In old embroideries we often find this stitch, employed as a substitute for plush or other costly stuffs, appliqued on to the foundation. It is executed in the same manner as the four preceding stitches, but can only be done in thick twist, such as Cordonnet 6 fils D.M.C or Ganse turque D.M.C.


Fig. 226. Mosaic stitch.
Each stitch should be made separately, and must pass underneath the foundation, so that the threads which form the pattern are not flat, as they are in the preceding examples, but slightly rounded.
Border in Persian stitch (fig. 227). -This stitch, of Persian origin, resembles the one represented in fig. 175. Instead of bringing the needle out, however, as indicated in fig. 176, take it back as you see in the illustration, to the space between the outlines of the drawing, and behind the thread that forms the next stitch. Before filling in the pattern, outline it with short stem stitches, or a fine cord, laid on, and secured with invisible stitches.


Fig. 227. Border in persian stitch. Materials:
Cordonnet 6 fils
D.M.C No. 14

15, 20 or 25.
Colours: Noir grand Teint 310, Vert-
Mousse 469 and
471, Rouge-
Cardinal 346,
Jaune-vieil-Or
680, Violet-
Mauve 315 and 316.

This graceful design which can be utilised in various ways is formed of leaves of 7 lobes, worked alternately in dark and light green; of flowers of 3 petals, worked in red and the centres in yellow, and of small leaves in violet. The setting, throughout, is worked either in black or in dark brown.

Stripe worked in flat stitch (fig. 228). -This pattern, simple as it is, will be found both useful and effective for the trimming of all kinds of articles of dress. The bottom edge should be finished off with rounded scallops or toothed vandykes worked in button-hole stitch. The flowers in flat stitch, are worked alternately, in Rouge-Géranium 351 and 352, and the leaves


Fig. 228. Stripe worked in flat stitch.
Materials-According to the stuff: Fil à dentelle D.M.C, Cordonnet
6 fils D.M.C or Coton à repriser D.M.C[A]
Colours-For the flowers: Rouge-Géranium 351 and 352.-For the knot stitch: Jaune-Rouille 308.-For the foliage: Vert-de-gris 474 and 475.[A]

Bouquet in straight and encroaching flat stitch (fig. 229). As we have already observed, it is by no means easy to arrange the colours in an embroidery of this kind, so as to obtain a really artistic effect. Whether the design be a conventional one or not, the great point is to put in the lights and shadows at the right place. If you want to make a faithful copy of a natural flower, take the flower itself, or a coloured botanical drawing of it, and if possible, a good black and white drawing of the same, match the colours in 6 or 7 shades, by the flower itself, keeping them all rather paler in tone, and take the black and white drawing as a guide for the lights and shadows. The colours for the leaves and petals, which should always be worked from the outside, should be chosen with a view to their blending well together. The stamens and the centres of the flowers should be left to the last, but the veins and ribs of the leaves, should always be put in before the grounding.


Fig. 229. Bouquet in straight and encroaching flat stitch. Materials: Coton à repriser D.M.C No. 50. Colours-For the forget-me-nots: Bleu-Indigo 312, 322 and 334.For the other flowers: Jaune-Rouille 365 and 366, Violet-Mauve 376, 316 and 377, Vert-Pistache 369.-For the foliage: Vert-deGris 474, Vert-Mousse 468, 469, 471 and 472.-For the stalks: Brun-Havane 455 and 457.[A]

For embroideries of this kind, suitable materials must be selected; the more delicate and minute the design, and the more varied the colouring, the softer and finer should be the quality of the material employed. Specially to be recommended, as adapted to every form of stitch and as being each of them capable of being subdivided, are Filoselle, Marseille, open Chinese silk and Coton à repriser D.M.C. [A]

Flowers embroidered in the Chinese manner (fig. 230).-All Chinese embroidery displays undoubted originality and wonderful skill and judgment in the choice of material and colour. It excels particularly, in the representation of figures, flowers, and animals, but differs from European work in this, that instead of using flat stitch and making the colours blend together as we do, the Chinese put them, side by side, without intermediate tones, or they sometimes work the whole pattern in knot stitch. The little knots, formed by this stitch are generally set in gold thread.


Fig. 230. Flowers embroidered in THE CHINESE MANNER.

Often too, instead of combining a number of colours, as we do, the Chinese fill in the whole leaf with long stitches and upon this foundation, draw the veins in a different stitch and colour. Even the flowers, they embroider in the same way, in very fine thread, filling in the whole ground first, with stitches set very closely together and marking in the seed vessels afterwards, by very diminutive knots, wide apart.

Chinese encroaching flat stitch (fig. 231).-Another easy kind of embroidery, common in China, is done in encroaching flat stitch. The branch represented in our drawing, taken from a large design, is executed in three shades of yellow, resembling


Fig. 231. Chinese encroaching flat stitch.
Materials: Cordonnet 6 fils D.M.C Nos. 20 to 50 or Chiné d'or D.M.C.
Colours-For the cotton: Jaune-Rouille 363 308, 366.-For Chiné d'or: Red and gold, blue and gold, green and gold. [A]

The stitches of the different rows encroach upon one another, as the working detail shows, and the three shades alternate in regular succession. Flowers, butterflies and birds are represented in Chinese embroidery, executed in this manner. It is a style, that is adapted to stuffs of all kinds, washing materials as well as others, and can be worked in the hand and with any of the D.M.C threads and cottons. [A]

Raised embroidery (figs. 232 and 233).-Raised embroidery worked in colours, must be stuffed or padded first, like the white embroidery in fig. 191. If you outline your design with a cord, secure it on the right side with invisible stitches, untwisting the cord slightly as you insert your needle and thread, that the stitch may be hidden between the strands. Use Coton à repriser D.M.C No. 25, for the padding. These cottons are to be had in all the colours, indicated in the D.M.C colour card, and are the most suitable for the kind of work.


Fig. 232. Raised embroidery. Preparatory work.


Fig. 233. Raised embroidery. Work COMPLETED.

Use Coton à broder D.M.C for the transverse stitches and over the smooth surface which is thus formed, work close lines of satin stitch in silk or cotton; the effect produced, will bear more resemblance to appliqué work than to embroidery. The centres of the flowers are filled in with knot stitches, which are either set directly on the stuff or on an embroidered ground.
Embroidery in the Turkish style (figs. 234 and 235).-This again is a style of embroidery different from any we are accustomed to. The solid raised parts are first padded with common coarse cotton and then worked over with gold, silver, or silk thread.

Contrary to what is noticeable in the real Turkish embroidery, the preparatory work here is very carefully done, with several threads of Coton à repriser D.M.C used as one. A rope of five threads is laid down, and carried from right to left and from left to right, across the width of the pattern. After laying it across to the right, as explained in fig. $\underline{234}$, bring the needle out a little beyond the space occupied by the threads, insert it behind them and passing it under the stuff, draw it out at the spot indicated by the arrow. The stitch that secures the threads, should be sufficiently long to give them a little play, so that they may lie perfectly parallel, side by side, over the whole width of the pattern.


Fig. 234. Embroidery in the turkish style. Preparatory work.
This kind of work can be done on woolen or cotton materials, and generally speaking, with D.M.C cottons, and gold thread shot with colour (Chiné d'or D.M.C.)

Very pretty effects can be obtained, by a combination of three shades of Rouge-Cardinal 347, 346 and 304, with Chiné d'or gold and dark blue or with Chiné d'or, gold and light blue.[A]
This kind of embroidery may be regarded as the transition from satin stitch to gold embroidery.


## Fig. 235. Embroidery in the turkish style. Work completed.

Gold embroidery.-Up to the present time, dating from the end of the eighteenth century, gold embroidery has been almost exclusively confined to those who made it a profession; amateurs have seldom attempted what, it was commonly supposed, required an apprenticeship of nine years to attain any proficiency in.

But now, when it is the fashion to decorate every kind of fancy article, whether of leather, plush, or velvet, with monograms and ingenious devices of all descriptions, the art of gold embroidery has revived and is being taken up and practised with success, even by those to whom needlework is nothing more than an agreeable recreation.
We trust that the following directions and illustrations will enable our readers to dispense with the five years training, which even now, experts in the art consider necessary.

Implements and materials.-The first and needful requisites for gold embroidery, are a strong frame, a spindle, two pressers, one flat and the other convex, a curved knife, a pricker or stiletto, and a tray, to contain the materials.
Embroidery frame (fig. 236).-The frame, represented here, is only suitable for small pieces of embroidery, for larger ones, which have to be done piece by piece, round bars on which to roll up the stuff, are desirable, as sharp wooden edges are so apt to mark the stuff.


Fig. 236. Embroidery frame for gold embroidery.
Every gold embroidery, on whatever material it may be executed, requires a stout foundation, which has to be sewn into the frame, in doing which, hold the webbing loosely, almost in folds, and stretch the stuff very tightly. Sew on a stout cord to the edges of the foundation, which are nearest the stretchers, setting the stitches, 3 or $4 \mathrm{c} / \mathrm{m}$. apart. Then put the frame together and stretch the material laterally to its fullest extent, by passing a piece of twine, in and out through the cord at the edge and over the stretchers. Draw up the bracing until the foundation is strained evenly and tightly. Upon this firm foundation lay the stuff which you are going to embroider, and hem or herring-bone it down, taking care to keep it perfectly even with the thread of the foundation and, if possible, more tightly stretched to prevent it from being wrinkled or puckered when you come to take it off the backing. For directions how to transfer the pattern to your stuff, and prepare the paste with which the embroidery has to be stiffened before it is taken out of the frame, see the concluding chapter in the book.

The spindle (fig. 237).-The spindle to wind the gold thread upon, should be $20 \mathrm{c} / \mathrm{m}$. long and made of hard wood. Cover the round stalk and part of the prongs with a double thread of Coton à broder D.M.C No. 16, or pale yellow Cordonnet D.M.C No. 25 , and terminate this covering with a loop, to which you fasten the gold thread that you wind round the stalk.


## Fig. 237. The spindle.

The pressers (figs. $\underline{238}$ and 239).-These, so called 'pressers', are small rectangular boards with a handle in the middle. The convex one, fig. $\underline{238}$, should be $15 \mathrm{c} / \mathrm{m}$. long by 9 broad; the other, fig. $\underline{239}$, which is quite flat, should be $32 \mathrm{c} / \mathrm{m}$. by 20 .


Fig. 238. Convex PRESSER, FOR PRESSING THE STUFF ON THE WRONG SIDE.


Fig. 239. Flat presser FOR LAYING ON THE PATTERN.

Having cut out your pattern in cartridge paper, lay it down, on the wrong side, upon a board thinly spread with embroidery paste. Let it get thoroughly impregnated with the paste and then transfer it carefully to its proper place on the stuff; press it closely down with the large presser, and with the little convex one rub the stuff firmly, from beneath, to make it adhere closely to the pasted pattern; small, pointed leaves and flowers will be found to need sewing down besides, as you will observe in fig. 242, where each point is secured by stitches. The embroidery should not be begun until the paste is perfectly dry, and the pattern adheres firmly to the stuff.

The knife (fig. 240).-Most gold embroideries require a foundation of stout cartridge paper, and, in the case of very delicate designs, the paper should further be covered with kid, pasted upon it.


Fig. 240. The knife. Reduced scale.
Transfer the design on to the paper or kid, in the manner described in the concluding chapter, and cut it out with the knife. You can only make very short incisions with this tool, which should be kept extremely sharp and held, in cutting, with the point
outwards, and the rounded part towards you, as shown in the drawing.
Tray to contain the materials (fig. 241).-Cut out as many divisions in a thin board, or sheet of stout cardboard, as you will require materials for your embroidery; these include not only gold thread of all kinds, but likewise beads and spangles of all sorts and sizes as well as bright and dead gold and silver purl, or bullion, as it is also called. For the pieces of purl alone, which should be cut ready to hand, you should have several divisions, in order that the different lengths may be kept separate.


Fig. 241. Tray to contain the materials.
Use of the spindle (fig. 242).-Gold embroidery thread should be wound double upon the spindle. It is laid backwards and forwards and secured with two stitches at each turn, as described in fig. 234 . Small holes where the stitches are to come, have first to be pierced in the material with the pricker, from the right side, for the needle to pass through. In soft stuffs, this is unnecessary, but in brocaded materials, and in plush and leather, where every prick shows and would often spoil the whole effect, it is indispensable.


Fig. 242. Use of the spindle
Gold thread which is stiff and difficult to work with, can be rendered soft and pliable by putting it into the oven, or any other warm place, for a short time.

Embroidery with gold purl (fig. 243).-Embroidery is the easiest kind of gold embroidery; you have only to thread the little pieces of purl, cut into the required lengths beforehand, like beads on your needle, and fasten them down upon the foundation like the beads in bead-work. Smooth and crimped gold purl, or silver and gold purl used together, look exceedingly well, particularly where the pattern requires effects of light and shade to be reproduced.


Fig. 243. Embroidery with gold purl.
Embroidery in diamond stitch (fig. 244).-The diamond stitch is a charming novelty in gold embroidery. Short lengths of purl, not more than $11 / 2 \mathrm{~m} / \mathrm{m}$. long, are threaded on the needle, and the needle is put in and drawn out at the same hole. These stitches which resemble knot stitches, form so many little glittering knots, turned alternately to the right and left, and look like seed-diamonds in appearance, more especially, when they are made in silver purl. The shorter the pieces are, and the more closely you set the knots together, the handsomer and richer the effect will be.


Fig. 244.
Diamond stitch.
Chinese gold embroidery (figs. $\underline{245}$ and 246).-We recommend the imitation of Chinese gold embroidery to our readers as an easy and grateful recreation. It consists simply in laying down a gold thread, on a delicately outlined pattern and securing it by stitches. It can be done on any material, washing or other, the costliest as well as the most ordinary.


B

## Fig. 245. Chinese gold embroidery. First part.

For a washing material use, Or fin D.M.C pour la broderie, No. 20, 30 or $40,[\mathrm{~A}]$ which, as it washes perfectly, is well adapted for the embroidery of wearing apparel, and household linen. Plain gold thread and gold thread with a thread of coloured silk twisted round it, are very effective used together.


B

## Fig. 245. Second part

Thus in fig. 245, the trees, foliage and flowers, are worked in plain gold, the grasses, in gold shot with green, the butterflies in gold with red, the two birds in gold with dark blue, and gold with light blue.


B
Fig. 246. Chinese gold embroidery. First part.
Two threads of gold should be laid down side by side and secured by small catching stitches, set at regular intervals from one another, and worked in Fil d'Alsace D.M.C No. 200,[A] of the same colour. Where the design requires it, you may separate the gold threads, and work with one alone.
The second specimen of Chinese embroidery, fig. $\underline{246}$, resembles the first, as far as materials and execution are concerned, but the design is different. The grotesque animals, flowers and shells it represents, can be worked separately, or connected together so as to form a running pattern.


B
Fig. 246. Second part.
Stripe worked in various stitches (fig. 247).-All the designs described thus far, are worked in the same way, but the stripe now presented to our readers introduces them to several kinds of gold thread, and a variety of stitches. The small, turned-back petals of the flowers are worked in plain gold thread, and outlined with crimped; the rest of the petals are worked in darning stitch, with plain gold thread. The latticed leaves are edged with picots, worked with bright purl. The other parts of the design are all worked with a double gold thread, the stalks in dead gold, the leaves in crimped. The gold thread is secured by overcasting stitches in gold-coloured thread, Jaune d'or 667, but it looks very well if you use black or red thread for fastening the crimped gold and dark or light green for the leaves and tendrils.


Fig. 247. Stripe worked in various

Gold embroidery on a foundation of cords (fig. 248). - In the old ecclesiastical embroideries, especially those representing the figures of saints, we often find thick whip cords used as a foundation, instead of cardboard, for the good reason that the stiff cardboard does not give such soft and rounded contours as a cord foundation, which will readily take every bend and turn that you give to it. In the following illustrations, we have adhered strictly to the originals, as far as the manner of working the surface is concerned, but have substituted for the cord, which in their case has been used for the foundation, Cordonnet 6 fils D.M.C No. 1, which is better for padding than the grey whip cord, as it can be had in white or yellow, according to whether it is intended to serve as a foundation to silver or gold work.


Fig. 248. Embroidery in FLATTENED GOLD WIRE AND PURL.

Lay down as many cords as are necessary to give the design the requisite thickness, in many cases up to 8 or $10 \mathrm{~m} / \mathrm{m}$. in height, taking care to lay them closely and solidly in the centre, and graduate them down at the sides and ends. When you have finished the foundation, edge it with a thick gold cord, such as Cordonnet d'or D.M.C No. 6 and then only begin the actual embroidery, all the directions just given, applying merely to the preparatory work.
Only four of the many stitches that are already in use and might be devised are described here. For the pattern, represented in fig. 248, flattened gold or silver wire is necessary, which should be cut into pieces, long enough to be turned in at the ends so as to form a little loop through which the thread that fastens them down is passed. Over each length of gold or silver wire small lengths of purl are laid at regular intervals, close enough just to leave room for the next stitch, the pieces of one row, alternating in position with those of the preceding one.

Plaited stitch in gold purl on a cord foundation (fig. 249).-Distribute the stitches as in the previous figure, substituting purl, for the flattened gold wire, and covering the purl with short lengths of gold thread of the same kind. All these stitches may be worked in gold and silver thread, mixed or in the one, or the other alone.


Fig. 249. Plaited stitch IN GOLD PURL ON A CORD FOUNDATION.

Scale stitch worked in gold thread and purl on a cord foundation (fig. 250). -Begin by covering the whole padded surface with gold or silver thread, then sew on short lengths of purl, long enough to cover six or eight threads, 2 or $3 \mathrm{~m} / \mathrm{m}$ apart, as shown in the engraving. These stitches in dead gold purl are then surrounded by shining or crimped purl


Fig. 250. Scale stitch in gold thread and purl ON A CORD FOUNDATION.

You bring out the working thread to the left of the purl stitch, which you take on your needle, put the needle in on the other side, draw it out above the little stroke, and secure the crimped purl with an invisible stitch.

Conventional flower worked on a cord foundation (fig. 251). -The half finished flower, represented here, was copied from a handsome piece of ecclesiastical embroidery enriched with ornament of this kind. The three foregoing stitches and a fourth, are employed in its composition. The finished portions on the left hand side, are executed in silver and gold purl, whilst the egg-shaped heart of the flower is formed of transverse threads, carried over the first padding, and secured by a stitch between the two cords. In the subsequent row, the catching stitch is set between the cords, over which the first gold threads were carried.


Fig. 251. Conventional flower worked on a cord foundation. Materials.-For padding: Cordonnet 6 fils D.M.C Nos. 1 to 5 or Fil à pointer D.M.C No. 10.-For sewing on the gold thread and purl: Soie de coton D.M.C No. 50 or 70, Fil à dentelle D.M.C on reels Nos. 25 to 50.[A]
The heavier the design is, the thicker your padding should be, and cords a good deal thicker than those which are represented in the drawing should be used, as the more light and shade you can introduce into embroidery of this kind, the greater will be its beauty and value.

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## FOOTNOTES:

[A] See at the end of the concluding chapter, the table of numbers and sizes and the list of colours of the D.M.C threads and cottons.


INSERTION IN CROSS STITCH, ALIKE ON BOTH SIDES, THE PATTERN LEFT BLANK.

## Tapestry and Linen Embroidery.

Tapestry is one of the oldest kinds of needlework and one which has always been popular every where.
There are two distinct sorts of canvas in use for tapestry, called respectively, 'plain (single thread) canvas', and 'Penelope (double thread) canvas'. The latter is generally preferred, because it is easier to count the stitches upon it, but both make an equally good foundation for the embroidery, as the following examples will show.
Besides canvas, other fabrics bearing a close resemblance to it, are often used, especially Java linen, the close texture of which renders grounding unnecessary.

Cloth, velvet or plush can also be overlaid with canvas, the threads of which are pulled away after the pattern is finished. For work of this kind, we however prefer a material with less dressing, such as a twisted tammy, or Colbert linen, because the pulling out of the harsh rough threads of the canvas is very apt to injure the material beneath.
Stitches, worked upon two stuffs, must be drawn very tight, or they will look loose and untidy when the auxiliary fabric is taken away.

Tapestry can be done either in a frame, or in the hand; in the latter case, the ends of the piece of canvas should be weighted with stones or lead, to prevent its puckering.
The stitches, which ought completely to hide the canvas, should all lean one way and the underneath ones always from left to right, as the letters in writing.

Marking out the embroidery ground (fig. 252). -Before beginning a piece of canvas work and tacking on the auxiliary fabric, count how many stitches it will contain, and mark them out in tens, with a coloured thread, as shown in fig. 252, along two sides at least, in the length and breadth. Having ascertained the number of stitches both ways, divide them in two, and starting each time from the middle stitch, trace two lines, one horizontal, the other vertical, right across the canvas. The point of intersection will be the centre. This sort of ground-plan will be found most useful, and should not be pulled out until, at least, half the work be finished. If moreover, you have corners to work, or a pattern to reverse, in the angle of a piece of embroidery, trace a diagonal line besides, from the corner to the centre.


Fig. 252. Marking out the EMBROIDERY GROUND.

Materials suitable for tapestry.-Hitherto, wool and silk, were the materials chiefly used for canvas work; a very thick wool for carpets, as being warmer and more durable. Silk is too delicate a fibre to resist much wear and tear, and cannot therefore be recommended for articles that are intended for constant use, and wool, though stronger, is subject to the destructive agency of moths; whereas cotton, which is cheaper than both, and quite as brilliant, is free from all these disadvantages and is extremely easy to clean.
For most kinds of tapestry we can therefore with perfect confidence, recommend the use of Coton à tricoter D.M.C Nos. 6 to 20, Cordonnet 6 fils D.M.C Nos. 3 to 15, and even Coton à repriser D.M.C No. 25.[A]
Cross stitch (fig. 253).-Cross stitch is the foundation of every other stitch, and the one in most common use. It is also called marking-stitch, being used for marking linen. It is worked in two lines. In the first, the thread is carried diagonally from left to right across a square of threads, and then, downwards, underneath the two horizontal threads; in the second, the stitches are carried from the right-hand lower corner of the square to the upper left-hand corner, so that the four points of the two stitches form a perfect square.


Fig. 253. Cross
stitch.
Half cross stitch (fig. 254). - If the cotton is too coarse, or the canvas too fine, to make the double stitch, carry the thread back along the whole line and make the half-stitches across it, from left to right; the same in the case of a piece of work, which you buy with a part of the pattern ready-worked.


Fig. 254. Half CROSS STITCH.
Gobelin stitch on plain canvas (fig. 255). -This is worked over two horizontal threads and one perpendicular. In a frame, you can work the second row, from right to left, otherwise, you must turn the work round, and bring out your needle behind the last-made stitch.


Fig. 255. Gobelin stitch.

Gobelin stitch on Penelope canvas (fig. 256).-For the same stitch on Penelope canvas, you need rather a coarse needle, which will make its way easily between the threads of the canvas.


Fig. 256. Gobelin Stitch on penelope canvas.

Reps stitch (fig. 257).-Contrary to Gobelin stitch, this stitch which is an imitation of reps, is worked in vertical lines, over two vertical threads and one horizontal one.


Fig. 257. Reps STITCH.

Tent stitch (fig. 258). -This stitch is simply the first half of a cross or marking stitch, worked over a single thread each way. The illustration shows the working of a row, from right to left, the thread being carried forward, underneath the vertical threads. Tent stitch is used for the most part, in conjunction with cross stitch, for the more delicate lines and the shaded parts of flowers and figures.


Fig. 258. Tent STITCH.

Wide Gobelin stitch (fig. 259).-This stitch covers two vertical and two horizontal threads, and advances one thread at a time.


Fig. 259. Wide gobelin stitch.

Broad cross stitch (fig. 260).-Worked over two vertical and four horizontal threads, and very useful for filling in large surfaces as it can be done twice as quickly as the ordinary cross stitch. It may be varied by turning the crosses first one way and then the other.


Fig. 260. Broad cross stitch.

Double stitch (fig. 261).-Begin with a simple cross stitch over every alternate intersection of the threads then make a second row of stitches between those of the first, but in this case, over two and six threads, so that they extend beyond the first each way. In the subsequent rows, a square stitch should be opposed to a long one and a long stitch to a square one.


Fig. 261. Double stitch.

Rice stitch (fig. 262). -Fill in the whole ground first, with large cross stitches, over four threads each way, then upon these, make the so-called rice stitches. These cross the four points of the large cross stitches, and meet in the space between, where they form another cross. The large cross stitches should be worked in rather coarse cotton, the rice stitches in one of a finer quality.


Fig. 262. Rice
stitch.
Double stitch, set two ways (fig. 263). -This consists of diagonal and upright cross stitches, alternately. Work from left to right, and carry the thread over four vertical threads and downwards, under two horizontal ones, then diagonally upwards, over four threads and downwards under two, then again over four vertical threads, and so on. Coming back, you cross the first threads, and pass the working thread each time in a straight line, underneath the two threads of the canvas. The stitches of the third and fourth rows are set, as the illustration shows, the opposite way to those of the two first, the thread being laid the contrary way. Gold thread is generally used for this second set of stitches; Or fin D.M.C pour la broderie, or Chiné d'or D.M.C will be found to be the most suitable for the purpose.[A]


Fig. 263. Double stitch set two
ways.
Plait stitch (fig. 264).-It requires great attention to work this stitch, to and fro; the easier way is to carry the thread back each time, to the starting point.


Carry the thread from left to right, over two horizontal threads, and downwards under four perpendicular ones, then under two threads, from right to left, as the figure indicates.

Stem stitch (fig. 265).-Here, the stitches are worked in separate rows, over four threads each way. The working thread passes first under the two middle threads, from right to left, and then under the two upper ones.


Fig. 265. Stem stitch.

Leaf stitch (fig. 266).-Carry the thread diagonally over two double threads each way, and back under one double thread, to the row whence the stitch started. Make rows of back-stitches in a different colour between the rows of long ones.


Fig. 266. Leaf stitch.

Fish-bone stitch (fig. 267).-The difference between this and the preceding stitch is, that the working thread after passing over three perpendicular and three horizontal threads, is secured by a back-stitch over the last intersection of the canvas threads. These back-stitches lean to the right or left, according to the direction of the long stitches.


Fig. 267. Fishbone stitch.
Diagonal web stitch (fig. 268).-Stretch diagonal threads across the whole surface you are going to embroider, and secure them with rows of overcasting stitches, set, if you are working on Penelope canvas, between the double threads of the canvas. In the next rows the stitches must be set the opposite way, which produces the effect of diagonal or twilled cloth.


Fig. 268.
Diagonal web stitch.

Cashmere stitch (fig. 269).-To imitate this texture in needlework first make one stitch over one crossing of the canvas threads, and then two stitches over two crossings.


Fig. 269.
Cashmere stitch.
Florentine stitch (fig. 270).-Florentine stitch is worked in slanting lines, the thread being carried, diagonally first over one and then over two double threads of the canvas.


Fig. 270.
Florentine stitch.
Mosaic stitch (fig. 271).-The first row consists of one short and one long stitch, alternately; the second, of short stitches only, set between the long stitches of the first row; the third row is a repetition of the first, and so on.


Fig. 271. Mosaic stitch.

Knotted stitch (fig. 272).-Carry the working thread over two threads in width and six in height, bring the needle back, four threads lower down, in front of the double threads, and insert it behind the preceding stitch, and over the middle threads, and then carry it down to the line of the stitches. In the subsequent rows, the stitches extend over four threads and encroach on two of the previous row, so that the stitches of the second row lie between those of the first.


Fig. 272. Knotted stitch.

Star, or Smyrna stitch (fig. 273).-- Make a plain cross stitch over four threads, each way, and then over that, another cross stitch, standing upright. The same stitch can be made over six or seven threads; if you work over more than four threads, it follows that you increase the number of stitches accordingly.


Fig. 273. Star, or smyrna stitch.
Rococo stitch (figs. $274, \underline{275}, \underline{276}$ ).-After fastening in your thread, lay it over four single or two double threads, as the case may be, and carry the needle through to the left, under one double thread; then, as fig. 274 shows, bring it back over the first stitch, put it in by the side of it, and bring it out below, under half the horizontal threads covered by the first stitch. Then make a stitch to the right, similar to the one just made to the left.


Fig. 274. Rococo

When you have finished one stitch, carry the needle under one thread, in an oblique line, to the next stitch, see fig. 273. The whole pattern is worked in diagonal lines.


Fig. 275. Rococo stitch. Stitches on the right side.


Fig. 276. Rococo stitch. Completed.

Parisian stitch (fig. 277).-This stitch, though it is generally worked on silk canvas, can also be worked on the different cotton and linen materials already referred to more than once in this Encyclopedia. It makes a very good grounding in cases where the material is not intended to be completely hidden. It consists of a long stitch over three threads, and a short stitch over one thread, alternately.


Fig. 277. Parisian stitch.
Greek stitch (fig. 278).-This differs from the ordinary cross stitch, in the oblique inclination given to the threads, and the manner in which it is begun. Instead of taking up the two threads that follow the first stitch, you bring your needle back from right to left, under the vertical threads of the first stitch, carry it downwards, and then from right to left, to a distance of four threads beyond the first stitch. The next stitch is made like the first. The rows may be joined together, either by the short or the long stitches, but you must follow one rule throughout. This stitch is much used in Slavonic countries, for the adornment of linen garments, and there we have observed that the short stitches are generally made to encounter the long ones. A coarse material that covers the ground well, such as, Coton à tricoter D.M.C Nos. 6 to 12, is the best one to use for this stitch.


Fig. 278. Greek
stitch.
Scotch stitch (fig. 279).-Squares, composed of slanting stitches, made over one, three, five, three threads respectively, and then again over one thread, and separated from each other by rows of Gobelin stitches, constitute what is ordinarily known by the name of Scotch stitch.


Fig. 279. Scотсн STITCH.

Moorish stitch (fig. 280).-For this stitch, instead of surrounding squares of stitches, made in the way we have just described, with Gobelin stitch, the squares are made to touch, rising like steps one above the other, and bordered only at the sides by Gobelin stitch.


Fig. 280.
Moorish stitch.
Oriental stitch (fig. 281).-Here, you make four diagonal stitches over one, two, three and four double threads respectively; which four stitches form so many triangles, one above the other. The empty spaces between are filled up with Gobelin stitches covering two threads.


Fig. 281.
Oriental stitch.
Shell stitch (fig. 282).-Carry your thread upwards over six horizontal threads, then from right to left, under one vertical thread and downwards over six horizontal ones. When you have made four vertical stitches in this way, bring the needle out behind the third double thread, counted lengthways, and between the third and fourth, counted across, and fasten the four long stitches together with a back-stitch, to the middle thread of the canvas. Draw a thread of a different colour twice through these back-stitches, so as to form small knots like shells, and then fill in the ground between the rows of long stitches, with back-stitches.


Fig. 282. Shell stitch.
Jacquard stitch (fig. 283). -If you have a large plain surface to cover, you should choose a stitch that forms a pattern in itself. Jacquard stitch and others which we shall describe later on, will be found to produce the effect of brocaded stuff. To work Jacquard stitch, make six stitches underneath one another, over two double threads, and six by the side of one another, from left to right, over two double threads. The second row consists of the same number of stitches, similarly worked downwards and to the side, but over one double thread only.


Fig. 283. Jaçuard STITCH.

Byzantine stitch (fig. 284).-Here, you make the same number of stitches as in the preceding figure but with this difference, that the two rows of stitches are made either over two, or four threads.


Fig. 284. Byzantine STITCH.

Milanese stitch (fig. 285). -In the first row, the back-stitch is made alternately, first over four diagonal crosses and then over one; in the second row, over three and two; in the third, over two and three, in the fourth, over one and four. The last long stitches should come under the last short ones and the short ones, in the middle of the last long ones.


Fig. 285. Milanese STITCH.

Plush stitch (fig. 286).-This stitch, also called Astrachan stitch, by means of which a very good imitation of an Oriental rug can be produced, consists of loops, each secured by a cross stitch; the best way to ensure these loops being even and regular is to make them over a narrow wooden ruler, or a piece of whalebone.

The effect can be varied by cutting the loops, which gives the surface the appearance of velvet.


Fig. 286. Plush stitch.
The illustration represents the middle loops only, as cut, for the cut and the uncut stitch can both be introduced into the same piece of embroidery. For example, the borders in figs. 290, and 291, are worked in open or cut plush stitch, whilst in the centres, the stitch is left uncut. Two stitches of a similar kind, called Smyrna and Malta stitch, suitable for making rugs or carpets, are described in the last chapter but one in the book.
Chain stitch (fig. 287).-Generally speaking, this stitch is only used for the adornment of under-linen or small articles of fancy-work but it can also be employed in copying cross stitch patterns. In old collections we often meet with very interesting pieces of needlework, which were used for hangings or screens, where the figure-subjects, are executed in chain stitch. Patterns in many colours, gain immensely by being worked in this stitch, the colours blend together better than in any other, and even the shape of the stitch contributes to soften the contrasts of colour.
Chain stitch cannot, like other stitches, be worked to and fro, nor can all the stitches of one row be finished first, as is generally possible in cross stitch work, each row must be begun separately, and always from the same side, and a different needle should be used for each colour, as the material has often to be changed.


Fig．287．Chain stitch．
The stitch is worked as follows；after fastening in your thread，insert the needle at the same hole it came out of，and bring it out two threads lower down．Keep the loop，formed by the working thread，under the point of the needle．The thread should not be drawn up tightly but left to form a rather loose，round loop．For the next stitches，insert the needle close to the thread that issues from the last loop．

Pattern for borders or grounding（fig．288）．－This simple but most effective design，copied from one of the most beautiful of Oriental carpets，can be executed in，either cross stitch，plush stitch，or chain stitch．To make a wider border still，the diagonal lines that divide the figures shaped like an S ，have only to be prolonged，and the figures repeated．
The colours have been chosen with the view of reproducing as nearly as possible the subdued and faded tones，which time has imparted to the original．


Fig．288．Pattern for borders or groundings．
Materials：Coton à broder D．M．C Nos． 6 to 12，Cordonnet 6 fils D．M．C Nos． 3 to 15，Fil à pointer D．M．C Nos． 10 to 30，or Coton à repriser D．M．C No． 25.
Explanation of the signs prefixed to the colours：（母）Rouge－Cardinal
346，（ $X$ ）Rouge－Cornouille 449，（吾）Bleu－Indigo 311，and（ $\square$ ） Bleu－Indigo 322，（■）Gris－Cendre 414，（ $\times$ ）Bronze doré 585 and（ （5）Vert－Mousse 470．［A］

Pattern for grounding（fig．289）．－Diagonal lines，intersected by balls，serve here as a setting for quaintly shaped flowers and leaves．The outlines are all worked in cross stitch，and the solid parts，in either tent stitch or Gobelin stitch．


Fig．289．Pattern for grounding．
Materials：Coton à tricoter D．M．C Nos． 6 to 16，Cordonnet 6 fils D．M．C Nos． 5 to 15 or Coton à broder D．M．C No．16．［A］
Explanation of the signs prefixed to the colours：（■）Noir grand Teint 310，（\％）Jaune d＇Ocre 676，（Fix）Violet－Mauve 315，（ Hi）Rouge－$^{(8)}$
Géranium 349，（ilil）Rouge－Aurore 360，（X）Bleu－Indigo 312，（『）
Bleu pâle 668，（E］）Rouge－Cornouille 449，（霊）Vert－de－gris 474，（© ）Vert－de－gris 475，（ $\square$ ）Grounding．${ }^{[A]}$

Part of a design，suitable for carpets（figs． 290 and 291）．Our space will not admit of our reproducing more than a quarter of this design．Colours of the softest shades should be selected for it．A black line divides the pattern into four quarters．The upper quarter on the right，and the lower one，on the left，should be worked in blue，and the upper one on the left，copied from fig． 290.


Fig. 290. Part of a design suitable for carpets.
Materials: Fil à pointer D.M.C Nos. 10 to 30, Coton à tricoter D.M.C Nos. 6 to 12, Cordonnet 6 fils D.M.C Nos. 3 to 10, or Coton à repriser D.M.C No. 12.
Explanation of the signs prefixed to the colours: (■) Noir grand Teint 310, ( $X$ ) Rouge-Grenat 358, (Fin) Rouge-Cornouille 450, (霊) Bleu-
 Gris-Noisette 424.[A]

The narrow border, in red, blue and green, is to be repeated after the broad band, which is represented in fig. 291, has been added to the grounding. A very good effect is obtained, if in the broad border, fig. 291, you vary the background of the different subjects.


Fig. 291. Outer border of the design for carpets fig. 290. Materials: Fil à pointer D.M.C Nos. 10 to 30, Coton à tricoter D.M.C Nos. 6 to 12, Cordonnet 6 fils D.M.C Nos. 3 to 15, or Coton à repriser D.M.C No. 12. [A]
Explanation of the signs prefixed to the colours: (■) Noir grand Teint 310, (X) Rouge-Grenat 358, (要) Bleu-Indigo 311, (\$) Vert métallique 465, (IIII) Jaune-vieil-Or 679, (©) Gris-Noisette 424, (Fi) Rouge-Cornouille 450.[A]

Linen embroidery.-The stitches used in linen embroidery are very similar to those used in canvas work. The ordinary cross stitch, as represented in fig. 253, is the one most commonly used, but it is not so effective as the two-sided stitches, which in the beautiful old needlework of the 15th, 16 th and 17 th centuries, have always excited our wonder and admiration.
Stuffs suitable for linen embroidery.-Most embroidery of this kind, and more especially the Italian, is done on very fine linen. Such fine work however, requires more time and patience than people, in these days, are as a rule disposed to bestow on work intended merely for pleasure and recreation. To meet the requirements of the day, therefore, in addition to the finer kinds of linen, a great variety of textures, are now manufactured, the threads of which, being thick and round, can be easily counted. The cross stitches that are worked on Cuba, Ceylon or Batavia linen, are large and coarse, those on linen-canvas, Russian linen, twisted tammy, and Rhodes linen, small and fine.

Linen fabrics are either white, unbleached or cream-coloured. All three are used for embroidery, but the coloured cottons show up best on the cream ground; on the white, they look hard and crude, and on the unbleached, dull and faded.
Materials suitable for linen embroidery-As most linen embroidery is executed on articles that are subjected to frequent washing, the D.M.C cottons, which are to be had in every shade and colour, are the best for the purpose. For coarse stuffs,
coarse cotton should be used, such as knitting cotton, Coton à tricoter D.M.C Nos. $6,8,10,12$ and $14,[\mathrm{~A}]$ which will be found a very good substitute for wool; or six-cord crochet cotton (Cordonnet 6 fils D.M.C) Nos. 3, 4, 5, 10 and 15,[A] which gives quite as full and brilliant a stitch, as silk-twist. Finer cottons should be used for the finer stuffs, such as embroidery cotton (Coton à broder D.M.C) Nos. 6 to 200,[A] and lace thread (Fil à dentelle D.M.C) Nos. 30 to 150.[A] In many cases, even darning cotton (Coton à repriser D.M.C) can be used, as like Algerian silk, it can be split or taken double, to suit the stuff.

Plain cross stitch on auxiliary canvas (fig. 292).-Plain cross stitch, commonly called marking stitch, has already been described in fig. 253. But it may be well to observe, that when an auxiliary material is used, it should be most carefully tacked upon the stuff following the thread of the same, and a sufficient margin left to allow of the drawing out of the canvas threads, when the work is finished.


Fig. 292. Plain
cross stitch on
aUXILIARY CANVAS.
Two-sided cross stitch, worked in four rows of stitches (figs. 293, 294, 295).-Straight lines of cross stitch, alike on both sides, can be worked in two journeys to and fro. Working from left to right, begin by fastening in your thread, never with a knot, but by two or three little running stitches, which are hidden afterwards by your first cross stitch. Directing your needle to the right, pass it diagonally over a double cross of the warp and woof of the canvas, and so on to the end of the line.


Fig. 293. First half of the first journey and aUXILIARY STITCH FOR RETURNING.

Having reached the last stitch, draw out your thread in the middle of it, make an auxiliary diagonal stitch downwards to the right, bring the needle up in the middle of the last stitch, take it thence, upwards to the left, across two threads, and begin the return journey, from right to left, crossing and thus completing the first row of stitches. In the auxiliary stitch with which you begin the backward journey, the thread lies double on both sides. Fig. $\underline{295}$ shows how to pass down to the next row.


Fig. 294. One journey and first half of the SECOND FINISHED, AND AUXILIARY STITCH LEADING TO THE SECOND RETURN.


Fig. 295. The two journeys to and fro, COMPLETING ONE ROW OF CROSS STITCH, BOTH SIDES alike.

Two-sided marking stitch (figs. 296 and 297). The above mode of working two-sided cross stitch cannot be applied to letters, or patterns in broken lines, which both consist chiefly of isolated stitches. Figs. 296 and 297 explain the course of the stitches in embroidery of this kind.


Fig. 296. Two-sided marking stitch. Different positions of the needle.
The working detail A, Fig. 296, indicates the spot for the thread to enter the stuff, and the position of the needle for the first and second stitches; B, the first two stitches completed, with an auxiliary stitch to the right, the thread drawn out on the right, and the position of the needle for the fifth stitch that completes the cross; G shows the completion of the stitch begun at B and the position of the needle for a second stitch to the right; D , one cross stitch completed and another begun, immediately beneath A. In fig. 297, E shows how to work stitches to the left; F, an auxiliary stitch to reach an isolated cross stitch on the right, G, auxiliary stitches between two isolated cross stitches, and H, a second and last auxiliary stitch to complete the cross.


Fig. 297. Two-sided marking stitch. Different positions of the needle.

Cross stitch forming a square at the back (figs. 298 and 299). - Many of the alphabets we so admire in old samplers are worked in cross stitch, that forms a square at the back. Each stitch has to be finished off before another is begun; if you carefully examine figs. 298 and 299, which show severally the right and the wrong sides of the stitch, you will find no difficulty in mastering it. Letter A, fig. 296, shows the entrance of the thread, the position of the needle for half the cross stitch on the right side, and the second side of the square at the back, as shown in fig. 299, A. Letter B, fig. 298, shows the cross stitch finished, and the position of the needle for the third side of the square on the wrong side, indicated by the same letter in fig. 299. C, in both figures, indicates a stitch which is double on the right side, and on the wrong side forms the fourth side of the square, whilst letter D, explains how to continue the stitches.


Fig. 298. Right side of the cross stitch, forming a square at the back.


Fig. 299. Square stitch forming the back of the cross stitch.
Two-sided Italian stitch (figs. $\underline{300}, \underline{301}, \underline{302}, \underline{303}$ ). - Two-sided Italian stitch consists of cross stitches, alike on both sides, divided from each other by horizontal and vertical stitches. The upper and lower stitches should all slope one way, as in plain cross stitch.

Italian stitch is worked in one journey, to and fro. Fig. $\underline{300}$ shows how to fasten in the thread, and place the needle for the first stitch, from right to left; fig. 301, the position of the needle from left to right, to form the cross at the back, and the vertical stitch to the left, on the right side; fig. 302, the position of the needle, for a two-sided horizontal stitch at the bottom of the cross, where upon you proceed as in fig. 300 . Fig. 303 explains the return of the thread, which completes the double crosses and the lines between.


The horizontal lines, not made on the first journey, are added on the way back. In conclusion, pass the needle back, horizontally, from left to right, to make the final stitch over the cross, and then make the stitch between, as shown in fig. 303 . On a thin stuff, this stitch produces an extremely pretty effect, resembling lattice-work, provided the thread be tightly drawn in the working.


Fig. 302. Twosided italian stitch. Position of the needle for the 4th and 5th STITCHES.


Fig. 303. Two-sided italian stitch. Return JOURNEY, WHICH completes the cross stitch.

Montenegrin cross stitch (figs. $304, \underline{305}, \underline{306}$ ). -The Slavonic tribes of the southern districts of E. Europe, especially the Montenegrins, have a great partiality for this stitch, which has been rarely noticed, hitherto, in books on needlework. The right side shows cross stitches with a double thread underneath, and divided by vertical stitches; the wrong side, regular cross stitches, also divided by vertical stitches. Coarse cotton should be used for this stitch; it produces a richer effect and not only covers the stuff better, but also the underneath stitch which in the Slavonic work, is entirely hidden by the cross stitches.

#  <br> A <br> B 

Fig. 304. Montenegrin cross stitch. $1 \mathrm{st}, 2_{\mathrm{nd}} \mathbf{3}_{\mathrm{Rd}}, 4 \mathrm{TH}$ and 5 th stitch AND TRANSVERSAL STITCH

Begin, as letter A indicates, with a long, slanting stitch, across 4 and 8 threads, then, bringing your needle back from right to left, under four threads, draw it out, carry it over the first long stitch, and insert it again from left to right, under the first four threads of the canvas. These four stitches finished, proceed to the fifth and sixth, which as B shows, cross the first four, then repeat the first stitch.


Fig. 305. Montenegrin cross stitch.
Position of the stitches on the WRONG SIDE.

The threads that form the stitches on the wrong side, should always be opposed to each other, that is, one cross should lean to the right, the other to the left, as shown in fig. 305 . This variation in the inclination of the stitches, which is regarded as a fault in plain cross stitch, is indispensable here, and produces a charming effect on the wrong side.


Fig. 306. Montenegrin cross stitch.
A row of stitches finished.
Plaited Algerian stitch (fig. 307).-The distinguishing feature of this stitch is, that it only advances one thread at a time. It should be begun on an uneven number of threads, and like the Montenegrin stitch, should be worked with coarse cotton. The rows may touch, either at the top or at the bottom of the stitch, so long as you keep to one plan throughout.


Fig. 307. Plaited algerian stitch.
Two-sided Spanish plaited stitch (figs. $\underline{308}$ and $\underline{309 \text { ). -This stitch has the advantage of being, not only very effective, but }}$ also very quickly executed. It is worked in two rows, forwards and backwards. All cross stitch patterns can be worked in Spanish stitch. The gaps, which are occasioned by the long stitches, have to be filled in with short ones. In itself, the stitch consists of slanting stitches, three threads a part, alike on both sides, and advances three threads at a time, as shown in figs. 308 and 309 .


Fig. 308. Two-Sided plaited spanish STITCH.


Fig. 309. Two-sided plaited spanish STITCH.

Two-sided line stitch (figs. 310 and 311).-Square stitch, Holbein stitch, line, or stroke stitch, as it is sometimes called, and setting stitch, are all worked on one principle. Though all these two-sided stitches are related to each other, and by no means difficult of execution, those new to the work will find a little practice necessary, to make the stitches follow in their proper order. Fig. 310 explains how the needle has to pass, alternately, step by step, over and under the threads of the stuff, and fig. 311, how the threads, left blank the first time, are covered on the way back. The great difficulty is how to place your first row of stitches so as to ensure an unbroken course back. It is as well before setting out, to ascertain clearly the most direct course back, so that you may not come to a stand-still, or be obliged to make unnecessary stitches on the wrong side. If you have to pass obliquely across the stuff, as in patterns figs. $\underline{326}, \underline{327}, \underline{328}, \underline{329}, \underline{331}$ and $\underline{333}$, proceed in the same way as though you were covering the straight threads of a fabric.


Fig. 310. Two-sided line stitch. Forward row.


Fig. 311. Two-sided line STITCH. BACKWARD ROW.

Two-sided insertion (figs. $\underline{312}, \underline{313}, \underline{314}, \underline{315}, \underline{316}, \underline{317}, \underline{318}$ ). We conclude this series of stitches with a description of a pretty, two-sided insertion, suitable for joining stripes of work of different widths together. In pieces of old needlework, we often find handsome, coloured patterns, joined together by a piece of lace or some quite different kind of work. The insertion represented in fig. 317 , is a very good substitute for either. Fig. 312 explains the first stitch and the course of the second, from left to right, under 3 vertical and 3 horizontal threads; the 3rd stitch to the left, over 6 vertical threads, and the beginning of the 4th stitch. Fig. 313 shows the 4th stitch completed, and the direction the 5th and 6 th stitches have to take; fig. 314, the 6th completed, and the position of the needle for the 7th and 8th; fig. 315, the 9th lower, horizontal stitch, over 6 vertical threads, the 10th backward stitch, and the position of the needle for the 11 th and last stitch. Fig. 317 represents a whole series of stitches, and fig. 318, the back of the work, which though quite a different pattern, will combine very well with any two-sided embroidery.


These insertions can be worked on any stuff, but the stitches, must be done, both ways, on a number of threads, divisible by 3 . Thus, the first stitch may cover 6,9 , or 12 threads, but never $8,10,12$ or 14 . [Transcriber's note: 12 , here, appears to be an error in the original.]


Fig. 317. Two-sided insertion. Row of stitches finished.


Fig. 318. Two-sided insertion, showing the back of fig. 317.

Gothic borders in Gobelin and cross stitch (figs. 319 and $\underline{320}$ ). -We are indebted for both these pretty patterns, which are quite Gothic in their character, to a visit we paid to the national museum at Munich, where we discovered them amongst a heap of other old valuables, lying un-heeded in a remote corner. Their simple graceful outlines render them peculiarly suitable for the decoration of table-cloths, counterpanes, curtains, etc. All embroideries of this kind should be finished off with a deep fringe, made in the stuff itself, or knotted on to it or may be trimmed with a heavy thread lace, of a wide width, corresponding with the work in character.


Fig. 319. Gothic border in cross stitch.
Materials: Coton à tricoter D.M.C Nos. 6 to 12, Coton à broder D.M.C Nos. 16 to 35, or Cordonnet 6 fils D.M.C Nos. 3 to 15. ${ }^{[A]}$ Colours: Rouge-Turc 321, or two shades of Bleu-Indigo, 311 and 334, or two shades of Rouge-Grenat, 358 and 359 or two shades of Brun-Acajou, 300 and 402. ${ }^{\text {[A] }}$

The design may be worked either in one shade, as in fig. $\underline{319}$, or in two, as in fig. $\underline{320}$, where all the outside stitches are worked in the darker shade of the given colours.


Fig. 320. Gothic border in cross stitch.
Materials: Coton à tricoter D.M.C Nos. 16 to 35.
Colours: Bleu-Indigo 311 and 344, or Rouge-Cardinal 346 and Rouge-Géranium 335, or Gris-Tilleul 391 and 331. [A]

Powdering and border. Albanian subjects (figs. 321 and $\underline{322}$ ). -The arrangement of colours for these charming patterns, of Albanian origin, should be as follows; the dark-coloured crosses, red, the lighter ones, alternately blue and green, the lightest, yellow.


Fig. 321. Powdering. Albanian subject.
Materials: Coton à tricoter D.M.C Nos. 6 to 12, Cordonnet 6 fils D.M.C Nos. 3 to 25 or Coton à repriser D.M.C No. 12, 25 or 50. [A] Colours: Rouge-Cardinal 347, Bleu-Indigo 322, Vert métallique 465, Jaune-Orange 444, Gris-Brun 409. [A]

In fig. 321 , most of the stitches in every other diagonal row, are worked in red, the others in green or blue; in the intermediate rows the flowers are worked alternately, in green and red, or blue and red, and throughout, the centre of each figure should consist of 4 stitches in yellow.


Fig. 322. Albanian subject.
Materials: Coton à tricoter D.M.C Nos. 6 to 12, Coton à broder D.M.C Nos. 16 to 35 or Cordonnet 6 fils D.M.C Nos. 3 to 25. [A]

Colours: Rouge-Cardinal 347, Bleu-Indigo 312, Jaune-Orange 444, Vert métallique 465, Gris-Brun 409.[A]
In fig. 321, which serves as a border to the above, only the stalks of the 4 conventional pinks, which, with the cross in their middle, form a square, are in brown.
These squares are separated from the bottom border by an insertion, in Gobelin stitch, worked over 6 threads, in red, blue, green and yellow, from 20 to 25 stitches of each. This band is edged on both sides with a row of stem stitches, worked in yellow over 4 threads. The Holbein stitches that border the band, can be made in whichever colour the worker prefers, or else in red and gold thread.
Borders in stroke stitch (figs. $\underline{323}, \underline{324}, \underline{325}$ ). -These three patterns will give our readers an opportunity of perfecting themselves in two-sided, square stitch (see figs. 310 and 311), also called stroke, or line stitch, according as it is worked, in oblique, or straight rows.


Fig. 323. Border in stroke stitch.
Materials: Coton à marquer D.M.C Nos. 5 to 200. [A]
Colours: Rouge-Turc 321 or Bleu-Indigo 312. [A]


Fig. 324. Border in stroke stitch.
Materials: Coton à repriser D.M.C No. 50. [A]
Colours: Vert-Pistache 319, or Vert-Mousse 470. [A]


Fig. 325. Insertion in stroke stitch.
Materials: Coton à broder D.M.C Nos. 16 to 60. [A]
Colours: Rouge-Turc 321, or Rouge-Grenat 309, or Bleu-Indigo 311.[A]

We again recommend our readers, to begin by ascertaining the course the stitches should take, in order to avoid all unnecessary stitches and be sure of finding their way back according to the prescribed rule.
Corners in stroke stitch (figs. 326 and 327 ). -These pretty little patterns are suitable for the decoration of ladies' and children's collars, fine pocket-handkerchiefs and finger napkins, and can be worked in one or two colours, as preferred. If two colours be used, the darker should be taken for the interior, the lighter for the narrow outside edge.


Fig. 326. \& fig. 327. Corners in line
STITCH.
Materials: Coton à broder D.M.C Nos 35 to 200 or Fil à dentelle D.M.C
Nos. 25 to 70. [A]
Colours: Bleu-Indigo, or Rouge-Cardinal, or Brun-Caroubier, or Violet-Lie-de-vin. [A]

Stripe in stroke stitch (fig. 328). -This is copied from a piece of Italian work, though from a resemblance in the different subjects to the rose, thistle and shamrock, if might have been supposed to be of English origin. The original work was executed in a most brilliant purple red which time has toned down to the colour of Jaune-Rouille 308, or Brun-Cuir 432, one or other of which we recommend, as being the only colours with which any thing approaching the refined distinguished look of the old embroidery, can be given to the new.


Materials: Cordonnet 6 fils D.M.C Nos. 15 to 50, Coton à broder D.M.C Nos. 16 to 35, or Coton à repriser D.M.C No. 12, 25 or 50. [A]
Colours: Jaune-Rouille 308, or Jaune-vieil-Or 680.[A]
Grounding in diagonal lines (fig. 329).-This pattern can be worked, in any of the previous stitches, or in back-stitch. It is only suitable for large surfaces, on account of the diagonal lines, and should be worked, all in one colour. It can be varied by adding sprays to the upper sides of the slanting stalks, like those on the lower sides, turned either the same way, or upwards. Skilled workers will readily contrive the middles for themselves, by combining the different subjects and putting them together in various positions, either diagonally or at right angles to each other, with the help of the Penelope mirror.[2]


Fig. 329. Grounding in diagonal lines.
Materials: Coton à tricoter D.M.C Nos. 6 to 16, or Coton à broder D.M.C Nos. 16 to 100.

Colours: Bleu-Indigo 322, or Rouge-Cardinal 347.
Powdering in cross, stroke and star stitch (fig. 330).-This charming combination of cross, stroke and star stitches, can be made use of wherever embroidery is available as a means of decoration.


Fig. 330. Powdering in cross, stroke and star stitch.
Materials: Coton à repriser D.M.C No. 50 and Chiné d'or D.M.C. [A] Colours-For the Cotton: Rouge-Grenat 326.-For the Chiné: BleuIndigo and gold. ${ }^{[A]}$

The cross stitches, in which the solid parts of the pattern are worked, should be in one colour only, the stroke and star stitches, in Chiné d'or D.M.C. [A]

Border in Greek stitch (fig. 331).-All the darker lines here, should be worked in black, colour 473, the leaves in the form of steps, alternately in light and dark red up to the stalks, the line of demarcation being indicated by the different direction of the stitches, so that two light leaves, and two dark leaves, should always face each other.


In the original, the cross bars that unite the leaves, are in yellow, whilst the detached figures that separate them, are worked, those that come between the light red leaves, in pale blue, and those between the dark red ones, in gold thread. The exterior part of the figure is filled in with the different colours, indicated above; with the exception of the small squares in Gobelin stitch, which should all be worked in plain gold, or Chiné d'or D.M.C, green and gold. The SS in the narrow outside border, should be worked in two shades of blue; the outside stitches in colour 341 and the solid parts in colour 668. The little figures with the transverse bars that unite the SS, should be set in black, and filled in, alternately, in light and dark red, and in yellow. Grounding (fig. 332).-This grounding was copied from a beautiful old cushion-cover and will be found particularly useful in the confection of small embroidered articles, because the pattern will always form a centre point in itself. A light, brilliant red, such as either of the two colours indicated beneath the figure, will best reproduce the tone of the original.


Fig. 332. Grounding.
Materials: Coton à tricoter D.M.C
Nos. 6 to 10, or Coton à broder
D.M.C Nos. 16 to 100.[A]

Colours: Rouge-Cardinal 804, or Rouge-Cornouille 450.[A]
In making the little stars that connect the different squares, the mode we recommended for working stroke stitch should be adopted, that is, beginning, by bringing the needle out in the middle, making 7 stitches, and at the eighth, carrying the needle back under the first, to the spot whence you started. The stitches will then be alike on both sides.

Wallachian border (fig. 333).-A piece of Wallachian needlework, executed on rough linen, and uncommon, both in colour and design, suggested the charming embroidery, here represented. In place of the somewhat violent colours, which indicate an undeveloped taste, we have substituted softer and more refined ones. All the stroke stitches of the middle stripe and of the two border stripes, top and bottom, as well as the darker portions of the small dice, subdivided into eight, in the bottom border and of the small diagonal squares in the top border, worked in Gobelin stitch, are in red, colour 346. The setting of upright stroke stitches round the large centre figures, as well as the straight lines that divide these same figures into four, are worked in yellow, colour 680.


Fig. 333. Wallachian border.
Gobelin stitch, stroke stitch and spanish half-stitch.
Materials.-For Rhodes linen No. 1: Cordonnet 6 fils D.M.C No. 15, and Or fin D.M.C pour la broderie No. 30.-For other stuffs: Coton à tricoter D.M.C Nos. 6 to 16, or Coton à repriser D.M.C No. 12, 25 or 50 and Or fin D.M.C. [A]

## Colours: Rouge-Cardinal 346, Rouge-Géranium 326, Vert-Pistache 319 and Jaune-vieil-Or 680.[A]

The squares and the half-squares are worked in colour 326 , green 319, and gold thread; colour 326 is indicated in the illustration by the darkest shade, green 319, by the medium shade, and the gold thread by the lightest shade.

The stitches in the right bottom quarter and top left one, incline upwards from left to right, in the two other quarters they incline the contrary way. The Spanish half-stitch as shown in fig. $\underline{309}$, can only be done over 4 and 2 threads and worked one way, not to and fro.
The general effect is very much heightened by the introduction of one or two rows of stitches, worked in gold thread, into the straight lines on either side of the stripes; all the light parts of the design moreover, should be worked in gold thread.
Borders in several shades of one colour (figs. 334 and 335). In some beautifully embroidered Chinese hangings, that latterly came under our notice, the principal subject was the figure of a mandarin, in a very richly decorated dress. The pretty pattern, given in fig. $\underline{334}$, was copied from the collar and cuffs of this dress. We should advise working it in several shades of pink or red, or in a single one of the colours indicated above.


Fig. 334. Border in several shades OF ONE COLOUR.
Materials: Coton à tricoter D.M.C Nos. 12 to 20, Coton à broder D.M.C Nos. 16 to 35 or Coton à repriser No. 12, 25 or 50.
Colours: Three shades of either Bleu-Indigo, Rouge-Grenat, or Violet-Mauve etc. etc.

The border of these hangings furnished us with pattern 335, which will be found to look best, worked in three very distinct shades of blue.


Fig. 335. Border in several shades of one colour.
The grotesque heads of animals, and the flowers and branches which break the running pattern, and are a Chinese speciality, distinguish this design from the more conventional patterns of the present day.
We recommend these two pretty patterns, to our readers notice, as likewise adaptable by transposition, to centres, or by repetition, to broad stripes. With very little trouble they can be converted, into a variety of subjects, such as it is often difficult to find ready made, and exactly suited to the purpose in hand.

Border in Greek stitch with a footing, composed of branches (fig. 336).-This design can be worked in Greek, Slavonic, Montenegrin, or plaited Algerian stitch. Our illustration worked in Greek stitch, shows how one stitch encroaches upon another, and how the thread is carried from one isolated stitch, to another.


Fig. 336. Border in greek stitch with a footing, composed of branches.
It will be found to be an improvement if the stitches are so made as to follow the direction of the lines. The central subject may be repeated two or three times, according to the width of border required. The edging is the same throughout. The use of the 'Penelope mirror' for repeating patterns is described in the concluding chapter of the book.
Table-cover in Gobelin and stroke stitch (figs. 337, 338, 339, 340).-This tasteful little table-cover provides excellent practice in working two sided, square stitch. The square represented in fig. 339, forms the middle of the cloth. The Gobelin stitches, set very closely, unite and form a star in the centre of the principal subject. They begin in the corners, in red and continue in green, violet and blue, successively; the little branches in stroke stitch, on each side of the Gobelin stitches, correspond with them in colour, and the small figures, that form the border of the square, may be worked, indiscriminately, in any of the colours used for the Gobelin stitches of the centre. Four branches run inwards from the corners of the square, and four more advance to meet, and pass them, from the inner angles of the wide border. Four figures, copied from the outside border, fig. 339 , and worked in yellow, and the little star, fig. 337, besides the little subjects, borrowed from the outside border, fig. 338 , are strewn lightly over the foundation, interspersed between the branches. In fig. 340 , nevertheless, which represents the whole table-cover, the edge is formed of the small subjects contained in the wide border and not of the little stars. The Gobelin stitches in the centre of fig. 337, are in dark green, the star stitches and the stroke stitches on the outside in red. The wide border consists of stars, every other row of which, is worked in red; the intermediate rows, successively, in blue, green, and yellow. The corners are composed of four detached stars, framed by a row of stroke stitches, one red and one blue, alternately. This line skirts both sides of the border, and forms the base to the quaint figures, that terminate the design and which can be worked in all the colours used for the inside.


Fig. 337. Small detached subject of fig. $\underline{\mathbf{3 4 0}}$.


Fig. 338. Outer border of fig. $\underline{340}$.


Fig. 339. Middle of fig. 340.
The original of our illustration, which is on fine Rhodes linen, in Coton à broder D.M.C No. 25, is only a small table-cover; for a larger one, if you wish strictly to adhere to the pattern, Java or Ceylon linen will be the best material to select, with Coton à tricoter D.M.C No. 12, for the stroke stitches and Coton à repriser No. 25 for the Gobelin stitches.


Fig. 340. Table-cover in gobelin and stroke stitch.
Materials.-According to the stuff: Coton à tricoter D.M.C Nos. 6 to 16, Coton à broder D.M.C Nos. 16 to 35, Coton à repriser D.M.C Nos. 12, 25, 50, Fil à pointer D.M.C Nos. 10 to 30, or Cordonnet 6 fils D.M.C Nos. 3 to 20.[A]
Colours: Rouge-Cornouille 450, Vert-Pistache 319, Violet-Lie-devin 372, Jaune-Rouille 364, Bleu-Indigo 322. [A]


Insertion-Plain stitches and overs

## Knitting.

Knitting is one of the earliest forms of needlework, and one, which has been carried to the highest perfection. It would be difficult to invent new stitches or patterns and, we shall therefore confine ourselves to describing the stitches in general use, and reproducing those of the old patterns we consider the most useful, that our readers may make their own selection.
In former days, knitting served mainly for the manufacture of stockings, and even now, in spite of machines, hand-knit stockings, and numberless other useful and ornamental articles, such as shawls, counterpanes, cradle-coverings, gloves, laces etc. are in great request.

Besides its practical use, knitting is an easy and pleasant pastime that can be taken up at odd minutes and even carried on, whilst talking, or reading.
Knitting consists of loops, or stitches, as they are generally called, formed by means of a thread and two needles.
In round knitting, four, or five needles are necessary for the better handling of the work.
Through the loops formed in knitting, being connected together in unbroken continuity, a very elastic fabric is produced, which is specially suitable for making warm, and closely-fitting wearing-apparel.
Materials.-Threads with a slight twist, such as Coton à tricoter D.M.C, are the best. With regard to the thickness of the needles, whether they be of steel, wood, or bone, your choice must be determined by the quality of the thread used.

The accompanying table is intended to help inexperienced knitters to match their needles and thread, we advisedly say, help, as it is impossible exactly to determine the numbers that will correspond, because every hand knits differently, and a loose knitter has to use finer needles than a tight knitter.
Other materials are enumerated here, besides, what is properly speaking, called knitting-cotton, as for caps, lace edgings, insertions and so forth, finer kinds of thread and threads with a stronger twist which show up the pattern better, should be used.


Table of the approximate relation of the D.M.C threads and cottons to the numbers of the knitting needles. [A]

Position of the hands in knitting (fig. 341.)-Lay the thread over the fifth finger of the right hand, and twist it round it, then carry it over the forefinger, which should be kept close to the work, the work being held between the third finger and the thumb. The left hand remains more or less inactive, having merely, by a slight movement of the forefinger to pass the loops, in succession, on to the needle in the right hand, which forms the stitches. This position of the hands, which is the one usually adopted in England and France, is the one represented in our illustration. The Germans on the contrary, lay the thread over the left hand, and can move the hands much more quickly, in consequence. There are some ways of casting on, which can only be done in the German fashion.

To prevent the irregularity in stitches, the needles should never be allowed to protrude more than 1 or $11 / 2 \mathrm{c} / \mathrm{m}$, from the work All exaggerated movement of the arms, which renders knitting a very tiring occupation, should be avoided.


Fig. 341. Position of the hands in knitting.
Casting on.-Casting, or, setting on, as it is sometimes called, is the formation of the first row of stitches which are to constitute the foundation of the work.

There are four methods of casting on: (1) crossed casting on, done in four different ways; (2) knitting on; (3) slipping on, also done in two ways; (4) casting on with picots.
(1) Crossed casting on with a single thread (fig. 342). Lay the thread over your fingers as though you were beginning a chain of plain stitches, fig. 403 , leaving a long end, sufficient to make the number of stitches required, lying within the palm of the hand. Put the needle in from below, into the loop on the thumb, and pass it from right to left under that part of the thread which lies between the forefinger and the thumb. Then bring the thread through the loop on the thumb, draw the thumb out, and lay the loop on the needle. In making the next stitches, lay the thread over the thumb, so that the end lies outside. Put in the needle under the front thread and complete the stitch as before. This method of casting on is generally done over two needles, one of them being drawn out before the knitting-off is begun, to ensure a loose edge.


Fig. 342. Crossed casting on with a single thread.
Crossed casting on with a threefold thread.-This method is similar to the last, only that the thread is taken threefold and is drawn by the needle through the loop, which is formed at the bend of the thread. Then you pass the single thread over the left hand, and the triple one over the thumb, as shown in fig. $\underline{342}$, and make the same stitches, as above. The threefold thread makes a broad chain at the bottom of the loops.

Double crossed casting on (fig. 343).-This can be done either with a single or a threefold thread. In our drawing it is done with the latter. The first stitch is made as we have already described, only that you have to keep the loop on your thumb, put the needle into it a second time, lay hold of the thread behind, cast on a second stitch, and then only, withdraw your thumb. In this manner two loops are made at once, close together.


Fig. 343. Double crossed casting on.
Crossed casting on, forming a chain (fig. 344.)-Begin by making one such stitch, as we have described in fig. 341; for the second and following stitches, bring the end of the thread to the inside of the palm of the hand, so that it lies between the thumb and the forefinger.


Fig. 344. Crossed casting on, forming a chain.
(2) Knitting on stitches (fig. ${ }^{345}$ ). -Begin with a plain crossed stitch; then take the thread and the needle in the left hand, a second needle in the right, and catch it into the stitch on the left needle, lay the thread under the right needle and draw it through in a loop, through the loop on the left needle. Then transfer it as a fresh stitch to the left needle; catch the needle into this second stitch, and draw the thread through it, to form the third, and so on.

This method of casting on is used for articles, that are to have a double edge, (see figs. $\underline{355} \underline{356}$ ), because stitches, made in this way, are easier to pick up than the tighter ones; but it should not be used, where it will form the actual edge, as the loops are always too open.


Fig. 345. Knitting on stitches.
(3) Casting on with slip loops (fig. 346).-Begin by casting on one loop in the ordinary way, next, lay the thread, as in German knitting, over the left hand, twisting it once only round the forefinger, then put the needle in, upwards from below, under the thread that lies on the outside of the forefinger; draw out the finger from the loop, put the loop on the needle to the right, take the thread on the forefinger again, and so on.


Fig. 346. Casting on with slip loops.
Casting on with double slip loops (fig. 347).-Begin by casting on a stitch in the ordinary way, then lay the thread over the forefinger, the reverse way, so that it crosses between, not outside the hand and the body of the knitter. Pass the needle upwards from below, under the inside thread, and slip this thread as a loop on to the needle. Continue to cast on, inserting the needle under the front and back threads alternately. This method is specially suitable for open patterns, where you have to increase several times, in succession.


Fig. 347. Casting on with double slip loops.
(4) Casting on with picots (fig. 348).-Cast on two stitches in the ordinary way and turn the work. Lay the thread over the needle, put the needle into the first stitch, from right to left, and slip it on to the right needle, knit off the second stitch plain, and draw the slipped one over it.


Fig. 348. Casting on with picots.
Cast on as many stitches as you want in this manner and then pick up the picots thus formed, with an auxiliary needle, and knit them off like ordinary stitches.
This method of casting on may be varied thus in the following manner: having cast on the stitches as in fig. 348 , throw the thread over the needle and knit two stitches together.

Plain stitch (fig. $\underline{349 \text { ). -This is the easiest stitch and the first which a knitter has to learn. It is executed as follows: Put the }}$ right-hand needle in, upwards from below, under the front part of the first stitch on the left-hand needle, lay the thread from right to left under the needle, draw it through the loop, and drop the loop off the left needle.


Fig. 349. Plain stitch.
Plain knitting is employed wherever a perfectly smooth, even surface is required. It looks quite differently on the wrong side from what it does on the right where it presents the appearance of vertical rows of plaiting.

Back, or seam-stitch (fig. 350).-You may intentionally knit the wrong side of plain knitting. This is called purling and is done, in the following way: lay the thread over the left needle, and put the right one, downwards from above, behind the thread, into the loop on the left needle, lay the thread upwards from below, over the right needle, draw it through the loop, and drop the loop off the left needle. This stitch is used in knitting patterns, and for marking horizontal lines in smooth surfaces, such as the seam of a stocking, for instance.


Fig. 350. Back or seam-stitch.
Plain stitch taken from behind (fig. 351).-Put the needle in from right to left, under the back part of the stitch; leave the thread behind the needle, then pass it from right to left over the needle and draw it through the stitch.


Fig. 351. Plain stitch taken from behind.
Back, or seam-stitch taken from behind (fig. 352).-Put the needle into the second part of the stitch, upwards from below, and knit it as a back or seam-stitch.


Fig. 352. Back or seam-stitch taken from BEHIND.
In plain stitch, taken from behind, the two threads of the loop are crossed, instead of lying side by side, as they do in plain knitting.
Back-stitch taken from behind, is only used for certain open-work patterns.
Overs (fig. 353). -These form holes in plain knitting, and are used for open-work patterns and for increasing.


## Fig. 353. Overs.

To make an over, lay the thread over the needle, and in the next row, knit this loop like any other stitch.
Each over adds one to the existing number of stitches. In cases, therefore, where the number is to remain the same, you have to make as many intakes as overs. Overs can only be used in conjunction with other stitches.
Knot stitch (fig. $\mathbf{3 5 4}$ ). - This forms a raised spot in plain knitting and is executed as follows: knit 1, and leave it on the lefthand needle; put the stitch you have made with the right needle back on the left, and knit it off. Make 4 or 5 similar stitches, all issuing from the same stitch on the left needle, so that you have 4 or 5 loops on the right needle; then drop the stitch off the left needle, and pull the 4 first loops over the last one.


## Fig. 354. Кnot stitch.

Cable or chain stitch.-Chain stitches are used for strengthening and equalizing the edges of articles that are made in stripes. They can be made in two ways; either, you knit off all the stitches on one needle, turn the work, put the needle into the first stitch, as if you were going to knit it from the back, and take it off the left needle without knitting it, the thread to lie behind the needle; or, you knit off all the stitches on one needle, turn the work, and knit off the first stitch.
The names of the stitches.-Out of the stitches that have been already described, other stitches are formed, which, as they are frequently alluded to in knitting directions, we shall here enumerate, explaining all the terms, usually employed in such directions.

Over, or increase.-Explained in fig. 353. Throwing the thread once over the right needle.
Double over, or two increases.-Throwing the thread twice over the needle.
Plain intake.-Knitting two stitches together plain. This is done when the intake is to lie from left to right.
Purled intake.-Purling two stitches together. This is done to make the stitches, that are knitted together, visible; or in the case of a piece of work composed of stripes, on the wrong side, when the intake is to lean to the right, on the right side.

Plain decrease, taken from behind.-Knitting off two stitches together, plain from behind. This is done when the intake is to lie to the left.
Purled decrease, taken from behind.-Purling two stitches together, from behind. This is done when, in articles composed of stripes, the decrease has to be made on the wrong side, and is to lie to the left on the right side.

Pulling over.-Slipping a stitch from the left needle to the right without knitting it, knitting the next plain, and pulling the slipped stitch over the knitted one. In this manner two or three stitches can be pulled over the knitted one.
Casting off.-To prevent the stitches from unravelling they are finished off in the following manner. Knit off two plain, pull the first over the second and drop it, so that only one remains on the needle. Knit the next stitch, and pull the one behind over it, and so on. This chain of stitches, must neither be too tight, nor too loose, but just as elastic as the rest of the work.

