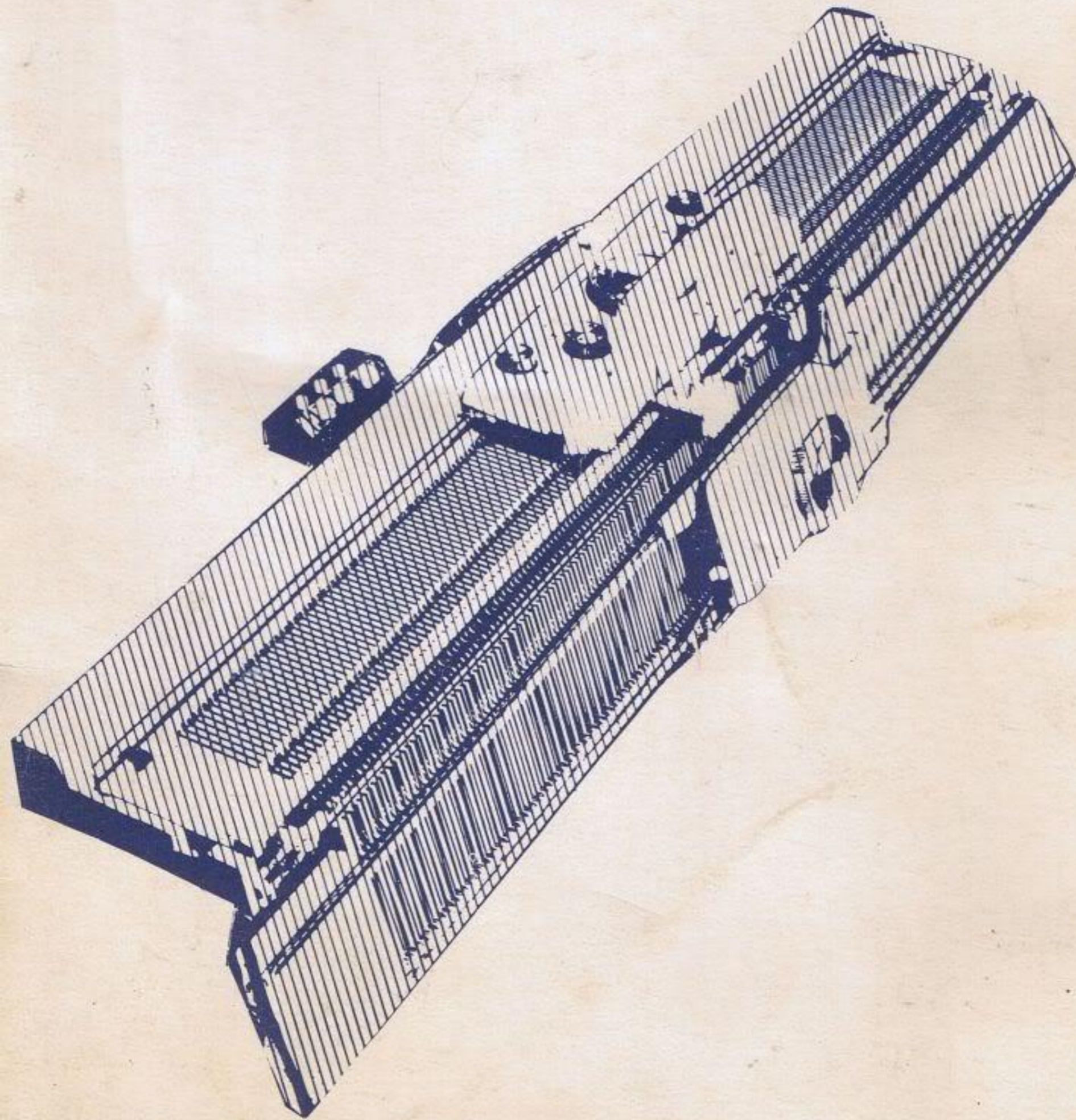




**CHR-200**

# **RIBBING ATTACHMENT**



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## DESCRIPTION OF THE VARIOUS PARTS

### The Ribber

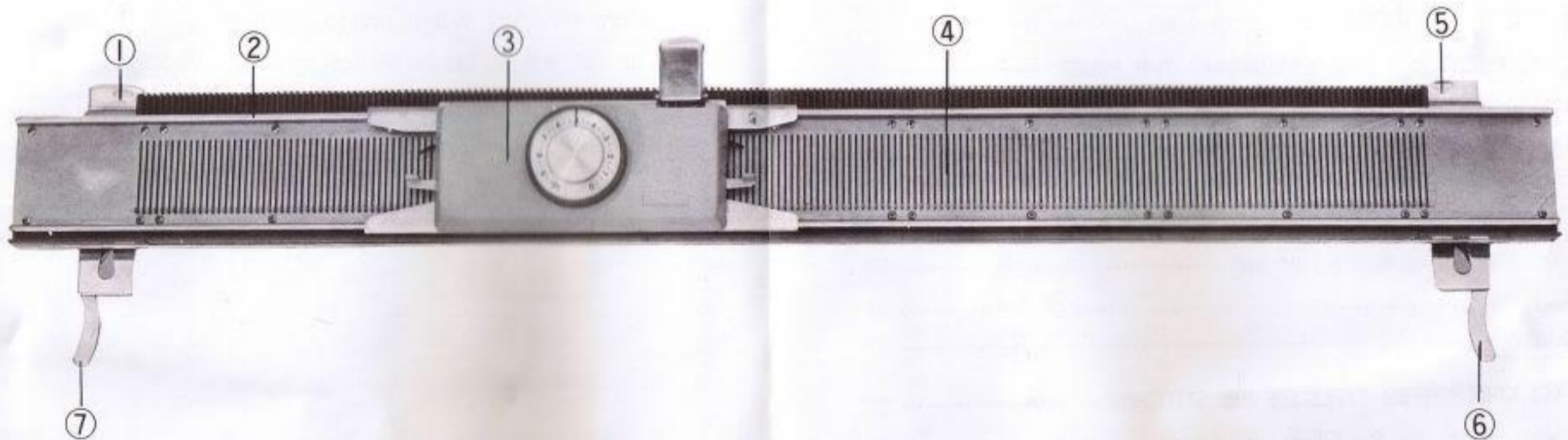


Fig. 1

1. Ribber Mounting Bracket L/H.
2. Upper Slide Rail for Carriage.
3. Ribber Carriage.
4. Ribber Needle Bed.
5. Ribber Mounting Bracket R/H.
6. Release Lever R/H.
7. Release Lever L/H.

The Ribber Carriage (Top View)

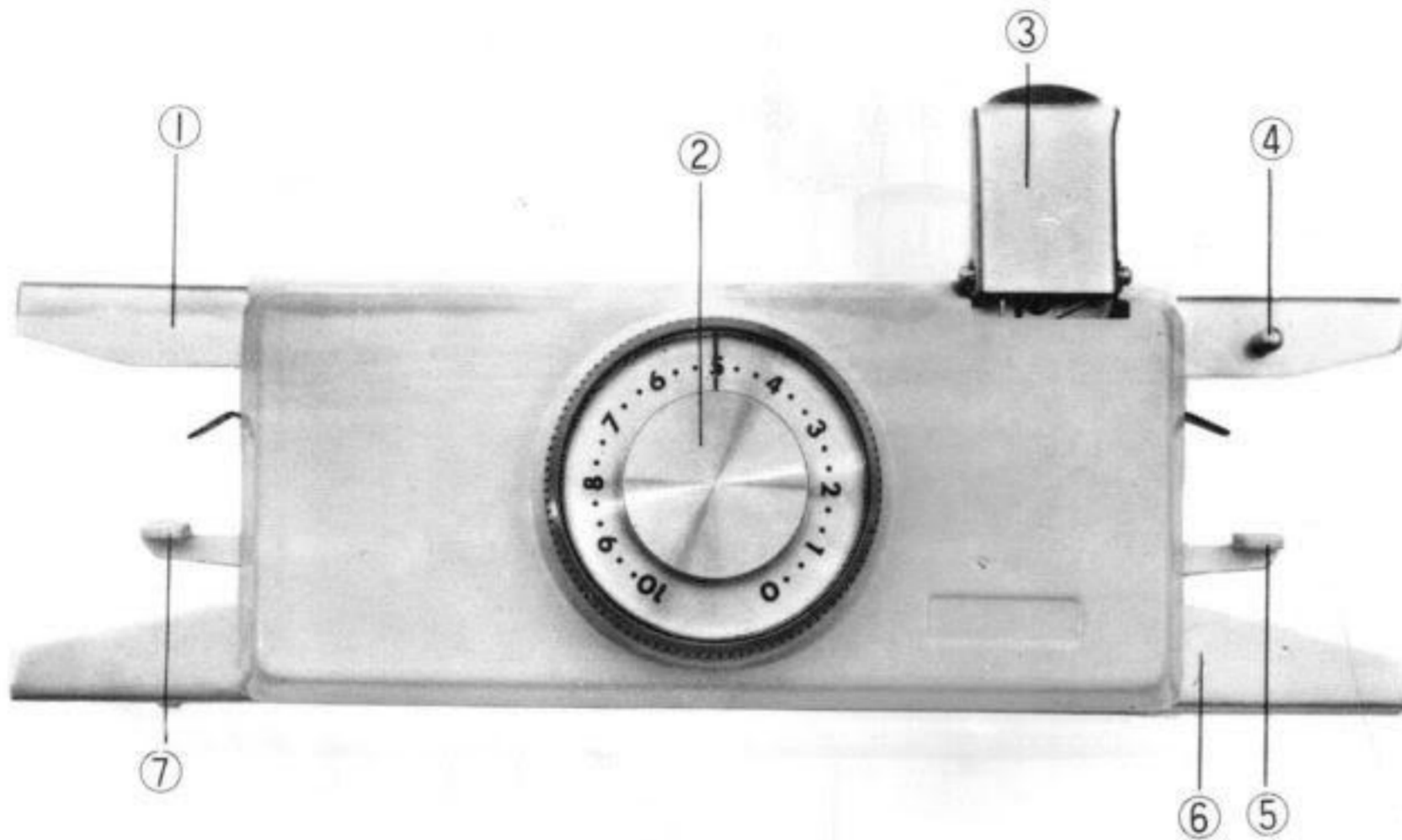


Fig. 2

- |                                     |                            |
|-------------------------------------|----------------------------|
| 1. Upper Slide Runner.              | 5. Shifting Cam Lever R/H. |
| 2. Tension Dial.                    | 6. Lower Slide Runner.     |
| 3. Connecting Arm.                  | 7. Shifting Cam Lever L/H. |
| 4. Upper Slide Runner Release Knob. |                            |

The Ribber Carriage (Under View)

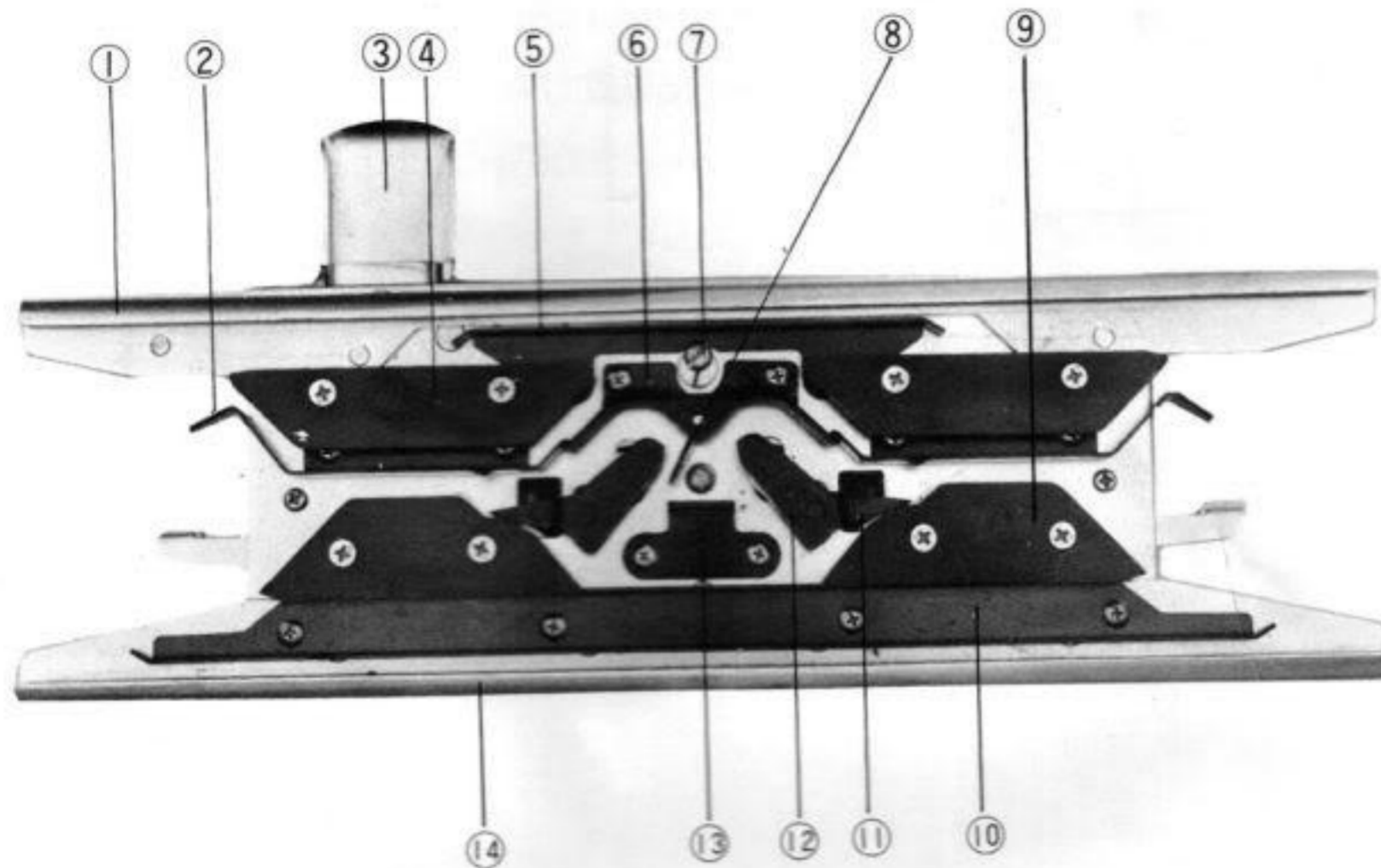


Fig. 3

- |                              |                            |
|------------------------------|----------------------------|
| 1. Upper Slide Runner.       | 8. Second Cam.             |
| 2. Needle Guide Cam.         | 9. Raising Cam.            |
| 3. Connecting Arm.           | 10. Rest Needle Channel.   |
| 4. Turning Cam.              | 11. Shifting Cam.          |
| 5. Upper Rail Guide.         | 12. Main Cam.              |
| 6. First Cam.                | 13. First Cam Limit Plate. |
| 7. Main Cam Adjusting Screw. | 14. Lower Slide Runner.    |

