

TABLE OF CONTENTS

	PAGE
INTRODUCTION	1
THE PATTERN SELECTOR BUTTONS (codes)	2
(1) PATTERN USING NO CONTROLS (Needles only)	3
Embossed Stripe	4
(2) PATTERNS USING NEEDLE SELECTOR BUTTONS & HOLDING CAM LEVERS (Main Bed)	
Bird's eye	6
Peacock	8
Cloister Pattern	10
Maple	12
Rivulet	14
Bow Tie	16
(2a) Abbo oblid midimid ==	
Contour	18
(3) PATTERNS USING CAM SWITCHES (Auxiliary Bed)	
Copy Cat	20
(3a) ALSO USING RACKING LEVER	
Open Moss	22
Vine	24
Cobble	26
Zig Zag	28
Lig Dag	

(4)	PATTERNS USING PATTERN SELECTOR	
	BUTTONS (Main Bed) & CAM SWITCHES	
	& RACKING LEVER (Auxiliary Bed)	
	Herringbone	30
	Elite	32
	Ripple	34
	Herringbone Tweed	36
	Cascade	38
	Basket Weave	40
	Braid Pattern	42
	Web Rib	44
	Waterfall	46
	Cockscomb (Stole Pattern)	48
	Whisper (Stole Pattern)	50
	Caprice	52
	Variation and Theme	54
	Ripple Rib	56
(5)	PATTERNS MADE BY TRANSFERRING STITCHES	
	Fantasy	58
	Filigree	60
	Waltz Time	62
	Waltz Time	02
(5a)	PATTERNS WITH CABLING MOTIFS & USING	
	VARIOUS CONTROLS	
	Foxtrot · · · · · · · · · · · · · · · · · · ·	64
	Plaited Cable	66
	Key Cable	68
	Ring Cable	70
	Narrow Macrame	72
	Macrame	74
	Trelis Cable	76
(6)	PERMANENT PLEATING	
	Box-Pleats	78
	Semi Box Pleat	78
	Rib Pleats	79
	Accordion Pleats	79

INTRODUCTION TO EMPISAL DOUBLE-BED PATTERNING

Empisal International has pleasure in presenting this book of exclusive Automatic Double-Bed patterns in answer to numerous requests arising out of the popularity of the Empisal Double-Bed knitting machines which has created a very special demand for these patterns.

It is not feasible to publish every single pattern which these fabulous knitters can create. It is nevertheless possible to give a wide cross-section, therefore the patterns chosen for this publication are those which will teach the ease with which the automatic controls of the knitter work for you. Thus will be learnt the essentials of pattern making and from the experience gained, the ambitious knitter can draw inspiration for the creation of her own designs.

A few words of explanation:—
Reading Instructions: The patterns have been set out on a row by row and step by step basis. For correct patterning, follow each step in the same sequence.

Tensions: The tension settings quoted in the text should only serve as guides to the setting used on the types of yarn mentioned. These patterns can be knitted at various tensions. The setting will depend upon the type of wool used. It is suggested that, before knitting, a tension swatch should be tried out to find the most suitable stitch size to use for the yarn used and the pattern knitted.

Needle Settings: These are clearly illustrated and where necessary, the needle graphs numbered and key-marked to correspond with the Needle Selector Buttons (N.S.B.) The patterns will only resemble illustrations when the needles are set to correspond with those depicted in the graphs.

Keymarks: The needlebed is marked with keymarks
and
. When the Slide Dial is on 1 and the Reverse
Switch on +, needle No. 1 in each group of eight will
correspond with this keymark
 and needle No. 5
with this mark
.

Asterisks: In some graphs needles are marked with an asterisk*. This represents the first needle of the pattern group, i.e. the needle setting for the pattern starts at the asterisked needle. The next asterisk represents the first needle of the repeat of the pattern.

Knitting of Garments: Choose any plain garment hand knitting leaflet and shape the garment according to the instructions given. Add originality by selecting any one of the many designs in this book and work it into the fabric of the garment.

It is suggested that the pattern of your choice should be knitted as an exercise before you actually start knitting the garment. To do this, cast on and knit a few rows, then set the knitter controls as indicated, after which knit through the instructions a few times to acquire the rhythm of knitting the pattern. Making the garment will then become so much simpler.

With double bed knitting, some of the more effective designs are picked out on what is commonly termed "the wrong side". This can be used to good effect to give originality and a fashion touch to your creations.

Racking Patterns: Before Racking always ensure that the Main Bed and Auxiliary Bed needles are well away from each other, i.e. all needles on both beds must be in positions B or A. If this precaution is not taken, serious damage will be done to the needles.

Selvedge needles: In some graphs, particularly in those where there is a wide racking range, e.g. "Foxtrot" the graphs shew a number of extra needles on the left of the first asterisk. These needles should be set according to the graph, the first needle of the Main Bed on the graph being the selvedge needle. As the Racking Lever is moved some of these needles will come into action for continuity of the pattern; this will save unnecessary transferring of selvedge stitches as the pattern proceeds.

It is not necessary to set extra needles for the selvedge on the right. However, when casting on for a garment it is advisable to set into action a number of needles equivalent to the additional needles on the left plus the patterning needles in multiples of the number of needles used in that pattern, for example:—

The garment pattern says: "Cast on 105 stitches", the stitch design is worked over 8 needles (from * to last needle before next *), and there are 10 needles before the first asterisk (refer to pattern "Foxtrot').

On the left set into action the first 10 needles according to the graph, this	
leaves 95 stitches to be set according to the graph	105-10=95
Over these 95 needles the stitch design can be set 11 times:	11 x 8=88
Leaving 7 needles to be set	7

We have had lots of fun choosing the patterns for this publication—We are sure you too will have lots more fun knitting the patterns and as you progress and become fully "at home" with your Empisal you will find yourself branching out and exploring the almost limitless range of pattern variation and discovering the exciting new possibilities in the creation of original and exclusive patterns of your very own to make your family the best knit-clad family in town.

THE PATTERN SELECTOR BUTTONS.

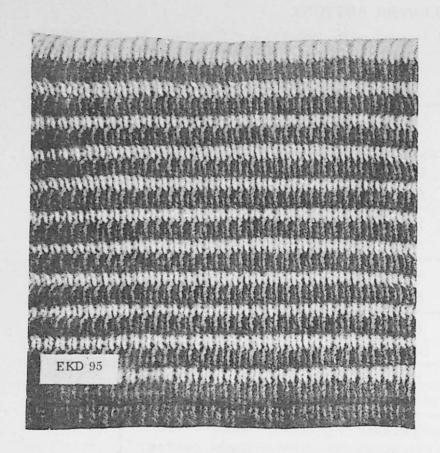
The 5 buttons on the front of the carriage control the stitch formation of the needles in B or C position. The centre button marked "Plain", if pushed in, acts as a release for all others and when all 5 are in a straight line the carriage is set for plain knitting or the stockinette stitch. Part or Partial knit is used principally for Fair-Isle designs. The Tuck stitch is not a fully formed stitch.

CODE	Setting of Pattern Selector Buttons.	Effect when Carriage is moved over B Position Needles.	
1	TUCK PART PLAIN >	Plain knitting Left course Plain knitting Right course	
2	TUCK PLAIN PART → PART →	Plain knitting Left course Stationary Right course	
3	TUCK PLAIN PART PART \$\Rightarrow\$	Stationary Left course Stationary Right course	
4	TUCK PLAIN PART PART	Stationary Left course Plain knitting Right course	
5	TUCK PLAN PART	Plain knitting Left course Tucking Right course	
6	TUCK PLAN PART TUCK &	Tucking Left course Tucking Right course	
7	TUCK C	Tucking Left course Plain knitting Right course	
8	TUCK ← PLAIR PART → PART ⇒	Tucking Left course Stationary Right course	
9	TUCK PLANT PART ← TUCK ←	Stationary Left course Tucking Right course	

The COURSE refers to the direction of the carriage across the knitting. LEFT COURSE means carriage movement from right TO LEFT.

RIGHT COURSE means carriage movement from left TO RIGHT.

The points of the arrows on the plate indicate the direction of the operation.



EMBOSSED STRIPE

SETTING OF CARRIAGES: - (Both on left of Needle Beds)

Main Bed. (M. B.)

Pattern Selector Buttons - Knit (Code 1).
Holding Cam Levers - Both on I.

Tension Setting - 4 (4 ply fingering).

Auxiliary Bed.(A.B.)

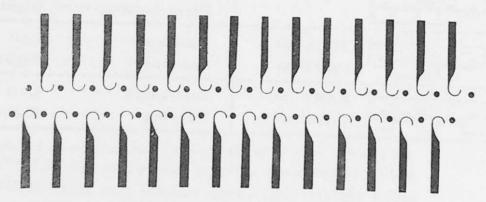
Cam Switches - Both Down - On N.

Pattern Conversion Switch - On R. Tension Setting - 4

Pitch Lever - On H. Racking Lever - On 5.

NEEDLE ARRANGEMENT:

In action M. B. needles - Position B. In action A. B. needles - Position B.



EMBOSSED STRIPE

1st row Colour A yarn.

Both Cam Switches Down - on N.

Operate carriages to Right.

2nd row Operate carriages to Left.

3rd row Operate carriages to Right.

4th row Operate carriages to Left.

5th row Colour B yarn.

Both Cam Switches Up - on P.R. Operate carriages to Right.

6th row Operate carriages to Left.

7th row Operate carriages to Right.

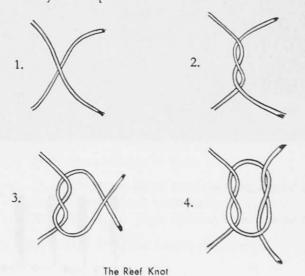
8th row Operate carriages to Left.

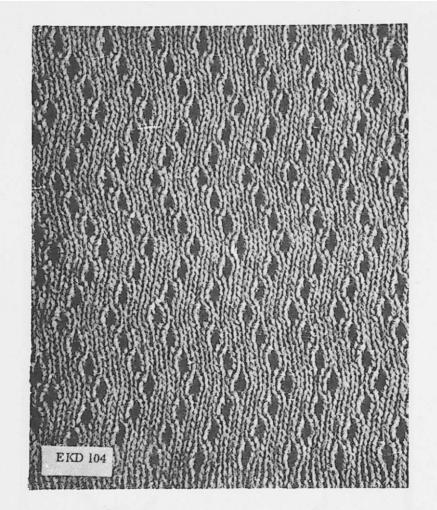
Repeat from rows 1 to 8 for length of pattern.

JOINING YOUR WOOL

For a perfect garment, knots in the body of the work must be avoided. To achieve this, when you have reached the end of one ball or cone of wool, merely remove the thread from the knitter and allow it to hang at the side of the work knitted. Rethread the machine from the next cone, and continue knitting. You will have two threads, the old and the new hanging at the side of the work, and these can be knotted together. The knot will then come into the seam where it will be hidden when your garment is assembled.

NOTE: If it is absolutely necessary to knot your yarn refer to Illustration explaining the Reef Knot. If this is properly carried out, the yarn will pass easily with the knot through the feeder into the machine. But remember it is preferable to avoid all knots in the body of the work. In competition knitting this always loses points.





BIRDS EYE

SETTING OF CARRIAGES: - (Joined on Right of Needle Beds)

Main Bed.(M.B.)

Pattern Selector Buttons - Knit (Code 1).
Holding Cam Levers - Both on III.

Tension Setting - 4 (4 ply fingering).

Auxiliary Bed. (A.B.)

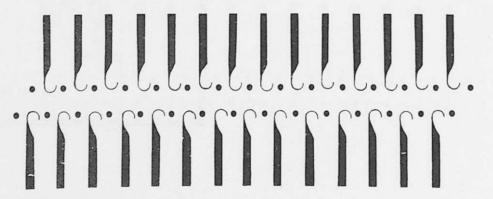
Cam Switches - Both Down - On N.

Pattern Conversion Switch - On R.
Tension Setting - 4
Pitch Lever - On H.
Racking Lever - On 5.

NEEDLE ARRANGEMENT:

In action M.B. needles - Position B.
In action A.B. needles - Position B.

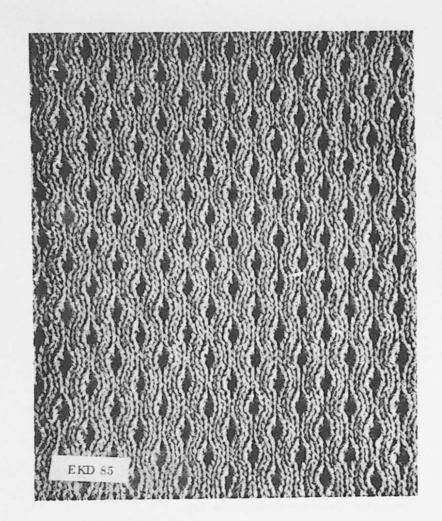
This pattern uses Needle Selector Buttons (N.S.B.)



EKD 104

BIRDS EYE

Note:-	" & Set" means "Press the Set Lever" to raise the needles.	13th row	Slide Dial on 4 & set. Operate carriages to Left.
1st row	Slide dial on 1.	14th row	Operate carriages to Right.
	Press N.S.B. 1 & 5 & set. Operate carriages to Left.	15th row	Operate carriages to Left.
2nd row	Operate carriages to Right.	16th row	M.B. Carriage Right Holding Cam Lever on I. Operate carriages to Right.
3rd row	Operate carriages to Left.		M.B. Carriage Right Holding Cam Lever on III.
4th row	M.B. Carriage Right Holding Cam Lever on I. Operate carriages to Right.	17th row	Slide Dial on 3 & set. Operate carriages to Left.
	M.B. Carriage Right Holding Cam Lever on III.	18th row	Operate carriages to Right.
5th row	Slide dial on 2 & set. Operate carriages to Left.	19th row	Operate carriages to Left.
6th row	Operate carriages to Right.	20th row	M.B. Carriage Right Holding Cam Lever on I. Operate carriages to Right.
7th row	Operate carriages to Left.		M.B. Carriage Right Holding Cam Lever on III.
8th row	M.B. Carriage Right Holding Cam Lever on I. Operate carriages to Right	21st row	Slide Dial on 2 & set. Operate carriages to Left.
	M.B. Carriage Right Holding Cam Lever on III.	22nd row	Operate carriages to Right.
9th row	Slide Dial on 3 & set. Operate carriages to Left.	23rd row	Operate carriages to Left.
10th row	Operate carriages to Right.	24th row	M.B. Carriage Right Holding Cam Lever on I. Operate carriages to Right.
11th row	Operate carriages to Left.		M. B. Carriage Right Holding Cam Lever on III.
12th row	ni alt Holding Com Lover on I	Repeat fr	om rows 1 to 24 for length of pattern.



PEACOCK

SETTING OF CARRIAGES: - (Joined on right of Needle Beds)
Main Bed. (M.B.)

Pattern Selector Buttons - Knit (Code I).
Holding Cam Levers - Both on III.

Tension Setting - 4 (4 ply fingering).

Auxiliary Bed. (A.B.)

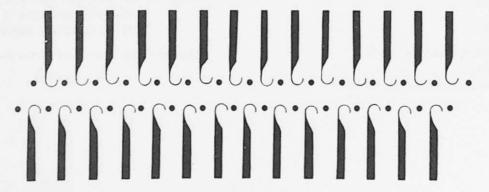
Cam Switches - Both Down - On N.

Pattern Conversion Switch - On R.
Tension Setting - 4
Pitch Lever - On H.
Racking Lever - On 5.

NEEDLE ARRANGEMENT:

In action M.B. needles - Position B.
In action A.B. needles - Position B.

This pattern uses Needle Selector Buttons (N.S.B.).



EKD 85

PEACOCK

1st row Slide Dial on 1.

Press N.S.B. 1 & 5 & Set.

Operate carriages to Left.

2nd row Operate carriages to Right.

3rd row Operate carriages to Left.