Materials for stockings.-Stockings can be made of silk, wool or cotton, entirely according to fancy, but for coloured stockings, we cannot too highly recommend the D.M.C knitting cottons, as more durable, in all respects, than either silk or wool. They are manufactured in 360 different shades, whereas, wool and silk are only to be had in a very limited assortment of colours. For hand-knit stockings, Nos. 25, 30, 35[A] are the best, for machine-knit, Nos. 40 and 50.

Stocking knitting.-A stocking consists of five parts: (1) the top, (2) the knee, (3) the leg, (4) the heel, (5) the foot.
(1). The top may be either ribbed, or knitted in an openwork stitch of same kind or with a double-toothed edge, fig. 356.
(2) and (3). The knee, and the leg down to the heel, are generally plain knitted; it is only children's stockings that are fancy knitted.
(4). The heel, is worked as straight knitting backwards and forwards; by knitting first one row plain and then turning back and knitting it purl. It is shaped to the foot by the intakes at the top.
(5). The foot is knitted plain, with intakes from the heel onwards, to get rid of the superfluous stitches. Then knit a plain piece, without a seam-stitch, till you begin to decrease for the toe, which can be worked in several different ways.
To ensure the right proportions between the several parts of a stocking, the following directions should be attended to. An ornamental top must never be taken into account, in measuring the length of the leg. When the top part is finished, you make the seam, at the beginning of the first needle of the round, of one, or two purled stitches, or sometimes, a narrow pattern of purled stitches. This marks the middle of the stocking. For ordinary-sized stockings, knit plain from the top-band, till the knitted piece, forms a square.
For stockings that are to cover the knee, knit half as much again, that is one and a half times the width of the stocking. This brings you to the calf of the leg. Pull the third stitch after the seam, over the second, and knit together the two last but one before the seam. There should be 12 rounds between each of the first 3 or 4 intakes, and after that 8 , until this part is one and a half times the width of the knee in length, and a quarter narrower.
For the ankle, knit a plain piece, half the width of the knee in length, without intakes.
For the heel, count the stitches on the four needles, exclusive of the seam, and put two stitches more than the quarter of the whole number on to the needles, to the right and left of the seam.

For a heel to fit well, it should be as long as it is wide. In order that they should wear better, the heel and the toe are often knitted with double thread. Coton à feutrer D.M.C ${ }^{[A]}$ is made expressly for that purpose, and should be wound round the thread of which the whole stocking is made. For the instep, the part between the heel and toe, you must go on decreasing from the heel, until you have 2 stitches less on each needle, than you had at the ankle. Then knit the plain part of the foot, which should be as wide as the ankle, after which proceed to decrease for the toe, which should be a quarter the length of the whole foot. In spite of this careful subdivision, it is always well to count the stitches, to ensure perfect regularity. The number of stitches cast on, at the outset, for the same-sized stockings, must depend upon the size of the wool or cotton; we can only give the numbers approximately. Our calculation is based on the use of 5 needles; the given number has therefore to be cast on four times.
Coton à tricoter D.M.C
Numbers to be used
25
30
35
40
50

Number of stitches to be cast on one needle for stocking ordinary-sized

32
34
36
40
42

Number of stitches to be cast on one needle for stockings that are to reach above the knee

Scalloped edge (figs. $\underline{355}$ and $\underline{356}$ ).-This is the simplest and strongest edge you can have for a stocking, and is called the cat's-teeth edge.


Fig. 355. Scalloped stocking edge. Edge OPEN.


Fig. 356. Scalloped stocking edge. Edge FOLDED TOGETHER.

Having cast on the stitches, knit 6 to 10 rounds plain, according to the size of the cotton, then one round of alternate intakes and overs. Knit as many plain rounds as before, and with a sixth needle take up as many of the cast on stitches, as you have stitches on one of the upper needles. Turn this needle inwards, and place it against the outside needle and knit off both needles together. See that you knit the corresponding stitches off together, otherwise the scallops that form the edge will be crooked.

Common heel (fig. 357). -This is the simplest form of heel, and can be knitted either with or without an outside seam. Divide the stitches into four, and put two more on each of the heel needles than on the others, then make, according to the size of the cotton, from 15 to 20 seams; knit off all the stitches on the right needle and a third of those on the left. Supposing that you have 24 stitches, knit off 8 , then slip 1, knit 1, and pull the slipped stitch over, knit 2 plain, turn the work, slip the first, and purl the next 8 stitches of the second needle; purl the 9th and 10th together, purl 2, turn the work to the right side, and slip the first stitch on to the right needle. By means of these successive intakes after the 8 stitches, the knitting forms a plait on both sides of the heel.


Fig. 357. Common heel.
In all heels that are made after this pattern, the intakes must begin on the right side and the last one must be made on the wrong, so that once the heel is finished and the work turned, you can go on knitting plain.

When you have finished the stitches of the two heel needles up to the outside seams, take up the stitches on the sides of the heel with a spare needle and knit them on to the left heel needle, then knit the stitches reserved for the instep, take up the stitches on the right side of the heel again and knit them on to the fourth needle.
In the next round, knit all the stitches of the first needle plain, excepting the 4 last; knit the first and second of these together and the two last plain. Knit the two first stitches of the fourth needle plain, slip the third, knit the fourth and pull the slipped stitch over.

Heel in steps (fig. 358).-After dividing the stitches, make from 12 to 14 seams. Then knit as many stitches of the first needle as you have seams at the side; turn the work, and begin the needle with the seam you made first. Knit off as many stitches from the second needle as from the first. Make the same number of seams, as for the first part of the heel. When the seams are finished, take up the chain stitches, on both sides, make a decrease by knitting the last stitch of the small part and the first of the large, together; knit two; turn the work; slip the first stitch, knit to the second side, and decrease as in the first part.


Fig. 358. Heel in steps.
When you have decreased all the stitches up to the last, take up the slipped stitches of the first part, and begin the intakes for the instep in the ordinary way.
There is not more work in this pattern of heel than in any other; it fits closely and consequently wears well.
Plain heel (figs. $\underline{359}$ and $\underline{360}$ ). -Those who are not fond of purling will appreciate this and the following pattern for a plain heel.


Fig. 359. Plain heel.
Knit off the stitches of the first needle after the seam; then on to two spare needles, cast on, 8 more stitches than you had on one needle after dividing the stitches; put the stitches of the third and fourth needles together and knit the first round plain.
2nd round-knit together the 1 st and 2nd, and the 9 th and 10 th of the first auxiliary needle; and the 10 th and 9 th and 2nd and 1 st of the second.
3rd round-plain.
4 th round-knit together the 1 st and 2 nd and the 7 th and 8 th of the first needle.
5th round-plain.
6 th round-knit together the 1 st and 2 nd and the 5 th and 6 th of the first auxiliary needle; and the 6 th and 7 th and the last but one and the last, of the second.
7 th, 10 th, 11 th, 13 th, 14 th, 16 th, 17 th, 19 th, 20 th rounds all plain.
8th round-knit together the 1 st and 2 nd, and the 3 rd and 4 th of the first auxiliary needle, and the 4 th and 3rd, and the last stitch but one and the last, of the second.

9th round-After the two last intakes, purl together the 4th and 3rd stitches before the end of the 1st and 3rd needle, and the 3rd and 4th at the beginning of the 2nd and 4th needles.
12th, 15th, and 18th rounds-Decrease, the same as in the 9th round.
21st round-knit 2 plain, at the beginning of the 1st and 3rd needles; knit the next 2 together; knit together the 4th and 3rd, before the end of the 2nd and 4th needles; knit the last stitches plain; go on decreasing in this way until the purled stitches meet. After the plain round over the intakes, add four plain rounds, divide the stitches that remain for the sole, on two needles and cast off on the wrong side.
Now take up the auxiliary stitches, and in the first 3 plain rounds, knit together the last and the first of the 1st and 2nd needles, and the last and the first of the 3rd and 4th.
With the rest of the extra stitches make purled intakes, knitting two plain rounds after each round with an intake.
For the other kind of plain heel also (fig. 360 ), auxiliary stitches are required. Supposing that you have 20 stitches on each needle, you must cast on 28 stitches on to each auxiliary needle; knit together the 4th and 3rd stitches at the end of the 1st and 3rd needles, and the 3rd and 4th of the 2nd and 3rd needles, so that you may have 4 plain stitches between both intakes. Go on decreasing, knitting 2 plain rounds after each round with an intake, until you have 6 stitches left on each needle. Then knit together the first and last stitches of each needle, one plain round over it, and finish with a chain on the wrong side of the heel. Then take up the auxiliary stitches and knit the instep.


Fig. 360. Heel knitted on the right side.
Italian stocking (fig. 361).-The heel, sole and toe of a stocking always wear out before the instep. The Italians and Greeks economise time and material and facilitate the renewal of those parts that wear out, by knitting the upper part of the foot in two pieces. After knitting the heel in on or other of the above ways, work the foot as straight knitting with the two upper needles only, until you have the necessary length. Then knit the underneath part separately, in the same way. You must keep a chain along all edges and a narrow seam of one or two stitches. In the sole, which you make after finishing the upper part, your intakes must come directly after and before the seam. When you have got the same number of rounds in each piece, join them together and begin the toe.


Fig. 361. Italian stocking.
Sew up the slits left open on either side, with a needle and thread taking care to fit the corresponding stitches together.
In this manner, when one part wears out, you have only to unpick these side-seams and re-sole or re-heel the stocking as the case may be.

Toe (fig. 362).-To begin as before, with the simplest and most ordinary way of making this part of the stocking, divide the stitches equally on to the 4 needles; knit together the 4th and 3rd stitches before the end of the 1st and 3rd needles, knit the 2 last and 2 first stitches of the 2nd and 4th needles plain, and make an intake by slipping the 3rd stitch, knitting the 4th, and pulling the slipped stitch over. Begin by knitting 2 plain rounds after each of the first 4 rounds with an intake, and afterwards only one. When you have only 4 stitches left on each needle, collect them on two, and knit them together, two and two, on the wrong side of the stocking.


Fig. 362. Toe.
Toe (fig. 363).-Here, before beginning to decrease, divide the stitches by 8, 10, or 12 . Supposing that they have been divided by 10, knit 8 plain; knit the 9th and 10th together, 8 plain, knit two together, and so on, the whole way round. Then knit as many plain rounds as there are plain stitches between 2 intakes. In the next rounds with intakes, you will have one stitch less between each intake, in the second therefore, there should be 7 plain stitches between each intake, and you knit 7 plain rounds; and so on to the 7th round, when 2 stitches will remain, followed by 2 plain rounds; when there are only 4 stitches left on the needles, turn them in to the wrong side of the stocking, and finish off with a chain.


Fig. 363. Toe.
Toe (fig. $\mathbf{3 6 4}^{\text {) }}$.-Begin the intakes with the two first stitches of each needle, by the slip and pull over process, knit one plain
round after each round with an intake. In the following rounds, make the intake in the 2 nd round with the 3rd and 4 th stitches, in the 3rd, with the 5th and 6th stitches, in the 4 th, with the 7 th and 8th stitches, so that when finished the intakes form a kind of spiral. Finish off in the ordinary way.


Fig. 364. Toe.



Fig. 365. Toe.
1st round-purl the first 2 stitches on each needle together.
2 nd and 3 rd, 5 th and 6 th, 8 th and 9 th, 11 th and 12 th, 14 th and 15 th, 17 th and 18 th rounds-plain.
4 th round -1 plain, 1 intake with the 2 nd and 3rd stitches, and with the last 2 on each needle.
7 th round-knit the 2 first plain, make 1 intake with the 3 rd and 4 th stitches, and 1 with the 2 last.
In each of the next rounds with intakes, knit 1 plain stitch more.
When the two seams meet, pull the last stitch on each needle over the first of the next; knit the stitches between the intakes plain. Continue to decrease in this manner until the last stitches are reached.
Mending knitting.-Knitted articles are repaired by reconstructing the web with a needle and thread. When the stitches are not actually broken, they can be strengthened by new ones made over them, by means of a needle and thread.

Materials for darning stockings.-The thread used for darning a stocking should be a little finer than that of which it is made. Coton à repriser D.M.C ${ }^{[\mathrm{A}]}$ is the best, for as it consists of several strands it can be subdivided as occasion requires.
Strengthening the stitches (figs. $\underline{366}$ and $\underline{367 \text { ). -This can be done in two ways. In fig. } 366 \text {, the thread is brought out }}$ between two horizontal bars, passed upwards over a perpendicular bar, put in by the side of the same and brought out between the next horizontal bars.

Work the second row of stitches backwards; take up two threads on the left, pass downwards to the right, over one thread, take up the thread you passed over, and so on.


Fig. 366. Strengthening the loops. First way.
The other way, fig. $\underline{367}$, is, when you have brought out your needle, to carry it over one thread to the right and upwards over two, take up the next two threads on the left, pass downwards over two horizontal threads, and over one thread to the right, and put in the needle where it first came out; then working from right to left, take up two threads, pass over one to the right, and downwards over two horizontal ones, and so on. In the next row, hold your work, the finished part uppermost, carry the needle downwards over one horizontal thread, bring it out between two threads that lie separately and take it downwards again over two horizontal threads, pick up two threads, working from right to left, pass upwards over two threads and over one to the right, take up two to the left, and so on.


Fig. 367. Strengthening the loops. Second way.
Repairing plain knitting (fig. 368).-When a broken piece of stocking web requires to be replaced by new, draw the new and the old pieces together with a needle and thread, using the same thread the stocking is made of.


Fig. 368. Repairing plain knitting.

For this purpose, you must clear the loops, by ravelling them out top and bottom, and slip them on to knitting needles. The loops that are to be connected must lie exactly opposite to each other. Enter your threaded needle upwards from below through the first disengaged upper loop, and slip it off the knitting needle, then enter the needle, downwards from above through the first lower loop, and upwards from below through the next, and draw out just enough thread to make the new loop the same size as the old ones. Then enter the needle, downwards from above, through the same upper loop you took up before, taking up also the one next to it, and passing your needle through it from underneath; draw out the thread to form the new loop and descend again to the next, and so on.

Repairing purled knitting (fig. 369).-To repair ribbed surfaces consisting of alternate rows of plain and purl, proceed as follows: hold the article so that the row of purled stitches is exactly opposite the upper part. Enter your needle upwards from below, through the first loop of the upper part; join the two lower loops together as in fig. 368; carry the needle upwards again, and enter it upwards from below through the first loop of the upper part and downwards from above, through the loop next it. Join the lower loops again, as in plain knitting.


Fig. 369. Repairing purled KNITting.
Disengaging the loops for darning (fig. 370).-Where the threads are broken, new loops have to be made, and the broken ones ravelled out and cut, so that the horizontal loops may stand out clear and distinct. Cut the threads on the vertical sides so that the loops form an edge and the hole is square, clear two or four loops in the corners of the hole, fold them in and fasten them off at the back by a stitch or two. The darns we are next going to describe should be made upon a ball to prevent drawing the threads too tightly.


Fig. 370. Disengaging the LOOPS FOR DARNING.

Darning on threads stretched horizontally (figs. 371 and 372 ).-Carry a horizontal thread across on the wrong side, in the place of each broken thread, securing it in the sound part of the stocking, about two threads from the edge of the hole. When you have made this foundation, put the needle in on the right side near the stitch that is nearest to the sound part on the left, fig. 371.


Fig. 371. Darning on threads STRETCHED HORIZONTALLY. Position of the horizontal THREADS.


Fig. 372. Darning on threads stretched horizontally. How TO COVER THE HORIZONTAL THREADS.

Then descending, pick up the nearest horizontal thread from below, so that the working thread lies to the right of the needle, and cover all the horizontal threads you have laid in this manner.
When you have taken up the last thread, pass the needle downwards from above, through the nearest loop, and bring it back through the one at which you entered it.
To make, in reascending, the second half of the loop, you must lay your thread to the right of the needle, fig. 372 .
When you have reached the last thread, enter the needle at the loop, opposite the one it came out of.
Darning on threads stretched obliquely across (figs. $\underline{373}$ and $\underline{374}$ ). - As the illustration shows, you have to pick up all the cleared loops, besides two or three on either side of the empty space. The number and length of the threads which you carry across, must correspond with those of the threads you have to replace.


Fig. 373. Darning on threads stretched obliouely across. Position of the threads.


Fig. 374. Darning on threads STRETCHED OBLIQUELY ACROSS. How to cover the oblique THREADS.

Fasten in, from the right side, a rather finer thread than the one the original web is made of, and make a few stitches over the existing ones, in the row you are about to complete.
Enter the needle upwards from below, through the first disengaged loop, pass it under two threads issuing from one loop, and then bring it back again into the same loop between the two slanting threads, drawing it out again upwards from below, through the next loop, and so on. The new loop must be just equal to the old ones in size. Make in the same manner as at the beginning, two or three stitches at the end of the row, within the edge of the hole. Work back in a similar way, with this difference only, that you turn your work round.

Piqué pattern (fig. 375).-The following patterns are suitable for making counterpanes, petticoats, vests and other articles of clothing. Select a suitable number of Coton à tricoter D.M.C. Cast on a number of stitches divisible by 7 , and begin by 6 rows of 5 plain stitches and 1 purled, taken from behind.
7th row-purl from behind the 3rd of the 5 plain, and knit 5 plain more and so on.


Fig. 375. Piqué pattern.
Materials: Coton à tricoter D.M.C Nos. 6 to
30.

Piqué pattern (fig. 376).-Cast on a number of stitches divisible by 14.
1st and 2nd row-* purl 7, knit 1, purl 1, knit 1, purl 1, knit 1, purl 1, knit 1; repeat from *.
3rd and 4th row-* knit 7, purl 1, knit 1, purl 1, knit 1, purl 1, knit 1, purl 1; repeat from *.
Repeat the whole from the 1st row.


Fig. 376. Pioué pattern.
Materials: Coton à tricoter D.M.C Nos. 6 to 30, or Coton pour crochet 4 fils D.M.C Nos. 4 to 20.[A]

Piqué pattern (fig. 377).-Cast on a number of stitches divisible by 4.
The 8 first rows-knit 2, purl 2.
9th and 10th row-knit 2 over the 2 purled, purl 2 over the 2 knitted of the 8th row.
11 th and 12 th rows-the same as the first 8 rows.
13th and 14th row-the same as the 9th and 10th row.
15th to the 23 rd-the same as the first 8 rows.


Fig. 377. Pigué pattern.
Materials: The same as for fig. 371.
Stripes for counterpanes (fig. 378).-This pattern is to be worked in stripes, of two colours; we may here take occasion to mention that in choosing two colours, one dark and one light, for a piece of work, the dark cotton should always be one or two numbers finer than the light, because the dark dyes thicken the cotton more than the light ones do. The blue, red and dark brown dyes sink into the cotton more and cause it to swell, whereas the lighter dyes do not affect its thickness.


Fig. 378. Stripes for counterpanes.
Materials: Coton à tricoter D.M.C No. 6, 8, 10 or 12.
Colours: Rouge-Turc 321 and Gris-Tilleul 391. [A]
Hence it comes, that for the stripes, here described, we were obliged to take No. 8 of the red cotton and No. 6 of the green, in order that the same number of stitches should make the same length of stripe.
Cast on 28 stitches:
1st needle-slip 1, knit 2, over, knit 1, knit 1 from behind, purl 1 from behind, knit 1 from behind, purl 2, knit 5, purl 2, knit 1 from behind, purl 1 from behind, knit 1 from behind, purl 1 from behind, knit 1 from behind, purl 1 from behind, knit 1 from behind, purl 1 from behind, knit 1, over, knit 3, 1 chain stitch.
2nd needle-wrong side: slip 1, purl 2, purl 2 together, purl 1 from behind, knit 1 from behind, purl 1 from behind, knit 1 from behind, purl 1 from behind, knit 1 from behind, purl 1 from behind, knit 2, purl 5, knit 2, purl 1 from behind, knit 1 from behind, knit 2 together, purl 2, 1 chain stitch.

3rd needle-right side: slip 1, knit 2, over, knit 1, knit 1 from behind, purl 1 from behind, knit 1 from behind, purl 1 from behind, knit 1 from behind, purl 2, knit 5, purl 2, knit 1 from behind, purl 1 from behind, knit 1 from behind, purl 1 from behind, knit 1 from behind, purl 1 from behind, knit 1, over, knit 2,1 chain stitch.
4th needle-wrong side: slip 1, purl 2, purl 2 together, purl 1 from behind, knit 1 from behind, purl 1 from behind, knit 1 from behind, purl 1 from behind, knit 2, purl 5, knit 2, purl 1 from behind, knit 1 from behind, purl 1 from behind, knit 1 from behind, purl 1 from behind, knit 1 from behind, purl 2 together, purl 2, 1 chain stitch.
behind, knit 1 from behind, purl 1 from behind, knit 1 from behind, purl 2, knit 5, purl 2, knit 1 from behind, purl 1 from behind, knit 1 from behind, purl 1 from behind, knit 1, over, knit 2, 1 chain stitch.

6th needle-on the wrong side: slip 1, purl 2, purl 2 together, purl 1 from behind, knit 1 from behind, purl 1 from behind, knit 2, purl 5, knit 2, purl 1 from behind, knit 1 from behind, purl 1 from behind, knit 1 from behind, purl 1 from behind, knit 1 from behind, purl 1 from behind, knit 1 from behind, purl 2 together, purl 2, 1 chain stitch.
7th needle like the 5th, 8th needle like the 4th, 9th needle like the 3rd, 10 th needle like the 2 nd, 11 th needle like the 1 st. Five plain stitches form a zigzag in the middle of the stripe.

Join the stripes with crochet stitches; of which several kinds are described in the next chapter.
Knitted square (fig. ${ }^{379}$ ).-Cast on 2 stitches on to each of the 4 needles. Repeat always 3 times after the asterisk.


Fig. 379. Knitted square.
Materials: Coton à tricoter D.M.C No. 8 or Fil à pointer D.M.C No. 20.
1st row-over, knit 1, over, knit 1 *.
2nd row-knit 1, over, knit 1, over, knit 2 *.
3rd row—knit 1, purl 1, over, knit 1, over, purl 1, knit 2 *.
4th row-knit 1, purl 2, over, knit 1, over, purl 2, knit 2 *.
5th row—knit 1, purl 3, over, knit 1, over, purl 3, knit 2 *.
6 th row-knit 1, purl 4, over, knit 1, over, purl 4, knit 2 *.
7th row-knit 1, purl 5, over, knit 1, over, purl 5, knit 2 *.
8th row—knit 1, purl 4, knit 2, over, knit 2, over, knit 1, purl 4, knit 2 *.
9th row-knit 1, purl 3, knit 4, over, knit 1, over, knit 4, purl 3, knit 2 *. 10 th row-knit 1 , purl 2 , knit 6 , over, knit 1 , over, knit 6 , purl 2 , knit $2 *$.

11th row—knit 1, purl 1, knit 8, over, knit 1, over, knit 8, purl 1, knit 2 .
12 th row-knit 1 , purl 2 , knit 5 , cross 2 stitches (that is, first knit off the second stitch plain and then the first), knit 1 , over, knit 1, over, knit 1, cross 2, knit 5, purl 2, knit 2 *.

13th row—knit 1, purl 3, knit 8, purl 1, over, knit 1, over, purl 1, knit 8, purl 3, knit 2 *.
14 th row-knit 1, purl 4, knit 4, cross 2, knit 1, purl 2, over, knit 1, over, purl 2, knit 1, cross 2, knit 4, purl 4, knit 2 *. 15 th row-knit 1, purl 5, knit 6, purl 3, over, knit 1, over, purl 3, knit 6, purl 5, knit 2 *.
16 th row-knit 1 , purl 4 , knit 3 , cross 2 , knit 1 , purl 4 , over, knit 1 , over, purl 4 , knit 1 , cross 2 , knit 3 , purl 4 , knit $2 *$.
17 th row-knit 1, purl 3, knit 7, purl 5, over, knit 1, over, purl 5, knit 7, purl 3, knit 2 *.
18 th row-knit 1 , purl 2 , knit 5 , cross 2 , knit 1 , purl 4, knit 2 , over, knit 1 , over, knit 2 , purl 4 , knit 1 , cross 2 , knit 5 , purl 2 , knit 2 *.

19th row—knit 1, purl 1, knit 9, purl 3, knit 4, over, knit 1, over, knit 4, purl 3, knit 9, purl 1, knit 2 .
20th row-knit 1, purl 2, knit 5, cross 2 , knit 1, purl 2, knit 6, over, knit 1, over, knit 6, purl 2 , knit 1 , cross 2 , knit 5 , purl 2 , knit 2*.

21st row—knit 1, purl 3, knit 7, purl 1, knit 8, over, knit 1, over, knit 8, purl 1, knit 7, purl 3, knit 2 *.
22nd row-knit 1, purl 4, knit 3, cross 2, knit 1, purl 2, knit 6, cross 2, knit 1, purl 2, knit 5, cross 2 , knit 1 , over, knit 1 , cross 2 , knit 5, purl 2, knit 1, cross 2, knit 3, purl 4, knit 2 *.
23rd row—knit 1, purl 5, knit 3, purl 3, knit 7, purl 1, over, knit 1, over, purl 1, knit 7, purl 3, knit 5, purl 5, knit 2 *.
24 th row-knit 1 , purl 4 , knit 3 , cross 2 , knit 1 , purl 4 , knit 3 , cross 2 , knit 1 , purl 2 , over, knit 1 , over, purl 2 , knit 1 , cross 2 , knit 3, purl 4, knit 1, cross 2, knit 3, purl 4, knit 2 *.
25th row—knit 1, purl 3, knit 8, purl 5, knit 5, purl 3, over, knit 1, over, purl 3, knit 5, purl 5, knit 5, purl 3, knit 2 *.
26 th row-knit 1, purl 2, knit 5, cross 2, knit 1, purl 4, knit 3, cross 2, knit 1, purl 4, over, knit 1, over, purl 4, knit 1 , cross 2 , knit 3, purl 4, knit 1, cross 2, knit 5, purl 2, knit 2 *.

27th round—knit 1, purl 1, knit 9, purl 3, knit 7, purl 5, over, knit 1, over, purl 5, knit 7, purl 3, knit 9, purl 1, knit 2 *.
Finish the square with several rows of purl and a chain.
Plain patent knitting, or brioche pattern (fig. 380).-This easy and extremely elastic stitch is used for all sorts of articles of clothing, and is worked in two rows.


Fig. 380. Plain patent knitting, or BRIOCHE PATTERN.

Cast on a number of stitches that divides by 3 , with 4 extra for the edge.
1st row-slip 1, knit 1, * over, put the needle into the next stitch, as if to purl it, slip the stitch from the left needle to the right, knit 1, repeat from *, and finish with 2 plain.

2nd row-begin with 1 chain, knit 1, knit the slipped stitch and the over together, over, slip the single stitch that remains, from the left needle to the right. When the knitting is round, you purl and knit the intake alternately.
Double patent knitting (fig. 381).-Begin on the wrong side.


Fig. 381. Double patent knititing.
1st row-like the 1 st row of fig. $\underline{380}$.
2nd row-knit all the stitches, pass the over by putting the needle into it from right to left.
3rd row-like the second row of fig. 380 . Now, it is only the second and third row that should alternate.
Patent knitting has a charming effect, done in two colours, by working them alternately backwards and forwards.
Plaited stitch (fig. 382).-This kind of stitch is worked in stripes, which, for scarves, counterpanes, etc., are generally joined together with stripes of plain knitting. For counterpanes, the lower numbers of D.M.C cottons are most suitable, for smaller articles the higher numbers. Plaited stitch is formed by crossing the stitches, that is, by knitting the second stitch on the left needle to begin with, and then the first stitch.


Fig. 382. Plaited stitch.
Materials: Coton à tricoter D.M.C Nos. 8 to 20, or Cordonnet 6 fils D.M.C Nos. 10 to 30.

If you cross two or more stitches in a few successive rows without slipping them, the stitches will be seen by degrees, to form a plait, as shown in fig. 382.

1st row-purl 4, cast on 3 stitches on to an auxiliary needle, and leave it hanging on the inside of the work; knit 3 and then knit the 3 stitches on the extra needle, purl 4.
Then follow 5 rows, in which you purl all the purled stitches and knit all the plain ones. After which 5 rows you repeat from the beginning.

Turkish stitch (fig. 383).-1st row—slip 1, knit 1, over, knit 2 together, over, knit 2 together, and so on to the 2 last stitches, which you knit plain.


Fig. 383. Turkish stitch.
2nd row-slip the 1st, knit the 2nd and the 3rd plain, the latter having been formed by the last over on the 1st needle; 1 over, 1 intake with the stitch and the over, 1 over, 1 intake and so on.

Turkish stitch with beads (fig. 384).-String the beads on the thread before you begin to knit. When you only use one kind of bead, thread a needle with your knitting cotton and run it through the thread on which the beads are strung.
When you use several kinds, you must count and thread them on in the required order. Beaded knitting is little in request now, excepting for tobacco pouches and purses; for which you should use Cordonnet 6 fils D.M.C Nos. 35, in any colour, and small beads.


Fig. 384. Turkish stitch with beads.
For close beaded knitting, plain stitch is the best. Run the beads down singly at each stitch. The beads will fall on the reverse side of the work so that in knitting with beads, remember that the reverse side will be the right side.
To work fig. $\underline{384}$, which represents the same stitch as fig. $\underline{383}$, you run down 2 or sometimes 3 beads before knitting each stitch.
Knitting pattern with two kinds of cotton (fig. 385).-A variety of pretty things, such as open-work stockings, shawls, curtains etc. can be made in this pattern, worked with two sizes of thread. To give it its full effect it ought to be knitted with coarse needles, Nos. 10, 11, or 12.


Fig. 385. Knitting pattern with two kinds of cotton.

## Materials: Fil à pointer D.M.C No. 20 or 30,

 and Cordonnet 6 fils D.M.C No. 60 or 80, écru. ${ }^{[A]}$Cast on a number of stitches that divides by 8. Take the coarse thread to begin with.
1 st and 2nd row-purl.
3rd row-purl 5, 2 overs, purl 5.
4th row-with the fine thread: over, knit 2 together, slip the next stitch of the previous row, drop the double over, slip the next stitch, 1 over, knit 2 together.
5th row-over, knit 2 together, over, knit 2 together, and so on.
6 th row-like the last. See that the 2 slipped stitches, in the coarse thread, always come on the right side of the work.
7th row—with the coarse thread: purl 4, purl the 2 slipped stitches of the 3rd row together, then repeat from the 1st row.
See that in the 3rd row the 2 overs come between the stitches formed by the 2 stitches that were formed by the 1 st over, and the 2 stitches of the 6th row, that were knitted together.

Knitting pattern with two kinds of thread (fig. 386).-Cast on a number of stitches that divides by 4.


Fig. 386. Knitting pattern with two kinds of thread.
Materials: Fil à pointer D.M.C Nos. 25 to 30 and Cordonnet 6 fils D.M.C No. 60 or 80.

1st row-with coarse thread: purl.
2nd row-plain.
3rd row-with fine thread: over, 1 intake, knit 2.
4th row-plain.
5th row-knit 1, over, 1 intake, knit 1.
6th row-plain.
7th row-knit 2, over, 1 intake.
8th row-plain.
9th and 10th row-with the coarse thread: purl.
11th row-plain.

12th row-with the fine thread: over, knit 2 together.
13th row-plain.
14th row-purl. Then repeat from the 1st row.
Knitting pattern with dropped stitches (fig. 387).-Cast on a number of stitches that divides by 9.


Fig. 387. Knitting pattern with dropped stitches.

## Materials: Coton à tricoter D.M.C Nos. 16 to

 30, Coton pour crochet D.M.C Nos. 6 to 30, or Fil à pointer D.M.C Nos. 10 to 30 .1st row-over, slip 3, knit 1, 2 overs, knit 3, 2 overs, knit 1.
2nd row-knit 3, slip the next, drop the 2 overs, knit 4, turn the work, purl 4, turn the work, knit 4, drop the 2 overs, slip the next stitch.

3rd row-over, slip 2, knit 1, pull slipped stitches over, drop the first of the 4 stitches, knit first the stitch that follows the second double over, then the 4 others plain, and lastly, take up the dropped stitch and knit it plain on the right side of the work.

4th row-knit plain.
5th row-over, slip 3, over, knit 6.
6th row-knit plain, and repeat from the 1st row.
Knitting pattern (fig. 388).-This pattern may be worked with any one of the D.M.C cottons recommended for fig. 387, but in the case of anything that is not wearing apparel, Fil à pointer D.M.C will be found more suitable. Cast on a number of stitches that divides by 18 .


Fig. 388. Knitting pattern.
1st row—over, knit 2 together, over, knit 2 together, over, knit 2 together, over, knit 4, knit 2 together, over, slip 2, knit 1, pull slipped stitches over, over, knit 3.

Each row marked by an even number is to be knitted plain throughout.
3rd row-knit 1, over, knit 2 together, over, knit 2 together, over, knit 2 together, over, slip 1, knit 1, pull slipped stitch over, knit 2, knit 2 together, over, knit 3, over, slip 1, knit 1, pull slipped stitch over, knit 1.

5th row-knit 2, over, knit 2 together, over, knit 2 together, over, knit 2 together, over, slip 1, knit 1, pull slipped stitch over, knit 2 together, over, knit 5, over, knit 2 together.
7th row-knit 3, over, knit 2 together, over, knit 2 together, over, knit 2 together, over, slip 1, knit 1, pull slipped stitch over, knit 1, over, slip 1, knit 1, pull slipped stitch over, knit 1, knit 2 together, over, knit 2.

9th row-knit 4, over, knit 2 together, over, knit 2 together, over, knit 2 together, over, slip 1, knit 1, pull slipped stitch over knit 1, over, slip 2, knit 1, pull slipped stitches over, over, knit 2.

11th row-knit 5, over, knit 2 together, over, knit 2 together, over, knit 2 together, over, knit 2 together, over, slip 1, knit 1, pull slipped stitch over, knit 6.
13th row-knit 7, over, knit 2 together, over, purl 2 together, over, slip 1, knit 1, pull slipped stitch over, knit 5
Repeat from the beginning.
Knitting pattern (fig. 389).-Cast on a number of stitches that divides by 9 .


Fig. 389. Knitting pattern.
Materials: Cordonnet 6 fils D.M.C, or Fil à pointer D.M.C

1st row-2 overs, slip 1, knit 1, pull slipped stitch over, knit 5, knit 2 together.
2nd row-2 overs, slip the first over on to the right needle, knit the second over, slip 1, knit 1, pull slipped stitch over, knit 3, knit 2 together.
3rd row-2 overs, slip the overs of the two first rows on to the right needle, slip 1, knit 1, pull slipped stitch over, knit 1, knit 2 together.
4th row-drop the overs of the 3 first rows and knit 8 double stitches, that is, knit 1 stitch on the over, slip it on to the left needle and knit it again.

These 8 stitches finished, make 2 overs, and slip 3, knit 1, pull slipped stitches over. Repeat from the beginning.
Each time you repeat the 4th row, make double stitches on 4 overs, that is, on 4 threads.
Knitting pattern (fig. 390). -This pattern is suitable for children's braces. For Coton à repriser D.M.C Nos. 6 to 20, which is the best for the purpose, you will require fine bone needles.


Fig. 390. Knitting pattern.
Materials: Coton à repriser D.M.C Nos. 5 to 20.

Cast on a number of stitches that divides by 4.
1st row-over, slip 1, knit 1, pull slipped stitch over, knit 2.
2nd row-knit 1, over, slip 1, knit 1, pull slipped stitch over, knit 1.
3rd row-knit 2, over, slip 1, knit 1, pull slipped stitch over.
4th row-slip 1, knit 1, pull slipped stitch over, knit 2, over.
5th row-knit 2 together, over, knit 2.
6 th row-knit 1, knit 2 together, over, knit 1.
7 th row-knit 2 together, over, knit 2.
8th row-knit 2, knit 2 together, over.
Repeat from the beginning.
 hoods and the like. The needles, which may be either of bone or steel must match the cotton in size; steel needles are the best for any thing finer than No. 16, of D.M.C Coton à tricoter.


Cast on a number of stitches that divides by 3 .
1 st row-over, slip 1 stitch on to the right needle, knit the 2 next stitches, and draw the first stitch over them.
2nd row and 4 th row-knit plain.
3rd row-like the first, but note, that the stitch that was the third in the first row, will be the first here.
Repeat from the beginning.
Knitting pattern (fig. 392).-Cast on a number of stitches that divides by 3.


Fig. 392. KNitting pattern.
1st row-over, knit the 2 first together, draw the 3rd stitch through the stitch formed by the intake and knit it off plain, then knit the stitch that was pulled over it.

2nd and 4 th row-knit plain.
3rd row-like the first; the third stitch here is the same that was drawn through the third stitch in the first row.
Knitting pattern (fig. 393).-Cast on a number of stitches that divides by 14.


Fig. 393. Knitting pattern.
1st row—over, knit 1, over, knit 2, purl 3, knit 3 together, purl 3, knit 2.
2nd row-knit 5, purl 7, knit 2.
3rd row-over, knit 3, over, knit 2, purl 2, knit 3 together, purl 2, knit 2.
4th row-knit 7, purl 5, knit 2.
5 th row-over, knit 5, over, knit 2, purl 1, knit 3 together, purl 1, knit 2.
6 th row-knit 9, purl 3, knit 2.
7th row-over, knit 7, over, knit 2, knit 3 together, knit 2.
8th row-knit 11, purl 1, knit 1.
Repeat from the beginning but in the reverse order, that is, purling the knitted stitches and knitting the purled.
Knitted lace (fig. 394).-Knitted lace looks best, made of a smooth, silky thread which shows up the pattern better than any other material. As a knitted edging makes a very pretty finish to almost any kind of knitted article, we give a selection of some of the easiest and most effective patterns that we consider suitable for the purpose.


Fig. 394. Knitted lace.
Materials: Cordonnet 6 fils D.M.C Nos. 25 to 60, Fil à
dentelle D.M.C Nos. 25 to 70.[A]
Cast on 8 stitches.
1st needle-1 chain, knit 2, over, knit 2 together, knit 2,2 overs, knit 2.
2nd needle-knit 3, purl 1, knit 4, over, knit 2 together, 1 chain.
3rd needle-1 chain, knit 2, over, knit 2 together, knit 6.
4th needle-2 chain, knit 5, over, knit 2 together, 1 chain.
Repeat from the first needle.


Fig. 395. Knitted lace.
Materials: Coton à tricoter D.M.C Nos. 25 to 50, Fil à pointer D.M.C Nos. 10 to 30, Cordonnet 6 fils D.M.C Nos. 10 to 30. [A]

1st needle-knit 2 together, 2 overs, knit 2 together, 2 overs, knit 3, over, knit 2 together, 1 chain.
2nd needle-1 chain, knit 2, knit 2 together, knit 2, purl 1, knit 2, purl 1, knit 1.
3rd needle-knit 2 together, 2 overs, knit 2 together, 2 overs, knit 4, over, knit 2 together, 1 chain.
4th needle-1 chain, knit 2, knit 2 together, knit 3, purl 1, knit 2, purl 1, knit 1.
5th needle-knit 2 together, 2 overs, knit 2 together, 2 overs, knit 5, over, knit 2 together, 1 chain.
6 th needle-1 chain, knit 2 , knit 2 together, knit 4 , purl 1, knit 2 , purl 1, knit 1.
7th needle-knit 10, over, knit 2 together, 1 chain.
8th needle-1 chain, knit 2, knit 2 together, knit 8.
9th needle-4 chain, 2 overs, knit 2 together, 2 overs, knit 3 , over, knit 2 together, 1 chain.
Repeat from the second needle.
Knitted lace (fig. 396).-Cast on 13 stitches.


Fig. 396. Knitted lace.
Materials: Fil d'Alsace D.M.C Nos. 30 to 70, Cordonnet 6 fils D.M.C Nos. 20 to 80, or Fil à dentelle D.M.C Nos. 25 to 60. ${ }^{[A]}$

1st needle-1 chain, purl 1, purl 2 together, over, knit 8, 1 chain.
2 nd needle-1 chain, knit 8 , over, knit 2 , knit 1 from behind, 1 chain.
3rd needle-1 chain, purl 2, over, purl 2 together, over, knit 8,1 chain.
4 th needle-1 chain, knit 8 , over, knit 2 together, over, knit 2 , knit 1 from behind, 1 chain.
5th needle-1 chain, purl 2 , over, purl 2 together, over, purl 2 together, over, knit 8,1 chain.
6 th needle-1 chain, knit 8 , over, knit 2 together, over, knit 2 together, over, knit 2 , knit 1 from behind, 1 chain.
7th needle-1 chain, purl 2, over, purl 2 together, over, purl 2 together, over, purl 2 together, over, knit 8,1 chain.
8th needle-1 chain, knit 8, over, knit 2 together, over, knit 2 together, over, knit 2 together, over, knit 2 , knit 1 from behind, 1 chain.
9th needle-1 chain, purl 2, over, purl 2 together, over, purl 2 together, over, purl 2 together, over, purl 2 together, over, knit 8, 1 chain.

10th needle-8 chain, knit 10, knit 1 from behind, 1 chain.
Repeat from the first needle.
Knitted lace (fig. 397).-Cast on 11 stitches.


Fig. 397. Knitted lace.
Materials: Fil d’Alsace D.M.C Nos. 30 to 70,
Cordonnet 6 fils D.M.C Nos. 25 to 70, Fil à
dentelle D.M.C Nos. 25 to 80.[A]
1st needle-1 chain, knit 1 from behind, over, knit 1, over, slip 1, knit 1, pull slipped stitch over, over, slip 1, knit 1, pull slipped stitch over, over, slip 1, knit 1, pull slipped stitch over, knit 1, 1 chain.

The 2nd, 4th, 6th, 8th, 10th, 12th, 14th, and 16th needle, purled.
3rd needle-1 chain, knit 1 from behind, over, knit 3, over, slip 1, knit 1, pull slipped stitch over, over, slip 1, knit 1, pull slipped stitch over, over, slip 1, knit 1, pull slipped stitch over, 1 chain.
5th needle-1 chain, knit 1 from behind, over, knit 5, over, slip 1, knit 1, pull slipped stitch over, over, slip 1, knit 1, pull slipped stitch over, knit 1, 1 chain.

7th needle-1 chain, knit 1 from behind, over, knit 7, over, slip 1, knit 1, pull slipped stitch over, over, slip 1, knit 1, pull slipped stitch over, 1 chain.

9th needle-1 chain, slip 1, knit 1, pull slipped stitch over, over, slip 1, knit 1, pull slipped stitch over, knit 3, knit 2 together, over, knit 2 together, over, knit 2,1 chain.
11th needle-1 chain, slip 1, knit 1, pull slipped stitch over, over, slip 1, knit 1, pull slipped stitch over, knit 1, knit 2 together, over, knit 2 together, over, knit 2 together, over, knit 1, 1 chain.

13th needle-1 chain, slip 1, knit 1, pull slipped stitch over, over, knit 3 together, over, knit 2 together, over, knit 2 together, over, knit 2, 1 chain.

15th needle-1 chain, slip 1, knit 1, pull slipped stitch over, knit 1, knit 2 together, over, knit 2 together, over, knit 1, 1 chain. Repeat from the first needle.

Rose for knitting (fig. 398).-Repeat all the directions, 8 ending with the sign *, 7 times.


Fig. 398. Rose for knititing.
Materials: Fil d'Alsace D.M.C in balls, No. 60 or 70, Fil
à dentelle D.M.C No. 40, 50 or 60 .[A]
Cast on 8 stitches, on to 4 needles, two on each; close the ring.
2nd round-8 times: over, knit 1.
The 3rd, 5th, 7th, 9th, 11 th, 13 th, 15 th, 17 th, 19 th, 21 st, 23 rd, and 25 th round, knit plain.
4th round-over, knit 3, over, knit 1 from behind *.
6 th round-over, knit 4, over, knit 1 from behind *.
8 th round-over, knit 7 , over, knit 1 from behind *. 10th round-over, slip 1, knit 1, pull slipped stitch over, knit 2 together, over, knit 1 *.
12 th round-over, knit 2 together, over, knit 3 *.
14th round—over, knit 1 from behind, over, knit 5 *.
16th round-over, knit 1 from behind, over, knit 7 *.
18th round—over, knit 1 from behind, over, knit 9 *.
20th round—over, knit 1 from behind, over, knit 11 *.
22nd round-over, knit 1 from behind, over, knit 13 *.
24th round—over, knit 1 from behind, over, knit 15 *.
26th round—over, knit 3, over, knit 5, knit 2 together, purl 1, slip 1, knit 1, pull slipped stitch over, knit 5 *.
27th round-knit 11, purl 1, knit 6 .
28th round-over, knit 5, over, knit 4, knit 2 together, purl 1, slip 1, knit 1, pull slipped stitch over, knit 4 *. 29th round-knit 12, purl 1, knit 5 *.
30th round—over, knit 1, over, slip 1, knit 1, pull slipped stitch over, knit 1, knit 2 together, over, knit 1, over, knit 3, knit 2 together, purl 1, slip 1, knit 1, pull slipped stitch over, knit 3 *.

31st round-knit 13, purl 1, knit 4 *.
32 nd round-over, knit 3, over, slip 2, knit 1, pull slipped stitches over, over, knit 3, over, knit 2, knit 2 together, purl 1, slip 1, knit 1, pull slipped stitch over, knit 2 *.
33 rd round-knit 14, purl 1, knit 3.
34th round—over, knit 11, over, knit 1, knit 2 together, purl 1, slip 1, knit 1, pull slipped stitch over, knit 1 *.
35 th round-knit 15, purl 1, knit 2.
36 th round-over, knit 1, over, slip 1, knit 1, pull slipped stitch over, knit 1, knit 2 together, over, knit 1, over, slip 1, knit 1, pull slipped stitch over, knit 1, knit 2 together, over, knit 1, over, knit 2 together, purl 1, slip 1, knit 1, pull slipped stitch over *. 37th round-knit 16, purl 1, knit 1.
38th round-over, knit 3, over, slip 2, knit 1, pull slipped stitches over, over, knit 3, over, slip 2, knit 1, pull slipped stitches over, over, knit 3, over, knit 2, over, slip 2, knit 1, pull slipped stitches over *.
39th, 41st and 43rd round-knit plain.
40th round—over, knit 4, knit 2 together, over, knit 5, over, slip 1, knit 1, pull slipped stitch over, knit 4, over, knit 1.
42nd round-knit 1, over, slip 1, knit 1, pull slipped stitch over, knit 1, knit 2 together, over, knit 1, over, slip 1, knit 1, pull slipped stitch over, knit 1, knit 2 together, over, knit 1, over, slip 1, knit 1, pull slipped stitch over, knit 1, knit 2 together, over, knit 2 *.
44th round-knit 2, over, slip 2, knit 1, pull slipped stitches over, over, knit 3, over, slip 2, knit 1, pull slipped stitches over, over, knit 3, over, slip 2, knit 1, pull slipped stitches over, over, knit 3 *.
Finish with three purled rounds.
Knitted edging (fig. 399).-Cast on 43 stitches.


Fig. 399. Knitted edging.
Materials: Fil d'Alsace D.M.C
Nos. 40 to 70 or Fil à dentelle
D.M.C Nos. 25 to 50, or Cordonnet 6 fils D.M.C Nos. 25 to 60.[A]

1st needle, make a chain of 2 stitches, over, knit 1 from behind, over, knit 1 from behind, over, knit 1 , over, slip 1, knit 1, pull slipped stitch over, knit 1, knit 2 together, over, knit 1, over, slip 1, knit 1, pull slipped stitch over, knit 1, knit 2 together, over, knit 1, knit 1 from behind, purl 1, knit 1 from behind, over, knit 1, knit 2 together, purl 1, slip 1, knit 1, pull slipped stitch over, knit 1, purl 1, knit 1, knit 2 together, knit 1 from behind, slip 1, knit 1, pull slipped stitch over, knit 1, over, knit 1 from behind, purl 1, knit 1 from behind, over, knit 2 together, knit 1, 1 chain.
2nd needle-1 chain, knit 2, purl 1, purl 1 from behind, knit 1, purl 1 from behind, purl 3, knit 1, purl 2, knit 1, purl 2, knit 1, purl 3, purl 1 from behind, knit 1, purl 1 from behind, purl 14, purl 1 from behind, purl 4.

3rd needle-slip 2 stitches over for a chain, over, knit 1 from behind, over, knit 1 from behind, over, knit 3, over, slip 2, knit 1, pull slipped stitches over, over, knit 3, over, slip 2, knit 1, pull slipped stitches over, over, knit 2 together, over, knit 1 from behind, purl 1, knit 1 from behind, over, knit 1, over knit 2 together, purl 1, slip 1, knit 1, pull slipped stitch over, purl 1, knit 2 together, purl 1, slip 1, knit 1, pull slipped stitch over, over, knit 1, over, knit 1 from behind, purl 1, knit 1 from behind, over, knit 2 together, knit 1, 1 chain.
4th needle-slip 1, knit 2, purl 1, purl 1 from behind, knit 1, purl 1 from behind, purl 4, knit 1, purl 1, knit 1, purl 1, knit 1, purl 4, purl 1 from behind, knit 1, purl 1 from behind, purl 15, purl 1 from behind, purl 4.
5th needle-slip 2 stitches over for a chain, over, knit 1 from behind, over, knit 1 from behind, over, knit 2, over, slip 1, knit 1, pull slipped stitch over, knit 2 together, over, knit 2, over, slip 1, knit 1, pull slipped stitch over, knit 2 together, over, knit 2 together, over, knit 1, knit 1 from behind, purl 1, knit 1 from behind, over, knit 3, over, slip 2, knit 1, pull slipped stitches over, purl 1, slip 2, knit 1, pull slipped stitches over, over, knit 3, over, knit 1 from behind, purl 1, knit 1 from behind, over, knit 2 together, knit 1, 1 chain.
6th needle-slip 1, knit 2, purl 1, purl 1 from behind, knit 1, purl 1 from behind, purl 6, knit 1, purl 6, purl 1 from behind, knit 1, purl 1 from behind, purl 16, purl 1 from behind, purl 4.
7th needle-slip 2 stitches over for a chain, over, knit 1 from behind, over, knit 1 from behind, over, knit 1, over, slip 1, knit 1, pull slipped stitch over, knit 1, knit 2 together, over, knit 1, over, slip 1, knit 1, pull slipped stitch over, knit 1, knit 2 together, over, knit 2 together, over, knit 2 together, over, knit 1 from behind, purl 1, knit 1 from behind, over, knit 5, over, slip 2, knit 1, pull slipped stitches over, over, knit 5, over, knit 1 from behind, purl 1, knit 1 from behind, over, knit 2 together, knit 1, 1 chain.
8th needle—slip 1, knit 2, purl 1, purl 1 from behind, knit 1, purl 1 from behind, purl 15, purl 1 from behind, knit 1, purl 1 from behind, purl 17, purl 1 from behind, purl 4.
9th needle-slip 2 stitches over for a chain, over, knit 1 from behind, over, knit 1 from behind, over, knit 3, over, slip 2, knit 1, pull slipped stitches over, over, knit 3, over, slip 2, knit 1, pull slipped stitches over, over, knit 2 together, over, knit 2 together, over, knit 1, knit 1 from behind, purl 1, knit 1 from behind, over, knit 1, knit 2 together, purl 1, slip 1, knit 1, pull slipped stitch over, knit 1, purl 1, knit 1, knit 2 together, purl 1, slip 1, knit 1, pull slipped stitch over, knit 1, over, knit 1 from behind, purl 1, knit 1 from behind, over, knit 2 together, knit 1, 1 chain.
10th needle-slip 1, knit 2, purl 1, purl 1 from behind, knit 1, purl 1 from behind, purl 3, knit 1, purl 2, knit 1, purl 2, knit 1, purl 3, purl 1 from behind, knit 1, purl 1 from behind, purl 18, purl 1 from behind, purl 4.
11th needle-slip 2 stitches over for a chain, over, knit 1 from behind, over, knit 1 from behind, over, knit 2, over, slip 1, knit 1, pull slipped stitch over, knit 2 together, over, knit 2, over, slip 1, knit 1, pull slipped stitch over, knit 2 together, over, knit 2 together, over, knit 2 together, over, knit 2 together, over, knit 1 from behind, purl 1, knit 1 from behind, over, knit 1, over, knit 2 together, purl 1, slip 1, knit 1, pull slipped stitch over, purl 1, knit 2 together, purl 1, slip 1, knit 1, pull slipped stitch over, over, knit 1, over, knit 1 from behind, purl 1, knit 1 from behind, over, knit 2 together, knit 1, 1 chain.
12th needle-slip 1, knit 2, purl 1, purl 1 from behind, knit 1, purl 1 from behind, purl 4, knit 1, purl 1, knit 1, purl 1, knit 1, purl 4, purl 1 from behind, knit 1, purl 1 from behind, purl 19, purl 1 from behind, purl 4.
13th needle-slip 2 stitches over for a chain, over, knit 1 from behind, over, slip 1, knit 1, pull slipped stitch over, over, slip 1, knit 1, pull slipped stitch over, knit 1, knit 2 together, over, knit 1, over, slip 1, knit 1, pull slipped stitch over, knit 1, knit 2 together, over, knit 1, over, slip 1, knit 1, pull slipped stitch over, over, slip 1, knit 1, pull slipped stitch over, over, slip 1, knit 1, pull slipped stitch over, knit 1 from behind, purl 1, knit 1, from behind, over, knit 3, over, slip 2, knit 1, pull slipped stitches over, purl 1, slip 2, knit 1, pull slipped stitches over, over, knit 3, over, knit 1 from behind, purl 1, knit 1 from behind, over, knit 2 together, knit 1, 1 chain.
14th needle-slip 1, knit 2, purl 1, purl 1 from behind, knit 1, purl 1 from behind, purl 6, knit 1, purl 6, purl 1 from behind, knit 1, purl 1 from behind, purl 18, purl 1 from behind, purl 4.
15th needle-slip 2 stitches over for a chain, over, knit 1 from behind, over, slip 1, knit 1, pull slipped stitch over, over, slip 2 , knit 1, pull slipped stitches over, over, knit 3, over, slip 2, knit 1, pull slipped stitches over, over, knit 3, over, slip 1, knit 1, pull slipped stitch over, over, slip 1, knit 1, pull slipped stitch over, over, knit 2 together, purl 1, knit 1 from behind, over knit 5 , over, slip 2, knit 1, pull slipped stitches over, over, knit 1 from behind, over, knit 2 together, knit 1, 1 chain.
16th needle-like the 8th.
17th needle-slip 2 stitches over for a chain, over, knit 1 from behind, over, slip 1, knit 1, pull slipped stitch over, over, slip 1, knit 1, pull slipped stitch over, knit 2 together, over, knit 2, over, slip 1, knit 1, pull slipped stitch over, knit 2 together, over, knit 2, over, slip 1, knit 1, pull slipped stitch over, over, slip 1, knit 1, pull slipped stitch over, knit 1 from behind, purl 1, knit 1 from behind, over, knit 1, knit 2 together, purl 1, slip 1, knit 1, pull slipped stitch over, knit 1, purl 1, knit 1, knit 2 together, purl 1, slip 1, knit 1, pull slipped stitch over, knit 1, over, knit 1 from behind, purl 1, knit 1 from behind, over, knit 2 together, knit 1, 1 chain.

18th needle-slip 1, knit 2, purl 1, purl 1 from behind, knit 1, purl 1 from behind, purl 3, knit 1, purl 2, knit 1, purl 2, knit 1, purl 3, purl 1 from behind, knit 1, purl 1 from behind, purl 16, purl 1 from behind, purl 4.

19th needle-slip 2 stitches over for a chain, over, knit 1 from behind, over, slip 1, knit 1, pull slipped stitch over, over, slip 1, knit 1, pull slipped stitch over, knit 1, knit 2 together, over, knit 1, over, slip 1, knit 1, pull slipped stitch over, knit 1, knit 2 together, over, knit 1, over, slip 1, knit 1, pull slipped stitch over, over, knit 2 together, purl 1, knit 1 from behind, over, knit 1, over, purl 1, slip 1, knit 1, pull slipped stitch over, purl 1, knit 2 together, purl 1, slip 1, knit 1, pull slipped stitch over, over, knit 1, over, knit 1 from behind, purl 1, knit 1 from behind, over, knit 2 together, knit 1, 1 chain.
20th needle-like the 4th.
21st needle-slip 2 stitches over for a chain, over, knit 1 from behind, over, slip 1, knit 1, pull slipped stitch over, over, slip 2 , knit 1, pull slipped stitches over, over, knit 3, over, slip 2, knit 1, pull slipped stitches over, over, knit 3, over, slip 1, knit 1, pull slipped stitch over, knit 1 from behind, purl 1, knit 1 from behind, over, knit 3, over, slip 2, knit 1, pull slipped stitches over, purl 1, slip 2, knit 1, pull slipped stitches over, over, knit 3, over, knit 1 from behind, purl 1, knit 1 from behind, over, knit 2 together, knit 1, 1 chain.

22nd needle-slip 1; knit 2, purl 1, purl 1 from behind, knit 1, purl 1 from behind, purl 6, knit 1, purl 6, purl 1 from behind, knit 1, purl 1 from behind, purl 14, purl 1 from behind, purl 4.
23rd needle-slip 2 stitches over for a chain, over, knit 1 from behind, over, slip 1, knit 1, pull slipped stitch over, over, slip 1, knit 1, pull slipped stitch over, knit 2 together, over, knit 2, over, slip 1, knit 1, pull slipped stitch over, knit 2 together, over, knit 2, over, knit 2 together, purl 1, knit 1 from behind, over, knit 5, over, slip 2, knit 1, pull slipped stitches over, over, knit 5 , over, knit 1 from behind, purl 1, knit 1 from behind, over, knit 2 together, knit 1, 1 chain.
24th needle-slip 1, knit 2, purl 1, purl 1 from behind, knit 4, purl 1 from behind, purl 15, purl 1 from behind, knit 1, purl 1 from behind, purl 13, purl 1 from behind, purl 4.
Repeat from the first needle.

## Next Chapter.

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## FOOTNOTES:

[A] See at the end of the concluding chapter, the table of numbers and sizes and the list of colours of the D.M.C threads and cottons.


Crochet lace.-Close leaves and bars with picots

## Crochet Work.

Crochet work, so called from the hook, French croche or croc, with which it is done, is not only one of the easiest but in comparison with the cost and labour, one of the most effective kinds of fancy-work. It is also one of the most useful, as it can be applied to the domestic requirements of every-day life, to wearing apparel, house-linen and upholstery; and we are sure that the patterns contained in this chapter, which have in addition to their other merits that of novelty, will meet with a favorable reception.

Hooks, or needles, as they are generally called, made of wood, bone or tortoise-shell are used for all the heavier kinds of crochet work in thick wool or cotton, and steel ones for the finer kinds. The Tunisian crochet is done with a long straight hook, which is made all in one piece. The points should be well polished inside and not too sharp, the backs slightly curved, and the handles, whether of bone, steel or wood, so light as not to tire the hand. Those represented here, we consider the best, as regards shape. As it is most essential that the needle should be suited to the cotton in size, we subjoin a comparative table of the numbers of the D.M.C threads and cottons and of the different needles.


Fig. 402. English crochet needle with wooden handle.
Table of the approximate relation of the D.M.C threads and cottons to the numbers of the crochet needles.


Table of the approximate relation of the D.M.C threads and cottons to the numbers of the crochet needles.
Explanation of the signs *.-In crochet, as in knitting, you frequently have to repeat the same series of stitches. Such repetitions will be indicated, by the signs *, **, ***, etc., as the case may be.
Crochet stitches.-In point of fact, there is only one, because all crochet work consists of loops made by means of the hook or needle, and connected together by being drawn the one through the other.

Crochet work may however, be divided into two kinds, German crochet, and Victoria or Tunisian crochet; the latter is known also under the name of tricot-crochet.
In German crochet there are eight different kinds of stitches: (1) chain stitch, (2) single stitch, (3) plain stitch, (4) treble stitch, (5) knot stitch, (6) bullion stitch, (7) cluster or scale stitch, (8) double stitch.

The rows are worked, according to the kind of stitch, either to and fro, or all from one end. In the former case, the work has to be turned at the end of each row, and the subsequent row begun with 1,2 or 3 chain stitches to prevent the contraction of the outside edge.
When the rows are all worked one way, the thread must be fastened on afresh each time, which is done by putting the needle into the first chain stitch of the preceding row, drawing the thread through it so as to form a loop, and making one or more chain stitches according to the height required.

At the end of each row, cut the thread and draw the end through the last loop; in this manner all crochet work is finished off. Some crochet workers make a few extra chain stitches with the ends of the thread at the beginning and end of each row, or fasten them off with a few stitches on the wrong side.
They can also, when the occasion requires, be formed into a fringe or tassels as a finish to the work.
Position of the hands and explanation of (1) chain stitch (fig. 403). -Take the thread in the left hand between the finger and thumb, hold the needle between the thumb and first finger of the right hand, letting it rest on the second finger, in the same manner in which you hold your pen, and put it into the loop, which you hold between the finger and thumb of the left hand. Take up the thread, lying on your finger, with the needle and make your first stitch as you do in knitting, tightening the loop just enough to leave an easy passage through it for the needle. The end of the thread must be held by the thumb and forefinger. The next stitches are made by taking up the thread with the needle and drawing it through the loop. The throwing of the thread round the needle by a jerk of the wrist is called an 'over'.


Fig. 403. Position of the hands and explanation of chain stitch.
(2) Single stitch (fig. 404).-Put the needle in from the right side of the work, into the uppermost loop of the preceding row, take up the thread on the needle and draw it through both loops.

Fig. 404. Single stitch.
(3) Plain stitch (fig. 405).-Put the needle through, as in fig. 404, from the right side to the wrong, under the upper side, either of a chain, or of a stitch of the preceding row, draw the thread through it in a loop, turn the thread round the needle and draw it through both loops on the needle. By making the rows of plain stitches follow each other in different ways, a great variety of stitches can be produced, as the illustrations and written instructions here given will show.


Fig. 405. Plain stitch.
Rose stitch (fig. 406). -This consists of rows of plain stitches, worked backwards and forwards. Insert the needle from the right side, under both the horizontal loops of the preceding row.


Fig. 406. Rose stitch.
Russian stitch (fig. 407).-This is worked like the foregoing, only that all the rows have to be begun from the same end, and the thread has to be cut off at the end of each row.


Fig. 407. Russian stitch.
Ribbed stitch (fig. 408).-Worked backwards and forwards, the hook being passed through the back part only of the stitches of the preceding row.


Fig. 408. Ribbed stitch.
Chain stitch.-Worked like fig. 408, but on one side only.
Piqué stitch.-This stitch also is only worked on one side. Put the needle in under one of the vertical threads of a stitch and complete the plain stitch. This is a stitch that looks very well on the wrong side; the bars of the loop lie quite close together, which makes it particularly suitable for unlined articles of clothing. It requires a large-sized needle to do this stitch well, especially if the material be a heavy one.

Slanting stitch (fig. 409).-Worked entirely on the right side. Take up the back thread of a stitch in the preceding row, take hold of the crochet thread without turning it round the needle and draw it through in a loop, and then finish the stitch like a plain stitch.


Fig. 409. Slanting stitch.

Crossed stitch.-The name which is given to the preceding stitch when both the threads of the stitches in the row before, are taken up together, instead of the back one only.
Russian crossed stitch (fig. 410).-To work this stitch which runs in slanting lines, put the needle in between the vertical threads of the stitches and underneath the two horizontal ones.


Fig. 410. Russian crossed stitch.
Counterpane stitch (fig. 411).-Counterpanes can be made in a less close stitch than those just described.


Fig. 411. Counterpane stitch.
To produce a soft and elastic fabric turn the thread round the needle and insert it under both the horizontal threads of a loop, take up the thread without turning it round the needle, draw it through in a loop, make an over, and draw the thread through all the three loops, that you have on the needle.
Knotted stitch (fig. 412).-This stitch likewise is composed of plain stitches, which, however differ in a slight degree from those we have described hitherto.


Fig. 412. Knotted stitch.
Make an over, put the needle through the two horizontal threads of the stitch below, make another over and draw it back through the two loops and the first over, make another over, and draw the thread through the last two loops.

Loop stitch (fig. 413).-Worked as follows: when you have put the needle into the loop of a stitch below, carry the thread, downwards from above, round a stripe of cardboard or a flat wooden ruler, then finish the stitch in the usual way. These long loops, each about $2 \mathrm{c} / \mathrm{m}$. in length, can also be made over the forefinger and held fast by the thumb as you work, but it is more difficult to make them regular in this way.


## Fig. 413. Loop stitch.

Each row of long stitches is followed by a row of plain stitches. The side, where the long loops lie, becomes the right side. If you wish this stitch to be very thick and handsome, wind the thread three times round the ruler, or finger, and secure it with a plain stitch; in this case, you should make one plain stitch between every two clusters. A loose, fleecy thread is generally used for this stitch, and for washing articles more especially, we recommend Coton à repriser D.M.C.
Plain stitches for a chain (fig. 414). - Begin with two chain stitches, put the needle in between the two threads of the first chain stitch, turn the thread round the needle and draw it through in a loop, turn it round again and draw it through the two loops; then, put the needle into the left part of the stitch that was just made, turn the thread round the needle, draw it through the two loops and so on, to the end.


Fig. 414. Plain Stitches for a chain.

A chain of this kind makes a very good substitute for mignardise when that can not be got of the right size and colour for the required purpose.
(4) Trebles.-Trebles are little columns, or bars made of loops or stitches. They can be worked, like all other crochet, either to
and fro, or all one way. There are different kinds of trebles; half or short trebles, trebles, double trebles, called also 'long stitch', and quadruple and quintuple trebles, called 'extra long stitch', connected trebles and crossed trebles.

Half trebles (fig. 415).-Turn the cotton round the needle from behind, put the needle in between the trebles of the preceding row, or into one edge of a chain stitch; make an over, bring the needle forward again with the thread, make another over and draw the needle through all three loops.


Fig. 415. Half trebles
Trebles (figs. 416 and 417).-Begin, as for the half treble, by turning the thread round the needle, and putting it in under one edge of the stitch beneath, then take up the thread on the needle and bring it through two of the loops, take it up again, and draw it through the two remaining loops.


Fig. 416. Trebles made directiy above one another.

In fig. 417 , we have trebles made in the same manner as fig. 416 , only that instead of putting the needle under one edge of the stitch beneath, you put it under both, and between the trebles of the last row.


Fig. 417. Trebles set between those of the preceding row.
Double trebles or 'long stitch' (fig. 418).-Turn the thread twice round the needle, put it into a stitch of the work and bring the thread through in a loop, then take up the thread on the needle and bring it through two of the loops, three times in succession.


Fig. 418. Double trebles or 'long STITCH'.

Triple and quadruple trebles or 'extra long stitch' (fig. 419). -For a triple treble, twist the cotton three times round the needle, for a quadruple one, four times, then form the treble in the usual way by bringing the needle through two of the loops at a time. To make a series of trebles, of gradually increasing length, bring the needle, at every other treble, through the last three loops, so that before making a triple treble you will have to make columns, respectively, 1 treble, $1 \frac{1}{2}$ treble, 2 trebles and $21 / 2$ trebles long. Columns like these, of different lengths, are often required in crochet work, for leaves and scalloped edgings.


Fig. 419. Triple and quadruple trebles or 'extra long stitch'.
Connected trebles (fig. 420).-Trebles, connected together, can be worked to and fro, and take the place of plain stitches. Begin with a chain, then make a treble of the required height, form as many loops as you made overs for the treble, take up the
upper thread of the stitch nearest the treble, turn the thread round the needle, bring it back to the right side and draw the needle through the trebles, two at a time.


Fig. 420. Connected trebles.
Crossed trebles (figs. 421 and 422). -Trebles of this sort produce an open stitch, which is often used for the footing of lace, or for an insertion. Make a foundation of chain, or other stitches, and proceed as follows: 3 chain, miss 2 stitches of the row beneath, make 1 treble in the third stitch, 5 chain, 1 over, put the needle in between the loops of the connected trebles and finish with a treble. Then make a double over, put the needle into the next loop of the preceding row, make another over, draw the needle through the loops, make another over and join the two next loops. This leaves 3 loops on the needle. Make an over, put the needle into the third stitch of the row beneath, make an over, and bring the needle back to the right side.


Fig. 421. Crossed trebles.
Join the 5 loops on the needle together, 2 and 2, make 2 chain, 1 over, put the needle into the upper parts of the connected trebles and finish with a treble, and so on.
These trebles also can be lengthened if necessary, but in that case, the width of the crossed treble must correspond with the height. Generally speaking you make the trebles over the same number of stitches as you made overs on the needle, which should always be an even number.


Fig. 422. Crossed trebles, set between those of the preceding row.

Trebles for a chain.-A quicker way of making a wide footing for a crochet lace is to make the trebles in the following manner.

Make 4 chain stitches, 2 overs, put the needle into the first of the 4 chain, 1 over, draw the thread through the stitch *, 1 over, draw the thread through the next 2 loops and repeat twice from $*=* * 2$ overs, put the needle into the left bottom part of the treble, close the treble as before and repeat from ${ }^{* *}$.
(5) Knot stitch (fig. 423). -This stitch which is composed of several loops forming a tuft, can only be worked from one side, consequently all one way. It looks best in a coarse material to show the interlacing of the threads.


Fig. 423. Кnot stitch.
Enter the needle through the two loops of the stitches of the bottom row, turn the thread round the needle, but away from you towards the back; bring it forward to the right side, put the needle again through one of the bottom stitches, make another over like the first and draw the needle through all the bars at once.
(6) Bullion Stitch (figs. 424 and 425).-For bullion stitch, select a needle, a little thicker towards the handle, and finer than you would use for any other crochet stitch.


## Fig. 424. Bullion stitch.

Begin by making a chain of very loose stitches, then wind the thread several times, very evenly, round the needle. Insert the needle into a loop of the chain, make a single over, and draw it with the last over upon it, through all the other overs.

Trebles in bullion stitch, fig. 425, are worked in just the same manner, only that you have to turn the thread, at least 10 or 12 times round the needle and draw it through all the overs at once. To facilitate the passage of the needle, keep the overs in their place with the thumb and forefinger of the left hand.


Fig. 425. Bullion stitch.
Bullion stitch can only be worked with wool or a very fleecy thread, such as Coton à repriser D.M.C,[A]but trebles in bullion stitch can be worked in any of the D.M.C threads and cottons.
(7) Cluster stitch (fig. 426).-Generally used as an insertion between rows of plain crochet.


Fig. 426. Cluster stitch.
Put the needle under one stitch of the preceding row, make an over, draw the thread through in a loop, make another over, put the needle in again under the same stitch, bring it back, make a third over, and pass a third time under the same stitch; bring the needle back, make a fourth over and pass the needle through all the loops that are upon it.
Then, after making a chain stitch, begin the same stitch over again, placing it in the second stitch of the lower row.
Cluster stitch may also be finished off by retaining the two last loops on the needle, making an over, and ending with a plain stitch.
(8) Double stitch (fig. 427).-A rather coarse thread, such as Coton à tricoter D.M.C Nos. 6 to 12, Cordonnet 6 fils D.M.C Nos. 3 to 10 , or Fil à pointer D.M.C Nos. 10 to $30[\mathrm{~A}]$ is better for this stitch than a loose fleecy thread which is apt to render it indistinct. Take up a loop right and left of a stitch of the preceding row, so that counting the loop of the last stitch, you have 3 loops on the needle, make an over and draw it through the 3 loops. Then take up a loop again by the side of the one you made on the left, and which now lies on the right. Take 2 loops in the next stitch, make an over and draw it through all the loops.


Fig. 427. Double stitch.
Raised stitch (fig. 428).-All the stitches that come under this heading require a foundation of a few plain rows for the raised trebles. In fig. 428, you will observe that the fourth stitch in the fourth row is a double treble, connected with a loop of the fourth stitch of the first row.


Fig. 428. Raised stitch.
Miss the stitch of the preceding row, which is hidden under the treble, make 3 plain stitches, 1 double treble, and so on.
Having finished this row, turn the work and make a plain row. In the next row begin with 4 plain stitches, then make 1 double treble between the 3 stitches that are between the first trebles, 3 plain stitches, 2 double trebles and so on.
In the 8th row of plain stitches, the trebles must be placed in the same order as in the 4 th.
Raised stitch with crossed trebles (fig. 429).-Begin, as in fig. 428 , by 3 rows of plain stitches. The 4 th row begins with 2 plain stitches followed by: * 1 double treble joined to the upper part of the 1 st stitch of the 1 st row; keep the 2 last loops of this
treble on the needle; make a double over for the next treble, pass the needle through the fourth stitch of the first row, make an over, turn the thread round the needle, bring it back, finish the treble all but the last 3 loops, which you crochet together. Miss the stitch behind the treble, make 3 plain stitches and repeat from *.


Fig. 429. Raised stitch, with crossed trebles.

Then turn the work, make one plain row, and turn the work back to the right side.
The second row of trebles begins with a plain stitch. The way in which the trebles are to be crossed is shewn in the illustration.
Raised stitch with dots (fig. 430). -After making 3 plain rows, begin the 4 th with 3 plain stitches, and proceed as follows: *6 trebles into the 4th plain stitch of the preceding row, leaving the last loop of each treble on the needle, so that altogether you have 7 loops upon it; then you turn the thread once round the needle and draw it through the loops; miss the stitch that is underneath the dot, make 3 plain stitches and repeat from *.