## STANDARD ACCESSORIES

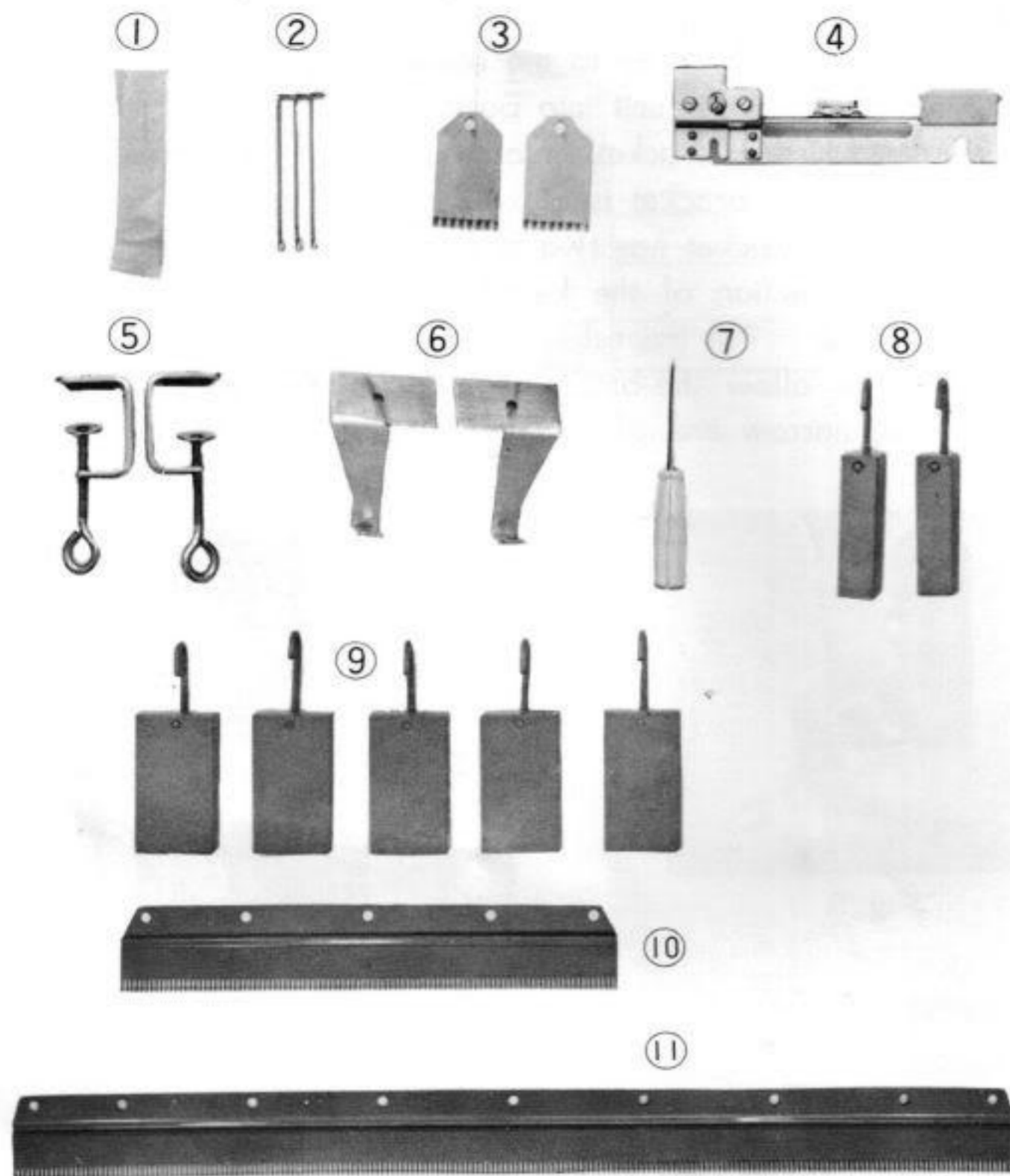


Fig. 4

- |                        |                           |
|------------------------|---------------------------|
| 1. Needle Pouch.       | 7. Screw Driver.          |
| 2. Spare Needles.      | 8. Selvedge Weights.      |
| 3. Selvedge Hooks.     | 9. Weights.               |
| 4. Ribber Feeder Arm.  | 10. Cast-on Comb (Small). |
| 5. Ribber Stay Clamps. | 11. Cast-on Comb (Large). |
| 6. Ribber Stays.       |                           |

## HOW TO ASSEMBLE THE RIBBER

1. Clamp the main machine firmly to the edge of a table. (Figs. 5 & 6)
2. Place the overhead feeder unit into position on the machine.
3. Fix the ribber mounting brackets into position on the back of the ribber needle bed. The R/H. bracket is shown partly in position in Fig. 7. It will be seen that each bracket has two slots in the shape of a keyhole. Locate the wide section of the keyhole slots over the two studs on the ribber needle bed. Pull the release lever outwards (again see Fig. 7) and this will then allow the bracket to slide downwards so that the studs are now in the narrow end of the keyhole slots. (Fig. 8)

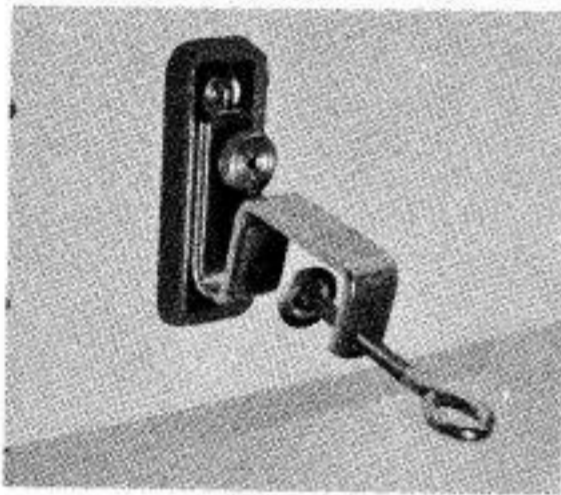


Fig. 5

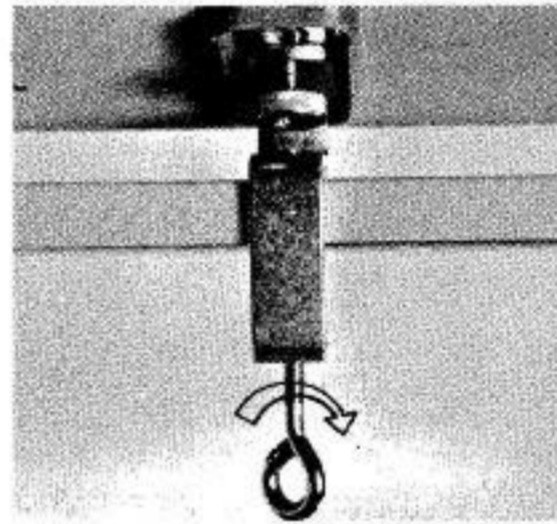


Fig. 6

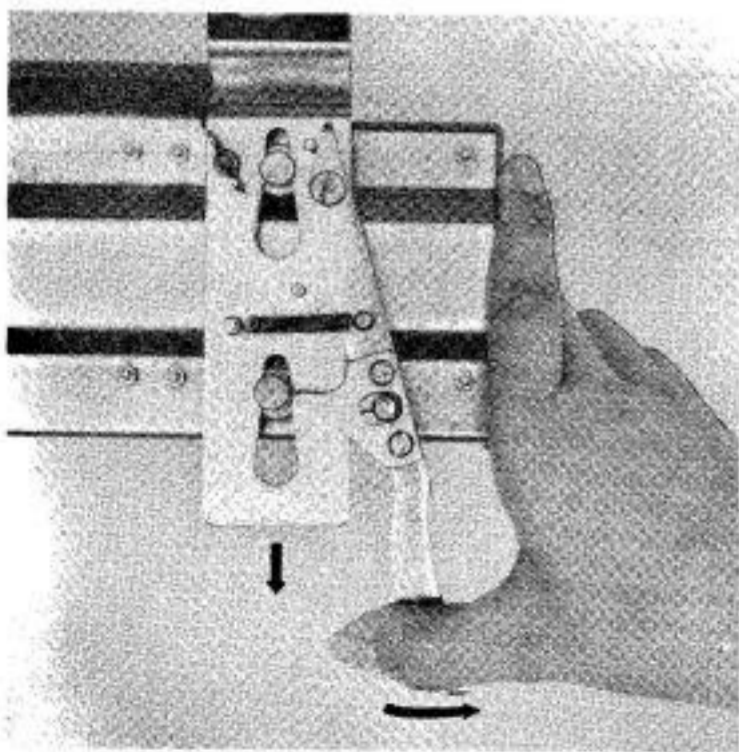


Fig. 7

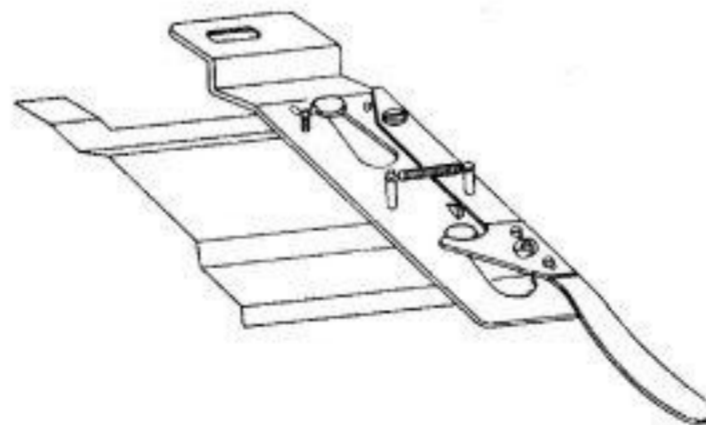


Fig. 8



**Note:** It is essential that the brackets are fitted as shown in Fig. 9 ensuring that the R/H and L/H brackets are at the correct ends of the ribber needle bed.

4. Facing you on each mounting bracket will be seen a wing nut. Remove this nut and place the ribber stay over the screw—see Fig. 10. Replace the wing nut and ensure that it is well tightened.

(Fig. 11)

5. Remove the two knurled nuts located at each end on the front of the main machine. Place the mounting brackets over the screws and replace the knurled nuts. Tighten firmly with a screwdriver.

(Fig. 12)

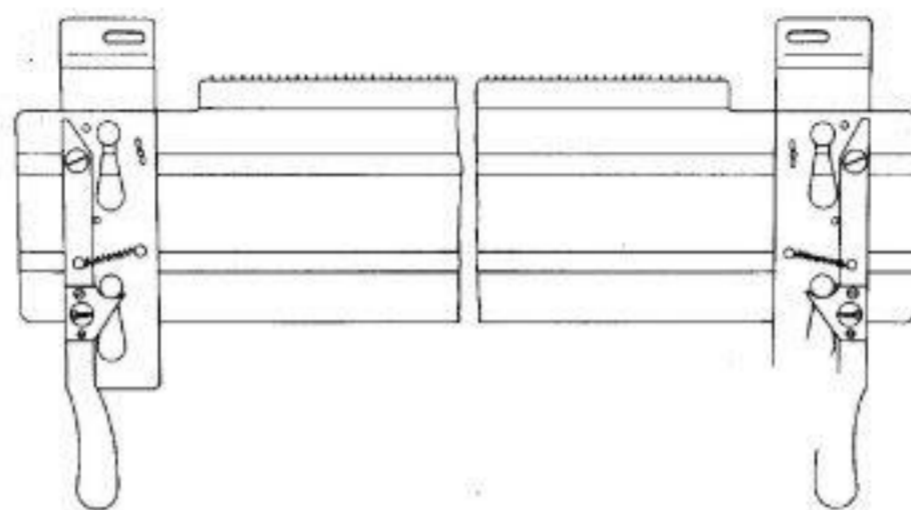


Fig. 9

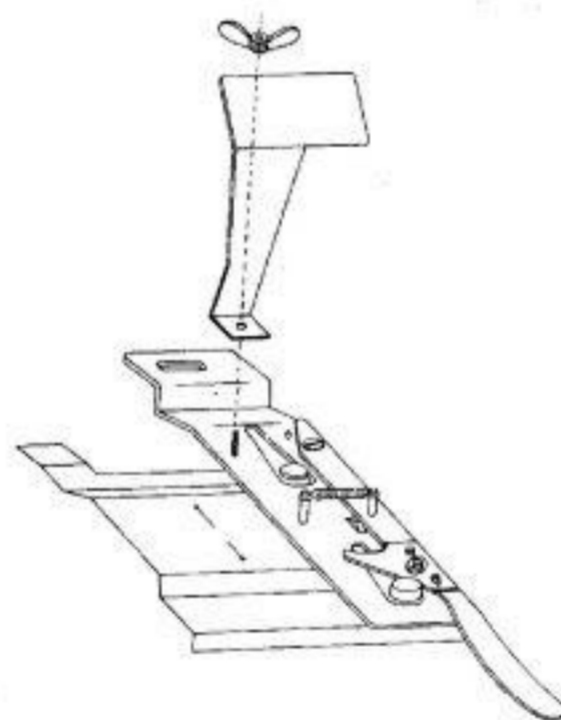


Fig. 10

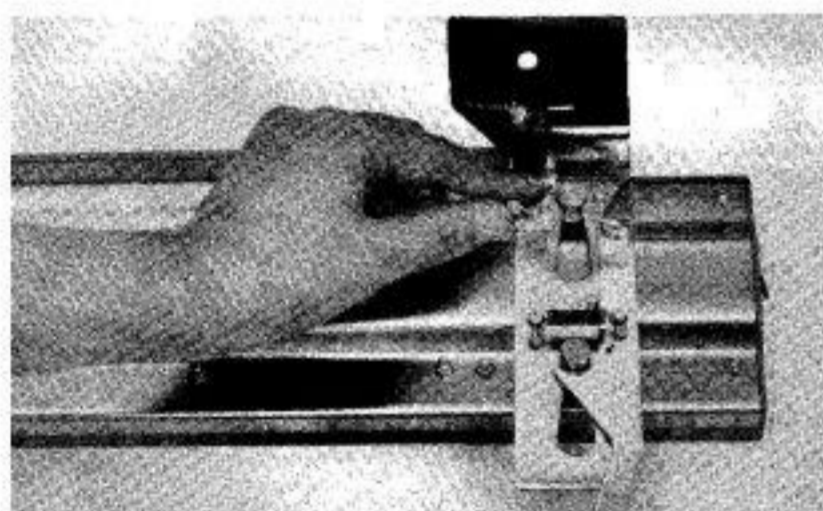


Fig. 11

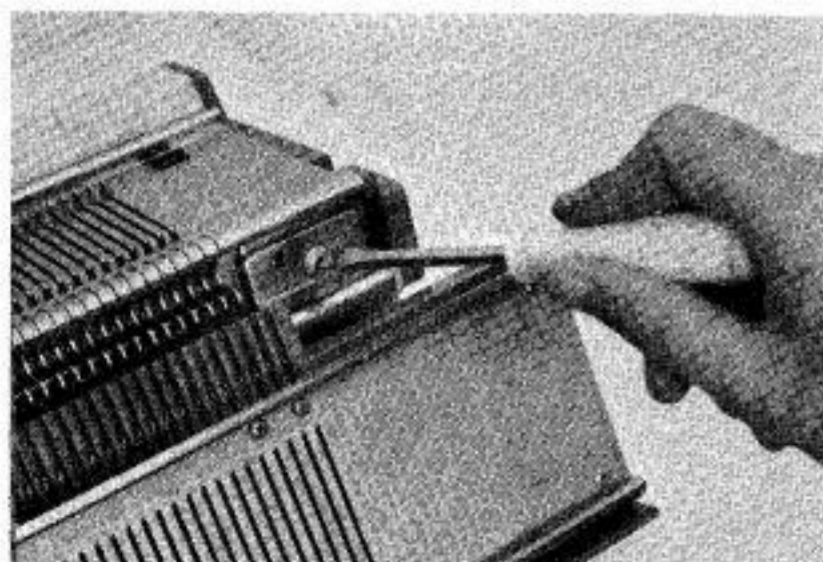


Fig. 12

**Note :** Prior to tightening the knurled nuts, ensure that the ribber needles are correctly positioned in relation to the machine needles. For correct positioning see Fig. 13.

The slots in the mounting brackets are elongated to enable the ribber to be moved slightly sideways until correct position is obtained.