4th row M.B. Right Holding Cam Lever on I. Operate carriages to Right.

5th row M.B. Both Holding Cam Levers on III. Slide Dial on 3 & set. Operate carriages to Left.

6th row Operate carriages to Right.

7th row Operate carriages to Left.

8th row M.B. Right Holding Cam Lever on I.
Operate carriages to Right.
M.B. Right Holding Cam Lever on III.

Repeat rows 1 to 8 for length of pattern.

CHANGING CONTROLS.

Many of the patterns in this book specify the side on which the carriage (or saddle) is resting on the needle bed at the start of the pattern. This is because the instructions that follow specify the manner of setting the controls, i.e. Holding Cam Levers, Lock Knobs and Pattern Selector Buttons, etc.

E. g. Carriage on Rt. of Needle Beds

Pattern Selector Buttons : Tuck Right (Code 5)

Holding Cam Levers : Left on II

: Right on I

If however one wishes to start the pattern with the carriages on the opposite side of the Needle Bed, this is possible provided the controls are suitably placed. If the carriage position is reversed so must the position of the controls be reversed. The above instructions would then be altered to read:

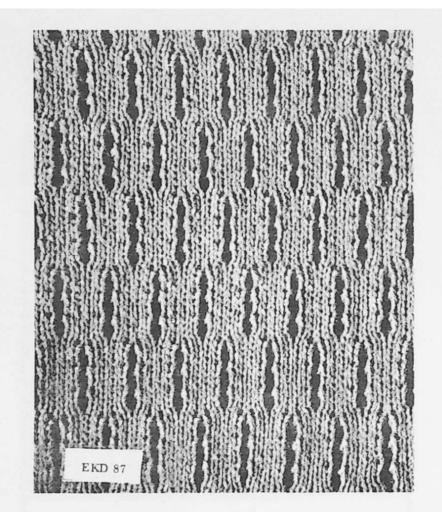
Carriage on Left of Needle Beds.

Pattern Selector Buttons : Tuck Left (Code 7)

Holding Cam Levers : Left on I

: Right on II

In some patterns this may cause a variation in the appearance of the stitches and in others where stitches are to be transferred it may be necessary to change the direction of the transferring, although this latter action is more usually dependant upon needle settings.



CLOISTER PATTERN

SETTING OF CARRIAGES: - (Joined on Right of Needle Beds)

Main Bed.(M.B.)

Pattern Selector Buttons - On Knit (Code I).
Holding Cam Levers - Both on III.

Tension Setting - 4 (4 ply fingering).

Auxiliary Bed. (A. B.)

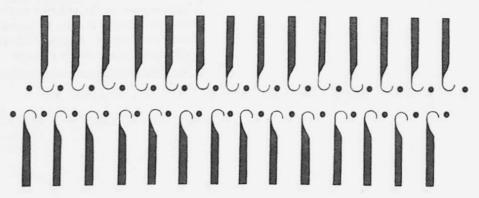
Cam Switches - Both Down - On N.

Pattern Conversion Switch - On R.
Tension Setting - 4
Pitch Lever - On H.
Racking Lever - On 5.

NEEDLE ARRANGEMENT:

In action M.B. needles - Position B.
In action A.B. needles - Position B.

This pattern uses Needle Selector Buttons (N.S.B.).



EKD 87

CLOISTER PATTERN

Slide Dial on 1.

1st row Press N.S.B. 1 & 5 & set.

Operate carriages to Left.

2nd row Operate carriages to Right.

3rd row Operate carriages to Left.

4th row Raise M.B. Right Holding Cam Lever to I.

Operate carriages to Right.

Lower M.B. Right Holding Cam Lever to III.

5th row

to Repeat rows 1 to 4

8th row

9th row

to Repeat rows 1 to 4

12th row

Slide Dial on 3.

13th row

to Repeat rows 1 to 12

24th row

Slide Dial on 1

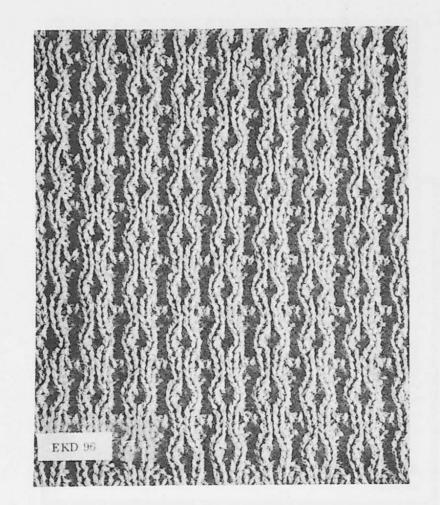
Repeat Rows 1 to 24 for length of pattern.

THE KNITTING SIDE (of the carriage)

The carriages on your Knitter are so constructed that the various controls work independently of each other and of their opposites. This means that the cams on only one side perform the knitting or patterning action when the carriage travels in one direction and those on the other side work when the direction of the carriage changes according to the manner in which the controls are set.

Certain knitting leaflets refer to "Knitting Side" which is that side of the carriage which is nearest the in-action needles or the fabric when the carriage is at rest on the needle bed; otherwise when the carriage is moving the knitting side is that side which is foremost in the direction of the movement of the saddle - The opposite side is called the Trailing Side.

From the above it follows that both the knitting side and the trailing side change with each change of direction of the carriage.



MAPLE

SETTING OF CARRIAGES: - (Joined on Right of Needle Beds)

Main Bed.(M.B.)

Pattern Selector Buttons - Knit (Code I). Holding Cam Levers - Both on III.

Tension Setting - 4 (4 ply fingering)

Auxiliary Bed. (A.B.)

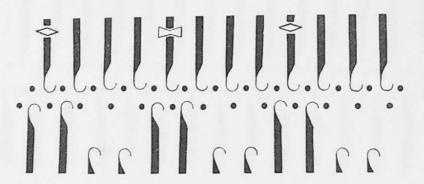
Cam Switches - Both Down - On N.

Pattern Conversion Switch - On R.
Tension Setting - 4
Pitch Lever - On H.
Racking Lever - On 5.

NEEDLE ARRANGEMENT:

In action M.B. needles - Position B.
In action A.B. needles - Position B.

NOTE: This pattern uses Needle Selector Buttons (N.S.B.). It is therefore essential that those needles "keyed" in the illustrations correspond with similarly marked needles on the knitter (marked \infty and \iffty on needle bed)



MAPLE

Slide Dial on 1. Press N.S.B. 1 & 5 & Set. 1st row Operate carriages to Left. 2nd row Operate carriages to Right. 3rd row Operate carriages to Left. 4th row Raise right M. B. Holding Cam Lever to I. Operate carriages to Right. 5th row Slide Dial on 3 & set. Lower Right M.B. Holding Cam Lever to III. Operate carriages to Left. Operate carriages to Right. 6th row Operate carriages to Left. 7th row Raise right M.B. Holding Cam Lever to I. 8th row Operate carriages to Right. Lower Right M.B. Holding Cam Lever to III. Slide Dial on 1

Repeat rows 1 to 8 for the length of the pattern.

ARGYLE DESIGNS.

Argyle designs are usually multi-coloured checks which originated in Scotland.

The completed fabric has the appearance of a number of checks superimposed upon a number of other checks, more often than not, diagonally across the fabric and always in a variety of colours.

Because of their multitudes of colours, they are often called Fair-Isle patterns, but this is of course completely incorrect.

The most popular garment using Argyle designs, is ofcourse, the stocking, but there is no reason why these same designs should not be used for jerseys, jumpers, skirts and teenage garments.



RIVULET

SETTING OF CARRIAGES: - (Joined on Right of Needle Beds)

Main Bed. (M.B.)

Pattern Selector Buttons - Knit (Code I). Holding Cam Levers - Both on III.

Tension Setting - 4 (4 ply fingering).

Auxiliary Bed. (A.B.)

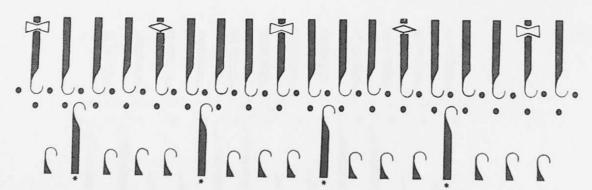
Cam Switches - Both Down - On N.

Pattern Conversion Switch - On R.
Tension Setting - 4
Pitch Lever - On H.
Racking Lever - On 5.

NEEDLE ARRANGEMENT:

In action M.B. needles - Position B.
In action A.B. needles - Position B.

NOTE: This pattern uses Needle Selector Buttons (N.S.B.). It is therefore essential that those needles "keyed" in the illustration correspond with similarly marked needles on the knitter (marked \infty and \iffty on the needle bed).



EKD 84

RIVULET

	Slide Dial on 1.
1st row	Press N.S.B. 1 & 5 & set.
	Operate carriages to Left.
2nd row	Operate carriages to Right.
3rd row	Operate carriages to Left.
4th row	Raise M.B. Right Holding Cam Lever to I.
	Operate carriages to Right.
	Lower M.B. Right Holding Cam Lever to III
5th row	Slide Dial on 4 & set.
	Operate carriages to Left.
6th row	Operate carriages to Right.
7th row	Operage carriages to Left.
8th row	Raise M.B. Right Holding Cam Lever to I.
	Operate carriages to Right.
	Lower M.B. Right Holding Cam Lever to III
	Slide Dial on 1.

Repeat from Rows 1 to 8 for length of pattern.

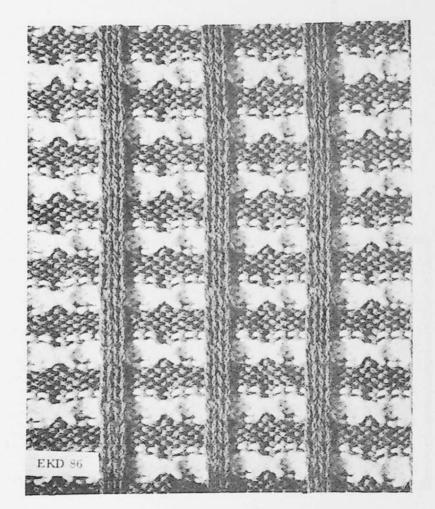
CROSS-STITCH PATTERNS.

If you have difficulty in finding a Fair-Isle graph, look through your sewing books for a cross-stitch pattern.

These are far more frequently available and some cross-stitch graphs show great originality.

Examine the designs and you will find they usually follow a regular pattern horizontally and vertically. Rule between the crosses series of parallel, horizontal and vertical lines and use the squares thus formed as your knitting graph.

Either knit the pattern in the colours suggested on the cross-stitch pattern or use your own colour ideas.



BOW-TIE

SETTING OF CARRIAGES: - (Joined on Left of Needle Beds)

Main Bed. (M.B.)

Pattern Selector Buttons - Knit (Code I).

Holding Cam Levers - Both on I.

Tension Setting - 8 (Double Crepe).

Auxiliary Bed. (A.B.)

Cam Switches - Both Down - On N.

Pattern Conversion Switch - On R.
Tension Setting - 7.

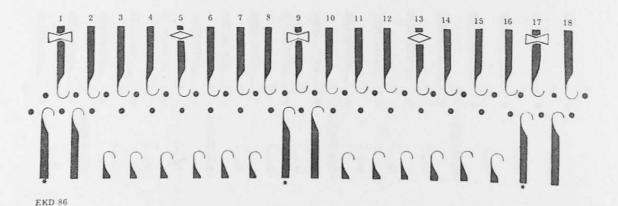
Pitch Lever - On H.

Pitch Lever - On H.
Racking Lever - On 5.

NEEDLE ARRANGEMENT:

In action M.B. needles - Position B.
In action A.B. needles - Position B.

NOTE: This pattern uses Needle Selector Buttons (N.S.B.). It is therefore essential that those needles "keyed" in the illustration correspond with similarly marked needles on the knitter (marked \sum and \iff on the needle bed).

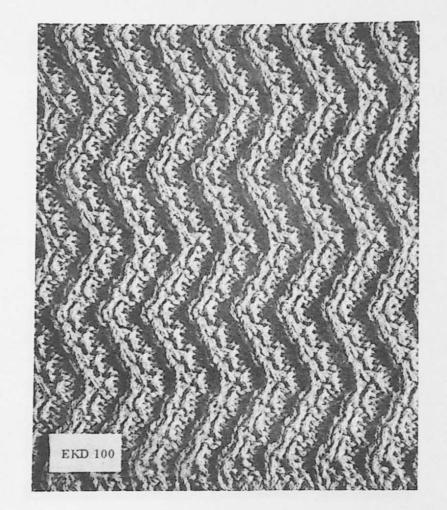


BOW-TIE

Colour A yarn 1st row Slide Dial on 1. Operate carriages to Right. 2nd row Operate carriages to Left. 3rd row Operate carriages to Right. Operate carriages to Left. 4th row 5th row Colour B yarn. M.B. Lower both Holding Cam Levers to III. A.B. Both Cam Switches Up on P.R. Press N.S.B. 1 & 5 & Set. Operate carriages to Right. Operate carriages to Left. 6th row Operate carriages to Right. 7th row 8th row M.B. Left Holding Cam Lever on I. Operate carriages to Left.

Reset all controls on the knitter according to the heading and repeat from 1st to 8th rows for required length of pattern.

A.B. Both Cam Switches Down on N.



CONTOUR

SETTING OF CARRIAGES: - (Joined on Right of Needle Beds)

Main Bed. (M.B.)

Pattern Selector Buttons - Knit (Code I). Holding Cam Levers - Both on III.

Tension Setting - 4 (4 ply fingering).

Auxiliary Bed. (A.B.)

Cam Switches - Both Down - On N.

Pattern Conversion Switch - On R.

Tension Setting - 4.

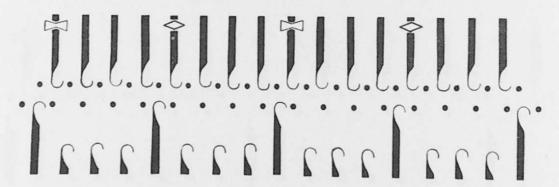
Pitch Lever - On H.

Racking Lever - On 5.

NEEDLE ARRANGEMENT:

In action M.B. needles - Position B.
In action A.B. needles - Position B.

NOTE: This pattern uses N.S.B. (Needle Selector Buttons) (N.S.B.). It is therefore essential that those needles "keyed" in the illustration correspond with similarly marked needles on the knitter (Marked and on the needle bed).



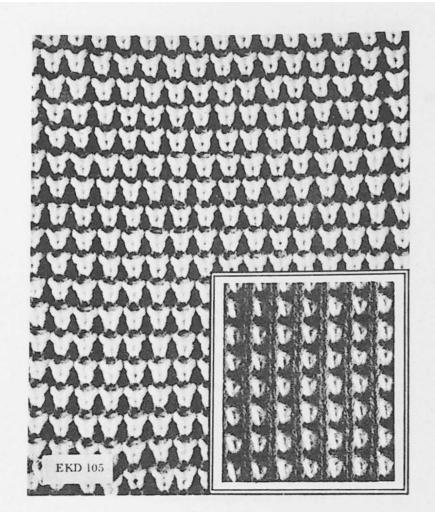
EKD 100

CONTOUR

1st row	Slide Dial on 1. Press N.S.B. 1 & 5 & Set. Operate carriages to Left.
2nd row	Operate carriages to Right.
3rd row	Operate carriages to Left.
4th row	M.B. carriage Right Holding Cam Lever on I. Operate carriages to Right. M.B. carriage Right Holding Cam Lever on III. Racking Lever on 4.
5th row	Slide Dial on 2 & set. Operate carriages to Left.
6th row	Operage carriages to Right.
7th row	Operate carriages to Left.
8th row	M.B. carriage Right Holding Cam Lever on I. Operate carriages to Right. M.B. carriage Right Holding Cam Lever on III. Racking Lever on 3.
9th row	Slide Dial on 3 & set. Operate carriages to Left.
10th row	Operate carriages to Right.
11th row	Operate carriages to Left.
12th row	M.B. carriage Right Holding Cam Lever on I. Operate carriages to Right. M.B. carriage Right Holding Cam Lever on III. Racking Lever on 2.