Fig. 430. Raised stitch with dots.
Then make 3 rows of plain stitches; in the 4th row, the 1st dot is made in the 4 th stitch, so that the dots stand out in relief.
Raised dots with trebles (fig. 431).-Turn the work after making 3 rows of plain stitches, make 3 stitches more in the 4 th stitch of the 1 st row, * 6 trebles, drop the last stitch of the 6 th treble, put the needle into the stitch between the last plain stitch and the 1st treble, take the dropped loop of the last treble and draw it through the one on the needle; miss the stitch under the dot, make 5 plain stitches and repeat from *.


Fig. 431. Raised dots with trebles.
Raised dots in slanting lines (fig. 432).-On the rows of stitches that have been previously prepared, make, for the 4th stitch of the 4th row, a cluster stitch, as in fig. 426, with 1 quadruple over and then 4 plain stitches, 1 cluster stitch and so on. The next row is plain; in the second you have to make 1 plain stitch more, and fasten the cluster stitches into the loops to the left of the second of the 3 covered rows. In this way you have to make each raised stitch, one stitch, in advance and to the left of the last, so that they run in slanting lines over the surface.


Fig. 432. Raised dots in slanting lines.

Close shell stitch (fig. 433).-This pretty stitch which can only be worked in rows, all one way, is more especially suitable for children's jackets and petticoats; it is easy, and has the merit of being quickly done. On a foundation of chain, or other stitches, make: 2 chain, 7 trebles on the 4 th stitch, * 1 chain, 7 trebles on the 5th stitch of the last row and repeat from *.


Fig. 433. Close shell stitch.
2nd row-** 7 trebles on the chain stitch of the last row which connects 7 bars, 1 plain stitch on the 4 th of the 7 trebles of the first row and repeat from **.

Picots.-The edges of most crochet work are ornamented with picots, or small points of different shapes, called severally close picots, chain picots and lace picots.
Close picots may be subdivided into, large and small, pointed, and rounded, picots with rounded leaves and picots with pointed leaves.

Small rounded picots.-These may either be made separately and then sewn on, or made at once, on to a crochet border. In the first case, begin with 3 chain, then coming back, make 1 plain stitch on the second and on the first chain stitch. In the second case make: 1 chain, take the needle out of the stitch and put it in from the right side, under both edges of the last stitch, take up the dropped stitch, bring it to the right side, * 3 chain; then returning: 1 plain stitch on each chain, draw the needle out, put it in from the right side into the second stitch of the row beneath, take up the loop, bring it back to the right side, and repeat from *.
Large rounded picots. -5 chain, miss 3,1 treble on the 2 nd and 1 treble on the 1 st chain stitch.
When you want to attach these picots at once to an existing piece of work, drop the last loop and bring it back again with the needle from the wrong side to the right and miss 2 stitches, instead of one, as in the case of the small picots.

Pointed picots.-Cast on 6 chain, then returning, and missing the 6 th stitch: 1 single stitch, 1 plain stitch, 1 half treble, 1 treble, 1 double treble.
Picots with rounded leaves.-* 4 chain, and 3 trebles on the first stitch, and 1 single on the same stitch on which the trebles were, ${ }^{* *}$, or 6 chain and repeat from * to ${ }^{* *}$.

When these picots serve as a finish to a straight edge, make 2 single stitches in the preceding row instead of 2 chain.
Picots with pointed leaves.-6 chain, on the first chain stitch: 3 double trebles, of which you retain the two last loops on the hook, 1 over, draw the thread through the 4 loops, 5 chain, 1 single on the stitch on which the trebles are.
Chain picots.-For the small chain picots, make: 5 chain and 1 plain stitch on the first of these 5 stitches. For the large ones: 5 chain and 1 treble on the first stitch.

Picots in bullion stitch (figs. $\underline{424}$ and $\underline{425}$ ). -5 chain, 1 treble in bullion stitch drawn up into a ring, and joined to the 5th chain stitch
Drooping picots (fig. $\underline{434}$ ). -5 chain, drop the loop, put the needle into the first of the 5 chain, take up the dropped loop, and draw it through the stitch.


Fig. 434. Drooping picots.
Lace picots (figs. 435 and 436).-Fig. 435 represents picots formed of chain stitches, as follows: 2 chain, put the needle into the first, 1 over, bring the thread back to the front, 2 chain: * put the needle into the two loops, and at the same time, into the second loop and the first chain, draw the thread through in a loop, make 2 chain and repeat from *.


In order to make the picots more even and regular, it is advisable to form them over a coarse knitting needle or mesh.
Fig. 436 represents picots attached by plain stitches to the edge of a finished piece of work; this is done as follows: 1 plain stitch, draw out the loop to the proper length for a picot, and slip it on a mesh: put the needle into the horizontal parts of the last stitches, turn the thread round the needle, draw it through in a loop, and make 1 plain stitch on the next stitch and so on.


Fig. 436. Lace picots attached to a row of stitches made before hand.
Method for copying tapestry patterns in crochet work (figs. $\underline{437}$ and $\underline{438}$ ).-Printed cross stitch and embroidery patterns can very well be copied in crochet work especially when they are in two colours only, or rather, are drawn in one colour, on a plain ground.


Fig. 437. Open-work crochet made after a tapestry pattern.
The way in which such patterns are copied in crochet is by means of chain stitches and trebles, which, rising one above the other in rows, form little squares. For each square marked on the pattern, you must count, in the grounding, 1 treble and 2 chain stitches; in the solid parts, 3 trebles.
The squares formed by the chain stitches should always begin and end with a treble.
When, therefore, a solid square comes between empty or foundation squares, count 4 trebles for the solid square, because the last treble of the last empty square touches the third treble of the solid one.

Thus for 2 solid squares, side by side, count 7 trebles, and for 3 squares, 10. Embroidery patterns worked in several colours can be reproduced in crochet either by trebles and rows worked one way only, cutting off the thread at the end of each row, or by plain stitches, worked in rows to and fro.


Fig. 438. Plain crochet made after a tapestry pattern.
When only three colours are used, pass two threads under the stitches; when more than two, leave those which are not in use, at the back of the work and only bring them to the front as they are wanted. The thread, you lay aside, takes at the back the place of the one in use. Of course, the threads not in use can only can be disposed of in this way when the work has a wrong side, otherwise they must be passed underneath the stitches. The colours should alternate in the order the pattern prescribes; moreover, the last stitch before you take another colour cannot be finished with the same thread, you must pass the new thread through the last loop and draw it up with that.
Crochet with Soutache or Lacet (braid) (figs. 439 and 440). -These are two patterns of crochet, worked with the ordinary crochet cottons and with Soutache or Lacet D.M.C, a material which has not been used for crochet work before.


Fig. 439. Crochet with soutache or lacet (braid).

Both patterns are worked entirely with trebles; in fig. 439, the red braid passes over and under 2 trebles; in fig. 440, it is brought, it will be observed, from the wrong side to the right after every 2 trebles, and passed between them, in such a manner as to form a slanting stitch between the rows of stitches.


Fig. 440. Crochet with soutache or lacet (braid).
Materials: Coton à tricoter D.M.C Nos. 6 to 12 or Cordonnet 6 fil D.M.C Nos. 3 to 10. Soutache D.M.C No. 2 or 3 or Lacets superfins D.M.C Nos. 2 to 5.

Colours: The cotton, white or écru. The Soutache or Lacet: RougeCardinal 347, or Rouge-Grenat 326, or Bleu-Indigo 312. [A]
Crochet square (fig. 441).-Begin with 4 chain stitches, and work 1 single on the 1 st chain, to make a round. Work, 1 chain and 2 plain on the next chain, 3 plain on each of the next 3 chain, 1 plain on the stitch on which the two first plain are worked.

Slip the next stitch, that is, put the needle in between the horizontal bars of the 1st plain stitch of the previous row, and draw the thread out without making a stitch.
Then make 1 chain and 2 plain on the slipped stitch.
After which, you make 3 plain on the second of the 3 plain that form the corner, and 1 plain on all the other stitches of the last row. The beginning and end of each row, are worked as described above.
Fig. 441 represents a square, worked in consecutive rows. In making a crochet square, the rows may end in the middle of a side.


Fig. 441. Crochet square.
When you use a stitch that has to be worked to and fro, you turn your work at the end of every row and work back along the stitches you have just made.
Crochet hexagon (fig. 442).-Make a foundation chain of 6 stitches, join the round; 12 plain on the 6 chain; finish the row as indicated for the previous figure $==$ turn the work $==* 1$ plain, 3 plain on the second plain of the last row; repeat 5 times from *. Finish the row with 1 single $==$ turn the work $==2$ plain, 3 plain on the second of the first 3 plain; 3 plain and so on. These hexagons can be made of any size.


Fig. 442. Crochet hexagon.
Coloured star worked into a light ground (fig. 443). -Begin with 3 chain, join the ring $=2$ plain on each of the 3 chain; then for the foundation, 1 plain with the dark thread, and 1 with the light on each of the 6 plain.

In each subsequent row, make one dark stitch more, increasing regularly, that is, making 2 stitches on the last light stitch that comes before the dark ones.

Proceed in this manner until you have 6 or 8 dark stitches, in all and then begin to decrease in every row by one, until there is at last only one dark stitch remaining.
These stars are used in the making of purses, cap-crowns and mats for lamps, etc.


Fig. 443. Coloured star worked into a light GROUND.

Tunisian crochet.-Tunisian crochet is also called crochet-knitting because, you have to cast on all the first row of stitches, as in knitting.

Materials-Every kind of cotton, as well as wool and silk, can be used for Tunisian crochet: the stitches look equally well in all these materials, but for things that require frequent washing or cleaning, a good washing material should be selected, such as Coton à tricoter D.M.C and Cordonnet 6 fils D.M.C[A], both strong and suitable in all ways.
As we have already said, Tunisian crochet requires to be done with a long straight needle, with a knob at one end and it can only be worked on the right side.

Plain Tunisian crochet (fig. $\mathbf{4 4 4}^{2}$ ).-After making a foundation chain of the required length, begin the first, or loop row as it is called. Put the needle into the 2nd chain stitch, draw a loop through and so on, until you have taken up all the chain stitches on the needle. After having made the last stitch of the loop row, make 1 chain stitch and then pass to the second row that completes the stitch. Turn the thread round the needle, draw it through two loops, turn the thread round again, and again draw it through two loops, and so on to the end.


Fig. 444. Plain tunisian crochet.
Straight plaited Tunisian stitch (fig. 445).-Worked thus: miss the first loop in the 1st row, take up the second, and come back to the first, so that the 2 loops are crossed. Work the second row in the same manner as the second row of the preceding figure.


Fig. 445. Straight plaited tunisian stitch.
Diagonal plaited Tunisian stitch (fig. 446).-Worked like the preceding, taking up first the second loop and then the first: the second row also, in the same way as before. In the third row, take up the first stitch, and draw the third through the second, so as to produce diagonal lines across the surface of the work.


Fig. 446. Slanting plaited tunisian stitch.
Open Tunisian stitch.-This is an easy kind of Tunisian crochet. The first row is worked as in fig. 444. In the row of plain stitches, you alternately join 2 and 3 , or 3 and 4 loops of the preceding row together, and replace them by as many chain stitches.

Decreasing and increasing in Tunisian crochet (fig. 447). Our illustration shows how to decrease on both sides and by that means form scallops.


Fig. 447. Decreasing in tunisian crochet.
You miss a stitch alternately on the right and left. On the right you crochet the first two stitches together, and at the end of the row, the last two, and so on, to the end. You increase in the same order, first on the right and then on the left.

Hairpin crochet (figs. $448, \underline{449}, \underline{450}$ ). -So called because it is worked on a kind of large steel hairpin or fork with two or more prongs. Wooden and nickel varieties of this implement, which are patented by Mme Besson, of Paris, are also used.

Very pretty laces, fringes, gimp headings and the like can be made in this kind of crochet work. It is often used in combination with ordinary crochet and plain and scalloped braids and gimps, or as a heading for fringes made of tufts and pendant balls. There are a great many stitches which can be worked in hairpin-crochet. We shall only describe those here that will best teach our readers how the work is done.


Fig. 448. Steel hairpin for crochet.


Fig. 449. Wooden fork for crochet.


Fig. 450. Fork with several prongs for crochet.
Materials.-For washing laces, Cordonnet 6 fils D.M.C is the best; for furniture fringes, the lower numbers of Coton à tricoter D.M.C, and for producing the appearance of filoselle, the lower numbers of Coton à repriser D.M.C are to be taken.

Stitches.-Begin by a chain stitch, made with an ordinary crochet needle, take the needle out of the loop, and insert the left prong of the fork upwards from below, holding the fork between the thumb and finger of the left hand. The thread should always be in front. Then put the thread over the right prong and the needle into the loop on the left prong, take up the thread, draw it through the loop, put the thread over the needle and draw it through the loop that is on the needle, twist the loop round the left prong, turn the needle round to the right (the thread will now be wound round the right prong); put the needle into the loop on the left prong, throw the thread over the needle, draw it through, tighten the loops and so on.

These stitches may be doubled, or you may make several trebles on each loop, or arrange the plain stitches in different ways.
Hairpin insertion (fig. 451).-Begin by making stripes with the fork, covering each thread with two plain stitches. Then join the stripes together by the loops, drawing the left loop over the right one and the right one over the left. When you come to the end of the stripes fasten off the last loops by a few stitches. To strengthen the edges, join two loops together by 1 plain, 2 chain, 1 plain and so on.


Fig. 451. Hairpin insertion.
Materials: Fil à pointer D.M.C No. 20 or 30, or Cordonnet 6 fils D.M.C Nos. 4 to 15, white or écru. ${ }^{[A]}$

Hairpin lace (fig. 452).-When, by making two half trebles in each loop, you have got the necessary length of hairpin crochet, join the loops two and two, by means of a coloured thread which makes a good contrast with the thread of which the hairpin crochet is made. Work 1 plain stitch joining 2 loops on the right, 2 chain, 1 plain joining the 2 loops on the left; then 2 chain and come back to the right, and so on, until you have taken up all the loops. This forms the zigzag in the middle.


Fig. 452. Hairpin lace. Materials-For the hairpin work: Fil à pointer D.M.C Nos. 20 to 30, or Cordonnet 6
fils D.M.C Nos. 3 to 10, white or écru. For the edge. Coton à tricoter D.M.C Nos. 16 to 30.

Colours: Rouge-Cardinal 347, or Jaune-
Rouille 364, or Brun-Marron 406.[A]
1st row-join 3 loops by: 1 plain, 5 chain.
2 nd row-on the 5 chain stitches: 1 plain, 1 half-treble, 3 trebles, 1 picot, made with 5 chain (for the chain picots, see p. 237), 1 half-treble, 1 plain. The footing of this lace is made like the one in fig. 451.

Hairpin fringes (figs. $\underline{453}, \underline{454}, \underline{455}, \underline{456}$ ).-Fig. $\underline{453}$ is made with a fork composed of one branch and 3 or 4 rulers, round which the thread is wound in succession, so as to form loops of different lengths. You may use for this, either a single very coarse thread, or else several fine ones, used together as one.


Fig. 453. Hairpin fringe with tassels.
The heading of the fringe is plain, and heavy tassels are fastened into the loops. The tassels are made as follows: take a thick skein of the same thread the fringe is made of, pass it through the loop, leaving just the length required for the tassel, at one end, thread a needle with the same thread and twist it round the skein, the right distance from the top to form the head of the tassel and then cut the ends even, at the bottom. As the loops are of different lengths, the tassels will hang in steps and the fuller and heavier they are, the handsomer the fringe will be.

Fig. 454 represents another pattern of fringe, the first part of which is made with the same fork as the preceding one. Instead however of winding the thread round the several prongs in succession, you pass it alternately round the two first and the fourth, thus making loops of two lengths only. Tassels of a length, suited to the purpose the fringe is intended for, depend from these loops and may be varied in the second row by balls made to issue from the middle, or by long meshes, which are made over the whole width of the fork and affixed to the loops.


Fig. 454. Hairpin fringe with tassels.
Materials: Coton à tricoter D.M.C Nos. 6 to 16.[A]
Colours: Écru and Jaune-Rouille 363, 368, or Gris-
Tilleul 331 and Rouge-Cornouille 449 and 450, or three other shades. ${ }^{[A]}$
Figs. $\underline{455}$ and $\underline{456}$ represent two pretty patterns of fringes made of écru cotton with a strong twist. These are very suitable for washing articles, as the cotton balls wash perfectly.


Fig. 455. Hairpin fringe with one line of balls.
The loops in fig. 455 are all of one length and a ball hangs from every third. In the last chapter but one, a minute description is given of the way in which these balls are made. The heading of the loops is formed by a row of chain stitches, varying in number from four to six, according to the size of the cotton. The edge is ornamented with little picots. The fringe, in fig. 456 , consists of three long and three short loops alternately, which causes, the balls that are made to depend from them, to form two parallel lines.


Fig. 456. Hairpin fringe with two lines of balls, one above the other.
Materials-For the crochet-work: Cordonnet 6 fils D.M.C Nos. 3 to 10, or Fil à pointer D.M.C Nos. 10 to 30. For the balls: Coton à repriser D.M.C Nos. 8 to 16.

If you join the loops of the heading together, three and three, you will have to make enough chain stitches to cover the space that is to be filled.

The picots are made with 6 chain stitches, you put the needle back into the fifth stitch after closing the picot, make 1 chain, 2 plain, in the preceding row, 1 picot and so on.

Fringe made with Lacet or braid (fig. 457).-This is an easy fringe to make and a very effective trimming for table-cloths, curtains etc., which are embroidered on coarse stuffs.


Fig. 457. Fringe made with lacet or SOUTACHE (BRAID).
Materials: Lacet D.M.C No. 4 or Soutache D.M.C NO. $2^{1 / 2}$ in red. Cordonnet 6 fils D.M.C Nos. 3 to 10. Fil à pointer D.M.C Nos. 10 to 30, écru.[A]

Begin with a foundation chain, in coarse écru twist, the light stitch in the middle of the heading of the fringe being also made of the same material

In the next row, you use the twist and the braid together, as follows-with the twist $=1$ chain stitch, put the needle into the first stitch of the foundation chain, take up the braid, draw it through, turn the twist round the needle, draw it through the braid and the chain stitch. To make the braid loops longer, they may be made over a wooden ruler. To the two rows of braid stitches, represented in the pattern, you may add as many other rows as you please. On the fringed side make: 4 plain, 3 chain, draw out one very long loop and fasten into it a cluster of lengths of braid from 10 to $12 \mathrm{c} / \mathrm{m}$. long, and draw the loop tightly round it to secure the tassel; 3 plain on the chain stitches. Repeat from *.

Lace made on Point Lace braid (fig. 458).-For the rounds: 1 plain on the braid, 10 chain, then coming back, 1 single on the 4th chain.


Fig. 458. Lace made on point lace BRAID.
Materials: Fil d'Alsace D.M.C

## Nos. 30 to 50, or Cordonnet 6 fils

D.M.C No. 80, white ${ }^{[A]}$ and Point Lace braid.

In this first round you make: 1 chain, 1 half-treble, 12 trebles $*$, 1 half-treble, 1 chain, 1 single on the 4th chain; 3 chain, 1 single on the braid, far enough from the 1st chain for the rounds not to overlap each other. Then 10 chain, 1 single on the 4 th chain, 1 single, 1 half-treble, 4 trebles, join to the first round between the 8th and 9 th trebles, 8 trebles and repeat from *. For the footing: 1 treble, 1 chain, miss a few threads of the edge of the braid, 1 treble.

Crochet guipure lace (fig. 459).-This charming little lace makes a very good substitute for real guipure. It can be made on a row of trebles, just as well as on point lace braid, or on a mignardise, after you have raised the picots of it by single and chain stitches.

Fig. 459. Crochet guipure lace.
Materials: Fil d'Alsace D.M.C Nos. 70 to 90. Cordonnet 6 fils D.M.C Nos. 80 to 120, or Fil à
dentelle D.M.C Nos. 40 to 70.
6 plain *, 9 chain, leave an interval equalling in length 6 bars of the point lace braid used in our pattern; in the braid: 6 plain stitches, very close together, 8 chain, 1 single on the 7 th of the 9 chain, 10 chain, 1 single on the 3 d of the 9 chain, 8 chain, 1 plain close to the first of the first 6 plain.
1st scallop-7 plain, 5 chain, join to the 4 th chain; on the 5th chain: 6 plain; on the 8th chain: 3 plain.
2nd scallop-on the 10 chain: 7 plain, 5 chain, join to the 4 th chain $=$ on the 5 chain: 6 plain $=$ on the 10 chain, 5 plain, 5 chain, join to the 4 th chain, 6 plain, 5 chain, join to the 4 th chain, 6 chain, 1 plain on the 10 th chain.

3rd scallop-like the first, then repeat from *.
Lace made on Point Lace braid (fig. 460).-On the braid, work a row of trebles, 1 or 2 chain stitches apart, according to the size of the braid and on this row of trebles, make two other rows as follows:

1 st row -5 chain, 1 treble on the treble of the preceding row, 5 chain, 1 treble, on the same stitch to which the first treble is joined, 5 chain, miss 3 trebles, 1 treble on the 4th treble of the row beneath.
2nd row-1 plain on the 3rd of the 5 first chain, 3 plain, 1 treble on the 3rd of the chain stitches between the two trebles of the first row that come close together; 3 chain, 1 treble on the same stitch, 3 chain, 1 treble on the same stitch, 3 chain, 1 treble on the 3 rd of the next 5 chain.


Fig. 460. Lace made on point lace BRAID.
Materials: The same as for 458.
Crochet lace (fig. 461). -1 st row-3 plain close together, in the braid; $* 13$ chain, join to the 1 st plain. On each of the first 6 chain; 1 plain; = on the 7th chain: 3 plain, then on the other chain stitches: 6 plain. In the braid: 7 plain and repeat from *.

2nd row-* miss 2 plain of the first row, 5 plain to reach the 2 nd stitch added in the first row, 4 plain on the 2nd added stitch, 4 plain on the next stitches. Repeat from *.


Fig. 461. Crochet lace.
Materials: Lacet superfin D.M.C No. 14
and Fil d'Alsace D.M.C Nos. 30 to 70.
[A]
For an insertion, drop the thread after the 2 nd of the 4 stitches that are to be made at the point, then put the needle into the stitch of the finished stripe, take up the thread again, draw it through the stitch and proceed to the second side of the scallop.

Crochet lace with mignardise (fig. 462).-This and all the patterns that follow, up to fig. 473, make very useful trimmings for all kinds of underclothing. Begin by raising the picots on both sides of the mignardise by: 1 plain stitch and 1 chain.


Fig. 462. Crochet lace with mignardise. Materials-According to the mignardise used. Fil d'Alsace D.M.C Nos. 30 to 70, or Fil à dentelle D.M.C Nos. 25 to 70.[A]

The rows of crochet work between, consist of: 1 treble on 1 chain, 4 chain, miss 2 picots of the mignardise, 1 treble between the 3rd and 4th picot.
Work the edge in two rows
1st row-1 treble between 2 picots, 3 chain, miss 2 picots, 1 treble.
2 nd row- 1 treble on 3 chain, 3 chain, 1 treble, 3 chain, 3 trebles, 7 chain, turn back and join to the 1 st of the 3 trebles, 2 chain, join them to the 2nd treble, 2 trebles on the 7 chain; keep the last loops of the last treble on the needle and join them to those of the next treble.

Lace with two rows of leaves (fig. 463).-This is one of the pleasantest crochet patterns to work that we know. The leaves are made separately and fastened into a foundation with thread, at least two numbers finer than that of which the leaves are made.


Fig. 463. Lace with two rows of leaves.
Materials: Fil d'Alsace D.M.C Nos. 20 to 100, Cordonnet 6 fils D.M.C Nos. 25 to 80 or Fil à dentelle D.M.C Nos. 25 to 100.

Leaf with 5 petals: 8 chain, make a ring $=2$ plain on the ring $=1$ st petal $* 11$ chain, miss 3 chain, 1 half-treble on the 8 th chain, 1 chain, miss the 7 th chain, 1 treble on the 6th chain, 1 chain, 1 treble on the 4 th chain, 1 chain, 1 treble on the 3rd chain, 2 chain, 2 plain on the ring.
2nd petal: 15 chain, miss 3 chain, 1 half-treble *, 1 chain, miss 1 chain, 1 treble *. Repeat 4 times from * to *; add: 1 chain, 2 trebles on the ring.

3rd petal: 21 chain, miss 3 chain, 1 half-treble *, 1 chain, miss 1, 1 treble *. Repeat 7 times from * to *; add: 1 chain, miss 1, 2 trebles in the ring.
The 4 th petal to be worked like the 3rd; the 5th like the 1 st.
When the 5 petals are finished, make 2 plain stitches on the ring; then on the chain stitches of the 1 st petal: 2 plain, 7 trebles, 2 trebles on the 10th stitch; then descending again: 7 trebles, 2 plain and 3 single on the 3 plain stitches of the ring.

On the 2nd petal work: 3 plain, 10 trebles, 2 trebles on the 14 th chain, 10 trebles, 3 plain, 2 single, on the 2 trebles on the ring. 3rd petal: 2 single, 3 plain, 14 trebles, 2 trebles on the 20th chain, 14 trebles, 3 plain, a single.

The 4 th petal is worked like the 2 nd ; the 5 th like the 1 st , to be followed by 1 single on the 1 st of the 3 chain stitches of the ring.
For the stalk: 14 chain; miss 1, 9 plain on the 9 chain; 6 chain, miss 1,5 plain on the 5 chain, 4 plain on the chain stitches that are still disengaged, 2 single on the ring and then fasten the thread off with a few stitches.

When you have enough leaves, join them together by a row of picots, working from left to right as follows: * take the second petal on the right side of a leaf, put the thread into the 12 th stitch; make 2 plain, 1 picot, 1 plain on the stitch on which the picot was made $=$ in all the leaves, the 3rd plain before the picot and the first after, meet in the same stitch beneath $=2$ plain, 1 picot, 3 plain, 2 chain $=$ on the 8 th stitch of the 3rd petal: 1 plain, 2 plain more on the next stitches $* *, 1$ picot, 3 plain. Repeat 6 times from ${ }^{* *}$ and finish with 2 chain.

On the 7th stitch of the 4th petal: 1 plain, 2 plain on the next stitches $* * *, 1$ picot, 3 plain. Repeat 4 times from ${ }^{* * *}$.
On the 5th stitch of the 5th petal: 1 plain, and on the 4 next, 4 plain ${ }^{* * * *}$. Repeat from ${ }^{*}$ to ${ }^{* *}$ round each leaf, then instead of a picot, make 4 chain, join between the 1st and 2nd picot, 4 chain, close the picot. From this point the preceding series of stitches takes the place of the picot that immediately follows the sign ${ }^{* *}$; proceed to ${ }^{* * * *}$.
Foundation for the footing of the lace, with a single row of leaves.-When all the leaves are joined together, take the finer number of cotton and fasten your thread to the last stitch of the small stalk; then make: ${ }^{*} 2$ chain, 1 plain on the 9th stitch of the 5th petal; 6 chain, miss 2, 1 plain on the 3rd stitch; 6 chain, 1 plain on the 3rd stitch, 1 chain, 1 plain on the 5th stitch of the 4 th petal; 6 chain, 1 plain on the 3rd chain; 2 chain, 1 plain on the 4 th stitch (counting from the bottom) of the 5th petal of the next leaf; 3 chain, 1 single on the last stitch of the long stalk; 3 chain, join to the 3rd chain stitch, 3 chain, draw the thread again in coming back through the 3rd of the second set of 6 chain stitches in the 1 st petal; 1 single; turning back and from left to right: 1 single on the plain stitch between the chain stitches, 6 chain, 1 plain on the 2nd of the last 3 chain, 6 chain, 1 plain on the stalk, 6 chain, 1 plain on the 3rd stitch of the stalk; 6 chain, 1 plain on the 4 th stitch of the stalk; 7 chain, 1 plain at the top of the little stalk, then repeat from *. The network in the next rows, which may be of any width, is composed of: 6 chain stitches and, 1 plain on the loop of the last row.
For the last row but one of the network, make: 4 chain, 1 plain over each loop, and complete the lace by a row of plain stitches.
To make the leaves stand out from the foundation, use two shades of thread, white and écru, white and Jaune-Rouille 365, or white and Gris-Cendre 415.
The following is the way to join two rows of leaves together, that have previously been edged with picots.
Fasten the thread on to the little stalk, * 3 chain, 1 plain on the 8th stitch of the leaf, 2 chain, join to the middle picot of the 3rd petal of the top leaf; 2 chain, 3 plain on the 5th petal of the bottom row, 1 picot, 3 plain.
For the 2 nd petal of the bottom leaf: 3 plain, 1 picot, 3 plain.
For the 5th petal of the next leaf below: 3 plain, 4 chain, 1 single on the long stalk, 5 chain, 1 plain on the 2nd picot of the 1 st petal of the preceding leaf, 5 chain, 1 single on the 2nd picot of the 4 th petal of the top leaf, 4 chain, 1 plain on the 4 th single of the stalk, 3 chain, 1 single on the 7th picot of the 3rd petal of the top leaf, 3 chain, miss 1 stitch of the stalk, 1 plain on the stalk, 3 chain, 1 plain on the 6th picot of the top leaf, 3 chain, 1 plain on the little stalk. Repeat from *.
Three and even four rows of leaves may be joined together in this manner and make a very handsome lace, particularly suitable for church linen.
Insertion with waved braid (fig. 464). -1 plain stitch at the point of the braid, 7 chain, 1 single on the 2 nd chain. On the next chain stitches: 1 half-treble, 1 treble, 1 double treble, 1 triple treble, 1 plain on the next point of the braid.

Repeat the same stitches on the second side, only that after the 6th chain stitch, you draw the thread through the 7th of the 1st finished row.

Little wheels, set between the crochet pyramids, and described in the chapters on filet-guipure and Irish lace, complete the insertion.


Fig. 464. Insertion with waved braid.

## Materials.-According to the size of the braid: Fil d'Alsace D.M.C

Nos. 20 to 70, or Cordonnet 6 fils D.M.C Nos. 40 to 70.[A]
Crochet lace, made with leaf braid (fig. 465). - Introduce the thread into one of the leaves of the braid and working from right to left, make for the outer border: * 1 plain, 2 chain, 1 picot in bullion stitch, with 5 twists of the thread, 2 chain, 1 treble near the end of the leaf. Leave the last 2 loops of the treble on the needle **.

Take 2 leaves of the braid, fold them one upon the other: 1 treble near the stalk of these folded leaves, tighten the loops of the 2 trebles; chain ${ }^{* * *}, 1$ picot, 2 chain, 1 plain, 2 chain. Repeat 5 times from ***.
Proceed with 1 picot, 2 chain,-there will be 7 picots round the folded leaves-1 treble on the folded leaves and repeat from ** to *, therefore the inverse way, and begin again from *.


Fig. 465. Crochet lace made with leaf braid. Materials: Fil d'Alsace D.M.C Nos. 50 to 100 or Fil à dentelle D.M.C Nos. 50 to 80. [A]
For the footing of the lace, 4 rows are required.
1st row-* 1 double treble close to the stalk of the leaf, 5 chain, 1 treble, at the third of the leaf, 1 double treble at the 2 nd third of the leaf, 5 chain, 2 double trebles, one on the right leaf, one on the left, draw the last loops of the 2 trebles up together and repeat from *.

2nd row-On each of the little loops formed by the 5 chain of the last row: 1 plain, 3 chain, 1 picot in bullion stitch, 7 chain, 1 picot, 3 chain; 1 plain on the next loop and so on.
3 rd row-1 plain on the 4 th of the 7 chain, 5 chain, 1 plain and so on.
4th row-1 plain on each loop of the last row.
Crochet lace made with leaf braid (fig. 466).-Begin with the outside edge:
1st row:-At the end of a leaf: 1 treble, 6 chain, 1 picot in bullion stitch, 6 chain, 1 treble $=$ at the beginning of a 2 nd leaf: 6 chain, 1 picot, 6 chain, 1 treble at the end of the leaf $=7$ chain, 1 picot, 7 chain, 1 treble on the 3rd leaf = 6 chain, 1 picot, 6 chain, 1 treble at the end of the 3rd leaf = 6 chain, 1 treble, 6 chain, 1 treble on the 4 th leaf $=1$ double treble joined to the 4th and 1 st leaf of the next scallop $=1$ treble at the end of the 1 st leaf, join and draw the last loops of these 3 trebles together.
2nd row-over each treble and picot: * 1 plain, 3 chain, 1 picot, 7 chain, 1 picot, 3 chain, 1 plain $=$ repeat 6 times from *.
At the indent and before the last picot: 2 chain, 1 picot, 2 chain $=1$ plain before the 1 st picot of the next scallop.
3rd row-1 treble, 8 chain, repeat 6 times. In the indent join the 4 th of the 7 chain stitches right and left together by 1 treble.
4 th row-15 single on each loop of 8 chain.


Fig. 466. Crochet lace made with leaf braid. Materials: Cordonnet 6 fils D.M.C Nos. 40 to 80 or Fil à dentelle Nos. 50 to 80.[A]

Inside junction.-Begin at the edge of the first leaf, fasten on the thread and make 10 chain and, 1 double treble at the end of the leaf, 1 triple treble, and draw up both together, 5 chain, 2 triple trebles on the leaves to the right and left $=5$ chain, 2 triple trebles, one at the end and the other at the beginning of the 3rd and 4th leaf $=2$ chain, 1 picot in bullion stitch, 2 chain, 1 plain on the last stitch of the first trebles, 10 chain, 1 plain on the last stitch of the last trebles; 5 chain, 1 triple treble at the end of the 4th leaf.
Going back to the beginning: 5 chain, 1 single on the 10 chain above the picot $=5$ chain, 1 single on the 5 th of the first 10 chain $=12$ chain, 1 plain on the loop of the last triple treble, 7 chain, 1 picot in bullion stitch, 6 chain $=1$ plain on the stalk between the 2 leaves; 6 chain, 1 picot, 7 chain, 1 triple treble on the leaf, 5 chain, repeat from *.

2nd row-5 chain, 1 treble on the lower loops. Distribute the chain stitches equally.
3rd row-1 plain in the braid that forms the footing of the lace, 2 chain, 1 plain on the last chain stitches, 2 chain, 1 plain in the
braid, continuing in this manner to join the crochet work and the braid together.
Irish lace (fig. 467).-Begin with the semicircles in the middle of the pattern, which arch over two scallops, and cast on 117 chain. Then lay a double or threefold thread of Cordonnet 6 fils D.M.C No. 2, over the chain stitches, and make one plain stitch on each; then cut the padding thread short off.


Fig. 467. Irish lace.
Materials: Cordonnet 6 fils D.M.C Nos. 25 to 100, Fil à pointer D.M.C No. 30 or Fil d'Alsace D.M.C Nos. 30 to 100.[A]

On the other side of the chain make 2 plain, $* 2$ chain, 1 picot, 7 chain, 1 picot, 2 chain, miss $7 ; 1$ plain on each of the 2 next stitches **.
Repeat 11 times from * to ${ }^{* *}$; the 11th time making only 6 chain.
2nd and 3rd row-On the upper side, over a double thread of twist: 1 plain on each stitch of the last row; cut off the padding thread $=2$ chain, 1 picot, 7 chain, 1 picot, 2 chain, 1 plain on the 4 th of the 7 chain stitches after the first picot of the preceding row $=3$ chain, 1 picot, 3 chain, 1 plain on the 4 th of the next 7 chain stitches $* *$. Repeat 11 times from ${ }^{*}$ to ${ }^{* *}$ and then make: 2 chain, 1 picot, 7 chain, 1 picot, 2 chain, 1 plain.
On the upper side and without a padding thread: 3 plain, 1 picot, * 5 plain, 1 picot, **. Repeat 20 times from * to **. Continue with: 3 plain, 10 chain, 1 picot, 2 chain, 2 plain on the 4 th of the first 7 chain of the 2 nd row on the inside of the semicircle $=2$ chain, 1 picot, 7 chain, 1 picot, 2 chain, 1 plain on the plain stitch of the previous row $=1$ plain on the 1 st of the 3 chain $=2$ chain, 1 picot, 7 chain, 1 picot, 2 chain, 2 plain as before, $=2$ chain, 1 picot, 7 chain, 1 picot, 2 plain $=2$ chain, 1 picot, 9 chain, 1 plain, return and make on the 9 chain: 7 plain, 2 chain, 1 picot, 2 chain, 2 plain $=$ make 4 more scallops like the previous one $=2$ chain, 1 picot, 9 chain, 1 plain = return and make on the 9 chain: 7 plain, 2 chain, 1 picot, 2 chain, 2 plain $=$ make 2 more scallops, and then a 3rd joined to the scallop that terminates the semicircle on the right by the 2 plain stitches $=2$ chain, 1 picot, 7 chain, 1 picot, 2 chain, 2 plain on the point of the crescent $=22$ scallops consisting of: 2 chain, 1 picot, 7 chain, 1 picot, 2 chain, 2 plain.
9 plain on the scallop that terminates the semicircle on the left, 7 chain, 2 plain on the next scallop, 2 chain, 1 picot, 2 chain, 2 plain on the next scallop $=$ make 2 bars more of the same kind $=7$ chain, 2 plain $=3$ bars like the previous ones $=7$ chain, 2 plain $=3$ bars as before $=2$ plain, 7 chain, 7 plain on the next scallop $=1$ bar consisting of 3 chain, 1 picot, 3 chain, 2 plain over all the scallops of the preceding row ( 24 scallops in all).

4th row-3 chain $*, 8$ trebles on the 7 chain that follow the 7 plain $=$ turn the work $=1$ single on the last treble, 3 chain, 1 treble on the 7th and 1 on the 6 th of the 8 trebles, 2 chain, 1 treble on the 5 th and 1 on the 4 th of the 8 trebles, 2 chain, 1 treble on the 3rd and 1 on the 2nd of the 8 trebles, 3 chain, 1 single on the 1 st of the 8 trebles $=$ turn the work $=* *$ on the 3 chain: 1 plain, 1 half-treble, 1 treble, 1 half-treble, 1 plain $=1$ plain between the 2 trebles below $=$ on the 2 chain, 1 plain, 1 half-treble, 1 treble, 1 half-treble, 1 plain ${ }^{* * *}=1$ plain between the 2 trebles beneath, repeat from ${ }^{* * *}$ to ${ }^{* *}$, therefore the reverse way.
Go on with 2 scallops consisting of 2 chain, 1 picot, 7 chain, 1 picot, 2 chain, 2 plain $=$ after the 2 nd scallop: 2 chain, 1 picot, 5 chain $=8$ trebles on the 7 chain over the 7 plain and finish the little flowers consisting of 4 scallops each, like the first from * to ${ }^{* * *}$ and from ${ }^{* * *}$ to $* *=2$ plain to get back to the scallop $=1$ chain, 1 picot, 2 chain, 2 plain, 3 chain, 1 picot, 7 chain, 1 picot, 2 chain, 2 plain, 3 chain, 1 picot, 3 chain, and make a 3rd flower of 4 scallops like the 2 others $=2$ single to come back to the scallop, 2 chain, 1 picot, 2 chain, 2 plain $=2$ more scallops like the previous ones, then make the 4 th flower of 4 scallops, which must come before the 7 plain stitches of the previous row $=20$ scallops consisting of: 2 chain, 1 picot, 7 chain, 1 picot, 2 chain, 2 plain $=$ the last scallop is to be joined to the 1 st scallop of the 1 st flower, under the left point of the semicircle $=3$ single along the small scallop, 3 trebles, 2 chain, 1 picot, 2 chain, 2 plain on the point of the scallop $=3$ bars like the previous ones to be joined to the 2 next scallops $=3$ similar bars between the small scallops $=1$ single on the scallop between the 2 flowers and 1 single on the 2nd set of chain stitches in the scallop that precedes the 3rd flower $=1$ single on the point of the 1 st scallop of the 3 rd flower $=$ continue the little bars along the 2 nd side until past the 4 th flower $=$ after the 4th flower make 2 bars consisting of 2 chain, 1 picot, 2 chain, 2 plain $=3$ chain, 1 picot, 3 chain, 2 plain on the next scallop **** 7 chain, 2 plain on the next scallop, 3 chain, 1 picot, 3 chain, 2 plain on the next scallop, 3 chain, 1 picot, 3 chain, 2 plain on the next scallop, 3 chain, 1 picot, 3 chain, 2 plain on the next scallop ${ }^{* * * * *}$ repeat five times from ${ }^{* * * *}$ to ${ }^{* * * * *}$. At the 2 nd repetition make 1 bar with 1 picot more, so that you have 4 bars instead of 3 . At the 5 th repetition you decrease by 1 bar, so that you have 2 instead of 3 .
1 plain on the point of the scallop of the flower, 3 chain, 1 picot, 7 chain, 1 picot, 3 chain, 3 plain, one of which is made on the 2nd plain of the previous row, and the 2 nd on the bar of chain stitches $=3$ plain, 1 picot, 7 chain, 1 picot, 3 chain, 2 plain = 2 more similar scallops $=$ then 3 chain, 1 picot, 9 chain, 1 plain on the 2 nd plain of the previous row $=$ join and on the 9 chain make 7 plain = 3 chain, 1 picot, 3 chain, 2 plain.
Over the 1 st little flower inside the semicircles, make 1 scallop like the previous ones $=$ then 3 chain, 1 picot, 7 chain, 2 plain on the 3rd point of the first flower $=2$ chain, 2 plain on the 2 nd point of the second flower $=6$ plain on the scallop and joined to the 3 rd point of the first flower $=3$ chain, 1 picot, 3 chain $=2$ plain $=1$ scallop like the previous ones, 2 plain on the 4 th point of the small flower, 3 chain, 1 picot, 9 chain, 1 plain $=7$ plain over the 9 chain $=3$ chain, 1 picot, 3 chain, 2 plain.
Make 7 scallops of: 3 chain, 1 picot, 7 chain, 1 picot, 3 chain, 2 plain, after the 7 th scallop make 1 chain only, which must come just before the 7th chain to the left without a picot and above the point of the semicircle.
Over the 7 chain make a flower like the first with 4 scallops $=$ then 3 scallops, 3 chain, 1 picot, 7 chain, 1 picot, 3 chain, 2 plain. Make one more flower with 4 scallops, 3 scallops like the previous ones = a third flower with 4 scallops, 2 chain, 2 plain, one of them above the point of the row beneath, 12 chain, 1 plain over the next scallop $=$ turn the work and coming back over the row just made, make: 7 plain on the first 7 of the 12 chain, 1 plain on the point of the scallop, 4 chain, 1 picot, 4 chain, 1 plain on the next scallop, carry on the bars over the flowers and scallops, making 1 plain on the scallops of the flower and 2 plain on the other scallops, up to the 5 plain stitches between the 2 flowers underneath the semicircle.
After the plain stitch that joins the last bar, turn the work and make 23 scallops consisting of: 4 chain, 1 picot, 7 chain, 1 picot, 4 chain, 2 plain.
Cut off the thread and fasten it on above the semicircle and at the plain stitch which precedes the 7 chain without picot and make the second side like the first = having reached the middle, close to the 5 plain, turn the work $=$ make the half round of bars and fasten off at the 4th scallop of the flower above the semicircle.
Fasten on at the point under the flowers where the work was turned and on the wrong side, and from right to left, work: 21 scallops consisting of 4 chain, 1 picot, 7 chain, 1 picot, 4 chain, 2 plain $=$ then add: 4 chain, 1 picot, 10 chain, 1 plain above the
point of the scallop of the small flower = turn the work: 7 plain over the 10 chain.
22 bars of 3 chain, 1 picot, 3 chain, 2 plain = after the 22 nd bar, 10 chain $=$ come back and join to the picot of the 21 st bar $=2$ chain, 8 trebles over the 10 chain and complete the flower as before. After the 4 th scallop of the flower: 2 chain, 1 single, quite close to the 8 trebles, 3 chain, 2 plain on the next bar, 3 chain, 1 picot, join to the 2 nd stitch of the 4 th scallop of the flower, 3 chain, carry on the bars the same distance as on the first side.
Footing of the lace-On the chain stitches that follow the 3rd plain stitch and above the last little figure: 1 triple treble, 6 chain, join to the middle plain stitch $=$ miss 1 scallop, 1 treble, 6 chain $=$ miss 1 scallop, 1 double treble, 6 chain, $=$ miss 1 scallop, 1 triple treble, 6 chain, $=$ miss 1 scallop of the figure on the left, 1 double treble, 6 chain $=$ miss 1 scallop, 1 treble, 6 chain $=$ miss 1 scallop, 1 double treble, 6 chain $=$ miss 1 scallop, 1 treble, 6 chain $=$ miss 1 scallop, 1 treble, 6 chain $=$ miss 1 scallop, 1 double treble, 6 chain, 1 triple treble, 6 chain, 1 quadruple treble on the next plain stitch. Repeat the whole, reversed, and finish off the footing with a row of plain stitches.

Edge of the lace.-Fasten on, where the semicircles join: 1 double treble on the first 3 chain stitches of the empty scallop, 5 chain, 1 double treble on the next disengaged chain stitches of the half scallop; continue the same on all the chain scallops and distribute the trebles so that there may be in all, 13 times 5 chain stitches.
Add 2 triple trebles, the last loops of them, connected by a plain stitch; the 1 st triple treble on the 3 last chain stitches of the last scallop, the 2nd on the plain stitch, that follows the 1st scallop of the middle figure $=4$ chain, 1 treble on the plain stitch of the 2 nd point. Repeat the same, reversed.
2nd row-On the first 5 chain of the last row: 5 plain $=$ on the next 5 chain: 5 plain $=$ on the 3 chain, leave a space: 5 plain, 12 chain, come back and join to the 8 th chain stitch by a single stitch $=$ on the scallop: 4 plain, 1 picot, 3 plain, 1 picot, 4 plain $=$ and so on, until you have 8 points altogether.

The plain stitches must be distributed as follows:
For the 2 nd point: in the 4 th space 4 plain, in the 5 th space 3 plain $=$ for the 3 rd point: in the 5 th space, 2 plain, in the 6 th space, 5 plain = for the 4 th point: in the 6 th space 1 plain, in the 7 th space 6 plain $=$ for the 5 th point: in the 8th space 4 plain, in the 9 th space 3 plain $=$ for the 6 th point: in the 9 th space 3 plain, in the 10 th space 4 plain $=$ for the 7 th point: in the 11 th space 7 plain $=$ for the 8 th point: in the 12 th space 7 plain $=5$ plain in each of the 2 remaining spaces.

Crochet lace (fig. 468). -This is always an effective pattern, in any number of thread. It is not new, however, and is probably already known to many of our readers as a pillow lace. Those who are not fond of making pillow lace, will be glad to learn how to reproduce it in crochet, as it makes a pretty trimming, both for wearing apparel and furniture. For furniture, it should be made in unbleached cotton, for articles of dress, in any of the of the finer numbers, referred to above.


Fig. 468. Crochet lace.
Materials.-For trimming curtains and coarse linen table covers: Fil à pointer D.M.C No. 25 or 30, or Cordonnet 6 fils D.M.C Nos. 10 to 25 écru. For articles of dress: Fil d'Alsace D.M.C Nos. 30 to 70, Cordonnet 6 fils D.M.C Nos. 25 to 70, or Fil à dentelle D.M.C Nos. 25 to 70 écru. [A]
For the separate squares, cast on 10 chain stitches, and close the ring.
1st row-* 5 chain, 1 plain on the ring. Repeat 3 times from *.
2 nd row- 1 chain, 1 plain on the first 5 chain: $* 5$ chain, 1 plain $=$ on the first 5 chain of the 1 st row: 2 chain, 1 plain on the second 5 chain of the 1st row. Repeat 3 times from *.
3rd row-1 plain on the first 5 of the 2 nd row: * 5 chain, 1 plain, 2 chain, 1 plain, 2 chain, 1 plain. Repeat 3 times from *.
In the 4th and following rows, go on increasing, as in the 3rd row, until, on all 4 sides, you have 11 plain stitches between every 5 chain.
12th row-1 plain, 5 chain, 1 plain, * 1 picot made of 4 chain, 1 plain between the 1 st and the 2 nd plain of the last row, 2 chain, 1 plain between the next 2 plain. Repeat 3 times from *, and fasten off.
Crochet the squares together, as you finish them. After the 12th and last plain stitch, make: 2 chain, drop the loop, put the hook into the 3rd of the 5 chain stitches that form one corner of the square, draw the dropped loop through, 2 chain, close the picot, finish the square.
For the star that connects the squares-10 chain, close the ring; * 4 chain, 1 picot, 4 chain, 1 over, join the 2 picots right and left of the squares that are to be joined together, by 1 treble; 4 chain, 1 picot, 3 chain, drop the loop, put the needle into the first of the first 4 chain stitches, draw the thread through, 2 plain on the ring, 8 chain, 1 treble on the 3rd picot and 1 treble on the 4 th picot of the square $=$ coming back: 1 plain on each of the 8 chain; 2 plain on the ring, and repeat 3 times from *.
For the half-star, that fills the space under the footing of the lace: 10 chain, close the ring $=9$ chain, 1 treble on the 1 st picot of the square; 4 chain, 1 picot, 3 chain; draw the thread through the 1 st of the 9 chain $=2$ plain, 8 chain, join the 3rd and 4th picots of the square by 1 treble bar on each picot $=8$ single stitches on the 8 chain, 2 plain on the ring; 4 chain, 1 picot, 4 chain $=$ on the 1 st and last picot of the 2 opposite squares: 1 treble, 4 chain, 1 picot, 3 chain, drop the loop, draw it through the 1 st of the 4 chain stitches $=2$ plain, 8 chain, join 2 picots by 2 trebles $=8$ single, 2 plain on the ring, 4 chain, 1 picot, 4 chain, 1 treble on the last picot $=8$ chain, draw the thread through the 1st of the 4 chain.

The footing is made as follows-* 1 plain on the 5 upper chain stitches of the square; 17 chain up to the ring, 3 plain, 17 chain and repeat from *. A row of plain stitches completes the footing.

Outer edge-* 2 treble on the 1st picot, 4 chain, and repeat 5 times from *.
On the 5 chain stitches, in the corner, make: 1 treble $=4$ chain, 1 treble on the 5 chain and finish the second side of the square like the first. Omit the chain stitches, between the 1st and last trebles of the squares.

The next and last row consists of: 2 plain, 1 picot, 2 plain every 4 chain. On the last 4 chain, at the point where 2 scallops join, make 4 plain stitches, without picots.
Lace with stars (fig. 469).-Begin with the stars, make a chain of 18 stitches, close the ring, mount it on a mould, wind a soft thread, such as Coton à repriser D.M.C No 60, seven or eight times round it, and make 30 plain stitches upon it, joining the last to the first by a single stitch.


Fig. 469. Lace with stars.

## Materials: Fil d'Alsace D.M.C Nos. 30 to 70, Fil à pointer

 D.M.C No. 25 or 30, Coton pour crochet D.M.C Nos. 8 to 12. [A]Then: * 13 chain, and returning, miss the 1 st chain $=$ on the 12 chain: 1 single, 2 plain, 2 half-trebles, 2 trebles, 2 double trebles, 1 double treble and a half, 2 triple trebles; keep the two last loops of the last treble but one, on the needle, and join them, to those of the last treble. Repeat 5 times from *.
2 nd row-1 plain, on the upper stitch that was missed in the 1st row; * 17 chain, 1 plain on the next point. Repeat 5 times from *.

3rd row-* 6 plain, 3 chain, miss 2 stitches of the lower row. Repeat from *.
4 th row-All round the last row, on each of the bottom stitches 1 plain; after every 6 stitches, 1 picot. This will give you 19 picots in all, separated from each other by 6 stitches.

Inner connection-Fasten on the thread at the 5th treble, counting from the ring: 1 single, 8 chain. Draw out the thread, from the back, through the 9th of the 17 chain round the star $=8$ chain $*$ join with 1 chain to the 5th treble, passing the thread through to the back = work on the wrong side: 3 chain, bring the thread back between the 5 th treble to the right side, and repeat 5 times from *. In joining the stars, place them so that 9 picots are turned to the edge, and 8 to the footing. The 10th and the 19th picots serve to join the stars.
1st row-2 trebles between the 19th and the 9th of the * 9 picots, 7 chain, 1 treble; repeat 9 times from *.
After the 10 th treble, make no more chain stitches, but 1 treble immediately between the 19 th and the 1 st picot of the next row.
2nd row-On the 7 first chain stitches of the last row: 3 plain, 4 half-trebles, 3 trebles, 1 picot, 3 trebles, 1 picot, and so on, until in the semicircle over the picots, you have 7 times 7 chain stitches and 16 picots $=$ on the ninth set of 7 chain: 3 trebles, 4 half trebles, 3 plain.
The scallops are joined by smaller ones, formed of: 3 plain, 4 half trebles, 3 trebles, 1 picot, 2 trebles, 7 chain, drop the loop, put the needle into the same treble of the last scallop; draw the loop through and make on the 7 chain: 1 plain, 1 half-treble, 5 trebles, 1 picot, 5 trebles, 1 half-treble, 1 plain; continue the large scallop, as described above.

The footing is composed of rings and trebles.-Begin with a ring, like those in the middle of the stars, worked as follows: 18 chain, with 28 plain upon them $=$ miss 1 plain stitch of the ring, 3 plain, 10 chain $=$ miss 1 plain, 3 plain, 10 chain $=$ miss 1 plain, 3 plain, 5 chain, 1 single on the 7 th picot of the 1st star, 5 chain = miss 1 plain, 3 plain, 5 chain, 1 single on the 8 th picot, 5 chain $=$ miss 1 plain, 3 plain, 5 chain, 1 single on the 2nd picot, 5 chain, finish off.

Straight edge-Worked from right to left $=1$ chain * turn the thread 7 times round the needle, join to the plain stitch between the 7 th and 6 th picot, complete the long treble, 7 chain, join 1 treble, consisting of six overs to the 1 st treble; 1 quintuple treble between the 6th and the 5th picot; 7 chain, 1 quadruple treble joined to the previous treble $=$ in all, 10 trebles, the 1 st made with 7 overs, the 2 nd with 6 , the 3 rd with 5 , the 4 th with 4 , the 5 th and 6 th with 3 , the 7 th with 4 , the 8 th with 5 , the 9 th with 6 , the 10th with 7; and between every 2 trebles, 7 chain.
The 3 long trebles of the ring are taken up with 1 plain and 7 chain between.
Guipure lace (fig. 470).-We advise our readers to work this charming pattern, in unbleached Fil à dentelle D.M.C No 50, because it imitates the appearance of old lace better than any other material.


Fig. 470. Guipure lace.
Materials: Fil d'Alsace D.M.C Nos. 30 to 100, Cordonnet 6 fils D.M.C Nos. 25 to 100, or Fil à dentelle D.M.C Nos. 25 to 100. ${ }^{[A]}$
Lozenge-shaped figures in the centre- 5 chain, close the ring.
1 st row- 5 chain, 1 picot, 2 chain, 1 treble on the ring $=5$ chain, 1 treble on the ring $=2$ chain, 1 picot, 2 chain, 1 treble on the ring $=5$ chain on the 3 rd of the first 5 chain.

2 nd row- 12 chain, $* 1$ treble on the 1 st treble of the 1 st row $=4$ chain, 1 treble on the 3 rd of the next 5 chain $=5$ chain, 1 treble on the same stitch as the last treble $=4$ chain, ${ }^{* *} 1$ treble on the 2 nd treble of the 1 st row, 9 chain. Repeat from ${ }^{*}$ to ${ }^{* *}$; join the last 4 chain, to the 3rd of the first 12 chain, by a single stitch.
3rd row-1 chain, 4 plain, 3 plain on the 5th of the 9 chain of the last row $=12$ plain, 5 plain on the 3rd of the 5 chain, between the 2 trebles, 12 plain, 3 plain on the 5 th of the lower 9 chain $=12$ plain, 5 plain on the 3 rd of the 5 chain, 7 plain; finish the row with a single stitch.

4th row-3 chain, 1 treble on each of the next 5 plain; 3 trebles on the 6 th plain; 1 treble on each of the next 15 plain, 5 trebles on the 16th stitch; 15 trebles on the 2nd side; and again 3 trebles on the 16 th stitch; 15 trebles on the 3rd side; 5 trebles on the 16 th stitch, 9 trebles and join to the 3rd of the 3 chain.
5th row-1 chain, 6 plain, 3 plain on the 7th stitch beneath, * 18 plain, 3 plain on the 19th stitch. Repeat twice from *.
6 th row-1 chain, 1 picot, 2 plain, 1 picot, 2 plain, 1 picot = towards the point: 3 plain, 1 picot $=$ on the 2 nd side of the square: 3 plain, 1 picot, and 5 times 2 plain, 1 picot = towards the point: 4 plain, 1 picot.

On the 3 rd side as on the 2 nd, only reversed, first 4 plain, and at the point 3 plain; on the 4 th side as on the 2 nd; on the 1 st side must still be added 3 plain, 1 picot, 2 plain, 1 picot, 2 plain, 1 picot, 2 plain; draw the thread through the loop and fasten off.
The oblong squares, that connect the lozenges, take 7 rows of plain stitches. Make a chain of $14=$ turn the work $=13$ plain; add 5 rows of the same number of stitches. On the short side, and at the edge of the square: 1 picot, 3 plain, * 9 chain, miss 1 chain $=$ returning: 1 plain on the 8 th chain $=$ on the next 7 chain: 1 half treble, 3 trebles, 1 half treble, 2 plain on the last chain stitches $=$ on the 2 nd half of the short side: 3 plain, 1 picot $=$ on the long side: 3 plain ${ }^{* *}, 1$ picot, 3 plain ${ }^{* * *}$. Repeat the whole twice from ${ }^{*}$ to ${ }^{* * *}$, and then once from ${ }^{*}$ to ${ }^{* *}$ only.

The row of bars, that encircles the small leaves, begins with 2 single stitches on the first picot, then add: **** 3 chain, 1 picot, 3 chain, 1 treble on the 9th chain of the small leaf; on the short side: 1 chain, 1 picot, 1 chain, 1 triple treble on the 9th chain of the leaf; drop the thread, bring it out from the back, by the side of the picot that forms the corner on the long side of the lozenge $=1$ chain, 1 picot, 1 chain, 1 treble on the small leaf $=3$ chain, 1 picot, 3 chain, 1 treble on the picot, forming the corner of the oblong square $=3$ chain, 1 picot, 3 chain, 1 treble on the leaf on the long side of the square $=3$ chain, 1 treble on the same stitch as the 1 st treble is on $=3$ chain, 1 treble on the same stitch as the 2 first trebles are on; 3 chain, 1 picot, 3 chain, 1 treble on the picot at the corner. Repeat once from ****.
Upper and lower edge-6 chain, 1 sextuple treble on the 2 nd picot of the lozenge $=6$ chain, 1 triple treble on the 4th picot of the lozenge. Coming back over the 2 trebles of 6 chain, work in 3 journeys to and fro, 13 plain stitches.

After the 2 nd row of plain stitches, 1 quintuple treble on the 6 th treble of the lozenge, and then 4 rows of plain stitches.
After the 6th row, pass at once to the leaves above the lozenge: ***** 15 chain, 1 plain on the picot that forms the point of the lozenge $=$ turn the work to the wrong side $=$ on the chain stitches work: $* * * * * * 3$ plain, 1 half treble, 4 trebles, 1 half treble, 3 plain $=$ turn the work to the right side $=$ returning and starting from the point of the leaf: 1 chain and 1 plain on each of the lower stitches.

For the 2nd leaf: 12 chain = turn the work and repeat, as for the former leaf, from ${ }^{* * * * *}$ to ${ }^{* * * * * * . ~}$
This leaf, being finished like the first, with this difference that it ends at the upper point, you pass to the 2nd little square: 6 chain, 1 sextuple treble on the picot next to the leaves; 3 chain, 1 triple treble on the 3rd picot, counted from the leaves $=6$ chain, 1 sextuple treble on the 5th picot of the lozenge; keep the 2 last loops of the treble on the needle, 1 sextuple treble on the picot between every 3 chain of the small square with leaves; draw up the 2 last loops together with those already on the needle $=6$ chain, 1 triple treble on the picot on the long side of the small square $=3$ rows of 13 plain each.
With the last stitch of each of these rows, take 1 of the chain stitches between the long trebles.
After the 3rd row: 1 sextuple treble on the first treble on the small leaf of the small middle square $=3$ rows of plain stitches to finish the square, and repeat from ${ }^{* * * * *}$.

The upper row is similar to this but should be worked from right to left.
Scalloped edge.-In the right corner of the 1 st oblong figure of the outside corner: 1 double treble, 2 chain, 1 double treble on the 4 th plain stitch $=2$ chain, 1 double treble on the stitch that forms the corner stitch of the square $=2$ chain, 1 plain at the extremity of the first long leaf, 9 chain $=1$ quadruple treble on the stitch between the 2 leaves $=2$ chain, 1 quadruple treble on the same stitch and on the 1 st treble $=2$ chain, 1 quadruple treble on the same stitch $=9$ chain, 1 plain on the last stitch of the 2 nd long leaf = turn the work: 1 chain, 1 plain on each of the chain stitches, and on each treble, 27 plain stitches in all $=$ turn the work: 1 chain, 1 plain, 2 chain, 1 plain on the 2nd plain; repeat the last 12 times. Take in 1 stitch on each side in every row, turn the work after each row, and at the end of the last fasten off. Fasten on at the foot of the scallop, not at the point, and work plain stitches all round it; 20 plain to the upper point, 40 in all.

The open-work edge of the scallops consists entirely of double trebles.-After the 40 plain stitches of the edge: 2 chain, 1 treble on the 1st plain stitch of the small square = turn the work: $* 2$ chain, 1 treble on the 2 nd of the plain stitches, forming the edge of the scallop ${ }^{* *}$; repeat 7 times from ${ }^{*}$ to ${ }^{* *}=* * * 2$ chain, 1 treble on the next plain stitch $=2$ chain, 1 treble on the next plain $=$ repeat 4 times from ${ }^{* * *}$; and then 7 times from ${ }^{*}$ to ${ }^{* *}=2$ chain, 1 plain on the 4 th treble of the square; 2 chain, 1 plain on the 3rd treble.

Work on, on the right side $=* * * * 2$ chain and 1 treble on the preceding treble as far as the 8 th treble; after the 8 th: ${ }^{* * * * * ~} 10$ chain, back to the 7th, and returning, join to the 7th treble $=$ on the 10 chain: 16 plain, after the 16 th draw the loop through the upper loop of the 8 th treble $=* * * * * 2$ chain, 1 treble, 2 chain, 1 treble, 10 chain, return, and fasten the chain stitches to the last treble but one $=6$ plain, 1 picot, 2 plain, 1 picot, 6 plain and join as before ${ }^{* * * * * * * ~}=$ Repeat once from $* * * * *$ to $* * * * * * *$,
 stitch of the small square, 2 chain, 1 treble on the 7 th plain stitch of the square, 2 chain, 1 treble on the 10th plain stitch, 1 treble on the outside stitch, at the corner of the square, 2 chain, 1 plain on the last stitch of the leaf; 9 chain and so on, as above described.

Having reached the second scallop, on the 2nd row of trebles, at the sign ***, work: 2 chain, 1 treble to the left on the scallop just finished, keeping the last loops of the treble on the needle, 1 double treble to the right of the scallop and join it to the 2nd treble; draw the 4 loops together $=2$ chain, 1 treble to the left, 1 quadruple treble to the right $=11$ chain, drop the loop, bring it to the right side through the 4 th treble of the right scallop $=$ on these 11 chain stitches: 1 single, 1 plain, 1 half treble, 2 trebles, 1 half treble, 1 plain, 1 single = 1 double treble on the open-work edge, then 2 chain, 1 treble, 2 chain, 1 treble, 12 chain; join to the 6th treble of the right scallop = working back: 4 plain, 1 picot, 4 plain, 1 picot, 4 plain, 1 picot, 4 plain, join to the treble, thrice 2 chain, 1 treble. Go back to ***** and repeat twice to *******.

The footing of the lace is worked in 5 rows from right to left.
1 st row- 1 single, * 1 double treble on the 6 th plain stitch of the square $=1$ chain, 1 double treble on the 2 nd plain stitch of the square $=3$ chain, 1 picot downwards, 3 chain, 1 plain on the stitch at the extremity of the long leaf $=3$ chain, 1 picot downwards, 3 chain, 2 quadruple trebles between the two leaves $=3$ chain, 1 picot downwards, 3 chain, 1 plain on the last stitch of the 2nd leaf, 3 chain; repeat from *.
2nd row-1 plain on each stitch of the previous row.
3rd row-count 2 stitches before and above the 2 trebles on the squares and make: * 1 treble, miss 1 stitch, 1 treble, miss 1 stitch, 1 treble, miss 1 stitch, 1 treble = turn the work: 1 plain on each of the 4 trebles $=$ turn the work, come back and make 4 plain on the first $4=5$ chain, miss 2 stitches of the 2nd row, 1 treble on the 3rd plain, and continue from *.
4 th row-1 treble on each of the 4 plain, 1 chain between each treble, 2 chain and so on.

5th row-1 plain stitch on each of the stitches of the 4 th row.
Crochet Reticella lace (fig. 471).-This pattern, copied in crochet from an old piece of Reticella lace, only looks well, worked in very fine cotton, as indicated in our illustration, namely, in unbleached Fil à dentelle D.M.C No 150. To make it resemble the original more closely, the method adopted in Venetian point, of making all the stitches over a padding thread, has, in the case of the outside edge, been followed here.


Fig. 471. Crochet reticella lace.
Materials: Fil d'Alsace D.M.C Nos. 30 to 100, or Fil à dentelle D.M.C Nos. 25 to 150.

At the end of each row of plain stitches, draw out a sufficiently long loop to lay it back over the stitches just made, and to work the next row of stitches over this double foundation. These loops must be long enough, not to pucker or tighten the scallops.
For the inner squares $=4$ chain, close the ring.
1 st row- 8 chain, 1 treble, 3 chain, 1 double treble, 3 chain, 1 treble, 3 chain, 1 double treble, 3 chain, 1 treble, 3 chain, 1 double treble, 3 chain, 1 treble, 3 chain, 1 single stitch on the 5th of the 8 chain.

2nd row-* 1 chain, 5 plain on the first 3 chain, 5 plain on the next 3 chain. On these 10 plain stitches, working to and fro, 9 rows of plain stitches, decreasing by 1 in each row; after the last stitch, come back along the side of the little triangle, and make 1 single stitch in every row, 1 plain on the treble of the 1 st row ${ }^{* *}$; repeat 3 times from ${ }^{*}$ to ${ }^{* *}$.
These small triangles must be worked over 1 single treble and between 2 double trebles.
When the 4 th triangle is finished, make directly, starting from the last stitch at the point, and along the side: 3 plain, 1 picot, 3 plain, 1 picot, 3 plain; 1 single stitch on the treble; all the triangles must be edged, in this same manner on both sides; on the stitch that forms the point: 3 plain stitches.

3rd row-* 17 chain, drop the loop $=$ bring it to the front, through the plain stitch that lies between 2 triangles; returning, make 10 single stitches backwards on the 10 chain. You make stitches like this, backwards, in all the trebles that follow, that is, the loop is dropped after each stitch, and brought forward from the wrong side to the right $=13$ chain, join to the 5 th single, counting upwards from below $=7$ single on the chain stitches; 13 chain, join to the other trebles; 6 chain, 1 single on the stitch at the point of the triangle ${ }^{* *}$; repeat 3 times from * to ${ }^{* *}$. $=$ The chain stitches for the trebles, must be drawn up very tight.
4 th row-1 plain on each of the stitches of the preceding row, 3 plain on the corner stitch. On each side there must be 29 plain stitches, not counting the corner ones.

5th row $=6$ chain, miss 2 stitches of the row beneath, * 1 double treble, 2 chain; repeat 3 times from $*=2$ chain, 1 double treble, 2 chain, 1 double treble on the same stitch as the 1 st treble $=2$ chain, 1 double treble on the same stitch as the 1 st treble $=2$ chain, 1 double treble on the same stitch as the two first trebles $=10$ times to the next corner: 2 chain, 1 double treble, 3 double trebles, each of them with 2 chain stitches at the corner; repeat the same on each of the 4 sides.

6th row-1 plain on each of the stitches of the last row, 3 plain on the corner stitch $=$ cut off the thread. Join the next squares together at once by the last corner stitch.

Lower edge-You begin by making the large scallop at the point of the square, and pass the double thread over the 3rd treble that comes before the 3 trebles at the point of the square and make: 1 plain stitch on each stitch of the square, up to the 3rd treble on the opposite side; then draw out a long loop which you carry back to the beginning. In the 2nd row increase by 2 stitches, right and left of the middle stitches, for the rounding of the scallop, and decrease by 1 on each side. Make 10 rows in all, and in each row, decrease by 4 stitches and increase by 2 . Fasten off after the 10 th row.
The two little scallops, right and left of the big one, are worked in 5 rows, over 5 trebles and 4 intervals of chain stitches, taking off 2 stitches in every row. For the small triangle between, worked in 4 rows, you must increase on both sides by 2 stitches.
When all the scallops are finished, edge them with 3 plain stitches, 1 picot and 3 plain and work in all the ends of thread from the preceding rows at the same time.
For the footing and the small triangles, that fill up the spaces between the squares: 22 chain, miss 1 , 10 rows of plain stitches, worked to and fro, decreasing by 1 in every row.

When the triangle is finished, make on one side, 1 single in every row; then, on the 11 remaining chain stitches, a second triangle, like the first, which you then join to the plain stitches, above the 5th treble; then returning along the side of the triangle, add 3 plain, 1 picot, 3 plain, 1 picot, 3 plain; 1 single on each of the 22 chain stitches.
Edge the next side of the 2 nd triangle like the first, join the corner stitch to the 5 th treble; edge the two inner sides 3 times with 3 plain stitches and 2 picots.

Then from right to left on the plain stitches: 6 plain, 15 chain, join them to the middle of the 2 triangles $=1$ single on each chain, 5 plain on the square; 11 chain, 1 single on the 9 th of the first 15 chain; 1 single stitch on each of the chain stitches; 1 plain on each stitch of the square, to the point where the squares join, 8 chain, 1 single on the 6 th of the 11 chain, 1 single on each of the 8 chain.

On the 2 nd side: 7 plain, 5 chain, 1 single on the 6 th of the 11 chain, 1 single on each of the 5 chain, 5 plain, 9 chain, 1 single on the 9th of the 15 chain, 1 single on each of the 9 chain, 6 plain on the square; fasten off.
Fasten on, at the 2 nd of the 3 corner stitches $=17$ chain, 1 plain on the corner stitch of the triangle; 8 chain, 1 plain on the next corner stitch, 17 chain, and so on.
A row of plain stitches, or trebles, completes the lace.
Lace with corner, formed by increasing on the outside (fig. 472).-1st row-On a row of chain stitches or trebles, work alternately: 1 chain, 1 treble = on the corner: 1 chain, 1 treble, 2 chain, so that the last 3 trebles come on one stitch.


Fig. 472. Lace with corner, formed by increasing on the outside. Materials: Fil d'Alsace D.M.C No. 30, Fil à pointer D.M.C Nos. 20 to 30, Cordonnet 6 fils D.M.C Nos. 15 to 30, or Fil à dentelle

## D.M.C Nos. 25 to 50.[A]

2nd row-1 plain on each stitch of the 1st row, 3 plain on the 2 nd of the 3 corner trebles.
3rd row-Counting from the 2 nd of the 3 corner stitches, and towards the left, make 1 plain on the 53rd, 52nd, 51st and 50th plain stitches; 8 chain, miss 1 chain, 1 plain on each of the 7 chain stitches $=$ on the other side of the 8 chain, also 1 plain on each stitch, 3 plain on the 8th chain, 1 plain on each of the first 7 plain.
On the next 11 stitches of the 2nd row: 1 plain $=4$ chain, miss 4,1 triple treble on the 5 th of the 2 nd row, 4 chain, 1 triple treble on the same stitch, 4 chain, 1 triple treble on the same stitch, 4 chain, miss 4,1 single on the 5 th $=$ turn the work $=$ on each treble of 4 chain: 7 plain; 28 in all; 1 single on the 10 th of the 11 plain $=$ turn the work $=$ miss the 28th plain, and on the 27 others make: 3 plain, 1 picot, 3 plain $=11$ chain, miss the 11 th, 10 plain on the others $=$ on the 2nd side of the chain: 4 plain, 10 chain, join them to the 6th of the first 11 plain of this row $=$ on the 10 chain: 5 plain, 3 chain, join them to the 5th plain of the 1st leaf, made in this row $=$ on the 3 chain: 3 plain $=$ on those of the 10 remaining chain stitches: 6 plain $=$ along the leaf: 3 plain, 1 picot, 3 plain = on the stitch at the point of the leaf: 3 plain = then down the 2 nd side: 3 plain, 1 picot, 7 plain $=$ over the next of the 28 plain: 3 plain, 1 picot, 4 plain $=* 11$ chain, miss the 11 th, 10 plain $=$ on the second side of the chain: 4 plain, 6 chain, join them to the 4th of the last 7 plain of the 2 nd leaf $=$ on the 6 chain: 9 plain. Continue on the 3rd leaf of this row: 3 plain, 1 picot, 3 plain and 3 plain on the stitch at the point of the leaf $=$ on each of the next 3 stitches: 1 plain, then 1 picot, 7 plain $=$ on the 28 stitches: 4 plain, 1 picot, 3 plain ${ }^{* *}$. Repeat from ${ }^{*}$ to ${ }^{* *}$, and here follow: 3 plain, 1 picot, 3 plain.
On the 2nd row: ${ }^{* * *} 5$ plain, 10 chain, join them to the 4 th of the last 7 plain of the 3rd leaf; 11 plain over the 10 chain $=$ on the 2nd row: 5 plain, 8 chain, miss 1 chain, 1 plain on each chain $=$ on the second side: 4 plain, 3 chain, join them to the 6th of the last 11 plain $=3$ plain on the leaf, 3 plain on the stitch at the point, 7 plain, and repeat from *.