6. Using the ribber stay clamps, clamp the ribber stays to the table edge. (Figs. 14 & 15)

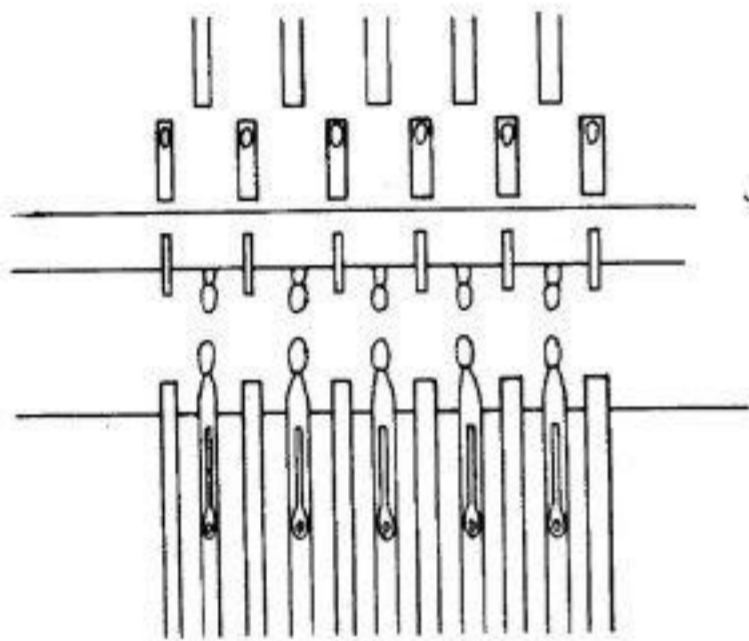


Fig. 13

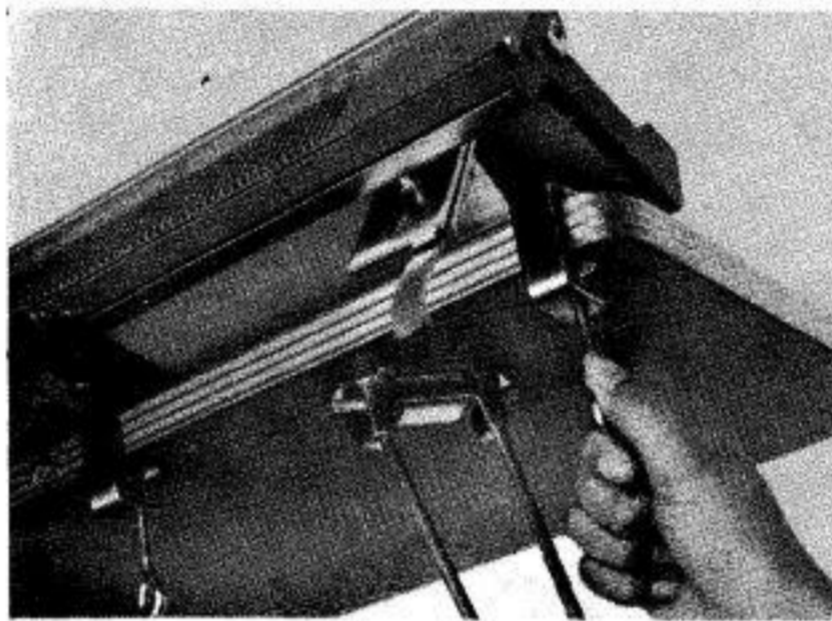


Fig. 14

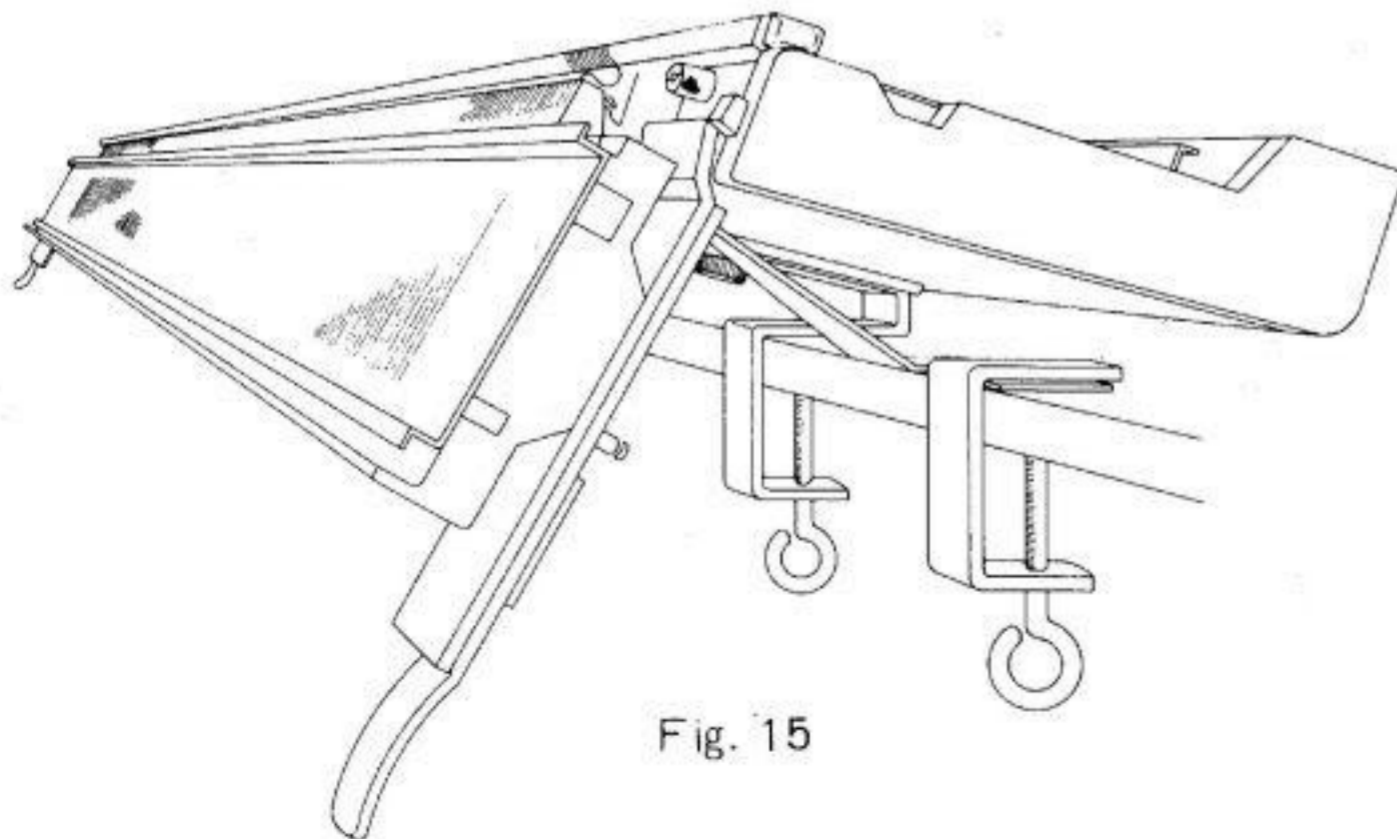


Fig. 15

7. Remove the feeder arm from the carriage of the main machine by loosening the two knurled nuts. (Fig. 16)

8. Replace the machine feeder arm with the special ribber feeder arm as shown in Fig. 17 and secure in position by tightening the knurled nuts. (Fig. 18)

**Note:** If your machine feeder arm is secured by two small screws, remove the screws, fit the ribber feeder arm then replace the screws and tighten firmly.

9. Place both the machine carriage and the ribber carriage in to their respective positions on the machine and ribber needle beds.

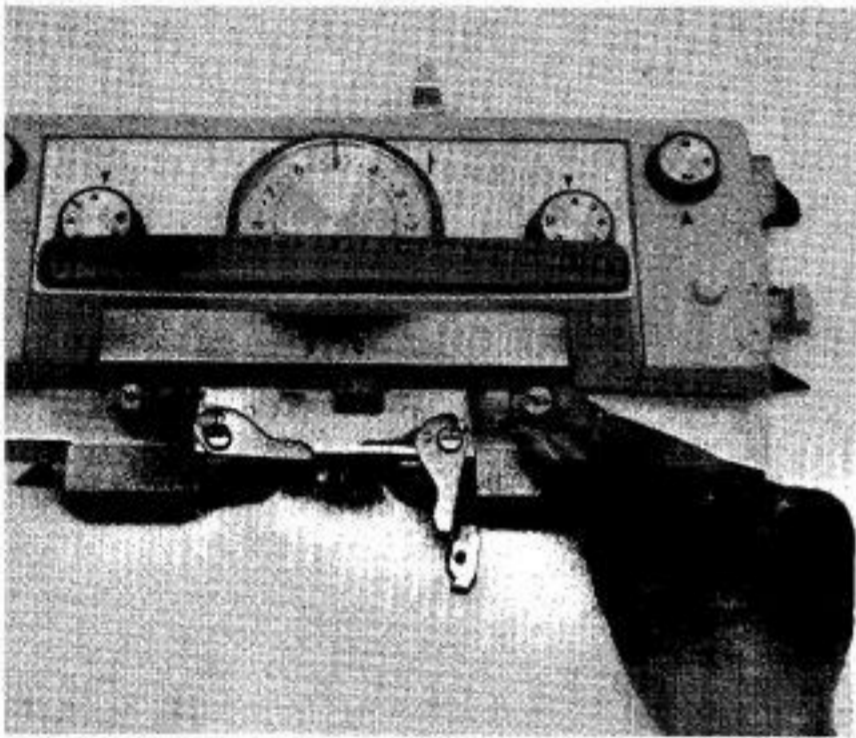


Fig. 16

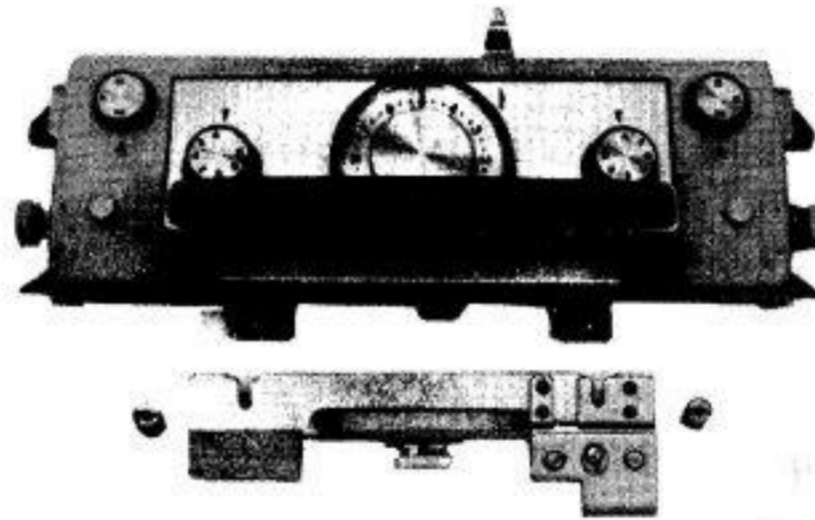


Fig. 17

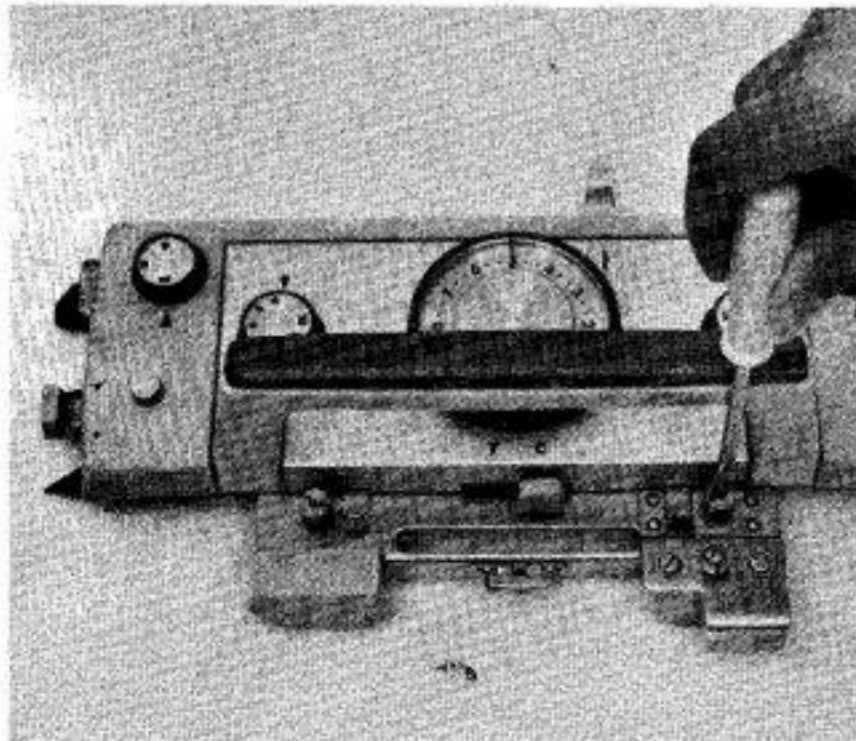


Fig. 18

## RIBBER NEEDLE POSITIONS—see Fig. 19

(A) **Rest Position (Non Working Position)**

Needles not in use.

(B) **Manual Return from Working Position**

Needles will knit when pushed down into this position from working position (C). Position (B) is used only during casting-on.

(C) **Working Position**

The required number of needles for knitting should be brought up into this position from position (A) before commencing to knit. After moving the ribber carriage across the needles, all working needles will align in this position.

(D) **Manual Return from Holding Position**

Needles will knit when pushed down into this position from holding position (E).

(E) **Holding Position**

Needles hold the stitches behind the latches but do not knit when in this position. Used for Turning, Part Knitting etc.

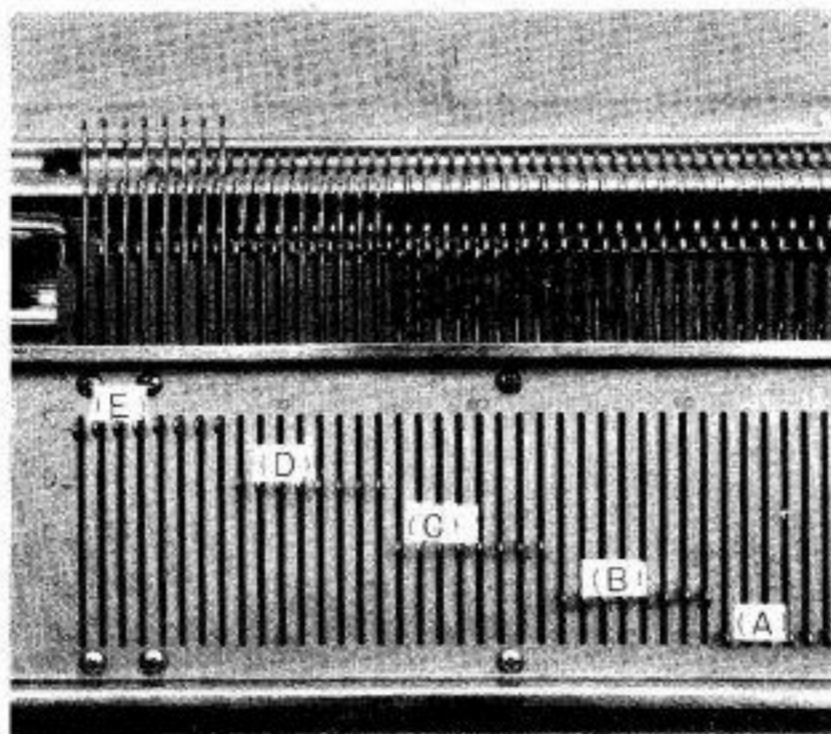


Fig. 19

# BASIC INSTRUCTIONS FOR OPERATING THE RIBBER

## 1. Release Levers

At each end of the ribber needle bed is a lever known as the release lever. When these levers are moved outwards they allow the needle bed to be lowered by about  $1\frac{1}{4}$ ". (Fig. 20)

The lower position is used should it be desired to make an examination of the fabric during knitting or to facilitate the picking up of a dropped stitch.

Needle bed must be raised to normal working position before re-commencing to knit. The ribber needle bed must always be placed in the lower position when out of use and the knitter is working on the main machine only.

To return the ribber to normal working position, simply push it up with both hands until it clicks into position.

(Fig. 21)

## 2. Tension Dial (see Fig. 22—1)

This controls the size of the stitch; the higher number giving the looser tension. The approximate settings for various thicknesses of yarns are as follows:

0—3	Very fine yarns
3—5	Medium yarns
5—8	Heavy yarns
8—10	Very heavy yarns

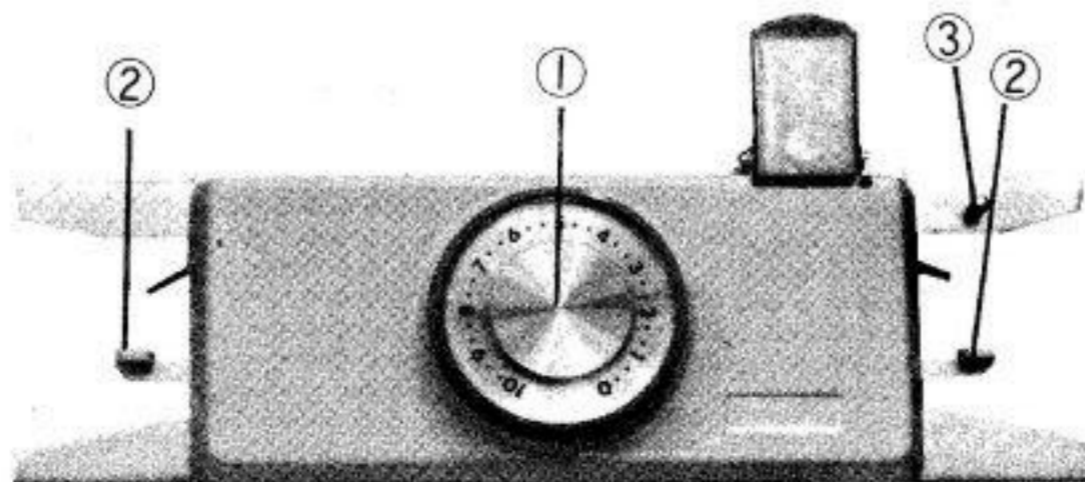


Fig. 22

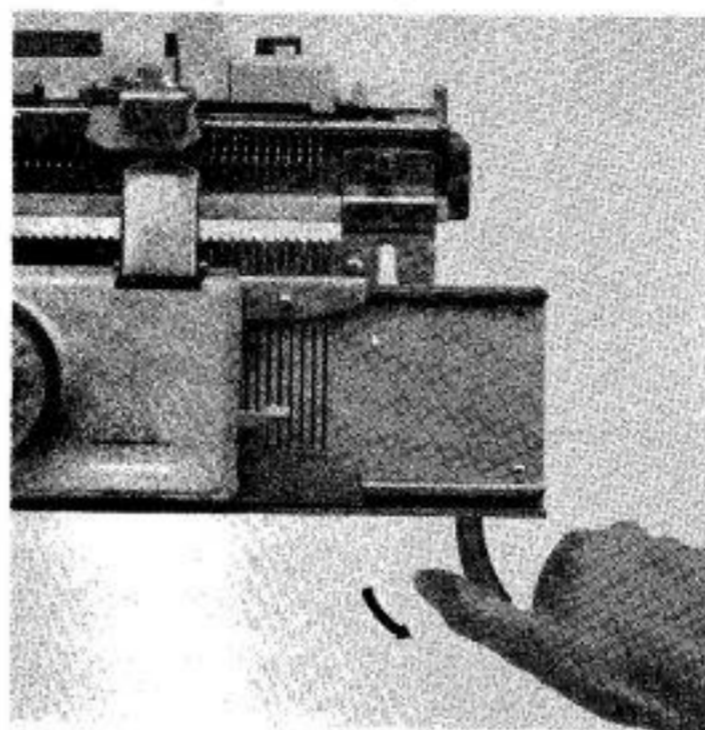


Fig. 20

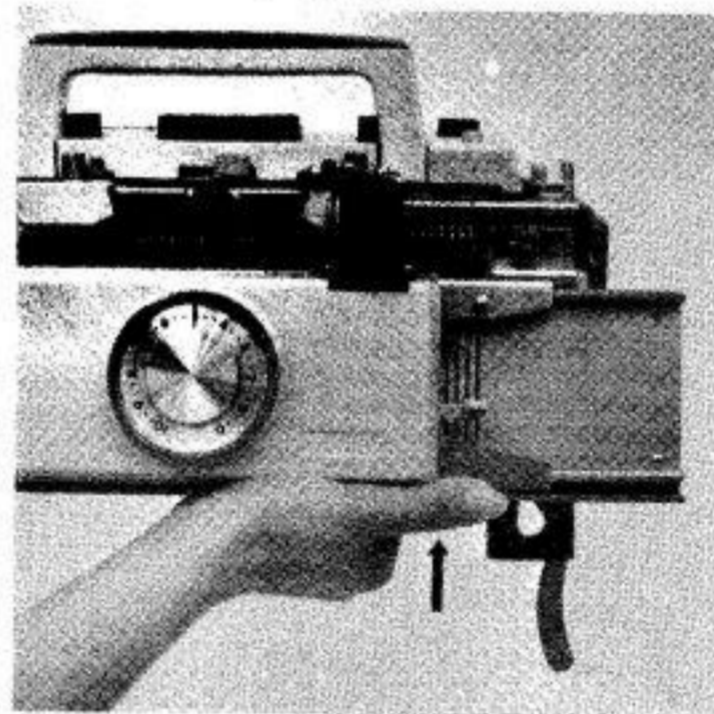


Fig. 21

### 3. Shifting Cam Levers (see Fig. 22—2)

These levers control the shifting cams and have two positions, namely Upward Position and Downward Position.

#### Upward Position—see Fig. 23

With the lever in this position, needles in Position (E) will not knit but needles in Positions (B), (C) and (D) will knit. If the ribber carriage is moved across the needles when these are in Position (B), (C) or (D) without being coupled to the machine carriage, all the loops on the ribber needles will be dropped.

#### Downward Position—see Fig. 24

With the lever in this setting, needles in Positions (B), (C), (D) and (E) will not knit. When moving the ribber carriage coupled with machine carriage across working needles in Position (B), (C) or (D), ribber needles will hold the stitches of the previous row, but will not make new stitches.

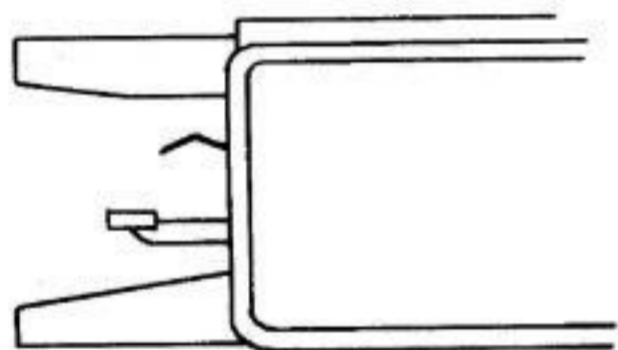


Fig. 23

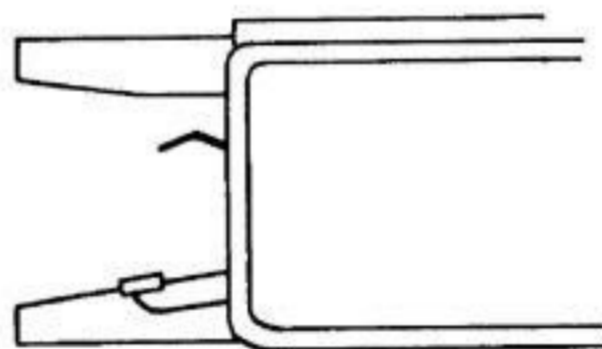


Fig. 24

The levers should therefore be set to this position when

a) You require to move the ribber carriage coupled with machine carriage across working needles without affecting the knitting on the ribber needles.

b) You require to introduce 'Tucking' stitches on the ribber needles.

To do this, detach the ribber carriage from the machine carriage and move the ribber carriage across the working needles — the ribber needles will have held their stitches and be in Position (C).

Now move the machine carriage across and re-connect it to the ribber carriage. It will be seen that there are now two loops on each of the ribber needles—these two loops form the tucking stitches.

#### 4. Upper Slide Runner Release Knob (see Fig. 22—3)

This knob is located on the right hand of the upper slide runner and is used to lift the ribber carriage clear of upper slide rail during knitting in the event of the carriage jamming etc.

To do this, pull the knob upward and to right as shown in Fig. 25, and then the ribber carriage will be easily lifted clear of upper slide rail.

**Note :** When recommencing to knit, it should be remembered that the upper slide runner must be replaced to fit firmly along the upper slide rail.

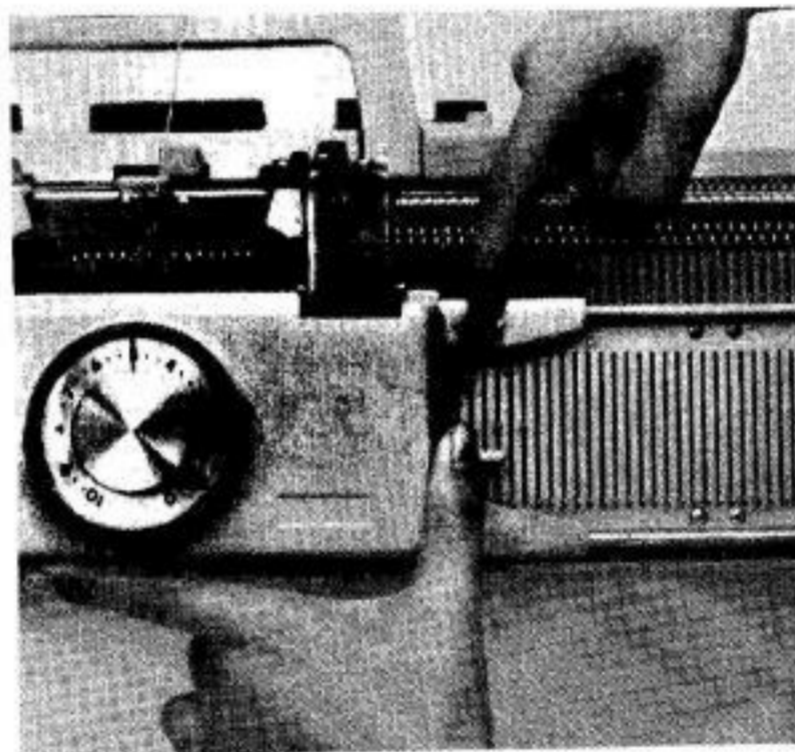


Fig. 25

## HOW TO CAST-ON FOR K1 P1 RIB (see Fig. 26)

(The settings given are for a 4 ply medium thickness yarn)

Using the 1 × 1 selector plate, arrange the needles as follows:

- a) On the machine, bring forward into Position (C) the number of alternate needles required for the width of the fabric. (Fig. 27)
- b) On the ribber, bring upward into Position (C) all the alternate needles that come between the needles brought forward on the machine. (Figs. 28 & 29)

**Note:** Both end needles should be on the machine.

### Method 1

1. Couple the two carriages together by means of the spring loaded connecting arm. This arm clips over the metal bracket protruding from the feeder on the main machine. Commence with both carriages on the right. (Fig. 30) Set the controls as follows—see Fig. 31.

#### a) Machine Carriage

M.A.S. Knobs ..... at 'M'  
T-C Lever ..... at 'C'  
Return Cam Levers ..... at '2'  
Tension Dial ..... at '3'

#### b) Ribber Carriage

Shifting Cam Levers  
..... Upward Position  
Tension Dial ..... at '5'



Fig. 26

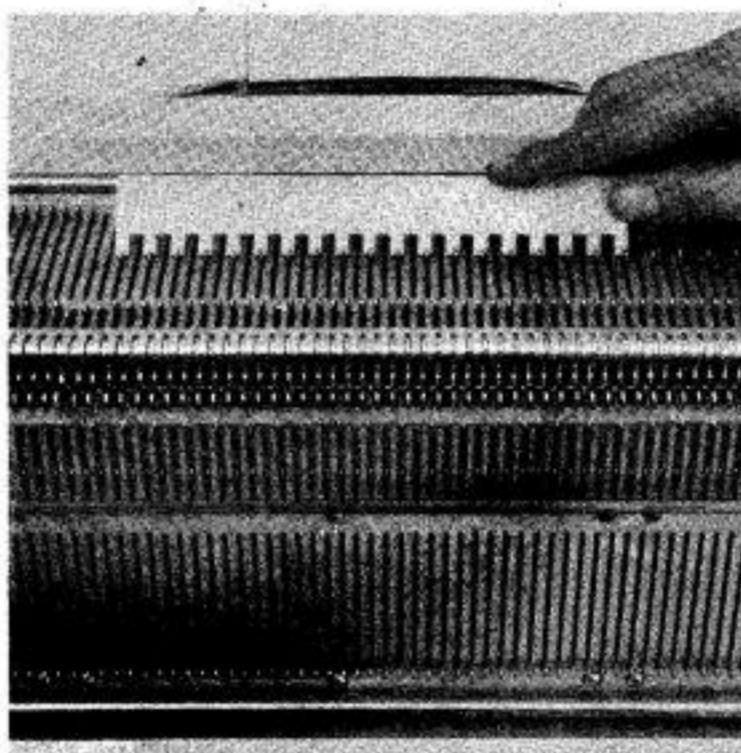


Fig. 27

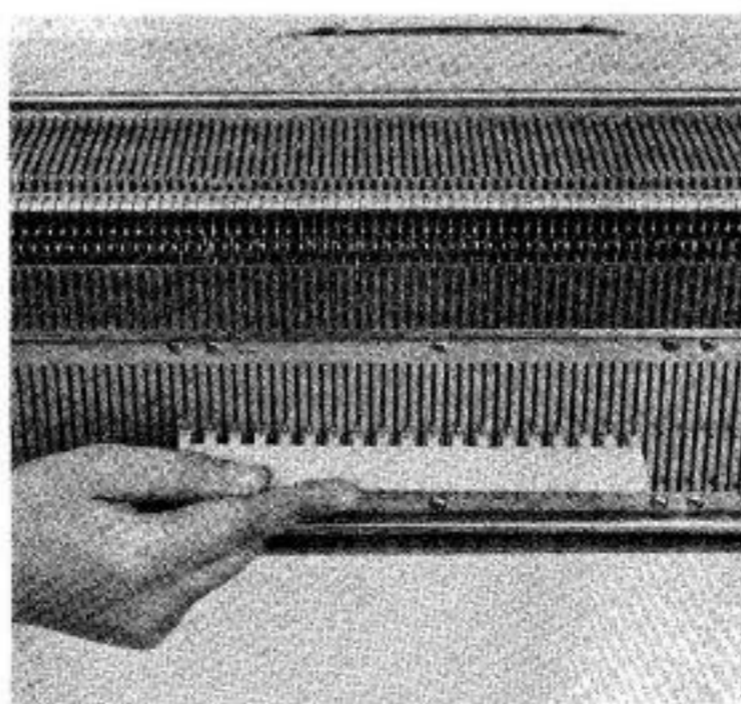


Fig. 28



2. Without threading the yarn through machine feeder, move both carriages across to the left. (Fig. 31)
3. Carriages now on left. Detach ribber carriage from machine carriage and move machine carriage only from left to right—see Fig. 32.

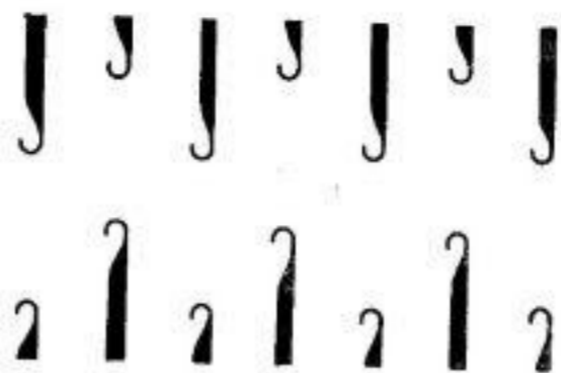


Fig. 29

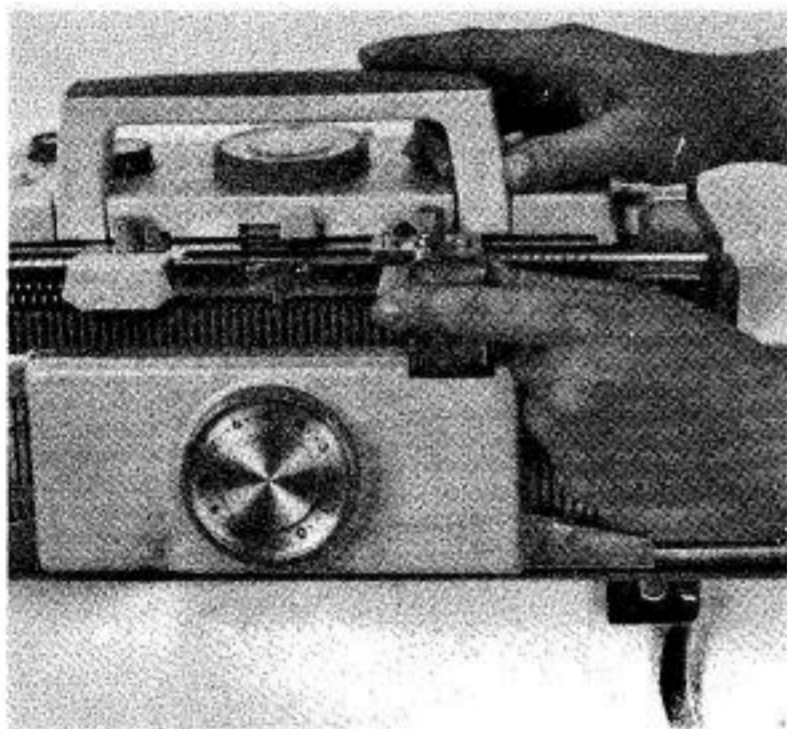


Fig. 30

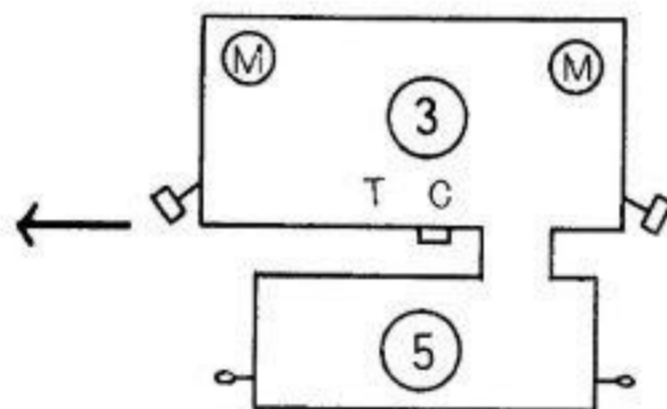


Fig. 31

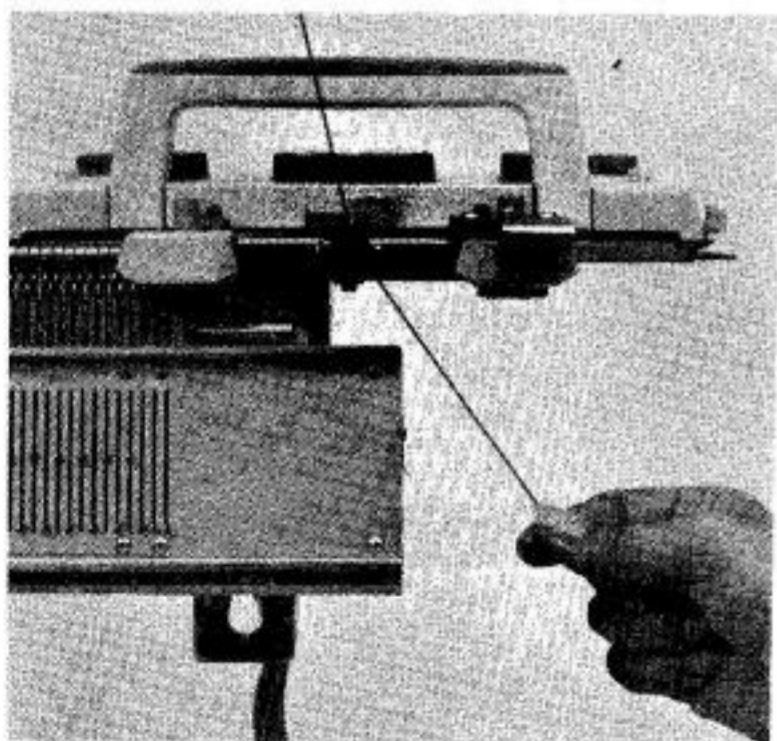


Fig. 33

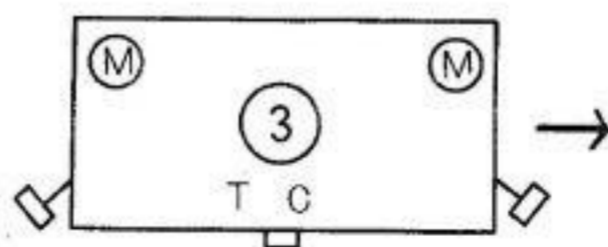


Fig. 32

4. After threading the yarn through the overhead feeder unit, thread it through the machine feeder as shown in Fig. 33 and fasten the loose end around the peg on the right hand end of the ribber needle bed. (Fig. 34)