13th row Slide Dial on 4 & set. Operate carriages to Left. 14th row Operate carriages to right. 15th row Operate carriages to left. 16th row M.B. Carriage Right Holding Cam Lever on I. Operate carriages to Right. M. B. carriage Right Holding Cam Lever on III. Racking Lever on 3. 17th row Slide Dial on 3 & set. Operate carriages to Left. 18th row Operate carriages to Right. 19th row Operate carriages to Left. 20th row M.B. carriage Right Holding Cam Lever on I. Operate carriages to Right. M. B. carriage Right Holding Cam Lever on III. Racking Lever on 4. 21st row Slide Dial on 2 & set. Operate carriages to Left. 22nd row Operate carriages to Right. 23rd row Operate carriages to Left. 24th row M.B. carriage Right Holding Cam Lever on I. Operate carriages to Right. M. B. carriage Right Holding Cam Lever on III. Racking lever on 5.

Repeat from rows 1 to 24 for length of pattern.



COPY CAT

SETTING OF CARRIAGES: - (Joined on left of Needle Beds)

Main Bed. (M. B.)

Pattern Selector Buttons - Knit (Code l). Holding Cam Levers - Both on I.

Tension Setting - 6 (Double Crepe).

Auxiliary Bed. (A.B.)

Cam Switches - Both Up on P.R.

Pattern Conversion Switch - On P.
Tension Setting - 7.
Pitch Lever - On P.

Racking Lever - On 5.

NEEDLE ARRANGEMENT:

In action M.B. needles - Position B.
In action A.B. needles - Position B.

EKD 105

Using 2 different coloured yarns

1st row Colour A yarn.

Operate carriages to Right.

2nd row Operate carriages to Left.

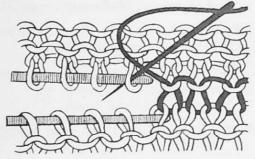
3rd row Colour B yarn.

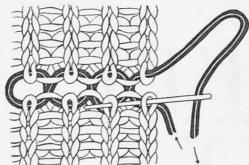
Cam Switches Both Down on N. Operate carriages to Right.

4th row Operate carriages to Left.

Cam Switches Both Up on P.R.

Repeat from Row 1 for length of pattern.





GRAFTING.

Grafting is a method of sewing together two pieces of knitted fabric so that the sewn stitches simulate knitted stitches.

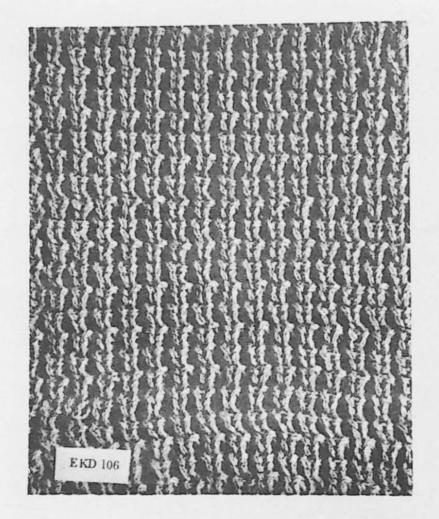
It is important that the tension in the sewn stitches is maintained to match the knitted work.

When several pieces of knitted fabric are to be grafted together, they should not be cast-off. Each separate piece should be removed from the needle bed onto a transfer pin or needle.

The pieces to be grafted are then placed adjacent to each other and sewn together as clearly illustrated in the attached diagram where it will be noted the yarn follows the shape of the stitches.

The grafting of plain knitting, purl knitting and rib knitting follow different patterns:-

- 1. Plain Knitting: This is illustrated above, worked on the front of the fabric.
- 2. Purl Knitting: Is the reverse of plain knitting and is worked from the opposite side to plain knitting.
- Ribbed Knitting: The two pieces are placed adjacent and the seaming is effected first by seaming together the plain stitches on the one side after which the purl stitches are seamed together on the opposite side.



OPEN MOSS

SETTING OF CARRIAGES: - (Joined on Right of Needle Beds)

Main Bed. (M.B.)

Pattern Selector Buttons - Knit (Code 1).
Holding Cam Levers - Both on I.

Tension Setting - 4 (4 ply fingering).

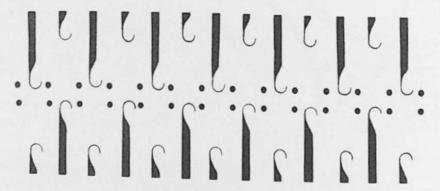
Auxiliary Bed. (A.B.)

Cam Switches - Both Up on P.R.

Pattern Conversion Switch - On P.
Tension Setting - 4.
Pitch Lever - On P.
Racking Lever - On 5.

NEEDLE ARRANGEMENT:

In action M.B. needles - Position B.
In action A.B. needles - Position B.



OPEN MOSS

ISC TOW	Operate carriages to Leit.
2nd row	Operate carriages to Right.
3rd row	A.B. Cam Switches Down on N. Operate carriages to Left.
4th row	Operate carriages to Right.
5th row	Set Racking Lever on 3. A.B. Cam Switches Up on P.R. Operate carriages to Left.
6th row	Operate carriages to Right.
7th row	A.B. Cam Switches Down on N. Operate carriages to Left.
8th row	Operate carriages to Right. Reset A.B. Cam Switches up on P.R. Reset Racking Lever on 5.

Repeat rows 1 to 8 for length of pattern.

1st row Operate carriages to Loft

TOYS.

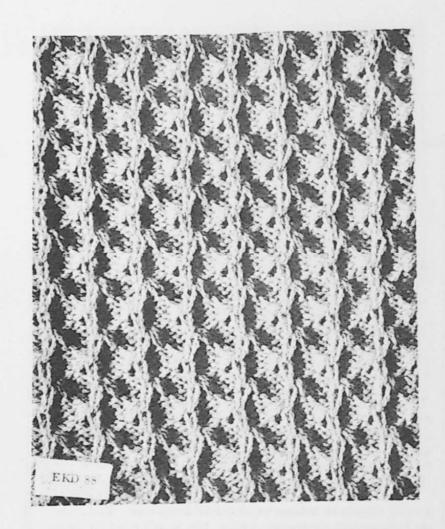
There is a great saving in making woollen toys for Christmas and birthday presents. These toys can easily be made on a knitting machine, using odd scraps of wool.

Making the toys can be fun and affords a wonderful opportunity for practising different stitches and shapings on the machine.

The toys can be made completely hygienic by covering the padding with plastic material which can be cleaned. Make the knitted covering removable for laundering either by tacking a seam that can be easily unpicked, or by inserting a zip fastener.

Various fillings may be used. If cut-up old nylon stockings are used, the toys may be laundered without removing the covering. Odd scraps of wool (cut-up) can be used and also kapok. Do not use cotton waste, as this packs down and the toys will lose their shape.

When making the features, (eyes, etc.) avoid using sharp objects or buttons which can be dangerous. Embroider the features with contrasting wools; this is safer and far better effects can be achieved.



VINE

SETTING OF CARRIAGES: - (Joined on Right of Needle Beds)

Main Bed. (M.B.)

Pattern Selector Buttons - Knit (Code 1).
Holding Cam Levers - Both on I.

Tension Setting - 4 (4 ply fingering).

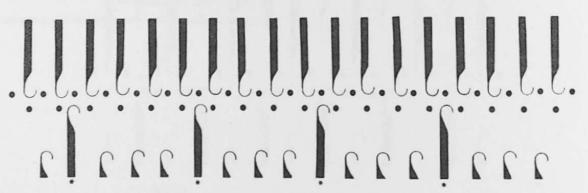
Auxiliary Bed. (A.B.)

Cam Switches - Both Up on P.R.

Pattern Conversion Switch - On P.
Tension Setting - 4.
Pitch Lever - On H.
Racking Lever - On 5.

NEEDLE ARRANGEMENT:

In action M.B. needles - Position B. In action A.B. needles - Position B.



VINE

1st row	Operate carriages to Left.
2nd row	Operate carriages to Right.
3rd row	Operate carriages to Left.
4th row	Set Right A.B. Cam Switches Down on N. Operate carriages to Right.
5th row	Set racking lever on 3. Set Right A.B. Cam Switches up on P.R. Operate carriages to Left.
6th row	Operate carriages to Right.
7th row	Operate carriages to Left.
8th row	Set right A.B. Cam Switches Down on N. Operate carriages to Right.
	Reset Right A.B. Cam Switches up on P.R Reset Racking lever on 5.
Repeat ro	ows 1 to 8 for length of pattern.

1st row Operate carriages to left.

ARAN DESIGNS.

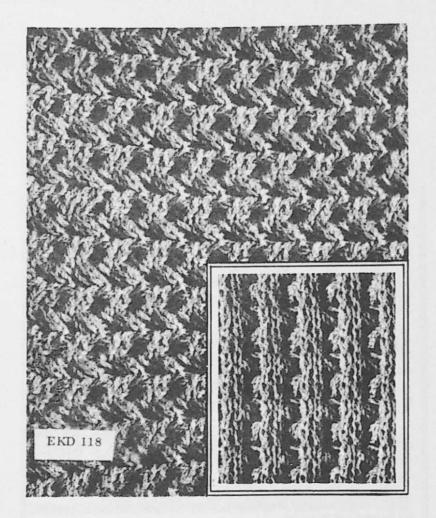
The Island of Aran is a small island off the west coast of Ireland.

Its inhabitants are avid knitters and they use locally handspun coarse home-dyed yarns for their garments which are generally very bulky.

For patterning purposes they rely more on the texture of the knitting than on changes of colour. Their designs consist mainly of panels surrounded by various stitches such as cables or other stitch changes, the central area of the panel being made up of other stitch designs.

The knitters themselves introduce a considerable amount of personality and originality to their work, and, using the various stitches to best advantage produce most unusual and interesting designs.

Aran designs should not, therefore, be classified under the heading of Fair-Isle.



COBBLE

SETTING OF CARRIAGES: - (Joined on Right of Needle Beds) Main Bed. (M.B.)

Pattern Selector Buttons - Knit (Code 1).
Holding Cam Levers - Both on I.

Tension Setting - 5 (4 ply fingering).

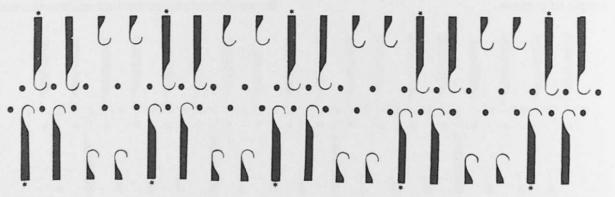
Auxiliary Bed. (A.B.)

Cam Switches - Both up on P.R.

Pattern Conversion Switch - On P.
Tension Setting - 5.
Pitch Lever - On H.
Racking Lever - On 5.

NEEDLE ARRANGEMENT:

In action M.B. needles - Position B.
In action A.B. needles - Position B.



COBBLE

2nd row	Operate carriages to Right.
3rd row	Operate carriages to Left.
4th row	Both A.B. Cam Switches Down on N. Set Racking Lever on 3. Operate carriages to Right.
5th row	Operate carriages to Left.

6th row Both A.B. Cam Switches Up on P.R. Operate carriages to Right.

7th row Operate carriages to Left.

1st row Operate carriages to Left.

8th row Operate carriages to Right.

9th row Both A.B. Cam Switches Down on N. Set Racking Lever on 5.
Operate carriages to Left.

10th row Operate carriages to Right.

Both A.B. Cam Switches Up on P.R.

Repeat from rows 1 to 10 for the length of the pattern.

INTERCHANGEABLE BUTTONS & BUTTONHOLES.

In large families where clothing may be handed down from one child to another, cardigans can be made so that they can be worn by a girl or boy.

Knit buttonholes into both the left- and right- fronts of the garment. Then, on a separate tape stretching beyond the first and last buttonhole, sew on buttons spaced the same distance apart as the buttonholes.

This tape is fixed by means of several press studs, behind and between the buttonholes, and the buttons inserted through to the right side of the work.

Place this tape behind left side for a girl; but for a boy, place the tape behind the right side. Thus the button-over is on the correct side in either case.



ZIG-ZAG

SETTING OF CARRIAGES: - (Both on left of Needle Beds)

Main Bed. (M.B.)

Pattern Selector Buttons - Knit (Code 1).
Holding Cam Levers - Both on I.

Tension Setting - 7 (4 ply fingering).

Auxiliary Bed. (A.B.)

Cam Switches - Left on N.

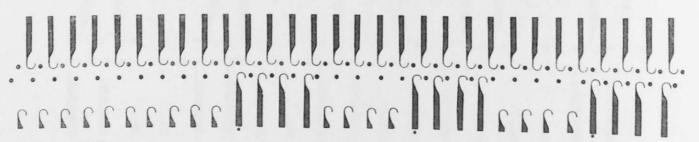
Right on P.R.

Pattern Conversion Switch - On P.
Tension Setting - 7.
Pitch Lever - On H.

Racking Lever - On O.

NEEDLE ARRANGEMENT:

In action M. B. needles - Position B.
In action A. B. needles - Position B.



ZIG-ZAG

1st row Operate carriages to Right.

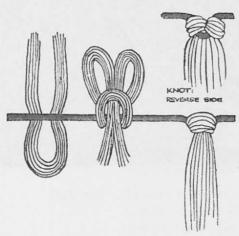
2nd row Set racking lever on I.
Operate carriages to Left.

Continue knitting, but before knitting each row set racking lever one position higher (3rd row on 2; 4th row on 3, etc.) until the 11th row, when racking lever is on 10, then reverse the direction of the racking lever to 9, 8, 7, etc.) until the 21st row when it will be on 0 again, and continue up and down the racking lever range for the length of the pattern.

SHORT TASSELS

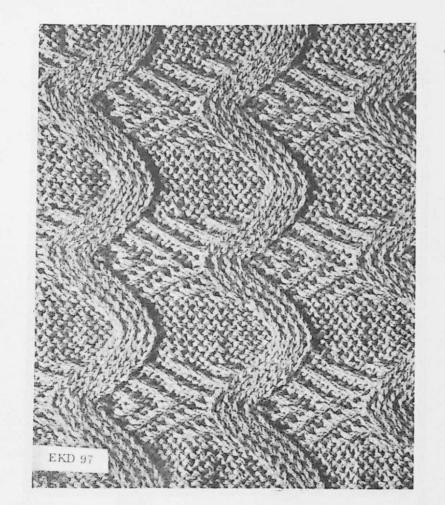
Single Knot

- 1. Wind a thread of wool 10 times round a piece of firm cardboard approximately five inches wide.
- 2. Cut the threads through at one edge of the cardboard.
- 3. Holding the threads at the opposite adge, pass the folds through one of the holes in the second row of the lacey patterns of the stole above the finished off edge.
- 4. Open the folds to form a loop, and pass the cut edges of the yarn through it.
- 5. Release the loop and pull on the cut edges to tighten the loop and so form a knot.
- NOTE: For uniformity, always pass the fold through the knitting from the same side.
 - 6. Repeat, as closely as desired, along each edge of the stole.
 - 7. Trim the tassels to the same length.



Trimming

A particularly nice finish can be obtained by placing the tassels on a firm edge, and brushing away from the knots towards the edge, before trimming.



HERRINGBONE RIB

SETTING OF CARRIAGES: - (Joined on Left of Needle Beds)

Main Bed. (M.B.)

Pattern Selector Buttons - Knit (Code 1).
Holding Cam Levers - Both on I.

Tension Setting - 7 (4 ply fingering).

Auxiliary Bed.(A.B.)