On the 2 nd row and for the corner: 9 plain, ${ }^{* * * * ~} 4$ chain, 1 triple treble on the 2 nd of the 3 corner stitches and repeat 4 times from ${ }^{* * * *}=4$ chain, miss 4 of the preceding row, 1 plain on the 5 th $=$ turn the work, on each bar of 4 chain, 6 plain, 36 in all, join the last to the 8 th of the 9 plain = going back over the 36 plain: 3 plain, 1 picot, 3 plain, 11 chain, miss the 11th, 1 plain on each of the 10 chain $=$ on the 2 nd side of the chain: 4 plain, 10 chain, join them to the 4 th of the 9 plain = over the 10 chain: 5 plain, 3 chain, join them to the 4th plain of the last leaf, 3 plain $=$ on the remainder of the 10 chain: 6 plain.
Proceeding along the leaf: 3 plain, 1 picot, 3 plain, 3 plain on the stitch at the point, 3 plain, 1 picot, 7 plain ${ }^{* * * * * \text {. Again on the }}$ 36 plain, make: 3 plain, 1 picot, 3 plain, 11 chain, miss the 11 th, 10 plain $=$ on the 2 nd side of the chain: 4 plain, 6 chain, join them to the 4 th of the last 7 plain of the last leaf, 9 plain over the chain stitches $=$ on the leaf: 3 plain, 1 picot, 3 plain, 3 plain
 Continue along the 2nd row: 4 plain, 10 chain and on these 11 plain $=4$ plain, 8 chain, returning, miss the 8 th, 7 plain on the others $=$ on the 2 nd side of the chain: 4 plain, 3 chain, join them to the 6 th of the last 11 plain $=$ on the 3 chain: 3 plain $=$ on the leaf: 3 plain, 3 plain on the stitch at the point of the leaf, 7 plain.

4th row-1 plain on the 1 st leaf of the 3 rd row: * 7 chain, 1 plain on the 2 nd leaf $=7$ chain, 1 triple treble on the 5th of the 9 plain between 2 leaves $=7$ chain, 1 plain on the 3 rd leaf $=7$ chain, 1 triple treble, 7 chain, 1 plain on the 4 th leaf $=7$ chain, 1 plain on the 5th leaf; 5 chain, 1 plain on the 1 st leaf of the corner scallop. Repeat from $*$, with this difference, that, in the corner scallop you must have 4 triple trebles.

5th row-on the first 7 chain of the 4th row: 7 plain, * on the next chain stitches: 12 plain $=$ turn the work, and crochet to and fro, decreasing by 1 stitch in each row, until you have only 2 stitches left = along the leaf: 10 plain and repeat 3 times from * $=$ 7 plain on the next 7 chain, 6 plain on the 5 chain, 7 plain on the 7 chain.
The corner scallop has 7 points = the 12 first stitches must be divided as follows: * 1st point: 12 plain in the first interval = 2nd point: 10 plain in the 2 nd interval and 2 plain in the 3rd interval $=3$ rd point: 7 plain in the 3 rd interval and 5 plain in the 4 th **. Repeat once from ** to *.

6th row-* 1 plain in the 1st leaf, 5 chain, 1 crossed quadruple treble, the branches of which are joined by 5 chain; repeat twice from ${ }^{*}=1$ plain, 4 chain, 1 plain in the 1 st leaf of the next scallop $=5$ chain, 1 crossed quadruple treble, the branches of which are joined by 5 chain and joined to the 6th stitch of the 2 next points $=5$ chain and so on.

7th row-6 plain on the first 5 chain of the 6th row, 6 plain on the next chain $=8$ chain; carry the chain back to the right, and join it on, between the 6th and 7th plain $=4$ plain on the 8 chain, then 8 chain, take it back, and join to the 1 st plain $=12$ plain on the 8 chain $=$ continue on the small scallop: 3 plain, 1 picot, 8 plain $=$ on the other 5 chain: 6 plain $=8$ chain, join them again to the 4 th of the 8 plain on the scallop $=$ on the last 8 chain: 3 plain, 1 picot, 8 plain $=$ on the 2 next bars of 5 chain: 12 plain $=8$ chain, join them to the 7 th of the last 12 plain $=$ on the 8 chain: 5 plain $=8$ chain, join them to the 1 st of the last 12 plain $=$ on the 8 chain: 5 plain, 3 chain, join them to the 4 th plain of the 3 rd finished scallop $=$ over the 3 chain: 2 plain, 1 picot, 2 plain $=$ on the next scallop: 3 plain, 1 picot, 3 plain $=$ in the half finished scallop: 6 plain $=8$ chain, take it back and join it to the 1st of the last 6 plain $=$ on the 8 chain: 5 plain, 1 picot, 3 plain, 1 picot, 5 plain to finish the scallop below: 5 plain $=$ on the 6 th row: 6 plain, 8 chain, join them to the first of the last 5 plain of the last scallop $=$ on the 8 chain: 3 plain, 1 picot, 8 plain.

Lace with corner, formed by decreasing on the inside (fig. 473).-For the stars-8 chain, close the ring; 3 chain, 15 trebles in the ring; close $=3$ chain, miss 1 treble of the last row, 1 treble, 5 chain, 1 treble on the upper part of the last treble $=$ alternate 7 times: 1 chain, 1 crossed treble divided by 2 chain, lastly 1 chain, close the ring, fasten off.


Fig. 473. Lace with corners formed by decreasing on the inside.
Materials: Fil d'Alsace D.M.C Nos. 30 to 70, Fil à pointer D.M.C No. 20 or 30, Coton pour crochet D.M.C Nos. 10 to 18, or Cordonnet 6 fils D.M.C Nos. 4 to 60.[A]

## Colours: White, Écru naturel or any other colour of the 450 shades of the D.M.C colour card.

Make 11 stars, and join them together as follows, counting the third from the left, in the engraving, as the first.-When you have joined the 1 st star to the 2 nd by the 6 th and 7 th cross trebles, join the next stars so that when the 3rd is fastened on, there should be 2 crossed trebles on the inside and outside of the 2nd star. The 3rd star will have: 1 crossed treble on the outside, 3 on the inside $=$ the 4 th: 2 crossed trebles inside, 2 outside $=$ the 5 th, the 6 th, and the 7 th: 1 inside, 3 outside $=$ the 8th: 2 on the inside and outside $=$ the 9 th: 3 inside, 1 outside $=$ the 10 th: 2 outside, 2 inside $=$ the 11 th: 3 outside, 1 inside. For the next scallops, repeat from the 2nd to the 5th star.
2nd row-* over the 2 chain stitches of the 3rd crossed treble of the 11 th star: 1 treble, 3 chain = over the 1 st chain stitch between the 3rd and 4th crossed trebles: 1 treble, 3 chain = over the next 2 chain stitches: 1 double treble, 3 chain $=3$ overs, in the next space: 1 double treble and 1 double treble in the 1 st space of the 10 th star; connect the two trebles together, 3 chain, 1 double treble, 3 chain, 1 treble, 3 chain, 1 treble, 3 chain, 1 connected treble as before, 3 chain ** 1 plain over the 2 chain stitches of the last crossed treble of the 9th star. Repeat from ${ }^{* *}$ to ${ }^{*}$, therefore backwards.
Each of the next trebles comes, either over 2 chain stitches of the crossed treble, or over the chain stitch between the crossed trebles ${ }^{* * *} 3$ chain, 1 treble, 3 chain, 1 double treble, 3 chain, 1 triple connected treble, 3 chain, 1 double treble, 3 chain, 1 treble, 3 chain ${ }^{* * * *} 1$ single; repeat, in the reverse order, therefore, from ${ }^{* * * *}$ to ${ }^{* * *}$.
When the outside row is finished, make a similar row on the inside of the stars; at the corner 3 trebles are to be made 3 times over each of the middle stars.
3rd row-1 treble above and below, on each stitch of the second row.
4th row-consists entirely of crossed trebles $=*$ miss on the upper edge: 3 times 1 treble, and 5 times 2 trebles $=$ on the next trebles of the preceding row: 1 double treble, miss 2 stitches, 1 double treble, miss 2 stitches, 1 double treble $=$ draw up the last loops of the 3 trebles together $=$ repeat the same thing backwards $=$ here follow: 8 crossed trebles separated each by 1 treble of the preceding row ${ }^{* *}$; the 8th and the 9th crossed trebles are together in the corner treble of the preceding row. Repeat from ${ }^{* *}$ to ${ }^{*}=$ here follows 1 row with 1 treble on every stitch below.

The row on the side of the footing is worked as above described $=$ at the corner, and after having made the 3rd connected treble, * miss 5 times 2 stitches, 6 times 1 stitch, 3 times 2 stitches, 3 times 3 stitches, ** 3 triple trebles connected together above, miss 3 stitches underneath; repeat from ${ }^{* *}$ to *, followed on both sides by a row of trebles.
In the corner of the inside row of trebles connect the loops of 5 pairs of trebles, in the centre connect the loops of 3 trebles, and again the loops of 5 pairs of trebles.

For the 1st star of the footing: 8 chain, close the ring; 3 chain in the ring, 15 trebles, close $=3$ chain, miss 1 treble, 1 treble, * 3 chain, 1 treble on the stitch of the 1st treble, miss 1, 1 treble in the 2nd stitch, draw the loops of the 2 trebles together **. Repeat 6 times from ${ }^{*}$ to ${ }^{* *}$; add 3 chain and close $=5$ chain, join them to the 15 th treble of the last row; 5 chain, 1 plain on the first chain stitches between 2 trebles; 4 chain, join them to the 7th treble; 4 chain, 1 plain on the next chain stitches, 3 chain, join to the treble over the 3 connected triple trebles, 3 chain, 1 plain on the next chain stitches, 4 chain, join them to the 8th treble, 5 chain, 1 plain on the 5th treble, cut off the thread.
The corner star is made like the one just described, and is joined on, as follows: 3 chain, join them to the 17th treble on the left of the last row (counting from the triple treble) $=3$ chain, 1 plain on the first chain stitches between 2 trebles $=3$ chain, miss 4 trebles, join them to the 5 th $=3$ chain, 1 plain on the 2 nd set of chain stitches between $=6$ chain, miss 5 trebles, join them to the 6 th $=3$ chain, 1 plain on the 3rd of the 6 last chain $=3$ chain, join them to the corner stitch, 3 chain, 1 plain on the last 3 chain = towards the right: 3 chain, join to the 5 th treble $=3$ chain, 1 plain on the preceding, 3 chain, 1 plain on the 3rd set of stitches between, 3 chain, miss 4 trebles, join to the 5 th treble $=3$ chain, 1 plain on the 4 th set of stitches between, 3 chain, miss 4 stitches and join $=3$ chain, 1 plain on the 5 th double treble, fasten off.

On the 3 first trebles of the preceding row of the inside edge, counting from the outermost stitches which are to be seen to the right in the illustration, 1 plain, 3 chain, miss 4 trebles, 1 treble $=3$ chain, miss 3 trebles, 1 double treble, 3 chain, 3 overs, pass the needle over the double treble, crochet off one over $=$ miss 3 stitches, 1 double treble, crochet off the 2 remaining loops $=3$ chain, 4 overs, crochet off 2 loops, 1 double treble over the chain treble of the star, crochet off the remaining loops $=$ 3 chain, 3 overs over the treble made on the 5 chain, crochet off 2 loops $=1$ treble on the 5th set of stitches between, crochet off the remaining loops $=3$ chain, 1 treble on the 6 th set of stitches between $=3$ chain, 1 treble on the 7 th set of stitches between $=3$ chain, 3 overs, 1 treble on the 8 th set of stitches between; crochet off 1 over, 1 double treble on the 5 first chain stitches of the star, crochet off the remaining loops $=3$ chain, 3 overs, 1 treble over the 2 nd double treble, 1 double treble,
miss 2 trebles of the preceding row, complete the treble $=3$ chain, 3 overs, crochet off 1 over, joining it to the last double treble; crochet off the overs $=1$ treble on the 5th treble of the preceding row, crochet off the loops $=3$ chain, 1 treble on the 4 th treble $=3$ chain, miss 4 stitches $=$ on each of the 6 following trebles: 1 plain $=3$ chain, miss 3 trebles, 1 treble, 3 chain, miss 3 trebles, 1 double treble; 3 chain, 3 overs, over the double treble crochet off 1 loop, 1 double treble on the 4th treble after the plain stitches, crochet off the last overs $=3$ chain, 3 overs, over the last double treble crochet off 1 loop, 1 double treble on the 5th intervening space of the corner star, crochet off the loops $=3$ chain, 1 plain on the 7th double treble of the star $=3$ chain, 1 double treble on the 8 th intervening space $=3$ chain, 3 overs, over the last double treble crochet off 2 loops, 1 double treble on the 3rd treble of the preceding row, complete the treble $=3$ chain, 3 overs, over the double treble crochet off 2 loops, 1 treble on the 4 th treble, complete the treble $=3$ chain, 1 treble on the 4 th treble, 3 chain, miss 3,3 plain.

One row of trebles to finish with; draw the 5 corner trebles together and add: 1 row of crossed trebles and 1 row of plain trebles, each time drawing the 5 corner loops together into one.
1st row of the outside border-1 plain on every one of the 7 next trebles of the row beneath, 5 chain; turn back, join them to the 7th plain and so on.

## 2 nd row-1 plain on the 4 th of the 7 plain, 9 trebles on the 5 chain.

3rd row-1 plain on each of the first 2 trebles of the 2 nd row, 1 picot, 2 plain, 1 picot, miss 1 stitch, 2 plain, 1 picot, 2 plain and so on.

Square with coloured tufts (fig. 474).-The following are different counterpane patterns which should be worked in coarse cotton; our engraving represents a single square, worked in two colours, in raised crochet. By joining a number of such squares together, 4 or 6 colours can be introduced into one covering with very good effect.


Fig. 474. Square with coloured tuFts.
Materials: Coton pour crochet D.M.C Nos. 6 to 10, or Coton à tricoter D.M.C Nos. 6 to 12.[A] Colours. White and Rouge-Turc 321, or écru and Bleu-Indigo 321, Rouge-Géranium 353 and Brun-Caroubier 356, Bleu d'Azur 3325 and Brun-Rouille 3312, Vert-Bouteille 494 and BleuPrunelle 489. ${ }^{[A]}$
Cast on 13 chain and close the ring.
1 st row- 1 plain on the 1 st of the 13 chain, 5 chain, 1 plain on the 4 th chain, 5 chain, 1 plain on the 7 th chain, 5 chain, 1 plain on the 10th chain, 5 chain, 1 plain on the 13th chain.

2 nd row-1 plain on the 1 st plain of the 1 st row * 1 plain on the 1 st of the 5 chain; 5 chain, 1 plain on the 5 th chain. Repeat 3 times from *.

3rd row-5 plain on the 5 chain, 5 chain, 5 plain and so on.
4th and 5th rows-continue to increase, as in the 3rd row.
6th row-after the 3rd plain, 1 tuft in the contrasting colour (see fig. 431).
The contrasting colour is to be introduced into the work at the first tuft, and cut off when the last is finished.
The ends of the coloured threads must be worked in under the stitches of the next row. The square may be of any size; it is bordered by small picot scallops by means of which the different squares are joined together.

Stripes for counterpanes (fig. 475).-We recommend the use of Soutache D.M.C or Lacets superfins D.M.C (braids) for the coloured stitches, in the place of cotton. The dark stitches standing, so to speak, on another ground of stitches the pattern will look brighter, if it be worked in a flat material that will spread out more than cotton does.
The stripe, worked in its entire length and always on the right side, must be begun by a chain of stitches of the length the stripe is to be.


Fig. 475. Stripes for counterpanes. Materials: Coton pour crochet D.M.C Nos. 6 to 8, or Coton à tricoter D.M.C Nos. 6 to 12 and Lacets surfins D.M.C No. 4, or

# Soutache D.M.C No. $2^{1 ⁄ 2}$. [A] 

Colours: Gris-Lin 716 and RougeBordeaux 497, Gris-Tilleul 393
and Bleu-Faience 484 or Brun-
Caroubier 356 and Jaune-Rouille 308 etc. ${ }^{[A]}$
1st row-1 plain stitch on each chain stitch.
2nd row-1 plain stitch with white or unbleached cotton, on each second stitch of the preceding row; 1 long plain stitch with the coloured cotton or the braid, in each second loop of the chain stitch.

When red and white cotton are used, only one thread must be drawn through the 1st loop, and the other through the two last loops.
3rd, 5th, 7th, 9th, 11 th rows-plain stitches of the colour of the grounding $=4$ th row-between every 5 coloured stitches 3 white $=6$ th row-between every 4 red, 5 white $=8$ th row-between every 3 red, 7 white $=10$ th row-between every 2 red, 9 white $=12$ th row-between the single red stitches, 11 white plain.

In the second half of the pattern the red stitches must increase in the same proportion as that in which they decreased before.
Pattern of a counterpane in Tunisian crochet (fig. 476). This pattern, on a reduced scale, of a counterpane in Tunisian crochet, though it is worked here in several colours, can be done all in one. The numbers of the stitches, as they are here given, refer of course to the pattern represented in our figure; if worked on a larger scale, the number of stitches would have to be increased every way in the proper proportion.

For the inner square, which is worked in a light material, make 20 chain stitches, on which you make 17 rows of plaited Tunisian crochet, fig. 445, then fasten off.


Fig. 476. Pattern of a counterpane in tunisian crochet.
Materials: Coton pour crochet D.M.C Nos. 6 to 8, or Coton à tricoter D.M.C Nos. 6 to 12. [A]

## Colours: Gris-Amadou 385 and Rouge-Cardinal 346, Vert-Bouteille

 492 and Violet-Mauve 316, or Bleu-Gentiane 479 and Gris-Écru 706.For the first coloured border, which immediately surrounds the centre square, take a coloured thread and make 2 chain stitches and upon these the common Tunisian stitch, fig. 444. Increase to the right in every row by one stitch, to the number of $6=$ then put the needle into the first stitch on one side of the square, turn the thread round and draw it through. Here you must be careful to observe, in the first instance, that the second part which is now to be joined to the square, should always remain on the left side of the square and secondly, that the thread with which you join the two parts together, should lie to the left and be drawn through, from the wrong side to the right. Having now got 7 Tunisian stitches on the needle, make 18 double rows, and join the last stitch of each row to a stitch of the square.
When these rows are finished, you proceed to decrease on the right till you have only 2 stitches left; and then again to increase as at the beginning of the stripe. At each increase, after each double row you must pass the thread through the corresponding stitch opposite of the same row. When you have again got 7 stitches on the needle, join them as before to the square. Work round the 4 sides of the square in this manner and when you come to the last decrease, join the stitches to those of the first increase, and fasten off. The next stripes are to be worked in the same way; they may be made either wider or narrower, plain, or ornamented with a cross stitch pattern which you work upon them.

Pattern of counterpane worked in stripes (fig. 477). -This is intended for a child's coverlet and is worked in pale blue, Bleu-Indigo 334, and white; the stripes and the lace border, in white, the setting, partly in white, partly in blue.


Fig. 477. Pattern of counterpane worked in stripes.

## Materials: Coton pour crochet D.M.C Nos. 6 to 12, Coton à tricoter

D.M.C Nos. 6 to 14, or Cordonnet 6 fils D.M.C No. 15.[A]

For the first stripe, make a foundation chain of 26 stitches; then counting back, draw the needle through the 6th and 7th chain stitches, drawing up all the three loops together $=2$ chain, then put the needle again through 2 chain stitches, draw up the 3 loops together $=2$ chain and so on.
Coming back, make the loop of the first stitch and that of the second on the chain stitches of the preceding row $=$ begin every row with 3 chain, which form picots along the edge of the stripe; when the stripes are finished, take a blue thread and make 1 plain stitch on each picot and 3 chain.

This blue row is followed by a white one, worked in cluster stitch, fig. 426, with 2 chain stitches between every 2 clusters.
Then follows another blue row of one plain stitch on each chain stitch of the previous row. The second blue row consists entirely of plain stitches worked along the long sides of the stripes, which are joined together afterwards, but not along the short sides until the counterpane is finished; then the stitches should border all the 4 sides. The second stripe, which should be of the same width as the first, is worked in Tunisian crochet; for the edge make one row of plain stitches in blue, one of cluster stitches in white, and then again a row of plain in blue.

Join the stripes together on the wrong side with plain stitches, taking up one loop on the right and one on the left, alternately.
When you have joined the stripes, make the outer border, which consists of 7 straight rows and a scalloped lace edging.
1st row-in blue: 3 chain and 1 plain on each picot, 1 plain, and so on, down the long sides of the stripes = along the short sides, the side of the chain stitches or that of the previous row: 1 plain, 3 chain, miss 2,1 plain.
2nd row-in white or unbleached: 1 cluster stitch, fig. $\underline{426}$, on each picot formed by the 3 chain stitches of the 1 st row; on the corner picots, you must make 3 cluster stitches.

3rd, 4th, 5th rows-in blue: similar to the first. Increase at the corners by making: 1 plain, 3 chain, 1 plain on the same stitch. 6th row-in white or unbleached: similar to the 2nd row.
7th row-in blue: 1 treble on each of the stitches of the previous row.
Lace edging.-The scallops extend over 22 stitches of the previous row and on that account it is better to make the corners first, to count the stitches both ways so as to distribute the stitches that are left over, between the scallops.

Corner scallop.-Fasten on the thread to the left of the second of the stitches that were added to make the turn, make 6 chain, 1 single on the 4th treble to the right $=1$ single on the next treble $=$ turn the work $=* 2$ chain, 1 treble on the 6th chain, repeat 7 times from *, in all therefore 8 trebles = after the 8 th treble: 2 chain, miss 1 treble, 1 single on the 2 next trebles = turn the work $=2$ chain, 1 cluster stitch between each treble, in all 9 cluster stitches, then 2 chain, miss 2 trebles, 1 single stitch on the next 2 trebles = turn the work $=2$ chain, 1 cluster stitch over the 1st, 2nd, 3rd and 4th pairs of chain stitches in the preceding row, and 2 cluster stitches and 2 chain over the 5 th, 6 th and 7 th chain stitches; over the other chain stitches again: 1 cluster stitch; then 2 chain, miss 2 trebles, join to the 3 rd treble $=$ fasten off.
For the scallops on the right side, divide the stitches between the corner scallops into equal portions. Supposing that they are divisible by 22 , count 9 stitches to the right, fasten on the thread at the 9 th; * 7 chain, miss 2 trebles of the row beneath, 1 plain on the 3rd, 1 single stitch on the next = turn the work $=2$ chain, 1 treble on the 7 chain, repeat 5 times from * and finish with 2 chain, 1 single on the 2 nd lower treble, 1 single on the next treble $=$ turn the work $=2$ chain and 1 cluster stitch between each treble of the preceding row, 2 cluster stitches between the 3rd and 2nd trebles $=$ after the 8th stitch: 2 chain, miss 1 treble, 1 single on each of the 2 next stitches $=$ repeat 3 times over 2 chain stitches of the previous row: 2 chain, 1 cluster stitch $=$ on the 4 th, 5 th and 6th chain stitches: 2 cluster and 2 chain; on the 3 last chain the same stitches as on the 3 first $=$ then 1 single over each of the next 18 and repeat from *.
The final row consists of open picots, formed of 5 chain stitches and 1 plain, between each cluster stitch; after the last of these stitches and in the indent of the scallops on the straight line, only 2 chain stitches and 1 plain on the 3rd stitch.

Pattern in squares for counterpanes (fig. 478). -This pattern may be worked in the same stitch as the previous one, either in Tunisian crochet or in any other of the stitches already described.


Fig. 478. Pattern in squares for counterpanes.
Materials: Coton à tricoter D.M.C Nos. 6 to 12, Cordonnet 6 fils D.M.C Nos. 1 to 5, or Coton pour crochet D.M.C Nos. 6 to 12. Colours: Gris-Coutil 323 and Brun-Caroubier 303 or Bleu-cendré 448 and Rouge-Cornouille 449, Vert-Mousse 470 and Bleu d'Azur 3325.[A]

Make a foundation chain of 18 stitches on which you work 10 rows to and fro in the dark colour. The 11th and following rows up to the 21 st are worked in the light colour, then take up the dark colour again. Each stripe should be 3 squares long.
The 2nd stripe is begun in the light colour, and the stitches, made at the beginning of each row, are joined to those of the first stripe, as the stitches of the 3rd are to those of the 2nd and so on.
When you have made sufficient big squares, each consisting of 9 small ones, border them with seven rows of plain stitches, worked to and fro.

The 4 squares that form the corners are only to be bordered in this manner on two sides; the squares along the straight edges, on 3 sides, and only those that are intended for the centre of the counterpane, on all 4 sides. The separate parts are then either sewn or crocheted together on the wrong side. The dark squares are ornamented with small stars worked in the light colour, the light ones with scallops in the dark colour.

For the small stars-4 chain, close the ring; 2 plain on each stitch of the chain; 8 plain in all $=$ after the 8 th stitch: 8 chain, 1 plain on the 1st plain of the 8 plain stitches. Repeat the 8 chain 7 times and fasten off, then sew the star on in the centre of the dark square, taking care to spread out the little points formed of chain stitches at regular distances from each other. The scallops are worked from left to right; fasten the thread on at the point where 4 squares touch, then make a chain of 18 stitches and secure it at the opposite point. On the chain stitches: 6 plain, 1 picot, 7 plain, 1 picot, 7 plain, 1 picot, 6 plain $=$ fasten off.
Repeat the same scallop over the second half of the square; when you come to the 2 nd picot of the first scallop join the two picots. When both scallops are completed, fasten them on to the foundation by a few stitches on the wrong side.
The outside border of the counterpane is made separately, and is worked inwards from without and from left to right.
1st row-begin with the dark colour and make * 10 chain stitches, drop the loop, put the needle into the 1st of the 10 chain, take up the loop and draw it through the stitch; 2 chain and on the 10 stitches: 6 trebles quite close together. Repeat from * and go on repeating the sequence until the lace is long enough to trim the counterpane handsomely.
2nd row-in the light colour and similar to the 1 st = only that in joining the chain stitches together, you make the single stitch on the chain stitches of the 1st row.

3rd row-in the dark colour and similar to the 2nd.
4 th, 5 th and 6 th rows-in the light colour and from right to left: 7 chain, 2 plain on each loop of chain stitches of the previous row.

7th row-in the light colour and from left to right: * 2 plain on the treble of the lace, 11 chain, 2 plain on the next loop of chain stitches $=$ these 2 stitches are made on the wrong side of the work $=$ drop the loop, turn the work to the right, 3 plain on the last 3 chain, 8 chain ${ }^{* *}$, and repeat always from * to **.

One row of plain made on each chain stitch and a 2 nd row of trebles on the plain stitches completes the lace edging, which is afterwards sewn on to the counterpane.
Counterpane with fringed border (fig. 479).-This pattern requires three colours; we suggest the following as making a very effective combination: Rouge-Turc 321, Bleu-Indigo 311 and white.


Fig. 479. Counterpane with fringed border.

## Materials: Coton pour crochet D.M.C Nos. 6 to 10, or Coton à tricoter D.M.C Nos. 6 to 14. <br> Colours: White, Gris-Tilleul 331 and Rouge-Cornouille 449.[A]

The stripes, one red, the other blue, may be worked in any stitch. They are edged with 8 plain stitches of 3 different lengths worked in red. * The first stitch passes only under the loops of the stitches; the 2nd over 2 stitches; the 3rd over 1, the 4th inwards, over 3. Repeat from *.

These stitches must be worked parallel to each other along the two edges that are to be joined together.
The stripes are fastened together on the wrong side by single or plain stitches.
The outside edge consists of 15 rows: 1st row-in red: 1 row of plain stitches on the right side of the work.
2nd row-in red, and on the wrong side of the work: plain stitches.
3rd and 4th rows-in red, and on the right side of the work: plain stitches.
5th row-in dark blue and on the right side: 1 treble, 1 chain, miss 1 plain of the row beneath, 1 treble and so on.
6th row-in white, and similar to the 5th.
7th row-in blue, and similar to the 5th.
8th row-in red: 1 plain on each stitch of the preceding row.
9th row-in red and on the wrong side: 1 plain on each stitch of the preceding row.
10th and 11th rows-in red: and both on the right side, 2 rows of plain stitches.
12th row-in white: 5 chain, miss 3 , 1 plain on the 4th stitch.
13th row-in dark blue and similar to the 12th.
14th row-in white: * 1 plain on the 5th stitch of the blue row; 10 chain, drop the loop, lay the chain stitches from left to right put the needle into the 3rd chain stitch, counting from the beginning, take up the loop and draw it through the 3rd chain stitch, 2 chain and repeat from *.
15th row-in white: 1 plain on the picot formed by the chain stitches; 5 chain, 1 plain.
Into this last row you draw clusters of lengths of red cotton to form the fringe, and knot them together with blue, or if you prefer it, you may finish off the coverlet with a hairpin fringe.

Counterpane composed of squares and olive shaped figures (fig. 480). -There are many who shrink from undertaking a large piece of work because it becomes inconvenient to handle and carry about. The counterpane here represented has the advantage of being made up of a number of quite little pieces, which are worked separately and joined together afterwards.


Fig. 480. Counterpane composed of squares and olive shaped figures. Materials: Coton pour crochet D.M.C Nos. 6 to 10, or Coton à

## Colours: White and Rouge-Turc 321, or Ecru and Rouge-Cerise <br> 3318, Gris-Coutil 323 and Bleu-Gentiane 478.[A]

Two colours, which can be clearly distinguished from each other in the engraving, should be chosen from among the various combinations suggested; one of them should be very light, say, cream or white for the olive shaped figures and squares, and the other of some soft shade only darker, for the connecting rows and the knotted fringe, described in the chapter on Macramé.
The olive shaped figures begin with 9 chain stitches, on which you make 8 plain stitches and on the 9 th: 3 plain for the corner.
On the second side of the chain: 8 plain and 3 besides on the corner stitch, and so on for 3 rows; in the last row there should be 28 stitches.

These 3 rows are to be considered as one only.
2nd row-3 chain, 1 treble on the plain stitch that follows * 1 chain, 1 treble and repeat 11 times from *; 1 chain, 3 trebles with 1 chain between them on the corner stitch, ** 1 chain, 1 treble, repeat 12 times from **.

On the last stitch at the corner, again 3 trebles with 1 chain; close the round with 1 single stitch.
3rd row-1 chain, 1 single on the chain stitch that follows the 1st treble of the last row; 3 chain, 1 double treble between the lower trebles, 1 chain and so on, until you have 35 trebles, counting the two sets of 3 trebles at the corner.

4th row-here you can change the colour: 1 plain on each of the stitches of the last row; 3 plain at the corners.
5th row-similar to the 4th.
6th row-2 plain, 1 cluster of 2 double trebles on the same stitch of the 4 th row as the 5 th stitch of the last row is on; miss 1 plain.
Continue in this manner along the whole row, taking care that the 9 th and 22 nd cluster come just at the corner.
7th and 8th rows-these two last rows should be worked in the same colour as the inside of the figure.
Be careful always to make the increase at the point; a 9th row in the dark colour may further be added, to connect the figures, by passing the thread from the wrong side to the right, between the 13 last stitches of two of the points of the figures. The space between these olive shaped figures is filled by a pointed square of chain stitches.
In the 1 st and following rows you miss 5 stitches at the point where the figures meet, and continue to decrease in this manner until the space is filled up. The fringe is made in the dark colour, either directly on to the plain crochet, or after a few rows of open-work.

Squares for chair-backs (fig. 481).-This is a design for cut-work, out of an old collection by Sibmacher, which we have adapted to crochet. It will be found most effective, worked in any of the given materials; we have worked it with admirable result, both in Cordonnet 6 fils D.M.C No. 15 and Fil à dentelle D.M.C No. 150.


Fig. 481. Squares for chair-backs.
Materials: Fil d'Alsace D.M.C Nos. 30 to 100, Cordonnet 6 fils
D.M.C Nos. 20 to 50, or Fil à dentelle D.M.C Nos. 25 to 70 in white or écru.[A]

1st row-4 chain, close the ring.
2nd row-1 chain, 2 plain on each chain, 8 in all; draw the loop of the last stitch through the 1 st chain.
3rd row-6 chain, 1 treble *, 3 chain, 1 treble, repeat 6 times from *. In all, with the 3 chain, 8 trebles.
4th row-4 plain, over each treble of 3 chain.
5th row-6 chain, 1 plain on the 2nd of the plain stitches beneath, * 3 chain, 1 treble, over the treble beneath, 3 chain, 1 plain on the 2 nd stitch of the row beneath. Repeat 6 times from *, then add 3 chain, 1 plain on the 3rd of the 6 chain.
6th row-7 chain, 1 plain over the treble of the last row; repeat the same series 7 times.
7th row-3 chain, 1 treble over the treble beneath; 1 treble on each chain stitch, 2 trebles on each plain stitch of the row beneath; in all, 72 trebles, including the 3 chain.

8th row-* 8 chain, 1 plain between the 2 trebles that were added, therefore between the 8 th and the 9 th $=$ turn the work $=$ make 12 plain on the wrong side = turn the work back to the right side $=$ take up 1 loop of each of the 12 stitches for the Tunisian stitch that is made on 10 rows, and decreasing by one stitch in each row, alternately on the right and left = draw up the 3 last loops together and make, descending on the right side: 1 single stitch on each row of the pyramid you have just made, finish with 1 plain on the stitch that follows the 8 chain. Repeat 7 times from *.
number of stitches on the 2nd side, and down the sides of all the pyramids $=$ after the 9 th row, fasten off.
10th row-fasten on the thread at a stitch at the point of a pyramid, * 7 chain, 5 overs, join the loop to the 2nd picot on the side of the pyramid where you are working, draw the needle back through 2 overs, make 2 overs more, and put the needle into the middle picot opposite and draw the needle twice through 2 loops, thirdly through 3 and each time after that, through 2 loops $=$ 6 chain, 1 double treble, join to the 3rd over, 7 chain, 1 plain $=$ on the next pyramid 7 chain, 1 septuple treble, join it to the next middle picot $=$ draw the needle thrice through 2 loops, 1 triple treble to join to the middle picot opposite, draw the needle back through the loops, and at the 4th over, through 3 loops, and each time after that, through 2 loops, 7 chain, 1 quadruple treble, join it to the 4 th over, 7 chain, 1 triple treble, 7 chain, 1 plain on the next pyramid. Repeat 3 times from *.
11 th row-1 chain, 1 plain on each of the stitches of the previous row and 2 plain on those forming the corner; fasten off.
12th row-1 single on the first plain, 5 chain, 1 treble on the 3rd plain, 2 chain, 1 treble on the 3rd plain and so on to the corner and until you have 14 trebles $=$ on the corner stitch: 2 chain and 1 treble more; then proceed as you did on the first side. There should be 18 trebles and 19 times 2 chain between the corner trebles; all four sides should be alike.

13th row-1 plain on each stitch of the last row, not counting the 3 which are to be made at the corner.
14th row- 14 single over the preceding stitches $*, 1$ chain, 24 plain; miss 4 plain of the last row, not counting the 2 increased stitches which must be left empty $=$ after the 24 th stitch turn the work, miss 2,21 plain, passing the needle under the 2 loops of the row beneath $=$ turn the work $=1$ chain, 20 plain $=$ turn the work $=19$ plain $=$ continue to decrease in the same proportion, until you have 3 stitches left and fasten off. In all the intakes miss the last stitch but one, coming back, and the 1st going, and always begin on the right side with 1 chain.
For the second half of these triangular figures which are worked from right to left, fasten on the thread to the 5th stitch after the increase and make 24 plain $=7$ plain should remain between the two triangular figures formed of plain stitches $=$ turn the work $=21$ plain, miss the 2 last stitches, 1 plain on the stitch the thread is fastened to $=$ turn the work $=$ miss 1 stitch, 19 plain, 5 overs, put the needle through the 4th of the 7 stitches between, bring it back twice, each time through 2 loops, make 2 overs more, put the needle through the last stitch of the 3rd row opposite, bring it back twice through 2 loops, then once through 3 loops and twice through 2 loops = turn the work $=18$ plain and so on, until you have made 10 transverse trebles = fasten off, then repeat the same series of rows on the other sides.
15th row-do not cut off the thread on the 4th side but work backwards: 3 single over the chain, 5 chain * 1 treble on the stitch whence the 5 chain proceeded, 2 chain, 1 treble on the last plain of the first half of the close parts of the pattern; 2 chain, 1 treble in the middle of the first part of the 10th transverse treble; 2 chain, 1 treble on the second half of the preceding treble, 2 chain, 1 treble on the 1 st plain of the second half of the close parts; 2 chain, 1 treble on the 3rd and last upper stitch of the close part; 2 chain, 1 treble on the same stitch as the last treble. Then along the edge, 10 trebles, joined by 2 chain, one of which trebles should always be on a row of plain stitches $=$ after the 10th treble: 3 chain, 1 plain on the 5th plain of the 13th row, 3 chain, again 11 trebles connected by 2 chain $=$ after the 11 trebles: 2 chain ${ }^{* *}$ and repeat 3 times from * to **.

16th row-on every 2 chain stitches: 3 plain.
17 th row -7 chain, 1 plain on the 6th plain of the last row; repeat 7 times $=$ for the 9 th and 10 th scallops only: 5 chain. The plain stitch that follows the 9th scallop should come exactly over the corner stitch of the 13th row $=$ after the 10th scallop: 1 plain; then 13 scallops with 7 chain, 1 plain on the 6th 5 stitch of the row beneath. Repeat twice from $*=$ after the 4 th scallop 2 smaller scallops, and up to the end of the row, 5 scallops more of 7 chain each.
18th row-make 7 plain over 7 chain, 5 chain, drop the treble, bring the needle back with the loop through the 3rd plain $=$ on the 5 chain: 3 plain, 1 picot, 3 plain = on the 7 remaining stitches: 2 plain-on the 9 th scallop of 5 chain, only: 5 plain $=$ on the 10th scallop of 5 chain, only: 3 plain $=$ then 7 chain, bring them back and join them to the 3rd plain of the 9th scallop and finish the picot.
When these squares are made use of in any number and have to be joined together, you must join 13 picots and leave the 14 th free. The four empty picots in the centre are connected by a small star.
Crochet star (fig. 482). This is one of the most graceful and delicate crochet patterns we know. For the purpose of reproduction here, we have had it worked in all the different sizes of D.M.C cotton but it looks best in a fine material; in Fil à dentelle No. 150, it can bear comparison with the finest needle-made lace.


Fig. 482. Crochet star.
Materials: Fil d'Alsace D.M.C No. 30, Cordonnet 6 fils D.M.C Nos. 25 to 80, or Fil à dentelle D.M.C Nos. 25 to 150.[A]

1st row-6 chain, close the ring.
2 nd row- 9 chain, 1 double treble, $* 4$ chain, 1 double treble; repeat 6 times from $*=$ after the 7 th treble: 4 chain, 1 single on the 5th of the 9 chain.

3rd row-1 chain, 4 plain, * 1 picot, 4 plain; repeat 7 times from * $=$ carry the thread to the last stitch through the 1 st plain.
4 th row- 12 chain, 1 treble on the stitch over the treble beneath, $* 9$ chain, 1 treble; repeat 6 times from $*=$ after the 7 th treble and the 9 chain: 1 single on the 3rd of the 12 chain.

5th row-3 chain, 1 treble on each stitch of the row beneath; including the 3 chain, 80 trebles in the whole circumference $=$ after the last treble: 1 single on the 3 chain.

6th row-11 chain, 1 quadruple treble on the 2nd treble of the last row; 4 chain, 1 quadruple treble on the 3rd treble and so on, in all 32 trebles including the 7 chain.
7 th row-1 chain, 5 plain on 4 chain.
8th row-3 plain on the 3 first chain, * 16 chain, miss 1 , ** 1 single, 1 plain, 1 half treble, 2 trebles, 1 treble $1 \frac{1}{2}$ long, 2 double trebles, 1 triple treble, 1 treble $31 / 2$ trebles long, 1 quadruple-treble $* * *, 3$ chain, miss 4 plain of the 7 th row, 5 plain, 16 chain, join them, counting upwards from below, to the 5th treble of the first pyramid = on 7 chain: 3 plain, 1 picot, 3 plain, 1 picot, 3 plain, 1 picot, 3 plain; join the last loop of the last plain and the loop of the 7 th chain; 8 chain. Repeat from ${ }^{* *}$ to ${ }^{* * *}=$ on the middle of the last quadruple treble: 1 double treble towards the bottom, finish the treble, 3 chain, miss 4,5 plain $* * * *$. Repeat 7 times from * to ${ }^{* * * *}$.

Coming back to the 1 st point make along it: 8 single stitches, then 7 chain, join them to the 5 th treble of the 16 th point $=$ over the chain: 3 plain, 1 picot, 3 plain, 1 picot, 3 plain, 1 picot, 3 plain and finish with 9 single to carry the thread to the top of the point.
9th row-1 chain, 1 plain, * 15 chain, 1 plain at the top of the point and repeat 15 times from *.
10th row-3 chain; 1 treble on each stitch of the 9th row; 256 trebles in all, including the 3 chain.
11th row-The star is bordered by small and large scallops, surmounted by points similar to those inside.
You begin by the small scallop and make on the 10 th row: 5 single, $* 8$ chain, bring them back and join them to the 1 st of the 5 single; 1 plain, 8 chain, miss 4 trebles, join them to the 5th; 14 plain on the 8 chain, 6 plain on the first 8 chain = turn the work $=5$ chain, 1 treble on the plain stitch between two scallops; 5 chain, 1 plain on the 7 th plain of the 1st scallop; 2 plain in the 5th chain, 2 chain, 1 picot, 10 chain, miss 1, and make on the following ones: 1 single, 1 plain, 1 half treble, 2 trebles, 1 treble $11 / 2$ treble long, 1 picot, 2 chain, 2 plain on the 5 chain; 8 plain on the 8 chain.

To pass to the large scallop make: 16 single, 8 chain, bring them back, 1 plain on the 5 th single, 8 chain, bring them back again to the 5 th $=$ turn the work $=$ on the second set of 8 chain: 6 plain, 1 picot, 9 plain $=$ on the first $8: 6$ plain, then 8 chain, bring them back and join them to the 4th plain behind the picot of the finished scallop $=$ on the 8 chain: 5 plain, 1 picot, 5 plain, 1 picot, 5 plain $=$ on the remaining chain below: 3 plain, 1 picot, 6 plain; add 4 single on the trebles and pass to the outer scallop $=18$ chain, 1 plain on the 3rd of the 5 plain of the small upper scallop; 18 chain, 1 plain on the 4 th of the 16 single $=$ turn the work $=25$ plain on the last chain stitches, and 25 on the first; 1 single on the 3rd single $=$ turn the work $=1$ plain on each of the preceding 50 plain stitches; join the last to the under row with a single stitch = turn the work $=10$ plain, 1 picot, 3 plain, 1 picot, 3 plain, 1 picot, 4 plain, 2 chain, 1 picot, 10 chain, miss 1,1 single, 1 plain, 1 half treble, 2 trebles, 1 treble $1 \frac{1}{2}$ treble long, 1 double treble, 1 treble $2^{1 ⁄ 2}$ trebles long, 1 triple treble, 1 picot, 2 chain and join them to the 6 th plain stitch, counting from the middle.
Then 4 plain, 1 picot, 3 plain, 1 picot, 3 plain, 1 picot, 10 plain, 11 single on the trebles. Repeat 7 times from *.
Star with little squares (fig. 483).-Begin with 4 chain stitches, close the ring.


Fig. 483. Star with little squares.
Materials: The same as for fig. 482.
1 st row-5 chain, * 1 treble, 2 chain. Repeat 6 times from *, to number altogether 8 trebles including the 5 chain; 1 single on the 3rd chain.
2 nd row-6 chain, * 1 triple treble on the 1 st chain stitch, 2 chain. Repeat 23 times from * and join to the 4th chain.
3rd row-6 chain, * 1 double treble on the treble beneath, 3 chain. Repeat from * through the row; join to the 4th chain.
4th row-1 plain on the treble $=$ on the 3 chain: 5 plain, 1 plain on the treble; work 5 times to and fro over these stitches, put the needle through the 2 threads of the last stitch = after the 5th row: 10 chain, then 5 plain on the 3 next chain.
In turning the work and going from the 2 nd to the 3rd, from the 4 th to the 5 th row, carry the thread behind the chain stitches, so that they may blend with the plain stitches; make in all 12 little squares with 11 spaces between; after the 12 th, square: 5 chain, 1 single on the 5th row of the first square.
5th row-on each of the 6 plain of the 1st square: 1 single $=$ on the 7 th: 1 plain $=7$ plain on the 5 chain $=1$ plain on the 1st stitch of the 2 nd square $=6$ rows of plain, 14 chain, 1 plain on the 5 th stitch of the next square $=$ then make 6 rows of plain and wind the thread round the chain stitches.
6 th row -1 single on every stitch of the last square, 1 plain on the last stitch above the 7 chain $=$ on the 7 chain: 9 plain, 1 plain on the 1 st stitch of the next square below $=9$ rows to and fro.
7 th row-after the 12 th square: 9 chain, 1 single on the 1 st plain, $* 14$ chain, 1 plain on the last plain $=$ on the 9 chain: $* * 1$ chain, 1 plain, 1 treble $1 \frac{1}{2}$ treble long, 2 double trebles $21 / 2$ trebles long ${ }^{* * *}, 5$ triple trebles ${ }^{* * * *}$. Repeat from ${ }^{* * *}$ to ${ }^{* *}$, then proceed from * to ${ }^{* * * *}$.
8th row-19 plain over the 14 chain, 1 single on each treble; stop them at the 12 th square and at the 3rd triple treble.
9 th row- 12 chain, 1 plain on the 10th of the 19 plain; 12 chain, 1 plain on the triple treble, and proceed in the same way throughout the whole length of the row.

10th row-on the first 12 chain stitches: * 5 plain, 1 picot, 12 plain $=$ on the second 12 chain: 7 plain, 10 chain, bring them back to the 5 th of the 12 plain of the first scallop $=$ on the 10 chain: 4 plain, 1 picot, 4 plain, 1 picot, 4 plain, 1 picot, 4 plain, $=$
on the 12 chain: 5 plain, 1 picot, 7 plain. Repeat 12 times from *.
Crochet collar (fig. 484).-We have avoided as far as possible describing articles in this book that are subject to the changes of fashion, the present collar composed of squares, stars, lozenge-shaped figures and a lace edge, is of a shape that will never be out of date. Fine and delicate work like this can only be executed in a very fine material, and we recommend unbleached thread as being more effective than white. The soft tone and the gloss of unbleached thread give the work an antique look, unobtainable in a white material. Fil à dentelle D.M.C No. 120 is the best for the purpose.


Fig. 484. Crochet collar.
Materials: Fil d'Alsace D.M.C No. 100, Cordonnet 6 fils D.M.C No. 120 or Fil à dentelle D.M.C No. 120, écru.

Begin with the straight-edged figures, and then make the connecting pieces between. The four squares with half stars at both ends of the collar and on the right and left of the centre square, have their four sides all alike, whereas the 3 figures within the scalloped edge are rather narrower on the outer than on the inner side where they join to the foundation.

Inner squares: 1 st row -4 chain, close the ring; 5 chain, * 1 treble on the ring, 2 chain; repeat 6 times from * and fasten the thread to the 3rd chain stitch.

2nd row-1 chain, 3 plain over 2 chain; 1 plain over each treble.
3rd row-8 chain, * 1 treble on each treble of the 1st row, 6 chain. Repeat 6 times from $*=8$ trebles in all, including the first chain stitches.
4th row-* 10 chain; returning over the chain stitches: 1 plain, 1 half treble, 4 trebles, 1 half treble, 1 plain, join to the 1 st chain stitch $=$ on the 6 chain of the 3 rd row: ** 1 plain, 1 half treble, 1 treble, 3 double trebles, 1 treble, 1 half treble, 1 plain ${ }^{* * *}$. Repeat once more from ${ }^{* *}$ to ${ }^{* * *}$, then 3 times from ${ }^{*}$ to $* * *=$ along the first leaf to the 10 th stitch: 10 single.
5th row-starting from the point: * 7 chain, 1 triple treble on the 5th stitch of the small scallop of the 4 th row: 7 chain, 1 triple treble on the next scallop, 7 chain, 1 plain on the 10th stitch of the 2nd leaf. Repeat 3 times from *.
6 th row-1 chain, * 3 plain on the stitch that forms the point of the leaf; 1 plain on each chain stitch and each treble of the last row $=16$ stitches in all, up to the 2 nd treble $=$ turn the work $=$ coming back: 1 chain, 1 double treble on the 4 th plain, 1 chain, 1 double treble, 1 chain, 1 double treble, 1 chain, 1 double treble, 1 chain, 1 double treble, 1 chain, miss 3 plain, join to the 4 th plain = turn the work $=$ make on each chain stitch, 2 plain and on each treble 1 plain and 1 picot over the 1st, 2nd, 4th and 5th treble; 8 plain **. Repeat 3 times from * to **.

7th row-1 chain, 1 plain on the 2 nd of the 3 stitches at the point, * 9 chain, 1 double treble between the two first picots of the semicircle formed in the last row; 8 chain, 1 triple treble on the 3rd treble of the semicircle, 8 chain, 1 double treble between the 3rd and 4th picots of the semicircle, 9 chain, 1 plain on the stitch at the corner.
8th row-19 single on the chain stitches of the 7th row, 1 chain, 3 plain on the corner stitch, 24 plain on the chain stitches and trebles $=$ turn the work $=$ coming back: 2 chain, 1 double treble on the 20th plain; on the same stitch add: 2 double trebles with 2 chain; finish with: 2 chain, join them to the 5th plain $=$ turn the work $=$ on the chain stitches: 1 plain, 1 picot, 1 plain, 1 plain on the treble. Repeat this series 4 times $=$ add: 4 plain on the chain stitches of the 7 th row $=$ turn the work $=5$ chain, 1 double treble on the 1st treble of the small semicircle; then again 3 times, 3 chain, and twice 1 double treble on each of the trebles beneath $=$ after the last 5 chain: join to the 4th plain.

The points in this row are made with: * 1 plain on the chain stitches, 8 chain, miss 1 stitch $=$ coming back: 1 single, 1 plain, 1 half treble, 1 treble $1 \frac{1}{2}$ treble long, 3 double trebles, 1 plain on the 5 chain stitches. The 2 nd point must be placed one half of it, before, and the other half behind the picot; make altogether 7 points $=$ after the 7 th: 8 plain on the chain stitches of the 7th row $=$ then work backwards, without however turning the work: 7 chain, 1 chain on the stitch at the top of the point and repeat 7 times from * $=$ after the 8th set of 7 chain stitches: 1 chain; 1 plain on the 9th plain, bringing the thread forwards from the right side to the wrong $=2$ chain; take the thread back to the 3rd plain from the wrong side to the right $=1$ treble on each chain stitch, 1 picot above each point, add 4 trebles and 14 chain, join them to the 4 th treble that comes after the 1 st picot.
On the 14 chain: 5 plain, 1 picot, 4 plain, 1 picot, 4 plain, 1 picot, 5 plain, 4 trebles to the next picot, 1 picot, 4 trebles; 14 plain, join them to the treble nearest the 1st scallop and so on = make 7 scallops in all; after the 7 th add 2 trebles on the 2 chain stitches $=$ after the 2 nd treble make 2 plain, followed by the 3 stitches at the corner $=$ in the next scallop, you fasten by 1 single, the 1 st picot of the 1 st scallop to the 3rd picot of the last scallop. When you have finished the four sides of the figure above-described, fasten off your thread.

The edging of these squares should be begun on the narrower of the inner sides and at the 3rd little scallop: * 1 plain on the middle picot of the 3rd little scallop, 7 chain, 1 double treble on the 1 st picot of the 4 th scallop; 7 chain, 1 triple treble on the

2nd picot of the same scallop, 6 chain, 1 double treble on the 3rd picot of the same scallop, 6 chain, 1 plain on the middle picot of the 5th scallop; 10 chain, 1 treble on the middle picot of the 6th scallop, 11 chain $* *, 1$ quadruple treble on the middle picot of the 7 th and 1 quadruple treble on the middle picot of the 1 st scallop following and draw the last loops of the 2 trebles up together. Repeat once from * to **. Carry the trebles all round the figure on the picots just referred to.
For the second half of the edging which becomes a little wider: *** 10 chain, 1 treble on the 6 th scallop, 11 chain, 2 quadruple trebles, the last loops of which you join to the middle picots of the 7th and 1st scallop; 11 chain, 1 treble in the next scallop; 10 chain, 1 treble in the 3rd scallop; 7 chain, 1 treble $2^{1 ⁄ 2}$ long, 8 chain, 1 treble $31 / 2$ long, 8 chain; 1 double treble, 8 chain, 1 plain, 12 chain, 1 treble, 14 chain, ${ }^{* * * *} 2$ quadruple trebles, the last loops of which are joined together. Repeat from ${ }^{* * * *}$ to ${ }^{* * *}$, that is the reverse way $=$ finally add 1 more whole row of plain and 3 plain stitches at the corners $=$ on the wider side you should have 99 stitches, not counting the increases at the corner.

To make the same figure, forming a part of the large outside scallops, repeat the same rows you have in the inner square up to the 7th row, the first half of which you make exactly the same as before. In the second half of the row of chain there should be 1 chain stitch less in each intervening space than there were in the first half.
8th row-make the first half of this row like the 8 th row of the inner square $=$ over the 2 nd half, one quarter of which is 4 chain stitches narrower, the little wheels are made like the others with 7 picots. The number of chain stitches and the trebles of the setting are also the same, but instead of 7 points you have to make 5 and over these, 5 small scallops instead of 7 .
The setting, towards the top is made exactly in the same manner as the wide part of the upper square, that is, as from the 3rd scallop of the first semicircle to the 5th scallop of the 2 nd . From this point, the series of stitches changes, so as to form a rounded edge: * 7 chain, 1 plain on the 6th scallop; 15 chain, 2 triple trebles joined by the last loops to the 7th and 1st scallop; 14 chain, 1 plain on the 2 nd of the 5 scallops; 15 chain, 1 plain on the 3rd scallop; 15 chain, 1 plain on the 4th scallop, 15 chain ${ }^{* *} 2$ triple trebles joined by the last loops in the 5th and 1 st scallop. Repeat once again from ${ }^{* *}$ to $*=$ add 1 row of plain on each stitch of the preceding row; 3 plain on the two top corner stitches. You will thus have 3 figures with a rounded edge on one side.

The second kind of square consists of 8 leaves inside and is begun in the same way by 6 chain formed into a ring.
1 st row -5 chain, 1 treble, 2 chain, * 1 treble, 2 chain. Repeat 6 times from * and join to the 3rd of the 5 chain.
2nd row-1 chain, 3 plain over 2 chain, 1 plain on each treble.
3rd row -9 chain, $*$ miss 1 stitch $=$ coming back: 1 single, 1 plain, 1 half treble, 1 treble, 1 double treble, 1 triple treble, 1 treble over the treble of the 2nd row; 7 chain. Repeat 7 times from $*=$ after the 8 th point: 7 single along the 1 st.
4th row-* 1 plain on the stitch you missed at the point, 5 chain, 1 triple treble on the treble of the 3rd row, 5 chain. Repeat 7 times from *.
5th row-3 chain, 1 treble on each stitch of the 4th row; join to the 3rd of the 3 chain.
6th row-10 chain, 1 plain on the treble over the triple treble of the 4 th row: 10 chain, 1 plain on the treble above the little point.
7th row-15 plain on the 10 chain = on the 3rd scallop only: * 7 plain, 10 chain, come back to the second scallop, bring the thread back from the wrong side to the right between the 7th and 8th plain stitches, 15 plain on the 3rd scallop, 8 plain on the next scallop, 15 plain and repeat 6 times from *.

When the 16th scallop is finished, pass to the point of the 1st scallop by means of 7 single, then add the 10 chain to pass to the 8th scallop above; when that is finished, fasten off, and fasten on again to one of the 8 scallops.
8th row-* 21 chain, miss 1 stitch, 1 plain, 1 half treble, 1 treble, 1 treble $1 \frac{1}{2}$ treble long, 1 double treble, 1 treble $2 \frac{1}{2}$ trebles long, 1 triple treble, 1 treble $31 / 2$ trebles long, 1 quadruple treble, 1 treble $4 \frac{1}{2}$ trebles long, 1 quintuple treble. After passing through the 3rd loop, make 1 quadruple treble, between the 2 plain scallops; then finish the quintuple treble, 7 chain, 1 plain on the 2nd scallop and repeat 7 times from *.
9th row-* 7 plain on the 7 chain; 1 plain on each stitch of the pyramid, 3 plain on the stitch at the point; 4 plain on the 7 chain on the opposite side $=$ turn the work $=* * 1$ chain, miss 1 plain, 1 treble on the 2 nd stitch $=$ after the 5th treble, leave out no more stitches between the trebles ${ }^{* * *}$; place the 8th, 9 th and 10 th trebles on the 2nd of the increased stitches. Repeat on the opposite side from ${ }^{* * *}$ to ${ }^{* *}$ and join to the 4 th of the plain stitches $=$ make 17 trebles in all, then one plain over each chain, 1 plain on each treble and 1 picot after every 3rd plain = after the 4th and up to the 8th picot, leave only 2 plain between: 11 picots in all = in conclusion: 3 plain more on the 7 chain and repeat the whole 7 times from *.
The little wheel at the top of the square is begun with 10 chain for the ring $=16$ plain on the ring, 4 chain, * 1 treble, 1 chain = repeat 14 times from *; 16 trebles in all, including the chain stitches $=$ then on each treble and each chain stitch: 1 plain; after 4 plain: 1 picot; connect the wheel first on the right.
The 2 nd picot is to be fastened to the 9 th picot of the large scallop = proceed with: 3 times 4 plain with 1 picot $=$ after the 3 rd plain, fasten the picot to the 3rd picot of the next large scallop and complete the small wheel. The left wheel is made and inserted in the same manner as the right one. The wheels at the bottom of the square require for the foundation ring: 14 chain, on which you make 21 plain = on these: 4 chain, $* 1$ treble, 1 chain = repeat 19 times from $* ; 21$ trebles in all, including the chain stitches $=3$ plain, 1 picot, 3 plain, 1 picot, 3 plain, 1 picot, 3 plain, 4 chain, join to the 8 th picot of the 2 nd scallop; 4 chain, finish the picot, 3 plain, 1 picot, 3 plain, 8 chain, join to the 10 th picot of the scallop, 8 chain, complete the picot; 3 plain, 1 picot, 3 plain, 8 chain, join to the 2 nd picot of the 3 rd scallop, 8 chain, close the picot, 3 chain, 1 picot, 3 plain, 4 chain, join to the 4th picot of the 3rd scallop; 4 chain, complete the picot, 3 plain, 1 picot and so on, until you have 14 picots round the wheel. Repeat the same wheel to the left between the 4th and 5th scallop.
The edging of this second kind of square is also slightly different; fasten the thread to the 6th picot of the 1st scallop before the small wheel, then working from right to left, count: * 10 chain, 1 treble on the 2 nd empty picot of the small wheel; 8 chain, 1 triple treble on the 4 th picot of the wheel = upwards: 9 chain, 1 double treble on the 6 th picot of the wheel; 9 chain, 1 plain on the 6th picot of the 8th scallop, 12 chain, 1 plain on the 7 th picot of the scallop, 11 chain $* *, 1$ quadruple treble on the 9 th picot of the 8th scallop and on the 3rd picot of the 7th; draw the last loops of the two trebles up together. Repeat once more from ** to ${ }^{*}$, then: 1 plain on the 6 th picot of the 6 th scallop; ${ }^{* * *} 12$ chain, 1 sextuple treble on the 9 th picot of the 6 th scallop, retain 2 loops of the treble on the needle, make 4 more overs, join the treble to the 3rd picot of the 5th scallop; finish the bars, 12 chain, 1 plain in the 6 th picot of the next scallop $=12$ chain, 1 double treble on the 2 nd picot of the 7 empty picots of the bottom wheel; 9 chain, 1 quadruple treble on the 4th picot; 12 chain, 1 double treble on the 6 th picot, 14 chain, 1 plain on the 6 th picot of the 4 th scallop, 14 chain $* * *, 1$ septuple treble, in the 9 th and 3rd picots of the 4 th and 3rd scallops $* * * *$. For the preceding treble, you pass first through 4 loops only, then make 4 more overs for the other half of the treble, and finish the last loops one by one. Repeat from ${ }^{* * * *}$ to ${ }^{* * *}$. One row of plain stitches completes the square.

After having made the square similar to that of the upper one, you have merely to add the large wheels at the top.
The setting of chain stitches and trebles is begun at the first scallop between 2 wheels $=1$ plain on the 6th picot of the 1 st scallop; 14 chain, 2 quintuple trebles, of which the last loops only are joined together, on the 9 th and 3rd picot of the 1 st and 2 nd scallop, $=14$ chain, 1 plain on the 6th picot of the next scallop; * 14 chain, 1 treble on the 2 nd empty picot of the wheel; 10 chain, 1 quadruple treble on the 4 th picot, 10 chain, 1 treble on the 6th picot; 14 chain, 1 plain on the 6th picot of the 3rd scallop; 14 chain, 2 sextuple trebles on the 10th and 2 nd picot of the 3rd and 4 th scallop; 15 chain, 1 plain on the 6th picot of the 4th scallop; 16 chain, 2 sextuple trebles on the 10 th and 2 nd picot of the 4 th and 5 th scallop; 16 chain, 1 plain on the 6 th picot of the 5th scallop; 15 chain ** 3 septuple trebles on the 10 th and 2 nd picot of the 5 th and 6 th scallop. Repeat from ** to *; and make 4 figures with rounded edges. When all the figures are finished, join them together by trebles of a suitable length.
Introduce the thread at the corner stitch on the widest side of the 2 nd 8 pointed star and make: 1 plain, 6 chain, miss 3 stitches, 1 plain on the 3 next stitches, 4 chain, miss 2 , 1 plain on the next 3 plain stitches.
Make 11 loops in this manner, each consisting of 4 chain and 3 plain, then 2 loops of 3 chain and 2 plain $=$ then miss as many
stitches of the square at the edge of the collar as were left empty in the second square; 2 plain and draw the loop each time through the 2 last stitches of the opposite square $=1$ chain, 1 single on the 2 nd chain stitch of the opposite side; 1 chain, 3 plain on the edge of the first square, 1 chain, 1 single, 1 chain, miss 3 stitches, 3 plain, 5 chain, bring the loop from the wrong side to the right $=$ on the chain stitches: 4 plain, 2 chain, miss 3,3 plain.
From this point onwards, fasten all the bars of chain stitches to the loops produced by the same stitches in the 2nd square. Thus, the 1st bar consisting of 5 chain, the 2 nd will consist of 7 chain on which make 7 plain, and then add 2 more chain. Nowhere must the two first chain stitches be uncovered.

The 3 rd bar must consist of 9 chain, 9 plain and 2 chain $=$ the 4 th of 11 chain, 5 plain, 1 picot, 5 plain, 2 chain $=$ the 5 th of 13 chain, 4 plain, 1 picot, 4 plain, 1 picot, 4 plain, 2 chain $=$ the 6 th of 16 chain, 6 plain, 1 picot, 6 plain, 1 picot, 6 plain, 2 chain $=$ the 7 th of 18 chain, 5 plain, 1 picot, 4 plain, 1 picot, 4 plain, 1 picot, 5 plain, 2 chain $=$ the 8 th of 21 chain, 5 plain, 1 picot, 5 plain, 1 picot, 5 plain, 1 picot, 5 plain, 2 chain $=$ the 9 th of 24 chain, 5 plain, 1 picot, 5 plain, 1 picot, 5 plain, 1 picot, 5 plain, 1 picot, 5 plain, 2 chain = the 10 th of 26 chain, 6 plain, 1 picot, 5 plain, 1 picot, 5 plain, 1 picot, 5 plain, 1 picot, 6 plain, 2 chain $=$ the 11th and last of 28 chain, 32 plain, 2 chain, fasten off.
As the square with the semicircles in it, has more plain stitches in the edge than the one with the eight-pointed star in it, the stitches must be divided so that you miss 3 from time to time, instead of two. When the 7 top figures are finished, join the 7 bottom ones to them, each separately, by a row of plain stitches, made on the wrong side of the work. Below the first square with the semicircles, comes the eight-pointed star, below the next eight-pointed star, the square with the semicircles, and so on.

A narrow edging forms the outside border, the foundation of which is a row of plain stitches running all along the squares. At the middle of the square you decrease by 2 stitches, and at the point where two squares meet, by 3 . When you reach the left side and the end of the row, make 3 plain on the corner stitch, then: * 5 plain, 1 picot, 5 plain, 14 chain, join them to the first of the 5 first plain (drop the thread at each scallop and bring it forward from the wrong side to the right) $=$ on the 14 chain: 5 plain, 1 picot, 11 plain, 1 picot, 5 plain = along the square: 5 plain, 1 picot, 5 plain, then 14 chain, join them to the first plain $=$ over the 14 chain: 5 plain, 1 picot, 5 plain, 14 chain, join them in turning back between the 5 th and 6 th of the 10 plain of the 1st scallop; 5 plain, 1 picot, 5 plain, 1 picot, 5 plain, 1 picot, 5 plain; on the half-finished scallop: 5 plain, 1 picot, 5 plain $* *=$ on the plain stitches of the edge: 4 plain, 1 picot, 4 plain, 12 chain, come back, join to the 1 st of the 4 plain $=$ on the 12 chain: 4 plain, 1 picot, 4 plain, 1 picot, 4 plain, 1 picot, 4 plain ${ }^{* * *}=$ repeat on the same figure once from ${ }^{*}$ to ${ }^{* * *}$ and once from ${ }^{*}$ to ${ }^{* *}$.

This makes 77 stitches, the number there ought to be on the wide side of the straight-edged figures.
The scallops vary a little on the rounded sides. There, you should have 110 stitches, counting from the corner to the treble that marks the middle at the bottom. The single scallops, between the triple scallops of the border, are also all made over 8 stitches; the first triple scallop is made over 20 stitches, the 2 nd, 3 rd and 4 th triple scallop over 16 stitches.
Make no single scallop after the 4th triple one; which is immediately succeeded by the 5th triple scallop, over 16 stitches.
Altogether, round each star, there are 9 triple and 8 single scallops. After the 8 th single one, make 3 plain stitches on the 2 chain stitches of the connecting bar.
On the 32 plain stitches of the last bar: 8 plain, 1 picot, 4 plain, 12 chain, bring them back and join to the 5 th of the 8 plain $=$ on the 12 chain: 5 plain, 2 chain, draw the loop through the picot in the middle of the last single scallop, 2 chain, close the picot, 8 plain, 1 picot, 5 plain = in the bar: 4 plain, 1 picot, 4 plain, 12 chain, bring them back and fasten them to the 1 st plain $=5$ plain, 1 picot, 4 plain, 12 chain, join them to the 4 th plain of the 1 st scallop; 5 plain, 1 picot, 8 plain, 1 picot, 5 plain $=$ in the half-finished scallop: 4 plain, 1 picot, 4 plain $=$ in the bar: 4 plain, 1 picot, 4 plain $=12$ chain, bring them back and fasten them to the 1 st plain. 4 plain, 1 picot, 4 plain, 12 chain, join them close to the scallop above $=5$ plain, 1 picot, 4 plain, 12 chain, bring them back and join them to the 4 th plain of the 2 nd scallop; 5 plain, 1 picot, 5 plain, 1 picot, 5 plain, 1 picot, 5 plain = in each of the 2 half-finished scallops: 4 plain, 1 picot, 5 plain = finish with 4 plain, 3 plain on the 2 chain and repeat from * round all the rounded parts.
The lozenges that fill the empty spaces between the large figures are made in 7 rows, on a ring formed of 4 chain.
1 st row -5 chain, 1 treble on the ring, 2 chain, 8 trebles in all, including the bar of chain stitches.
2nd row-3 plain over 2 chain, 1 plain over each treble.
3rd row-7 chain, 1 treble over the treble beneath, 5 chain, 1 treble; 8 trebles in all.
4th row-* 1 plain, 1 half treble, 1 treble, 1 double treble, 1 treble $2 \frac{1}{2}$ trebles long; ${ }^{* *}$ repeat the reverse way to $*=1$ plain on the treble, 7 chain, miss 1 stitch, 1 plain, 1 treble, 1 double treble, 1 treble, 1 plain. Repeat twice from * to **, followed by: 9 chain, miss 1,1 single, 1 plain, 1 half treble, 2 trebles, 1 half treble, 1 plain, 1 single $* * *$. Repeat once from ${ }^{*}$ to ***, then again from ${ }^{*}$ to ${ }^{* *}$, and add 5 single all along the scallop.
5 th row -9 chain $* 1$ plain on the top stitch of the small leaf, 7 chain, 1 treble on the middle stitch of the scallop, 7 chain, 1 treble on the next scallop $=9$ chain, 1 plain on the leaf, 9 chain, 1 treble on the scallop, 7 chain, 1 treble on the next scallop, 7 chain and repeat once from *.
6 th row-1 plain on each stitch of the row before, 3 plain on the points.
7 th row-on each side of the lozenge 3 little scallops on 8 chain, with 3 picots and 1 picot below the scallops and between every 4 plain; the scallops at the points extend over 4 stitches only, so that the picot below is left out.
These lozenges are fastened on two sides to the middle picot of the triple scallop; then, starting from the 3rd scallop of the lozenge you make, 8 chain, join them to the middle picot of the 1st triple scallop; coming back over the 8 chain: 5 plain, 1 picot, 5 plain and finish the scallop. The next scallop, at the point of the lozenge, is fastened by a picot of 6 chain, to the middle picot of the 6 th scallop underneath the connecting bar. Repeat the same on the 2nd side and make 6 lozenges in all.
The lace that finishes off the collar at the neck must be made to stand up, and is begun by a row of trebles on the plain stitches.
From the corner as far as the 2nd treble of the 4th scallop, make triple trebles, from the 4th scallop to the 6th chain stitch after the 5th scallop, make double trebles, from this point to the 2nd scallop of the next semicircle, only single trebles, then again double trebles and finish with triple trebles as at the beginning. Decrease by 2 or 3 stitches in each square.

When this row of trebles is finished, fasten off, and fasten on again on the right and on the base of the 1st treble which you border with 4 chain, then follow: * 15 plain on the row of trebles, put the needle in under the 2 loops of the trebles $=$ turn the work $=2$ chain, 1 double treble, miss 4 plain, 1 double treble on the 5th stitch, 2 chain, 1 double treble, 2 chain, 1 double treble, 2 chain, miss 4 plain = turn the work $=$ bring the loop to the front; ${ }^{* *} 1$ plain, 1 picot, 1 plain, 1 plain on the treble; repeat 3 times again from ${ }^{* *}$ and add 4 plain on the trebles $=$ turn the work $=6$ chain, 1 double treble over the treble beneath; again 3 times 6 chain stitches and 1 double treble; join the 4 th set of 6 chain to the 4 th plain $=$ bring the thread back to the front: 1 plain on the 6 chain $=8$ chain, miss 1 , and make on the others: 1 plain, 1 half treble, 2 trebles, 1 treble $1 \frac{1}{2}$ treble long, 2 double trebles, 1 plain stitch on the 6 chain. The next point comes above a treble; you make 7 points in all. After the 7 th: 5 plain, then 7 chain, 1 plain on each point between the points and join.
Join the 8th set of 7 chain on to the 4th plain of the first treble $=$ then add: 2 chain, draw the loop from the wrong side to the right through the 1 st plain stitch; 8 trebles, 1 picot, 4 trebles, 12 chain, bring them back over the picot, join it between the 4 th and 5th trebles; 5 plain, 1 picot, 5 plain, 1 picot, 5 plain, 1 picot, 5 plain.
Over each point: 1 picot and over the picot 1 scallop, like the one made in the square. On the 7 th point only 1 picot $=$ after the last treble on the last chain: 2 chain; then go on with the plain stitches until you have 27 and repeat from *.
In the semicircles that follow you leave out the first and last little scallops, the first and the last scallop must be joined together by the first and the last picot; in the last semicircle, make 6 little scallops, the same as you did in the first.
and the diagonal figures, all have to be made separately and sewn on afterwards in their proper place. To join the separate parts neatly together, draw a square the size of the work on a piece of thick paper or waxcloth, divide it into 8 parts by means of straight and diagonal lines, sew the separate pieces of crochet upon it, face downwards, in their proper places and make the trebles on the wrong side of the work.


Fig. 485. Crochet chair-back. Materials: Fil à dentelle D.M.C No. 50 for the close figures and No. 120 for the connecting bars. ${ }^{[A]}$
Begin by the centre star and make: 12 chain, close the ring.
1 st row-23 plain on the 12 chain.
2nd row-9 chain, 1 double treble on the 2nd plain, 4 chain, 1 treble and so on until you have 12 trebles, including the 5 chain. 3rd row-1 plain on each chain stitch and each treble; 60 plain in all.

4th row-3 plain, 1 picot, altogether 20 picots in the row, then fasten off.
The leaves round the ring have 3 petals, 1 large and 2 small; you begin by the large one, and make the small ones afterwards. The petals should be begun from the point and not from the bottom as is generally done- 30 chain; coming back: 4 single, 4 plain, 5 half trebles, 8 trebles, 4 half trebles, 4 plain stitches, 3 plain on the 1 st chain $=$ on the second side of the chain make the same number of stitches but in the reverse order.