Making sure that all ribber needle latches are open, move machine carriage across to the left—see Fig. 35—and it will now be seen that the yarn has formed a zig zag mesh between the machine and ribber needles. (Figs. 36 & 37)

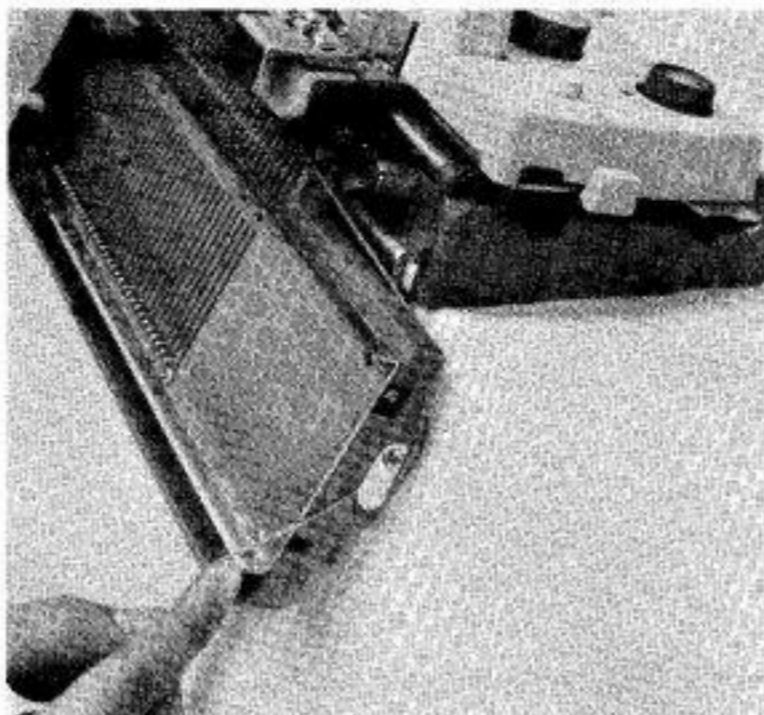


Fig. 34

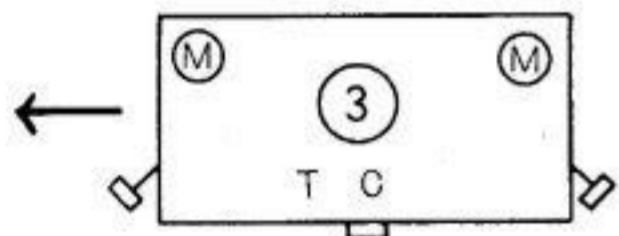


Fig. 35

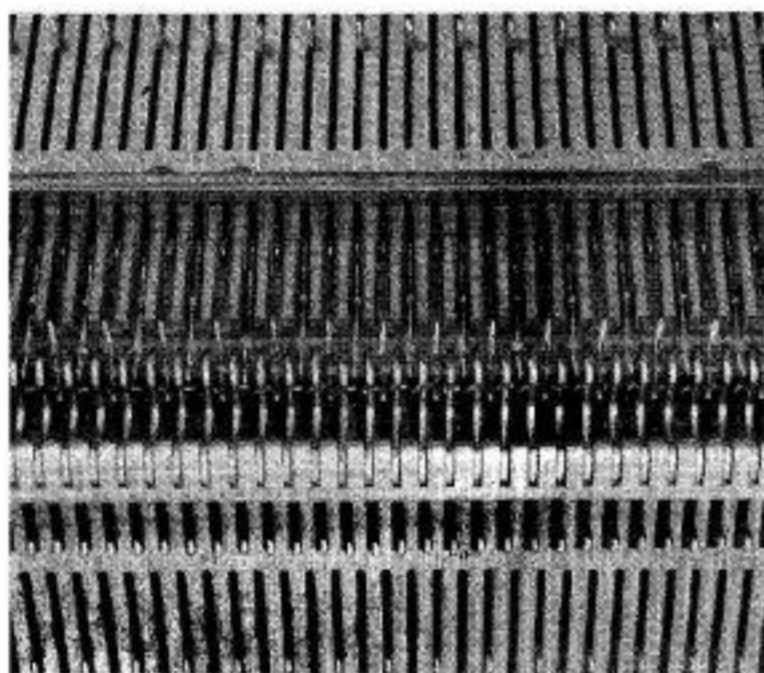


Fig. 36

5. Using the straight edge of the selector plate, push back into Position (B) all working needles on the machine and, at the same time, push down into Position (B) all working needles on the ribber—see Fig. 38—using for this purpose the handle of a transfer tool.

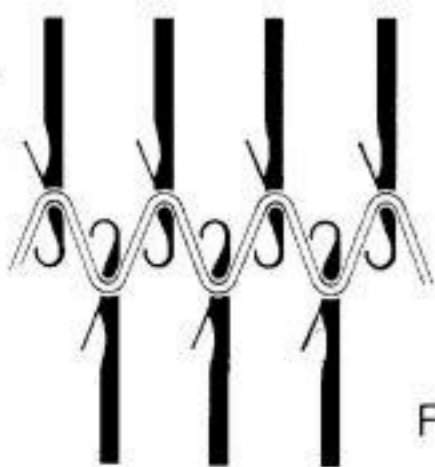


Fig. 37

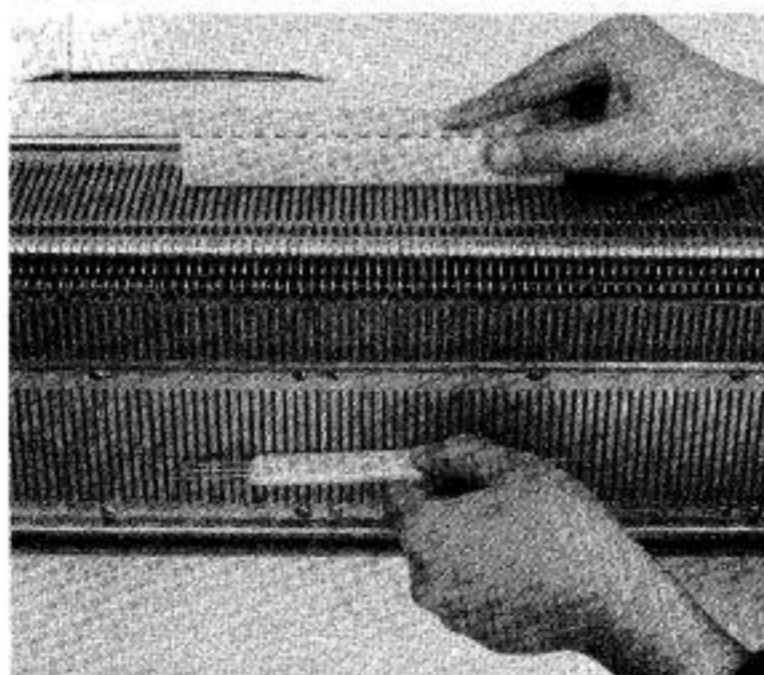


Fig. 38

6. Withdraw the wire from a cast-on comb and push the comb upwards between the two needle beds, as shown in Fig. 39, until the teeth pass through the zig zag mesh formed by the yarn, ensuring that the comb is placed centrally on the mesh.

Replace the wire through the teeth of the cast-on comb and, using a divider thread belonging to the main machine accessories, hook it onto the hooked end of the wire and again withdraw the wire so that a strand of thread will replace with the wire. (Fig. 40)

Lower the comb so that the thread now rests on the mesh. (Fig. 41)

7. Hang two or more weights—according to the width of the fabric—on to the comb. Make sure when attaching the weights that the comb remains suspended in a horizontal position.

(Fig. 42)

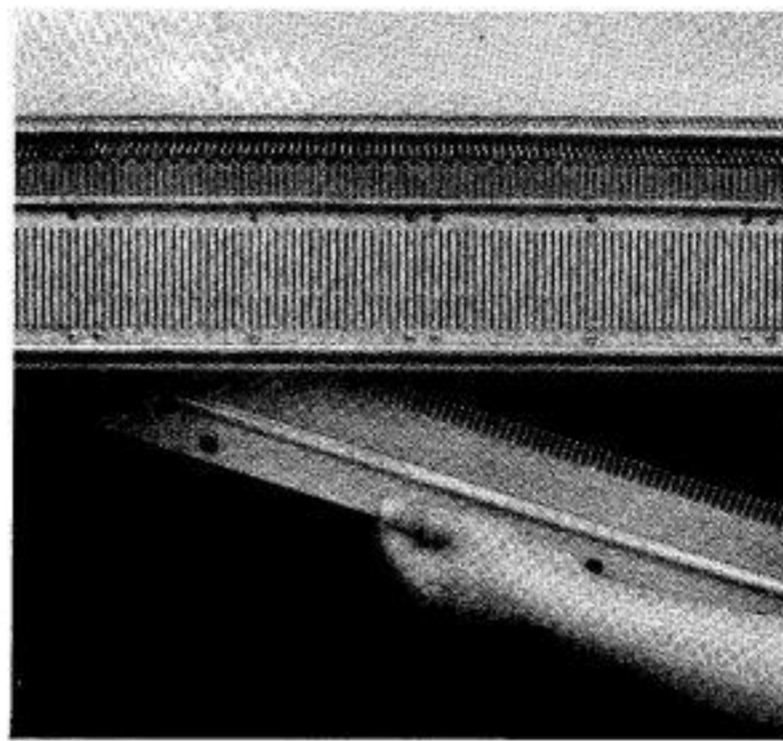


Fig. 39

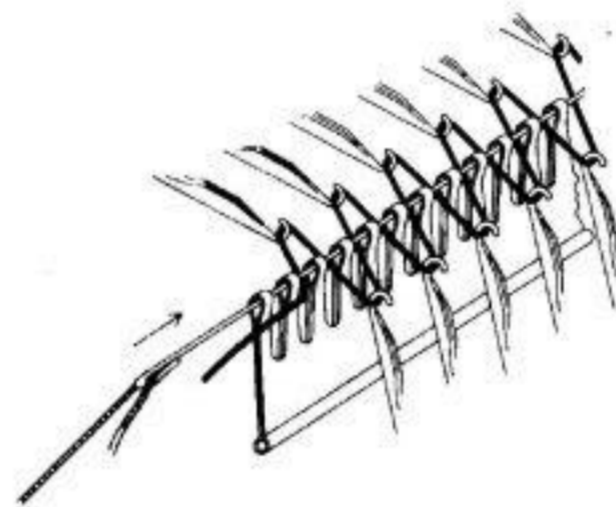


Fig. 40

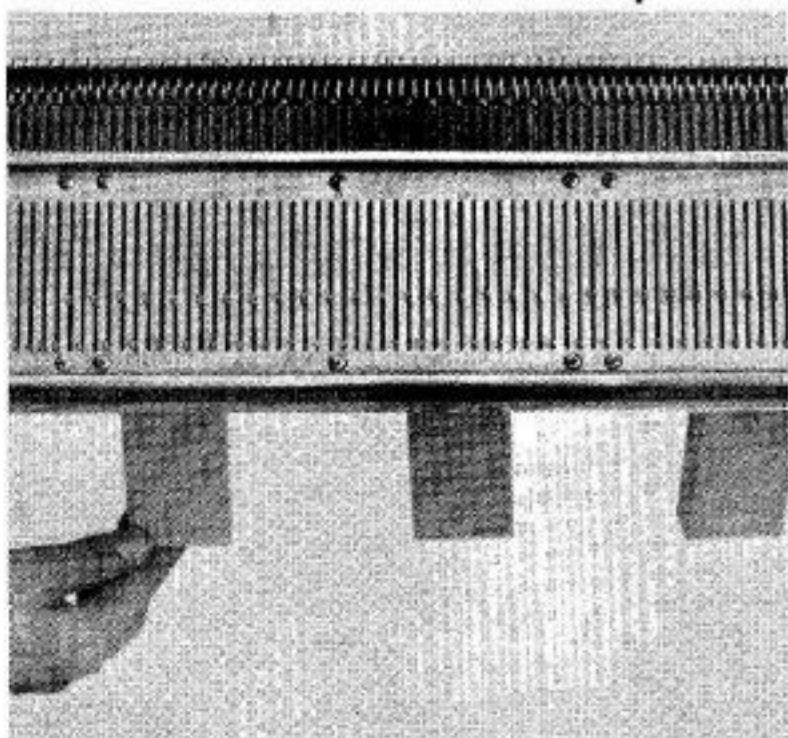


Fig. 42

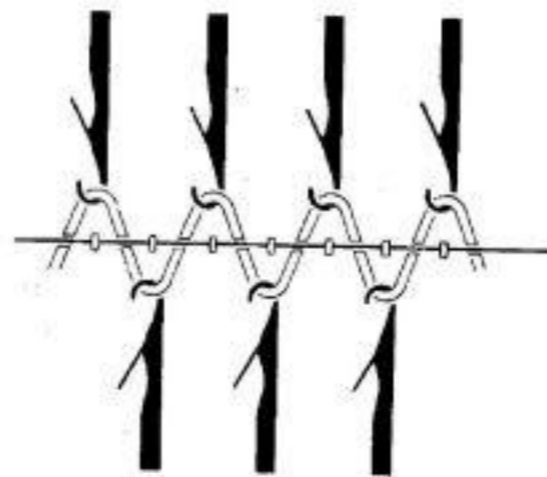


Fig. 41

8. Move the machine carriage across to the right from left—see Figs. 43 & 44—and back to left from right.

(Fig. 44)

9. Now with the both carriages on the left, couple the carriages together as shown in Fig. 45, and set the right hand MAS knob to 'S' on the machine carriage. Move both carriages to right. (Fig. 46)

This completes the casting on.