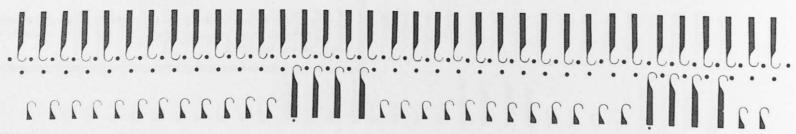
Cam Switches - Both Down on N.

Pattern Conversion Switch - On R.
Tension Setting - 7.
Pitch Lever - On H.
Racking Lever - On 0.

NEEDLE ARRANGEMENT:

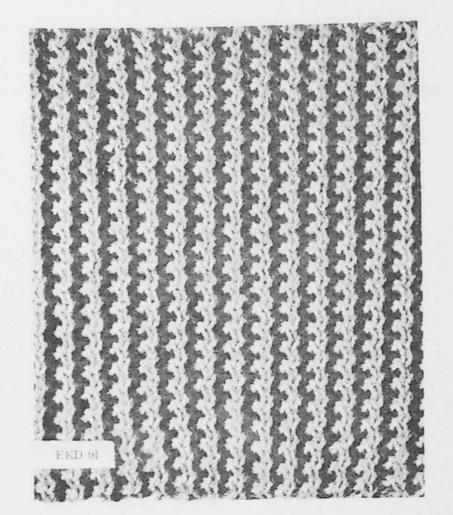
In action M.B. needles - Position B.
In action A.B. needles - Position B.

This pattern uses Needle Selector Buttons (N.S.B.).



HERRINGBONE RIB

1st row	Racking lever on 1. Operate carriages to Right.	11th row	Racking lever on 9. Slide Dial on 8 & set. Operate carriages to Right.
2nd row	Racking lever on 2. Operate carriages to Left.	12th row	Racking lever on 8. Slide Dial on 7 & set.
3rd row	Racking lever on 3. Operate carriages to Right.	101	Operate carriages to Left.
4th row	Racking Lever on 4. Press N.S.B. 1, 2, 5 & 6. Slide Dial on 1 & Set.	13th row	Racking lever on 7. Slide Dial on 6 & set. Operate carriages to Right.
	P.S.B. on Partial (both in) (Code 3). Operate carriages to Left.	14th row	Racking lever on 6. Slide Dial on 5 & set. Operate carriages to Left.
5th row	Racking lever on 5. Slide Dial on 2 & set. Operate carriages to Right.	15th row	Racking lever on 5. Slide Dial on 4 & set. Operate carriages to Right.
6th row	Racking lever on 6. Slide Dial on 3 & set. Operate carriages to Left.	16th row	Racking lever on 4. Slide Dial on 3 & set. Operate carriages to Left.
7th row	Racking lever on 7. Slide Dial on 4 & set. Operate carriages to Right.	17th row	Racking lever on 3. Slide Dial on 2 & set. Operate carriages to Right.
8th row	Racking lever on 8. Slide Dial on 5 & set. Operate carriages to Left.	18th row	Racking lever on 2. P.S.B. on Knit (Code 1). Operate carriages to Left.
9th row	Racking lever on 9. Slide Dial on 6 & set. Operate carriages to Right.	19th row	
10th row	Racking lever on 10. Slide Dial on 7 & set.	20th row	Racking lever on 0. Operate carriages to Left.
	Operate carriages to Left.	21st row	onwards - Repeat from row 1.



ELITE

SETTING OF CARRIAGES: - (Joined on Left of Needle Beds)

Main Bed. (M.B.)

Pattern Selector Buttons - Tuck Right (Code 5).

Holding Cam Levers - Both on I.

Tension Setting - 4 (4 ply fingering).

Auxiliary Bed. (A.B.)

Cam Switches - Left on P.R.

Right on N.

Pattern Conversion Switch

On P.

Tension Setting

4.

Pitch Lever

On H.

Racking Lever - On 5.

NEEDLE ARRANGEMENT:

In action M.B. needles - Position B.
In action A.B. needles - Position B.

ELITE

NOTE: Before knitting each M.B. row — raise the "in action" needle nearest to the carriage to position E.

1st row Operate carriages to Right.

2nd row Operate carriages to Left.

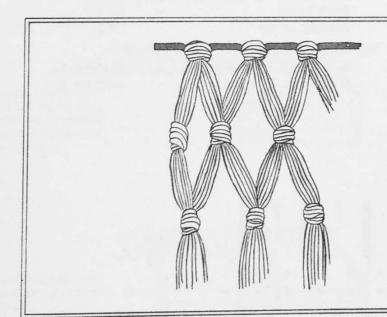
3rd row Set Racking Lever to 4.

Operate carriages to Right.

4th row Operate carriages to Left.

Reset Racking lever to 5.

Repeat rows 1 to 4 for length of pattern.



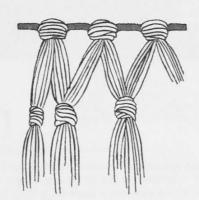
LONG TASSELS

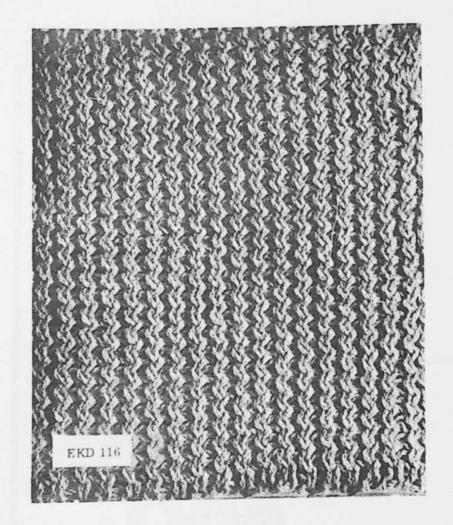
Double Knot

- 1. Wind a thread of wool 10 times round a piece of firm cardboard approximately eight inches wide.
- 2. Proceed as for steps 2 to 6 inclusive of the "short tassel" pattern.
- 3. Working on the side opposite the looped knot, divide the first tassel into two parts each of 5 threads.
- 4. On the outer of the two parts make a knot about $1\frac{1}{2}$ inches below the looped knot.
- 5. Divide the second tassel into two parts.
- 6. Join with a knot, the unknotted half-fringe of the first tassel, to its nearest neighbouring half-fringe.
- 7. Proceed by dividing each tassel into two, and joining with each neighbouring half-fringe with a knot as in step 6.
- 8. The last half-fringe should be knotted in the same way as the first one.

Treble Knot

To obtain an even heavier treble-knotted fringed tassel, use a 10-inch cardboard. After the completed second row of knots start again about one-and-a-half inches below, pairing and knotting half tassels as before, commencing with the outer half tassel.





RIPPLE

SETTING OF CARRIAGES: - (Joined on Right of Needle Beds).

Main Bed. (M.B.)

Pattern Selector Buttons - Tuck Right (Code 5).

Holding Cam Levers - Both Position I.

Tension Setting - 4 (4 ply fingering).

Auxiliary Bed. (A.B.)

Cam Switches - Left on P.R.

Right on N.

Pattern Conversion Switch - On P.

Tension Setting - 4

Pitch Lever - On P.

Racking Lever - On 5.

NEEDLE ARRANGEMENT:

In action M.B. needles - Position B.
In action A.B. needles - Position B.

EKD 116

RIPPLE

NOTE: Before knitting each M.B. row — raise the "in action" needle nearest to the carriage to position E.

1st row Operate carriages to Left.

2nd row Operate carriages to Right.

3rd row Set racking lever on 3.

Operate carriages to Left.

4th row Operate carriages to Right.

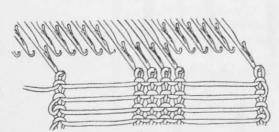
Reset racking lever to 5.

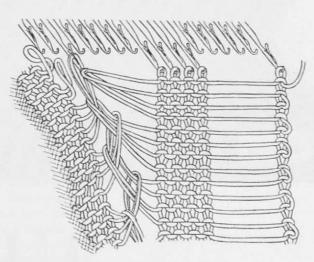
Repeat from Row 1 for length of pattern.

IMITATION HAIR-PIN LACE.



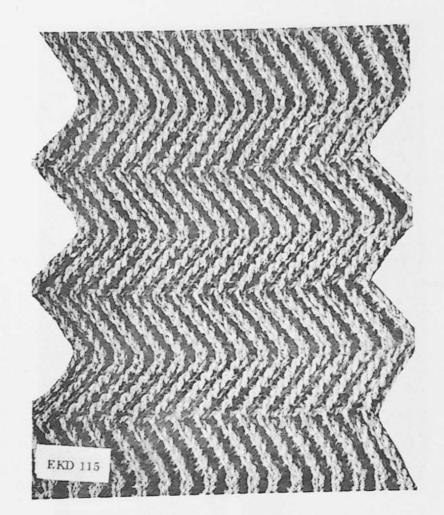
Needle setting for, and starting a centre section.





3) Knitting and joining two sections:

After knitting the first section, the stitches made on the single needle at the side are unravelled. Whilst knitting the central sections a previous section is interlinked; therefore the stitches made on the single needle on the interlinking side are unravelled as the work proceeds.



HERRINGBONE TWEED

SETTING OF CARRIAGES: - (Joined on Left of Needle Beds)

Main Bed. (M.B.)

Tuck Right (Code 5). Pattern Selector Buttons

Both on I. Holding Cam Levers

4 (4 ply fingering). Tension Setting

Auxiliary Bed. (A.B.)

Left on P.R. Cam Switches

Right on N.

Pattern Conversion Switch -

On P.

Tension Setting

On P.

Pitch Lever Racking Lever

On 5.

NEEDLE ARRANGEMENT:

In action M.B. needles

Position B.

In action A.B. needles

Position B.

EKD 115

HERRINGBONE TWEED

NOTE: Before knitting each M.B. row, raise the "in action" needle nearest the carriage to Position E.

1st row Set Racking Lever at 5.
Operate carriages to Right.

2nd row Set Racking Lever at 3.

Operate carriages to Left.

3rd row Continue knitting 3rd to 8th rows but before to each row set the racking lever on 5 and 3 8th row alternately until the 8th row when the racking

lever is set on 3 and the row knitted.

9th row Operate carriages to Right.

10th row Set racking lever on 5.

to Continue knitting the 10th to 18th rows but before each row set the racking lever on 3 and 5 alternately until the 18th row when the racking lever

is set on 5 and the row knitted.

Operate carriages to Right.

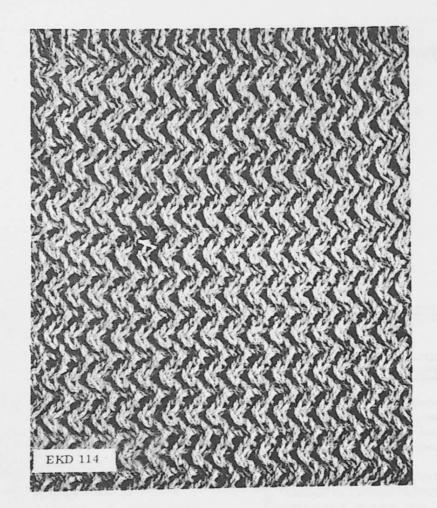
Repeat the pattern from Row 2.

BIAS KNITTING.

Bias knitting is a method of producing a knitted binding, equivalent to a fabric 'cut on the cross', and is a very effective method of finishing off collars, pockets, etc. - which is one of the trade-secrets of the professional machine knitter.

To knit on the bias start at either edge of the needle bed and cast on with a selvedge over a sufficient number of needles to make up the width of the binding:- knit one row, then every row (or if a narrower bias is required every second row) decrease at one edge one or two stitches and increase a similar number of stitches on the other edge; continue for the length of the binding, always decreasing on the one side and increasing on the other. Cast off when the requisite length has been knitted.

The angle of the bias can be altered either by changing the number of stitches increased and decreased, or by increasing and decreasing each alternate row instead of at every row.



CASCADE

SETTING OF CARRIAGES: - (Joined on Right of Needle Beds)

Main Bed . (M. B.)

Pattern Selector Buttons - Tuck Right (Code 5).

Holding Cam Levers - Both on I.

Tension Setting - 5 (4 ply fingering).

Auxiliary Bed. (A.B.)

Cam Switches - Left on P.R.

Right on N.

Pattern Conversion Switch

On P.

Tension Setting

- 5.

Pitch Lever

- on P.

Racking Lever

- On 6.

NEEDLE ARRANGEMENT:

In action M.B. needles

Position B.

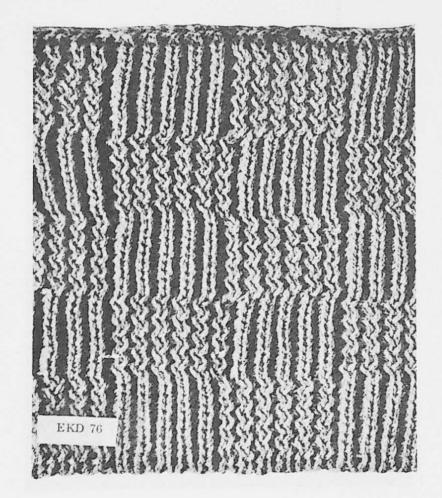
In action A.B. needles

Position B.

CASCADE

NOTE: Before knitting each M.B. row, raise the "in action" needle nearest the carriage to Position E.

1st row	Operate carriages to Left.
2nd row	Operate carriages to Right.
3rd row	Set Racking Lever on 4. Operate carriages to Left.
4th row	Operate carriages to Right.
5th row	Set racking lever on 2. Operate carriages to Left.
6th row	Operate carriages to Right.
7th row	Set racking lever on 4. Operate carriages to Left.
8th row	Operate carriages to Right. Reset Racking Lever on 6.
Repeat fr	om row 1 for length of pattern.



BASKET WEAVE

SETTING OF CARRIAGES: (Joined on Left of Needle Beds)

Main Bed. (M.B.)

Pattern Selector Buttons - Tuck Right (Code 5).

Holding Cam Levers - Both Position I.

Tension Setting - 4 (4 ply fingering).

Auxiliary Bed. (A.B.)

Cam Switches - Left on P.R.
Right on N.

Pattern Conversion Switch - On P.
Tension Setting - 4.
Pitch Lever - On H.
Racking Lever - On 5.

NEEDLE ARRANGEMENT:

In action M.B. needles - Position B.
In action A.B. needles - Position B.

BASKET WEAVE

NOTE: Before knitting each M.B. row raise the "in action" needle nearest the carriage to position E.

1st row	Operate	carriages	to	Right.
---------	---------	-----------	----	--------

2nd row Operate carriages to Left.

Set racking lever on 4.

3rd row Operate carriages to Right.

4th row Operate carriages to Left.

Set racking lever on 5.

Repeat rows 1 to 4 until row 20.

21st row Set racking lever on 5.

Operate carriages to Right.

22nd row Operate carriages to Left.

Set racking lever on 6.

23rd row Operate carriages to Right.

24th row Operate carriages to Left.

Set racking lever on 5.

Repeat rows 21 to 24 until row 40.

Set racking lever on 5.

Repeat from row 1.

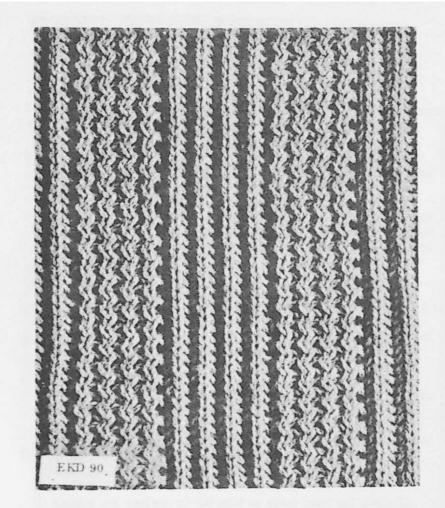
SLIDE FASTENERS.

Slide fasteners are usually sewn into plackets and are a neat way of effecting a concealed closure.