Small petal on the left-21 chain, miss 1, 5 plain, 3 half trebles, 5 trebles, 3 half trebles, 3 plain, 3 plain on the top. Repeat the same series of stitches in the reverse order on the second side $=$ at the 10 th stitch of the large petal and counting upwards from below, draw the thread through the 10th stitch of the small petal, and do the same through the 9 next stitches = for this purpose drop the loop each time and draw it back through the opposite stitch, from the wrong side to the right. After making the same petal on the right, fasten off; fasten on again at the outer edge and edge the 3 petals with 1 plain on each stitch and 3 plain on the stitch at the point; make 4 leaves with 3 petals each.
Between the pointed leaves, which are afterwards placed on the diagonal line of the square, come some very long leaves which are rounded towards the top-29 chain, miss 1,5 plain, 2 chain, 1 treble on the 3rd of the chain stitches; carry on the trebles until you have, on coming to the last chain, 7 trebles = turn the work and make 1 plain on each stitch of the row $=$ turn the work $=1$ plain on every stitch all round $=$ turn the work $=* 9$ plain, 4 half trebles, 3 trebles, 2 double trebles, join the last loops of the 2 last trebles together; set the 20th and 21st double treble on the same stitch $=$ the 20 th treble $2 \frac{1}{2}$ trebles long; the 21st a triple treble $=$ on the next plain stitch; 1 treble $31 / 2$ trebles long and 1 quadruple treble $=$ again on the next stitch: 2 trebles, the first of them $41 / 2$ trebles long, the 2 nd a quintuple one $=$ on the 3rd plain: 2 quintuple trebles, 4 chain, 1 plain on the plain stitch of the 2 nd row and next to the last quintuple treble, 1 half treble, 1 treble, 2 double trebles on one stitch, 2 triple trebles on one stitch ${ }^{* *}$, 1 quadruple treble on the 2 next stitches. Repeat from ${ }^{* *}$ to $*$, therefore in the reverse order.
To make the large star which is the first of the figures placed on the diagonal line, make: 4 chain, close the ring.
1st row-10 chain,* 1 double treble on the 4 chain, 5 chain. Repeat 4 times from *, 6 trebles in all.
2 nd row-over 5 chain: 1 half treble, 1 treble, 1 treble $1 \frac{1}{2}$ treble long, 1 double treble, 1 treble $21 / 2$ trebles long ${ }^{* *}$, 1 triple treble. Repeat once from ** to * and 5 times from * to **.
3rd row-1 plain on each stitch of the 2 nd row.
4 th row -3 plain, 1 picot, 2 plain, * 2 chain, 1 picot, 5 chain, miss $1=$ coming back: 4 plain, 1 picot, 2 plain $=$ on the plain stitches of the 3rd row: 2 plain, 1 picot, 3 plain. Repeat from *, with this difference that the trebles that are placed over the half trebles of the 2nd row must begin with 3 chain. Make, altogether, 12 long bars, 6 of them beginning with 2 chain and 6 with 3; these bars remain empty; after the 12th you fasten off.
5th row-fasten on the thread to the top stitch of a treble, 11 chain, 1 plain. Repeat this series 11 times.
6 th and 7 th row-1 plain on each stitch of the 5th row, then 1 plain on each stitch of the 6 th row.
8th row-over 9 bars and 8 spaces: 3 plain, 1 picot, 3 plain and so on. Add nothing further to the 2 rows of plain stitches of the 10th, 11 th and 12 th picots.
For the second star of the corner figure 4 chain, close.
1st row-8 chain, 1 treble, * 5 chain, 1 treble. Repeat 3 times from *; 5 trebles in all, including the chain stitches.
2nd row-* 1 chain, 1 half treble, 1 treble, 1 treble $11 / 2$ treble long, 1 double treble, 1 triple treble **. Repeat from ** to *, and the whole series 4 times.
3rd row-* 1 chain, 3 plain, 1 picot, 2 plain, 2 chain, 1 picot, 4 chain = coming back, 4 plain on the 4 chain, 1 picot, 2 chain = on the stitches of the 2 nd row: 2 plain, 1 picot, 2 plain, 3 chain, 1 picot, 5 chain, miss 1,4 plain $=$ coming back: 1 picot, 3 plain. Repeat 4 times from *, fasten off.
4th row-fasten on at the point of one of the bars and make from one bar to the other: 9 chain, 1 plain on each bar.
5th row-1 plain on each stitch of the last row.
6 th row-1 plain on each stitch of the last row and join the 4 last stitches to the 4 that are under the 11 th treble of the 1 st star,

2 nd row- 2 chain, * 1 half treble, 1 treble, 1 treble, $11 / 2$ treble long, 1 double treble ${ }^{* *}$. Repeat from ** to * and then, 3 times from * to **.
3rd row-1 plain on each stitch of the 2 nd row.
4 th row-1 chain, 2 plain, * 1 picot, 3 chain, 1 picot, 5 chain. Repeat 3 times from *; after the 8 th picot: 3 chain.
5th row- 15 chain, 1 triple treble on the 5 th and on the 2 nd plain stitch between 2 picots, 9 chain, 1 triple treble and so on. Altogether, including the chain stitches, 8 trebles and 8 times 9 chain; join to the 7 th chain.

6th and 7th row-1 plain on each stitch of the previous row; join the 4 last stitches again to the 4 th stitch of the 2nd star and fasten off.
The open work border is made from the 1st large star, beginning near the 9 th treble at the point where the picots leave off. After fastening on the thread: 5 chain, miss 2 plain, 1 plain on the $3 \mathrm{rd}=$ at the point where the circles meet, miss 3 or 4 stitches on each side and carry the treble over the indent of the scallop.

After finishing the picots of chain stitches on the two sides and as far as the 3rd treble of the large star, fasten off; fasten on again on the right of the large star: 4 chain, 1 plain on the 3rd chain; put the needle only through the 2 upper loops of the chain stitch; in the indent, connect 3 picots by 1 chain stitch; 2 chain and 1 plain between the next plain stitches. Fasten off. The 2 next rows both begin on the right and consist of plain stitches only; in the indent of the rings join 3 stitches of the preceding row together by 1 plain.
The 5 leaves over the circles-Begin with the middle and largest one- 25 chain, miss 1,3 plain, 2 chain, miss 2,1 treble, 2 chain and so on, 7 trebles in all = turn the work $=1$ plain on each stitch, passing under only 1 loop of the stitches $=$ on the stitch you missed: 3 plain; on the second side: 1 plain on each stitch $=$ turn the work $=$ do as in the last row $=$ turn the work $=$ do as in the 2 last rows, excepting as regards the 5 last stitches which you leave untouched $=$ turn the work $=15$ plain, * 1 chain $=$ turn the work $=12$ plain = turn the work $=12$ plain on the 12 plain and on all those you missed ${ }^{* *}$. Fasten off the thread. On the 2nd side of the leaf: draw the thread through the 6th stitch, counting upwards from below and on the side that is not indented, 15 plain and repeat from ${ }^{*}$ to ${ }^{* *}=$ then make: 1 row of plain, putting the needle through both the loops of the lower stitches = at the points of the leaves: 3 plain, in the indents of the leaves miss 1 stitch.
First leaf on the right of the large leaf -25 chain, miss 1, 3 plain, 1 chain, 1 treble on the 3rd chain; 7 trebles in all $=$ turn the work = 1 plain on each stitch, 18 stitches altogether, to the corner stitch; 3 plain on the corner stitch. The 2 nd side is worked like the 1 st.
Add 3 more rows of plain stitches and increase 3 plain on the stitch at the point = in the 3rd row leave the 5 last stitches empty $=$ turn the work $=11$ plain, 1 chain = turn the work $=11$ plain and 5 plain on the 5 stitches that were passed over; fasten off.
On the opposite side fasten on the thread on the wrong side at the 8 th stitch counting from the point: 12 plain, 1 chain $=$ turn the work $=12$ plain = turn the work = make plain stitches up to the end of the leaf and border it, like the large leaf, with plain stitches $=$ join the 8 first stitches to the corresponding ones in the large leaf $=$ make 4 leaves all alike.
2 nd leaf on the left-19 chain, miss 1, 3 plain, 2 chain, 1 treble on the 2 nd chain; 7 trebles in all $=$ turn the work $=1$ plain on each of the preceding stitches, 3 plain on the stitch at the point $=$ turn the work $=1$ row of plain stitches $=$ turn the work $=1$ row of plain $=$ turn the work $=1$ row of plain, excepting on the last 7 stitches $=$ turn the work $=14$ plain, 1 chain $=3$ more rows to and fro with 11 plain; fasten off, and fasten on again on the 2 nd side at the 6 th stitch counting from below: 2 rows of 11 plain and 1 row to the end of the leaf = then encircle this leaf, like the others with plain stitches, join the 8 last stitches to the last 8 of the large leaf $=$ make 4 leaves all alike.
3rd leaf on the right-18 chain, miss 1, 2 plain, 1 chain, 1 treble on the 3rd chain, 5 trebles in all = turn the work $=4$ rows of plain worked to and fro; on the stitch at the point: 3 plain $=$ after the 4 th row: 4 trebles, 8 plain, 1 chain, 4 plain, 1 chain, 4 plain, 1 chain, then plain stitches to the end = fasten off. On the second side, fasten on to the 6th stitch counting downwards from the top: 9 plain $=$ coming back: 3 plain, 1 chain, 7 plain $=$ coming back: 7 plain, 1 chain $=$ then to the end of the leaf, 1 plain on each stitch.
3rd leaf on the left -14 chain, miss 1, 2 plain, 2 chain, 1 treble, 2 chain, 1 treble, 2 chain, 1 treble, 2 chain, 1 treble; 4 rows of plain all round, 3 plain on the stitch at the point, and 3 plain on the added stitch. After the 4th row: 14 plain $=$ turn the work $=$ 10 plain $=$ turn the work $=3$ single, 7 plain $=$ coming back: 7 plain $=$ coming back again: 7 plain; after the last plain, 1 single on each plain up to the top $=$ fasten off.
On the second side of the leaf: 9 plain = turn the work $=5$ plain = turn the work $=5$ plain, 1 single on each of the remaining stitches $=$ turn the work $=$ surround the whole leaf with plain stitches; 3 plain on each stitch at the point; join the 8 last stitches to the 8 last of the 2nd leaf.

Branch on the right and 1st leaf-28 chain, miss 1, 4 plain, 1 chain, 1 treble on the 3 rd chain, 1 chain, 1 treble on the 3rd chain, 1 chain, 1 treble $1 \frac{1}{2}$ treble long on the 3rd chain, 1 chain, 1 treble $1 \frac{1}{2}$ treble long on the 3rd chain, 1 chain, 1 treble on the 3rd chain, 1 chain, 1 half treble on the 3rd chain, 1 chain, miss 2 stitches, 5 plain $=$ on the second side of the chain: * 1 plain on each stitch, 3 plain on the 2 nd of the missed stitches. Repeat 3 times from *. After the 4 th row of plain: 6 chain $=$ turn the work $=1$ row of plain on both sides and plain stitches on the 6 chain; fasten off the thread. Counting back the last stitches, fasten on the thread at the 18th stitch, make one more row of plain, fasten off.
2nd leaf of the branch-22 chain, miss 1, 3 plain, 1 chain, 1 half treble on the 3rd chain, 1 chain, 1 treble on the 3rd chain, 1 chain, 1 treble on the 3rd chain, 1 chain, 1 half treble on the 3rd chain, 1 chain, 1 plain on the 3rd chain, 1 plain on each of the remaining stitches; 4 rows of plain, to and fro, in each of the stitches of the last row. The rows touch, and therefore encircle the leaf.
3rd leaf-16 chain, miss 1,2 plain, 1 chain, 1 treble on the 3 rd chain, 1 chain, 1 treble on the 3 rd chain, 1 chain, 1 treble on the 3rd chain, 1 plain on each of the remaining stitches, 4 rows of plain, to and fro round the leaf; 3 plain on the stitch at the top of the leaf and 3 on the one at the bottom.

When these 3 leaves are finished, join them together on the wrong side so that the end of the 2 nd leaf is parallel with the last treble of the 1st leaf, and the end of the 3rd leaf parallel with the 1st of the last plain stitches of the 2nd leaf. Having sewn these 3 leaves together, carry on the plain stitches with the thread of the 3rd little leaf over the two others. Fasten off the thread, join it on again at the 10th plain stitch of the 3rd little leaf, counting the stitches downwards from the top $=40$ chain, 1 single on the 34 th chain $=$ on the ring: 10 plain, 1 plain each chain and 1 plain on each stitch of the leaves $=$ then, make 3 more rows of plain and 2 plain on every second stitch of the 10 stitches in the ring.
Having reached the chain stitches, fasten on the thread, turn the work and continue the other rows. When the rows of plain stitches are finished, draw a thread through the chain stitches and pull them gently together.

Branch on the left and 1st leaf-22 chain, miss 1, 3 plain, 2 chain, 1 treble on the 2 nd chain, 2 chain, 1 treble $1 \frac{1}{2}$ treble long, 2 chain, miss 1,1 treble, $11 / 2$ treble long, 2 chain, miss 1,1 treble, 2 chain, miss 1,1 treble, 2 chain, miss 1 , 1 plain on each of the remaining stitches. The remainder the same as for the right leaf.
2 nd leaf -16 chain, miss 1,2 plain, 2 chain, 1 treble, 2 chain, miss 1,1 treble, 2 chain, miss 1,1 treble, 2 chain, miss 1,1 treble, 2 chain, miss 1, 1 plain on each of the remaining stitches. The rest the same as for the right leaf.

3rd leaf -12 chain, miss 1,2 plain, 2 chain, miss 1,1 treble, 2 chain, miss 1,1 treble, 2 chain, miss 1 , 1 treble, 2 chain, miss 1 , 1 plain on each of the remaining stitches. The remainder, as well as the little ring, the same as for the right leaf. Make altogether 4 leaves for the right side and 4 for the left.

Calyx of the small flowers. -11 chain $=$ turn the work $=1$ plain on the first 5 chain, 3 plain on the 6 th chain, 1 plain on the 5 other chain $=$ turn the work $=* 2$ chain, 1 treble on the 1 st plain, 1 chain, 1 treble, 1 chain, 1 treble, 1 chain, ** 3 trebles on the second of the 3 plain, on the 6th chain, repeat once from ${ }^{* *}$ to $*=$ turn the work $=1$ plain on each of the preceding stitches, 3 single on the added stitch = turn the work $=1$ single on the first 2 plain; plain stitches as far as the middle stitch; 13 chain, miss 1, 1 plain on each chain stitch, 6 plain, 2 single. Fasten off. Make 8 calices in all.
Small flowers of three different sizes-Make altogether, 24 large, 12 of medium size, and 16 small.
For the large flowers-18 chain, close the ring, 24 plain on the 18 chain; 1 plain on every stitch of the preceding row and 1 picot after every second plain stitch. Join the first and the last picots of 2 large flowers to the calyx, the 2nd and the 3rd picots of one large flower to the 10th and 11th picots of the other. Join the 1st and 11th picots of the 3rd flower to the 8th picot of the first and to the 5th of the second flower.

For the medium-sized flowers -14 chain, close the ring $=20$ plain on the ring, then a second row of plain with 1 picot after every second plain stitch.

These flowers connect the centre figure with the corner one.
For the small flowers -10 chain, close the ring $=16$ plain on the ring, then a second row of plain stitches with a picot after every second stitch. Sew the medium-sized flowers and the small ones to the big ones with overcasting stitches.
As regards the bars of chain stitches that complete the pattern they can easily be copied from the illustration.

## Next Chapter. <br> Return to Table of Contents.

## FOOTNOTES:

[A] See at the end of the concluding chapter, the table of numbers and sizes and the list of colours of the D.M.C threads and cottons.


Tatted insertion.-Double knots, single picots and josephine picots.

## Tatting.

On account of a similarity in their construction, a chapter on tatting seems to form a natural sequence to the one on crochet and is in some ways a preparation for that on macramé which succeeds it.
The English name of tatting is said to be derived from «tatters» and to denote the frail disconnected character of the fabric. By the Italians it was formerly called «occhi», whilst in the East it still bears the name of «makouk», from the shuttle used in making it.

In the eighteenth century, when tatting was in great vogue, much larger shuttles than our present ones were used, because of the voluminous materials they had to carry, silk cord being one.
Shuttles.-The tatting shuttle consists of two oval blades of either bone, ivory, mother of pearl or tortoise-shell, pointed at both ends, and joined together in the middle. A good shuttle contributes materially to the rapid and perfect execution of the work and attention should be paid in its selection to the following particulars: that it be not more than $7 \mathrm{c} / \mathrm{m}$. long and 2 or 3 $\mathrm{c} / \mathrm{m}$. wide: that the two ends be close enough to prevent the thread from protruding; this is more especially important in tatting with two shuttles and lastly, that the centre piece that joins the two oval blades together should have a hole bored in it, large enough for the thread to pass through.

In filling the shuttle, be careful not to wind on too much thread at once, or the blades will gape open at the ends and the thread get soiled by constant contact with the worker's hands.

Materials.-A strongly twisted thread such as Fil d'Alsace D.M.C, Fil à dentelle D.M.C, or Cordonnet 6 fils D.M.C, is best for tatting. We particularly recommend Fil d'Alsace, as forming the best shaped knots and picots. A soft material such as Coton à tricoter D.M.C, can also be used where it suits the purpose better.

First position of the hands (fig. 486).-The construction of the knots or stitches, appears at first sight to present great difficulties but will be easily mastered by attention to the indications here given. One thing, to be constantly borne in mind is, that when the right hand has passed the shuttle through the loop, it must stop with a sudden jerk and hold the thread tightly extended until the left hand has drawn up the knot. After filling the shuttle, take the end of the thread between the thumb and forefinger of the left hand, and the shuttle in the right, pass the thread over the third and fourth fingers of the left hand, bring it back towards the thumb and cross the two threads under the fingers, as indicated in fig. 486 . Pass the thread that comes from the shuttle round the little finger of the right hand, and give the shuttle the direction shown in the engraving.


Fig. 486. First position of the hands.
Second and third position of the hands (figs. 487 and 488 ). -Make the shuttle pass between the first and third fingers, in the direction indicated by the arrow in fig. 487 , and bring it out behind the loop.


Fig. 487. Second position of the hands.
Here the first difficulties for beginners arise and until they have sufficiently mastered the movements of both hands not to confuse them, we advise them to pay careful attention to the following instructions. As soon as you have put the shuttle through the loop, place the right hand on the table with the thread tightly extended, leaving the left hand perfectly passive.


Fig. 488. Third position of the hands.
Then, raising the third and fourth fingers of the left hand with the loop upon them, pull up the loop, stretching the thread
tightly in so doing by extending the fingers. By this movement a knot is formed, the first part of the «double knot», which is the most common one in tatting.

Remember that the right hand must be kept perfectly still as long as the left is in motion and that the knot must be formed of the loop thread that is in the left hand.

The right hand, or shuttle thread, must always be free to run through the knots; if it were itself formed into knots it would not have the free play, needed for loosening and tightening the loop on the left hand, as required.

Fourth position of the hands (fig. 489). -The second part of a knot is formed by the following movements: pass the shuttle, as indicated in fig. 489, from left to right, between the first and third fingers through the extended loop; the right hand seizes the shuttle in front of the empty loop and extends the thread; the left hand pulls up this second part of the knot as it did the first.


Fig. 489. Fourth position of the hands.
Single or half knots. Josephine picots (figs. 490 and 491).-The Josephine picot or purl, as it is also called in tatting, consists of a series of single or half knots formed of the first knot only. These picots may be made of 4 or 5 knots, as in fig. 490, or of 10 or 12 knots, as in fig. 491.


Fig. 490.
Single or
half knots.
Small JOSEPHINE
рісот.


Fig. 491. Single or half knots. Large josephine

рісот.

Fifth position of the hands (fig. 492). -When the second knot forming the double knot has been made, the two hands resume the position shown in fig. 487 . Fig. 492 reproduces the same and shows us a few finished knots as well.


Fig. 492. Fifth position of the hands.
Position of the hands for making a picot (fig. 493). -Picots are introduced into tatting patterns as they are into knitting and crochet. They also serve to connect the different parts of a pattern together and render a great many pretty combinations feasible.


Fig. 493. Position of the hands for making a picot.
Open and close picot (figs. $\underline{494}$ and 495).-These are formed of single knots, leaving a loop on the extended thread, as shown
in fig. $\underline{494}$, and a short length of thread between the knots; finish the second half knot and when you have pulled it up, join it to the preceding knot. In this manner the picot represented in fig. 495 is formed quite naturally.


Fig. 494. Open picot.


Fig. 495. Close picot.

In every kind of tatting the knot that comes after the picot is independent of the loop.
Thus if the directions say: 2 knots, 1 picot, 3 knots, 1 picot, 2 knots, etc., you must count the knot that served to form the loop and not make: 2 knots, 1 picot, 4 knots, etc. To join the different rings, ovals, etc., together by means of picots, take up the thread that runs over the left hand with a crochet needle, inserting it into the picot downwards from above, draw the thread through and pull it up like any other knot.
Tatting with two shuttles (fig. $\underline{496 \text { ). -Two shuttles are used in tatting when the little rings are not to be connected together }}$ at the bottom by a thread, when you want to hide the passage of the thread to another group of knots and when threads of several colours are used.


Fig. 496. Tatting with two shuttles.
When you work with two shuttles, tie the two threads together. Pass one thread over the third finger of the left hand, wind it twice round the fourth finger and leave the shuttle hanging down.
Pass the second shuttle into the right hand and make the same movements with it as you do in working with one shuttle only.
Detached scallops (fig. 497).-Make 12 double knots with one shuttle, then tighten the thread so as to draw them together into a half ring; the next knot must touch the last knot of the scallop before it.


Fig. 497. Detached scallops.
Materials: Fil d'Alsace D.M.C in balls Nos 30 to 70 or
Cordonnet 6 fils D.M.C Nos. 25 to 50.[A]
Scallops joined together at the top (fig. 498). With one shuttle make 4 double, 1 picot, * 8 double, 1 picot, 4 double, close the half ring, 4 double, draw the thread through the picot and repeat from *.


Fig. 498. Scallops joined together at the top. Materials: Fil d'Alsace D.M.C Nos. 30 to 70, Cordonnet 6 fils D.M.C Nos. 15 to 40, or Fil à dentelle D.M.C Nos. 25 to 60 [A]

Scallops with picots (fig. 499).-Make with one shuttle: 4 double, 1 picot, * 3 double, 1 picot, 2 double, 1 picot, 2 double, 1 picot, 3 double, 1 picot, 4 double, close the ring.


Fig. 499. Scallops with picots.
Materials: Fil d'Alsace D.M.C in balls Nos. 30 to 70, écru or white.[A]
Leave sufficient length of thread before beginning the next ring, for the rings not to overlap each other = make 4 double, draw the left hand thread through the 5th picot of the preceding ring and repeat from *.

Tatted insertion (fig. $\underline{500}$ ).-Make with one shuttle a ring like the ones in fig. $\underline{499}$, then leaving a length of, from 5 to $10 \mathrm{~m} / \mathrm{m}$. of thread, make a second ring = turn the work = leave the same length of thread again, begin a third ring which you join after the 4 th double, to the 5th picot of the 1st ring = turn the work after each ring is made, so that all the upper rings represent the right side of the work and all the lower ones the wrong.


Fig. 500. Tatted insertion.
Materials: Fil d'Alsace D.M.C in balls Nos. 30 to 70, écru or white.
Tatted insertion (fig. 501).-To be worked with two shuttles. Begin with one thread and one shuttle and make a ring, as in figs. 499 and 500 ; and a second close to it; then pass the thread over the left hand, take the second shuttle in the right hand and make 6 double on the 2nd thread, after which you again make a ring above and one below with one shuttle only.


Fig. 501. Tatted insertion.
Materials: Fil d'Alsace D.M.C Nos. 30 to 70, or Cordonnet 6 fils D.M.C No. 20.

Edging of tatting and crochet (fig. 502).-Make with one shuttle: 1 double, 1 picot, 2 double, 1 picot, 2 double, 1 picot, 2 double, 1 picot twice as long as the others, 2 double, 1 picot, 2 double, 1 picot, 2 double, 1 picot, 2 double, 1 long picot, 1 double $=$ close the ring $=$ fasten off the two threads on the wrong side with two or three stitches.


Fig. 502. Edging of tatting and crochet.
Materials-For the tatting: Fil d'Alsace D.M.C in balls No. 30. For the crochet: Cordonnet 6 fils D.M.C No. 60.
After the first knot join the next ring to the preceding one by the long picot, and work the remainder as has been already described.

When you have a sufficient number of rings, pick up the picots by crochet trebles with 3 chain stitches between them. On this first row, crochet a second, consisting of: 2 chain, 1 picot, 2 chain, 1 single in the treble of the 1 st row. To finish the bottom part of the work, make 1 plain in the 1st picot, 3 chain; 1 plain in the 2 nd picot, 3 chain, 1 plain in the 3rd picot, 1 chain, 1 plain in the 1st picot of the next ring.

One row of single crochet serves as a footing to the edging.
Tatted edging in three rows (fig. 503).-Worked with two shuttles. The first row is worked like fig. 495, with one shuttle. The second and third are worked with two.


Fig. 503. Tatted edging in three rows.
Materials: Fil d'Alsace D.M.C in balls Nos. 30 to 70, or Cordonnet 6 fils D.M.C Nos. 20 to 60.

Fasten the thread of the right hand shuttle into the first picot; then work on this thread the same number of double knots and picots as in the 1st row and join each half ring to the picot of the row before. In the 3rd row, insert 3 picots between the 8 double knots of the row above. Here the Josephine picot may be substituted for the plain picot.

Tatted edging (fig. $\underline{504}$ ).-Worked with two shuttles and two colours. After making a string of rings like those in fig. $\underline{502}$, with Fil d'Alsace D.M.C No. 30 écru, fasten the blue and unbleached threads of the respective shuttles to the middle picot. Holding the light thread in the right hand, and the dark one laid over the left hand, work: 3 double, 1 picot, 3 double $=$ then put the right hand thread separately through the 2 picots of the rings and continue to make: 3 double, 1 picot, 3 double.


Fig. 504. Tatted edging.

## Materials: Fil d'Alsace D.M.C in balls Nos. 30 to 70, or Fil à

 dentelle D.M.C Nos. 25 to 50.
## Colours: Écru and Bleu-Indigo 334, or Jaune d'Ocre 667 and

Rouge-Cornouille 450, Gris-Tilleul 331 and Brun-Caroubier 356.
The next row also is made with two shuttles. Hold the light thread in the right hand; with the dark thread, laid across the left hand, make: * 4 double, 1 picot, 2 double, 1 picot, 2 double $=$ turn the work $=$ with the right hand shuttle make: 6 double, put the thread through the little picot formed above the middle picot of the rings, 6 double, close the ring $=$ turn the work $=$ make with two shuttles: 2 double, 1 picot, 2 double, 1 picot, 4 double, put the light thread through the 2 blue picots and repeat from *. The first row of crochet for the footing consists of chain and plain stitches only, the second, of chain stitches and trebles.

Medallion (fig. 505).-Take two colours of thread and fill two shuttles with the light colour and two with the dark. Make with one shuttle: 24 double and 12 picots, 6 of them short and 6 long; close the ring, break off the thread and fasten off the ends by a stitch or two on the wrong side.-For the next 4 rows take two shuttles.


Fig. 505. Medallion.
Materials: Fil d'Alsace D.M.C in balls Nos. 30 to 50.[A] Colours: White and Rouge-Géranium 352, or écru and Vert-Mousse 471, Bleu pâle 668 and Jaune d'Or 676.
1 st row-with the shuttles containing the light colour $=$ fasten the ends on to a short picot and make: * 3 double, 1 short picot, 2 double, 1 long picot, 2 double, 1 long picot, 2 double, 1 long picot, 2 double, 1 short picot, 3 double; pass the right hand thread through one of the short picots of the first ring, repeat the series 5 times from *.

When you reach the 6th half ring, instead of making the second picot, put the left hand thread through the short picot of the first half ring, then complete the last double knots, cut the threads off, pass them through the picot of the ring and fasten them off on the wrong side.
2 nd row-with the shuttles filled with the light colour $=$ fasten the ends on to a long picot, then make: $* 4$ double, 1 picot, 4 double, pass the right hand thread through the picot of the first row and repeat the series 17 times from *.
3rd row-with the shuttles filled with the dark colour $=$ fasten the ends on to one of the picots of the last row and make: * 4 double, pass the right hand thread through the picot of the 2nd row, make a long picot, 4 double and repeat this series all round the medallion, until you have 18 scallops.

4 th row-with the shuttles filled with the dark colour $=* 2$ double, 1 picot, 2 double, 1 picot, 2 double, 1 picot, 2 double, pass the right hand thread, from the wrong side, through the picot of the 2nd row and begin again from *.
Insertion of tatting and crochet (fig. 506).-Fill two shuttles, one with a light colour, say, Bleu de France 344, the other with a darker, such as Jaune-Rouille 365, and two numbers coarser than the thread you intend to use for the crochet. Begin with the dark colour and make: * 4 double, 1 picot, 8 double, 1 picot, 4 double, close the ring. With both shuttles, the light colour in the left hand: 4 double, 1 picot, 2 double, 1 picot, 2 double, 1 picot, 4 double, put the right hand thread through the picot of the first circle; then add: 4 double, 1 picot, 2 double, 1 picot, 2 double, 1 picot, 4 double.


Fig. 506. Insertion of tatting and crochet.
Materials: Fil d'Alsace D.M.C in balls Nos. 30 to 70, or Fil à dentelle D.M.C Nos. 25 to 50.

## Colours: Bleu de France 344 and Jaune-Rouille 365.

With the shuttle, filled with the dark colour: 5 double, pass the thread through the picot of the first ring, make 8 double, 1 picot, 5 double, close the ring. Then, leaving a short length of thread between, make: 4 double, put the thread through the picot of the preceding ring, 8 double, 1 picot, 4 double, close the ring ${ }^{* *}$; then repeat from ${ }^{*}$ to ${ }^{* *}$.
When you have thus made two equal lengths, join them together with crochet, using a thread two numbers finer than the tatting thread; if the latter for instance was Fil d'Alsace No. 30, you would take No. 50 of the same material for the crochet-1 plain in the 1 st picot, 5 chain, 1 plain in the middle picot, 5 chain, 1 plain in the 3 rd and 1 st picot $=$ then, over 5 chain: 1 sextuple cluster stitch (fig. 426), 5 chain.
In the row on the opposite side of the tatting, take out the crochet needle at the 3rd chain stitch and put it in from beneath into the corresponding stitch of the opposite row; in this manner join the two insertions together so as to complete the pattern.

Insertion of tatting and crochet (figs. $\underline{507}$ and $\underline{508 \text { ). -Worked with one shuttle. The tatting thread should be two numbers }}$ coarser than the crochet thread. Begin with 2 strings of half rings consisting of: 4 short picots and 3 long. Leave a length of thread between, equal to the diameter of the ring.


Fig. 507. Insertion of tatting and crochet.
Materials-For the tatting: Fil d'Alsace D.M.C in balls Nos. 30 to 70, or Cordonnet 6 fils D.M.C Nos. 25 to 50, écru or white. [A] For the crochet: The same materials, but two numbers finer.

When the two strings of half rings are finished, crochet with the fine thread: 6 plain over each length of thread between, and at the base of the scallops.


Fig. 508. Working detail of fig. $\underline{507}$.
2nd row-5 chain, 1 plain in the 4 th plain of the 1 st row.
In the row that connects the two rows of tatting, put the 3rd chain stitch into the corresponding stitch of the opposite row.
For the outside edge make: 1 plain in the 1 st short picot, 8 chain $*, 1$ treble in the 2 nd short picot, 7 chain, 1 treble in the 3rd short picot, 8 chain, 1 plain in the 4 th short picot, 1 plain in the short picot opposite, 3 chain, pass the thread through the 4 th of the 8 chain stitches, 4 chain and repeat from *.
For the last row make: 3 plain in each of the 3 last of 8 chain, * 1 picot of 5 chain above the treble, 4 plain in the 4 next chain, 1 picot, 1 single in the same stitch as the plain before the picot, 3 plain, 1 picot, 3 plain, miss the 1st and the last stitch, then make 3 plain on the next scallop and repeat from *.

Edging of tatting and crochet (fig. 509).-Worked with two shuttles and in two shades. With the light shade: 2 double, 1 short picot, 2 double, 1 long picot, * 2 double, 1 picot of the ordinary size, 2 double, 1 picot, 2 double, 1 picot, 2 double, 1 long picot, 2 double, 1 short picot, 2 double, close the ring $=$ with 2 shuttles: 3 double, pass the thread through the 1 st picot, make 3 double, 1 long picot, 2 double $=$ with the light shade: 4 double, pass the thread through the 9 th picot of the 1 st ring, make 3 double, 1 picot, 4 double, close the ring $=$ with 2 shuttles: 2 double, 1 picot, 3 double, 1 short picot, 3 double $=$ with one shuttle: 2 double, pass the thread through the empty picot of the small ring, make 2 double, pass the thread through the long picot of the big ring, then repeat from *.


Fig. 509. Edging of tatting and crochet.
Materials-For the tatting: Fil d'Alsace D.M.C in balls No. 30 in two shades of one colour.

## For the crochet: Fil d'Alsace D.M.C in balls No. 50 in one colour

 only.To complete the edge, crochet first one row, consisting of: * 1 plain in the 1 st of the 5 picots of the big ring, 4 chain, 1 plain in the 2 nd picot, 4 chain, 1 plain in the 3rd picot, 4 chain, 1 plain in the 4 th picot, 4 chain, 1 plain in the 5th picot and repeat from *.

2nd row-2 plain on the 3rd and 4th of the first chain stitches = over the 2 nd and 3rd chain: 1 plain, 1 half treble, 2 trebles, 1 half treble, 1 plain; on the 4 last chain: 2 plain.

For the footing make: 1 plain in the long picot, 5 chain, 1 plain in the next picot, 5 chain, 1 double treble in the short picot, leave the 2 last loops of the treble on the needle $=3$ trebles in the first lower loop of the double treble, keep the last loops of these 3 trebles on the needle, after the 4th treble, draw the needle through the 4 trebles. The last row consists of: 3 chain, 1 treble over 5 chain.

Tatted medallion (fig. 510).-Worked with two shuttles and two colours.


Fig. 510. Tatted medallion. Materials: Fil d'Alsace D.M.C Nos. 30 to 50.
[A]
Colours: Gris-Tilleul 330 and RougeCardinal 304.[A]
1st row-with one shuttle: 12 double and 6 picots, close the ring.
2nd row-with two shuttles and the dark coloured thread laid across the left hand $=$ knot the threads into one of the picots of the 1st ring: 1 double, 1 long picot, 2 double, pass the right hand thread through one of the picots of the ring, 1 picot, 2 double and so on. After the 12th picot fasten off the threads on the wrong side by two or three stitches.
3rd row-with one shuttle: * 3 double, pass the thread through one of the picots of the 2 nd row, make 3 double, close the ring = leave $5 \mathrm{~m} / \mathrm{m}$. of thread = turn the work $=4$ double, 1 picot, 4 double, close the ring $=$ leave $5 \mathrm{~m} / \mathrm{m}$. of thread again and repeat 11 times from *.
4th row-with two shuttles; fasten the ends to one of the picots of one of the 12 rings of the 3rd row: * 3 double, 1 picot, 3 double $=$ with one shuttle: 3 double, pass the thread through the picot, 3 double, 1 picot, 2 double, 1 picot, 3 double, close the ring $=$ close to this: 3 double, pass the thread through the 2 nd picot of the 1 st ring, 3 double, 1 picot, 3 double, close the ring $=$ again, close to the last ring: 3 double, pass the thread through the picot of the 2 nd ring, 2 double, 1 picot, 3 double, close the ring = with 2 shuttles: 3 double, pass the thread through the 2nd picot of the 3rd ring, 3 double, fasten the thread to the picot of the ring of the 3rd row and repeat 11 times from *.
5th row-with two shuttles and the dark colour across the left hand: 6 double and 2 picots over the lower rings and 10 double and 4 picots over the upper rings.

Tatted edging (fig. 511).-With two shuttles and with the two colours indicated, or in any other combination of colours.


Fig. 511. Tatted edging.
Materials: Fil d'Alsace D.M.C in balls Nos. 30 to 70, Cordonnet 6 fils D.M.C Nos. 40 to

## 50, or Fil à dentelle D.M.C Nos. 25 to 40. Colours: Gris-Tilleul 330 and Rouge-Grenat

 326.Begin with two shuttles, the red thread across the left hand $=10$ double, 1 picot, 6 double $=$ with one shuttle: 6 double, 1 picot, 6 double, close the ring $=$ turn the work $=$ make a second ring like the first and close to it $=$ turn the work = with two shuttles: 6 double, 1 picot, 6 double $=$ with one shuttle: 6 double, pass the thread through the picot of the ring opposite, 6 double, close the ring $=6$ double, 1 picot, 6 double, close the ring $=$ turn the work to make the next half ring.
Make 3 rows of half rings connected by rings. In the 2 nd row, you pass the thread from the ring through the picot to which the 2 nd ring was fastened in the 1st row.

For the outside scallops, make with one shuttle: * 5 double, pass the thread through the picot that connects 2 rings, 5 double, close the ring $=$ with two shuttles: 4 double $=$ with one shuttle: 2 double, 1 picot, 2 double, 1 picot, 2 double, pass the thread through the picot of the half ring of the 3 rd row, 2 double; then 8 picots more with 2 double between each, close the ring $=$ with two shuttles: 4 double, 1 long picot, 2 double, 1 short picot, 2 double, 1 short picot, 3 double $=$ with one shuttle: 5 double, pass the thread through the 3rd picot of the big ring, 5 double, close the ring $=$ with two shuttles: 2 double, 6 picots with 2 double after each picot $=$ with one shuttle: 5 double, pass the thread through the 3rd picot of the big ring, 5 double, close the ring $=$ with two shuttles: 3 double, 1 picot, 2 double, 1 picot, 2 double, 1 picot, 4 double, pass the right hand thread through the 6th picot of the big ring $=$ with two shuttles: 4 double, then repeat from *.

The footing is worked in crochet and consists of one row of chain stitches and one of trebles.
Square of tatting (fig. 512).-Worked with two shuttles and two colours. With the light colour: 2 double, 1 picot, 4 double, 1 picot, 4 double, 1 picot, 4 double, 1 picot, 2 double, close the ring.


Fig. 512. Square of tatting.
Materials: Fil d'Alsace D.M.C in balls Nos. 30 to 100,
Cordonnet 6 fils D.M.C Nos. 10 to 60, or Fil à dentelle D.M.C
Nos. 25 to 70. [A]
Colours: Jaune-Rouille 366 and Brun-Caroubier 359.[A]
1st row-with two shuttles, the dark coloured thread across the left hand = fasten the thread to a picot and make: * 2 double, 1 picot, 2 double, 1 picot, 2 double, 1 picot, 2 double, pass the right hand thread through the picot of the ring; 1 picot over the connecting thread, then repeat 3 times from *. The last picot over the picot of the small ring is made at the end.

2nd row-with two shuttles, the light thread over the left hand $=$ fasten the thread to the picot over the light picot: * 2 double, pass the right hand thread through the picot of the 1st row, 1 long picot over the lower picot, 3 double, pass the thread through the next picot of the 1 st row = in the corner, 1 rather longer picot than the one before, 3 double, pass the right hand thread through a picot, 1 long picot, 2 double, pass the thread through a picot; repeat 3 times from *. To form the last picot, fasten off the thread on the wrong side by two or three stitches.

3rd row-with one shuttle and the dark colour: * 4 double, pass the thread through the picot above the picot of the small ring, 4 double, close the ring = leave $10 \mathrm{~m} / \mathrm{m}$. of thread, make a second ring like the $1 \mathrm{st}=$ leave $10 \mathrm{~m} / \mathrm{m}$. of thread, make 6 double, pass the thread through the long picot, 6 double, close the ring $=$ leave $10 \mathrm{~m} / \mathrm{m}$. of thread, make another ring of 12 knots , fasten it to the same picot, the preceding knot is fastened to; then make a ring of 8 double knots and repeat 3 times from *. 4 th row-with one shuttle and the light colour and worked like the 3rd row, leaving a rather longer length of thread between; then make: 16 instead of 12 double for the corner rings.
5th row-with one shuttle and the light colour $=8$ double, fasten the thread to one of the corner loops and between 2 rings of the 4th ring: 8 double, close the ring = turn the work = leave a length of thread, 3 double, 1 picot, then 4 times 2 double knots and 1 picot, 3 double, close the ring. Make the second ring as close as possible to the first, beginning and finishing the second with 5 double knots = make a 3rd ring like the 1 st, join it to the 2 nd ring by the 4 th picot = turn the work = make another ring of 16 knots and join it to the same loop of the 4 th row, to which the two other rings are already joined $=$ turn the work $=1$ ring above, with 4 picots, like the first one we described, then a ring of 12 double knots below.

At the top, 6 detached half rings, placed between 3 connected rings, which form the corners. The top rings are to be joined after the 3rd double knot, to the 4th picot of the preceding ring.
6th row-with two shuttles and the dark colour only = fasten the threads to a picot that serves as a connecting link, take the dark thread over the left hand and make: 3 double, 1 picot, 2 double, 1 picot, 2 double, 1 picot, 3 double $=$ fasten the thread to the connecting picot and carry the half rings all round the square.

## FOOTNOTES:

[A] See at the end of the concluding chapter, the table of numbers and sizes and the list of colours of the D.M.C threads and cottons.


Macramé stripe-Arabic subject.

Macramé is an Arabic word, signifying an ornamental fringe or trimming, which has been adopted as the term for a certain kind of hand-work, known also as «knotted fringe» or «Mexican lace» and produced by the knotting, interweaving and tying together of threads.
We have given the preference to the Arabic name because of its less definite meaning, seeing that not only fringe and lace, but trimmings of all kinds, in the shape of bands and stripes and headings, can be worked in macramé.

Until its revival about ten years ago, when it was regarded by many as a new invention, the art of macramé making had for centuries become almost extinct and save here and there in the convents, was quite unknown.
The multitude of uses to which it can be turned as a trimming, the infinite variety it admits of and its great durability and strength, make macramé well worth a study; the difficulties that repel many at first sight are only on the surface and any one who carefully follows the instructions given in the following pages, will soon overcome them and be able without pains to copy the charming designs that accompany them, which remind us of the wooden lattices in the windows of Eastern houses, doubtless familiar to many of our readers, under the name of moucharabieh.
Materials.-These may be of almost any kind; silk, gold thread, cord, wool or cotton, can all be employed with good effect Almost any of the D.M.C cottons can be used for macramé; but the ones especially to be recommended are: Fil à dentelle D.M.C[A], Cordonnet 6 fils D.M.C[A] and Coton à broder D.M.C[A] for the finer kinds of work, and for the coarser, Fil à pointer D.M.C ${ }^{[A]}$, Coton à tricoter D.M.C ${ }^{[A]}$ and Ganse turque D.M.C[A]. The twist in all these is so regular as to admit of a high degree of perfection being attained with them: they are moreover very agreeable to the touch, a great recommendation considering how much they have to be handled by the worker.

Macramé cushion and other accessories (figs. $\underline{513}$ and 514).-The only really important requisite for macramé work is the cushion, which should be well stuffed, and weighted with lead (fig. 513). It is convenient to have it made to screw on to a table like the Swiss tambour frames. There are other kinds of macramé cushions but none, in our opinion, as practical as these because any pattern can be worked upon them and patterns that have a heading or a border of picots can not be worked on any others. The pegs at the ends of the cushion are for fixing and winding the long threads upon, which carry the knots, and which we shall in future call «cords».


Fig. 513. Macramé cushion.
For making long lengths of macramé fringe, metal clamps, with round-headed pegs attached to them top and bottom, to fasten the cords to, as represented in fig. 514 , will be found far better than a cushion, as any number of threads can be knotted on to them at a time by pushing them more or less closely together on the cord.


Fig. 514. Clamps for macramé fringe.
Besides the cushion and clamps, you will require, some big glass-headed pins, made expressly for the purpose, a crochet needle for pulling the threads through the stuff when they have to be knotted on to an edge, and a French mètre or yard measure to measure the threads with; to these implements may further be added, scissors and a metal comb and ruler for cutting and straightening the ends of the threads.

The length of the threads must depend on their substance and size; that is to say, that a knot will take up more of a coarse stiff thread than of a fine pliable one, on which account, to avoid the necessity of preliminary trials, the right length of thread, for the quality and size of material, is given with each pattern. If, for any reason, our workers should not follow the directions given, they must bear in mind that the thicker and stiffer the material, the more they will have to allow for the knots and vice versa.

Formation of the knots.-Beginners must be careful, in macramé as in tatting, not to move or slacken the cord, or horizontal thread that carries the knots. The knots made by the «knotting-thread», as it will be called in future, consist of loops formed over the cord and then tightened. The knotting-thread and the cord are constantly changing places, as you work, loops having to be made now with the one and now with the other.

Knotting on the threads (fig. 515).-Excepting when you work with the threads of a material obtained by unravelling and drawing out the cross threads, you must knot on lengths of thread on to a cord; cut them double the length the fringe is to be and fold them in half, so as to form a loop by means of which you attach them to the cord, in the following manner. Put the loop over the cord from the front and bring it back underneath, put the ends down through the loop, detail $a$, and tighten it, detail $b$, as shown in the engraving.


Knotting on the threads on to a stuff edge and formation of a flat double knot (fig. 516).-Push your crochet needle through the edge of the stuff from the right to the wrong side and catch hold of the loop, formed by the folding in half of the thread that is to be knotted on; pull it out to the right side, put the ends through, and tighten the loop, detail $a$. Detail $b$ shows two double threads, knotted on near to each other in this way, and the first tying together of the two outer threads for the flat knot which is formed as follows: you take the two outer of the four threads hanging down and cross the right hand one under, and the left hand one over the two centre threads. Whilst doing this, hold the inner ones tightly stretched out on the 3rd and 4 th fingers of the left hand, detail $b$. The manner in which the two threads are brought back and tied together again is shown in detail $c$; the drawing up of the threads completes the so-called flat double knot, detail $d$. Detail $e$, of the same figure, shows two flat double knots, side by side, and the first step towards the formation of a third, connecting together the two right threads of the one with the two left threads of the other.


Fig. 516. Knotting on the threads on to a stuff edge and formation of a flat double knot.

Knotting on threads on to a knotted heading (fig. 517). - Make flat double knots as in fig. 516, detail $d$, on a double cord and then knot on your threads on to the loops of the double knots, putting the loop through from the right side, so that it may lie at the back. Use double threads so that the work beneath the heading may not be too open.


Fig. 517. Knotting on threads onto a knotted HEADING.
Knotting on threads on to a picot heading (fig. $\underline{\text { 518 }}$ ) -First, crochet a row of chain stitches, then make flat double knots on the chain, far enough apart for the thread between to form picots on the chain, then a second chain of crochet drawn through the picots on one side, on to which tie triple or quadruple lengths of thread, as shown in the engraving.


Fig. 518. Knotting on threads on to a picot HEADING.

Knotting on threads with round picots (fig. 519). - Fasten the lengths of thread to the cushion with pins, about half a c/m. apart, fix the cord to one of the pegs at the left end of the cushion, hold it tightly extended in a horizontal line with the right hand. With the left hand knot the threads that are pinned down on to the cord, looping each end twice round it, upwards from below and then drawing it through between the two loops or knots thus formed, pulling each knot to the left as you tighten it round the cord. Make the second row of knots in the same way, taking care to lay the second cord as close to the first as possible that the vertical threads may not be visible between. One series of knots forms a bar; there are both horizontal and slanting bars as will be seen later on.


Fig. 519. Knotting on threads with ROUND PICOTS.


Fig. 520. Knotting on with a fringe heading.
For this way of knotting on threads, a very strongly twisted material is better than a loose one, as when it is cut and untwisted, it makes a much richer and fuller fringe.

Knotting on with picots and flat double knots (fig. 521). -Take two threads, pin them on close together, make a flat double knot, fig. 516, tying the outer threads over the inner ones, and loop the ends over a cord to make a horizontal bar of knots.


Fig. 521. Knotting on threads with picots and two flat double knots.

Knotting on threads with picots and two flat double knots (figs. 522 and 523).-Pin the two threads on as before and make two flat double knots, one below the other; detail a shows the first knot begun, detail $b$ the two knots completed. Fig. 523 shows the picots secured by a horizontal bar of knots beneath them.


Fig. 522. \& fig. 523. knotting on threads with picot and two flat double knots.
Knotting on threads with scallops (fig. 524 ). -The threads for the scallops must be cut much longer than those that are to be knotted on below them. The button-hole loops must be so made that they turn upwards; and there must be 12 of them, all made with the left hand thread over the right hand thread, detail $a$. Then, knot on two double threads underneath the scallop and besides, make knots with the threads that come from the scallops, detail $b$.


Fig. 524. Knotting on threads with scallops.
Knotting on threads with loops (fig. 525).-Pin on two threads folded in half, a little distance apart, detail a, and bind them together with a flat double knot. Pin on more lengths close to them, the inner threads of which are held by a "collecting knot", as the flat double knot is called when it is made over more than two threads (see also fig. 530 ). The ends of the threads can then be looped over one or two cords, so as to form a single or double bar of knots, as required.


Fig. 525. Knotting on threads with loops.
Knotting on threads with triple scallops (fig. $\underline{526}$ ). - Knot on three single threads in succession; first, the middle one, then the second, with the knot right and left and the loop long enough to form the scallop, then the third in the same manner.


Fig. 526. Knotting on threads with triple SCALLOPS.

Knotting on threads for ribbed picots (fig. 527).-Take a double thread and make two slanting bars of knots, see details a and $b$, then secure them, like the preceding scallops by a horizontal bar of knots, see detail $c$.


Fig. 527. Knotting on threads with ribbed picots.
Knotting on threads for a gimp heading (fig. 528). -This mode of knotting on forms a broad gimp, consisting of vertical bars of knots, made over a single cord. On the one side, that which is afterwards turned downwards, the cord, the ribs are made on, forms loops, held with pins, into which meshes of threads can be knotted when the gimp is finished, for making either a fringe or a grounding.


Fig. 528. Knotting on threads for a gimp heading.
Patterns in several colours may likewise be knotted into gimp headings of this kind.
Flat double knots with half knots (fig. $\underline{529}$ ). -These are double knots followed by a third knot, or more correctly speaking, a half one of the first flat knots.


Fig. 529. Flat double knots with half KNOTS.

Collecting knots (fig. 530).-As explained in fig. 525, these are flat double knots, made over more than two threads. The engraving shows, in the first place on the left, a flat double knot made over two threads, completed, and the first crossing of the thread for the collecting knot; secondly, the second crossing of the threads; thirdly how the collecting knot can, if necessary, be continued over 4 threads, and fourthly, how the collecting knot should be made to finish with a flat double knot.


Fig. 530. Collecting knots.
Plaited and waved knots (fig. 531).-Plaited knots are formed by a continuous repetition of the first crossing of the threads for making a flat knot, detail $a$; waved knots by a slight twist given to the plaited knots from left to right, detail $b$. These plaits of waved knots are secured by joining together the threads of opposite meshes, two and two, by a flat double knot.


Fig. 531. Platted and waved knots.
Single crossed knots and double crossed knots (figs. 532 and 533 ). -Two plain crossings of the threads, detail $a$, to begin with; after which you rapidly reverse the threads, turning the knot to the wrong side, drawing it up tightly at the same time; this forms the first knot, detail $b$. The second knot, fig. 533 , is formed by 3 crossings, detail $a$; reverse the threads rapidly, to form the double crossed knot, detail $b$. For the following knots tie the threads together, as for the flat double knot, detail $c$.


Fig. 532. Single CROSSED KNOT.


Fig. 533. Double crossed knot.

Looped picot and knotted picots (figs. 534 and 535).-Looped picots are made along a row of knots by setting the knots, far enough apart for the loop between, to form a picot when the knots are drawn up close together. In fig. 534 , the detail a represents the picot, in its first open stage, detail $b$ the same picot when it is finished.


Fig. 534. Looped picot.
Knotted picots, fig. 535, are formed after one or more flat double knots, by a knot made in the outer thread; to get this knot into the right place, make it on a big pin and draw it up close to the flat knot before you take out the pin.


Fig. 535. Knotted picot.
These picots are always made on both sides and can be repeated several times along a row of knots. Detail a shows the crossing of the threads for the picots, detail $b$ the picots completed and followed by a flat knot.
Bead knots (fig. 536).—A bead knot is made by turning back the threads after a row of flat double knots. Detail a shows three flat double knots finished, detail $b$ the inner threads turned back over the flat double knots, detail $c$ the two knotting threads, brought between the two threads coming from the left to the right, and detail $d$ the bead knot finished and followed by a flat double knot.


## Fig. 536. Bead knots.

Bars of knots to the right and left (figs. $\underline{537} \underline{538}, \underline{539}, \underline{540} \underline{541}, \underline{542}, \underline{543}, \underline{544}$ ).-After knotting on the requisite number of threads on to a double cord, make two button-hole loops with the right thread round the left one, fig. 537, then knot each thread twice over the second cord, fig. 538 . These knots must be as close together as possible. This done, begin to make the slanting bars, inclining from left to right, with 4 threads.


The first thread on the left, marked 1 in fig. $\underline{540}$, serves as cord to the threads $2,3,4$, which are looped in succession over thread 1.


Fig. 541 represents threads 2,3 and 4 , knotted thread 1 and in the second bar, thread 2 becoming in its turn the cord, and having threads 3,4 and 1 knotted over it, whilst it is being held, tightly stretched in the right hand. The knotting should be done with the left hand.


In fig. 542 , which represents a bar inclining from right to left, threads 3,2 and 1 are knotted over thread 4; and in fig. 543, in the second row, threads $2,1,4$ over thread 3 . Here, it has to be the left hand that holds the thread extended from right to left, whilst the right hand does the knotting.


Fig. 543. Bar SLANTING TO THE LEFT.


Fig. 544. Bars joined TOGETHER.

Fig. $\underline{544}$ explains how the double bars are bound together by an ordinary double knot.
Single chain (fig. 545).-This is made with two single threads, by knotting them alternately over each other, that is, each in turns serving as cord to the other.
Double chain (fig. $\underline{546}$ ).-The double chain is made in the same manner as the single, only with a double thread.


Fig. 546.
Double chain.

Fig. 545.
Single
chain.

Both the double and single chain are generally used in macramé gimps and borders as a means of conducting threads of different colours, from one part of a pattern to another, which could be done in no other way; also, as a continuation to the Chinese knot, fig. 607, as described at the end of this chapter.

Ribbed border (fig. $\underline{547}$ ). - Here, the same cord runs to and fro; the 4 threads that hang down, form little ribbed bars running right and left. To distinguish from the knotting threads, the thread that runs to and fro it, is represented in a darker colour.


Fig. 547. Ribbed BORDER.

Macramé fringe (figs. $\underline{548} \underline{549}, \underline{550}$ ). -Entire length of the threads for No. 8 of Coton à tricoter D.M.C: $80 \mathrm{c} / \mathrm{m}$.


## Fig. 548. Macramé fringe.

Materials: Coton à tricoter D.M.C Nos. 6 to
16, Cordonnet 6 fils D.M.C Nos. 5 to 25, or Fil à dentelle D.M.C Nos. 25 to 70.
Colours: Bleu-Indigo 311, Rouge-Turc 321 and white, or Bleu tendre 710, RougeMaroquin 3327 and Vert-Fauve 691.

1 st row-knot on the threads, as in fig. $\underline{515}$, and in the following order: 1 double white thread, 2 double red, 1 double blue and so on.
2nd row-make a horizontal bar of knots, see figs. $\underline{519} \underline{\underline{520}}$ and $\underline{521}$, over a second cord.
3rd row-3 button-hole knots, fig. 524, each with 2 threads.
4th row-like the 2nd.
5th row-make slanting bars of double knots right and left, counting 6 threads for each bar, consequently 12 for 2 . The 1 st and 12th thread serving as the cords for the knots. In the 2nd series of knots which forms the double slanting bar, make another double knot over the cord with the thread that served as cord in the preceding row.
When the slanting bars are finished, bring them as close together as possible, tighten the last thread on the right and make another double knot with the left thread; the position of all the threads is clearly described in fig. 549 . Then continue the bars in the opposite direction, so that the 2nd thread on the left is stretched over the right hand group of threads, and the 11th thread on the right over the left hand group.


Fig. 549. Working detail of FIG. 548.
Make 3 rows of double bars and then take always 3 threads of a left hand group and 3 of a right hand one, tie them loosely together in a plain knot, put in, above the knot, a bunch of 8 threads, $15 \mathrm{c} / \mathrm{m}$. long, fig. $\underline{550}$ detail a, draw up the knot close to the bars and wind thread of a different colour several times round it, detail $b$, to form the tassel.


Fig. 550. Working detall of fig. 548.
The other bunches of threads which are hung on between two bars of knots must be tied on the same level with the first, but do not, nevertheless, come into close contact with the bars.

Insertion or fringe (figs. $\underline{551}$ and $\underline{552}$ ).-Entire length of the threads for No. 8 of Coton à tricoter D.M.C: $50 \mathrm{c} / \mathrm{m}$., including the fringe.


Fig. 551. Insertion or fringe.
Materials: Coton à tricoter D.M.C
Nos. 6 to 13, Cordonnet 6 fils
D.M.C Nos. 1 to 20, Fil à pointer
D.M.C Nos. 10 to 30, or Fil à
dentelle D.M.C Nos. 25 to 50.
Colours: Bleu-indigo 311 and
Brun-Chamois 418, or Brun-
Rouille 3312 and Bleu-Gris 3303.
1st row-knot on the threads as in fig. 515.
2nd row-1 double horizontal bar of knots, as in figs. $\underline{519}$ or 520, over double cords.
3rd row-Take 8 threads for a group of bars; 2 light and 2 dark ones on each side; the two sets of threads are numbered in fig. 552, a working detail of fig. $\underline{551}$, from 1 to 4 .
Begin by making all the knots over threads 1 and 2 of the left set, so that threads 3 and 4 on the left will be outside and threads 1 and 2 inside the group. Make the same knots over the 3rd and 4th thread on the right, then repeat the left group again and so on.
Repeat from the beginning, and make 2 double knots over thread 3 on the right, fig. $\frac{552}{}$, with threads 1 and 2 on the left, then again 2 knots over thread 4 on the right. When this series of knots is finished, make: 3 double knots over thread 1 (darkcoloured in the engraving) with the left thread 2 and the right threads 1 and 2; make on the left: 3 knots over thread 4 with the right thread 3 and the left threads 2 and 1, and so on.


Fig. 552. Working detail of fig.

When this pattern is worked for a gimp and not a fringe, the threads are made to end in knots, as explained in fig. 558.
Gimp made with macramé shuttles (figs. $\underline{553}, \underline{554} \underline{555}$ ).-Cut 8 double threads of the length the gimp is to be.
In order not to have to add on threads in the middle of the work, or have long ends hanging down, which are very much in the way, we recommend the employment of a new macramé shuttle, a kind of spool, such as are used in the making of pillow lace. These shuttles simplify the work enormously and are made hollow so that they can be mounted and filled on the spindle of any sewing machine.


Fig. 553. Gimp made with macramé shuttles. Materials: Coton à tricoter D.M.C Nos. 6 to 16, Cordonnet 6 fils D.M.C Nos. 1 to 10, Fil à pointer D.M.C Nos. 10 to 30, or Fil à dentelle D.M.C Nos. 25 to 50.[A] Colours: Bleu-Indigo 311 and Brun-Marron 406. [A]

Knot on the threads, as in fig. $\underline{515}$, and make a single bar of knots. Then leaving 2 threads on the right and 2 on the left disengaged, make 3 flat double knots with every set of 4 threads between. Make a slanting bar of double knots over the 16 th right thread, with the 15th, 14th, 13th, 12 th, 11 th, 10 th and 9 th thread; then make knots with the same threads and with the 16 th over the 15 th thread. Make a similar bar on the left, over the 1 st thread, with the $2 \mathrm{nd}, 3 \mathrm{rd}, 4$ th, 5 th, 6 th, 7 th and 8 th thread.


On both sides, and with the 4 outer threads: 4 flat double knots, fig. $\underline{516}$, detail $d$; 2 more bars on the right and left, but in the opposite direction, and knotting all the threads even to the last one, fig. 555. Take the 4 middle threads and make 6 flat double knots and then turn the bars of knots inwards; the return of the cord is indicated as before in fig. 555.
Macramé borders (figs. $\underline{556}, \underline{557} \underline{558}, \underline{559}$ ). - Length of the single threads for No. 6 of Coton à tricoter D.M.C: $50 \mathrm{c} / \mathrm{m}$.
Knot the threads on for both these borders in the ordinary way, followed by a single horizontal bar of knots. For fig. 556, make a triple slanting bar of knots, with 4 threads, slanting one from right to left and one from left to right; then make a single horizontal bar and add another series of triple bars slanting the opposite way; complete the pattern by a vertical bar, lay another cord and make a horizontal bar upon it on the wrong side of the work and finish by tying the threads together, two and two, as shown in fig. 558, detail $a$, cut them, detail $b$, and push the knot upwards, detail $c$.


Fig. 556. Macramé border.


Fig. 557. Macramé border.
Materials: Coton à tricoter D.M.C Nos. 6 to 10, Fil à pointer D.M.C Nos. 10 to 30, or Fil à dentelle D.M.C Nos. 25 to 70.[A]

Colours-For fig. 556: Bleu-Lapis 342 or BleuGentiane 480-For fig. 557: Rouge-Turc 321 or Rouge-Cerise 3318. [A]

For fig. 557 take 8 threads for a group of knots. Make all the bars slanting from right to left first, fig. 559, then take the 5th thread, counting from left to right, for the cord, fig. 559 again, and begin the second series of bars of knots, slanting from left to right. Fasten off the threads as already explained in fig. 558 .


Fig. 558. Working detail of figs. 556 and 557.

The same pattern can also be used as an insertion: bags for instance, look very well made of alternate stripes of this insertion and stripes made of flat knots. The openwork stripes must be wider than the close ones.


Fig. 559. Working detail of fig. 557.
Macramé fringe (figs. 560 and 561 ).-Entire length of the threads, including the fringe, for No. 5 of Cordonnet 6 fils D.M.C: $120 \mathrm{c} / \mathrm{m}$.


Fig. 560. Macramé fringe.
Materials: Cordonnet 6 fils D.M.C Nos. 3 to 25 or Fil à dentelle D.M.C Nos. 25 to 50.

Colours: Brun-Cuir 431 and 432, Bleu-
Indigo 31

1st row-knot on the threads, as in fig. 520 , in the following order: 4 double blue threads, 3 single dark brown, 1 double light brown, 3 single dark brown; then again 4 double blue, and so on.

2nd row-divide the threads into groups, so that the brown threads come in the middle with 4 blue ones on either side. Begin on the left = cover the 4th blue thread, which comes nearest to the first brown one, with flat double knots, made over the 1st, 2nd and 3rd brown thread and the light brown one $=$ cover the 3rd blue thread with the 4 brown threads and the 4th blue, which served as the cord in the 1 st row of knots = cover the 2 nd blue thread with the 4 brown and the 4 th and 3rd blue $=$ cover the 1 st blue with the 4 brown and the 4 th, 3rd and 2 nd blue.


Fig. 561. Working detail of fig.
$\underline{560}$
In the working detail, fig. 561, the dark lines represent the blue threads, the light ones, the brown.
When the quadruple bar, slanting from left to right, is finished, make a similar one, from right to left, then connect the 1 st and 16 th thread by a double knot and pass the first blue thread on the left over to the right group.
2nd row-make similar groups, reversed, so that the brown knots come next to the last blue ones and the blue knots again terminate the groups of bars; the brown threads will be stretched flat between the preceding group and the next.

3rd and 5th row-like the first.
4th row-like the 2nd.
After the 5th row of groups, take 4 brown threads on either side of the blue knots, and make them into a double chain, fig. 546 , consisting of 12 knots, and make 6 flat double knots with the last threads.
Lastly, unite all the threads of one group of bars, and make them into a handsome tassel by the addition of other threads.



Fig. 562. Macramé fringe.
Materials: Cordonnet 6 fils D.M.C Nos. 3 to 15 or Fil à dentelle D.M.C Nos. 25 to 50.[A] Colours: Écru, or any light shade mentioned in the D.M.C colour card.[A]
1st row-Knot on the threads as in fig. $\underline{527}$, succeeded by a double horizontal bar of knots.
2nd row-twisted or waved knots with 4 knots, fig. $\underline{531 .}$
3rd row-double horizontal bar of knots.
4th row-with 6 threads: 1 double bar, slanting from left to right, and 1 bar, from right to left, joined together by the last threads.

5th row-with the 4 threads coming from the groups of bars: 1 single chain, fig. $\underline{545}$, with 4 crossings of the threads, quite close to the point where the groups meet, and 1 single chain with 7 crossings, made with the outside threads.
6 th row-similar groups of bars to those of the 4th row, but set the reverse way and terminating in a horizontal bar. For the tassels, add a thick bunch of threads to each group of 6 threads that issues from the work.

Fringe with mosaic border (figs. $\underline{563}, \underline{564} \underline{565}$ ). -Entire length of the threads for No. 8 of Cordonnet 6 fils D.M.C: 75 c/m.


Fig. 563. Fringe with mosaic border.
Materials: Cordonnet 6 fils D.M.C Nos. 8 to 30, or Fil à dentelle D.M.C Nos. 25 to 50. Colours: Écru, Brun-Acajou 401 and Rouge-Cardinal 347.

1st row-knot the threads on, as in fig. 515, one écru and one brown alternately, succeeded by a single horizontal bar of double knots.
2 nd, 3 rd, 4 th and 5 th row- 4 rows of knots, such as are seen in fig. $\underline{564}$, in process of being made, and in fig. $\underline{565}$, finished, and succeeded by a flat knot. The colours alternate in the knots; in the 2nd and 4th row the knot is set in the light colour, in the 3rd and 5 th, in the dark.


6th row-1 horizontal bar of double knots over a fresh cord.
7th row-lay down another cord, make another horizontal bar of knots and between every second of the light double knots, loop on 1 red thread; the loop, that fastens it to the cord, taking the place of the knot.

8th row-lay down a third cord, and make 2 double knots with the red threads between the knots of écru thread.
9th row-lay down a fourth cord, make a half knot with every red thread.
10th row-lay down a fifth cord, then make a horizontal bar of double knots, as in the 6th row; the red threads are taken to the wrong side and passed over. Knot the ends of the threads together in clusters of 6, about $15 \mathrm{~m} / \mathrm{m}$. below the last cord of knots.

Macramé ground (figs. $\underline{566}, \underline{567} \underline{568}$ ).-Fill the shuttles with the length of thread that you think will be required for the work.


Fig. 566. Macramé ground.
Materials: Cordonnet 6 fils
D.M.C Nos. 15 to 30 or Fil à dentelle D.M.C Nos. 25 to

1st row-knot the threads on, as in fig. 515, 4 blue and 4 écru alternately, and make a double horizontal bar.
2nd row-beginning in the middle, make 2 flat double knots with 8 blue threads; with the 4 blue threads on the left, make a quadruple group of bars over the 4 blue threads on the right. These quadruple groups of bars, called «shell bars» are illustrated in detail in fig. $\underline{567}$. Unite the blue threads at the sides by flat double knots.


Fig. 567. Shell bar. Working detail of fig. 566.


Fig. 568. Openwork part of fig. 566.

The beginning and continuation of the openwork parts of the pattern are explained in fig. 568.
The threads that issue from the last group of knots are used for making the second shell bar, the two inner bars of which are made in écru cotton, and the two outer in blue. When this striped shell bar is finished, the blue threads are again united for the openwork figure.

Fringe with foundation worked on the wrong side (figs. $\underline{569}, \underline{570} \underline{571}, \underline{572}$ ).-Entire length of the threads for No. 8 of Coton à tricoter D.M.C: $80 \mathrm{c} / \mathrm{m}$.


Fig. 569. Fringe with foundation worked on the wrong side.
Materials: Coton à tricoter D.M.C Nos. 8 to 16, Cordonnet 6 fils D.M.C Nos. 5 to 25, Fil à pointer D.M.C Nos. 6 to 30, or Fil à dentelle D.M.C Nos. 25 to 50.[A] Colours: White, Bleu-Indigo 311 and 312 or Gris-Amadou 385, Brun-Caroubier

356, 357. ${ }^{[A]}$
Knot the threads on, as in fig. 515 and after finishing the horizontal bar, make from left to right, over the 1st thread, 1 double knot made with the 2nd and with the 3rd thread.
Then, over the 2nd thread, which has now become the 1st, make double knots with the 3rd, 1st, 4th and 5th thread; then, over the 3rd thread, counting now from right to left, which in the knotting on figured as the 4 th: 1 double knot with the 5th and 2nd thread.

Make the same group from right to left, only at the 3rd change of thread make 5 double knots instead of 2 , and let the last knots count for the new group of bars, turned the opposite way.


Fig. 570. Opposing BARS.
Working detail of fig. 569.


Fig. 571. Formation of the knots on the wrong SIDE.

In the middle of two opposing groups of bars, make a flat double knot with 2 of the right threads and 2 of the left.
When the second horizontal bar is finished, turn the work round, and go on working on the wrong side, making plain double knots, as in fig. $\underline{571}$, turned in one row, all from right to left, and in the next, from left to right.
When you have worked 10 such rows of knots, begin to make one knot less on either side of a group, so as to form pointed scallops of knots which you finish off with a plain bar.


Fig. 572. Appearance of the knots on the right SIDE.
Working detail of fig. 569.

Tassels are then made with the threads that issue from each scallop, and when these are sewn up, turn the work round to the right side, where the knots, made on the wrong side, will present the appearance indicated in fig. 572.
Macramé fringe (fig. 573).-Entire length of the threads for No. 6 of Coton à tricoter D.M.C: $65 \mathrm{c} / \mathrm{m}$.


Fig. 573. Macramé fringe.
Materials: Coton à tricoter D.M.C No. 6,
Cordonnet 6 fils D.M.C Nos. 3 to 25, or Fil à pointer D.M.C Nos. 10 to 30. [A]
Colours: Écru, Rouge-Turc 321 and Rouge-Grenat
358 or Violet-Mauve 315 and 316, and Vert-

## Bouteille 494.[A]

Knot on double threads, as in figs. 517 and $\underline{524}$, to count as single in the working directions $=* 1$ thread of red, colour 358,3 of écru, 1 of red, colour 358, 1 of red, colour 321, 3 of écru, 1 of red, colour 321, and repeat from *.

1st row-6 chain knots made with every 4 threads.
2nd row-a single horizontal bar of knots.
3rd row-collecting knots, fig. 530, made with the écru threads over the 4 dark and the 4 light red ones, and flat double knots over the 4 écru threads.

4th row-collecting knots over 4 écru threads with 4 red and 2 écru threads.
5th row-collecting knots in the centre of the groups, with the écru threads.
6th row-similar to the 4 th.
7th row-similar to the 5th.
Then take the red threads on the right and left and twist them, each cluster separately, from left to right between the thumb and forefinger, as you do in making a cord, then unite them together, twisting them from left to right. Fasten off the cord by a knot, beneath which the ends of thread form a little tassel. Collect all the écru threads together and make them into a heavy tassel with the aid of supplementary threads.
 threads on, as in fig. 520, in the following order; 1 double thread of colour 471, 6 double threads of colour 450, 2 of colour 471, 6 of colour 450, 1 of colour 471.


Fig. 574. Border with shell knots.

## Materials: Cordonnet 6

fils D.M.C Nos. 5 to 25.
[A]

## Colours: Vert-Mousse

471 and Rouge
Cornouille 450, or
Rouge-Framboise 686
and Gris-Coutil 323.[A]
From left to right and over the 1 st thread: 1 double knot with the 2 nd thread; over the 4 th thread of colour 450, and from right to left, double knots with the 3rd, 2nd and 1st thread of the same colour = from left to right: 1 double knot with the 6th thread of colour 450 over the 5th, and with the 3rd thread over the $2 \mathrm{nd}=$ from right to left: 5 double knots over the 8th thread of colour 450 = from left to right: 1 double knot over the 10 th thread, 1 double knot over the 5th thread, 1 double knot over the 1 st thread $=$ from right to left: 7 double knots over the 12 th thread $=$ from left to right: 3 detached double knots.
Then, from left to right, and subsequently from right to left $=$ with 6 green threads: 2 double bars slanting over the 2 red threads (see the top of fig. 577); unite the 4 red threads in the middle and make a shell knot with them, fig. 575 , consisting of 6 flat knots, fig. 576; take 2 threads on the right and 2 on the left, turn them down to the left and right, and then from the wrong side to the right, over the threads that come from the bars and close with a flat knot. On the sides, make double bars and between each bar, 2 single chain knots.


Fig. 575. Large Shell knot, open. Working detail of FIG. 574.


Fig. 576.
Large shell кnot, shut. Working detail of FIG. 574.


Fig. 577. Openwork part of fig.
574.

Fill the empty spaces under the outside shell knots, with 9 flat double knots; under the middle knot make bars of inter-crossed knots, of which a clear explanation will be found in fig. $\underline{577}$.
To join two borders of the kind together, pass the thread of the second border over the thread on which the bar in the middle of the outer scallop is knotted.

Fringe with shell knots (fig. 578 ).-Entire length of the single threads for No. 12 of Coton à tricoter D.M.C: $90 \mathrm{c} / \mathrm{m}$.


Fig. 578. Fringe with shell knots.
Materials: Coton à tricoter D.M.C Nos. 6 to 15.
Colours: Écru and Rouge-Turc 321.