10. Now turn the right hand MAS knob back to 'M' and turn the tension dial to No. 5 on the machine carriage. Release the loose end of yarn from the peg at the end of the needle bed. Turn row counter to zero and continue to knit. (Figs. 47 & 48)

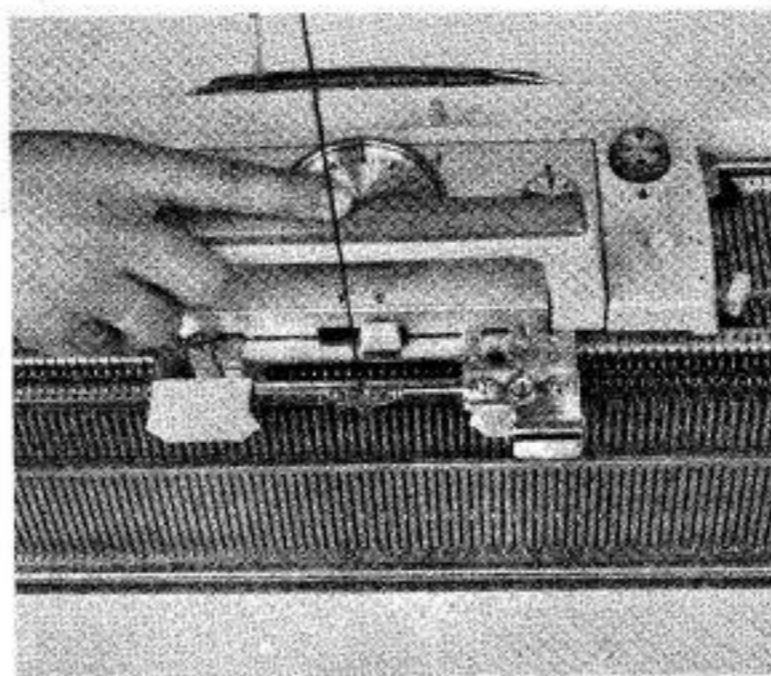


Fig. 43

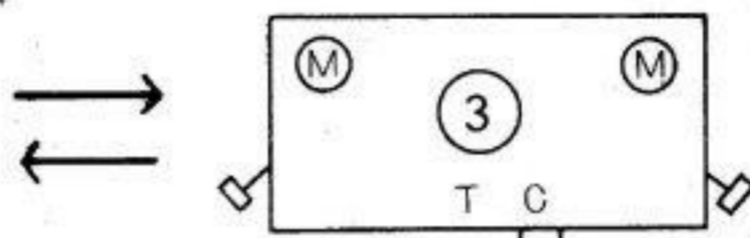


Fig. 44

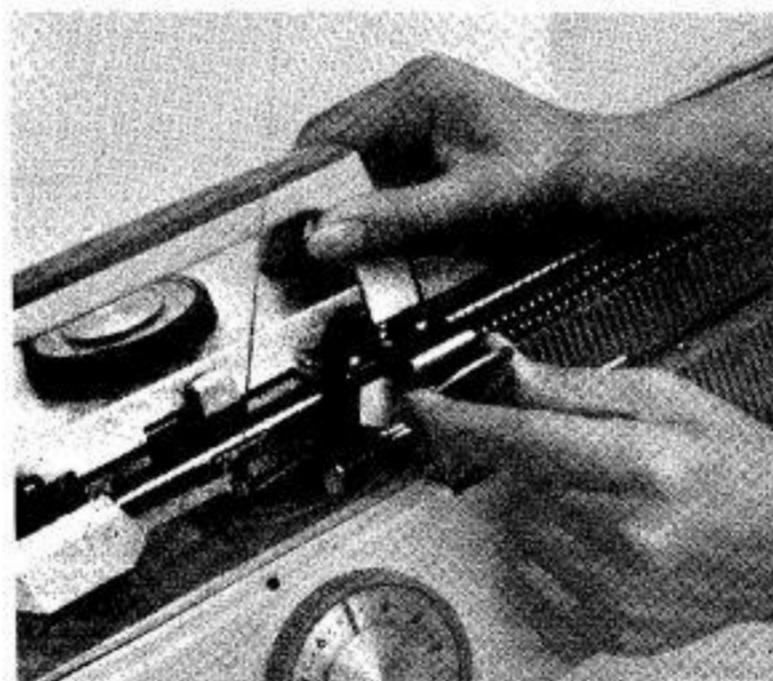


Fig. 45

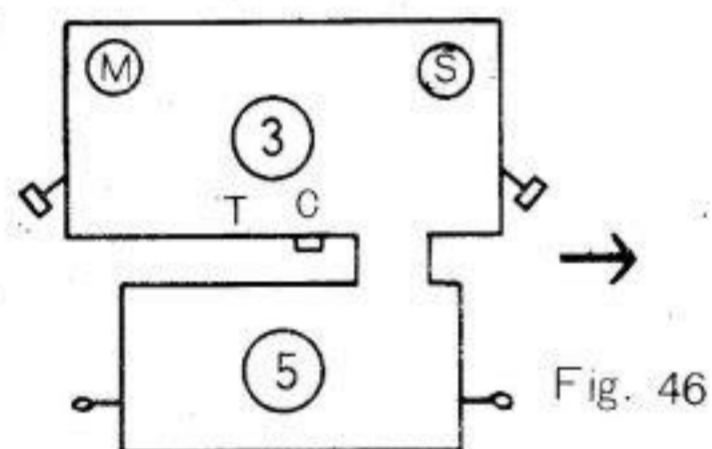


Fig. 46

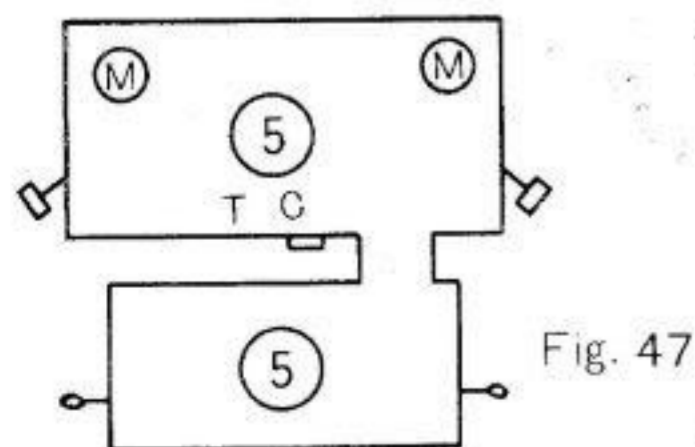


Fig. 47

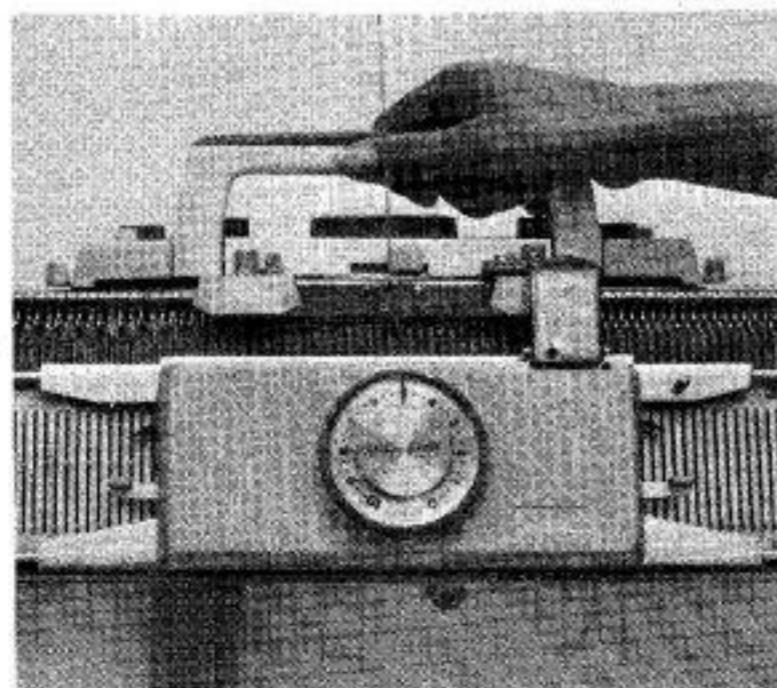


Fig. 48

## Method 2

1. After threading the yarn through the overhead feeder unit, thread it through the machine feeder and fasten the loose end around the peg on the right hand end of the ribber needle bed—see Figs. 33 & 34. Commence with both carriages on the **right**.
2. Set the controls as follows—see Fig. 49.
  - a) **Machine Carriage**
    - M.A.S. Knobs ..... at 'M'
    - T-C Lever ..... at 'C'
    - Return Cam Levers ..... at '2'
    - Tension Dial ..... at '3'
  - b) **Ribber Carriage**
    - Shifting Cam Levers  
..... Upward Position
    - Tension Dial ..... at '3'
3. Couple the two carriages together as shown in Fig. 50. Making sure that all ribber needle latches are open, move both carriages, across to the left—see Fig. 49—and it will be seen that the yarn has formed a zig zag mesh between the machine and ribber needles. (Figs. 36 & 37)
4. Using the straight edge of the selector plate, push back into Position (B) all working needles on the machine and, at the same time, push down into Position (B) all working needles on the ribber, using the handle of a transfer tool. (Fig. 38)

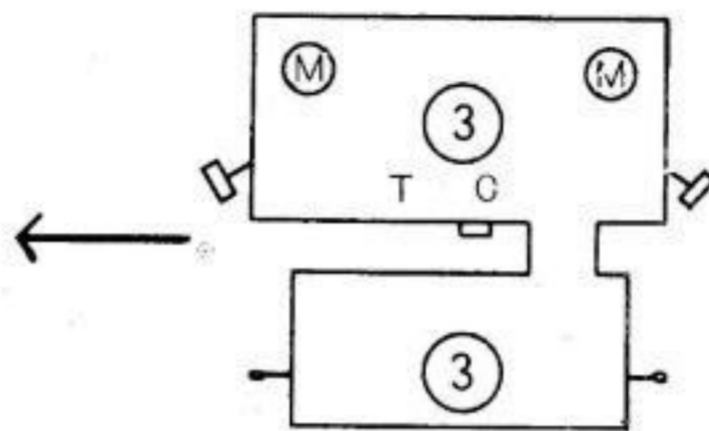


Fig. 49

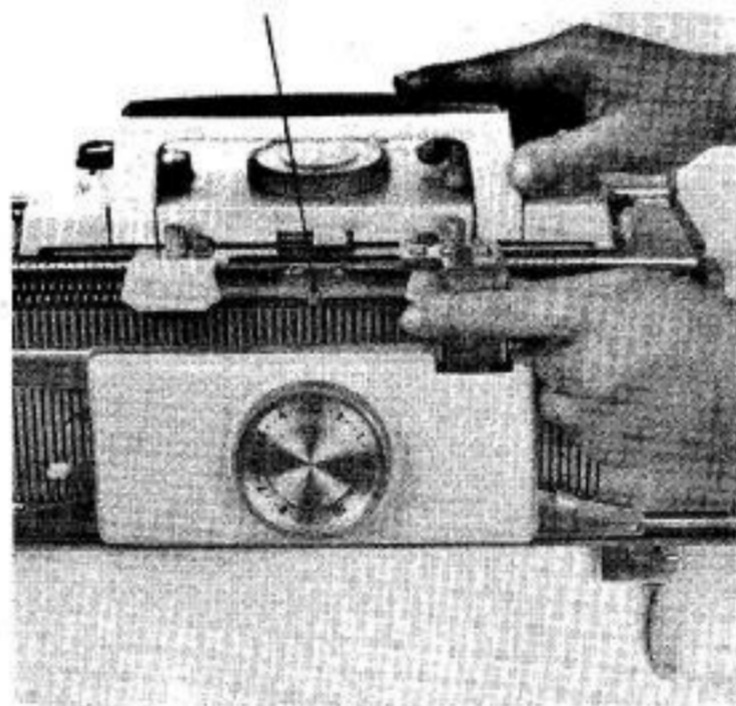


Fig. 50

5. Withdraw the wire from a cast-on comb and push the comb upwards between the two needle beds until the teeth pass through the zig zag mesh formed by the yarn. Replace the wire through the teeth of the cast-on comb and, using a divider thread, hook it onto the hooked end of the wire and again withdraw the wire so that a strand of thread will now replace with the wire—see Fig. 40.
6. Hang two or more weights—according to the width of the fabric—onto the comb. Make sure when attaching the weights that the comb remains suspended in a horizontal position. (see Fig. 42)
7. With the both carriages on the left, detach the ribber carriage from the machine carriage. Move the machine carriage only across working machine needles from left to right, and return it from right to left.  
(Figs. 51 & 52)
8. With the both carriages now on the left, couple two carriages together. Set the right hand MAS knob to 'S' on the machine carriage, and on the ribber carriage, turn tension dial to No. 5. (Fig. 53) Move the carriages across needles from left to the right. (Figs. 53 & 54)  
This completes the casting-on.

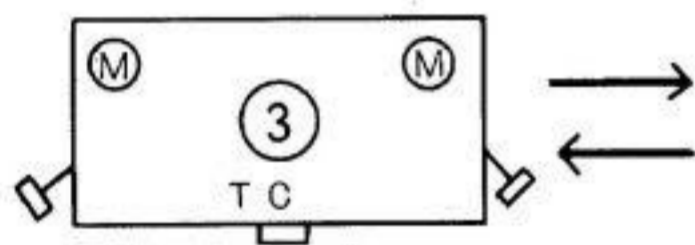


Fig. 51

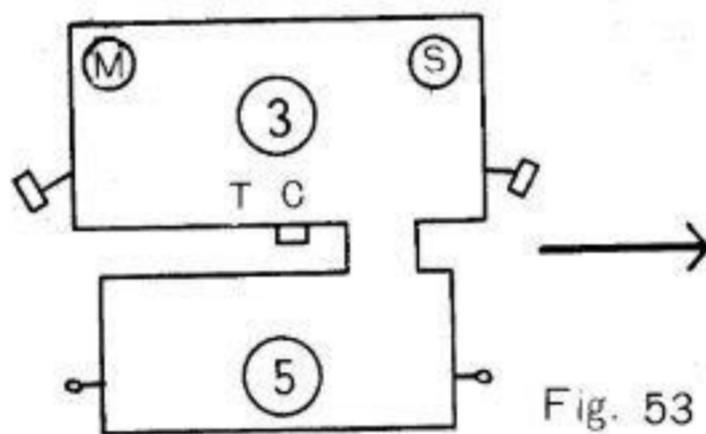


Fig. 53

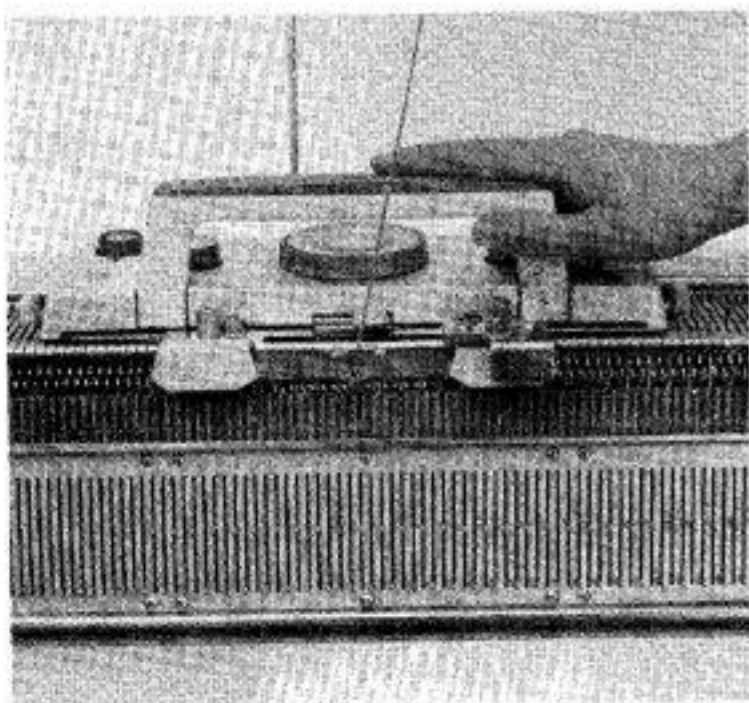


Fig. 52

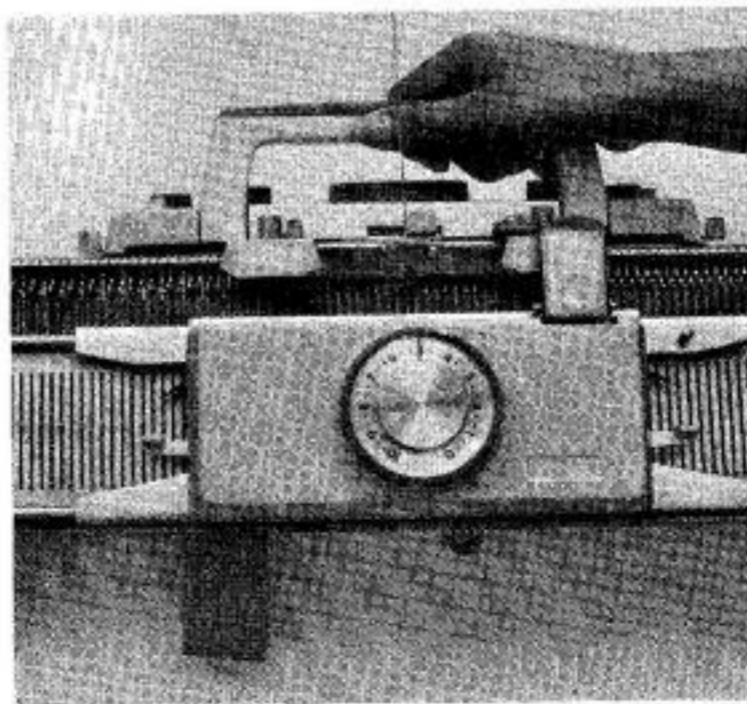


Fig. 54

9. Now turn the right hand MAS knob back to 'M' and also turn tension dial to No. 5 on the machine carriage as shown in Fig. 55.