The opening or placket should be knitted in such a way that when the fastener has been sewn in, the two edges of the fabric will meet to cover it. If necessary one or two hooks and eyes along the placket will effectively complete the concealment.

To sew slide fasteners into knitted garments:

- 1) Loosely oversew together the edges of the opening.
- 2) Place the fastener into position on the inside of the garment, the centreline of the fastener corresponding with the seamed edges of the fabric.
- 3) Tack the fastener into place ensuring at the same time that it lies flat.
- 4) With neat back stitches sew the fastener into place close to the metal. (With careful sewing the stitches need not show through the fabric).
 - (If a hem has been made to hide the fastener the joining seam can be sewn into and concealed by the hem).
- 5) Make a neat hemming stitch around the edge of the tape of the fastener.
- 6) Remove tacking thread.



BRAID PATTERN

SETTING OF CARRIAGES: -(Joined on left of Needle Beds)

Main Bed.(M.B.)

Pattern Selector Buttons - Tuck Right (Code 5).

Holding Cam Levers - Both on I.

Tension Setting - 4 (4 ply fingering).

Auxiliary Bed. (A. B.)

Cam Switches - Left on P.R.

- Right on N.

Pattern Conversion Switch -

ch - On P.

Tension Setting Pitch Lever

- On H.

Racking Lever

- On 5.

NEEDLE ARRANGEMENT:

In action M.B. needles

Position B.

In action A.B. needles

Position B.

EKD 90

BRAID PATTERN

NOTE: Before knitting each M.B. row — raise the "in action" needle nearest the carriage to Position E.

1st row Operate carriages to Right.

2nd row Operate carriages to Left.

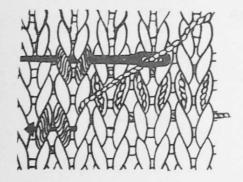
3rd row Set racking lever on 6.

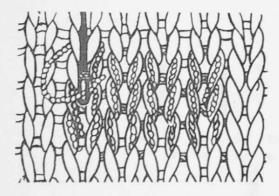
Operate carriages to Right.

4th row Operate carriages to Left.

Reset racking lever to 5.

Repeat rows 1 to 4 for length of pattern.





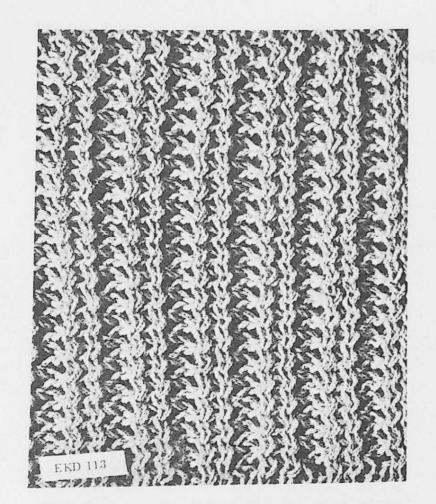
EMBROIDERY (on knitting)

Embroidery on knitting is frequently resorted to so as to save the time and sometimes the complicated process of knitting with a large number of colours in Jacquard and Fair-Isle patterns. Some very excellent effects can be obtained.

Most frequently used stitch is the pattern that oversews or simulates a stitch; this is sometimes called Swiss Stitch, Swiss Darning or Kitchener Stitch:-

With a length of yarn on a darning needle, the stitch is made by following the path of the stitch already knitted into the fabric, brought to the front at the base of the stitch to be oversewn, passed into the back of the stitch above it, and brought to the front through the base of the adjoining stitch. The needle is then taken to the back of the work through the top of the stitch below the one being oversewn and returned to the front through the adjoining Stitch. Continue thus for the area to be covered.

Cross stitch embroidery can be very effectively applied to knitted garments using each stitch as a square as in Tapestry work.



WEB RIB

SETTING OF CARRIAGES: - (Joined on right of Needle Beds)

Main Bed. (M.B.)

Pattern Selector Buttons - Tuck Right (Code 5).

Holding Cam Levers - Both on I.

Tension Setting - 4 (4 ply fingering).

Auxiliary Bed. (A.B.)

Cam Switches - Left on P.R.

Right on N.

Pattern Conversion Switch - On P.

- 4.

Tension Setting
Pitch Lever

- On P.

Racking Lever

- On 5.

NEEDLE ARRANGEMENT:

In action M.B. needles

- Position B.

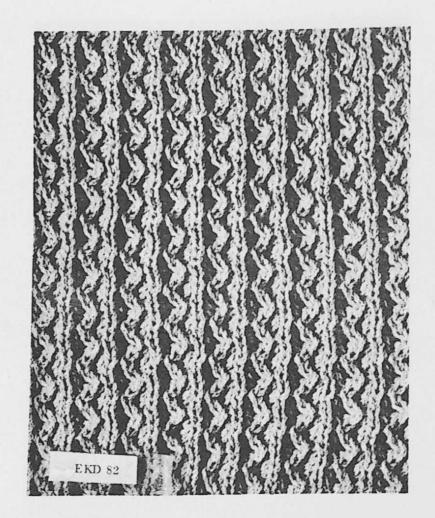
In action A.B. needles - Position B.

WEB RIB

NOTE: Before knitting each M.B. row — raise the "in action" needle nearest to the carriage to position "E".

1st row Operate carriages to Left.
2nd row Operate carriages to Right.
3rd row Set racking lever on 3.
Operate carriages to Left.
4th row Operate carriages to Right.
Reset Racking lever on 5.

Repeat rows 1 to 4 for length of pattern.



WATERFALL

SETTING OF CARRIAGES: - (Joined on left of Needle Beds)

Main Bed. (M. B.)

Pattern Selector Buttons - Tuck Right (Code 5).

Holding Cam Levers - Both on I.

Tension setting - 4 (4 ply fingering).

Auxiliary Bed. (A.B.)

Cam Switches - Left on P.R.

Right on N.

On P.

Pattern Conversion Switch

Tension Setting - 4.

Pitch Lever - On H.

Racking Lever - On 5.

NEEDLE ARRANGEMENT:

In action M.B. needles - Position B. In action A.B. needles - Position B.

EKD82

WATERFALL

NOTE: Before knitting each M.B. row — raise the "in action" needle nearest to the carriage to Position E.

1st row	Operate carriages to Right.
2nd row	Operate carriages to Left.
3rd row	Set racking lever on 4. Operate carriages to Right.
4th row	Operate carriages to Left.
5th row	Set racking lever on 3. Operate carriages to Right.
6th row	Operate carriages to Left.
7th row	Set racking lever on 4. Operate carriages to Right.
8th row	Operate carriages to Left. Reset racking lever on 5. Repeat from 1st row for length of pattern.

DYE-LOTS.

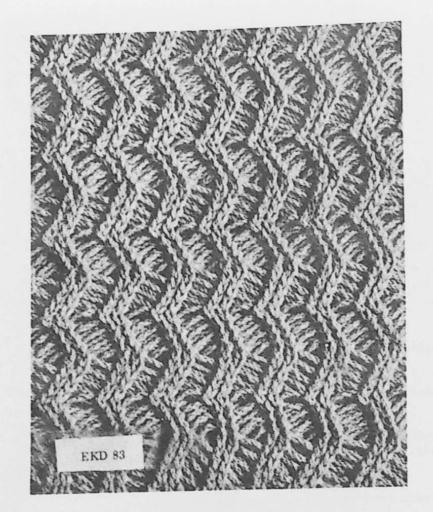
The dying of yarns is an intricate process and, whilst the same colour can always be achieved, the depth of shade will be affected by slight variations in weight of dye, volume and temperature of water, etc.

A limited weight of yarn is dyed at one time, each lot being numbered.

When purchasing yarns, therefore, check that each ball or skein comes from the same dyelot.

It is wise to be on the safe side and buy a little more yarn than required, to ensure that you have an adequate supply from the same dyelot.

Any surplus can be used for repairing or re-fashioning the garment or for fair-isle patterning in other garments.



COCKSCOMB (Stole Pattern)

SETTING OF CARRIAGES: - (Joined on left of Needle Beds)

Main Bed. (M.B.)

Pattern Selector Buttons - Tuck Right (Code 5).

Holding Cam Levers - Both on I.

Tension Setting - 4 (4 ply fingering).

Auxiliary Bed. (A.B.)

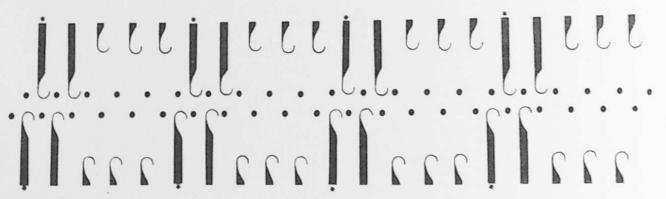
Cam Switches - Left on P. R.

Right on N.

Pattern Conversion Switch - On P.
Tension Setting - 4.
Pitch Lever - On H.
Racking Lever - On 5.

NEEDLE ARRANGEMENT:

In action M.B. needles - Position B.
In action A.B. needles - Position B.



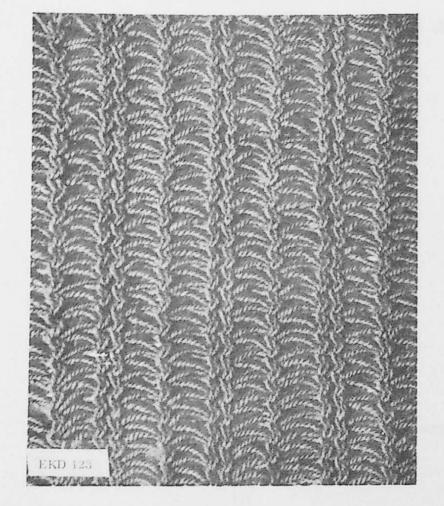
COCKSCOMB (Stole Pattern)

NOTE: Be	efore knitting each M.B. row — raise the "in action" eedles nearest to the carriage to Position E.	8th row	Set Racking Lever on 4. Operate carriages to Left.
1st row	Operate carriages to Right.	9th row	Operate carriages to Right.
2nd row	Set Racking Lever on 4. Operate carriages to Left.	10th row	Set Racking Lever on 5. Operate carriages to Left.
3rd row	Set Racking Lever on 5. Operate carriages to Right.	11th row to	Continue as above alternating the racking lever on 4 and 5 each row (4 on 11th row, 5 on 12th
4th row	Set Racking Lever on 4. Operate carriages to Left.	18th row	row, etc.). For the 18th row the racking lever will be on 5.
5th row	Set Racking Lever on 5. Operate carriages to Right.		(19th row will be a repeat of the 1st row where the racking lever is also on 5, thus reverting the pattern to its original direction.)
6th row	Set Racking Lever on 4. Operate carriages to Left.		Repeat from 1st row for length of pattern.
7th row	Set Racking Lever on 5.		

Operate carriages to Right.

PRESS FASTENERS.

An easy, quick way of marking rows in knitting is to use large press fasteners by pressing them through the fabric at the position to be marked. They can easily be removed and will leave no marks.



WHISPER (Stole Pattern)

SETTING OF CARRIAGES: - (Joined on right of Needle Beds)

Main Bed. (M.B.)

Pattern Selector Buttons - Tuck Right (Code 5).

Holding Cam Levers - Both Position I.

Tension Setting - 4 (4 ply fingering).

Auxiliary Bed. (A.B.)

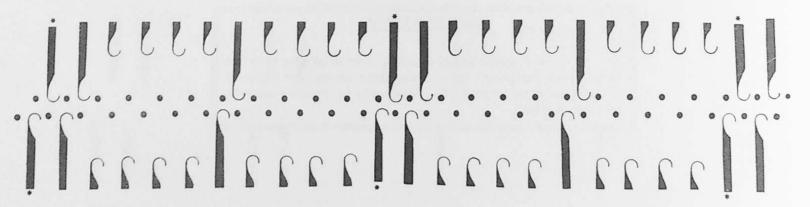
Cam Switches - Left on P.R.

- Right on N.

Pattern Conversion Switch - On P.
Tension Setting - 4.
Pitch Lever - On H.
Racking Lever - On 5.

NEEDLE ARRANGEMENT:

In action M.B. needles - Position B.
In action A.B. needles - Position B.



WHISPER (Stole Pattern)

NOTE: Before knitting each M.B. row raise the "in action" needle nearest the carriage to Position E.

1st row Operate carriages to Left.

2nd row Operate carriages to Right.

3rd row Set racking lever to 4.

Operate carriages to Left.

4th row Operate carriages to Right. Set racking lever to 5.

Repeat from 1st row for length of pattern.

MAKING FRINGES WITH LACY PATTERN BORDER FOR A STOLE

Needle Setting

- 1. Bring 12 needles into action on left side, leaving 48 needles "out of action", bring 4 needles into action on right.
 - 2. Cast on with the small cast-on comb, using scrap wool.
- 3. Knit 10 rows. (There will be a long thread along the front of the knitter where the needles are out of action. This will form the fringes.)
 - 4. Remove the cast-on comb.
- 5. Insert claw-weight into the lower edge of the knitting on the 12 needles at the left. The knitting on the last 4 needles on the right must not be weighted.

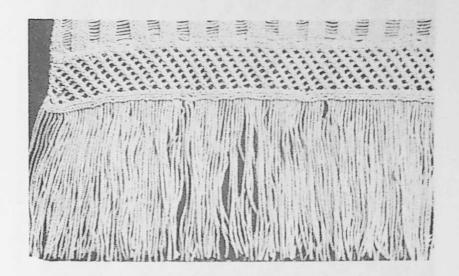
NOTE: The lacy pattern is done only on the 12 stitches — the other edge remains plain and forms the binding.

Forming the Lacy Pattern

To form the lacy pattern, which will be above the fringes, the stitches are transferred from LEFT to RIGHT only.

6. Open all needle latches.

- 7. Starting from the left, transfer the 3rd stitch on to the 4th needle, the 5th on to the 6th, the 7th on to the 8th, the 9th on to the 10th.
 - 8. Bring empty needles into action again.



9. Knit two rows.

- 10. Transfer the 4th stitch on to the 5th needle the 6th on to the 7th, the 8th on to the 9th, and the 10th on to the 11th.
- Bring empty needles into action again.
 Knit two rows,

NOTE: These four rows make up the pattern.

13. Now knit from step 7 to step 12 until the work measures 20 inches (or the width of the stole).

14. Using scrap wool knit 10 rows. The above will make the fringing for one end of the stole. Repeat steps 1-14 for the other end.

ATTACHING THE FRINGE

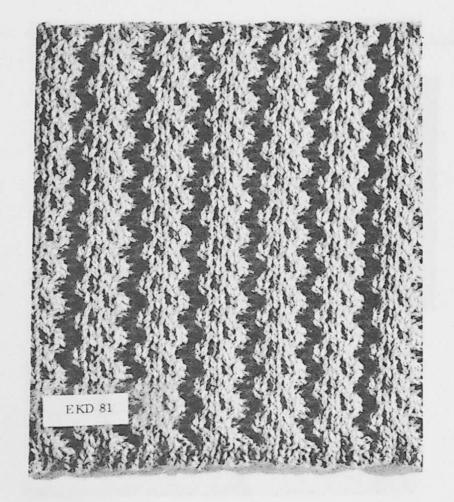
- 15. Place the top edge of the lacy pattern about one-eighth of an inch above the bottom edge of the stole
- Sew the top of the lacy pattern along the bottom edge of the stole.
- 17. Fold the fringes double so that the back of the binding (see note to step 5 above) faces the back of the lacy pattern.
- 18. Sew the binding to the stole so that it covers the unfinished edge

19. Unravel the scrap wool.

20. Sew up loose stitches at the sides of the lacy pattern and the binding.

21. Press fringe lightly.

If you like the threads folded, leave them as they are — if you prefer a cut fringe, cut the threads at the fold then trim straight.



CAPRICE

SETTING OF CARRIAGES: (Joined on left of Needle Beds)

Main Bed.(M.B.)