The threads must be taken double, counting as one. Knot them on, as in fig. $\underline{524}$. This exceedingly effective pattern is a very simple one to work and can easily be copied from the engraving by following, for the bars, figs. 537 to $\underline{544}$; for the collecting knots fig. 530, for the large shell knots figs. 575 and 576, and for the chain of flat double knots, fig. 536 detail $a$.

The tassels that complete the fringe must depend from the last collecting knot and hang between the triple bars of knots and beneath the collecting knot.
Macramé border or fringe (fig. 579 ). - Entire length of the threads for No. 10 of Cordonnet 6 fils D.M.C: $170 \mathrm{c} / \mathrm{m}$.


Fig. 579. Macramé border or fringe.
Materials: Cordonnet 6 fils D.M.C Nos. 10 to 20, Fil à dentelle D.M.C Nos. 25 to 50, or Fil à pointer D.M.C No. 30.[A] Colours: Écru, Rouge-Turc 321 and Bleu-Indigo 312.[A]
1st row-knot on the threads with double round picots, and one horizontal double bar. The colours should succeed each other as follows: * 4 blue scallops, 4 écru, 5 red, 4 écru, repeat from *.
2nd row-begin working from right to left: 1 single chain with 2 single threads, fig. $\underline{545}$, and 7 changes of the threads; after the 3rd change of the threads, connect the 2 nd chain with the 3rd, the 4 th with the 5 th. Finish off every 2 chains with a flat double knot.

Make, over the first blue threads; 1 waved plait, fig. 531 detail $b,=$ over the 14 th écru thread: 1 bar of double knots, 3 going and 4 returning $=$ over the last 2 red threads: waved knots, and repeat from $*=$ then lay down 2 fresh cords, to make a double horizontal bar of knots.

3rd row-with the blue threads: 5 large shell knots, fig. 576, 1 triple bar of double knots to the left and right $=$ between the bars 9 large shell knots = 1 triple bar of double knots to the right and left and finish with 5 large shell knots, as above.

With the écru threads: 3 flat double knots, 1 double horizontal bar of knots = over the last écru thread: 3 waved knots with 12 changes of the threads $=1$ more double bar of knots $=$ join the cord to the outside thread of the blue triple bar. With the red threads: 1 shell knot, figs. $\underline{576}$ and $\underline{577}$, over 12 threads; 1 double bar on both sides of the shell knot with the outside threads, 1 single chain, consisting of 7 changes of the threads, made with the outside red threads; join the red thread and the light one that comes from the double bar together, on the left.
The light thread is afterwards looped into the blue thread on the right $=4$ collecting knots over 6 red threads on the right and left, 1 collecting knot over all the red threads and one, on both sides, over 6 red threads.

After joining the threads on both sides, carry on the single chain with 3 changes of the threads $=$ over the first red thread of the left chain, make 1 double horizontal bar with all the disengaged threads $=$ below the bar, 4 flat double knots $=1$ single
horizontal bar $=8$ double knots, each over a single thread $=1$ double bar of knots.
From this point, continue with the écru threads: 1 row of double knots, 1 double horizontal bar and 1 waved plait; then join: 2 blue threads and 2 écru, and 2 écru and 2 red, together, to make flat double knots; the double knots between remain of one colour.
The bottom border is like the top one with the exception of the picots.
When this pattern is to be used for an insertion or a gimp, the threads should be fastened off, as indicated in fig. 558.
Macramé border (figs. $580, \underline{581}, \underline{582}$ ). -Wind the threads on shuttles and knot them on, as in fig. $\underline{515}$, in the following order: 2 threads of, either colour 334 or Chine d'or (blue and gold), 2 of colour 330, 2 of colour 392, 1 of colour 432, 1 of colour 310 2 of colour 430, 1 of colour 310, 1 of colour 432, 2 of colour 392, 2 of colour 330, 2 of colour 334, or of Chiné d'or blue and gold.


Begin with the open work on either side of the crossed bars, figs. $\underline{581}$ and $\underline{582}$, with 4 blue threads and by 4 changes of the threads outwards and 3 inwards $=$ the same with 4 light green threads with 3 changes outwards and 2 inwards $=$ then with the dark green threads, with 2 changes outwards and 3 inwards $=$ over the 4 th dark green thread, 1 double knot with the 1 st dark green thread with the 4th light green one and with the 4 blue.


Over the 3 next, dark green threads, knot the 4 light green threads and the 4 blue, from right to left, and from left to right, thus forming altogether 8 bars across the first bar = then knot the 8 first threads over the last dark green one = add a crossed bar with 7 changes of the threads outwards and 5 inwards.
Middle group, left side: 1 double knot with the first light brown thread over the second thread; 3 double knots with the black threads (the only ones that are to be taken double) and 2 light brown threads over the 1st and 2nd dark brown ones.

In the 2 nd bar, knot the 1st dark brown thread, and in the 3rd, the 4 dark brown ones, over the black thread. On the right, a similar group, slanting towards the one on the left.

On the left-over the 1 st light brown thread coming from the right, 1 double knot, made with 2 light and 2 dark brown threads, and the black one, all coming from the left.

On the right-over the 1st light brown thread coming from the left, 1 double knot with 1 light and 2 dark brown threads and the black one (used double).
On the left-over the light brown thread coming from the right, 1 double knot with one light and 2 dark brown threads and the black one.
On the right-over the light brown thread, 1 double knot with 2 dark brown threads and the black one.
On the left-the same knots as on the right.
On the right-over the 1 dark brown thread 1 knot with 1 brown thread and the black one.
On the left-the same knots as on the right.
On the right-over the 1st dark brown thread, 1 knot with a brown thread and the black one.
On the left-the same knots over the last thread.
On the right-over the last brown thread one knot with the black one.
On the left-over the 4 light green threads and the 4 blue ones, double knots with the 4 brown threads and the black one $=1$ double knot with the 1st light brown thread over the 2nd, 3 double knots over the 2nd dark brown thread, with 2 light threads and 1 dark brown $=4$ double knots with the 2 light and the 2 dark brown threads over the black one; after which you make 5 other bars, taking the last thread turned inwards for the cord. Make similar groups, slanting from right to left, then, beginning again on the left, make the knots with the 4 light green threads over the 1st thread of the same colour running from right to left.

On the right-knot 3 light green threads over the 1st thread coming from the left and repeat the same group twice, on both sides.

The third bar forms, at the same time, the first scallop of a triple crossed bar, which has also to be made on the right.
The two crossed bars finish with a triple group of bars; the last bar of which, on the right, consists of only one double knot.
There remain to be made, on both sides, crossed bars with three whole scallops inside, one outside, and one half one, top and bottom.
Knot all the other threads over the 4 blue and the 4 light green ones $=$ in the middle, knot the right and the left threads, alternately, till the black threads meet at the point.

Turn the group of bars, edged with blue and light green, inwards, and finish it off by a crossed bar, with 3 scallops inside.
Macramé fringe (figs. $\underline{583}$ and $\underline{584}$ ). -Entire length of the threads for No. 15 of Cordonnet 6 fils D.M.C: $120 \mathrm{c} / \mathrm{m}$.


Fig. 583. Macramé fringe.
Materials: Cordonnet 6 fils D.M.C Nos. 15 to 30, Fil à pointer D.M.C Nos. 10 to 30, or Fil à dentelle Nos. 25 to 50 .
Colours: Ecru and Brun-Havane 455, or Gris-Tilleul 391 and 331.
1st row-knot the threads on with picots, fig. 519, 6 écru and 6 brown.
2nd row-double and slanting bars made with 6 single threads, succeeded by a double horizontal bar.
3rd row-begin with the light threads and make bars with double knots between, as in fig. 577 , and finish at the sides with 2 bars made with the brown threads; for the dark brown bars, see also figs. $\underline{555}, \underline{561}, \underline{568}$, for the crossed bars, fig. $\underline{584}$.


Fig. 584. Working detail of fig.
583.

This pattern should always end in such a manner that the light openwork figure form the scallop and be framed with the brown knot.

Macramé fringe (fig. 585).—Entire length of the threads for No. 12 of Coton à tricoter D.M.C: $96 \mathrm{c} / \mathrm{m}$.


Fig. 585. Macramé fringe.
Materials: Coton à tricoter D.M.C Nos. 6 to 16, Cordonnet 6 fils D.M.C Nos. 8 to 20, or Fil à dentelle D.M.C Nos. 25 to 50.[A]

Colours: Brun-Cuir 325 and Brun-Marron 403, 405, 407.[A]

This pattern is so easy that we refer our readers to figs. $\underline{544}$ and $\underline{561}$ for the working of it, merely remarking, that the bars are made alternately from right to left, and from left to right, and that 3 threads are knotted over the cord that runs from the left and 4 , over the one from the right.
This fringe will always be found most effective in appearance if it be made in four shades of one colour, knotted on in succession.



Fig. 586. Macramé fringe.
Materials: The same as for fig.
585.

This effective pattern is not difficult, save in appearance, so that it is unnecessary to describe it in detail; for the knotting on, see fig. $\underline{525}$; for the plain bars, figs. $\underline{539}$ to $\underline{544}$; for the collecting knots, fig. $\underline{530}$. The only difficult point is where the threads cross each other inside the bars and form a check and by carefully following the course of the knots in fig. 587, that will be easily overcome.


Fig. 587. Working detail of fig. 586.
Fringe or ground with picots (fig. 588). -Wind the threads on shuttles and do the knotting on, as in fig. 521, followed by a double horizontal bar.


Fig. 588. Fringe or ground with picots. Materials: Cordonnet 6 fils D.M.C Nos. 10 to 40 or Fil à dentelle D.M.C Nos.

25 to 50. [A]
Colours: White, écru, or any light shade mentioned in the D.M.C colour card. [A]
Leave a small space between the double bar and the 3rd bar, which is a single one, in which you cross the threads without knotting them.
Beginning on the left-over the 2nd and 3rd thread: 2 button-hole knots, 1 picot, 2 button hole knots = over the 1st, 2nd and 3rd thread: 1 double knot with each of the 3 next threads = over the 6th and 7th with the 5th thread: 4 button-hole knots with 1 picot after the 2nd knot.

With each of the 4 next threads, that is the 8th, 9th, 10th and 11th: 1 flat double knot followed by: 1 bar of double knots over the 12 th thread as the cord, made with the 11th, 10 th and 9 th thread $=$ add 1 bar with the 11 th thread as the cord, and the 7 next ones as the knotting threads $=$ add 1 bar with the 10 th thread as the cord, and the 7 next ones as the knotting threads. Leave 3 threads free on the right = with the 8 threads on the left: 1 bar over the thread before these 3 threads = leave 3 free again on the right $=1$ quintuple bar with the remaining threads.

* 1 flat double knot with the 15 th, 16 th and 17 th thread $=$ with the 20 th thread, over the 19 th, 18 th and 17 th thread: 4 buttonhole knots with 1 picot after 2 knots = knot 4 threads over the 13th thread and from left to right = from left to right, 2 bars with all the threads **.
Over the 2 threads on the left and with the 3rd thread: 4 button-hole knots and 1 picot $=$ with the 6 threads from the left: 2 bars consisting of button-hole knots and picots $=$ a 3rd bar with 6 double knots $=$ join it to the last bar.
Leave 2 threads of the bar of button-hole knots free $=$ with the outer thread make: 4 button-hole knots and 1 picot over the 2 nd thread and the cord of the bar.
Repeat from * to ** along the bar, also from right to left.
Left group-knot the 3 last threads over the 4th thread and from left to right.
Right group-make, from right to left, 1 bar consisting of 6 double knots, over the 4 th thread counting from right to left. After these last changes of the threads no difficulty will be found in copying the rest of the pattern.

Double fringe (figs. $589, \underline{590}, \underline{591} \underline{592}$ ).-Entire length of the threads for No. 10 of Cordonnet 6 fils D.M.C: $100 \mathrm{c} / \mathrm{m}$., and entire length for No. 16 of Coton à broder D.M.C: $40 \mathrm{c} / \mathrm{m}$. Knot on, as in fig. 515, 1 thread of Cordonnet, 4 of Coton à broder (these are to be taken double) 2 of Cordonnet, 4 of Coton à broder, and so on.


Fig. 589. Double fringe.
Materials: Cordonnet 6 fils D.M.C Nos. 10 to 30 and Coton à broder D.M.C Nos. 16 to 35.

Colours: White for the Cordonnet, Rouge-Grenat 335 for the Coton à broder.
In the second horizontal bar, you only use the red threads of Coton à broder for knotting, not the white Cordonnet ones. To supply their place, knot on two threads of red Coton à broder under the white threads.
With the red threads ( 4 count as one) make 3 rows of collecting knots, followed by a single horizontal bar. Divide the white threads into twos and make single chains with them, the whole length of the fringe; the thread must be changed 8 times for each chain; then pass the right chain under the left one and join them by a flat double knot.
You then, with the threads turned outwards, right and left, make the single chain with 5 changes of the threads and join them together again by a flat knot.
The other single chains are made with 6 and 8 changes of the threads and crossed under the double knots. The tassels, which the red threads serve as a foundation to, are begun by: 1 waved plait with two knots, then 4 single chains, again a waved plait and 1 berry composed of knots.
This berry is made over the 8 threads that come from the chains, with a long auxiliary thread, knotted as shown in fig. $\underline{590}$.


Fig. 590.
Knotted berry
FOR FIG. 589.
Large shell knots, as described in figs. $\underline{591}$ and $\underline{592}$ may be substituted in the place of the berry, fig. $\underline{590}$.


Fig. 592. Large Shell knot, shut.

Macramé border (fig. $\underline{593}$ ).-Fill 24 shuttles, knotted together, that is, 2 and 2, and knot on 3 green threads, 6 gold and 3 green. The changing of the threads and the course of the knots can be so easily copied from the pattern that a description in detail is not necessary, it is sufficient to observe that all the dark parts in the engraving should be worked in green and the light ones in gold.


Fig. 593. Macramé
border.
Materials:
Cordonnet 6 fils
D.M.C Nos. 10 to

20 and Or fin
D.M.C No. 30.

COLOUR-For the
cotton: Vert
métallique $465{ }^{[A]}$
Beaded ground (fig. 594). - Knot on 4 threads for every group of knots, and secure them by a knot and a picot, as shown in the engraving. Work the groups of knots, as indicated in fig. 568 , and after each group is finished, thread a gold bead on to every 2 threads. Our model is worked in écru thread and gold beads; the latter go very well with any colour and especially with the more subdued shades of green, such as the Vert-Mousse, Vert Bouteille and Gris-Tilleul of the D.M.C colour card.


Fig. 594. Beaded ground.
Materials: Cordonnet 6 fils D.M.C No. 25 or Fil
à dentelle D.M.C Nos. 25 to 50 and gold beads.
[A]
Square of mosaic macramé (figs. $\underline{595}$ and $\underline{596}$ ). -This little pattern illustrates the way in which tapestry and cross-stitch patterns can be utilised for macramé.


Fig. 595. Square of mosaic macramé.
Materials: Fil à pointer D.M.C No. 30, Coton à broder D.M.C No. 16 and Or fin D.M.C pour la broderie No. 20[A]
Colours: Rouge-Cardinal 346, Rouge-Grenat 326 and 309, BleuIndigo 312 and 334, Gris-Tilleul 391 and 393[A]

All patterns that are drawn on checked paper can be copied in macramé and even in several colours. For every square, you count either one single or one double thread, according to the scale on which the work is to be.

In the case of a single thread, you count one double knot per square, in that of a double one, 4 double knots, two in the first and two in the second row.
After knotting the threads together, two and two, and pinning them to the cushion, see letter a, make 2 single chains with 2 changes of the thread, letters $b$ and $c$, then take a very long cord, letter $d$, and knot on the threads. The cord forms picots along two sides of the square; into which you fasten threads, letters $e$ and $f$, for the single chain formed, on the two other sides by the knotting threads.


Fig. 596. Working detail of fig. 595.
The coloured threads for the flowers are knotted on as the pattern requires it, taking the place for the time being, of those with which the foundation is made, which are left hanging on the wrong side until they are wanted again

The top leaves of the iris shaped flower, are worked in two shades of blue; the bottom ones, in three shades of red, the stalk and the leaves in green, and the little stars, with which the ground is powdered, in real gold thread.
When the ground is finished, you make the same openwork border at the sides and along the bottom, as at the top and finish off with very full tassels, hung on over 3 double threads and made of all the colours used in the square, tied up with gold thread, fig. 596 letter $g$.

Fringe with three rows of tassels (fig. 597).-As this kind of fringe is chiefly used for trimming carpets, curtains and furniture, it is best to make it in the coarsest numbers of the materials indicated at the foot of the engraving.


Fig. 597. Fringe with three rows of tassels.
Materials: Cordonnet 6 fils D.M.C Nos. 3 to 30, or Fil à pointer
D.M.C Nos. 10 to 30[A]

Colours: Bleu-Indigo 312 and écru.
The pattern is so simple in its construction that it is sufficient to refer our readers to fig. 528 , for the knotting on of the threads and to fig. 531, for the waved plait.
The little tassels between the knots, are made separately from the rest of the work and fastened on by the thread with which you sew them together at the top.
Macramé ground (fig. 598). -The work represented in the engraving was made for a purse and copied from a beautiful piece of Arabian stuff. Ganse turque D.M.C was used for the light background and Coton à broder D.M.C for the design. It is very easy to copy this pattern from the illustration by paying scrupulous attention to the number of knots; we do not therefore enter into any detailed description of the same, merely referring the worker to figs. $\underline{528}$ and $\underline{596}$ and the accompanying directions, for the adding on and the taking off of threads.


Fig. 598. Macramé ground.
Materials: Ganse turque D.M.C No. 12 and Coton à broder D.M.C No. 16.
Colours: Rouge-Cardinal 347, or Rouge-Cerise 3318.
Macramé square (figs. $\underline{599}$ and $\underline{600}$ ). -Length of the single threads of both kinds: $200 \mathrm{c} / \mathrm{m}$.


Fig. 599. Macramé square.
Materials: Cordonnet 6 fils D.M.C No. 15 and Coton à broder D.M.C No. 16 or Fil à dentelle D.M.C No. 25 and Coton à broder D.M.C No. 30.[A]

## Colours: White, Rouge-Grenat 309 and 358, or Gris-Lin 716 and Rouge-Maroquin 3327 and 3329.[A]

Knot upon a ring consisting of one thread: * 1 thread of white Cordonnet, 1 of Coton à broder colour 309, 1 of colour 358, 1 of colour 309 and repeat three times from *. (The embroidery cotton is to be taken double.)
Begin with the light red thread and make: 1 single chain with 3 changes of the threads, 1 single chain with the dark red thread with 4 changes of the threads. Add, or rather thread, 8 supplementary threads in succession on to the white thread, which in fig. $\underline{600}$, comes in the middle of the group of knots, and over each of these supplementary threads, make 2 double knots with the light red thread and 2 with the dark.

When all the red threads are knotted over the white ones, make crossed bars with the red threads by themselves, thus producing a point at the bottom of the leaf.
Then, over the first white thread coming from the right, knot all the white threads on the left of it and in the last place, the cord itself, over the 3 red threads.

Make the same series of threads on the left. This is succeeded by a second bar of white knots, the last thread of which is left unknotted. Make 4 double knots with the 8 white threads and close the square by a double bar. Add a supplementary thread to the first bar, so that you may have 10 threads coming from each side of the second bar and over these you knot the red threads, which form a dark setting to the leaves.


Fig. 600. Gradual increase of the threads. Working detail of fig. $\underline{599}$.

When this is done on both sides, make 10 flat double knots with a supplementary knot, taking 4 single threads for each knot, and decreasing the number of knots successively to 2 . At the point of the inside square, knot the white threads over the red ones and turn back the second white thread to serve as a cord to the first of the outside bars. Join the first thread on the left and the first on the right, to form a flat knot with them in the middle, the threads of which are then passed over the red threads; the last white threads become the cords for the second outer bar. Make a group of bars with the red threads and cross them 3 times, then finish with a handsome tassel and join the white threads together all round the square with tassels. In the case of your wishing to use these squares for making a larger piece of work, through joining several of them together, you can knot the ends of the threads into short double chains, finishing off these again with ring knots, fig. 608, and loops; through these loops, when you come to join on the next square, the knotting thread is drawn, forming them thus into connecting picots, like those which you make in tatting.

Fringe with corner (figs. $\underline{601} \underline{602}, \underline{603}$ ).-Macramé fringes are not capable of being drawn up, as knitted, crochet, and netted fringes are, on the inside, so as to turn the corners. Consequently, according to the pattern, a greater or less number of supplementary threads have to be knotted in so as to form the corners.


Fig. 601. Fringe with corner.
Materials: Cordonnet 6 fils D.M.C Nos. 10 to 30 or Fil à dentelle D.M.C Nos. 25 to 50. [A] Colours: White and Rouge-Cardinal 348. [A]

The working detail, fig. $\underline{602}$, shows us how the 5 first supplementary threads, are looped on to the 4 th row of knots. A group of crossed bars requires 16 threads, which answer to 4 groups of little squares, placed between the lozenges. The 6th supplementary thread is put into the double connecting knot at the corner, fig. 603, and on this, the bar of knots which runs right and left is subsequently made. (In order to make it clearer, the supplementary threads are represented in the engraving in a darker shade).


Fig. 602. Addition of the first supplementary threads. Working detail of fig. 601.
On the two middle threads, which are a continuation of the connecting knot, 7 supplementary threads have next to be knotted, thread 7 singly, threads 8 and 9 together, threads 10, 11, 12 and 13, all singly.


Fig. 603. Addition of the second supplementary threads. Working detail OF FIG. 601.
In this manner the supplementary threads $7,10,11,12$ and 13 connect the two cords, whilst threads 8 and 9 only, are mounted separately on both sides.

The bars, formed by the knots which are made with the supplementary threads, must be drawn tight, like any other double bar. The space left between the cords in the engraving is intentional, to distinguish the supplementary threads from the others.
A long, coloured thread is looped on to the topmost thread, between the two bars, and with this, knots are made over all the 14 threads that come from the bars and run inwards.

In the middle of the square there must be 9 flat double knots; when these are made, you continue knotting the red thread from the right and left, down to the bottom point of the square, and complete the figure by a single bar of knots, made of the white thread.

Knotted tassels, hanging from the points of the scallops, and others ornamented with flat double knots made of 10 threads, suspended between the scallops, form the outside finish to this fringe.

Fringe with pointed scallops and large tassels (figs. $\underline{604}, \underline{605}, \underline{606}, \underline{607}, \underline{608}, \underline{609}, \underline{610}$ ).-Entire length of the threads for No. 15 of Cordonnet 6 fils D.M.C: $200 \mathrm{c} / \mathrm{m}$.


Fig. 604. Fringe with pointed scallops and large tassels.
in every particular, but more especially, extremely careful attention to the direction of the cords, that the groups of double knots and the bars may be drawn up very tightly together, so as to make the pattern very distinct and give each figure its proper value.


Fig. 605. Addition of THE FIRST SUPPLEMENTARY threads. Working detail OF FIG. 604.
For each repetition of the subject 16 threads are wanted. You begin the half stars, on each side of the lozenges, with the 15 th and 16th double thread of the first figure and make 3 double knots with 3 threads over a 4th thread, fig. 606.
Over 2 cords on the left and 2 on the right, consequently over 4 threads: 5 button-hole knots, with the 4 threads and the disengaged threads, 1 flat double knot over each of the 4 threads. This forms a shell knot, on either side of which, make 3 button-hole knots over 3 threads.


Fig. 606. Addition of the other supplementary threads. Working detail OF FIG. 604.
For the groups of bars on either side of the shell, take the 11 th, 12 th, 13 th and 14 th double thread on the left, and the 3rd, 4 th, 5 th and 6 th on the right. These groups are joined by button-hole knots.

Knot the 4 threads of the left group over the cord on the right; and over them again the 2 next threads on the right; knot the 4 threads on the left over the 4th thread on the right; make 2 button-hole knots with the 4th thread over the 3 threads at the bottom and on the side.
Over the 4 threads, that come from the left and right, make quadruple bars; cross the upper threads after the second row of bars, make 2 button-hole bars with the next thread over the 4 th thread, then finish the 3rd and 4th bar of knots.

To make the olive-shaped group of knots on both sides, take the threads, that come out from the shells, as cords. Fig. 605 shows the adding on of the first supplementary thread, fig. 606 , that of 12 more which, knotted on to the first, form with it, the group of bars on the diagonal corner line. The knots, of which the next large shell is composed, are made with 2 more supplementary threads and one thread from the preceding figure. Add on 2 more supplementary threads to the disengaged threads, which 4 then serve as cords for the groups of bars, left and right.

The 4th group of bars which forms the corner of the fringe, is made on the 4 threads that come from the large shell, on to which the fourth set of 12 supplementary threads is knotted.
The pattern ends at the bottom with a half star, and a double bar; beneath these, large scallops are added, consisting of 2 half stars, 4 ovals, 1 whole star and 2 ovals.
All the threads that come from the groups are then collected at the top of the scallops and overcast with strong thread, so as to form a thick round cord along the edges of the scallops, widening towards the point, as more and more threads are taken in. At the point, these threads are knotted into a big tassel with another bunch of supplementary threads added to them. The other small tassels, represented in fig. $\underline{604}$, are made separately and then fastened on.
The fringe is further ornamented by large knotted tassels, introduced between the scallops, for which, a large knotted berry, fig. 590, over 21 cords, has first to be made.
Collect the 21 threads all together, to begin with; then make: 2 rows of knots over 12 threads, 1 over 15, 3 over 21,1 over 15 and 2 over 12; then cut the ends of the 21 threads to the same length, and turn them inwards, to fill up the hollow space inside the berry, stuffing it besides, if necessary, with wadding to make it perfectly firm and hard and sewing it together at the ends.
To this you attach 5 large and 6 small pendants; the smaller ones are begun with a Chinese knot, figs. $\underline{607}$ and $\underline{609}$, which terminates in a double chain, formed into a ring knot.


These ring knots take the place, in macramé, of bead drops, in gimp trimmings; when they are made of a double chain, you cut away 3 threads, when of a single, 1 thread, conceal the ends carefully inside the knot, make a loop with the 4th or 2nd thread, fig. 608 , and lastly, fasten off all the ends with two or three invisible stitches.
Into the loop formed by the 4th thread, you hang 3 small ring knots, made of a single chain, with a loop, top and bottom, formed of the ends of the thread.

Fig. 609 represents the small pendant, of which six are required for a tassel; fig. $\underline{610}$, the large one, of which there should be five. The berry, or head of the tassel, is attached to a crochet, or knotted cord, of which a description will be found in the last chapter but one of this work.


## Next Chapter.

## FOOTNOTES:

[A] See at the end of the concluding chapter, the table of numbers and sizes and the list of colours of the D.M.C threads and cottons.


Insertion in embroidered netting.-Ornament with various stitches.

## Netting.

Netting is a handicraft, so ancient that it would be difficult to trace it to its origin, or determine the date of its invention. There is evidence to show that the making of nets for fishing and game catching was as familiar to the earlier races of mankind as it is to us.
Practised in the first instance for the wants of life, it by degrees developed into an art, in conjunction with embroidery, to which it was made to serve as a foundation. The netting of every country, almost, has a distinctive character of its own: that of Persia is known by its fine silken meshes and rich gold and silver embroidery; that of Italy, by the varied size and shape of its meshes and a resemblance in the style of its embroidery to the Punto tagliato; whilst the netting of France, known by the name of Cluny guipure, consists of a groundwork of fine meshes with stiff close designs embroidered upon it, outlined in coarse glazed thread.

Netting, which divides itself under two headings, netting proper, or plain netting and net embroidery, has never yet gone out of fashion and places are still to be found where the entire population is engaged in this industry.
Plain netting and the implements used in netting (figs. 611, 612, 613).-Plain netting consists of loops, secured and rendered independent of one another by knots. For forming and tightening these loops and knots the following implements are necessary; in the first place, a netting needle; these are generally made of steel, split and flattened at both ends, with a hole bored through them below the fork at the one end, in which the thread, fig. 611, is secured, before it is wound on lengthwise between the forks. They are numbered as to size like knitting needles. There are netting needles likewise of bone, ivory, wood and tortoise-shell for twine and thick materials; these are without hole, fig. $\underline{612}$

Fig. 611. Netting needle of steel.


Fig. 612. Netting needle of ivory.
The thread must be wound on very tightly, and not too much of it at a time, that the needle may slip easily through the loops. The mesh, or spool, fig. 613 , whether of ivory, bone, steel or wood, should be smooth and round and of the same thickness throughout, so that the loops, made upon it, may be all of one size and easily slipped off.

Fig. 613. Mesh or spool of ivory.
For long loops a flat mesh is best, and in all cases, the needle and mesh should be selected with a view, both to the material employed, and the size of loop required

In addition to these two implements, a cushion, weighted with lead will be required, to pin the foundation loop to, on which the first row of netting is worked.

Materials suitable for netting.-These, of course depend on the purpose of the netting: silk, twine, wool and cotton, can all be used and each possesses its advantages and disadvantages. Silk has the finest gloss but when it is strongly twisted it is very apt to knot, and when loosely twisted, does not make firm knots. It is difficult to get linen thread with a smooth uniform twist and moreover it soon frays in the working; wool is too elastic a fibre and is unsuitable for washing purposes, cotton remains therefore, in every respect the most desirable material, being both smooth and uniformly twisted; as qualities, more especially adapted for netting we may mention the following: Fil à pointer D.M.C, Cordonnet 6 fils D.M.C (crochet cotton), Fil à dentelle D.M.C (lace thread), and even Coton à tricoter D.M.C ${ }^{[A]}$ (knitting cotton).

Netting stitches.-The loops are always the same-four-cornered whether they be square or oblong-and connected together, though secured and rendered independent of one another by knots. By different ways of passing the thread over the mesh and connecting the loops together, the following stitches are produced: $1^{\circ}$ oplain loop, $2^{\circ}$ double loop, $3^{\circ}$ oblong loop, $4^{\circ}$ honeycomb loop, 5o twisted loop.


Fig. 614. First position of the hands.
1o Plain loop. First position of the hands (fig. 614).-Every kind of netting requires a foundation loop, from 10 to 20 c/m. long, made either of Cordonnet 6 fils D.M.C Nos. 3 to 10 , or Fil à pointer D.M.C No. $10[\mathrm{~A}]$, which is pinned to the cushion. Fasten the working thread to the foundation loop; then take the mesh in the left hand, holding it between the thumb and forefinger, with the other fingers extended beneath. Take the needle filled with thread in the right hand and pass the thread downwards over the mesh and over the second, third and fourth fingers, inside, carry it up behind the third finger and lay it to the left under the thumb by which it has to be held fast.


Fig. 615. Second position of the hands.
Second and third position of the hands (figs. $\underline{615}$ and $\underline{616}$ ).-Carry the thread down behind the second, third, fourth and fifth fingers, and put the needle through the loop on the fingers and behind the mesh, through the foundation loop, thus forming a second loop, which you hold back with the little finger of the left hand. Then gradually drawing up the thread that runs from the mesh, let go the loop held down by the thumb; then by degrees let go also, the loop which lies over the second, third and fourth fingers, still holding the last loop fast with the little finger; finally you release this too and pull up the knot thus formed close to the mesh with the right hand. This completes the stitch. The next stitches are made in the same way; whether they are to serve for casting on or for a netted foundation. The mesh is drawn out at the end of each row, the work turned and the mesh held beneath the last row, in readiness for the next, in making which you pass your needle through each loop. These diamond-shaped loops form a diagonal net.


Fig. 616. Third position of the hands.
$\mathbf{2}^{\circ}$ Double loop.-To make a double loop put the thread two or three times round the mesh.
3o Oblong loop.-For oblong loops, the knots must be made a little distance from the mesh.
4o Honeycomb loop.-Make an oblong loop, pass the thread round the fingers, but not over the mesh as in plain netting, put the needle, not into the loop of the previous row, but between the loop, just made. The knot which is made in the same way as in plain netting, must be drawn close up to the mesh; the two threads of the loop should lie side by side on the mesh. The loops in honeycomb netting are six-sided.
5o Twisted loops.-Pass the thread, as in plain netting, over the mesh and fingers, but before letting the thread which is under the thumb go, pass the needle from right to left under the loop you are making and the thread, and only then draw up the knot.

Although in netting the loops cannot be formed in as many different ways as in knitting or crochet, they admit of a certain variety, as the following explanations will show.
Patterns produced in netting by using meshes of different widths.-Plain netting can be varied by making one row of loops over a large mesh and one over a small one, or several rows over the large and several over the small, alternately, changing the meshes at regular intervals.
Patterns produced in netting by increasing and decreasing (fig. 617).-Patterns of this kind are made by netting the meshes together in regular sequence and taking up as many meshes as you have netted together, or vice versa. You may increase and decrease in the same rows, or at an interval of so many rows.


Fig. 617. Patterns produced in netting by increasing and DECREASING.
Two sizes of thread should be used for this patterns. To show the relation they should bear to one another, we instance: Fil à pointer D.M.C No. 30 with Fil à dentelle D.M.C No. $50[\mathrm{~A}]$, or Coton à tricoter D.M.C Nos. 14 and 30[A], with Coton à tricoter D.M.C No. $50[\mathrm{~A}]$, or Coton à repriser D.M.C No. 25 with No. 100.[A]

Begin by 3 rows of plain netting with the finer thread over the small mesh, followed by one row with the coarser thread over the large mesh; then, with the coarse thread over the large mesh, one row, in which you net every two loops together and one row, with two loops in every one, so that the number of loops remains the same. These are followed by 3 rows of plain netting with the fine thread on the small mesh.

Loose loops in clusters (figs. $\underline{618}$ and 619). -These clusters of loose loops are made in the following manner:


Fig. 618. Loose LOOPS IN CLUSTERS.


Fig. 619. Loose loops in clusters. Working detail of FIG. 618.

1st row-one loop, the knot of which must be a little distance from the mesh; put the thread over the mesh and the needle through the loop where the knot is; repeat this three or four times, making the loops all of the same length. Then unite all the loops with one knot, carrying the needle from right to left, round the loops, instead of putting it through the loop of the previous row.

2nd row-make one loop over each loop of the first row, leaving out the loops that form the cluster.
As may be gathered from the drawing, many different patterns can be worked upon the netting in this manner.
Netting composed of plain, double and oblong loops (fig. 620).-Netting composed of large and small loops is the kind generally used as a groundwork for embroidery. The loops of it are straight; diamond netting will serve the same purpose, but as it is less commonly used we have given the preference to the straight.


Fig. 620. Netting composed of plain, dOUble and oblong loops.

The whole first row consists of a double and a plain loop alternately; the second, entirely of oblong loops, which are made by passing the thread only once over the mesh, and so, that in netting on the double loop, the knot is brought close to the needle, where as, in netting the plain loop, it hangs free; so that, as shown in fig. 620, all the loops of the 2nd row are of the same length. In the 3rd row, which is like the first, the plain loops should come between the small holes and the double ones between the large holes.
Circular netting composed of long and short loops (fig. 621 ).-Make thirty or thirty one loops over a large mesh with a very stout material, such as Fil à pointer D.M.C No. 20, or a double thread of Cordonnet 6 fils D.M.C No. 30, then draw up the thread on which the loops are strung, as tightly as possible, so as to form quite a small ring for the centre, and fasten off.


Fig. 621. Circular netting composed OF LONG AND SHORT LOOPS.
For the next row, also made in coarse thread, fasten the thread on to a long loop and make one loop into each loop of the first row, over a small mesh. Use the same mesh for all the subsequent rows, which should be worked in a finer thread, such as Cordonnet 6 fils D.M.C No. 50 or 60.

If you want to avoid fastening on the thread afresh for each row, make a loop over the thumb.
Making loops over the thumb.-Put the thread, as for a plain loop over the mesh and fingers, and put the needle through the loop, likewise as for a plain loop, but before tightening the knot, draw the mesh out of the loop just made and make it exactly as long as the loop above.

Circular netting formed by increases (fig. 622).-Make 10 loops on the foundation loop, close the ring, then go on, making a row with one knot in the first loop and two knots in the second, until the net attains the right circumference; in the subsequent rows, increase by one loop, that is to say, make two knots in each of the previous increases.


Fig. 622. Circular netting formed by increases.
Square of netting (figs. $\underline{623}$ and 624 ).-To make squares of netting with straight loops, begin by making two loops or three knots. Make two knots in each of the following rows so that each row is increased by one loop. Continue to increase until you have one loop more than the square should number.


Following this row with the extra stitch, make a row without either increase or intake and begin the intakes in the next row, joining the two last loops of each row together by a knot. Finish the two last loops over the thumb.
Square of netting begun from the middle (figs. $\underline{625}$ and $\underline{626}$ ). -Instead of beginning a square from the corner, in the manner just described, it may be begun from the middle.


Fig. 625. Square of netting begun from the middle. Begun.


Fig. 626. Square of NETTING BEGUN FROM THE middle. Completed.

Cast on the required number of loops, make an intake in each row, by omitting to take up the last loop of a row. In coming back, your first knot will thus be made over the last loop but one of the previous row, fig. 625 . To complete the square, fasten the thread on again, to the end of the thread of the last row, then make a similar to it, and repeat the same rows you made at the beginning (see fig. 626).
Stripes of straight netting (figs. $\underline{627}$ and 628 ). -These can be begun and finished in two ways. The simplest way, more especially when they are to be embroidered afterwards, is to cast on the necessary number of loops, to decrease on one side by dropping a loop, fig. $\underline{627}$, or by joining two loops together with a knot, fig. $\underline{628}$, and to increase on the other side, by making two knots over one loop.


Fig. 627. Stripe of straight netting EDGED WITH EMPTY LOOPS.
Great care must be taken not to change the order of the intakes and increases, as any mistake of the kind would break the lines of squares, and interfere with the subsequent embroidery, unless there happened to be more loops in the stripe than stitches in the pattern, in which case the superfluous loops might be cut away when the embroidery is finished.


Fig. 628. Stripe of straight netting.
Straight netting with a scalloped edge (fig. 629). -The second way of making stripes of straight netting is to begin by a square. After making two loops on the foundation loop, make rows with increases, until you have the required number of loops. Then make an increase in every row to the left and leave the last loop empty in every row to the right. Continuing the increases on the left, you net 4 rows, without increasing or decreasing on the right, whilst in the next 4 , you again leave the outside loop empty.


Fig. 629. Straight netting with a scalloped edge.
Square frame of netting (fig. 630). -Handkerchief, counterpane and chair-back borders can be netted in one piece, leaving an empty square in the centre. After casting on the loops as for an ordinary square of netting, letter a, increase them to double the number required for the border. Thus, for example, if the border is to consist of 3 squares, you make 6 loops, then leave 3 loops empty on the left and continue to work to the right and decrease to the left, up to the dotted line from $c$ to $c$. After this you begin to decrease on the right and increase on the left, up to the dotted line from $e$ to $e$.


Fig. 630. Square frame of netting.
Leaving the right side of the net, you now fasten on the thread at $c$, where the 3 empty loops are, and here you make your increases on the right side and your intakes on the left, till you come to the corner, from whence you decrease on the right and increase on the left, up to letter $g$. Stop on the left side and then work from left to right, passing over the row that is marked $e$. The fourth corner, letter $b$, is worked like any other piece of straight netting, with an intake in each row, until there are only two loops left.
Diagonal netting with crossed loops (figs. 631 and 632). To work this simple and effective pattern, begin by making a stripe of plain netting, 14 loops in width, for the middle. When it is long enough for your purpose, take up all the loops on one side on a strong thread; fasten the work to the cushion again and work 3 rows, along the other edge in the following manner.


Fig. 631. Diagonal netting with crossed loops.
Original size.

## Materials-For the netting: Cordonnet 6 fils

 D.M.C Nos. 10 to 30, or Fil à dentelle D.M.C Nos. 25 to 40. [A]For the darning stitches: Coton à tricoter D.M.C Nos. 12 to 20, or Coton à repriser D.M.C Nos. 12 to 50.[A]

1st row-long loops, to be made by the thread being passed thrice over the mesh.
2nd row-here, 3 loops are so made as to cross each other, that is, you begin by putting your netting-needle at first into the 3rd loop, counting from left to right, then into the 1st, and lastly into the middle one of the three, so that the right loop leans to the left and the left one to the right.
3rd row-one plain loop in each of the loops of the previous row. You now, draw out the thread, run in on the other side, and run it in through the loops last made, in order to make 3 rows again, as above described, on the bottom side.


Fig. 632. Working detail of fig. 631.
When this is done, you begin the scallops, composed of 12 knots or 11 loops, or 14 loops and 15 knots $=$ net 5 rows, leaving the outside loops empty, fig. 632 , stop on the left and proceed with: 6 knots or 5 plain loops, 2 or 3 long loops with 3 overs, 3 plain loops $=$ turn the work $=3$ plain loops, 3 knots $=$ turn the work $=2$ loops with 3 overs, 3 knots $=$ turn the work $=2$ plain loops, 2 knots $=$ turn the work $=$ cross 2 or 3 loops, according to the number you crossed in the middle, then carry the working thread to the middle of the long loops, and connect them by 2 knots = pass the needle under the knot of the last long loop, then, on the right side net: 3 plain loops $=$ turn the work $=3$ plain loops, 3 knots $=$ turn the work $=2$ plain loops, 2 knots $=$ turn the work and continue the rows of plain netting until you have only 2 loops left.

To reach the next scallop, pass the netting-needle through each hole of the net and round each thread.
Finish off the scallops with a row of plain netting, made with a coarser thread than the foundation.
These netted edgings are generally made in unbleached cotton, because the patterns afterwards embroidered upon them in coarse, white knitting or darning cotton, show best upon it. The thread for this purpose should be used double, and the pattern worked in darning stitches, made over 8 squares of the netting; the 8th knot is then encircled by a loop and the thread carried down over 8 squares and a loop again made round the 8 th knot. After making 4 rows of stitches on the netting, cut 3 bars between the rows of white stitches.

The row of openwork produced in this way has a very good effect and greatly improves the look of the lace.
Netted fringe (fig. 633).-Plain netting, pretty as it is, looks rather poor, unless ornamented with embroidery of some kind. The double netting, illustrated in fig. 633, will prove a welcome novelty. The footing is worked in crochet, with braid, secured on both sides by chain stitches.


Fig. 633. Netted fringe.
Materials-For the netting: Cordonnet 6 fils D.M.C Nos. 10 to 30 or Fil à pointer D.M.C No. 30. [A]
For the fringes: Soutache D.M.C No. 3 or Lacets superfins D.M.C No. 4. ${ }^{[A]}$
Into every fourth of these chain stitches, net one loop, missing the 3 between. At the end of the row, turn the work and make the knot in the middle of the 3 chain stitches, so that the 2 loops of netting cross each other.
In the second, or rather the third row, the knots are again made first into the front loops, into those of the first row that is; in the fourth row, into those of the second row.

When the stripe is sufficiently wide, finish it off with tassels, made of Soutache D.M.C No. 3. Instead of tying up the lengths of braid with a thread, twisted round them and fastened off with a stitch, make 2 looped knots round them with an end of the braid, where the neck of the tassel should come.

Embroidered netting.-Embroidered netting, also known as Filet Guipure, Cluny Guipure, and Richelieu Guipure, is a netted ground, with patterns of one kind or another, worked upon it in a variety of stitches.

Implements required for embroidered netting.-Besides scissors, needles and thread, a light steel frame is the only thing required, and this renders embroidered netting very popular.
The needles should be long, and blunt; those called saddlers needles are the best.
Wire frame for embroidered netting (fig. 634). -The frame on which the net is stretched should be made of strong iron wire, that will not bend in the using. In shape, it may be square or oblong, according to whether squares or edgings are to be made upon it, but the sides must be straight, so that the net can be evenly stretched.


Fig. 634. Wire frame for embroidered netting.
This wire frame must be covered, first with wadding or tow, as shown in fig. 634 , and then with silk ribbon, which must be wound tightly round it, and more particularly at the corners, very closely, so that it may be quite firm and not twist about when the netting is sewn in. The ends of the ribbon should be secured by two or three stitches.

Mounting the netting on the frame (fig. 635 ). -When the netting is exactly the size of the inside of the frame, it need only be secured to it with overcasting stitches, set very closely at the corners.


Mounting the netting on the frame with an auxiliary tape (fig. 636). When the netting, is smaller, the space between it and the frame, must be filled up with strong very evenly woven, linen tape, sewn on all round the netting.


Fig. 636. Mounting the netting on the frame WITH AN AUXILIARY TAPE.

The tape must be very tightly held in the sewing, so that it even forms little gathers all round; this will help you to stretch the netting in mounting it without injuring it, and is especially necessary when the netting is not quite evenly made. Fig. 636 shows how the tape is sewn on, the fold that has to be made at the corners, and the way to fix the netting into the frame.
Long stripes or large pieces of work, can be mounted on waxcloth, but we cannot recommend shortening the preparatory work in this manner, as the squares of netting are never so regular as when they are made in a frame.

Materials for embroidered netting.-Thick threads with a strong twist are the best for darned, or embroidered netting, such as Cordonnet 6 fils D.M.C[A] (crochet cotton), or Fil à dentelle D.M.C[A] (lace thread).
There are however certain old kinds of embroidered netting made in soft loose silk, for imitating which it is best to use, Coton à repriser D.M.C ${ }^{[A]}$ that being quite the best substitute for the original material.

The stitches used for embroidered netting.-These are so multifarious and admit of so many different combinations, that not a few of them seeing that be quite new to our readers, willsome we have never yet come across in any book on the subject that has come under our notice.

Ordinary darning stitch (fig. 637).-The simplest stitch of all for covering a netted ground is the ordinary darning stitch; drawing the thread, that is to say, in and out of the number of squares, prescribed by the pattern, and backwards and forwards as many times as is necessary to fill them up.


Fig. 637. Ordinary darning stitch.

The number of stitches depends, to a certain extent, on the material employed; with Coton à broder D.M.C for example, you will have to make more stitches than with one of the coarser numbers of Coton à repriser D.M.C.

This is the stitch generally used for reproducing a cross stitch pattern on a netted ground and is especially to be recommended for covering large surfaces, curtains, counterpanes and so forth, as it is quickly done and shows up the pattern well.
Linen stitch (figs. 638 and 639). -This is the stitch most often met with in the old embroideries, it being the one the solid parts of the leaves and flowers, and the borders are generally worked in.


Fig. 638. Linen stitch. First stitches.


Fig. 639. Linen stitch. Second stitches.

Fasten on the thread to a knot of the netting and carry it twice to and fro, over and under the threads of the netting, so that at the end of the row, every second thread passes under and over the thread of the netting, as it is carried upwards again.
This constitutes the first layer of threads, the second completes the linen stitch and is made in the same way, only across the first, alternately taking up and missing a thread as is done, in darning. The thread may also be carried both ways over the threads of the squares. In this case you must draw an uneven number of threads through the squares, otherwise the crossing of the threads will be irregular in the last square.

Linen stitch. Formation of the corners (fig. 640).-When linen stitch is used for the border of a pattern, and a corner has to be formed, you begin by carrying the threads over a given number of squares. This first layer, especially in the case of long
stripes, must be kept very slack, and to ensure the threads being all of the same length, lay a fine mesh or a thick knitting needle at one end and stretch the threads over it. After carrying the second layer across a few squares, take away the mesh or needle. The threads of the first layer become gradually shorter, from the passage of the cross threads in and out between them, and end by being just long enough to prevent the last embroidered squares from being too tightly stretched.


Fig. 640. Linen stitch.
Formation of the corners.
On reaching the corner, you cross the threads of the next row, as shown in fig. 640 . The first threads of the second side form the foundation of the corner square; from the second corner square you pass to the third; from the third to the fourth, carrying your thread alternately over and under the threads that were stretched for the first corner.
Loop stitch (point d'esprit) (figs. 641 and 642 ). -This is a light open stitch, chiefly used for making a less transparent foundation than plain netting. Fasten the thread to the middle of one bar of the netting, then make a loose loop to the middle of the top bar of the same square, fig. 641, by carrying the thread, from left to right, over one vertical and one horizontal bar of the net and inserting the needle downwards from above under the bar and in front of the working thread. For the second row back, also represented in fig. 641, you draw the needle through, underneath the bar above the loop stitch and make the loop upwards from below; in doing this the working thread must lie to the left, in front of the needle. Fig. 642 shows how to join the rows and pass the needle through the stitches of the preceding row.


Fig. 641. Loop stitch. 1st and 2nd course of the thread.


Fig. 642. Loop stitch. Several rows completed.

Star composed of loose threads (figs. $643, \underline{644}, \underline{645}$ ). -This star covers 16 squares of netting. Fasten the thread to the middle knot of the 16 squares, then carry it diagonally over 4 squares, three times from left to right under a knot of the foundation and three times from right to left. In this way, the bottom rays of the star are formed. For the stitches that complete the figure, you start from the middle and following the direction of the little arrow in the illustration, you cover the netting with 3 horizontal and 3 vertical threads, carried over 4 squares. When you have laid the vertical threads, slip the needle 4 or 5 times round in a circle, under the diagonal and over the straight threads, but always over the bars of the netting. This completes the star, as it is represented in fig. $\underline{645}$. Care must be taken to make the stitches lie quite flat side by side, and not one on the top of the other.


Fig. 643. Star formed of LOOSE THREADS LAYING THE UNDERNEATH THREADS.


Fig. 644. Star formed of loose threads. Laying the UPPER THREADS.


Fig. 645. Star formed of loose threads. Finished.

Darning stitch (point de reprise) (figs. $\underline{646}$ and $\underline{647}$ ).-Little flowers and leaves are generally executed in this stitch; the first course of the thread is shown in fig. 646 . Leaves can be made with one, two or three veins. Carry the needle, invariably from the middle, first to the right and then to the left, under the threads of the foundation and push the stitches close together, as they are made, with the point of your needle. This you will be able to do most easily by holding the work so as to make the stitches towards you.


Fig. 646. Leaves worked in darning stitch. Begun.


Fig. 647. Leaves worked in darning stitch. Completed.

For a leaf with only one division or vein, like the left leaf in fig. 646 , merely run the needle through the middle of the threads, whereas for a leaf with two or three veins, you must run it, over and under, either one, or two threads (see the right leaf in fig. 646).

In working leaves of this kind in darning stitch, you must draw your stitches at the top and bottom of the leaf rather tighter than in the middle, so as to give them the proper shape. If you wish to make them very slender at the bottom, you can finish them off with a few overcasting stitches.
Fig. $\underline{647}$ represents two leaves completed, one with one vein and the other, with two.
Pointed scallops in darning stitch (fig. 648).-The simplest way to work these scallops is to carry a thread, as shown in the illustration, to and fro over the square, from the knot in one corner to the middle of the bar above and downwards to the opposite knot, round which the thread is carried and passed upwards again to the middle. As the scallop must always be begun from the top, you will have, two foundation threads on one side and three on the other. Here likewise, you must push the threads as closely together as possible with the needle.


Fig. 648. Pointed scallops in darning stitch.

Pointed scallops in button-hole stitch (fig. 649).-Another quite as pretty and easy way of working pointed scallops on a netted foundation is by making two button-hole stitches before crossing to the opposite side. As shown in the foregoing illustration, you begin by stretching single or double foundation threads across; then beginning at the point, you make, alternately right and left, 2 button-hole stitches over the foundation threads, so that the working thread is only carried across to the opposite side after every second stitch.


Fig. 649. Pointed scallops in BUTTON-HOLE STITCH.

Veined pointed scallops (fig. 650).-A third way of making pointed scallops is by first stretching a thread to and fro across the middle of the square, after which you slip the needle from left to right under the middle thread, and underneath the left bar from above. Then you carry the needle, from right to left, over the foundation thread and under the right bar and so on. The one thread must be drawn tightly round the other, in order that the stitches may form close and evenly shaped veins, like small cords, on the wrong side of the scallop. There must be enough stitches to completely cover the foundation thread that crosses the middle of the square.


Fig. 650. Veined pointed scallops.

Pointed scallops in Venetian stitch (fig. 651).—The prettiest scallops of all are those worked in Venetian stitch. You begin, by making from 8 to 10 button-hole stitches over one bar of the netting, then you work on with the same stitch backwards and forwards, making one stitch less in each row, until you come to the one which forms the point of the scallop and is fastened to the bar above; you carry the working thread back on the wrong side to the lower bar, and then under the button-hole stitches to the next square of the netting. Scallops worked in this manner, can be overcast round the edges in the way described further on, in fig. 660.


Fig. 651. Pointed scallops in venetian stitch.

Wheels embroidered on netting (figs. $\underline{652}$ and $\underline{653}$ ). -To make wheels or spiders, as they are also called, you have first to fasten the thread to the middle knot of four squares, thence you carry it diagonally right and left, fig. 652, right detail, across the empty squares of netting and the knot, and return to the middle, overcasting your first thread by the way, so as to form a closely twisted cord. This is called cording a thread.
Having reached the centre, carry the working thread round and round, under and over the corded threads and under the bars of the netting till the wheel covers half the bars.


Fig. 652. LAYing the threads FOR A WHEEL AND BEGINNING OF THE WHEEL.


Fig. 653. WHEELS WORKED IN TWO ways.

Fig. 653 shows, on the right, a finished wheel, and on the left, another way in which it can be made, and indicates the course of the thread over and under the lines, as in a darn. These details show also how, when the foundation thread of the wheel starts from a corner, it is left single in the first square until the wheel is finished; then the needle is slipped back along the little spoke, opposite to the single thread, and through the wheel, and the single thread is corded like the others.
Ribbed wheels (fig. 654).-Make the foundation of the wheels as before, over 8 threads. To form the ribs at the back of the wheels, see fig. 654; make a back stitch, on the right side, over a bar of the netting, and carry on the needle under one bar, so that the thread that lies outside always crosses 2 bars of the netting.


Fig. 654. Ribbed wheels.
In this case you must make circles of thread enough, to cover the bars completely, not half, as before.
The same stitches, as fig. $\underline{654}$ shows, can be made on either side of the embroidery, and so as to form, either a square or a lozenge (see fig. 655).


Fig. 655. Ribbed squares or Lozenges.

Wheels set with button-holing (fig. 656).-A very pretty lace-like effect is produced by encircling the wheels in large squares of netting with a double setting of stitches. The left detail of fig. $\underline{656}$ shows how the thread, having been passed under the wheel and twisted once round the single thread, is carried all round the square and forms 8 loops.


Fig. 656. Wheels set with button-holing.
The arrow shows the way in which the loops are taken up, and the first ring of stitches round the wheel is finished.
The second detail of the same figure explains the course the thread, that forms the second ring, has to take through the loops and between the bars; whilst the white line shows the passage of the thread over the second ring. The third detail represents a wheel, completed.

Star with one-sided button-hole stitches (fig. 657).-The pattern represented in fig. 657, is the quickest to work that we know of. Two button-hole stitches made upon the outside bar of a square and a simple crossing of the thread at the bottom,
produce elongated triangles which should always be begun from the knot. Two triangles stand exactly opposite to each other in one square, and the square that comes in the middle of the four thus filled, is ornamented with a small wheel.


Fig. 657. Star with one-sided button-hole STITCHES.

Rounded corners of netting (fig. 658).-Darning stitches, made over a thread carried diagonally across one square and the adjacent corners of that and two other squares, produce the figure illustrated in fig. 658. The accompanying detail shows the mode of working.


Fig. 658. Rounded corners on netting.
The number of stitches depends on the material you use; there should be no more than can lie quite flat, side by side, on the diagonal thread.

Linen stitch, set with darning stitch (fig. 659).-There are some patterns it would hardly be possible to work on netting unless you could soften the outlines by darning stitches, as shown in the foregoing figure.


Fig. 659. Linen stitch set with darning stitch.
When employed as a setting to linen stitch, there should be fewer than in fig. 658; you may also, instead of interrupting them at every corner, carry them all round a square, (see the right detail of the figure).

Linen stitch set with cord stitch (fig. 660).-Many figures are also either corded or edged with twisted thread; both ways are represented in the illustration. In the latter case you can use the same thread as for the linen stitch, or if you wish the setting to be very pronounced, a thicker one. For instance, if the netting be made of Cordonnet 6 fils D.M.C No. 25[A] we recommend Fil à pointer D.M.C No. 15 or $20^{[\mathrm{A}]}$ for the setting. This difference of material is especially noticeable in the old Cluny Guipure, where the figures worked in linen stitch are edged with a thread like a cord. But if the linen stitch be bound with cord stitch, the same thread must be used for it, as for the foundation. A soft material, like Coton à repriser, makes the best padding for the overcasting stitches.


Fig. 660. Linen stitch set with cord stitch.
Flower in dot stitch on a foundation of linen stitch (fig. 661).-With the help of this stitch, which is described in the chapter on white embroidery and represented in fig. 179, a great variety of little supplementary ornaments can be made, on every description of netted ground.


Fig. 661. Flower in dot stitch on a foundation of linen stitch.

Bordering in button-hole stitch (fig. 662).-Scalloped edges in netting should be button-holed; 2 or 3 padding threads should be run in first, following the bars of the netting, over which the button-holing is done; the bars of the netting must not be cut away until the edge be finished.


Fig. 662. Bordering in button-hole stitch.
Cut work in embroidered netting (fig. 663).-Cut work here means half covering the bars of the netting with button-hole stitches and half cutting them away with scissors. The inner bars are frequently ornamented with a double button-hole edging and knotted picots, see figs. $\underline{698}$ and $\underline{699}$ in the next chapter. You slightly separate the stitches of the first row of button-holing so as to be able to introduce the thread of the second row between them.


Fig. 663. Cut work in embroidered netting.

Straight loop stitch (fig. 664). -In the first row you carry the thread over one bar and slip it through behind a knot; in the second you do the same thing, only that above, your needle will pass under 3 threads, two of them the threads of the loop of the first row and the third a bar of the net. In every square 4 threads cross each other.


Fig. 664. Straight loop Stitch.
Waved stitch (fig. 665).-This stitch, which forms a close waved ground, is produced by passing the thread in each row of the netting over a square and behind a knot. When the pattern admits of it, as it mostly does, a considerably thicker thread is used for this stitch and for the stitches represented in figs. $\underline{667}, \underline{668}, \underline{669}$ and $\underline{670}$, than that in which the netting is made. When the netted ground is of Fil à dentelle D.M.C No. $50,[\mathrm{~A}]$ the embroidery upon it may very well be done in Cordonnet 6 fils. D.M.C No. $10[\mathrm{~A}]$, or Fil à pointer D.M.C No. 30.[A]


Fig. 665. Waved stitch.
Intersected loop stitch (fig. 666).-Begin by covering the whole surface to be embroidered with plain loop stitches, then stretch threads diagonally across the squares of the netting and the loop stitches; one set of threads running over the stitches and under the knots of the netting, the other under the first and second threads of the loop stitches and over the first crossed threads and the knots.

The laying and stretching of these threads must, it is hardly necessary to say, be systematically and regularly done.


## Fig. 666. Intersected loop stitch.

Ground worked in horizontal lines (fig. 667).-Make half cross stitches over 4 squares of netting, by passing the thread alternately over and under 3 knots, and under 3 squares of the netting. In the second row, cross the threads over those of the first row, as is shown in our engraving.


Fig. 667. Ground worked in horizontal lines.

Ground worked in stitches placed one above the other (fig. 668).-Cover a whole row of squares with cross stitches and leave 3 rows of squares empty. When you have a sufficient number of rows of cross stitches, take a long needle and pass it upwards from below, and from right to left, under the two bars of the third upper square; then pass downwards to the first square of the 3 bottom rows and under the bars from right to left, so as again to leave 3 squares between the fresh stitches. The next row of stitches is made in the same manner, so that the stitches are not only set contrary ways but reciprocally cover each other.


Fig. 668. Ground worked in stitches placed one above the other.
Latticed ground (fig. 669).-Begin by running the thread, to and fro, under two vertical bars and over three horizontal ones. When the ground is entirely covered, carry your thread from right to left, under the bars over which the first rows of threads are crossed; then take it over the long crosses, that correspond to 5 squares of netting, and pass it in the same line under the bars of the netting. In coming back, the long stitches cross each other over the stitches of the first rows.


Fig. 669. Latticed ground.
Ground worked in Russian stitch (fig. 670).-Pass the thread from left to right, under a bar of the netting, carry it downwards over 4 squares and pass it again, from left to right, under the bar, then upwards, again over 4 squares of netting and so on. The stitches of the next rows are made in the same manner; you have only to see that the loops formed by the stitches all come on the same line of knots.


Fig. 670. Ground worked in russian stitch.
Ground worked in two sizes of thread (fig. 671).-Herewith begins the series of stitches, referred to at the beginning of the chapter, copied in part from one of the oldest and most curious pieces of embroidered netting we have ever met with. The copies were worked with Cordonnet 6 fils D.M.C No. 25 and écru Fil à dentelle D.M.C No. 70[A]; the former being used for the darning and the almond-shaped stitches between; the latter for the button-hole stitches. Wherever two sizes of thread are used for one pattern, all the stitches in the coarse thread should be put in first and those in the fine, last.


Fig. 671. Ground worked in two sizes of thread.

Ground with wheels and loop stitch (fig. 672). -You begin with the coarse thread and finish all the wheels first, making them each over 4 threads of the netting; then with the fine thread, you make loop stitches between them, in rows, as shown in figs. 641 and 642 .


Fig. 672. Ground with wheels and LOOP STITCH.

Ground worked in darning and loop stitch (fig. 673). -The darning stitches are made in the coarse thread, over 4 squares of the netting, in a horizontal direction, with loop stitches, in the fine thread, made between them, over the same number of squares.


Fig. 673. Ground worked in darning and Loop stitch.

Ground worked in two sizes of thread (fig. 674).-Carry the coarse thread, from right to left, under the first knot of the netting, and then under the next, from left to right. This has to be done twice, to and fro, so that the squares of the netting are edged on both sides with a double layer of threads.


Fig. 674. Ground worked in two sizes of thread.
When the whole foundation has been thus covered, take the fine thread and make loop stitches in the squares between the other rows of stitches, passing the needle for that purpose over the double stitch. Lastly, intersect the loop stitches with straight threads and pass the needle each time through the knot of the netting.

Ground worked with cross stitches in one size of thread (fig. 675).-This pattern, very like the foregoing one, consists of 3 diagonal rows of stitches, worked to and fro, with cross stitches made over them.


Fig. 675. Ground worked with cross Stitches in one size of thread.
You may also begin with the cross stitches, in the fine thread, and work the triple stitches over them, in the coarse.
Ground worked with darning and cord stitches (fig. 676).-Patterns, executed chiefly in darning stitches, in a comparatively coarse thread, present a closer and heavier appearance than those we have been describing. Here, every other square of the netting is filled, as closely as possible, with stitches; the empty squares between are intersected diagonally with corded threads.
Ground worked with squares and wheels (figs. $\underline{677}, \underline{678}, \underline{679}$ ).-A ground very often met with in old embroidered netting, consists of diagonal lines of squares, closely filled with darning stitches, alternating with diagonal lines of squares, each with a small wheel in the middle.


In fig. 678 , the darning stitches, and the wheels, which are both worked with the same material, cover 4 squares of the netting.


Fig. 678. Ground worked with SQUARES AND WHEELS.


Fig. 679. Ground with large wheels.

Larger expanses of netting may also be entirely filled with wheels, fig. 679. To make a really satisfactory grounding of this kind, you should be careful always to carry your thread over the bars of the netting and under the threads that are stretched diagonally across.
Ground worked in cross and darning stitch (fig. 680). -You begin, as before, by making the close darning stitches, and then proceed to the cross stitches. To give them the right shape, finish all the rows of stitches one way first; in the subsequent rows, that cross the first ones, you introduce the thread between the stitches that were first crossed.


Fig. 680. Ground worked in cross and darning stitch.

Ground of geometrical figures (fig. 681).-This pattern, quite different from all the others, consists of simple geometrical lines. Fasten the thread to a knot of the netting, then carry it, always diagonally, under 3 other knots and repeat this 3 times, after which, carry it once round the bar of the netting, to fasten it, and back again to the knot which it already encircles, and from thence begin a new square. Owing to your having always to bring the thread back to the knot whence the next square is to begin, you will have 4 threads on two of the sides and 6 on the two others.


Fig. 681. Ground of geometrical FIGURES.

In the second and subsequent rows, the needle has to pass twice under the angles that were first formed, in order that, over the whole surface, all the corners may be equally covered and connected.

Netted insertion worked in plain darning stitch (fig. 682). -The taste for ornamenting not only curtains but bed and table linen also, with lace and insertion of all kinds, to break the monotony of the large white surfaces, is becoming more and more general and the insertion here described will be welcome to such of our readers as have neither time nor patience for work of a more elaborate nature.


Fig. 682. Netted insertion worked in plain darning stitch.
Materials-For the netting: Cordonnet 6 fils D.M.C No. 25.-For the darning stitch: Coton à broder D.M.C No. 25, or Coton à repriser D.M.C Nos. 12 to 50, white or écru.[A]
The way to make straight netting has already been fully described in figs. $\underline{625}, \underline{626}, \underline{627}, \underline{628}, \underline{629}$ and $\underline{630}$, and darning stitch in fig. 637.

To those who wish to be saved the trouble of making the netting themselves, we can strongly recommend various fabrics, intended to take its place, more especially Filet Canevas, which is an exact imitation of the finest hand-made netting. The centre part of the pattern in fig. 682, is worked in rows of horizontal darning stitches, the narrow border in vertical ones.
Ground of netting embroidered (fig. 683). -We have already had occasion, in the foregoing explanations, to point out the advantage of embroidering with two sizes of thread, but it is only in a piece of work of a certain size that it is possible really to judge of the excellent effect produced by the use of two threads of different sizes.


Fig. 683. Embroidered ground of netting.
Materials-For the netting: Fil à dentelle D.M.C Nos. 25 to 50.
For the darning stitch: Cordonnet 6 fils D.M.C No. 15, or Fil à pointer D.M.C No. 30.-For the loop stitch: Fil à dentelle D.M.C or

The principal lines of the pattern, which are in darning stitch, are worked in a very coarse thread with a strong twist, Fil à pointer D.M.C, whilst the loop stitches are in Cordonnet 6 fils D.M.C.
Our model was worked in écru thread but there is nothing to prevent several colours being introduced, for instance écru, black or Gris-Ficelle 462 for the netted foundation; Rouge-Cardinal 346, for the darning stitches, and Chiné d'or D.M.C green and gold or blue and gold, for the loop stitches and the threads that are carried across inside.

Embroidered square of netting with two kinds of lace suitable for the border (figs. 684, 685, 686).—Large pieces of embroidered netting are generally made up of squares and stripes, joined together with ribbon and fine linen insertions. It is easier and less cumbrous to make the netting in separate pieces. Squares of different patterns can also be combined with crochet and pillow lace, in this case of course the squares have to be arranged with some system.


Fig. 684. Embroidered square of netting.
Materials: Cordonnet 6 fils D.M.C Nos. 15 to 30, or Fil à dentelle D.M.C Nos. 15 to 40, white or écru. [A]

Fig. $\underline{685}$ represents a lace edging intended for the square fig. $\underline{684}$, which shows how even in such a simple pattern as this, several colours may be successfully introduced.


Fig. 685. Lace edging for the square, fig. 684. Materials: The same as for fig. 684, and Or fin
D.M.C pour la broderie No. 30.

Colours-For the netting and the loop stitch: White or écru.-For the darning stitch: BrunCaroubier 303 and Rouge-Grenat 335. [A]

Fig. 686 is a handsomer and more elaborate pattern for the same kind of purpose. The loop stitches and the linen stitches should be worked in a very light shade; instead of the colour indicated at the foot of the engraving, Rouge-Géranium 353, Violet-Mauve 377 or Jaune-Rouille 365 may be used; for the netting and the loop stitches you may combine, with the first shade, two shades of Brun-Caroubier 303 and 357, with the second, two shades of Jaune-vieil Or 678 and 680 and with the third, two shades of Rouge-Cardinal 346 and 348.


Fig. 686. Lace edging.
Materials: The same as for 684.
Colours-For the netting: écru.-For the ground in loop and linen stitch: Bleu pâle 668.-For the bars in darning stitch: GrisTilleul 391 and 393.[A]

Pattern for ground (fig. 687).-The peculiar charm of this most unpretending pattern is chiefly due to the variety of material and colour introduced into it. The netted ground is made of dark brown Cordonnet 6 fils D.M.C No. 25, worked over, in the first instance, with loop stitches in a pale grey, which are afterwards connected by darning stitches in Coton à repriser Gris-Tilleul 392.


Fig. 687. Pattern for ground.
Materials-For the netting: Cordonnet 6 fils D.M.C Nos. 15 to 30. For the embroidery: Coton à repriser D.M.C No. 25. Colours: Brun-Havane 455, Gris-Noisette 423, Jaune-vieil-Or 680, Gris-Tilleul 391 and Rouge-Géranium 352.[A]

The same material in Rouge-Géranium, is used for the little centre squares and the pink crosses, and isolated darned squares are framed with loose cord stitches in Coton à repriser colour Jaune-vieil-Or 680.
We can also recommend, for the same pattern, the following combination of colours, all to be found on the D.M.C colour card; namely, Bleu pâle 668 for the netting; Chiné d'or, gold with dark blue for the loop stitches; Ganse turque D.M.C No. 12 (Turkish gold cord) for the darning stitches, between the loop stitches; Coton à broder or Cordonnet 6 fils in Rouge-Cornouille 450 , for the detached darned squares and Coton à repriser, in Jaune-d'Or 667 for the setting of all the different parts of the pattern.

Embroidery on netting with different-sized loops (fig. 688).-The netting, described and represented in fig. 620, with plain, oblong and double loops, here forms the ground for the embroidery.


Fig. 688. Embroidery on netting with different-sized loops,
Materials-For the netting: Fil à dentelle D.M.C No. 40. For the embroidery: Coton à broder D.M.C No. 16, white or écru. ${ }^{[A]}$

In order to make the isolated loop stitches, the thread which forms the cross in the middle must be carried to the middle of the bar, the loops that form the stitches must be finished and the thread carried back to the knot whence it started. It must then be taken three times backwards and forwards over the foundation thread and the two bars of the netting, when the stitches, into and over 3 squares of the netting, should be made. The last row in the engraving shows the pattern in the successive stages of its development.

Square and edging in cut netting (figs. 689 and 690 ).-Few patterns admit of such a successful application of all the stitches hitherto described, as the square and edging presented to our readers in the two subjoined figures. On a netted ground of rather fine thread, we have in the first place, linen stitch, in the border, worked in rather a coarser thread than the ground; then raised wheels, button-holed bars with picots in the centre, plain wheels very close together, and long ribbed bars worked in darning stitch.


Fig. 689. Square in cut netting.
The edging, to match the square, is worked in the original in pale shades, in contrast to the square which is executed entirely in écru thread. The squares in the netted footing of the lace are loosely overcast with pale Violet-Mauve 316, the same colour is also used for the wheels in the outside edge, each of which fills a square, and for the loop stitches round them; whilst the middle one of the three upper ribbed wheels and the star are worked in dark Violet-Mauve 315. The crosses in linen stitch, the three lower ribbed wheels and the long ribbed bars in darning stitch, are in Gris-Tilleul 392.


Fig. 690. Lace edging in cut netting.
Materials: Fil à dentelle D.M.C Nos. 25 to 50, in three shades of one colour.
Netted insertion (fig. $\underline{691 \text { ).—This is a copy of a beautiful piece of embroidered netting, to all appearance, several centuries }}$ old, and in a state that rendered, even the most delicate handling almost impossible.


Fig. 691. Netting insertion-For the netting: Cordonnet 6 fils D.M.C No. 40 white or écru. -For the embroidery: Ganse turque D.M.C Nos. 6 and 12.
After several experiments, the best result has been arrived at, and the Turkish cord in which the original is made, has now been manufactured for netting purposes, as well as for other kinds of decorative work, already alluded to, and referred to again later on.

The first foundation, that is, the actual netting, for a thing of this kind, should be made in white or écru thread, with very small meshes; the pattern itself is embroidered on the netting with Ganse turque D.M.C No. 12; this material, écru and gold mixed, gives the work a glittering and peculiarly elegant appearance, unobtainable in any other.
The execution is extremely easy, it being worked entirely in darning stitch; but the drawing should be copied with great accuracy and the wide braid very carefully sewn on with close stitches round the squares, which are filled in with darning stitches made in Ganse turque No. 12.
Any netting pattern can be copied in this braid, and the simplest piece of work of the kind is worth mounting on a rich foundation of silk, brocade, velvet or plush. To give a single example, the insertion here described and illustrated, was mounted on slate-blue plush and has been universally admired.

## FOOTNOTES:

[A] See at the end of the concluding chapter, the table of numbers and sizes and the list of colours of the D.M.C threads and cottons.


Insertion.-Irish lace with raised ornaments.

Irish lace, also known under the name of Renaissance lace, from its having been first made in the sixteenth century, is an imitation of the earliest pillow laces; it ought, properly speaking, to be called French lace, having been invented in France and thence introduced into England and Ireland.
It is composed of braid or tape, formed into figures, joined together by needle-made, corded or button-hole bars and fillings of different kinds, or by bars alone.

The lace stitches and bars are almost the same as those used in fine Venetian point, but they are executed in a coarser material so that this section of our work may be considered as a preparation for the different kinds of lace, to be described in the next chapter.
MaterialsMaterials (fig. 692).-The braids used for making Irish lace are an English speciality and manufactured exclusively in England; they are very various in shade, width and thickness, and are to be had white, unbleached, grey and pale yellow, narrow and wide, coarse and fine in texture, with and without holes, open edge and picots, with large medallions and small.


Fig. 692. Patterns of the different tapes and braids used for irish lace.

Fig. 692 represents the kinds most commonly used, in their original size, together with a specimen picot, or purl, as they are called in England, for the outside edge, also to be had ready made, for those who do not care for the trouble of making them themselves.
For the stitches and bars by which the braids are joined together, the best material is Fil à dentelle D.M.C,[A] (lace thread) a smooth even thread, now made in every colour to match the braids.