Release the loose end of yarn from the peg at the end of the needle bed. Turn the row counter to zero and continue to knit.

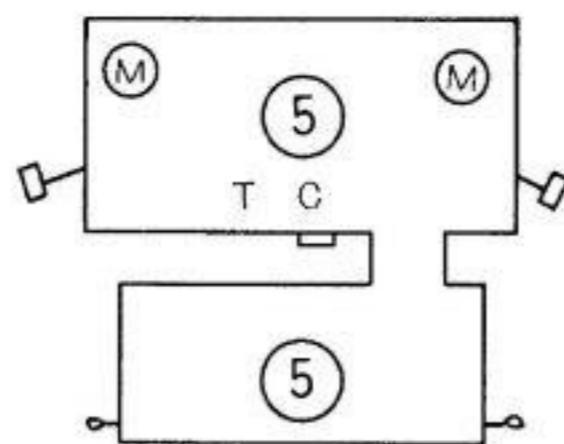


Fig. 55

## HOW TO KNIT OTHER TYPES OF RIB STITCHES

### 1. Abbreviations on the Chart

- | ..... **Needle to knit** (working needle)
- ..... **Needle to rest** (non-working needle)  
Needle should be pushed back or down into Position (A)
- ∩ ..... **Needle to tuck**  
For ribber needle represented by this symbol, move the ribber carriage only with the leading shifting cam lever in downward position.
- ∨ ..... **Needle to pass**  
For ribber needle represented by this symbol, move the ribber carriage coupled with machine carriage with the leading shifting cam lever in downward position.

## 2. How to Read the Pattern Chart

Chart A shows an arrangement of the needles before commencing to knit. Upper chart from centre horizontal line is for machine needles, and the lower is for the ribber needles. After completing the casting-on as referred in either Method 1 or Method 2, if necessary transfer stitches or stitches using a transfer tool from a needle or needles on ribber/machine onto left or right adjacent needle or needles on machine/ribber.

Chart B is for a complete pattern. Upper chart from centre horizontal line is for machine needles, and the lower is for ribber needles.

Number in the vertical column along the left side of the chart represent number of rows.

## 3. How to Knit

(In all cases cast-on as for K1 P1 rib)

**Pattern No. 1 (Fisherman Type Rib)** ..... Fig. 56

Fig. 57 shows the needle arrangements.

Chart A is for the needles before commencement of knitting.

Chart B is for a complete pattern.

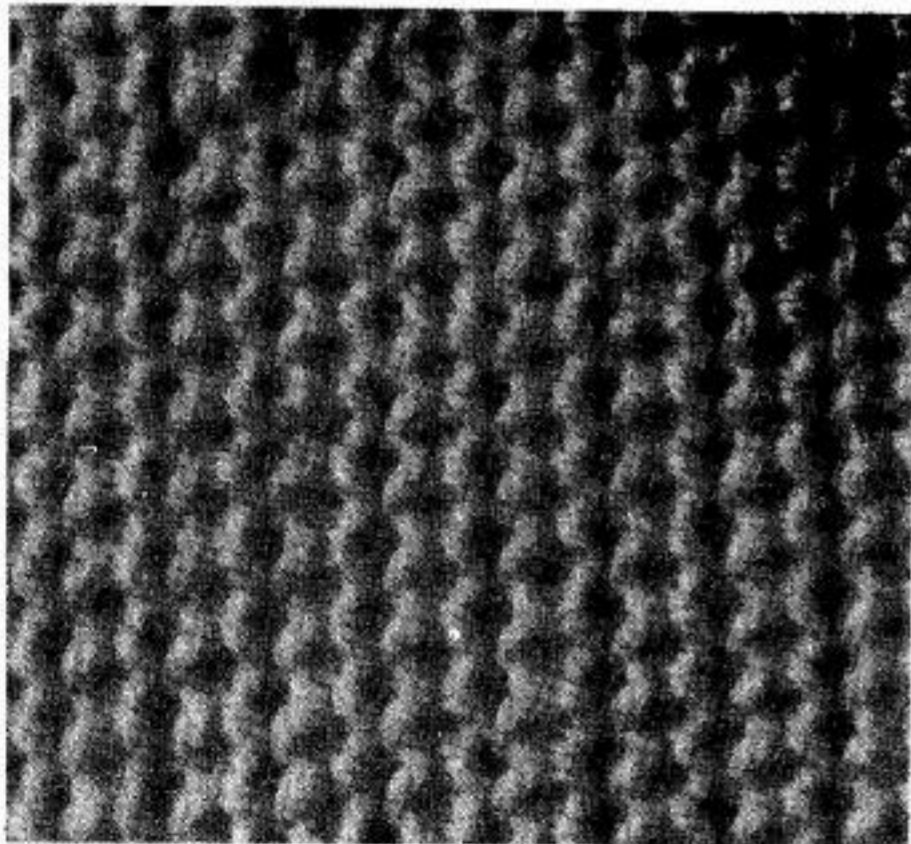


Fig. 56

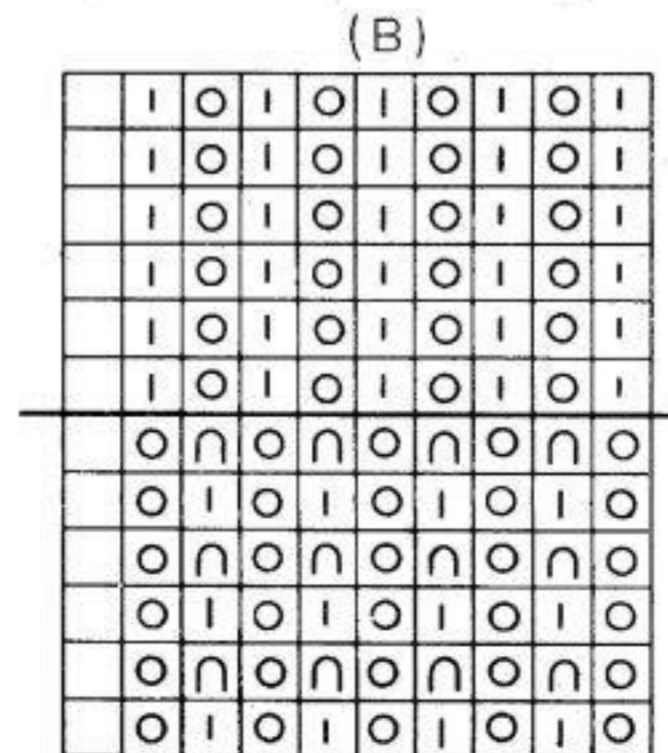
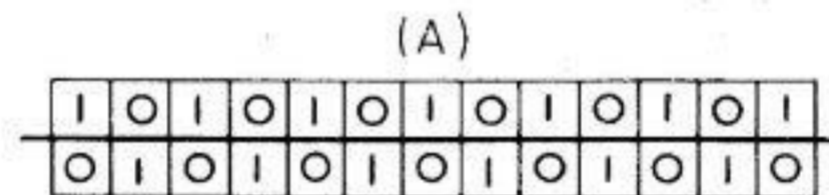


Fig. 57



Set carriages as follows:

On machine carriage	.....	MAS Knobs	.....	at 'M'
(Fig.58—B)		T-C Lever	.....	at 'C'
		Tension Dial	.....	at '5'
		Return Cam Lever	.....	at '2'
On ribber carriage	.....	Shifting Cam Lever L/H	.....	Downward
(Fig. 58—A)		Shifting Cam Lever R/H	.....	Upward
		Tension Dial	.....	at '5'

\*1st row Carriages on right. First move ribber carriage from right to left.  
(Fig. 58—A)

Now move machine carriage from right to left. (Fig. 58—B)

2nd row Carriages now on left. Couple the two carriages together. knit  
this row moving the two carriages simultaneously to right.  
(Fig. 58—C)

Detach ribber carriage from machine carriage.\*

For pattern, repeat from \* to \*.

Pattern No. 2 (1×1 Tuck Rib) ..... Fig. 59

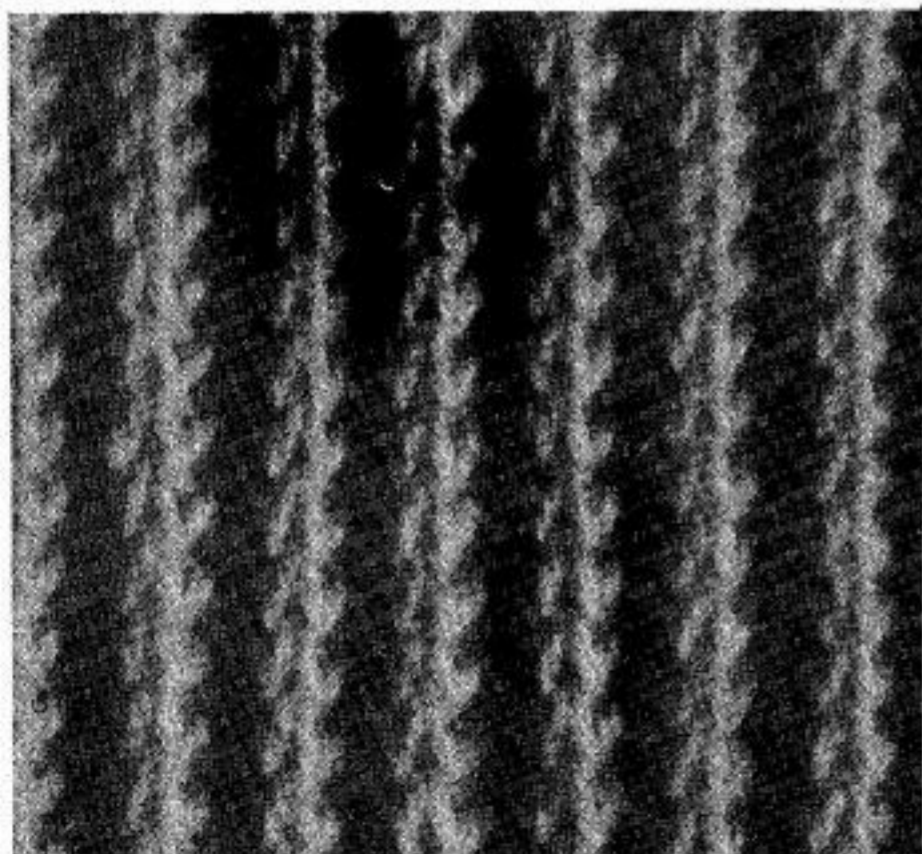


Fig. 59

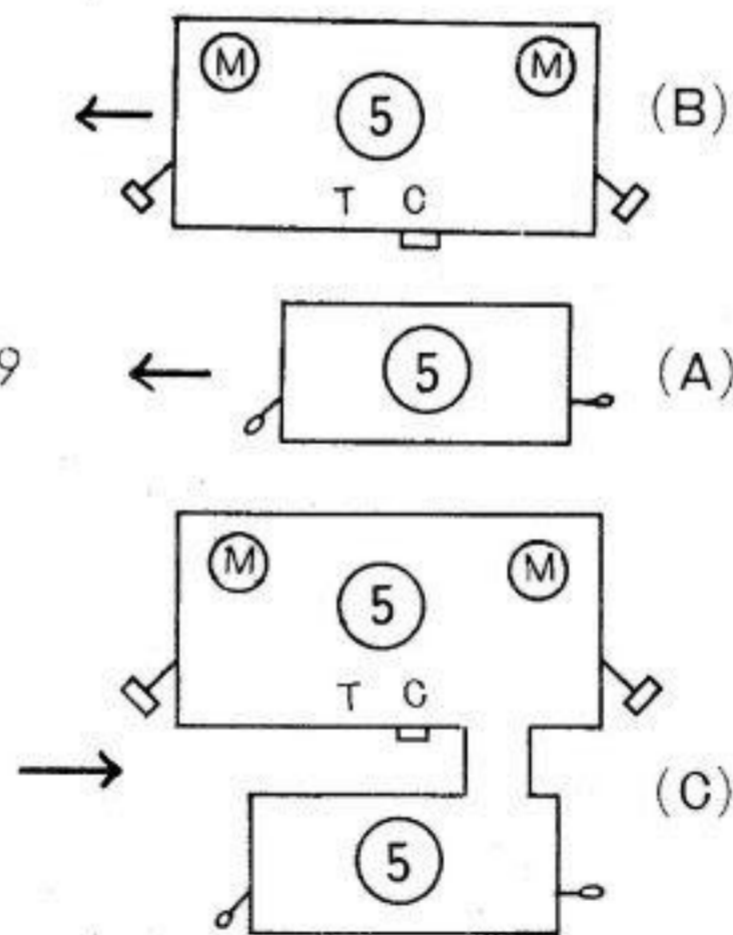


Fig. 58

Needle Arrangements—see Figs. 60—(A) and 60—(B).

Carriage setting as follows:

On machine carriage ..... MAS Knob L/H ..... at 'M'  
 ( Fig. 61—(B) ) MAS Knob R/H ..... at 'S'  
 T-C Lever ..... at 'T'  
 Return Cam Levers ..... at '2'  
 Tension Dial ..... at '5'

On ribber carriage ..... Shifting Cam Lever L/H ... Downward  
 (Fig. 61—(A) ) Shifting Cam Lever R/H ... Upward  
 Tension Dial ..... at '5'

\*1st row Carriages on right. Move ribber carriage from right to left—see Fig. 61—(A)— and then move machine carriage also to left. (Fig. 61—(B))

2nd row With the carriages on the left, couple them together, and move the carriages from left to right. (Fig. 61—(C))

Detach ribber carriage from machine carriage\*.

Repeat from \* to \* for a complete pattern.

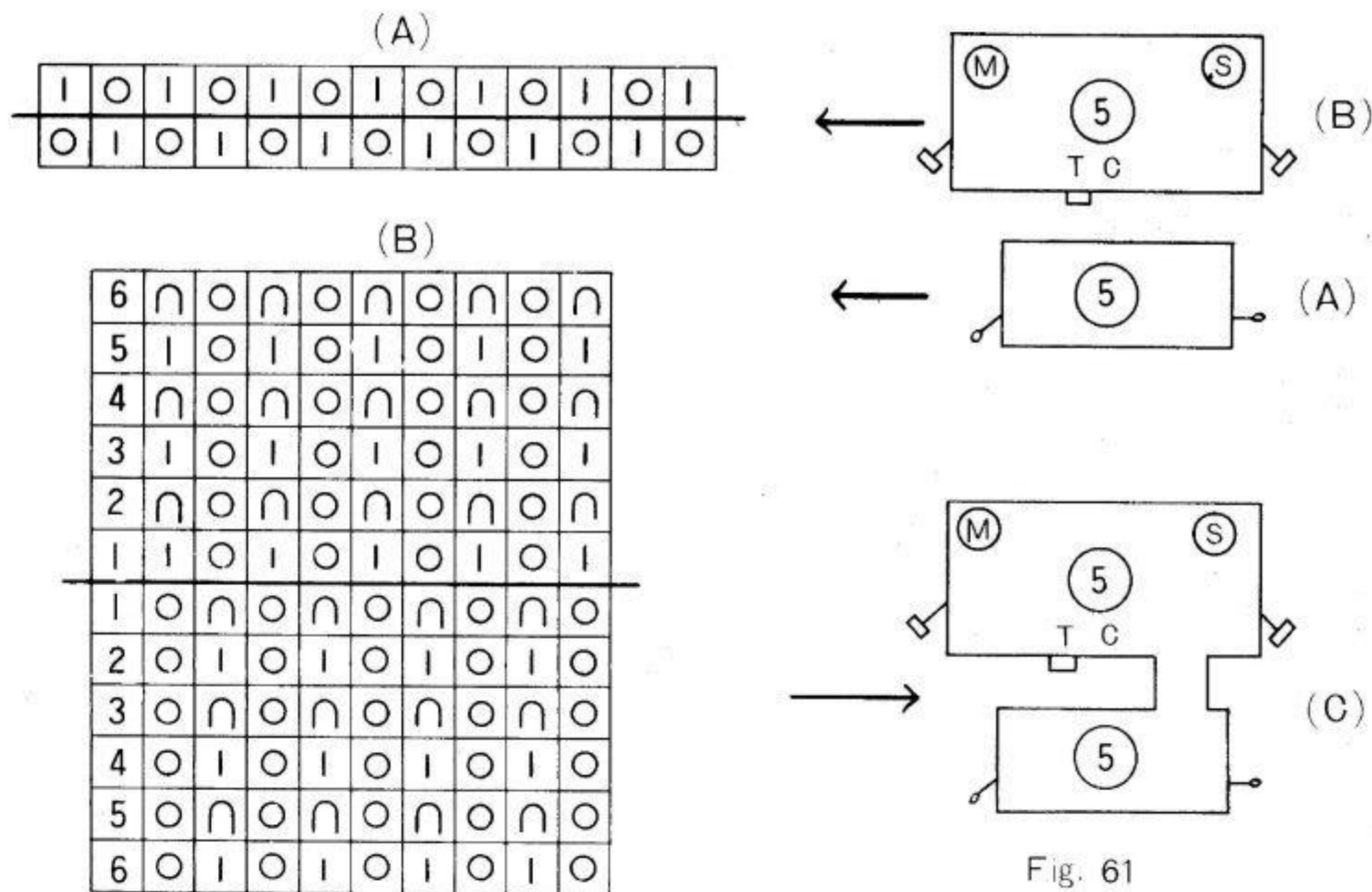


Fig. 60

Fig. 61

After casting on, transfer stitches as shown in Fig. 63—(A).