Pattern Selector Buttons - Tuck Right (Code 5).

Holding Cam Levers - Both on I.

Tension Setting - 5 (4 ply fingering).

Auxiliary Bed. (A.B.)

Cam Switches - Left on P.R.

Right on N.

Pattern Conversion Switch - On P.

Tension Setting - 5.

Pitch Lever - On H.
Racking Lever - On 5.

Racking Lever

NEEDLE ARRANGEMENT:

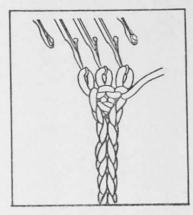
In action M.B. needles - Position B.

In action A.B. needles - Position B.

CAPRICE

NOTE: Before knitting each M.B. row — raise the "in action" needle nearest the carriage to Position E.

1st row	Operate carriages to Right.	
2nd row	Operate carriages to Left.	
3rd row	Operate carriages to Right.	
4th row	Operate carriages to Left.	
5th row	Set Racking Lever on 4. Operate carriages to Right.	
6th row	Operate carriages to Left.	
7th row	Operate carriages to Right.	
8th row	Operate carriages to Left. Reset Racking Lever on 5.	
Repeat Rows 1 to 8 for length of pattern.		



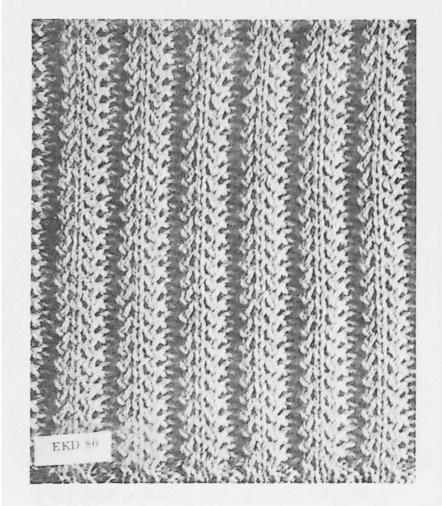
CORD: To knit a cord.

Over 3, 4, 5 or 6 needles work the carriage with the cams set to knit in one direction and "Partial" (i.e. to pass over the stitches without knitting) in the opposite direction.

In actual working the effect will be to knit over the needles in one direction and to draw a length of yarn from one side to the other on the return movement.

If only a few needles are used, the knitting draws in as the work lengthens to make an even tubular cord.

An unusual colour effect may be obtained by filling the centre with a contrast colour yarn. This is done simply by threading the contrast colour on a bodkin or long safety pin and working it through the centre of the knitted cord.



VARIATIONS ON A THEME

SETTING OF CARRIAGES: - (Joined on left of needle beds)

Main Bed .(M.B.)

Pattern Selector Buttons - Tuck Right (Code 5).

Holding Cam Levers - Both Position I.

Tension Setting - 4 (4 ply fingering)

Auxiliary Bed. (A.B.)

Cam Switches - Left on P.R.

Right on N.

Pattern Conversion Switch - On P.

Tension Setting - 4.

Pitch Lever - On H.

Racking Lever - On 5.

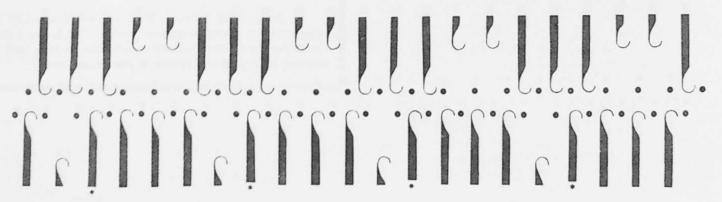
NEEDLE ARRANGEMENT:

In action M.B. needles

Position B.

In action A.B. needles

- Position B.



VARIATIONS ON A THEME

NOTE: Before knitting each M.B. row raise the "in action" needle nearest the carriage to Position E.

1st row Operate carriages to Right.

2nd row Operate carriages to Left.

3rd row Set racking lever on 4.

Operate carriages to Right.

4th row Operate carriages to Left.

Set racking lever on 5.

Repeat from 1st row for length of pattern.

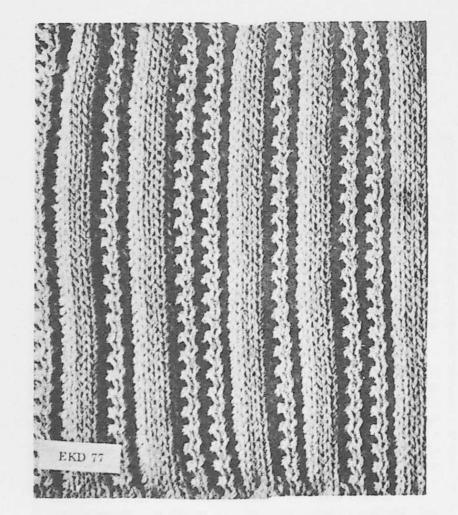
FAIR-ISLE PATTERNS.

The expression "Fair-Isle pattern" describes traditional patterns of the Shetland Islands, off the coast of Britain. One of these islands whose traditional pattern first became popular was that of the Fair-Isle itself.

Most of the patterns had, and still have a significance to the Islanders themselves, and it is a known fact that the home ports of many fishermen who have been found drowned along the coasts of Britian have been identified by the traditional patterns knitted into their jerseys.

Fair-Isle patterns are akin to traditional religious patterns still knitted on the Island of Malta and in other parts of the world where, in ancient times, religious crusaders had a strong influence. In fact, these religious patterns originated during the time of the Crusaders when knitting was exclusively a man's pastime. They ultimately reached Britain as a result of the defeat of the Armada, through the salvage and capture of shipwrecked Spanish sailors off the coasts of Scotland in 1588.

In their dispersal throughout the world these traditional and religious patterns have become modified. Nevertheless, this type of pattern is still called a Fair-Isle pattern, many of them having been copied in industrial use following the invention of the Jacquard knitting frame, which did much to popularize and disperse this type of pattern throughout the world.



RIPPLE RIB

SETTING OF CARRIAGES: - (Joined on left of needle beds)

Main Bed. (M.B.)

Pattern Selector Buttons - Tuck Right (Code 5).

Holding Cam Levers - Both on I.

Tension Setting - 4 (4 ply fingering).

Auxiliary Bed. (A.B.)

Cam Switches - Left on P.R.

Right on N.

Pattern Conversion Switch - On P.
Tension Setting - 4.
Pitch Lever - On H.
Racking Lever - On 5.

NEEDLE ARRANGEMENT:

In action M.B. needles - Position B.
In action A.B. needles - Position B.

RIPPLE RIB

NOTE: Before knitting each M.B. row — raise the "in action" needle nearest to the carriage to Position E.

1st row Operate carriages to Right.

2nd row Operate carriages to Left.

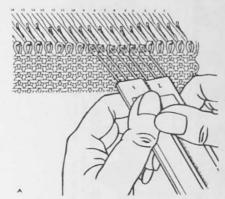
3rd row Set racking lever on 4.

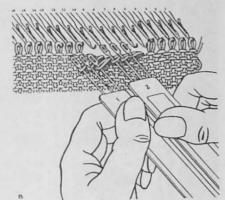
Operate carriages to Right.

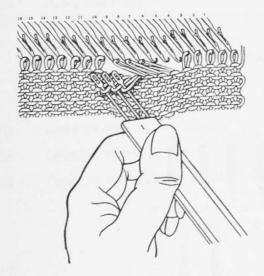
4th row Operate carriages to Left.

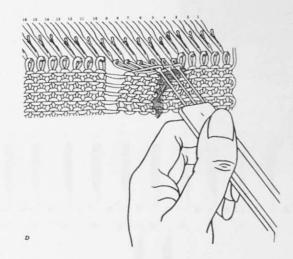
Reset racking lever on 5 and continue knitting repeating rows 1 to 4 for length of pattern.

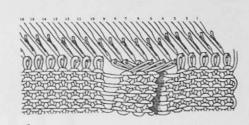
CABLING IN PICTURES

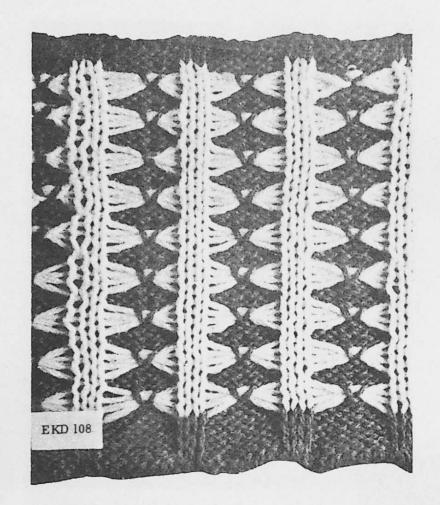












FANTASY

SETTING OF CARRIAGES: - (Joined on Left of Needle Beds)

Main Bed.(M.B.)

Pattern Selector Buttons - Knit (Code 1).
Holding Cam Levers - Both on I.

Tension Setting - 7 (Double Crepe)

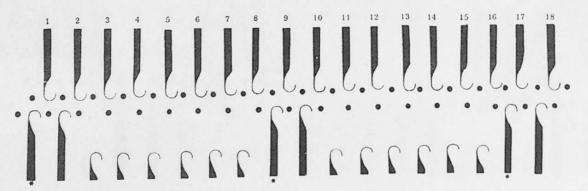
Auxiliary Bed. (A.B.)

Cam Switches - Both Down on N.

Pattern Conversion Switch - on R.
Tension Setting - 7.
Pitch Lever - on H.
Racking Lever - on 5.

NEEDLE ARRANGEMENT:

In action M.B. needles - Position B.
In action A.B. needles - Position B.



FANTASY

1st row	Colour A yarn. Operate carriages to Right.
2nd row	Operate carriages to Left.
3rd row	Operate carriages to Right.
4th row	Operate carriages to Left. Both Cam Switches Up on P.R.
5th row	Colour B yarn. Operate carriages to Right.
6th row	Operate carriages to Left.
7th row	Operate carriages to Right.
8th row	Operate carriages to Left. Colour A yarn.
To knit only on A.B.	A.B. Carriage:- Both Cam Switches Down (N). M.B. Carriage:- P.S.B. Press in both Partial buttons (Code 3).
	Set row counter back 4 rows.
Row 5a	Operate carriages to Right.
Row 6a	Operate carriages to Left.
Row 7a	Operate carriages to Right.

Row 8a Operate carriages to Left.

Separate the needle beds to take the Auxiliary
Bed into "Resting" position.

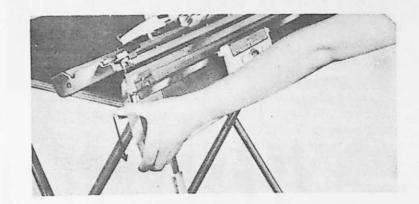
Raise the 4 loose threads onto the M.B. central
"in action" needles (i.e. onto needles 5, 13, 21,
29, etc.).

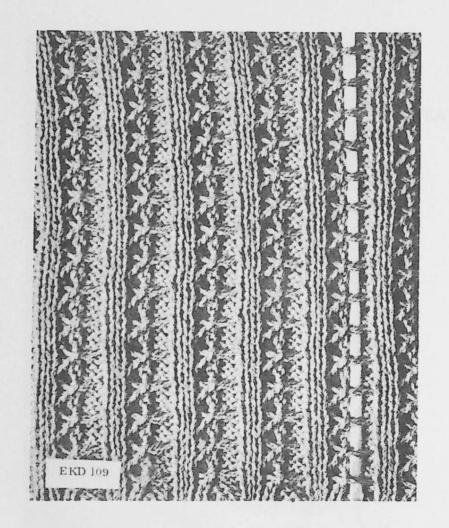
Return A.B. Needle bed to closed position.

Reset Pattern Selector Buttons on Knit (Code 1).
Colour B yarn.

Both Cam Switches Up on P.R.

Repeat from 5th row to row 8a for length of pattern.





FILIGREE

SETTING OF CARRIAGES: - (Joined on Right of Needle Beds)

Main Bed.(M.B.)

Pattern Selector Buttons - Knit (Code 1).
Holding Cam Levers - Both on I.

Tension Setting - 5 (4 ply fingering).

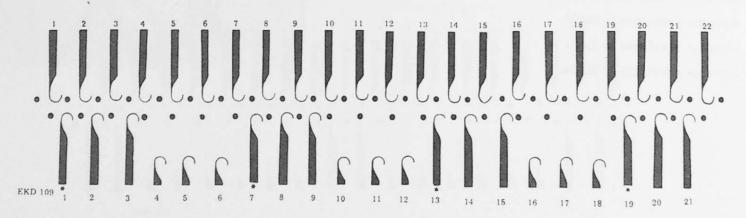
Auxiliary Bed. (A.B.)

Cam Switches - Both Down on N.

Pattern Conversion Switch - On R.
Tension Setting - 5.
Pitch Lever - On H.
Racking Lever - On 5.

NEEDLE ARRANGEMENT:

In action M.B. needles - Position B. In action A.B. needles - Position B.



FILIGREE

1st row Operate carriages to Left.

2nd row Operate carriages to Right.

3rd row Operate carriages to Left.

4th row Operate carriages to Right.

- a) Transfer the stitch from the 3rd A.B. needle onto the 7th M.B. needle. Repeat this along the needle bed, the stitch from the 9th A.B. needle to the 13th M.B. needle, the 15th to the 19th etc.
- b) The A.B. needles from which the stitches have been removed must be returned to B position.

5th row Operate carriages to Left.

6th row Operate carriages to Right.

7th row Operate carriages to Left.

8th row Operate carriages to Right.

Continue as above transferring stitches every 4th row.

VARIATIONS

This pattern may be varied in several ways :-

- (i) (a) Transfer the stitches from the A.B. needles on the left across those out of action to the A.B. needle on the right of the next group. This works the filigree into the rib.
 - (b) Return the A.B. needles (from which and to which stitches have been transferred) to Position B.
- (ii) When knitted a length of ribbon can be threaded through the filigree - narrow ribbon if knitted according to the pattern, wider if knitted according to variation (a) above.
- (iii) Similar to (i) above, except that when transferring stitches at the 4th row, transfer from left to right. At the 8th row from right to left, and alternating thus every 4th row.
- (iv) Similar to (iii) working on the original pattern, transferring stitches from the left A.B. needles to the right M.B. needles at the 4th row and from the right A.B. needle to the left M.B. needle at the 8th row.

Patterns (iii) and (iv) are not suitable for threading ribbon through.



WALTZ TIME

SETTING OF CARRIAGES: - (Joined on left of Needle Beds)
Main Bed.(M.B.)

Pattern Selector Buttons - Knit (Code 1).
Holding Cam Levers - Both on I.

Tension Setting - 5 (4 ply fingering)

Auxiliary Bed. (A.B.)

Cam Switches - Both Down on N.

Pattern Conversion Switches - On R.
Tension Setting - 5.
Pitch Lever - On H.

Racking Lever - On 0.

NEEDLE ARRANGEMENT:

In action M.B. needles - Position B.
In action A.B. needles - Position B.

WALTZ TIME

Operate carriages to Right. 1st row Set Racking Lever on 1. 2nd row Operate carriages to Left. Continue knitting, but before knitting each row, 3rd row set the Racking Lever one step higher until Row to 10 when the Racking Lever will be set on 9 and 10th row the carriages will operate from right to left. 11th row Set Racking Lever on 10. Operate carriages to Right. 12th row Transfer from the A.B. needles the stitches in pairs to the adjoining empty needles (as illustrated). The needles from which the stitches have been transferred should be set into Position A.

Operate carriages to Left.

13th row Set Racking Lever on 9.
Operate carriages to Right.

14th row Continue knitting, but before knitting each row, set the Racking Lever one step lower until Row 21 when the Racking Lever will be set on 1 and 21st row the carriages will operate from left to right.

22nd row Set Racking Lever on 0. Operate carriages to Left.