Transferring designs for Irish lace.-The best way is to trace them on oiled tracing linen with a watery ink, free from greasy matter. This tracing linen, which is of English make, is white, glazed on one side only; the unglazed surface should be turned uppermost, as it takes the ink better.
As this tracing linen is quite transparent, the pattern can be transferred to it at once without recourse to any other process.
It will be found less trying for the eyes to lay a piece of transparent coloured paper, or stuff, under the pattern whilst you are copying it. The Irish lace designs are almost all drawn with double lines, between which the braid is tacked on with small back stitches. We may mention at once that it is advisable to make the stitches longer on the right side than on the other, or at any rate to make them of the same length.

Tacking down and gathering in the braids (fig. 693). - Where the lines of the pattern describe a curve or a circle, the outside edge of the braid, as shown in fig. 693, must be sewn down firmly, so as to form little folds or gathers on the inside edge, which are first tacked down and then gathered in with small overcasting stitches in fine thread, so as to fit exactly to the pattern.


The stitches, made for the bars and the fillings, must never be drawn so tightly as to drag out the edges of the braids and thus spoil the outlines of the pattern. Nor should the stitches be caught into the tracing cloth, but only rest upon it.

When the embroidery is finished, turn the work the wrong side up, cut every second or third tacking stitch and pull the threads carefully out, from the wrong side, when the lace will separate itself from the backing without difficulty; it has then to be damped and ironed also on the wrong side. (See the concluding chapter on the different processes for finishing off needlework).

It is of no consequence which are made first, the bars or the fillings; we however incline to the former, more especially in the case of button-hole bars, as they are easier to do than the fillings and once done, there is less risk of puckering or drawing the edges together, in making the fillings.

The stitches.-We shall now proceed to describe a series of bars and stitches, which, if carefully studied, will serve as a preparation for making all the finer kinds of laces described in the ensuing chapter.

Without pretending to have exhausted the infinite variety of lace stitches that exists, we hope to have brought before our readers' notice a sufficiently numerous selection to satisfy all tastes and capacities.
With regard to the names, the same stitches are known by so many different ones, that excepting in the case of those universally accepted, we have disregarded them altogether and merely numbered the stitches in their order.

Plain twisted bar (fig. 694).-Secure the thread to the braid and throw it across from one braid edge to the other, put the needle in downwards from above, and overcast the first thread, so as to form the two into a cord. If you do not make enough overcasting stitches to tighten the two threads, the bars will be loose and untidy and spoil the general appearance of the work.


Double twisted bar (fig. 695). -Throw three foundation threads across the space to be filled and overcast them loosely, so that they remain visible between the stitches.

Plain button-hole bar (fig. 696). -Throw three threads across and cover them with button-hole stitches, made from right to left.


Fig. 696. Plain
button-hole bar.
In making this and the subsequent bars, we recommend turning the needle round and holding it as it were the reverse way, so that the eye not the point passes first under the threads; strange as it may seem, it is easier in this manner to avoid splitting the threads. The working thread should always issue from the edge of the braid, one or two threads before the foundation threads of the bar, to prevent the bars being of unequal width, or getting twisted at the beginning.
Button-hole bars with pinned picots (figs. 697 and 698 ). After covering half, or a third of the bar with button-hole stitches, pass the thread without making a loop, under the foundation threads, and fasten the loop with a pin, fig. 697, then slip the needle, horizontally from right to left, under the 3 threads and tighten the knot close to the last button-hole stitch.


Fig. 697. ButtonHOLE BAR WITH PINNED PICOTS.


Fig. 698. Buttonhole bar with PINNED PICOTS.

Fig. 698 shows a picot made in the same manner, but with several button-hole stitches inserted between the loop and the button-holed bar.

Bar with lace picot (fig. 699).-Here the picot is made by bringing the thread out through the loop and beginning the buttonhole stitches, 4 or 5 in number, according to the size of the thread, quite close to the pin, so that they entirely cover the loop. The pin must be stuck in the width of 4 stitches, distant from the bar, and the foundation threads should be completely hidden under the bar.


Fig. 699. Bar WITH LACE PICOT.


Fig. 700. BAR with picot made in BULLION STITCH.

Bar with picot made in bullion stitch (fig. 700).-Put the needle halfway into the last button-hole stitch, twist the thread ten or twelve times round it from left to right, draw it through and tighten the thread, so that the spiral on the thread form a semicircle, then continue the bar (see also for the bullion stitch figs. 179 and 661).

Bar with button-hole picot (fig. 701).-Cover rather more than half the bar with button-hole stitches, carry the thread three times to the 6th stitch and back, then button-hole these threads that are attached to the bar in the same way as the bar itself and finish the bar in the usual way.

These button-hole picots are generally used for edging lace; they may in their turn be adorned with small pinned picots to produce a richer effect.


Fig. 701. Bar with button-hole PICOT.


Fig. 702. Bar WITH two rows of KNOTS.

Bar with two rows of knots (fig. $\mathbf{7 0 2}$ ).-Over two foundation threads, make double knots, far enough apart to leave room for the knots of the next row between.

These double knots consist, in the first place, of one plain button-hole stitch and then one reversed, that is, made by bringing the needle out in front of the thread and passing it under the loop; the result being that the thread will lie behind the thread and not before it, as in an ordinary button-hole stitch.

Branched bars (fig. 703).-Where you have a larger surface to cover with bars, you are generally obliged to make them with branches. For this purpose you prepare the threads as for an ordinary bar and cover them halfway with button-hole stitches; then you carry on the foundation thread to the next bar, button-hole it also halfway, lay the next foundation thread, and finally button-hole all the half-covered bars till you reach the dotted line, from whence you lay the last foundation threads.

The last bar is worked over 2 or 4 threads, so that the working thread can be taken back to the edge of the braid by means of the last button-hole stitches.


Fig. 703. Branched bars.


Fig. 704. Plain russian stitch.

Plain Russian stitch (fig. 704).-Stitches of all kinds can be used, as well as bars, for joining braids together that run parallel to each other, and for filling up the spaces between. These stitches, which serve as an insertion, are some of them very elementary, whilst others require great skill and patience to execute.
The simplest of all is the Russian stitch, which bears a great resemblance to the crossed stitch, shown in fig. 39, and the crossed back-stitch, fig. 176.

You pass the needle from left to right, under the edge of the braid, then again from right to left under the opposite edge, taking care always to leave the thread in front of the needle.

Twisted Russian stitch (fig. 705 $^{\text {) }}$.-Instead of passing the needle behind the thread, pass it before it and round it, so that the needle always comes out again beneath the thread, which will then be twice twisted.


Fig. 705. Twisted russian stitch.


Fig. 706. Column stitch.

Column Stitch (fig. 706).-At the bottom, the stitch is made like the plain Russian stitch, and at the top, like the one in fig. 705, with the difference that the second thread is passed three times round the first.

Insertion of single button-hole stitches (figs. 707 and 708).-Make very loose button-hole stitches along both edges of the braid, all the same size and the same distance apart, and vertically, opposite to each other.


Fig. 707. Insertion of single button-hole stitches.


Fig. 708. Insertion of plain buttonhole stitches.

When these two rows are finished, pick up each loop with Russian stitch, either single, fig. 704, or twisted, fig. 705. Fig. 708 shows the double Russian stitch made in each loop; it may be trebled or quadrupled, according to whether you wish your insertion to be very transparent or not.

Insertion with bead stitches (fig. 709).-Join the opposite rows of loops together by four stitches. The threads of these stitches must lie quite flat, side by side, and not one on the top of the other. After the fourth stitch, you wind the thread round the bottom loop and then carry it on to the next, whence you repeat the four stitches as above.


Fig. 709. Insertion with bead STITCHES.

Cluster insertion (fig. 710).-Over the middle of two finished plain bars and one half-finished one, a short distance apart, you make five button-hole stitches and overcast the remainder of the third bar. The first bar of the next cluster must be set quite close to the last.


Fig. 710. Cluster insertion.

Insertion with branches (figs. 711 and 712).-Throw the thread across the middle of the space between two edges of braid, and lengthways, from one end to the other, pass the needle horizontally under four or five threads of the braid, across the insertion; then carry it in a similar manner, first to the left and then to the right, take up the same number of threads of the braid and connect the three loops together by a knot, as is clearly shown in fig. 711 .


Fig. 711.
Insertion with plain branches.


Fig. 712.
Insertion with
branches and wheels.

Fig. 712 represents a similar beginning, and a similar interlacing of the threads, but ornamented this time with a wheel, added after the knot has been made over the loops.
Insertion with leaves in darning stitch (fig. 713).-Fasten on the thread where, according to the illustration, the first leaf in the insertion ought to come, carry it across to the opposite side, draw it through the edge of the braid and bring it back to the point whence it started, lay threads across to both sides, like in figs. 711 and 712 , unite them by a knot, such as described in fig. 711, lay the thread once more round the middle leaf, and finish the leaf in darning stitch, working downwards from the top, as described in the preceding chapter in figs. $\underline{646}$ and $\underline{647}$. As may be seen from the second middle leaf, your darning stitches have to be made over five threads, subdivided into two and three.


Fig. 713.
Insertion with LEAVES WORKED IN DARNING STITCH.

Insertion with small wheels (fig. 714).-Here, you have to make two rows of Russian stitches opposite each other and carry the thread to the point of intersection, then, you make a wheel over five threads and pass the needle under the completed wheel to reach the next point of intersection. Half wheels may also be added at the edge of the braid, as in figs. $\underline{658}$ and $\underline{659}$.


Fig. 715. Insertion with big wheels.
Insertion with big wheels (fig. 715).-Carry the thread horizontally across the middle of the space intended for the insertion, to the opposite side, and then conduct it by means of overcasting stitches into the corner; thence make a loose loop over to the opposite corner, pass the needle under six or eight threads of the braid edge, slip it under the horizontal thread first laid and behind the loop, and finish the stitch on the other side in the edge of the braid.
Throw the thread again across the empty space and over the first thread, bring your needle back to the middle, make a big wheel over four threads, passing each time under the same threads, then overcast the single thread, come back to the edge of the braid and make the second loop, bringing out the thread at the same place where the other stitches came out.

Insertion with cones (figs. $\underline{716}$ and $\underline{717 \text { ).-Over plain but very distended Russian stitch, make darning stitches backwards }}$ and forwards, beginning at the point and reaching to the middle, so as to form small cone-shaped figures.
To reach the point of the next cone you overcast the thread of the Russian stitch several times.
You may also, as in fig. 717, double the Russian stitch and make the darning stitches in such a manner that the points of the cones touch each other and their bases meet the edge of the braid. The same thing, worked the reverse way, that is, with the points turned outwards to the edge, produces a not less pretty effect.


Fig. 716. Insertion with cones.


Fig. 717. Insertion with cones.

Insertion with embroidered squares (fig. 718).-After making rows of loose button-hole stitches along the braid edges, as in figs. $707,708,709$, run a thread through the button-hole stitches; this thread serves as the foundation to the Russian stitches by which the two edges are joined together. The empty square space left between the Russian stitches is then filled up with button-hole stitches, like those in fig. 651, in the foregoing chapter.


Fig. 718. Insertion with EMBROIDERED SQUARES.
Insertion with half bars (fig. 719).-Fasten on the thread in one of the corners of the braid and conduct it by means of overcasting stitches to the middle of the insertion, draw it through the edge of the braid on the right and make button-hole stitches over it, to the middle of the space to be filled, then carry the thread to the left, draw it through the left edge, a little higher up than on the other side, and make the same number of stitches over it as over the first. You can vary this insertion with very good result by making more stitches on one side than on the other, but it should never be more than 10 or 12 stitches wide.


Fig. 719.
Insertion with
half bars.
Plain net stitch. First lace stitch (fig. 720). - Make rows of button-hole stitches to and fro, loose enough to form loops into which the stitches of each subsequent row are set. You must be careful to make the same number of stitches in all the spaces that are of the same size, and also, when you begin a row with a whole stitch, to begin the return row with a half, and so on, in regular rotation.
The number of stitches should vary with the width of the pattern and the decreasing and increasing should always be done at the edge.

The loops must be as many threads of the braid edge long, as they are wide.


Fig. 720. Plain net stitch. First lace stitch.


Fig. 721. Double net stitch. Second lace stitch.

Double net stitch. Second lace stitch (fig. 721).-You leave the same distance between the stitches here as in the preceding figure, but in each of the loops of the first row, you must make two button-hole stitches close together. It is as well to round the loop a little less than is usually done in net stitch.
Third lace stitch (fig. 722).-Here, you make three button-hole stitches close together, joined to the next three by a loop of thread, just long enough to hold the three button-hole stitches of the subsequent row.


Fig. 722. Third lace stitch.


Fig. 723. Fourth lace stitch.

Fourth lace stitch (fig. 723).-Working from left to right, make two button-hole stitches rather near together, and leave twice as long a loop between them and the next two stitches as between the two first.
In the next row, which is worked from right to left, make one stitch in the loop between the two stitches that are close together and three or four in the long loop.

Fifth lace stitch (fig. $\mathbf{7 2 4}$ ).-As in fig. 723, you begin this stitch from left to right, but making three stitches very close together with an intermediate loop as long as the three stitches in one.

In the second row, you make one button-hole stitch in each of the loops between the three stitches and six or eight in the long intermediate loop.


Fig. 724. Fifth lace stitch.


Fig. 725. Sixth lace stitch.

Sixth lace stitch (fig. 725).-Over wide loops, made from left to right in the first row, make in the second, enough button-hole stitches entirely to cover the thread.

In the third row of stitches, put the needle into the small loop between two sets of button-hole stitches, so that the close stitches shall form vertical lines across the surface they cover.
This stitch admits of every sort of modification, such as, for instance, making the third row of stitches on the button-hole stitches, in the middle of the ones on the small loop; or making one row of close stitches first, and then three open rows; in the former case you should always make an uneven number of button-hole stitches, so that you have the same number on both sides of the needle, which you must put in between the two threads that form the middle button-hole stitch.

Seventh lace stitch (fig. 726).-Begin, working from right to left, by making one row of pairs of button-hole stitches, a very short distance apart; in the second row you make one button-hole stitch between each of these pairs, and in the third row, two button-hole stitches in every long loop. Here, the stitches must not be crowded together but have a small gap left between them.


Fig. 726. Seventh lace stitch.


Fig. 727. Eighth lace stitch.

Eighth lace stitch (fig. 727).-This stitch is generally known as the "pea-stitch" on account of the holes occasioned by the different distribution of the stitches.

The first row consists of stitches, set rather closely together, and all the same distance apart. In the second row, you make one button-hole stitch in the last stitch of the first row, then, missing two loops and three button-hole stitches, you make two stitches in the next loops and so on. In the third row, you make three stitches in the big loop, and one in the loop between the stitches of the second row.
Ninth, and tenth lace stitch (figs. 728 and 729 ).—Both, the small and the big pointed groups of stitches, begin with a row of close button-hole stitches.


Fig. 728. Ninth lace stitch.


Fig. 729. Tenth lace stitch.

Fig. 728 requires three rows; in the second you miss two stitches and make two in the next loops; in the third, only one stitch is introduced between the two loops of the lower row.
Fig. 729 requires five rows. The stitches of the first must be set as closely together as possible; in the second row you make four stitches and miss two of the first row, in the third row you make three stitches, in the fourth, two and in the fifth, one only. The long loops of the last row must not be too slack so that the first stitches of the next scallop may quite cover them.
Eleventh lace stitch (fig. $\underline{730}$ ).-This stitch is not really more difficult to work than those we have been describing, but requires rather more attention to learn.
The first row consists of plain net stitches; in the second, you have three button-hole stitches in the middle net stitch; in the third, three button-hole stitches in the whole loops on either side of the three button-hole stitches of the second row, and one stitch in the half loops that precede and immediately follow them; the fourth row is similar to the second.
In the fifth row the close stitches are changed. The three button-hole stitches are made in the third whole loop, before and after those of the fourth row, so that between two groups of three stitches you have six single button-hole stitches and seven loops.


Fig. 730. Eleventh lace Stitch.


Fig. 731. Twelfth lace stitch.

Twelfth lace stitch (fig. 731).-Fasten on your thread, take it by overcasting stitches over the braid edge, half a c/m. from the corner, and make three button-hole stitches downwards, quite close together. The next loops, over four or six threads of the braid, must be left long enough to be on a level with the first stitch reaching downwards from the edge.
In the second row, you cover the long loops with three button-hole stitches and draw the intervening thread quite tight.
The third row is like the first, with the difference, that you put the needle in between the two threads of the button-hole stitch, instead of through the loops.
Thirteenth lace stitch (fig. 732). -The stitch here represented, as well as the two next ones are looped from left to right and then again from right to left.

As it is more unusual to make the loops from left to right than the reverse way, the proper position of the needle and the
course of the thread are shown in the illustrations.
Fig. 732 requires, in the first place, two button-hole stitches very close together in the edge of the braid, then a third stitch covering the two first stitches and set quite close to them; the connecting thread between these stitches must be tightly stretched so as to lie almost vertically, that the stitches may form straight lines.


Fourteenth lace stitch (fig. 733). - This begins, likewise, with two button-hole stitches, above which you make two buttonhole stitches instead of one, as in fig. 732, producing an open ground with vertical bars.
Fifteenth lace stitch (fig. 734).-This resembles the two foregoing stitches and consists of three button-hole stitches, made over the edge of the braid or the intermediate bars, and joined together afterwards under one transverse stitch.


Fig. 734. Fifteenth lace STITCH.


Fig. 735. Sixteenth lace stitch.

Sixteenth lace stitch (fig. 735).-You begin this by a row of net stitches worked from right to left, or as the engraving shows, by a row of stitches called «seed stitches».
The second row, worked from left to right, consists of short bars, set slanting and shaped like a seed, and made the same way as the picot in fig. 699. The first stitch is carried through the loop of the row below, the second over both threads and far enough from the loop to leave room for three other stitches. The first of the four button-hole stitches of the next group must be set quite close to the last.

Seventeenth lace stitch (fig. 736).-Here we have the same pattern as the preceding one without the row of net stitches; the engraving shows us at the same time, the proper direction of the needle and thread for the row that is worked from right to left.


Eighteenth lace stitch (fig. 737).—This is the first of a series of lace stitches, often met with in old Venetian lace, and which can therefore with perfect right be called, Venetian stitches.
Owing to the manner and order in which the rows of stitches are connected and placed above one another, they form less transparent grounds than those we have hitherto described.

In these grounds you begin by making the row of loops, then you throw a thread across on the same level and in coming back, pass the needle through the row of loops under the thread stretched across, and under the stitch of the previous row.
Nineteenth lace stitch (fig. 738). -The close stitch here represented is more common in Venetian lace than the loose stitch given in fig. 737.


Twentieth lace stitch (fig. 739).-By missing some loops of the close ground in one row and replacing them by the same number in the next, small gaps are formed, and by a regular and systematic missing and taking up of stitches, in this way, extremely pretty grounds can be produced.

Twenty-first lace stitch (fig. 740). -These close lace stitches, can be varied in all sorts of other ways by embroidering the needle-made grounds.
In fig. 740 , you have little tufts in darning stitch, and in a less twisted material than the close stitches of the ground, worked upon the ground.

If you use Fil à dentelle D.M.C (lace thread) for the ground, you should take either Coton à repriser D.M.C (darning cotton), or better still, Coton surfin D.M.C[A] for the tufts. The ground can also be ornamented with little rings of button-holing, stars or flowerets in bullion or some other fancy stitch.


Fig. 740. Twenty-first lace STITCH.


Fig. 741. Twenty-second lace STITCH.

Twenty-second lace stitch (fig. 741).-For the above three stitches and the three that follow, the work has to be held, so that the finished rows are turned to the worker and the needle points to the outside of the hand. In the first row, from left to right, take hold of the thread near the end that is in the braid, lay it from left to right under the point of the needle, and bring it back again to the right, over the same. Whilst twisting the thread in this way round the needle with the right hand, you must hold the eye of the needle under the left thumb.
When you have laid the thread round draw the needle through the loops; the bars must stand straight and be of uniform length. Were they to slant or be at all uneven, we should consider the work badly done.

In the row that is worked from left to right, the thread must be twisted round the needle, likewise from left to right.
Twenty-third lace stitch (fig. 742). -This is begun with the same stitches as fig. 741, worked from right to left. You then take up every loop that comes between the vertical bars with an overcasting stitch, drawing the thread quite out, and tightening it as much as is necessary after each stitch. You cannot take several stitches on the needle at the same time and draw out the thread for them all at once, as this pulls the bars out of their place.


Fig. 742. Twenty-third lace STITCH.


Fig. 743. Twenty-fourth lace stitch

Twenty-fourth lace stitch (fig. 743).-This is often called the Sorrento stitch.
Every group of three bars of stitches is separated from the next by a long loop, round which the thread is twisted in its backward course. In each of the succeeding rows you place the first bar between the first and second of the preceding row, and the third one in the long loop, so that the pattern advances, as it were in steps.

Twenty-fifth and twenty-sixth lace stitches (figs. 744 and $\underline{745}$ ).-These two figures show how the relative position of the groups of bars may be varied.


Fig. 744. Twenty-fifth lace STITCH.


Fig. 745. Twenty-sixth lace STITCH.

Both consist of the same stitches as those described in fig. 741. The thread that connects the groups should be tightly stretched, so that the rows may form straight horizontal lines.

Twenty-seventh lace stitch (fig. 746).—Begin by making two rows of net stitches, fig. 720, then two of close ones, fig. 738, and one row like those of fig. 741.

If you want to lengthen the bars, twist the thread once or twice more round the needle. You can also make one row of bars surmounted by wheels, as shown in fig. 765 , then one more row of bars and continue with close stitches.


Fig. 746. Twenty-seventh lace stitch.


Fig. 747. Twenty-eighth lace stitch.

Twenty-eighth lace stitch (fig. 747).-Between every group of three bars, set close together, leave a space of a corresponding width; then bring the thread back over the bars, as in figs. $\underline{737}, \underline{738}$ and $\underline{739}$, without going through the loops. In the second row, you make three bars in the empty space, two over the three bars of the first row and again three in the next empty space. The third row is like the first.
Twenty-ninth lace stitch (fig. 748). -This stitch, known as Greek net stitch, can be used instead of button-hole bars for filling in large surfaces.

Make bars from left to right, a little distance apart as in fig. 741, leaving the loops between rather slack, so that when they have been twice overcast by the returning thread, they may still be slightly rounded. In the next row, you make the bar in the middle of the loop and lift it up sufficiently with the needle, for the threads to form a hexagon like a net mesh.


Fig. 748. Twenty-ninth lace STITCH.


Fig. 749. Thirtieth lace stitch.

Thirtieth lace stitch (fig. 749). After a row of pairs of button-hole stitches set closely together, with long loops between, as long as the space between the pairs, throw the thread across in a line with the extremities of the loops, fasten it to the edge of the braid and make pairs of button-hole stitches, as in the first row above it.
The loops must be perfectly regular, to facilitate which, guide lines may be traced across the pattern, and pins stuck in as shown in the figure, round which to carry the thread.

Thirty-first lace stitch (fig. 750).-At first sight this stitch looks very much like the preceding one, but it differs entirely from it in the way in which the threads are knotted. You pass the needle under the loop and the laid thread, then stick in the pin at the right distance for making the long loop, bring the thread round behind the pin, make a loop round the point of the needle, as shows in the engraving, and pull up the knot.


Fig. 750. Thirty-first lace stitch.


Fig. 751. Thirty-second lace stitch.

Thirty-second lace stitch (fig. 751).-To introduce a greater variety into lace stitches, netting can also be imitated with the needle. You begin with a loop in the corner of a square and work in diagonal lines. The loops are secured by means of the same stitch shown in fig. 750, and the regularity of the loops ensured, as it is there, by making them round a pin, stuck in at the proper distance. The squares or meshes must be made with the greatest accuracy; that being the case, most of the stitches described in the preceding chapter can be worked upon them, and the smallest spaces can be filled with delicate embroidery.

Thirty-third lace stitch (fig. 752). -This stitch is frequently met with in the oldest Irish lace, especially in the kind where the braids are joined together by fillings not bars. At first sight, it looks merely like a close net stitch, the ground and filling all alike, so uniform is it in appearance, but on a closer observation it will be found to be quite a different stitch from any of those we have been describing.
The first stitch is made like a plain net stitch, the second consists of a knot that ties up the loop of the first stitch. Fillings of this kind must be worked as compactly as possible, so that hardly any spaces are visible between the individual rows.


Fig. 752. Thirty-third lace STITCH.


Fig. 753. Thirty-Fourth lace STITCH.

Thirty-fourth lace stitch (fig. 753).-To fill in a surface with this stitch, known as the wheel or spider stitch, begin by laying double diagonal threads to and fro, at regular distances apart, so that they lie side by side and are not twisted. When the whole surface is covered with these double threads, throw a second similar series across them, the opposite way. The return thread, in making this second layer, must be conducted under the double threads of the first layer and over the single thread just laid, and wound two or three times round them, thereby forming little wheels or spiders, like those already described in the preceding chapter in figs. $\underline{653}$ and 654.

Thirty-fifth lace stitch (fig. 754).-Begin by making a very regular netted foundation, but without knots, where the two layers of threads intersect each other.
Then, make a third layer of diagonal threads across the two first layers, so that all meet at the same points of intersection, thus forming six rays divergent from one centre. With the fourth and last thread, which forms the seventh and eighth ray, you make the wheel over seven threads, then slip the needle under it and carry it on to the point for the next wheel.


Fig. 754. Thirty-fifth lace stitch.


Fig. 755. Thirty-sixth lace stitch.

Thirty-sixth lace stitch (fig. 755).-After covering all the surface to be embroidered, with threads stretched in horizontal lines, you cover them with loops going from one to the other and joining themselves in the subsequent row to the preceding loops.

The needle will thus have to pass underneath two threads. Then cover this needle-made canvas with cones worked in close darning stitches, as in figs. $\underline{648}, \underline{716}$ and 717.

Thirty-seventh lace stitch (fig. 756).-Here, by means of the first threads that you lay, you make an imitation of the Penelope canvas used for tapestry work, covering the surface with double threads, a very little distance apart, stretched both ways. The second layer of threads must pass alternately under and over the first, where they cross each other, and the small squares thus left between, must be encircled several times with thread and then button-holed; the thicker the foundation and the more raised and compact the button-holing upon it is, the better the effect will be. Each of these little button-holed rings should be begun and finished off independently of the others.


Thirty-eighth lace stitch (fig. 757).-Plain net stitch being quicker to do than any other, one is tempted to use it more frequently; but as it is a little monotonous some openwork ornament upon it is a great improvement; such for instance as small button-holed rings, worked all over the ground at regular intervals. Here again, as in the preceding figure the rings must be made independently of each other.

Thirty-ninth lace stitch (fig. 758).-Corded bars, branching out into other bars, worked in overcasting stitches, may also serve as a lace ground.

You lay five or six threads, according to the course the bars are to take; you overcast the branches up to the point of their junction with the principal line, thence you throw across the foundation threads for another branch, so that having reached a given point and coming back to finish the threads left uncovered in going, you will often have from six to eight short lengths of thread to overcast.

Overcasting stitches are always worked from right to left.


Fig. 758. Thirty-ninth lace STITCH.


Fig. 759. Fortieth lace STITCH.

Fortieth lace stitch (fig. 759).-Of all the different kinds of stitches here given, this, which terminates the series, is perhaps the one requiring the most patience. It was copied from a piece of very old and valuable Brabant lace, of which it formed the entire ground. Our figure of course represents it on a very magnified scale, the original being worked in the finest imaginable material, over a single foundation thread.

In the first row, after the three usual foundation threads are laid, you make the button-hole stitches to the number of eight or ten, up to the point from which the next branch issues, from the edge of the braid, that is, upwards.

Then you bring the needle down again and button-hole the second part of the bar, working from right to left.
A picot, like the one described in fig. 701, marks the point where the bars join. More picots of the same kind may be added at discretion.

Wheel composed of button-hole bars (figs. $\underline{760}, \underline{761}, \underline{762}, \underline{763}$ ).-As we have already more than once given directions for making wheels, not only in the present chapter, but also in the one on netting, there is no need to enlarge on the kind of stitches to be used here, but we will explain the course of the thread in making wheels, composed of button-hole bars in a square opening.


Fig. 760. Wheel composed of button-hole bars. Making and TAKING UP THE LOOPS.


Fig. 761. WhEEL COMPOSED OF button-hole bars. The buttonHOLING BEGUN.

Fig. 760 shows how the first eight loops which form the foundation of the bars are made.
In fig. 761 you will see that a thread has been passed through the loops, for the purpose of drawing them in and making a ring in addition to which, two threads added to the loop serve as padding for the button-hole stitches; the latter should always be begun on the braid side. Fig. 762 represents the bar begun in fig. 761 completed, and the passage of the thread to the next bar, and fig. 763 the ring button-holed after the completion of all the bars.


Fig. 762. Wheel composed of button-hole bars. Passing from one bar to the other.


Fig. 763. Wheel composed of BUTTON-HOLE BARS. BARS AND RING FINISHED.

Filling in round spaces (figs. $764, \underline{765}, \underline{766}$ ).-The stitches best adapted for filling in round spaces are those that can be drawn in and tightened to the required circumference, or those that admit of the number being reduced, regularly, in each round.


Fig. 764. Filling in a round space WITH NET STITCH.

In tacking braids on to circular patterns, the inside edges, as we pointed out at the beginning of this chapter, have to be drawn in with overcasting stitches in very fine thread.
Fig. 764 shows how to fill in a round space with net stitches. It will be observed that the loop which begins the row, has the thread of the loop with which it terminates, wound round it, which thread then passes on to the second series of stitches. In the same manner you pass to the third row after which you pick up all the loops and fasten off the thread by working back to the braid edge over all the rows of loops, following the course indicated by the dotted line.


Fig. 765. Filling in round spaces. First circle of wheels begun.


Fig. 766. Filling in round spaces.
The two circles of wheels finished.

Fig. 765 shows how to finish a row of loops with wheels worked upon three threads only. In the first row, you make a wheel over each bar; in the second, you make a bar between every two wheels; in the third, the wheels are only made over every second bar; a fourth row of bars which you pick up with a thread completes the interior of the circle, then you work along the bars with overcasting stitches, fig. 766, to carry the thread back to the edge of the braid where you fasten it off.
Needle-made picots (figs. $767,768,769$ ). -The edges and outlines of Irish lace are generally bordered with picots, which as we have already said can be bought ready-made (see fig. 692). They are not however very strong and we cannot recommend them for lace that any one has taken the pains to make by hand.


Fig. 767. Connected needle-made picots.
In fig. $\underline{767}$, the way to make picots all joined together is described. You begin, as in fig. 762 , by a knot, over which the thread is twisted as indicated in the engraving.

It is needless to repeat that the loops should all be knotted in a line, all be of the same length and all the same distance apart.
Fig. 768 represents the kind of needle-made picots which most resemble the machine-made ones, and fig. 769 show us the use of little scallops surmounted by picots, made in bullion stitch.


Fig. 768. Isolated needle-made Picots.

One or two rows of lace stitch fig. $\underline{736}$, or the first rows of figs. $\underline{749}, \underline{750}$, can also be used in the place of picots.


Fig. 769. Button-hole picots with PICOTS IN BULLION STITCH.

Irish lace (fig. 770). - English braids or those braids which are indicated at the foot of the engraving must be tacked down on to the pattern and gathered on the inside edge, wherever the lines are curved, as explained in fig. 693; in cases however where only Lacet superfin D.M.C[A] is used, the needle should be slipped in underneath the outside threads, so that the thread with which you draw in the braid be hidden.


Fig. 770. Irish lace.

The braids are joined together where they meet with a few overcasting stitches, as shown in the illustration.
Here, we find one of the lace stitches used instead of picots; the first row of fig. $\underline{736}$ always makes a nice border for Irish lace.
Irish lace (fig. 771).-This pattern, which is more complicated and takes more time and stitches than the preceding one, can also be executed with one or other of the braids mentioned at the beginning of the chapter; but it looks best made with a close braid.


Fig. 771. Irish lace.
Materials: Lacet surfin D.M.C No. 5, white or écru and Fil d'Alsace D.M.C Nos. 40 to 150, or Fil à dentelle D.M.C Nos. 50 to 150.

The bars, which in the illustration are simply button-holed may also be ornamented with picots of one kind or another; the interior spaces of the figure on the left can be filled, instead of with corded bars, with one of the lace stitches we have described, either fig. $\mathbf{7 2 0}, \underline{721}$, or $\underline{732}$, any one of which is suitable for filling in small spaces like these.
In the figure on the right, the ring of braid may be replaced by close button-hole stitches, made over several foundation threads or over one thick thread, such as Fil à pointer D.M.C No. 10 or $20^{[A]}$ to make them full and round.

You begin the ring on the inside and increase the number of stitches as the circumference increases.
Any of the stitches, from fig. 720 to fig. 743, can be introduced here.
Irish lace (fig. 772).-Here we find one of the fillings above alluded to, fig. 751, used as a ground for the flowers and leaves. For the design itself some of the closer stitches described in this chapter, should be selected. When the actual lace, is finished you sew upon the braid a thin cord, made of écru Cordonnet 6 fils D.M.C, as described in the chapter on different kinds of fancy work. Cords of this kind can be had ready made, but the hand-made ones are much to be preferred, being far softer and more supple than the machine-made.


Fig. 772. Irish lace.
Materials: English braid with open edge.-For the lattice work: Fil d'Alsace D.M.C in balls Nos. 50 to 100 or Fil à dentelle D.M.C Nos. 50 to 100, white. For the cord: Cordonnet 6 fils D.M.C No. 15,
écru.[A]

Irish lace (fig. 773).-This lace, more troublesome than the preceding ones to make, is also much more valuable and effective. The ground is composed entirely of bars, like the ones described in fig. 761, the branches, true to the character of the work are worked in the close stitch represented in fig. 755, and the flowers in double net stitch, fig. 721.


Fig. 773. Irish lace.
Materials-For the cord: Cordonnet 6 fils D.M.C Nos. 15 to 25. For the bars and lace stitches: Fil à dentelle D.M.C No. 200.[A]

In working the above fillings, the thread must not, as in lace made with braid, be carried on from one point to the other by overcasting stitches along the braid edges, but should be drawn out horizontally through the cord and back again the same way, giving the needle in so doing a slightly slanting direction.

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## FOOTNOTES:

[A] See at the end of the concluding chapter, the table of numbers and sizes and the list of colours of the D.M.C threads and cottons.


Venetian lace of the xvi century.

## Laces of different kinds.

In general, to the uninitiated, the word «lace» signifies exclusively the delicate and elaborate fabrics that owe their origin to Venice and the Netherlands and were thence imported into other countries. But besides Venetian, French, English, Chantilly, Brussels, Sedan point, names familiar to every one, there are all kinds of other laces, likewise of great antiquity, and named as the above are, after the country they belong to.

As it would be impossible in these pages to give a comprehensive account of them all, we have restricted ourselves to such as seem more especially suited to the amateur, to whom needlework is a mere recreation and pastime.

Worked like the above-named entirely with the needle, but much less elaborate and minute in character and workmanship, they are quicker and easier to make and we are sure that by the help of the directions that accompany the illustrations, any careful worker will be able to imitate them without difficulty.

Materials.-It will be observed that we do not bind ourselves in the following directions to one size of cotton, that as in point of fact, one and the same piece of work can be executed in either fine or coarse cotton, we have only indicated the most suitable kind of material to use: as for instance for Armenian lace, Fil à pointer D.M.C ${ }^{[A]}$ or Cordonnet 6 fils D.M.C[A], for Smyrna or knotted lace, Fil à pointer D.M.C, Cordonnet 6 fils D.M.C and Fil à dentelle D.M.C[A], for Reticella and Venetian lace, Fil d’Alsace D.M.C[A], for Brussels lace, the finest numbers of Fil à dentelle and for pillow lace, any one of those enumerated, excepting Coton à broder surfin.
Materials Pillow lace and the necessary articles for its manufacture.-Pillow lace derives its name from the cushion or pillow on which all bobbin lace is made, which distinguishes it from point lace, so-called because it consists of «points» or stitches made with a needle and thread.

Various articles are required for the making of pillow lace; in the first place a cushion or pillow, then bobbins and a winder, parchment patterns, pins and a pricker.
The lace pillow (figs. $\underline{774}, \underline{775}, \underline{776}$ ). -The pillows used for pillow lace are of different kinds and vary in shape with where the country, and the manner in which the lace is made.


Fig. 774. The lace pillow.
Fig. 774 represents the shape in use in the mountains of Bohemia and Saxony, where pillow lace has always been one of the chief industries of the inhabitants. Any one can make a cushion of this kind themselves with a piece of stuff, $60 \mathrm{c} / \mathrm{m}$. long and 40 wide. The long sides are firmly sewn together and the short ones turned in with a narrow hem through which you run a cord to draw them up. A disc of stout cardboard is put inside the case after you have gathered up the one end; you then stuff the case as full as possible with bran, sawdust or horsehair, lay a second disc of cardboard in at the top and draw up the other end.

These pillows are then put into cardboard boxes with rather high sides, or into a kind of basket, weighted at the bottom, to keep it firm and steady. Pillows of this most primitive kind have the great advantage of being perfectly easy to make.
Fig. 775 represents a pillow of a more complicated kind, which can be stood upon the table or mounted on a stand. The cylinder is movable so that you can go on working without interruption.


Fig. 775. Pillow with movable cylinder for making lace.
The whole apparatus consists of a board or stand, $50 \mathrm{c} / \mathrm{m}$. long and 40 wide, resting upon two transverse pieces of wood, $31 / 2$ $\mathrm{c} / \mathrm{m}$. high behind and $1 \mathrm{c} / \mathrm{m}$. in front.

The board should be covered, first with a very thick flannel or Bath coating and then with a fine dark green flannel or cloth. Two small supports are fixed on to the outside edge of the stand to hold the cylinder, which consists of two discs that revolve on a rod about $22 \mathrm{c} / \mathrm{m}$. long.
This rod should be covered, in the first place with a thick layer of tow and then with flannel or cloth.
On the left side of the cylinder is a cog-wheel and a metal spring is attached to the board, by means of which the wheel is prevented from turning the wrong way.

Fig. 776 shows how the bobbins are placed upon the pillow. In Normandy a kind of stuffed box is used instead of a pillow. The board is $3 \mathrm{c} / \mathrm{m}$. higher behind than in front and is deeply grooved to hold the cylinder, which is stuffed and shaped like the one represented in fig. 775 .


Fig. 776. Position of the bobbins and the work on the CUSHION FIG. 775.

This cylinder scarcely projects above the stand, a second groove in the back edge receives the lace as it is worked off the cylinder.
The pillows used for Valenciennes lace are of again a different construction, but as it is not our intention in the present work to describe the finer kinds of lace it appeared superfluous to give any illustration of the pillows on which they are made.
The bobbins (fig. 777).-A bobbin is a sort of little wooden spool with a handle to it; there are several varieties of them but we have confined ourselves to a representation of the kind considered best for beginners.


Fig. 777. The bobbin (Jamnig's patent).
As a considerable number are wanted for every pattern and they are apt to slip about and get entangled in inexperienced hands, they are now to be had with the handles weighted with lead to steady them and counteract any independent motion of their own. We cannot help again laying great stress on the importance of seeing that the size of the bobbins and the number of the cotton be well assorted to the kind of lace.
The winder (fig. 778).-Every one who means to take the work seriously should provide themselves with a winder, as here represented, which is affixed to a polished wooden stand.
This stand has to be firmly screwed to the table and the bobbin is squeezed in between the two little rods fitted into the supports at the left end of the stand; one of these rods serves as the axle to the little wheel, the other can be drawn in and out and fitted to the length of the bobbin.


Fig. 778. The winder (Jamnig's patent).
When the bobbin is fixed in its place, you take the thread in the left hand and wind it round it, turning the wheel with the right hand from right to left in the direction indicated by the arrow.
The thread is wound round the handles of the bobbins that are used for making very fine lace, and a wooden shield that is so contrived that you can slip it over the handle prevents the thread from getting soiled.
Stoppage of the thread at the end of the bobbin (fig. 779).-After cutting off the thread, you make a loop close to the top of the bobbin to prevent it from unwinding too easily. This loop is formed by taking the bobbin in the right hand, the thread between the fourth and fifth fingers of the left hand and laying it away from you round the left thumb; then lifting up the bottom thread with the second finger of the left hand you pass the bobbin upwards from below through the loop on the left hand.


Fig. 779. Stoppage of the thread at the end OF THE BOBBIN.

Machine for crossing the threads (fig. 780).-This ingenious little machine is of great assistance in making straight running patterns and Irish lace braids, and is particularly useful for Russian lace and braid lace of all kinds.
It renders the even crossing of the threads in those parts of a pattern that imitate linen in texture comparatively easy.
Two implements like combs, fitting into one another, and movable, are mounted at two thirds of their length on a steel axle. The long teeth have holes bored through the ends, from the sides to the middle of the points and through these holes the threads from the bobbins are passed.


Fig. 780. Machine for crossing the threads (Jamnig's patent).

The short teeth also are pierced with transverse holes, through which a needle with the threads threaded in the long teeth resting upon it, is passed. The points of the short teeth are covered with a hollow metal cylinder, split through from end to end, which can be removed when new threads have to be added.
When the threads are all on, a small spring is fixed to the two ends of the axle, which is independent of the machine, and the two ends of the spring are introduced into the hollow of the cylinder.

By the pressure you exercise on the teeth in the cylinder, the long teeth change their position, the lower ones rise and the upper ones fall and the threads cross each other, as in a loom. After each movement of the machine, the bobbin that makes the woof must be passed between the crossed threads; the edges are made like those of any other kind of lace.
Fig. 781 explains how the bobbins are passed between the threads that are held between the teeth of the machine.


Fig. 781. Passage of the bobbins through the machine.
The pattern.-The pattern is one of the most important things in making pillow lace.
The outlines must be clear and exact, as upon that in great measure the perfection of the lace depends.
The drawing transferred to parchment, paper or cardboard, usually of a yellowish tint, should be lined with a very thin stuff such as muslin to prevent its tearing.
A stripe of quadrille, or point paper as it is called, should be laid upon the pattern and then holes pricked with a medium-sized needle at every intersection of the lines.

All the curved long lines of the pattern must first be traced upon the point paper with ink and then pricked.
The pattern should be adapted to the thickness of the thread the lace is to be made of; for a coarse lace large point paper should be used and small, for the finer kinds of lace. The pricking of the pattern beforehand is particularly important in the case of the common torchon lace, where the real beauty of the design consists in its regularity; in the case of fine close patterns the pricking can only be done as you proceed.

Prickers and holders of the kind represented in fig. 782 or very much resembling it, are to be had at every stationer's shop.


## Fig. 782. Pricker and holder.

The holes made by the prickers are to receive the pins, stuck in as you go along, round which you form and by which these are kept in their place.
The pins must be long, with round heads and of a size suited to the thread. When your pattern is ready fasten it to the pillow or cylinder as the case may be, stretching it as smoothly as possible and being careful in so doing to fit the lines of the pattern together. If it be too long it must be cut to the required length or you may make the cylinder bigger by wrapping several folds of flannel round it.
The value of lace depends not only on the work but on the thread it is made of; all the D.M.C cottons ${ }^{[A]}$ can be recommended for lace-making and coloured laces of all kinds are greatly improved by the addition of a little Chiné d'or D.M.C or Or fin D.M.C pour la broderie.[A]
Position and movements of the hands (fig. 783).-Pillow lace is always made with two pairs of bobbins at once and the «stitches» are formed by the different ways of passing, plaiting, crossing and twisting the threads.

Fig. 783. Position and movements of the hands.
To begin with the simplest operation, making a plait, hang 2 pairs of bobbins to a pin, take 2 bobbins in each hand and lay the right bobbin of each pair over its left fellow and draw up the threads slightly. Then take the bobbins in the 2nd, 3rd and 4th fingers of the right hand and with the same fingers of the left, lay the 2nd bobbin over the 3rd with the 2nd and 3rd fingers of the left, so that the two middle bobbins are crossed, then take the 4th bobbin in the 2nd and 3rd fingers of the right hand and the bobbin that is now the 2nd, in the 3rd and 4th fingers of the left hand and lay the former over the 3rd, the latter over the 1 st. This constitutes a «half passing».

The plait, fig. 784, is formed by the repetition of the half passing. Two half passings make a whole or «double passing».
On the kind of lace you are making, depends how many pairs of bobbins you will have to use. But as one part of the lace is often made before the other, or you have to put on supernumerary bobbins, you fasten up those not in use on one side with pins, as shown in fig. 783.


Fig. 784.
Passing
with two
pairs of
bobbins.
Net pattern or ground (figs. 785 and $\underline{786}$ ). -This consists of half passings, worked in rows to and fro; the pins are stuck in at the end of each row.

The pattern, fig. 785 , is fastened upon the pillow and 6 pins are stuck in at the top, at regular intervals from each other; hang one pair of bobbins on every pin and lay the second bobbin of each pair over its fellow, so that the threads cross each other.


Fig. 785. Pattern for net passings.
1 half passing with the 1 st and 2 nd pair = lay the 1 st pair aside $=1$ half passing with the 2 nd and 3rd pair = lay the 2 nd pair aside $=1$ half passing with the 3rd and 4th pair = lay the 3rd pair aside $=1$ half passing with the 4 th and 5th pair = lay the 4 th pair aside $=1$ half passing with the 5 th and 6 th pair $=$ stick in a pin at point 2 , then work back from right to left $=$ surround the pin with a half passing made with the 5 th and 6 th pair = lay the 6th pair aside $=1$ half passing with the 5th and 4 th pair = lay the 5 th pair aside $=1$ half passing with the 4 th and 3rd pairs = lay the 4 th pair aside $=1$ half passing with the 3rd and 2nd pair = lay the 3rd pair aside $=1$ half passing with the 2 nd and 1 st pair $=$ stick in a pin at point 3 and repeat from the beginning.

Fig. 786 shows the net ground completed; the thread that runs to and fro, to make it more clear, is represented in a darker shade than the others.

Before proceeding further, it is as well to prepare our readers for the many trials they will have to make, even with the help of the most minute explanations, before they succeed in carrying out the directions; for the whole art of making pillow lace lies in a manual dexterity, only attainable by practice.


Fig. 786. Net ground. Completed.

Even copying the patterns from description is only possible at first in a qualified sense; the surest way of attaining a satisfactory result is by constantly comparing the drawing and the work in progress and wherever the latter does not correspond with the former, trying at once to rectify the difference.
Linen or cloth ground.-The pattern used for net passing can also be used for linen passing or ground but 7 pins, instead of 6 , have to be stuck in at the top first. As in net passing, you work first from left to right, running 2 threads to and fro in perfectly horizontal lines, so as to produce a ground resembling linen in its texture.
The threads that run to and fro are held at the edge with pins and changed by a half passing, so that the one that was first in going, is first also in returning.
The use of the machine for crossing the threads is especially to be recommended in working linen ground; by pressing the short branches of the machine, the position of the threads is changed and the bobbin is pushed through; by a second pressure the second bobbin is driven through, the pin is stuck in for the picot or the cord, when the bobbins are taken back again, four movements being thus all that is required.
Plain hole ground (figs. 787 and 788).-Hole ground can be worked in various ways; we will begin by describing the plain hole ground, which as a rule forms the ground of all torchon laces. After fixing the pattern, as represented in fig. 787, upon the pillow, stick in 5 pins, hang 2 pairs of bobbins on to each and throw the 2 nd bobbin of each pair over its fellow $=1$ half passing with the 2 nd and 3 rd pairs $=$ put up a pin at point $1=1$ half passing with the same pair $=$ this encloses the pin $=$ lay the 3rd pair aside $=1$ half passing with the 2 nd and 1 st pair $=$ put up a pin at point $2=$ enclose it with the same pairs $=1$ half passing with the 5 th and 4 th pair $=$ put up a pin at point $3=$ enclose it with the same pairs $=$ lay the 5 th pair aside $=1$ half passing the 4 th and 3rd pair = put up the pin at point $4=$ enclose the same $=$ lay the 4 th pair aside $=$ work on in the same way over points 5 and $6=1$ half passing with the 6th and 7th pair = put up the pin at point $7=$ enclose the same $=$ work on in the same way over points $8,9,10,11$ and $12=1$ half passing with the 8 th and 9 th pair $=$ put up the pin at point $31=$ enclose the same $=$ work on over points $14,15,16,17,18,19$ and $20=1$ half passing with the 9 th and 10 th pair $=$ put up the pin at point $21=$ enclose the same and proceed as in the preceding rows, from point 22 to 29.


Fig. 787. Pattern for plain hole ground.

Hole ground with twisted thread is made in the same way we have just been describing, only that after every half passing enclosing the pin, each pair of bobbins is twisted once. A ground which is worked in this way is stronger than the other. Twisted hole ground is seen again in figs. 792 and 794.


Fig. 788. Plain hole ground.
Wheels in hole ground (figs. $\underline{789}$ and $\underline{790}$ ). -For the wheels, which are often worked on pillow-made grounds, 4, 6, 8 pairs of bobbins, sometimes even more are used (see likewise fig. 801).


Fig. 789. Wheel begun in hole ground.

In fig. 789, the wheel is worked with the 4 middle pairs of bobbins. Each pair has first to be twisted once $=1$ linen passing with the 3rd and 2 nd pair = lay aside the 3 rd pair $=1$ linen passing with the 2 nd and 4 th pair $=$ lay both pairs aside $=1$ linen passing with the 4 th and 3rd pair = lay aside the 4 th pair $=1$ linen passing with the 3rd and 2 nd pair $=$ put up the pin at the next point and between the 2 nd and 3rd pair $=1$ linen passing with the 3 rd and 2 nd pair $=$ lay aside the 3rd pair $=1$ linen passing with the 2 nd and 1 st pair = lay both pairs aside $=1$ linen passing with the 4 th and 3rd pair = lay the 4 th pair aside $=1$ linen passing with the 3rd and 2nd pair = the last passing completes the wheel, such as it is represented in fig. 790.


Fig. 790. Wheel in hole ground completed.

Twist the pairs of bobbins again as you did before beginning the wheel and then proceed with the plain ground.
Rose ground (figs. 791 and 792).-After preparing the pattern, as in fig. 791, put up pins at $a, b, c, d, e, f, g, h$ and $i$ and hang on 2 pairs of bobbins to the first pin, and one pair to each of the other $8=1$ half passing with the 1 st and 2 nd pair $=$ twist each pair once $=$ take out the pin at point $a$ and put it up again at the same point between the pairs $=$ enclose the pin with 1 half passing $=$ twist the pair once $=$ lay the 1st pair aside $=1$ half passing with the 2 nd and 3rd pair $=$ twist the pair again $=$ take out the pin at $b$, put it in again at the same point between the pair = enclose the pin = twist the pairs again = lay the 2 nd pair aside $=1$ half passing with the 3rd and 4th pair $=$ twist the pair again $=$ take out the needle at $c$ and put it in again at the same point between the pairs $=$ enclose the pin $=$ twist the pair again $=1$ half passing with the 3rd and 2nd pair $=$ twist the pair again = put up a pin at point $1=$ enclose the pin $=$ twist the pair again $=1$ half passing with the 2 nd and 1 st pair $=$ twist the pair again = put up a pin at point $2=$ enclose the pin = work point 2 and 1 with the 3 rd and 2 nd pair $=1$ half passing with the 4th and 5th pair = twist the pairs again = take out the pin at $d$ and put it in again at the same point between the pair $=$ work point $e$ exactly like point $d$ with the 5 th and 6 th pair $=$ work point 4 like point 3 with the 4 th and 5 th pair $=$ work points 5,6 and 7 in a slanting direction from right to left = carry out point 8 with the 5 th and 4 th pair $=$ lay both pairs aside $=$ work point 9 with the 3rd and 2 nd pair $=$ work point $f$ like point $e$ with the 6 th and 7 th pair $=$ work point $g$ like point $f$ with the 7th and 8 th pair $=$ then work points 10 to 15 with the 6 th and 7 th pair = point 16 with the 7 th and 6 th pair $=$ point 17 with the 5 th and 4 th pair $=$ point 18 with the 3 rd and 2 nd pair $=$ point $h$ like point $g$ with the 8 th and 9 th pair $=$ point $i$ with the 9 th and 10th pair = points 19 to 26 with the 9 th and 10 th pair $=$ point 27 with the 9 th and 8 th pair $=$ point 28 with the 7 th and 6 th pair $=$ point 29 with the 5th and 4 th pair $=$ point 30 with the 3rd and 2nd pair. Proceed in this manner until the whole ground be finished.


Fig. 791. Pattern for rose ground.


Fig. 792. Rose ground.
Double or ornamental ground (figs. 793 and 794 ). -This ground should be worked in a comparatively fine material; we should recommend Fil à dentelle D.M.C Nos. 30 to 100 . Put up pins at points $a$ and $g$ in the pattern and hang on a pair of bobbins = put up pins likewise at $b, c, d, e$ and $f$ and hang on a pair of bobbins to each $=1$ half passing with the 2nd and 3rd pair $=$ take out the pin at point $b$ and put it in again between the pair at the same place $=$ enclose the pin with a half passing $=$ 1 half passing with the 2 nd and 1 st pair = put up a pin at point $1=$ enclose the pin $=1$ half passing with the 4 th and 5 th pair $=$ take out the pin at point $l$ and put it in again between the pairs at the same place $=$ enclose the needle $=1$ half passing with the 4 th and 3rd pair $=$ put up a pin at point $2=$ enclose the needle $=1$ half passing with the 3 rd and 2 nd pair $=$ put up a pin at point 3 = enclose the needle $=1$ half passing with the 3 rd and 4 th pair $=1$ half passing with the 2 nd and 1 st pair $=$ put up a needle at point $4=$ enclose the needle $=$ work point $d$ like point $c$ with the 6 th and 7 th pair $=1$ half passing with the 6 th and 5 th pair = put up a pin at point $5=$ enclose the pin $=$ work over point $e$ like point $d$ with the 7 th and 8 th pair $=1$ half passing with the 7th and 6th pair = put up a pin at point $6=$ enclose the pin $=1$ half passing with the 6 th and 5 th pair $=$ put up a pin at point $7=$ enclose the pin $=1$ half passing with the 6 th and 7 th pair $=$ lay the 2 pairs aside $=1$ half passing with the 5 th and 4th pair, by which the threads are made to cross each other in the square $=$ work over point $f$ as over point $e$ with the 10th and 11th pair = work over points 17 to 19 as over points 5 to $7=$ when the square is finished 1 half passing with the 10th and 11th pair $=$ half passings between all the squares.


Fig. 793. Pattern for fig. $\underline{794}$


Fig. 794. Double or ornamental ground.
Tulle ground (fig. 795).-Prepare your pattern for the ground represented here on a magnified scale, by pricking holes at regular distances so as to form diagonal lines intersecting each other, as shown in the engraving, and set more or less closely together, according to the thickness of the thread you use.


Fig. 795. Tulle ground.
1 half passing = put up the pin at the next point, twist both pairs twice, but without enclosing the pin, and pass the inner left thread over the inner left one = twist the two pairs again = cross as before and so on.

Valenciennes ground (fig. 796).-The Valenciennes ground is formed of little plaits for which 2 pairs of bobbins are used. These plaits are often used in other kinds of lace as well, as may be seen for instance in figs. $\underline{801}, \underline{802}$ and $\underline{806}$ which are not Valenciennes patterns.


Fig. 796. Valenciennes ground.
According to the size of the squares the plaits are made with either 4,6 or 8 half passings, 2 pairs of bobbins being invariably used. The plaits are joined by a half passing, made with the last pair of the left plait and the first of the right = stick the pin into the hole $=$ enclose the pin by a half passing and work the next plait on the left with the two left pairs and the next plait on the right with the two right pairs.

Brussels ground (fig. 797).-For the sake of greater clearness, this ground too has been worked and reproduced here on a magnified scale.


Fig. 797. Brussels ground.
It is worked in diagonal lines, as follows: 1 double passing with 2 pairs of bobbins = put up a pin at the next point = enclose the pin with a double passing, twist both pairs each time once and so on. This ground, when it is worked by the hand in very fine thread, takes a long time to do and is therefore often made by machinery.

Eternelle with two rows of holes (fig. 798). -The so-called «eternelle» laces have no definite pattern; they can be made of any width, in the form of insertions or edgings.


Fig. 798. Eternelle with two Rows of holes.

For a single row of holes, you want 6 pairs of bobbins; for two rows, 7; for three, 9, adding two pairs of bobbins for every additional row of holes. The upper part of fig. 798 shows how the points are distributed; here 7 pairs of bobbins are used.
Put up a pin at the topmost point $=$ hang on 2 pairs of bobbins $=1$ double passing $=$ take out the pin and put it in again between the two pairs $=$ tighten the pair $=$ hang on 1 pair of bobbins again on the left $=1$ double passing with the 1st pair of the bobbins you hung on first and with the new pair = push the double passing close to the pin $=$ twist the first pair once and then lay it aside $=1$ double passing with the 2 nd and 3rd pair that enclose the pin $=$ hang on 2 pairs of bobbins in the middle $=$ 1 double passing with both pairs = lay the 5 th pair aside $=1$ double passing with the 4 th and 3rd pair $=$ lay the 4 th pair aside $=1$ double passing with the 2 nd and 1 st pair $=$ twist the 1 st pair once and lay it aside $=1$ double passing with the 2nd and 3rd pair that enclose the pin $=$ put up 1 pin at the 3rd lower point, hang on 2 pairs of bobbins $=1$ double passing with these bobbins $=$ lay the 7 th pair aside $=* 1$ double passing with the 6 th and 5 th pair $=$ lay the 6 th pair aside $=1$ double passing with the 5 th and 4 th pair = lay the 5 th pair aside $=1$ double passing with the 4 th and 3 rd pair $=$ lay the 4 th pair aside $=1$ double passing with the 3 rd and 2 nd pair = put up a pin at the next point $=1$ double passing with the 2 nd and 1 st pair $=$ twist the 1 st pair once $=1$ double passing with the 2 nd and 3rd pair, to enclose the pin $=$ lay the 3 first pairs aside $=1$ double stitch with the 4th and 5th pair = lay the last two pairs aside $=1$ double passing with the 6 th and 7 th pair $=$ put up a pin at the next point $=$ enclose the pin with the last pairs = repeat from *.

Lace with torchon ground and edge in net ground (fig. 799).-Worked with 10 pairs of bobbins.


Fig. 799.
Lace with torchon ground and

## fils D.M.C Nos. 20 to 100, or Fil à dentelle D.M.C Nos. <br> 25 to 150, white or écru. [A]

Put up a pin at $*=$ make net passings, fig. 786 , to point $1=$ put up a pin at point $1=$ enclose the pin with the two last pairs on the right $=$ net passings to point $2=$ put up a pin at point $2=$ lay one pair of bobbins aside $=$ net passings to point $3=$ put up a pin at point $3=$ enclose the pin $=$ net passings to point $4=$ put up a pin at point $4=$ lay one pair of bobbins aside $=$ net passings to point $5=$ put up a pin at point $5=$ net passings, back to point $6=$ put up a pin at point $6=$ take up the bobbins on the left again = 1 half passing with the 1 st pair on the left = put up a pin at point $7=$ work the torchon ground, at the top of the lace, as in fig. 788, with the 2 nd and 3rd pair $=1$ half passing with the 3 rd and 4 th pair $=$ put up a pin at point $8=$ twist the 1 st and 2 nd pair $=1$ double passing with the 1 st and 2 nd pair $=$ put up a pin at point $9=1$ double passing with the 2 nd and 3rd pair = lay the 2nd pair aside = make hole or torchon stitch, fig. 788, with the 3rd and 4th pair = put up a pin at point $10=$ work on to point 11 in hole ground = put up a pin at point $11=$ cross the 1 st and 2 nd pair on the left $=$ put up a pin at point $12=$ enclose the pin = lay 5 pairs of bobbins aside on the left $=$ take up 5 pairs on the right $=$ put up a pin at point $13=$ net passings with the 5 pairs on the right $=$ take up, in addition, the 6th pair on the left $=$ hole ground with the 5th and 6th pair = put up a pin at point $14=$ net passings to point 15 with 5 pairs of bobbins $=$ put up a pin at point $15=$ net passings with 6 pairs of bobbins $=$ take up a 7th pair of bobbins in addition $=$ hole ground with the 6 th and 7 th pair $=$ put up a pin at point $16=$ net passings with 6 pairs of bobbins = put up a pin at point $17=$ net passings with 6 pairs of bobbins $=$ put up a pin at point 18 and then repeat from the first point * on the left.
Pillow lace (figs. $\underline{800}, \underline{801}, \underline{802}$ ). -We here give as an example the same pattern of lace worked in two thicknesses of thread; fig. 801 in Cordonnet 6 fils D.M.C No. 25[A], fig. 802 in Fil à pointer D.M.C No. 30[A], which is of course much thicker. As this pattern is especially suitable for trimming household articles, made of unbleached linen, such for instance as table-covers, curtains and hangings of all kinds, we prefer it made in the thicker thread; even then it looks very well as a trimming for articles of dress.


Fig. 800. Pattern for the pillow lace figs. 801 and 802.
It is worked with 40 pairs of bobbins $=$ hang them on one after the other in a row $=$ put up a pin at point $1=$ twisted linen passing = work all the pairs to point 2 with linen passing = put up the pin at the last pair = go back through 3 pairs with linen passing $=$ twist 2 pairs once $=$ go back with linen passing through all the pairs to point $3=$ twist each pair separately $=$ at point 4 twist the 2 pairs and put up the pin = twist the last pair twice and so on and coming back to point $5=$ put up the pin $=$ come back again to point $6=$ return to point $7=$ put up the pins at the two points.


Fig. 801. Pillow lace.

## Material: Cordonnet 6 fils D.M.C No.

 30. [A]Divide the 30 other pairs into twos = put up a pin between every set of two pairs = linen passing. The ground is all worked alike: twist the pairs twice $=$ linen passing $=$ put up the pins $=$ linen passing to points 6 and $7=$ twist the threads in taking them through $=$ make a plait, fig. $\underline{796}$, for the scallop point $8=$ put up a pin at the point marked for the picot $=$ pass the thread of the outside bobbin from right to left, round the pin, to form the picot $=$ continue the plait to the next picot $=$ put up a pin $=$ form the picot $=$ continue the plait to point $9=$ connect the plait with the bobbins of points 9 and $7=$ make 4 linen passings with 3 pairs = continue the plait = carry the last pair to point $10=$ twist the threads $=$ make 1 linen passing $=$ put up a pin and enclose it = go on in this manner to point $12=$ make the wheel, as in figs. 789 and 790 , with 6 pairs of bobbins, hanging on 4 new pairs at point $12=$ work with twisted linen passing $=$ twist the 4 pairs once and cross with linen passing $=$ take the last pair out from the middle to point 13, join it to the first pair of the scallop $=$ make all the wheels before continuing the ground $=$ then go back from point 13 to $14=$ cross the pairs again $=$ at point 12 twist 4 pairs $=2$ twisted linen passings right and left with the bobbins of points 14 and $15=1$ twisted linen passing $=$ put up the pins and work all the spiders alike.


Fig. 802. Pillow lace.
Material: Fil à pointer D.M.C No. 30.[A]
Pillow lace insertion (figs. 803 and 804).-Hang on 12 pairs of bobbins.


Fig. 803. Pattern for pillow lace insertion fig. 804.
Divide the bobbins and put 2 pairs at point $1=$ put up a pin $=$ twist once $=2$ linen passings $=$ from point 2 to point $8=5$ twisted linen passings = add one pair of bobbins = put up a pin = add one pair of bobbins $=$ put up a pin $=$ lay one pair of bobbins aside $=$ twist $=2$ linen passings $=5$ twisted linen passings to point $10=2$ linen passings $=$ twist the 2 last pairs $=$ go back with linen passing through 2 pairs = join together with the two pairs and the first pair by means of a twisted stitch $=$ put up the pin = lozenge stitch (for lozenge stitch in which the lozenges or close leaves are made, you take 4 or 6 threads; in the execution it resembles the darning stitch represented in figs. 646 and 647 ) to point $11=$ twist at point $12=$ take 2 pairs from point $10=$ plait to point $13=$ twist with the bobbins of point $1=$ double passing $=$ plait on the right, twist on the left $=$ put up the pin = tie up as described.
Take the second pair at points 13 and $15=$ put up the pin $=2$ twisted double passings on the right $=2$ linen passings $=$ twist the 2 latter = put up the pin = at point 16 lay one pair of bobbins aside $=$ with simple passing go back through 2 linen passings $=$ join the latter and the former with linen passing = put up the pin at point $17=$ lozenge stitch with the bobbins of points 15 and 17 to point $18=$ connect the same at point 11 = carry on the lozenge stitch to points 19,20 and 21 = put up a pin at each number and enclose with a linen passing $=$ with the first pair of bobbins of point 21,2 linen passings to the left and 2 twisted linen passings, that is to say, crossing the threads = put up the pin at point 22.


Fig. 804. Pillow lace insertion.
Materials: Cordonnet 6 fils D.M.C Nos. 25 to 50, or Fil à dentelle
D.M.C Nos. 25 to 100.[A]

Twist the threads from point 16 to point $23=$ make a plait from point 15 to point $23=$ then join the two parts together by half passings $=$ put up a pin $=$ twist the threads and make plaits to point $24=$ join the threads as at point 23.

On the left and with the first pair of point 19, 2 linen passings = with the 2 latter 1 twisted passing = put up the pin at point 25 $=$ returning, 2 linen passings to point $26=2$ linen passings to the left $=$ with the 2 latter pairs 2 double passings and put up the pin.

Pillow lace (figs. 805 and 806 ).-Hang on 14 pairs of bobbins.


Fig. 805. Pattern for pillow lace fig. 806.
These are divided into 3 groups $=3$ pairs at point $1=$ put up a pin $=$ twisted linen passing $=$ twist both pairs once $=$ put up the pin at point $3=$ add on 5 pairs at point $2=$ put up the pin $=$ go back through 3 pairs $=$ twist the 2 last pairs $=$ linen passing $=$ put up the pin at point $3=$ twist both pairs = linen passings, as seen in the illustration, to the right and left as far as point $11=$ at point 13 intervert 6 pairs by a twisted linen passing $=$ make a plait at point $14=$ put up a pin in the middle of the same $=$ pass through 2 pairs of bobbins with twisted linen passing = put 1 pair of bobbins aside at point 22 = put up a pin at the 2 first pairs at point $15=$ work the leaf in lozenge stitch = put up a pin at point 16 near the first pair $=$ twist both pairs once $=$ linen passing = put up the pin at point $17=$ go back in the same manner $=$ work on in the same way to point $21=$ put up the pin at point $22=$ twisted linen passing to point $11=$ tie up the first pair of the scallop with the bobbins of point $11=$ bring the last pair back and work as at point $1=$ then repeat and proceed in the same way to point $27=$ twist the 2 pairs up to point $26=$ put up the pin $=$ make one lozenge stitch and join the plait, stitch to point $28=$ continue the lozenge stitch to point $29=$ join the bobbins of point 29 to those of point 21 by a plait = put up the pin = linen passing $=$ twist the two last pairs once $=$ put up the pin $=$ linen passing $=$ put up the pin at point $31=$ twist both pairs once $=2$ linen passings $=$ put up the pin at point $82=2$ linen passings = tie up the bobbins of point 33 with those of point $29=$ plait stitch $=$ put up the pin $=$ join to point 34 with lozenge stitch $=$ with the bobbins at point 28 make lozenge stitch to point $27=$ put up a pin $=$ twist 3 pairs once $=$ make 2 linen passings $=$ join with linen passing $=$ continue the scallop according to the preceding description, from point 27 to point 35.


Fig. 806. Pillow lace.
Material: Cordonnet 6 fils D.M.C No. 25.[A]
At point 34 make a leaf in lozenge stitch = put up the pin = continue from point 33 to point 36 with twisted linen passings = carry the first pair of bobbins of the lozenge to point 35 by means of 2 twisted linen passings $=$ put up a pin in the middle of the 2 pairs $=$ make a plait to point $37=$ cross the pairs again as at point 13 , in the beginning.

Pillow lace (figs. 807 and 808).-Worked with 30 pairs of bobbins.-These are divided: 14 pairs at point $1=$ put up a pin on the left and right $=$ with the last pairs make plaits to point $12=$ add 2 pairs $=$ make a double passing as for a plait $=$ put up a pin in the middle of the pairs = plait with 2 pairs of bobbins to point $3=$ add 2 pairs of bobbins $=$ make a double passing as for the plait = put up a pin in the middle of the pairs $=$ then go on in the same manner to point $4=$ add 4 pairs of bobbins $=$ put up the pin $=$ at point 5 , add 2 pairs of bobbins $=$ make a plait $=$ put up a pin and join to point 4 by a double passing.


Fig. 808. Pillow lace. Material: Fil à dentelle D.M.C No. 50. ${ }^{[A]}$

At point 1, lay the two last pairs to the right $=$ put up a pin $=$ make a plait to point $6=$ add 2 pairs of bobbins $=1$ double passing = put up a pin = make a plait to point 7 with a pairs of bobbins $=$ add 2 pairs of bobbins $=1$ double passing $=$ put up the pin $=$ make a plait to point $8=$ add 4 pairs of bobbins $=5$ linen passings $=$ put up a pin at the last passing $=$ at point 9 add 2 pairs of bobbins $=$ make a plait $=$ put up a pin $=$ join to point 8 with linen passing $=$ make plaits from point 9 to point $10=$ put up a pin $=$ leave the pairs hanging $=5$ linen passings with the bobbins of point $10=$ put up the pin at point $11=$ go back to point 10 with 5 passings = put up the pin = make a plait and tie up the bobbins at point $6=$ leave these bobbins hanging down.
With the two first pairs at point 11, make a plait to point $12=1$ linen passing at point 7 and join to point 12 by a plait = plait stitch $=$ put up a pin $=$ then plait stitch to point 13 and make the same connection as at points 12 and $7=$ continue to plait to point $14=$ put up the pin at the first pair $=7$ linen passings $=$ leave these bobbins hanging down $=$ tie up the plait of point 5 with the 1 st pair of point $4=$ make a plait on the left $=$ put up a pin at point $15=$ make 5 linen passings on the right and put up the pin at point $16=$ make a plait to point $17=$ make the same connection as at point 7 and $12=$ the same connection also at point $18=$ make a plait to point $19=$ put up the pin $=$ make a plaited lozenge with one pair $=$ leave 2 pairs hanging at point 20 , left and right $=$ continue to point $21=$ leave 2 pairs hanging, left and right $=$ make a plait to point $22=$ begin again at point 17 and make a leaf in lozenge stitch to point $23=$ make a second leaf from point 16 to point $23=$ join the leaves at point $23=$ make a plait with the first pair of point 16 to point $24=$ put up a pin $=$ enclose it with a double passing and make a plait $=$ tie up the bobbins at point $15=$ continue the edge to point $26=$ make a leaf in lozenge stitch from point 32 to point $26=$ tie up the bobbins at point 26 and make linen passings with the united bobbins to point $27=$ with the bobbins of point 18 and point 20 , therefore with 4 pairs, make a square in lozenge stitch $=$ join the 3 leaves at point $23=$ from point 23 to point 28 make a plait with the two first pairs of bobbins $=$ put up a pin at point $28=$ make a plait with picots to point $29=$ lozenge stitch from point 32 to point 22 and point $33=$ join to point 30 by a plait = plait to point $22=$ work from point 34 to 35 in the same way as from point 1 to point $33=$ at point 22 and point 35 the pairs cross each other.
Pillow lace (figs. 809 and 810 ).-Hang on 28 pairs of bobbins. Begin at point 1 with a plait, fig. $\underline{790}=$ put up a pin $=*$ hang on 5 pairs at point 2 and put up a pin at the last pair $=$ with the last pair make a plait to point $3 *=$ hang on a pair of bobbins $=1$ linen passing $=$ hang on a pair of bobbins $=1$ linen passing $=$ hang on 3 pairs of bobbins $=1$ linen passing $=3$ linen passings $=$ put up a pin $=1$ leaf in lozenge stitch to point $4=$ hang on 2 pairs of bobbins $=2$ plait stitches $=$ put up a pin $=$ make a leaf to point $5=$ hang on 2 pairs of bobbins $=1$ plait stitch $=$ put up a pin $=$ repeat in the reverse order to point 3.



Fig. 810. Pillow lace. Material: Fil à dentelle D.M.C No. 50.[A]

Fig. 809. Pattern for the lace fig. 810.
Put up a pin at point $9=$ hang on a pair of bobbins $=1$ linen passing $=$ hang on a pair of bobbins $=1$ linen passing $=$ hang on a pair of bobbins $=$ make a plait to point $11=$ put up a pin $=$ hang on 2 pairs of bobbins at point $12=$ make a plait and tie the threads together with those of point $11=$ on the left with 2 pairs, on the right with 3 pairs to point 13 for the edge $=$ put up 2 pins and continue the edge with linen passings to point 14.

Return to point 15 and make a plait = put up a pin = divide the bobbins and put one pair on the right, the other on the left $=$ take the bobbins at point 5 and 7 and make plaits to points 16 and $17=$ make linen passings with the two pairs to point $18=$ put up a pin and make a plait to point 21.

Make leaves in lozenge stitch from points 4 and 8 to points 19 and $20=$ one leaf from point 16 to point $19=$ make another leaf to point 22 and one to point $21=$ make the same leaves on the left to points 20,21 and $23=$ cross the bobbins at point $21=$ make leaves from point 21 to points 24,26 and 26 .
Make lozenge stitch with picots, with 3 pairs of bobbins from points 9 and 10 to point $22=$ join the bobbins to leaf $22=$ carry on the braid to point $26=$ join 2 pairs of bobbins to the leaf $=$ leave the 2 pairs at point 28 hanging down $=$ carry on the braid to point 25.

Make a leaf at point 27 to point $14=$ tie the threads together as at point $10=$ carry on the edge to point $29=$ put up a pin $=$ make a plait with picots to point $30=$ tie up the threads with those of leaf $28=$ make a leaf to point $31=$ introduce the threads into the edge = put up a pin $=$ tie the threads together.
Make a plait on the left = leave 4 pairs of bobbins hanging down on the right, 2 pairs for the plait and 2 for the leaf = carry on the edge to point $32=$ leave 2 pairs hanging for another leaf $=$ continue the edge to point 33 . Make a plait from point 21 to point 34.
Begin again on the left at points 1 and 2 and work, as on the right, to point $35=$ cross the threads at point $25=$ linen passing $=$ distribute the pairs to point $36=2$ pairs at point $37=2$ at point $38=3$ pairs at point $34=$ plait to point $37=$ join to point $38=$ continue the plait and join to points $36,35,39=$ at points $35,36,37$ lozenge stitch with every 2 pairs of bobbins to point $40=$ then join the next 6 pairs together $=$ and work on with lozenge stitch to point $41=$ work exactly in the same manner at
points $31,32,34,35,39,42$ as at points $36,37,38,40$ to $41=$ at point 41 , all the threads are interwoven, and then divided into 3 sets = continue the leaves to points 45,46 and 47. Then repeat in the reverse order from points 31, 38, 25, 32 and 39.

Armenian lace (figs. 811 and 812).-The dresses of the Turkish women are often ornamented with flowers and leaves, executed in needlework which take the place of fringe and braid trimmings and are often even employed as adornments for the neck and arms instead of necklets and bracelets in metal work; though, as such, they do not always accord with our Western notions of good taste, the Armenian work is in itself, both sufficiently interesting and easy of execution, to deserve description here amongst other kinds of needlework that are adaptable to use. It may be imitated with capital effect in strong stiff washing materials, such as those indicated in our illustration, either upon a linen or cotton foundation or upon plush or silk.


Fig. 811. Armenian lace.
Materials: Fil à pointer D.M.C Nos. 10
to 30, Cordonnet 6 fils D.M.C Nos. 15
to 40 or Fil à dentelle D.M.C Nos. 25
to 70.
Colours: Écru and Brun-Caroubier 303.[A]

The thread is first drawn into the edge of the stuff; you then carry it from right to left, determine the length of the squares, and working from left to right make on this first thread as many knots as you have room for.
Fig. $\underline{812}$ shows the formation of the knot, the manner in which the thread, passing from left to right, forms a loop, and how to pass your needle under the straightly extended thread and through the loop. You leave a space of one or two $\mathrm{m} / \mathrm{m}$. between the knots, according to the thickness of the thread you are using. Having covered the first thread with knots, you return to the edge for the next row of knots, but passing your needle this time under three threads.


Fig. 812. Working detail of fig. 811.
The number of knots should be the same in each row, and the four sides of the square should be all equal.
When the squares are finished they are edged with picots on the two lower sides, as shown in fig. 812.
Thread of two colours was used for fig. 811, the squares being worked alternately in Écru and Brun-Caroubier and the picots, all in the latter colour.

Lace and insertion in knotted stitch (fig. 813). - Excepting in the case of the returning thread, the same stitches are used for the pretty border and insertion given in fig. 813, as for the Armenian lace.


Fig. 813. Lace and insertion in knotted stitch.
Materials: Fil à pointer D.M.C Nos. 10 to 30, Cordonnet 6 fils D.M.C Nos. 10 to 25, or Fil à dentelle D.M.C Nos. 25 to 50 . Colours: Écru and Rouge-Cardinal 46.[A]
The stitches that form the insertion are attached, on both sides, to an English braid, something of the nature of Rhodes linen, which is open-worked before the knotted work upon it is begun.
engraving.
The outside edge consists of light scallops, formed by the regular increase and decrease of the stitches. The original piece of work from which our drawing was taken, forms the border of a dark blue plush carpet; the red and écru hues of the lace harmonize exceedingly well with the soft colour of the plush.
Insertion in knotted stitch (figs. 814 and 815). -This kind of work, similarly composed of knotted stitches, can be used instead of crochet insertion or single and cut openwork in linen. It looks exceedingly well as a trimming for bed and table linen and is executed on foundation threads or cords, which connect the different figures together, with closely connected rows of knots between.


Fig. 814. Insertion in knotted stitch.
Materials: Fil à pointer D.M.C No. 30, Cordonnet 6 fils D.M.C Nos.


Fig. 815. Working detail of fig. 814.
Insertion in knotted stitch (figs. 816 and 817).-The mode of making the insertion in knotted stitch, which is represented in the two accompanying engravings, is supposed to be of Italian origin, but we have met with quite as perfect specimens of work done in the same way, which were the products of Persia and Asia Minor. We have called it by the same name as the preceding patterns, for even the way in which the stitch is worked is almost the same. Through some slight difference however in the interlacing of the threads, shown by the open loops in fig. 817, the stitches lie closer together and are alike on both sides of the work.


Fig. 816. Insertion in knotted stitch.
Materials: The same as for fig. 814. [A]
No difficulty will be found in making out the course of the rows; it is best to begin by the two rows of stitches that form the perpendicular bars and make the stitches, that compose the 4 staves between the bars next. For the little picots see fig. 700 .


Fig. 817. Working detail of fig. $\underline{816}$.
Lace in knotted stitch (figs. 818 and 819).-This charming little lace, which is of Italian origin, was taken from a cushion cover, used for church purposes. The stitches, made in the order indicated in the working detail, fig. 819 , are overcast at the last with a fleecy thread, such as Coton à repriser D.M.C, of a rather sober colour, such for instance as Bleu-Indigo 334, RougeGéranium 352, or Jaune-Rouille 363.


Fig. 818. Lace in knotted stitch.
Materials: Cordonnet 6 fils D.M.C Nos. 10 to 25 or Fil à dentelle D.M.C Nos. 25 to 50.[A]


Fig. 819. Working detail of fig. 818.

You overcast the slanting bars and pass over the stitches that connect the two picots.
Reticella lace (figs. 820 and $\underline{821 \text { ). -The Reticella laces are generally made on a design traced upon parchment, similar to }}$ those required for the laces described later on. But as the manner of working has been modified in the lace represented here, we thought it as well to adopt the same simplification, often used in beautiful pieces of old needlework, which consists in substituting a braid made upon a pillow, for the bars made with the needle.


Fig. 820. Reticella lace.
Materials-For the open-work: Cordonnet 6 fils D.M.C Nos. 10 to 100, or Fil à dentelle D.M.C Nos. 25 to 150, white or écru. For the bars: Lacets superfins D.M.C Nos. 3 to 8.[A]


Fig. 821. Working detail of fig. 820.
You begin by laying and fastening down the braid by means of very small stitches upon the lines of the pattern, which should be traced upon black paper; you next proceed to make the centre bars, covered with plain button-hole stitches, on which you mount a row of stitches, like those of fig. 755; these are followed by another bar, to make which, you pick up the loop of the stitches of the preceding row and by another row like the second, finished off with picots, like those illustrated in fig. 700. The bases of the pyramids likewise consist of bars, button-holed on both sides and edged on the inside with picots.
The stitches of the first row should not be too close together, that there may be room for those of the second row between, as we have already explained in fig. 702, in the chapter on Irish lace.
The inside of the pyramids is worked in the stitch represented in fig. $\mathbf{7 5 5}$, the picots round them are like the ones in fig. $\underline{599}$.
The lace, represented in fig. 820 in its original size, was worked in Fil à dentelle D.M.C No. 80, whilst the second engraving, representing the same subject, shows us how perfectly well it can also be made in heavier and coarser materials, these being in this instance, Lacets superfins D.M.C No. 4 and Cordonnet 6 fils D.M.C No. 20.

Venetian laces (figs. $\underline{822}, \underline{823}, \underline{824}, \underline{825}, \underline{826}, \underline{827}, \underline{828}$ ).-Under the name of «Venetian point» are comprised, not only certain kinds of pillow lace, but even more generally, the beautiful needle-made lace, the outlines of which are bordered with handsome scallops in high relief.

We shall confine our attention in the present instance to the needle-made Venetian lace as the other can be learnt without any great difficulty by following the instructions already given for the making of pillow lace.
The preparation of the pattern, in most kinds of needlework, is a most important matter and one requiring the greatest care, but in the case of needle-made lace and pillow lace the processes are different.

The paper on which the design is traced must first be backed or lined with unglazed black paper (made specially for this purpose). Prick holes all along the lines of the pattern, at exactly the same distance from each other, remove the tracing and tack the black paper upon rather coarse linen.
This done, you take from three to five lengths of the thread of which the lace is to be made, lay them down together upon the lines marked by the prickings and secure them at each hole by a stitch made over the threads.


Fig. 822. Venetian lace.
Fig. 822, with the others of the same series in their natural size, show the proper distance that should be left between the prickings, and the laying down of the threads begun; whilst in fig. 823, we have the threads laid down throughout, even for the little eyelet holes, which are to be open-worked afterwards.


Fig. 823. Venetian lace.
When all this preliminary work is finished, the pattern is ready for the lace stitches that are to form the filling in, between the raised outlines. In order to keep your work perfectly clean and preserve it from unnecessary contact with your fingers, cover all those parts of the pattern you are not immediately engaged on, with a piece of blue paper with a hole, about the size of a pea, cut in it. This you move along as you go, working only at the part of the pattern which is visible through the hole, keeping all the rest carefully covered up and sewing paper over each part as soon as it is finished; this should not be removed until you are ready to join all the separate parts together with bars or latticed ground and work the button-hole edges.


Fig. 824. Venetian lace.
All the different lace stitches that are used as fillings must be begun and fastened off at the outline threads, which you must be careful not to drag out of their place.

We again remark, for the benefit of those of our readers who may not have read the preceding chapter attentively, that in working all the finer lace stitches, the needle should be held with the eye towards the worker and the point turned outwards. All the inside portions of the pattern have to be worked in separately; (for a choice of stitches to serve as fillings see figs. 720 to 762 ) until all the spaces are filled, as represented in figs. $\underline{825}$ and $\underline{826}$. The stitches should be selected as far as possible, to suit the style of the design. Flowers look best worked in an open or lattice stitch, leaves on the other hand in a thick close stitch.


Fig. 825. Venetian lace.


Fig. 826. Venetian lace.
When all the insides are done, the edges and outlines have to be closely button-holed.


Fig. 827. Venetian lace.
The old Venetian laces are bordered with scallops in high relief, worked over a thick pad of laid threads, as described on p .83 , fig. 191, relating to Venetian embroidery.


Fig. 828. Venetian lace.
Materials-For the open stitches: Fil à dentelle D.M.C Nos. 100 to 200.
For the outlining and for the padding: Coton surfin D.M.C Nos. 120 to 150.[A]

Venetian lace with net ground (fig. 829).-The outlining of the figures with several strands of Coton surfin D.M.C, should, in the case of detached pieces of lace, be done at once, but where the figures are connected by bars or by a net ground as in fig. 825 , the button-holed outlines should be done last. Thus in making the lace, fig. 829, you should begin by working all the insides of the flowers and foliage, then the net ground which may be replaced by bars with picots and then only proceed to the outside button-holing and the scallops.


Fig. 829. Venetian lace with net ground. Materials-For the open stitches: Fil à dentelle D.M.C Nos. 100 to 200.-For the outlining: Coton surfin D.M.C Nos. 120 to 150.

As all this kind of lace-work is very laborious and takes a long time to do, we advise our readers to use thread that is slightly tinted; in the first place it does not turn yellow as white thread is liable to do and secondly, being softer and less twisted it takes every bend and turn more readily than the stiffer white material does.
Of all the different kinds of thread, so frequently alluded to in these pages, the higher numbers of Fil d'Alsace D.M.C and Fil à dentelle D.M.C are the best for the finer kinds of lace, and they all have the soft ivory tint, we so admire in the old needlework.

Spray in needle-point (fig. 830).-Needle-point lace, also called Brussels lace, requires the same preparatory work as Venetian lace; but it seldom contains such a variety of stitches and openwork as the latter.


Fig. 830. Spray in needle-point.
Materials-For the open stitches: Fil à dentelle D.M.C No. 200.-For the outlining: Coton surfin D.M.C Nos. 120 to 150.[A]

The flowers are generally worked in one of the stitches, represented in figs. $\underline{720}$ and $\underline{740}$; the outlines are less thickly buttonholed and the stitches, set everywhere less closely.

Here also, the finished parts should be carefully covered with paper to keep them from getting soiled.

The needle-point lace designs are ordinarily speaking more realistic and as regards the composition, less artistic and severe than the Venetian point ones

The spray, represented in our engraving, is a specimen of an ordinary Brussels lace pattern and of the stitches it is worked in.

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## FOOTNOTES:

[A] See at the end of the concluding chapter, the table of numbers and sizes and the list of colours of the D.M.C threads and cottons.


Appliqué work on satin set with fine cord.

## Miscellaneous fancy work.

As the plan on which this book was constructed rendered a systematic classification of the different subjects it treats of necessary, a certain amount of miscellaneous fancy work, which does not come under any of the previous headings remains to be dealt with in the present chapter. In most cases the illustrations and the accompanying directions are but an application to a practical use of the different kinds of stitches already described in previous chapters and those who are familiar with all these various branches of needlework will have no difficulty in understanding what follows.

Knotted cord (figs. $831,832, \underline{833}, \underline{834}, \underline{835}$ ). -The knotted cord referred to in the letter press belonging to figs. $\underline{772}$ and $\underline{773}$ in the chapter on Irish lace, comes under the present heading: in making it, the fingers take the place of a crochet needle.
You tie two ends of thread or braid together, take one thread in the left hand fig. 831, and with the forefinger of the right, pull out a loop long enough for the left forefinger to pass through and hold the end of the thread tight with the little finger of the right hand.

Then draw the left forefinger backwards through the loop and behind the thread that is round the loop and lies in the left hand, fig. 832. As you lay the thread round the left forefinger, you must pass the knot and the ends of thread as well, over into the left hand, and with the right hand pull the thread that lies on the right and draw up the loop, fig. 833.


Fig. 831. Knotted cord. First position of the hands.


Fig. 832. Knotted cord. Second position of the hands.


Fig. 833. Knotted cord. Third position of the hands.
In fig. 834 , representing the fourth position of the hands, you are shown how the forefinger of the right hand lifts up the thread and passes through the loop on the left hand; the end will consequently also pass immediately into the right hand and the left hand will tighten the knot.


Fig. 834. Knotted cord. Fourth position of the hands.
It is by thus drawing up first a loop on the right and then one on the left that this pretty cord is produced.
Skilful hands will soon learn to make a cord of the same kind with four threads, as follows: knot the four ends of thread together, make a few knots, using two threads as one, then dropping the loop on your forefinger, put the next one upon it and draw up the knot, passing however the threads over those that you dropped. Then drop the loop you have on your finger again and take up the first loops.
For the cord made with double threads, represented in fig. 835 on a magnified scale, use Cordonnet 6 fils D.M.C or one of the other materials mentioned at the foot of the illustration. Soutache D.M.C will always be found to be very suitable for this purpose.


Fig. 835.
Knotted cord.
Materials: Fil
à pointer
D.M.C Nos.

10 to 30,
Coton à tricoter
D.M.C Nos. 6 to 12,
Cordonnet 6
fils D.M.C
Nos. 3 to 25
or Soutache
D.M.C Nos. 1 to 3.[A]

Balls for trimmings (figs. $\underline{836}, \underline{837}, \underline{838}, \underline{839}, \underline{840}, \underline{841}$ ).-Amongst the crochet patterns are two that are finished off with balls; to make these, begin by cutting a number of rounds of cardboard, two for every ball, with holes in the middle, fig. 836.
If you have a great many balls to make it is well worth your while providing yourself with a metal die of the proper size, to cut the rounds with.


Fig. 836. Balls for trimmings. Circle of CARDBOARD.


Fig. 837. Balls for trimmings.
Overcasting the circle of cardboard.


Fig. 838. Balls for trimmings. Cutting the Stitches round the edge.


Fig. 839. Balls FOR TRIMMINGS. Putting in the LOOP.


Fig. 840. Balls for trimmings. Cutting out the CARDBOARD.


Fig. 841. Ball COMPLETED WITH LOOP attached.
Lay two of these rounds together and cover them closely with stitches, fig. 837, using for this purpose Coton à tricoter D.M.C (knitting cotton) or Coton à repriser D.M.C (darning cotton).[A]

When the round is entirely covered, put the scissors in between the two circles of cardboard and cut open the stitches all round the outer edge, fig. 838; then draw a piece of thread between the two circles and knot it firmly round the stitches that meet in the centre hole, fig. 839; leave sufficiently long ends of thread hanging to form a loop by which the ball can afterwards be fastened to the heading of the fringe; when the stitches are knotted together you cut and pull out the cardboard, fig. 840, and snip the thread with your scissors until it becomes quite fluffy and the ball is perfectly round, as shown in fig. 841.
Tambour work (figs. $\underline{842}, \underline{843}, \underline{844}, \underline{845}$ ). -Since the introduction of the sewing machine, by means of which this charming kind of embroidery can be so quickly and easily executed, it has somewhat gone out of favour. As however, the fine patterns with a good deal of shading in them, can be far more accurately worked by hand than by machine, tambouring, which is in point of fact merely a form of crochet, has lately been revived. The piece of stuff on which the tambour work is to be done must be mounted on a frame.


Fig. 842.
Thimble for tambouring.


Fig. 843. Tambour needle.
The loops which are made with a small hook, called a tambour needle, form a fine chain stitch and must be regular and even; to facilitate this a sort of thimble, fig. 842 , is worn on the forefinger of the right hand, formed of a small plate of sheet brass, rolled up but not joined, so as to fit any finger; it is open at the top like a tailor's thimble and has a little notch on the side which is placed above the nail, and in which you lay the tambour needle whilst you work. From the thimble being cut slightly slanting at the top, it follows that the inside where the two ends meet is a little shorter than the outside.

The thread is drawn through in a loop to the front of the work by means of the hook, whilst it is held at the back in the left hand, and when the needle is put downwards through the stuff, laid round it. The needle in its downward and upward passage, should be kept in the notch in the thimble and the stuff pressed down with the thimble, as the needle is drawn up to the surface of the work, fig. 844.


Fig. 844. Position of the hands in tambouring.
A little practice is necessary to acquire the right action of the hands, there being always a tendency, the same as in tatting and macramé, to confuse the movements of the two. As soon as you realize that the upward drawing of the needle and the downward pressure of the stuff with the thimble must be simultaneous, you will find that you can work with great rapidity and with admirable results. Thread with a very strong twist, which the hook will not split, is the only suitable kind for tambouring. Of the D.M.C materials, Fil d'Alsace ${ }^{[\mathrm{A}]}$ and Fil à dentelle ${ }^{[\mathrm{A}]}$ are the most to be recommended.
Numbers of patterns, originally intended for other kinds of embroidery can be executed in tambour work; amongst those contained in this Encyclopedia, figs. 192, 210, 216, 219, and $\underline{227}$ are the ones that are best adapted to the purpose.


Fig. 845. Drawing out the thread with the needle.
Smyrna stitch worked with a crochet-needle (figs. $846, \underline{847}, \underline{848}, \underline{849}$ ).—In the chapter on tapestry, p. 137 we remarked that Oriental carpets and mats could be worked in different other ways, to be subsequently alluded to at greater length.


Fig. 846. Smyrna stitch WORKED WITH A CROCHET needle. First detail.


Fig. 847. Smyrna stitch worked with a crochet needle. Second DETAIL.

Smyrna stitch requires only a crochet needle and is worked on very coarse canvas or Java linen. You take a coarse mesh of cotton, such as Nos. 6, 8 or 10 of Colon à tricoter D.M.C (knitting cotton), cut it into lengths of $8 \mathrm{c} / \mathrm{m}$., fold two lengths together in half, stick in the crochet needle from above, under two threads of the canvas, take hold of the loop with the hook, fig. 846 , and draw it in; then push out the hook to seize the ends of the cotton and draw them through the loop which is on the needle, as indicated by the little arrow in fig. 847. The stitches or tassels should be two or three double threads of the canvas apart. As you finish each row, comb the ends of the tassels out carefully with a fine metal comb. When the whole piece of work is finished shear the entire surface, quite even, with a pair of sharp scissors. Fig. 849 shows a square of the work completed, presenting that warm velvety appearance which distinguishes the Smyrna carpets.
 OF THE KNOTS UNDERNEATH.

Malta stitch (figs. $\underline{850}$, $851, \underline{852}, \underline{853}, \underline{854}$ ).-This stitch is much used by the Maltese; it is the same as the «point tricot» excepting that in the latter, the loops formed by the return of the thread are open and the stitches packed very closely together, whereas in the Maltese work there is always one close loop and two open tassels.


Fig. 850. Malta stitch. First detail.


Fig. 852. Malta stitch. Third DETAIL.


Fig. 851. Malta stitch. Second DETAIL.


Fig. 853. Malta stitch. Fourth
DETAIL.

It is worked as follows: take a thick bunch of lengths of Coton à repriser D.M.C, pass it under two vertical threads of the stuff from right to left, fig. 850 , leaving an end, 1 or $2 \mathrm{c} / \mathrm{m}$. long, lying on the surface of the work; put the needle in again under the two threads that are in front of the first stitch and leave the tassel, formed by the first stitch, above the one by which you bring the needle back between the two stitches.

The needle must now follow the same course it took for the first stitch and the thread must be drawn out far enough to form a loop as long as the tassel; you then repeat the second stitch, carrying back the working thread however this time above the loop, after which you cut the two open ends the same length as the loop. In the Maltese work, three times as many threads have to be left between the tassels as are covered by the stitch.

Thus if your stitch cover 4 threads of the foundation, you should leave 12 threads between the tassels, and if it cover 6 , you should leave an interval of 18 threads, that the stuff may always be visible between the little tassels or balls.

Fig. 854 represents a portion of a curtain, embroidered on Flemish linen in the colours indicated at the foot of the engraving these may be arranged according to the taste of the worker.


Fig. 854. Malta embroidery.
Materials: Coton à repriser D.M.C No. 25.[A]
Colours: Jaune-vieil-Or 680, Vert-Mousse 469, Bleu-Indigo 311 and Rouge-Cornouille 449.[A]
Malta embroidery is mostly done on coarse coloured linen fabrics or on single thread canvas.
Triangular Turkish stitch (figs. $855, \underline{856}, \underline{857}, \underline{858}, \underline{859}$ ). Amongst the many pretty stitches for which Turkish embroideries are distinguished, there is one in particular, which though apparently very difficult, is in reality quite the reverse; it resembles line stitch upon straight threads, only that in the East it is generally worked in diagonal lines, each row requiring two journeys to and fro.
In the first, fig. 855 , the needle must always be carried, first over, then under two threads in a diagonal line and so on to the end of the row.

Coming back, you pass the needle under the stuff and the stitch on the right side, and bring it out at the bottom of the stitch; then you make a back stitch over two horizontal and two vertical threads, pass the needle over two straight threads, put it in behind the same, bring it out again near the upper stitch and then insert it near the bottom vertical stitch; after this you carry it to the second stitch lower down and pass it over the same. Four threads should meet in every hole which the needle makes. The third and fourth row should be worked in a colour that forms a sharp contrast with the one in which the two first rows are worked and constitute with these one complete row of stitches, fig. 856.


Fig. 855. Triangular turkish stitch worked diagonally. First journey COMPLETED AND SECOND BACK, BEGUN.


Fig. 856. Triangular turkish stitch worked diagonally. Two journeys to AND FRO FORMING THE COMPLETE ROW.

Figs. 857, 858 and 859 show how the same stitch can be worked in straight, instead of in diagonal rows.


Fig. 857. Triangular turkish stitch worked horizontally. First journey.


Fig. 858. Triangular turkish stitch worked horizontally. First journey BACK.

The dark shade in fig. 859 shows the first row of stitches, the light, the second, or rather the third and fourth, as four rows of stitches are required to make one complete row of triangular Turkish stitch.


Fig. 859. Triangular turkish stitch

Pattern worked in triangular Turkish stitch and Gobelin stitch (fig. 860).-The diagonal lines are all worked with Chiné gold and blue, and gold and red. The stitch we have just described is most effective in conjunction with other kinds of embroidery, as illustrated in fig. 860 , where it is combined with Gobelin stitch.

The running foundation is divided into slanting squares; the diagonal lines are all worked in gold and red. The squares number 9 stitches inside, these are followed by a tenth which is covered by the first stitch of the next square. Where two kinds of coloured gold thread are used, one square will be framed on all sides by one kind, say, gold and blue for instance, the next by the other, gold and red.


Fig. 860. Pattern worked in triangular turkish stitch. Materials: Chiné d'or D.M.C.
Colours: Gold and red, gold and dark blue, gold and light blue, gold and green.

The stalk that divides the two little leaves and has a small lozenge at the top, is begun above the fifth of the 9 stitches; you make 5 stitches, but in such a manner as to end at the top of these 5 with the stitch that runs in a diagonal direction over the threads, turned to the inside of the stalk, so that the last stitch of the first row may form with the first stitch of the second row, a triangle at the top of the stalk, which is surmounted by the aforesaid lozenge.
The lozenges in Chiné gold and light blue, of which there are three in each of the half squares, besides those that terminate the stalk, consist of 9 stitches, the first, extending over 3 threads, the second over 5 , the third over 7 , the fourth over 9 and the fifth over 11; the four next decreasing in a similar manner. The leaves in Chiné gold and green, on either side of the stalk, also begin with a stitch over 3 threads of the stuff, followed by 8 , each increasing in length by one thread on the side of the stalk, but all equal on the other, the last extending over 12 threads of the stuff. After these 9 , the subsequent 8 must decrease in the same manner by one thread on the opposite side; then you make 4 more extending over only 3 threads and set the contrary way to the others.
The zigzag border and the small squares of 5 stitches within it are worked entirely in Chiné gold and red.
Turkish embroidery (fig. 861).-The powdering of flowers and also the border are worked like the preceding pattern in twosided Gobelin stitch. Embroidery of this kind looks best on Algerian linen, which is exactly like the Turkish stuff. It is not absolutely necessary to count the threads for the little flowers and stalks, but it is as well to do so for the border, that you may be sure to get the zigzags perfectly regular.


Fig. 861. Turkish embroidery.
Materials: Chiné d'or D.M.C No. 30 and Coton à broder D.M.C No. 40.[A]
Colours-For the Chiné: Gold and red, gold and dark blue and gold and green. For the Coton à broder: Noir grand-teint 310.[A]
The petals of the flowers are worked alternately in Chiné gold and red, and gold and blue, the centre in Or fin D.M.C pour la broderie and the leaves and stalks in Chiné gold and green. The petals are set with stem stitch in fine black Coton à broder and if the embroidery is to be the same on both sides this setting must be repeated at the back.

The distribution of colours in the border is left to the taste of the worker, but we should recommend for the zigzags Chiné gold and red, as being the most effective.

Appliqué work (fig. 862).-Appliqué work means the laying on of pieces of one kind of stuff on to a foundation of a different kind, so as to form a pattern-these pieces of stuff of various shapes and sizes, taking the place of solid needle-made embroidery.


Fig. 862. Appliqué work.
Appliqué work may be done on linen, silk, velvet, plush and leather. The stuff out of which the pattern is cut has, in most cases, to be backed first with very fine tissue paper.

This is done in the following manner with starch paste, which dries quicker than any other. Spread the paste on the paper with a brush, carefully removing all the little lumps; it should only be just liquid enough to make the stuff and the paper adhere perfectly together and above all must never penetrate to the right side of the stuff. When the paper has been evenly spread with the paste, lay your stuff upon it and smooth and press it down with a clean cloth, stroking it out carefully in the line of the thread to prevent its becoming in the least dragged or puckered, or any air remaining between it and the paper.

You next lay several sheets of paper without a mark or a fold in them, on a perfectly smooth flat board, and upon these, your paper-lined stuff, covered in its turn with several loose sheets of paper, all being kept in their place by another board with several stones or heavy weights laid upon it to act as a press. Leave the stuff in the press until it be quite dry. You will find that any kind of fabric, even the slightest, can be rendered available in this manner for appliqué work, not even plush or velvet being in the least injured by the process.

You then transfer the whole pattern on to the foundation, whatever it happen to be, but only the detached figures on to the paper-lined stuff, carefully cutting out the latter with a very sharp pair of scissors so as to avoid unravelling the threads along the edges.

The foundation, stretched in a frame, as described on page 115 , fig. 236 , is to be placed on a board or table in such a manner that only the stuff rests upon it, whilst the frame projects on all four sides.

Then cover the cut-out figures with paste on the wrong side and fit them into their proper places upon the foundation. In larger pieces of work especially, this should be done as quickly as possible so that a board with weights upon it, to serve as a press, may be laid over them all at once.

The board must not be removed until the paste be dry; then you can begin the needlework, fastening down the appliqué figures and finishing them off round the edges by laying down a fine round, cord, or by flat stitches.
You either sew on the cord with invisible stitches, opening it a little at each stitch so as to slip the needle and thread in between the twist, or else with ordinary overcasting stitches.
In either case it must be so laid on as completely to hide the cut edges and keep them from fraying.
Should you wish to frame the appliqué figures with flat embroidery, you must bring your needle out close to the cut edge and enter it, 1 or $2 \mathrm{~m} / \mathrm{m}$. within the edge from above.
Both, cord and flat stitch setting, should be of a subdued shade and if possible, of a colour to match the foundation.
Morocco embroidery (figs. $\underline{863}, \underline{864}, \underline{865}, \underline{866}$ ). This work named after the country where it was originated, belongs both to the class of darned and damask embroidery.


Fig. 863. Morocco embroidery.
Materials-According to the stuff: Fil à pointer D.M.C, Cordonnet 6 fils D.M.C, Coton à broder D.M.C or Coton à repriser D.M.C.[A] Colour: Rouge-Cardinal 346.[A]

In fig. 864, the stitches are formed by passing over 5 threads and taking up the sixth. Coming back you take up the third of the 5 threads first missed and proceed in the same manner over the whole surface of the work, unless the lines of the pattern require you to depart from this rule; as, for instance, in certain parts of fig. 864 , where you will notice stitches, carried over 7 or 8 threads; also in the borders, fig. 865 and 866 , where the stitches are arranged in a rather arbitrary manner, in order to bring out the pattern more clearly.


Fig. 864. Morocco embroidery.
Quarter of the subjects of fig. 863.
Fig. 864 represents the fourth part of one of the subjects that make up the design fig. 863 ; that is, four such, joined together, form one of the squares of fig. 863.

Figs. 865 and $\underline{866}$ are patterns of two little borders and an insertion, suitable as a finish to fig. $\underline{863}$, which can be enlarged to any size by the addition of other squares to those that are represented here.


Fig. 866. Morocco embroidery.
Border and insertion suitable for fig. 863.
Most of the stuffs, already so frequently alluded to in this work, can be used as a foundation for this kind of embroidery, provided the right working materials to go with it are chosen; Coton à tricoter or Fil à pointer should only be used for the coarser stuffs, such as Rhodes linen No. 1, or Russian linen and the different kinds of tammy cloth, whereas the other kinds of D.M.C threads and cottons and especially the finer numbers, are best adapted for embroidery on fine stuffs, such as Rhodes linen No. 2, and Spanish or Algerian linen.
Spanish embroidery (figs. $\underline{867}$ and 868).-Spanish embroidery consists almost exclusively of button-hole stitch, fig. $\underline{171}$, and flat stitch, fig. $\underline{221 .}$


Fig. 867. Square of spanish embroidery.

## Materials: Or fin D.M.C pour la broderie No. 40, Coton à broder D.M.C Nos. 50 and 100, or Fil à dentelle D.M.C No. 80.[A]

 Colours: Bleu-Indigo 312, 322, 334 and Bleu pâle 668.[A]The button-hole stitches, for which the more subdued shade of the colours indicated should always be taken, or else yellow, dark or pale, to match the gold thread, are made over two threads of gold and follow the outlines of the pattern, which should be more or less appropriate to this style of embroidery. One of the gold threads always keeps the inside of the line and follows it throughout in an unbroken course, whilst with the second, the outside one, you form picots, folding the gold thread over from right to left and catching down the loop by a button-hole stitch, which is introduced into the loop itself and carried over the combined gold threads, as shown in the left corner of fig. 868 , representing one quarter of the whole design, where the position of the needle and the way in which the picot is secured are plainly indicated.

For the scallops, a round material with rather a strong twist should be used, such as Soie de coton D.M.C No. 100[A] or Fil à dentelle D.M.C Nos. 70 to $100^{[\mathrm{A}]}$, wound on reels.


Fig. 868. Quarter of the pattern for fig. 867, in the Natural size.

Where the picots have to fill up empty spaces of a larger size, you can join several together by connecting them each in turn with the first.
When you have bordered all the outlines with button-hole stitches and picots, fill up the spaces enclosed within the lines, which properly speaking form the pattern, with flat stitch embroidery, worked in Coton à broder or Coton à repriser; after which the whole surface is sewn over with fine little spangles which give the sparkling look that constitutes the peculiar charm of this kind of embroidery. The flowers are covered with a fancy stitch that forms regular little lozenges, and every second row of stitches is hidden under a spangle.
With regard to the colours indicated at the foot of fig. 867 , this is how they were distributed in the original, from which our engraving was taken; all the outlines in button-hole stitch, in Bleu pâle 668; the tops of the flowers in Bleu-Indigo 334; the bottom parts in Bleu-Indigo 332, and all three shades of blue so blended together in the solid parts of the design as to be undistinguishable from each other. It is not absolutely necessary to keep to the colours here indicated; there is no reason whatever why a greater variety should not be introduced, but in every case the more subdued shades should be selected; a pale red, for instance, for the flowers, a green and a brown for the arabesques, will always be found to produce a very pretty and harmonious effect.

When all the needlework is finished, you cut away the stuff underneath the network formed by the picots, with a pair of sharp scissors.

Our readers will notice that in fig. 867 the flowers and arabesques succeed and grow out of each other; that whilst the four quarters are symmetrical, yet at the same time, the curves in each quarter take a different inclination.

You cannot therefore simply repeat the subject four times; when you have copied the one quarter, given in fig. 868, you must lay this first quarter on again at the cross + on the left side; when the second quarter is finished, you again turn the copy to the left and tack it on at the +; when you come to the fourth quarter the lines of the first quarter must exactly meet those of the last. We beg here to draw attention to the directions, relative to the copying of patterns, given in the subsequent chapter.

Basket stitch on linen (fig. 869).-This stitch has some resemblance with the Greek stitch, fig. 278, and the Montenegrin, fig. 306, only that it is not crossed like the latter.


Fig. 869. Basket stitch on linen.
Basket stitch can be worked on all kinds of stuffs, on counted threads or on a wide or narrow tracing, with fine or coarse thread, and more or less closely, according to the taste of the worker.
You insert the needle from right, and pass it under, from 3 to 6 threads of the foundation, according to the stuff and the material you are using, then downwards from left to right, and over, from 6 to 8 threads, into the stuff again from right to left; then you push it under the stuff in an upward direction and bring it out on the left in the middle of the space left between the last stitch and the top of the second. The dotted line in the engraving indicates the course of the stitches.
Old German knotted stitch (fig. 870).-This is a stitch often met with in old church and house linen embroidery. A beautiful design worked in this way is given further on.


Fig. 870. Old german knotted stitch.
Contrary to most stitches, this is worked upwards; the needle is put in horizontally under the stuff, the thread tightly drawn, then laid from left to right and drawn through underneath the first stitch and a tight knot made. We find the same stitch, worked in a variety of ways, according to the taste and skill of the worker; for instance the knots may be set slanting, as in fig. 870, or else straight and very close together, as in fig. 873, where they present the appearance of a close string of beads, or again wide apart, as they are in fig. 876.
All these ways are admissible but care should be taken in each case, to make the stitches perfectly regular; it is the direction which is given to the stitch and the number of threads taken up with the needle that changes the appearance of the stitch.

Raised stem stitch (figs. 871,872 ). -Take a very thick thread, such as Fil à pointer D.M.C No. 10 or 20, or one of the coarser numbers of Cordonnet 6 fils D.M.C, lay it as a foundation thread along the line of your pattern and work over it wide stem stitches, as represented in figs. 172 and 173 , either in the same number of thread used for the foundation thread, or a finer, according to the stuff you are embroidering upon.


Fig. 871. Raised stem stitch.


Fig. 872. Another kind of raised STEM STITCH.

You may overcast the same stitch in the manner indicated in fig. 872, using a different colour for the second layer of stitches to produce an agreeable variety.

Border in different kinds of stitches (fig. 873). -The straight lines of this border are all worked in old German knotted stitch in écru thread, forming a thick round cord which stands out from the surface in high relief; the flatter outlining of the outside figures is done in basket stitch in soft blue knitting cotton. The little oblong figures within the two inner lines of the border are worked in Gobelin stitch, in red embroidery cotton, and the filling of the figures, outlined in basket stitch, in one or other of the Irish lace stitches, worked in white lace thread, either so that all the stitches enter the stuff, or form a network over it.
The work may be simplified by sewing Soutache D.M.C or Lacet superfin D.M.C along the straight lines instead of embroidering them in basket stitch.


Fig. 873. Border in different kinds of stitches. Materials-For the old German knotted stitch: Cordonnet 6 fils D.M.C No. 2, écruFor the basket stitch: Coton à tricoter D.M.C No. 16, Bleu-Indigo 312-For the Gobelin stitches: Coton à broder D.M.C No. 20, Rouge-Turc 321-For the lace stitches: Fil à dentelle D.M.C No. 40, white.

Roumanian stitch (figs. $\underline{874}, \underline{875}$ ). -This consists of stitches that are worked in the width of the stuff, intersected by backstitches set slightly slanting.

Though the engraving is so clear as to render it hardly necessary, we subjoin an exact description of the way the stitches run.


Fig. 874.
Roumanian stitch.
Bring out the needle on the left, 2 or 6 threads beyond the line your embroidery is to follow; with regard to the number of threads you take up, you must be guided by the quality of the stuff and the material you have selected: put the needle in on the right, the same distance in advance of the line as before and bring it out in the middle of the stitch; then passing the needle over the first stitch, put it in again one or two threads in advance of the point where it came out, and draw it out close to where the first stitch began.

The border, represented in fig. 875, is worked in great part in Roumanian stitch.


Fig. 875. Border in roumanian stitch.
Materials: Coton à broder D.M.C No. 16, Coton à repriser D.M.C No. 50, or Cordonnet 6 fils D.M.C No. 20.[A]
Colours: Rouge-Cardinal 346, Rouge-Grenat 358, Brun-Caroubier 355, Rouge Maroquin 3327 et 3328, or Rouge-Cerise 3317 et 3318.[A]

The original, still very well preserved, notwithstanding its age, is worked in silk of a brilliant red on a stiff stuff which has been coloured by time and use.
Willems satin, Rhodes linen No. 2 and Algerian linen, make very suitable foundations for this kind of embroidery and have that soft tint which is almost indispensable to a satisfactory imitation of old needlework.
Any one of the shades of red named at the foot of the illustration, will be found to be a good match for the original colours.
Roumanian stitch is used wherever the lines of the pattern are widest; there where they narrow, in the indentures of the leaves and the twists of the stalks, flat stitch is used instead.
By the repetition of the detached subject, this pattern may be made to serve either for a stripe or for a grounding; if you use it for a stripe, the centre flower of the principal subject with the stalks lengthened, will look very well worked as a separate subject between the large bouquets. Worked in a double row, base to base, on any stuff and in any material, these large figures form a very handsome border which makes an effective trimming for furniture and curtains.

Pattern for piqué embroidery (fig. 876). -The stuff, called piqué, such as it is now manufactured, is simply an imitation of an old kind of needlework, almost unknown in these days, but very popular in the fifteenth and sixteenth century in Italy, for making coverlets and more especially curtains and blinds; the latter being highly esteemed, because without intercepting the light altogether, they tempered it agreeably.


Fig. 876. Pattern for pioué embroidery.
Materials: Cordonnet 6 fils D.M.C Nos. 1 and 25, Fil d'Alsace D.M.C No. 100, Fil à pointer D.M.C No. 30 and Fil à dentelle
D.M.C No. 30.[A]

A similar kind of work was common in Bohemia until a recent date for the making of caps. It is done on two layers of stuff, of different kinds, the upper one fine and transparent, the lower, more substantial.
The pattern is drawn upon the fine stuff, because on that side the different kinds of stitches are made.

You then tack the two stuffs together and work all the outlines of the pattern in Old German knotted stitch with écru Fil à pointer D.M.C No. 20; that done, thread a tapestry needle with white Cordonnet 6 fils D.M.C No. 1 or 2, slip it in between the two layers of stuff and secure the end by two or three stitches; then push the twist quite close to the knotted stitch and fasten it in between the two layers of stuff, with small and very regular running stitches, in a fine pliable material, such as Fil d'Alsace D.M.C on reels.

Fill up in this manner all the ground of the pattern, leaving the arabesques and the ornaments plain, or embellishing them with some kind of lace or embroidery stitch.
When these stripes are intended for blinds, you can produce pretty transparent effects in them by cutting away the underneath stuff, in places.

Alphabet in Soutache (braid) (figs. $\underline{877}, \underline{878}, \underline{879}, \underline{880}, \underline{881}, \underline{882}$ ).-This alphabet, which is one of the best of its kind, was taken from a work published in Venice in 1662, by Giovan' Antonio Tagliente, secretary and calligraphist to the Republic.


Fig. 877. Letter T of the soutache alphabet. Mode of interlacing the soutache.
The letters lend themselves, better than any we know, to being executed in Soutache D.M.C.
The sewing on of the braid is done with very small running stitches and the interlacing with a tapestry needle, into which the braid is threaded; both operations are shown in figs. 877 and 880 . The embroidery of the connecting bars, and the small leaves and tendrils that complete the letter are explained in fig. 881 , whilst fig. 882 represents the letter A in its finished state.


Fig. 878. Alphabet in soutache. Letters A to N.


Fig. 879. Alphabet in soutache. Letters $\mathbf{O}$ to $\mathbf{Z}$.
For sewing on the braid, a fine soft material is the best, such as Soie de coton D.M.C[A] and for embroidering the small accessories, Coton à broder D.M.C No. $50{ }^{[\mathrm{A}]}$.


Fig. 882. Letter A of the alphabet in soutache in its finished state.

Flowers executed in Soutache and embroidery (fig. 883). Flowers and sprays, such as here represented, make a charming trimming for summer dresses, sunshades, aprons etc. and can be executed with admirable effect in the D.M.C Soutache, now to be had in all the colours of the D.M.C colour card. A very pretty running pattern can be formed out of the spray, fig. 883 , by turning the flowers first to the right and then to the left and making the stalks come out underneath the ears of corn. In order to reverse the position of the flowers thus, you will have to make two tracings of the spray, one negative and one positive.


Fig. 883. Flowers executed in soutache and embroidery. Materials: Soutache D.M.C Nos. 1 to 3 and Coton à broder D.M.C No. 35. ${ }^{[A]}$
Colours-For the Soutache: White, écru or Jaune d'Ocre 677, and Bleu-Indigo 322.-For the Coton à broder: Ecru, Jaune-Orange 444, Bleu-Indigo 311, Gris-Tilleul 391 and 330, Vert-Pistache 319, 320 and 369, Rouge-Cardinal 348.[A]

For the ears of corn in fig. 883, use either Soutache écru, or Jaune-d'Ocre 677 No. 2; for the marguerites, white Soutache No. $21 / 2$ and for the corn flowers, Soutache Bleu-Indigo 322 No. 2. Nothing could be simpler than the mode of working these flowers.

Thread a tapestry needle with the Soutache and draw it into the stuff, and then pass it through from the right side to the wrong at the bottom of one of the petals of the flowers, secure it on the wrong side by two or three stitches and then bring the working thread, which should be of the same colour as the Soutache, out again at the point of the petal, then carry the Soutache back to the bottom of the petal and fasten it down, like the gold threads in fig. 242, by a stitch rather wider than the Soutache, fold the Soutache over again to the starting point, and secure it by a stitch, and so on. In order to give a different character to the flowers, use Soutache of different widths, fold it over more or less closely and lay it down in shorter or longer lengths, as required. The natural irregularity of the petals of a flower can be very faithfully imitated in this manner. Fig. 883 shows the way in which, for the ears of corn, the braid is folded back upon itself and fastened down, whilst in the white flowers the two layers of the braid that form each petal are separated at the bottom.
The stamens of the marguerites are worked in knot stitch with yellow cotton and those of the cornflowers with dark blue.
The other little details are executed in flat and stem stitch in the colours indicated at the foot of the engraving. With the pattern to go by, the distribution of the colours for the different parts can present no possible difficulty.
We need only point out that Rouge-Cardinal 348 is intended for the little knot that connects the stalks of the flowers.
Chinese subject (fig. 884).-This quaint and graceful composition, copied from an interesting piece of Chinese embroidery, gives our readers the opportunity of turning the different damask stitches, already described in these pages, to quite a new use.


Fig. 884. Chinese subject.
Materials: Coton à repriser D.M.C No. 50, Or fin D.M.C pour la broderie No. 40 and Chiné d'or D.M.C.[A]
The kind of gauze which forms the foundation of the original work can be replaced either by Spanish or Rhodes linen No. 2 , by any stuff, in fact, the threads of which can be counted.
The drawing has to be transferred to the stuff, and the different parts are filled in with the stitches, clearly indicated in the illustration.

By the introduction of several colours, this pattern is capable of being infinitely varied.
Thus, in the model before us, the neck and bulb of the flask, the leaves it stands upon and those attached to the flowers in it, are worked in Vert-Pistache 367, the handles, the ornament on the bottle, and the triangular figure in the centre are in white the little flower on the left, the second on the right, the straight staff, the upper wings of the butterfly, as well as the three leaves underneath the triangle are in Bleu-Indigo 334; the first flower on the right of the flask, the knot above the triangle, the lower wings of the butterfly and the middle part of the bottom subject on the right of the engraving are in Gris-Amadou 383; and Violet-lie-de-vin and Brun-Caroubier 357 alternate in the pointed leaves that support the flask; the former colour recurs in the ornaments of the staff, and Rouge-Cardinal 347, black and Gris-Tilleul alternate in the other details of the drawing.
For the setting it will be best to take Or fin D.M.C pour la broderie or else Chiné d'or D.M.C, used either double or single, according to whichever the drawing seems to require.

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## FOOTNOTES:

[A] See at the end of the concluding chapter, the table of numbers and sizes and the list of colours of the D.M.C threads and cottons.


Ornament after Holbein.

## Practical directions.

Hitherto we have been chiefly occupied with descriptions and explanations of the different kinds of needlework; to render these complete, it remains for us to give a few practical directions with regard to the copying, adjustment and transposition of the patterns, as well as to the different processes, often so essential to the ultimate success of a piece of needlework. For this success will soon be found not to depend on the stitches only but very largely on the proper adaptation of the design to the space it is intended to fill.
Then, in the case of new lace, it is necessary to know the amount of dressing it will require to give it the right stiffness and when this dressing has worn off how to renew it; whilst in the case of appliqué work more especially, it is indispensable to know exactly what the ingredients are, of which the paste should be composed and how to make and lay it on in the proper manner.

Tracing patterns against a window pane.-In order to copy a pattern in this way, the first step is to tack or pin the piece of stuff or paper on which the copy is to be made upon the pattern. In the case of a small pattern, the tacking or pinning may be dispensed with and the two sheets held firmly pressed against the window pane with the left hand, whilst the right hand does the tracing, but even then it is safer to pin or gum the four corners of the two sheets together, in case of interruption, as it is difficult to fit them together again exactly.
The tracing may be done with a pencil, or better still, with a brush dipped in Indian ink or water-colour paint.
The process of tracing is easy enough, so long as the hand does not get tired but as this generally comes to pass very soon it is best, if the pattern be a large and complicated one, to stick the sheets to the pane with strong gum or suspend them on a string, fastened across the pane by pins stuck into the window frame on either side.

To take off a pattern by rubbing.-If you want to take a pattern of a piece of embroidery direct from the work itself, lay it, the right side up, flat upon a board or table and cover it with letter or tissue paper.
The paper should be of a good medium thickness, if it be too thick it will not take a clear impression of the pattern, and if very thin it is apt to tear.

Fasten the paper down upon the embroidery with drawing-pins and rub off the pattern with drawing-wax. In default of the right kind of wax, the bowl or handle of a spoon, or a large silver coin will serve the purpose equally well, as will also some powdered graphite or charcoal. The outlines will not of course, in any case, be very clearly defined upon the paper and will have to be gone over and carefully supplemented afterwards with a pencil.

Taking off the pattern with charcoal or graphite is less injurious to the embroidery than rubbing it off with wax or metal, as the pressure required in the latter case flattens the needle-work very considerably. As soon as you have fixed the lines of the pattern by drawing them over with ink, it is ready for use.
To transfer a pattern direct on to the stuff.-Patterns cannot be copied by either of the above methods direct on to the stuff and can only be used when the stuff on which the embroidery is to be executed is transparent; in the case of thick close fabrics the drawing must be made on the stuff itself. The following is the simplest way of transferring a pattern on to a transparent stuff; begin by going over all the lines of the drawing with Indian ink so as to make them quite thick and distinct, and tacking the paper with large stitches on to the back of the stuff. Then, mix some very dark powdered indigo diluted with water, in a glass with a small pinch of sugar and powdered gum arabic, and using this as ink and a fine pen very slightly split, trace the pattern that shines through on the stuff.

The tracing must be very slight, for if the embroidery be not done till some time afterwards the lines get so firmly fixed in the stuff that one washing will not obliterate them; the tracing ink moreover makes the work unpleasantly sticky.
To copy with oiled paper.-Another rather expeditious mode of transferring patterns on to thin and more especially smooth glossy stuffs, is by means of a special kind of tinted paper, called autographic paper, which is impregnated with a coloured oily substance and is to be had at any stationer's shop. This you place between the pattern and the stuff, having previously fastened the stuff, perfectly straight by the line of the thread, to a board, with drawing-pins. When you have fitted the two papers likewise exactly together, you go over all the lines of the pattern with a blunt pencil, or with, what is better still, the point of a bone crochet needle or the edge of a folder. You must be careful not to press so heavily upon the pattern paper as to tear it; by the pressure exercised on the two sheets of paper, the oily substance of the blue paper discharges itself on to the stuff, so that when it is removed all the lines you have traced are imprinted upon the stuff.
This blue tracing paper is however only available for the reproduction of patterns on washing stuffs, as satin and all other silky textures are discoloured by it.

To pounce patterns upon stuffs.-The modes of copying, hitherto described, cannot be indiscriminately used for all kinds of stuff; for cloth, velvet and plush, for instance, they are not available and pouncing is the only way that answers.
The patterns, after having been transferred to straw or parchment paper, have to be pricked through. To do this you lay the paper upon cloth or felt and prick out all the lines of the drawing, making the holes, which should be clear and round, all exactly the same distance apart.
The closer and more complicated the pattern is, the finer and closer the holes should be. Every line of the outline must be carefully pricked out.
If the paper be sufficiently thin, several pouncings can be pricked at the same time, and a symmetrical design can be folded together into four and all pricked at once.

The pricked pattern has next to be tacked upon the material, the side from which the pricking was done next to the stuff and the little funnel-shaped holes uppermost. Paper and stuff must be firmly fastened down and kept in position by drawing pins, so that neither of them may move during the process, otherwise you will have double lines on the stuff which you will find very confusing afterwards.

For the pouncing, use either powdered chalk or charcoal, according to whether the stuff be dark or light in colour. Dip the pouncing implement, a thing like a small drum-stick, stuffed and covered with cloth, into the powder and rub it lightly over the whole surface of the pricked pattern, so that the powder penetrates through the pin-holes to the stuff. In default of a proper pouncing implement take a small stripe of cloth, roll it up round a stick and wind a string round, and dip this into the powder.
When the powder has penetrated to the stuff, remove the paper and if the pattern is to be repeated, lay it on again further on, taking care to make the lines meet exactly so that the join may not be seen.
When you have finished the pouncing and taken off the paper, you proceed to draw or rather paint in the pattern with watercolour paints: Ackermann's are the best for the purpose; no others, as far as our experience has proved, adhere so well to even the roughest fabrics or so little affect the brilliancy of the embroidery thread. Four paints, blue, black, yellow and white are sufficient for all purposes, whatever the colour of the stuff may be.

On a smooth surface the tracing may be done with a pen but a small sable-hair brush is preferable under all circumstances.
The rougher and more hairy the surface, the finer the brush ought to be, in order that the colour may sink well in between the fibres.
Before beginning to paint in the pattern, gently blow away all the superfluous powder from the surface. This process may be objected to as being an old one which has been superseded by new inventions; a resinous powder for instance, by the use of which patterns can be fixed, as soon as they have been pounced, by passing a hot iron over the stuff, a sheet of paper having first been laid upon it to protect it; or else a mixture of gum and powder which can be dissolved on the stuff itself by the steam
of spirits-of-wine, and various other processes needless to mention here, as some are only useful in tracing patterns on a large scale, whilst others require a variety of appliances, not as a rule, within the reach of those to whom needle-work is a simple recreation.

The preparation of the stuffs and the subdivision of the patterns.-Long years of experience and practice have brought us in contact with a good many designers, many of them artists in their way, so long as it was only a question of putting their own compositions on paper but who yet found themselves confronted by real difficulties the moment they were called upon to transfer them to stuff.

We shall, as far as possible, point out to our readers the precautions to be taken in tracing patterns and must for that purpose go back to one of the first operations, namely that of pricking.
To begin with, the paper on which the pattern is should always be large enough for there to be a clear margin of from 4 to 5 $\mathrm{c} / \mathrm{m}$. all round the pattern, so that the pouncing instrument may never come in contact with the stuff beneath.

In transferring patterns to stuff, no lines of division should ever be made directly upon it either with lead, chalk or charcoal, as it is hardly ever possible entirely to obliterate them and they often become very confusing afterwards.
Before beginning the tracing, divide your stuff into four, then decide what the width of the border outside the pattern is to be; it is quite an exceptional thing to carry a pattern right up to the edge. Stuffs that will take a bend, such as all linen and cotton textures, can be folded in four, like the paper, the folds ought then to be pinched and pressed down so that the lines may remain clear and distinct until the tracing be finished.
After dividing it into four, mark out the diagonal lines; these are absolutely necessary in order to get the corner figures rightly placed.
Though most of our readers know how to make these lines on paper with a pencil and ruler, few, easy as it is, know how to make them upon stuff. You have only to fold over the corner of your piece of stuff so that the outside thread of the warp or cut edge run parallel with the woof edge which marks the angle of the fold-over.

This double folding over divides the ground into 8 parts. To arrange for the outside border or margin, is easy enough if the stuff and the kind of work you are going to do upon it admit of the drawing out of threads, as then a thread drawn out each way serves as a guide for tracing the pattern, straight to the line of the stuff. It is often better however, not to draw out the threads for an open-work border till the pattern be traced. If you do not wish or are not able to draw out threads to mark the pattern and you are working on a stuff of which the threads can be counted, follow the directions given on page 128, and explained in fig. 252.
You cannot mark cloth, silk stuffs or plush by folding them in the above way, cloth and some kinds of silken textures will not take a bend and others that will would be spoiled by it.

All such stuffs should be mounted in a frame, before the pattern be traced and the ground be then divided out in the following way: take a strong thread, make a knot at one end, stick a pin into it and tighten the knot round it; with a pair of compasses, divide one of the sides into two equal parts, stick the pin with the knot round it in at the middle and the same on the opposite side, putting in a second pin by means of which you stretch the thread; carry other threads across in a similar way, in the width of the stuff and from corner to corner and you will have your ground correctly marked out, in such a manner as to leave no marks when, after pouncing in the pattern, you remove the threads. Before finishing the pouncing of a pattern, see that it is the right size for the purpose it is intended for.

Supposing that you are tracing a border with a corner, you should measure the length it will occupy and then by a very light pouncing, you can mark the points from which the pattern will have to be repeated. It may be that a gap will be left in the middle, which, if not too large, can be got rid of without altering the pattern by pushing the whole thing a little further in and so shortening the distance between the two corners.
Should the gap however be too large for this, you will have to make a supplementary design to fill up the place. The same thing would be necessary in the case of your having to shorten a pattern.

To transpose and repeat patterns by means of looking-glasses (fig. 885).-We have referred to the necessity that often occurs of adapting patterns to certain given proportions; this can in most cases be done easily enough without the help of a draughtsman, especially in the case of cross stitch embroideries, by means of two unframed looking-glasses (Penelope mirrors, as they are called) used in the following manner.


Fig. 885. To transpose and repeat a straight pattern by means of looking glasses.

If you want to utilize a piece only of a straight border, or after repeating it several times, to form a corner with it, you place the mirror in the first instance across it at right angles, at the place from which the pattern is to be repeated, and then exactly diagonally inwards.
To make a square out of a straight pattern, you take two mirrors and so place them that they touch at the point where the diagonal lines meet, as represented in fig. 885, and you have your square at once.
This is all easy enough, but before beginning any large piece of work it is necessary to consider carefully which parts of the drawing will best fill the centre and which are best suited to form the corners, as it is not every part of a straight pattern that is adapted for repetition.

A few preliminary trials with the help of the mirrors will better show the importance of these explanations than anything further we can say on the subject.

To alter the proportions of a pattern by dividing the ground into squares (figs. 886 and 887 ).-Cases will occur where it will be found necessary to subject the pattern to greater modifications still than those we have hitherto been dealing with.
You want, for example, to embroider a rather large running ground pattern on a piece of stuff, that is relatively too small for
the subject; or a small and rather minute pattern on a large surface on which it is likely to look, either too insignificant, or too crowded and confused and the chances are, if you do not know how to draw, you will either think it necessary to get a draughtsman to help you or you will give up the piece of work altogether, deterred by the difficulties that confront you. You need not do either if you will follow the directions here given.
Take a sheet of large-sized quadrille paper which if necessary you can prepare for yourself; trace your pattern upon it, or rule the squares direct upon the drawing, as shown in fig. 886.


Fig. 886. Dividing the ground into squares before copying.
On a second sheet of vegetable paper, rule squares, a fourth, a third or half as small again as those on the first sheet. Thus, if the sides of the first squares be $15 \mathrm{~m} / \mathrm{m}$. long and you want to reduce your pattern by one fifth, the sides of your new squares should measure only $12 \mathrm{~m} / \mathrm{m}$.
If, on the contrary, you want to enlarge the pattern by one fifth, make the sides of your squares $18 \mathrm{~m} / \mathrm{m}$. long.
Then you follow, square by square, the lines of the drawing, extending or contracting them, according to whether the pattern is to be enlarged or diminished.
To copy a pattern directly from a piece of embroidery and enlarge or diminish it at the same time, proceed as follows: fix the embroidery on a board, stretching it equally in every direction; then measure the length of the drawing, divide the centimetres by the number of units corresponding to whatever the proportions of your copy are to be, and if there be any fractions of centimetres over, subdivide them into millimetres, if necessary, into half millimetres and make your division by whatever measure you have adopted; take a pair of compasses with dry points, open them sufficiently for the opening to correspond to the number and the distance obtained by the division; plant a pin with a thread fastened to it, at the point indicated by the point of the compasses and repeat the last operation all along one side of the embroidery and, if possible a little beyond it, so that it may not be defaced by the marks of the pins. All you now have to do is to pull the threads in perfectly straight lines to the opposite side and carry other threads across them in a similar manner so that the whole surface be divided into squares.


Fig. 887. Pattern reduced by marking out the ground in small squares.
It is needless to say that if you have to trace a pattern from a mounted piece of work you cannot stretch it on a board; with a little invention however some way can always be found of planting the pins so as not to injure the work.
To alter the width of a pattern retaining the original height (figs. $\underline{888}, \underline{889}, \underline{890}$ ).-Sometimes it is necessary to lengthen out a pattern without however altering its height. In this case you modify the shape of the square and make long or narrow squares, according to the general shape of the design you wish to reproduce. Fig. 888 represents a pattern in Soutache D.M.C, marked out in squares; in fig. 889 the squares are lengthened out a third beyond their original size and the pattern is expanded; in fig. 890 , the squares are compressed to a third less than their original size.

This method of subdividing patterns greatly facilitates the alterations they have so often to undergo and we are sure that there are few amongst those who have any real aptitude for needlework, who cannot draw enough to be able to copy the contents of a square.


Fig. 888. Pattern in soutache. Original size.


Fig. 889. Pattern in fig. 888 drawn out in the width.


Fig. 890. Pattern in fig. 888 compressed in the width.
To prepare the paste for appliqué work.-It may seem strange to devote a separate paragraph to such an apparently simple operation; but in appliqué work it is a most important one, as not only the stuff on which the work is done but all the expensive accessories are liable to be spoilt by paste that has been badly prepared.
Put some wheaten (not rice) starch into a vessel with a rounded bottom, pour on just enough water to dissolve the starch and stir it with a wooden spoon till it becomes perfectly smooth.

In the meantime put about $1 / 4$ of a pint of clean water on the fire to boil and when it boils add to it a little powdered pitch or carpenter's glue, in quantity about the size of a pea and pour in the starch, stirring it the whole time. When the mixture has boiled up several times take it off the fire and go on stirring it till it gets cold, otherwise lumps will form in it, which as we specially pointed out in the preceding chapter, must never be allowed to get in between the stuff and the paper.
This kind of paste makes no spots and does not injure even the most delicate colours as it contains no acid. In winter it will keep for several days, but in hot weather it very soon begins to ferment and should then on no account be used.

Gum arabic ought never to be used for appliqué work, as it becomes so hard that it is impossible to get the needle through, whilst the saccharine it contains almost always causes ugly spots to appear in the stuff when it dries.
When the work is finished it is a good plan to spread a very thin layer of paste over the entire back of it with a fine brush made of hog's bristles, and not to take it out of the frame until it is perfectly dry.

To stiffen new needlework.-In the chapter on Irish lace, page 441 , we said that new needlework of that kind had to be ironed; this should be done in the following manner: when the lace has been taken off its foundation, lay it, face downwards, on a piece of fine white flannel; then dip a piece of very stiff new organdie muslin into water, take it out again almost immediately and wring it slightly, so that no drops may fall from it, and then dab the wrong side of the lace all over with this pad of damp muslin and iron it with a hot iron which should be moved slowly forwards so that the moisture which the organdie has imparted to the lace may evaporate slowly. Not until you are quite sure that the lace is dry should it be taken off the board.
There is no better way than this of giving new lace that almost imperceptible degree of stiffness by which alone it is often to be distinguished from old. Water only does not stiffen the thread sufficiently and it is difficult with starch to hit upon exactly the right consistency, whereas the organdie muslin supplies just the needful quantity.

Embroidered network can be stiffened in the same manner and should be damped in the frame on the wrong side and not taken off until it is quite dry.
We even recommend embroidery on linen being treated in the same way but when the linen is very creased, cover it with a damp cloth and iron upon that first, then take the cloth away and iron the embroidery itself so as to dry it completely.

To wash ordinary lace.-Wind it round a bottle the same width top and bottom and cover it entirely with muslin, fastened to the lace by a few stitches. Fill the bottle half full of sand, so that it may not get knocked about too violently when the water boils.
Immerse the bottle in a saucepan of cold water with a piece of soap the size of a nut in it, and if the lace be very dirty, a small pinch of salt, and let it boil for about an hour pouring off the water as it gets dirty and adding clean.

When all the dirt has been boiled out of the lace, which you will know to be the case when the water remains perfectly clear, rinse out the soap before you take the lace off the bottle, by plunging it into cold water.

To wash real lace.-The process is the same as the above, but as real lace is so seldom washed and is generally very yellow and fragile, particularly if it has been roughly used, it is rather difficult to clean.
If stained or greasy, it should be left to soak for some hours or even days, in good olive oil. This restores to the thread that softness and smoothness which use and bad washing had impaired. After the oil bath it should be washed on a bottle in the manner already described.
To stiffen lace.-Dip the lace when perfectly dry in thin starch prepared as follows.
Take as much fine wheaten starch, as you think you will require, divide it into two portions and dissolve both in cold water. Boil the one portion and when it has so far cooled as to have ceased to steam, stir the cold starch into it and dilute the whole with cold water to the consistency of thick cream. If the lace is to be slightly coloured, add a few drops of black coffee, or dilute the starch with weak tea or guimauve water; the coffee will give it a dark cream colour, either of the latter a pale greenish hue.
Dip the lace in the mixture and squeeze it out gently without wringing it to get rid of all the superfluous liquid, then lay it flat on the left hand and beat it for a few minutes with the right to work the starch well in; repeat the whole process twice, then roll the lace in fine linen and leave it there till you are ready to iron or pin it out, as the case may be.

To iron lace.-After the lace has lain for an hour or two in the cloth, iron it if it be machine-made and if it be Irish Guipure or real point lace of any sort, pin it out.
Before you begin to iron, hold the lace tight in your left hand by the footing and with the right hand pull out all the picots, along the edge of the lace, to an equal length, then lay it out flat upon a board covered with white flannel and iron it with a moderately hot iron, passing the iron backwards and forwards over it until it be quite dry.
If creases should come in the ironing where they ought not to be, dab them over lightly with a sponge moistened with water and a few drops of starch and pass the iron over them again.
After ironing the whole length of lace, pull it out crossways from left to right, and from right to left and iron it all over once more. This does away with the artificial stiffness and gives it the agreeable softness and pliancy of new lace.

To pin out lace.-In order to pin out lace in a thoroughly satisfactory manner, you should provide yourself with a wooden drum, about $30 \mathrm{c} / \mathrm{m}$. high and from 50 to $60 \mathrm{c} / \mathrm{m}$. in diameter, large enough to rest upon the knees.

The outside circumference of the wood should be padded and covered with grey or white ticking.
The pins must be exactly the size of the picots they are to pin down; you will require extremely fine ones for Valenciennes and coarser for other kinds of lace: steel pins are of no use whatever, because of their liability to rust. Cover the cylinder with blue paper (less trying for the eyes than any other) and take only just as much lace out of the damp cloth as you are likely to be able to pin out before it gets dry, keeping the remainder covered up.
Lay the lace upon the drum and pin the footing down first in a straight line, sticking the pins in pretty closely and at regular distances apart; then pin down each picot separately, taking care not to open them if they have kept their original shape and to shut them up by twisting them if they have got untwisted.
If you find the pinning out troublesome and cannot get it all done before the lace dries, damp the picots with a sponge as you proceed.
Lace should never be pinned out when it is dry as the threads of the picots are then very apt to break and torn picots destroy the value of even the choicest lace.

Raised lace has to be stamped out from the wrong side with a lace awl or kind of pricker of bone made for the purpose. Some professional lace-cleaners use this implement even for Valenciennes lace but we cannot recommend it, seeing that it is a lace that is by nature perfectly flat.

Let the length of lace you have pinned out remain on the drum till it be quite dry; if you have several yards to pin out, wind it round and round the cylinder. Cover up the lace as you proceed and put each length away as soon as it is ready in a blue paper bag, so as to keep the whole perfectly clean.
In conclusion we may remark that the cleaning of lace should only be undertaken when you are fairly sure of not being interrupted, as more especially the pinning requires to be finished off as quickly as possible.
To wash coloured cottons and work done with the same.-In order to test the fastness of the dyes, untie the skeins and pour boiling water upon them, leave them to soak for about a quarter of an hour, soap and rub them lightly with the hand from end to end and rinse them out thoroughly in as many changes of cold water as may be found necessary, until the water remain perfectly colourless.
Squeeze out all the water you can and let them dry quickly without exposing them to the sun.
Coloured cottons are often washed in vinegar, because it is supposed to affect the colour less than water does. We have come to the conclusion after several trials that this is a delusion, for the good dyes keep their colour without the aid of vinegar and the bad ones wash out in spite of it.
The fast colours lose none of their beauty in the process nor does it affect the quality of the cotton; any excess of colouring matter which the fibres of the cotton may have absorbed in the process of dyeing is got rid of by this means.
If a piece of work has been done with unwashed cottons and the colours run in the first washing, you have only to rinse it out in several changes of tepid water to restore it to its original freshness and if you want to give it a yellowish tinge, it should be dipped it in weak tea or coffee.
Materials.-It was stated in the preface that our readers would find the choice of colours and material rendered comparatively easy to them by the notes affixed to the illustrations, but these notes, in spite of all the care bestowed upon them must still have remained very incomplete had it not been for the following tables which we were fortunately enabled to append to our work and which will help every one to choose their own materials without having them actually before them. The strokes that are affixed to each number indicate the exact size of the thread, so that to find out the number you want to buy you have but to lay your pattern thread, stretching it slightly, on the strokes, in succession, till you come to the one that matches it in size.

With regard to the colours, the names and shades of which have been classed in the second table with the greatest care, and of which our workers have no less than 460 to choose from [3], all those referred to in connection with our illustrations are quite fast dyes [4], save in a few instances in which we were forced to make an exception in favour of a doubtful colour to secure a harmonious effect.
A complete table of colours must of necessity include certain more or less staring shades, which though they may not be to every one's taste cannot on that account be left out.
We conclude our work with the well-meant and by no means useless recommendation to our readers, never to begin a piece of work of any considerable size without first making sure that the colours they intend to use are fast and providing themselves with a larger supply of materials than even on a close calculation they think they are likely to require, lest they should find themselves under the disagreeable necessity of having either to leave their work unfinished or finish it with materials that do not match. There is generally a slight difference in tone between cottons that have been bought at different times, and there is also a reasonable likelihood, considering their great variety, of some mistake being made in the number by either buyer or seller in ordering a fresh supply.


All of the above articles, excepting those marked with an asterisk, are made in all numbers in écru, white, black and the 450 shades contained in the D.M.C colour card.--For the names of the colours, see next page.

| Alphabetical list of the names and the numbers of the 450 shades D.M.C Alsace Thread, Sewing and Embroidery Cottons contained in the D.M.C colour-card, in any of which shades the knitting Cotton, Soutaches and Braids etc. are to be had. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Couleurs Colours | Très-foncé Very dark | Foncé Dark | Moyen Medium | Clair Light | Très-clair <br> Very light |
| Bleu d'Azur | ... | 3325 | $\cdots$ | $\cdots$ | ... |



| 3307 | 3308 | 3309 |
| :---: | :---: | :---: |
| 448 | ... | ... |
| 517 | 518 | 519 |
| 483 | 484 | 485 |
| 339 | 340 | 341 |
| 478 | 479 | 480 |
| 3302 | 3303 | 3304 |
| 312 | 322 | 334 |
| 343 | 344 | 345 |
| 507 | 508 | 509 |
| 683 | ... | ... |
| ... | 668 | ... |
| 488 | 489 | 490 |
| ... | ... | 709 |
| 527 | 528 | 529 |
| 675 | ... | ... |
| 587 | 588 | 589 |
| 301 | 401 | 402 |
| 435 | 436 | 437 |
| 662 | 663 | 664 |
| 303 | 356 | 357 |
| 324 | 418 | 419 |
| 302 | 432 | 325 |
| 617 | 618 | 619 |
| 456 | 457 | 458 |
| 440 | 441 | 442 |
| 405 | 406 | 407 |
| 463 | ... | ... |
| … 3312 | $\ldots$ 3313 | 3314 |
| 652 | 653 | 654 |
| 384 | 385 | 386 |
| 719 | ... | ... |
| 592 | 593 | 594 |
| 612 | 613 | 614 |
| 410 | 411 | 412 |
| 647 | 648 | 649 |
| 414 | 318 | 415 |
| 323 | 389 | 390 |
| 657 | 658 | 659 |
| 705 | 706 | ... |
| 708 | ... | ... |
| 602 | 603 | 604 |
| 637 | 638 | 639 |
| 461 | 462 | ... |
| 522 | 523 | 524 |
| 642 | 643 | 644 |
| 716 | 717 | ... |
| 718 | ... |  |
| 622 | 623 | 624 |
| 422 | 423 | 424 |
| 627 | 628 | 629 |
| 380 | 381 | 382 |
| 632 | 633 | 634 |
| 427 | 428 | 429 |
| 393 | 330 | 331 |
| 597 | 598 | 599 |
| 445 | 446 | $\ldots$ |
| 711 | 712 |  |
| 577 | 678 | 579 |
| 676 | 677 | ... |
| 443 | 444 | ... |
| 308 | 365 | 366 |
| 667 | ... | ... |
| 680 | ... | ... |
| 314 | 328 | 399 |
| ... | $\cdots$ | $\ldots$ |
| ... | $\ldots$ | $\ldots$ |
| $\ldots$ | $\cdots$ | ... |
| 572 | 573 | 574 |
| ... | ... | 3326 |
| 567 | 568 | 569 |
| 361 | 332 | 362 |
| $\cdots$ | ... | ... |
| 304 | 305 | 348 |
| 3317 | 3318 | 3319 |
| 447 | ... | ... |
| 450 | ... | ... |
| 464 | ... |  |
| 686 | 687 | 688 |



To avoid mistakes the public is urgently requested to designate the colours by the number, never by name.
The colours whose numbers begin with 3 or 4 are the fastest.

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Further information respecting mode of execution, materials and so forth may be had by applying to the firm of TH. de DILLMONT, DORNACH (Alsace).

## FOOTNOTES:

[3] The D.M.C colour-card consists of 450 shades about half of which are fast dyes. See the list of names on pp. 572 and 573.
[4] By fast (bon-teint) colours are meant those which will bear ordinary and repeated washing. There are only very few which are really fast, or grand-teint, that is to say, which will resist the action of chemical agents, amongst of these, the black, Noir 310, is quite indestructible

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[^0]:    Stripe showing running, stitching, button-holing, and herring-boning.