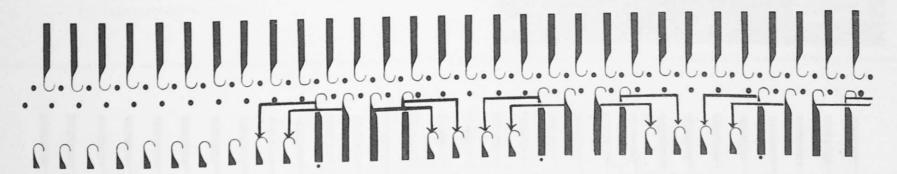
23rd row Transfer all stitches from the A.B. needles back to original setting (reverse of 12th row).

Operate carriages to Right.

Repeat pattern from 2nd row.

VARIATION

This pattern can be varied by reducing the racking range - As it is written the full racking range from 1 to 10 is used. It could be equally effective using a range from 1 to 6 only.



EKD 101

The needles to which stitches are transferred should be brought into action, Position B.

The needles from which stitches are transferred should be placed out of action.



FOXTROT

SETTING OF CARRIAGES: - (Joined on left of Needle Beds).

Main Bed.(M.B.)

Pattern Selector Buttons - Knit (Code 1).
Holding Cam Levers - Both on I.

Tension Setting - 5 (4 ply fingering).

Auxiliary Bed. (A.B.)

Cam Switches - Both Down on N.

Pattern Conversion Switch - On R.
Tension Setting - 5.
Pitch Lever - On H.
Racking Lever - On 0.

NEEDLE ARRANGEMENT:

in action M.B. needles - Position B. In action A.B. needles - Position B.

FOXTROT

NOTE:	The cables in this pattern are done on the A.B. needles.
	Use the two-needle transfer handles for cabling
	Whenever cabling, ensure that the stitches from the needles on the one side cross above the stitches from the
	needles on the opposite side in the same order (or direction)

110	<i>(n)</i>
1st row	Operate carriages to Right.
2nd row	Set Racking Lever on 1. Operate carriages to Left.
3rd row to 10th row	Continue knitting but before knitting each row set the racking lever one step higher until Row 10 when the racking lever will be set on 9 and the carriages will operate from right to left.
11th row	Set racking lever on 10. Operate carriages to Right.
12th row	Cable over the 4 adjacent A.B. needles. Operate carriages to Left.

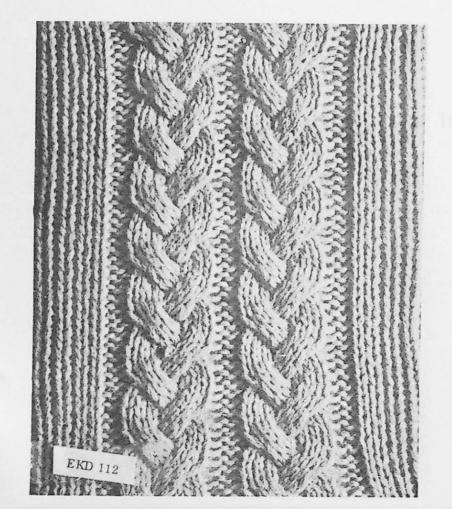
13th row	Racking lever on 9. Operate carriages to Right.
14th row to 21st row	Continue knitting but before knitting each row set the racking lever one step lower until row 21 when the racking lever will be set on 1 and the carriage will operate from left to right.
22nd row	Set racking lever on 0. Operate carriages to Left.
23rd row	Cable over the 4 adjacent A.B. needles. Operate carriages to right.
	Repeat pattern from 2nd row.

VARIATION

This pattern can be varied by reducing the racking range - As it is written the full racking range from 1 to 10 is used. It could be equally effective using a range from 2 to 9 or 3 to 8 only.

WAISTLINES.

Waistlines in cardigans, dresses, etc. can be kept in shape by sewing a piece of ribbon or petersham, the same measurement as the waist, inside the garment. This will keep it in shape and ensure a good fit.



PLAITED CABLE

SETTING OF CARRIAGES: - (Joined on left of Needle Beds). Main Bed. ($M_{\bullet}B_{\bullet}$)

Pattern Selector Buttons - On Knit (Code 1).
Holding Cam Levers - Both on I.

Tension Setting - 9 (Double Crepe).

Auxiliary Bed. (A.B.)

Cam Switches - Both Down on N.

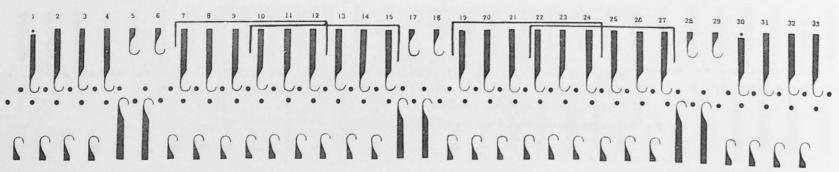
Pattern Conversion Switch - On R.
Tension Setting - 8.
Pitch Lever - On H.
Racking Lever - On 5.

NEEDLE ARRANGEMENT:

In action M.B. needles - Position B.
In action A.B. needles - Position B.

Cables in this pattern are done on the Main Bed Needles using two 3-Needle Transfer Handles. After cabling, raise the needles on which you have crossed over the stitches to Position E. This will make the movement of the saddle easier and prevent dropped stitches. Briefly cabling in this pattern is done as follows:—

The centre 3 stitches are always transferred outwards, either to the left or to the right on to the outer needles before the outer stitches are transferred inwards. Knit an uneven number of rows between cables, this will help you to remember the sequence if you always work over the 6 cabling needles nearest the side on which the carriage is resting.



PLAITED CABLE

1st row Operate carriages to right.

2nd row Operate carriages to left.

3rd row Operate carriages to right.

Working on the 9 M.B. needles set aside for the pattern, cable the 6 stitches on the side nearest the carriage as follows:-

- a) Lift 3 stitches on the side nearest the carriage on to one transfer handle.
- b) Lift the adjacent 3 (central) stitches on to the other transfer handle.
- c) Cross over the transfer handles so that :-
- (i) Those stitches from the 3 needles further away from the saddle are transferred to the vacant needles nearer the carriage.
- (ii) Those stitches that were nearer the carriage are transferred to the central needles.

4th row Operate carriages to left.

5th row Operate carriages to right.

6th row Operate carriages to left.

Cable over those 6 stitches on the side nearest the carriage. (Follow the instructions given after Row 3). In this way you will be cabling over the same central needles, but different outer needles.

Repeat from Row 1.

VARIATION:

This pattern can be varied by alternating the transferring sequence, and in this way produce an embossed effect similar to the "Key Cable".

PERMANENT PLEATING

A very interesting feature of the Double Bed Knitter is its ability to knit permanent pleating which in normal pressing of the garment or even dry cleaning will not be affected.

At the end of this book, patterns will be found for the following permanent pleats:-

Box Pleat, Semi-Box Pleat, Rib Pleat, Accordion Pleat.

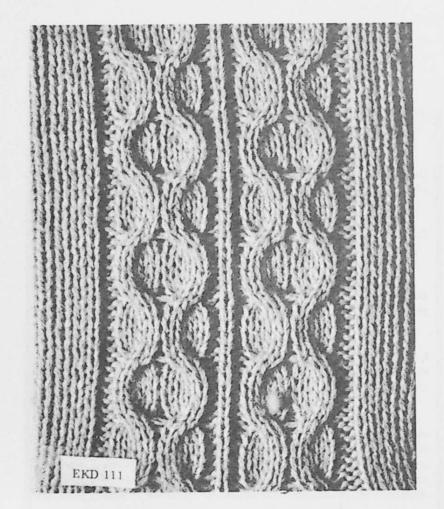
It will be noted that the type of pleat is established by the needle setting, after which it is only necessary to knit with the normal carriage settings for the length of the required fabric.

The needle settings are given for average pleating widths, however, the width of the facings can be adjusted by changing the position of the main bedout of action needles and their corresponding auxiliary bed needles.

To obtain a slightly outward flared effect start knitting on the lower tension and at the stage where the flare is to commence, gradually increase the tension every few rows according to the length of the remaining length of fabric. When the panels are joined together, one end will be slightly narrower than the other.

If using this method of flaring for a skirt the tighter tension will be at the waist and the cast-off will be at the lower edge where the lower tension stitches are knitted.

Do not increase tensions too much otherwise the lower edge of the panel will tend to be too loose (floppy).



KEY CABLE

SETTING OF CARRIAGES: - (Joined on left of Needle Beds)

Main Bed . (M. B.)

Pattern Selector Buttons - On Knit (Code 1).

Holding Cam Levers - Both on I.

Tension Setting - 9 (Double Crepe).

Auxiliary Bed. (A.B.)

Cam Switches - Both Down on N.

Pattern Conversion Switch - On R.
Tension Setting - 8.
Pitch Lever - on H.
Racking Lever - on 5.

NEEDLE ARRANGEMENT:

In action M.B. needles - Position B.
In action A.B. needles - Position B.

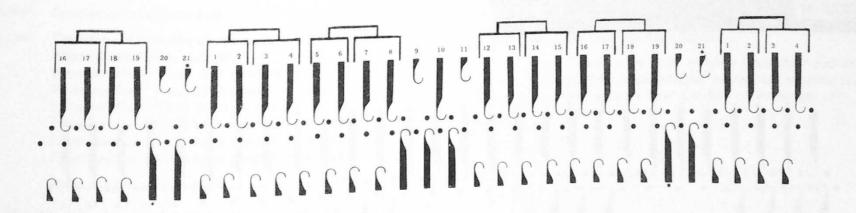
NOTE: The principle of cabling is used in this pattern, which however, does not form a true cable because the one set of stitches is always uppermost.

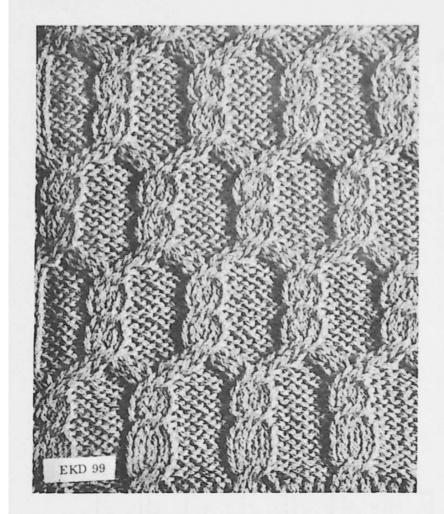
The crossed over stitches are done on the M.B. using the 2 needle Transfer Handle, but the direction is alternated as explained in the body of the pattern. For convenience of wording, "crossover" is termed "cabling" in this pattern. After cabling raise the needles on which you have crossed over the stitches to Position E (this will make the moving of the saddle easier and prevent dropped stitches).

KEY CABLE

1st row	Operate carriages to Right.
2nd row	Operate carriages to Left.
3rd row	Operate carriages to Right.
4th row	Operate carriages to Left.
5th row	Operate carriages to Right.
6th row	Operate carriages to Left.
7th row	Cable stitches on the M.B. i.e. transfer the 2 outer stitches to the centre, and then the 2 inner stitches outwards above the previously transferred stitches. Operate carriages to Right.
8th row	Operate carriages to Left.

9th row Operate carriages to Right. 10th row Operate carriages to Left. 11th row Operate carriages to Right. 12th row Operate carriages to Left. 13th row Cable stitches on M.B. i.e. transfer the 2 inner stitches outwards, then the 2 outer stitches inwards above the previously transferred stitches. Repeat from Row 1, remembering to cable alternately as in Rows 7 and 13. Thus Row 19 is a repeat of Row 7 and Row 25 is a repeat of Row 13.





RING CABLE

SETTING OF CARRIAGES: - (Joined on left of Needle Beds).

Main Bed.(M.B.)

Pattern Selector Buttons - Knit (Code 1).
Holding Cam Levers - Both on I.

Tension Setting - 6 (4 ply fingering).

Auxiliary Bed. (A.B.)

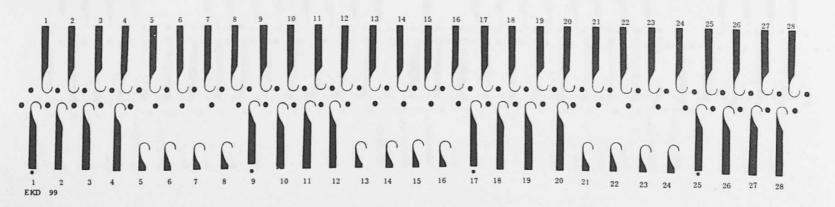
Cam Switches - Both Down on N.

Pattern Conversion Switch - On R.
Tension Setting - 6.
Pitch Lever - On H.
Racking Lever - On 5.

NEEDLE ARRANGEMENT:

In action M.B. needles - Position B.
In action A.B. needles - Position B.

NOTE: The cables in this pattern are done on the Auxiliary Bed needles. Use the two-needle transfer handles for cabling — Whenever cabling, ensure that the stitches from the needles on the one side always cross above the stitches from the needles on the opposite side in the same order (or direction).



RING CABLE

1st row	Operate carriages to Right.			
2nd row	Operate carriages to Left.			
3rd row	Operate carri ages to Right.			
4th row	Operate carriages to Left.			
5th row	Cable over the four A.B. needles. Operate carriages to Right.			
6th row	Operate carriages to Left.			
7th row	row Operate carriages to Right.			
8th row	Operate carriages to Left.			
9th row	Cable over the four A.B. needles. Operate carriages to Right.			
10th row	Operate carriages to Left.			
11th row	Operate carriages to Right.			
12th row	Operate carriages to Left.			
13th row	Cable over the four A.B. needles. Operate carriages to Right.			
14th row	Operate carriages to Left.			
15th row	Transfer the stitches on the A.B. needles to adjacent needles as follows:-			
	From needles 3 and 4 to needles 5 and 6			
	From needles 9 and 10 to needles 7 and 8			
	From needles 11 and 12 to needles 13 and 14			
	From needles 17 and 18 to needles 15 and 16			
	From needles 19 and 20 to needles 21 and 22			
	From needles 25 and 26 to needles 23 and 24			
Operate carriages to Right.				

The needles to which stitches are transferred should be brought into action, Position B. The needles from which stitches are transferred should be placed out of action.

•		
	on the act tra ne	needles 1 and 2 are at the selvedge, leave the stitches the needles, if however the pattern is being made in e centre of the fabric, bring into action the two out of tion A.B. needles on the left of needles 1 and 2, and insfer the stitches from needles 1 and 2 onto those edles. Repeat this at the opposite end of the patterng needles.
	16th row	Operate carriages to Left.
	17th row	Cable over the four A.B. needles. Operate carriages to Right.
	18th row	Operate carriages to Left.
	19th row	Operate carriages to Right.
	20th row	Operate carriages to Left.
	21st row	Cable over the four A.B. needles.

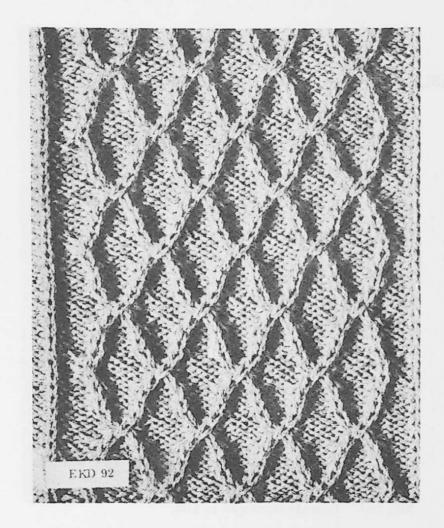
Operate carriages to Right.

24th row Operate carriages to Left.

25th row Cable over four A.B. needles. Operate carriages to Right.

26th row Operate carriages to Left.

Transfer the A.B. stitches from their present needles to the original setting and continue knitting as from Row 3 to Row 26 for length of pattern.



NARROW MACRAMÉ

SETTING OF CARRIAGES: (Joined on left of Needle Beds)

Main Bed. (M.B.)

Pattern Selector Buttons - On Knit (Code 1).

Holding Cam Levers - On I.

Tension Setting - 5 (4 ply fingering).

Auxiliary Bed. (A.B.)

Cam Switches - Left Down on N

Right Up on PR

Pattern Conversion Switch -

- 5

Tension setting
Pitch Lever

- On H.

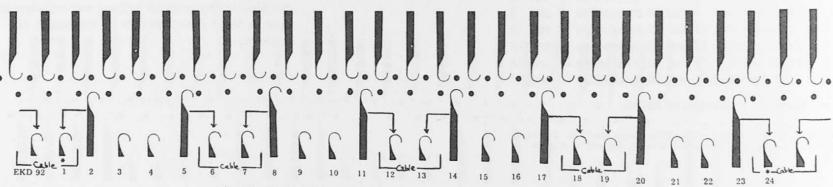
Racking Lever

- On 5.

On P

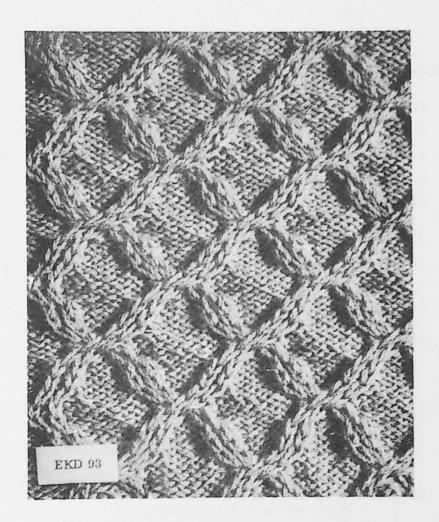
NEEDLE ARRANGEMENT:

In action M.B. needles - Position B.
In action A.B. needles - Position B.



NARROW MACRAMÉ

1st row	Operate carriages to Right.	11th row	Operate carriages to Right.
2nd row	Operate carriages to Left.	12th row	Operate carriages to Left.
3rd row	Operate carriages to Right.	13th row	Operate carriages to Right.
4th row	Operate carriages to Left.	14th row	Operate carriages to Left.
5th row	On the Auxiliary Bed transfer the stitches as follows:-	15th row	On the Auxiliary bed transfer the stitches as follows:-
	From A.B. needle 2 to A.B. needle 1 From A.B. needle 5 to A.B. needle 6 From A.B. needle 8 to A.B. needle 7 From A.B. needle 11 to A.B. needle 12 From A.B. needle 14 to A.B. needle 13 From A.B. needle 17 to A.B. needle 18 From A.B. needle 20 to A.B. needle 19 From A.B. needle 23 to A.B. needle 24		From A.B. needle 2 to A.B. needle 3 From A.B. needle 5 to A.B. needle 4 From A.B. needle 8 to A.B. needle 9 From A.B. needle 11 to A.B. needle 10 From A.B. needle 14 to A.B. needle 15 From A.B. needle 17 to A.B. needle 16 From A.B. needle 20 to A.B. needle 21 From A.B. needle 23 to A.B. needle 22
	Operate carriages to Right.		Operate carriages to Right.
6th row	Operate carriages to Left.	16th row	Operate carriages to Left.
7th row	Using two single-needle transfer handles, cable over two adjacent A.B. needles and repeat all along the A.B. needle bed - Whenever cabling	17th row	Cable over two adjacent A.B. needles and repeated all along the A.B. needle bed (See row 7.) Operate carriages to Right.
	ensure that the stitches from the needles on the one side cross above the stitches from the	18th row	Operate carriages to Left. Revert needles to original setting.
	needles on the other side, always in the same order or direction	19th row	Operate carriages to Right.
	Operate carriages to Right.	20th row	Operate carriages to Left.
		21st row	Operate carriages to Right.
8th row	Operate carriages to Left.	22nd row	Operate carriages to Left.
9th row	Transfer A.B. stitches back to their original setting. (See graph).	23rd row	Operate carriages to Right.
	Operate carriages to Right.	24th row	Operate carriages to Left.
10th row	Operate carriages to Left.	Repeat pa	ttern from 5th to 24th rows for length of pattern.



MACRAMÉ

SETTING OF CARRIAGES: - (Joined on left of Needle Beds)

Main Bed.(M.B.)

Pattern Selector Buttons - On Knit (Code 1).

Holding Cam Levers - On I.

Tension Setting - 6 (4-ply fingering).

Auxiliary Bed. (A.B.)

Cam Switches - Left on N.

Right on P.R.

Pattern Conversion Switch - On P.

Tension Setting - 6

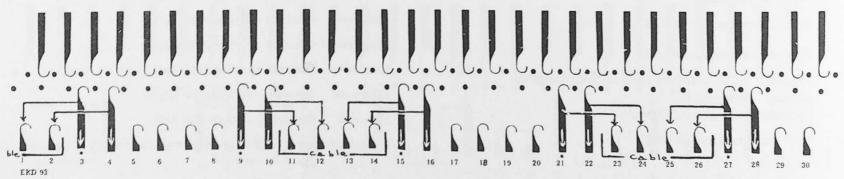
- On H.

Racking Lever - On 5.

NEEDLE ARRANGEMENT:

Pitch Lever

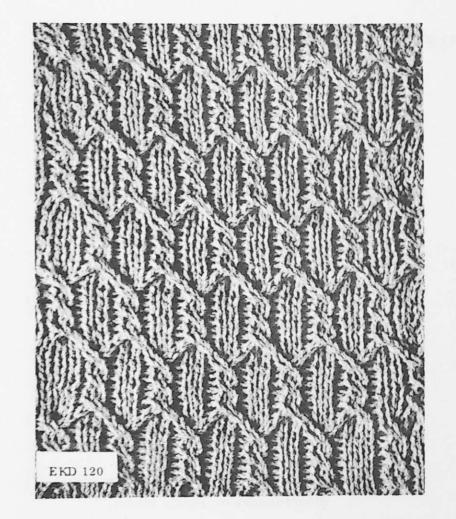
In action M.B. needles - Position B.
In action A.B. needles - Position B.



The needles to which stitches are transferred should be brought into action. Position B. The needles from which stitches are transferred should be placed out of action.

MACRAMÉ

1st row	Operate carriages to Right.	12th row	Operate carriages to Left.
2nd row	Operate carriages to Left.	13th row	Operate carriages to Right.
3rd row	Operate carriages to Right.	14th row	Operate carriages to Left.
4th row 5th row	Operate carriages to Left. On the Auxiliary Bed transfer the stitches as follows:- From A.B. needles 3 and 4 to A.B. needles 1 and 2 From A.B. needles 9 and 10 to A.B. needles 11 and 12 From A.B. needles 15 and 16 to A.B. needles 13 and 14 From A.B. needles 21 and 22 to A.B. needles 23 and 24	15th row	On the Auxiliary Bed transfer the stitches as follows:- From A.B. needles 3 and 4 to A.B. needles 5 and 6 From A.B. needles 9 and 10 to A.B. needles 7 and 8 From A.B. needles 15 and 16 to A.B. needles 17 and 18 From A.B. needles 21 and 22 to A.B. needles 21 and 20 From A.B. needles 27 and 28 to A.B. needles 29 and 30
	From A.B. needles 27 and 28 to A.B. needles 25 and 26 Operate carriages to Right.	16th row	Operate carriages to Right. Operate carriages to Left.
6th row 7th row	Operate carriages to Left. Using the two-needle transfer handles, cable over the four A.B. needles and repeat all along the A.B. needle bed - Whenever cabling ensure that the stitches from the needles on the one side cross above the stitches from the needles on the other side always in the same order or direction.	17th row 18th row 19th row 20th row	Cable over four A.B. needles and repeat all along the A.B. needle bed (as in row 7). Operate carriages to Right. Operate carriages to Left. Revert needles to original setting. Operate carriages to Right. Operate carriages to Left.
	Operate carriages to Right.	21st row	Operate carriages to Right.
8th row	Operate carriages to Left.	22nd row	Operate carriages to Left.
9th row	Transfer A.B. stitches back to their original setting (see graph).	23rd row	Operate carriages to Left. Operate carriages to Right.
	Operate carriages to Right.	24th row	Operate carriages to Left.
10th row	row Operate carriages to Left.		ttern from 5th to 24th rows for length of pattern.
11th row	Operate carriages to Right.		



TRELLIS CABLE

SETTING OF CARRIAGES: - (Joined on Right of Needle Beds)

Main Bed. (M.B.)

Pattern Selector Buttons - Knit (Code 1).
Holding Cam Levers - Both on I.

Tension Setting - 5 (4 ply fingering).

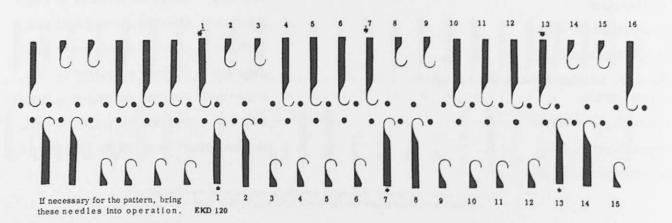
Auxiliary Bed. (A.B.)

Cam Switches - Both Down on N.

Pattern Conversion Switch - On R.
Tension Setting - 5.
Pitch Lever - On H.
Racking Lever - On 5.

NEEDLE ARRANGEMENT:

In action M.B. needles - Position B.
In action A.B. needles - Position B.



TRELLIS CABLE

NOTE: CABLING: Cabling in this pattern is done on the Main Bed needles using two single-needle transfer handles. Whenever cabling ensure that the stitches from the needles on the one side always cross above the stitches from the needles on the opposite side in the same order (or direction). Whenever a row of cabling has been set, raise to E position all M.B. needles on which crossed-over stitches have been placed. This will make it easier to pass the saddle across when knitting.

On the fabric in the knitter:

1st row

Cable on M.B. needles across the out of action needles i.e.

- (a) Remove the stitches with single transfer handles from needles 1 and 4;
- (b) Transfer the stitch from needle 4 to needle 1 and the stitch from needle 1 to needle 4;
- (c) Repeat this over needles 10 and 7, 16 and 13, 22 and 19, 28 and 25, etc.

Operate carriages to Left.

2nd row

(a) Transfer A.B. stitches to the Main Bed as follows:-

From A.B. needles:- to M.B. needles:- From A.B. 1 and 2 to M.B. 2 and 3 From A.B. 7 and 8 to M.B. 8 and 9 From A.B. 13 and 14 to M.B. 14 and 15 and continue along needle beds in the same manner.

- (b) Lower those A.B. needles from which stitches have been removed to A position.
- (c) Operate carriages to Right.
- (d) Set racking lever on 2.

3rd row

(a) Transfer M.B. stitches to the Auxiliary Bed as follows:

From M.B. needles:From M.B. 5 and 6
From M.B. 11 and 12
From M.B. 17 and 18
From M.B. 23 and 24

to A.B. 1 and 2
to A.B. 7 and 8
to A.B. 13 and 14
to A.B. 19 and 20

- (b) Now set empty M.B. needles out of action.
- (c) Cable on M.B. over needles 7 and 4, 13 and 10, 19 and 16, 25 and 22.

4th row Operate carriages to Left.

5th row Operate carriages to Right.

6th row Operate carriages to Left.

7th row Cable over the same M.B. needles as in 3rd row (c).
Operate carriages to Right.

8th row Operate carriages to Left.

9th row Operate carriages to Right.

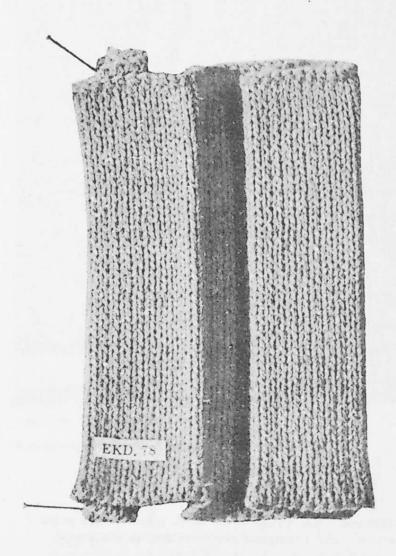
10th row Cable over the same needles as in 3rd row (c).
Operate carriages to Left.

- (a) Transfer back to the out of action M.B. needles the stitches of A.B. (M.B. needles 5 and 6, 11 and 12, 17 and 18, 23 and 24).
- (b) Lower the empty A.B. needle to position A.
- (c) Operate carriages to Right.
- (d) Set racking lever on 5.

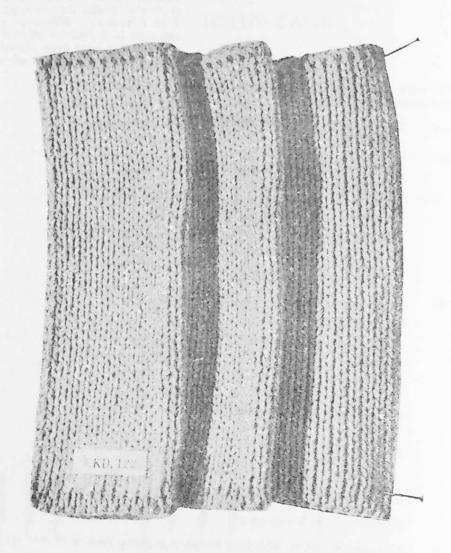
12th row (a) Transfer the M.B. stitches back to the original needle setting as illustrated.

Repeat from Row 1 to Row 12 for length of the pattern.

PERMANENT PLEATS



BOX PLEATS



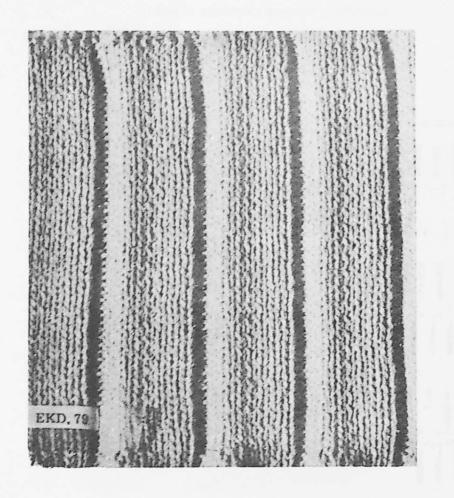
SEMI BOX PLEAT

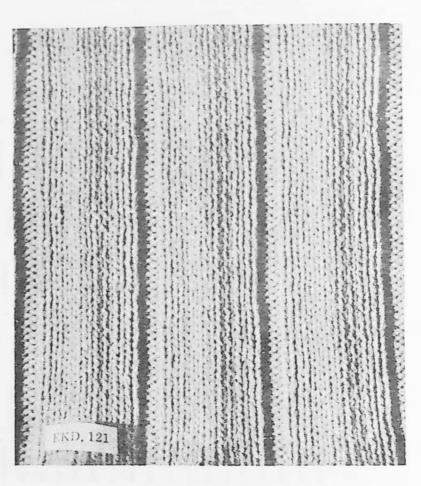
PERMANENT PLEATING

SETTING OF CARRIAGES:

NEEDLE ARRANGEMENT: Main Bed. (M.B.) In action M.B. needles Position B. Pattern Selector Buttons Knit (Code 1). In action A.B. needles Position B. Holding Cam Levers Both on I. 1st row Operate carriages to Right. Tension Setting 6 (4 ply fingering). 2nd row Operate carriages to Left. Auxiliary Bed. (A. B.) Cam Switches Both Down on N. Repeat for the length of fabric required to be permanently Pattern Conversion Switch On R. pleated. Tension Setting Pitch Lever On H., Racking Lever On 5. Both carriages on the same side of needle bed, either left or right. **SEMI** BOX **PLEAT** BOX **PLEATS** RIB **PLEATS ACCORDION** PLEAT

PERMANENT PLEATS





RIB PLEATS

ACCORDION PLEAT