Carriage settings as follows (Fig. 64):

- On machine carriage ..... MAS Knobs ..... at 'M'
- T-C Lever ..... at 'C'
- Return Cam Levers ..... at '2'
- Tension Dial ..... at '4'
- On ribber carriage ..... Shifting Cam Levers ..... Upward
- Tension Dial ..... at '4'

Knit simply moving the carriages coupled together back and forth for a complete pattern.

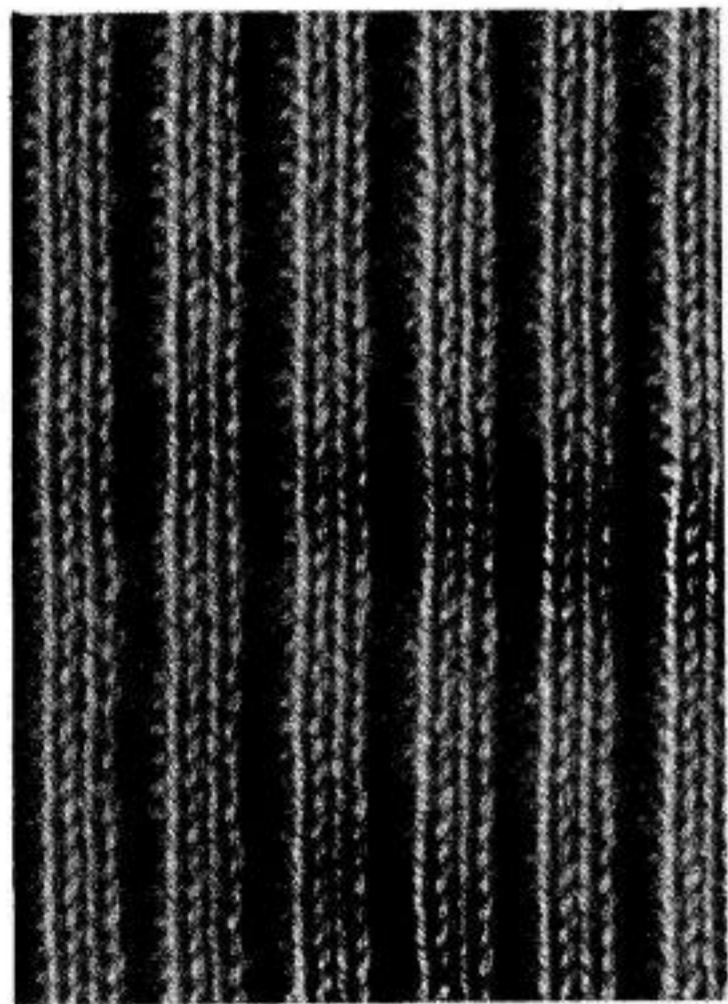
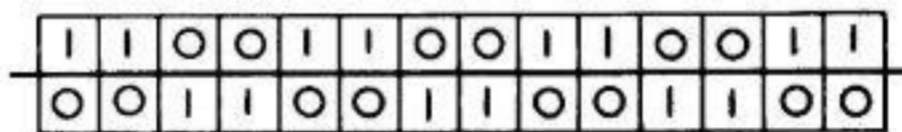


Fig. 62

(A)



(B)

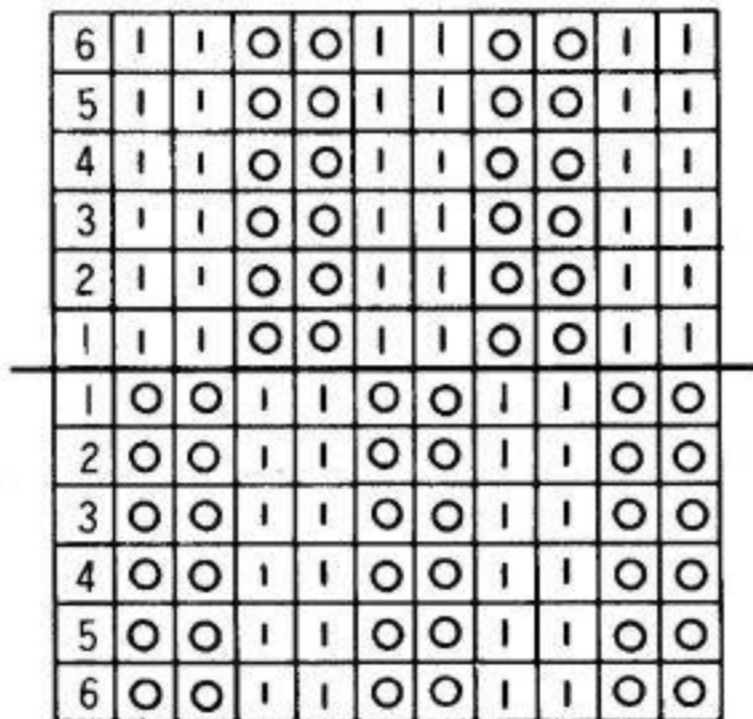


Fig. 63

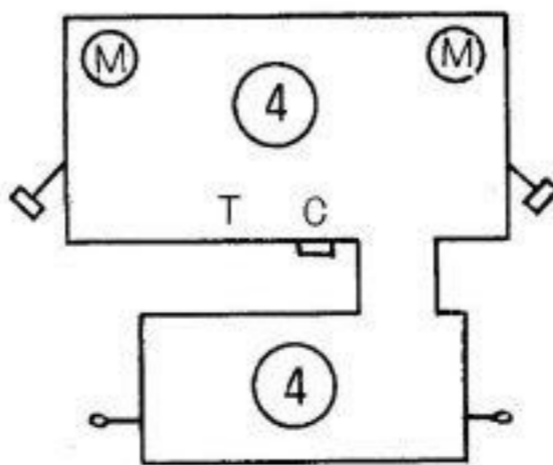


Fig. 64

**Pattern No. 4 (K5 P2 Rib)** ..... Fig. 65

After casting-on, transfer stitches as shown in Fig. 66—A.

Carriage settings as follows (Fig. 67):

- On machine carriage ..... MAS Knobs ..... at 'M'
- T-C Lever ..... at 'C'
- Return Cam Levers ... at '2'
- Tension Dial ..... at '4'
- On ribber carriage ..... Shifting Cam Levers ..... Upward
- Tension Dial ..... at '4'

Knit simply moving the carriages coupled together back and forth for a complete pattern.

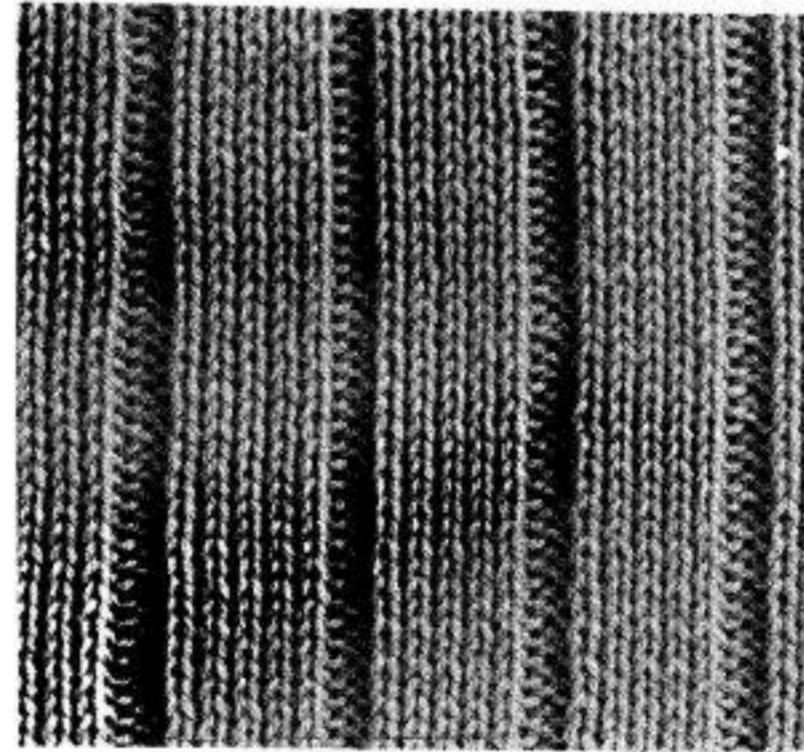


Fig. 65

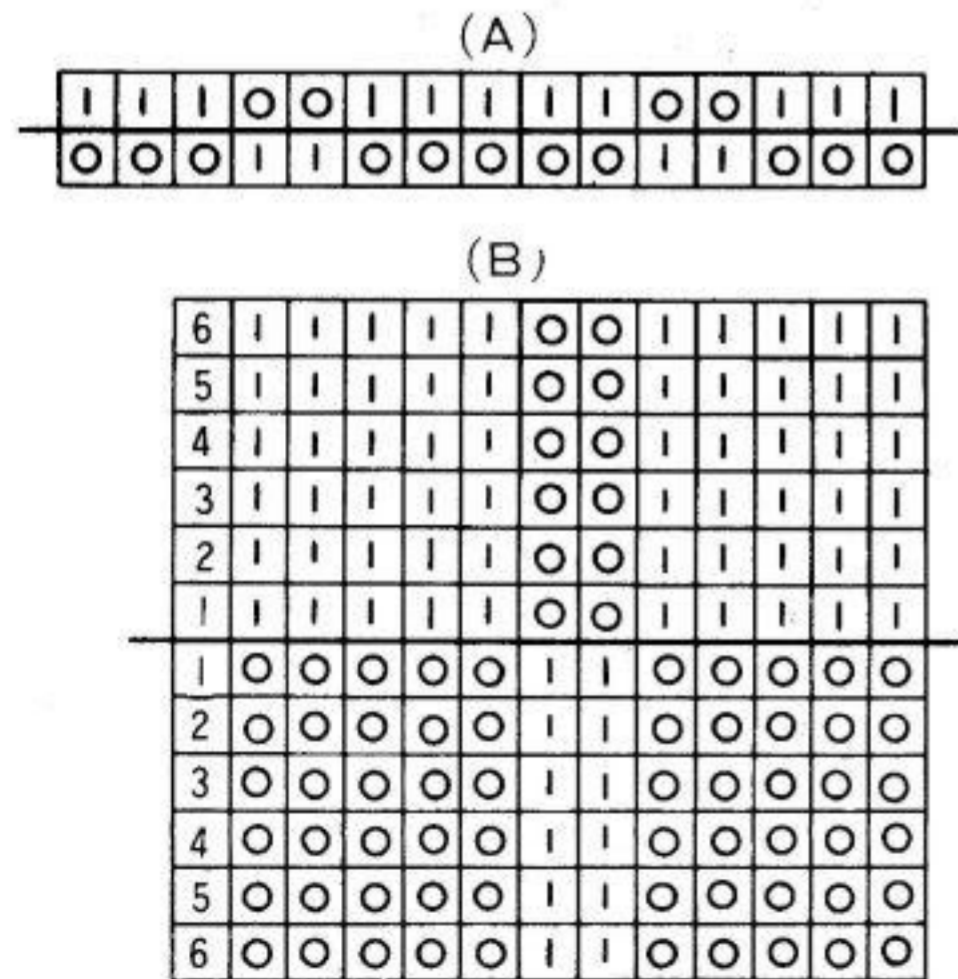


Fig. 66

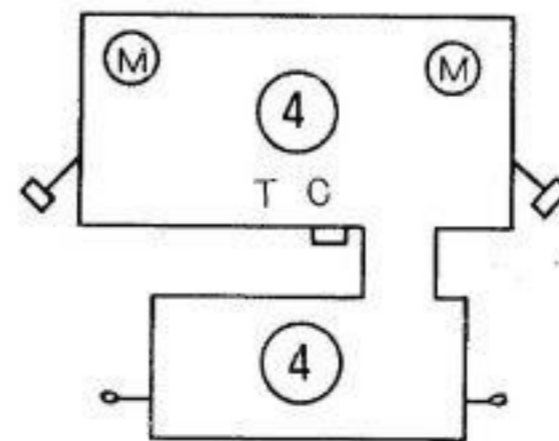


Fig. 67

**Pattern No. 5 (K3 P1 Rib with Tucking on Ribber Side) .....Fig. 68**

After casting-on, transfer stitches as shown in Fig.69—(A).

Carriage settings as follows (see Fig. 70—(A) and (B)):

On machine carriage ..... MAS Knobs ..... at 'M'  
(Fig. 70—(B))

T-C Lever ..... at 'C'

Return Cam Levers ... at '2'

Tension Dial ..... at '5'

On ribber carriage ..... Shifting Cam Lever L/H ..... Downward  
(Fig. 70—(A))

Shifting Cam Lever R/H ..... Upward

Tension Dial ..... at '5'

(A)

	o				o				o				o	
o		o	o	o		o	o	o		o	o	o		o

(B)

8				o				o	
7				o				o	
6				o				o	
5				o				o	
4				o				o	
3				o				o	
2				o				o	
1				o				o	
<hr/>									
1	o	o	o	n	o	o	o	n	o
2	o	o	o	n	o	o	o	n	o
3	o	o	o	n	o	o	o	n	o
4	o	o	o		o	o	o		o
5	o	o	o	n	o	o	o	n	o
6	o	o	o	n	o	o	o	n	o
7	o	o	o	n	o	o	o	n	o
8	o	o	o		o	o	o		o

Fig. 69

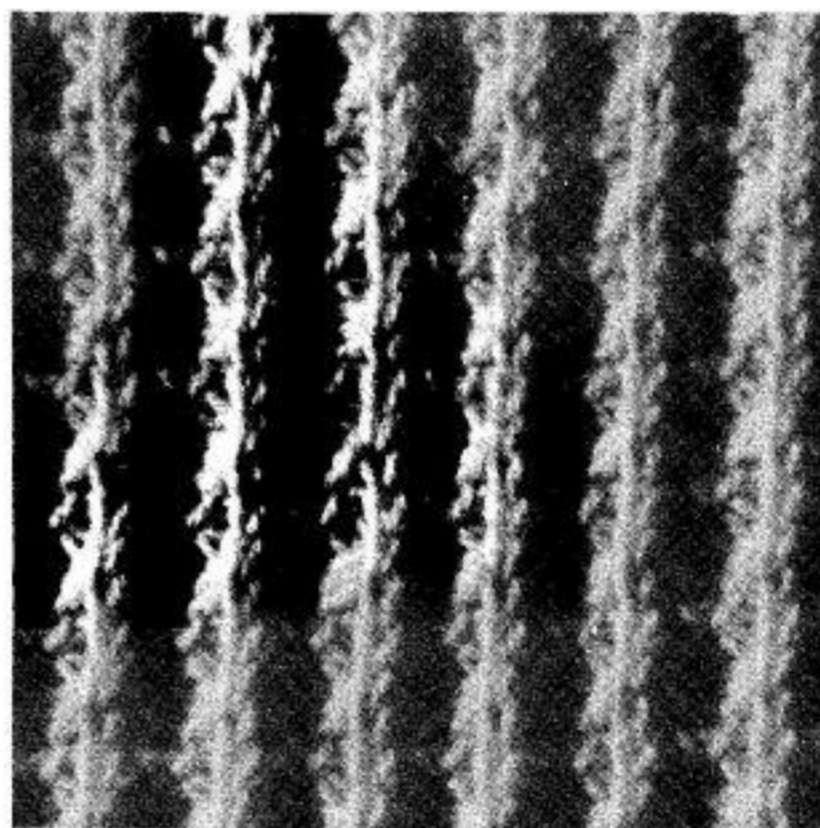


Fig. 68

**\*1st row** Carriage on right. First move carriage from right to left across working ribber needles.  
(Fig. 70—A).

Then move machine carriage also from right to left as shown in Fig. 70—B

**2nd row** Both carriages on left. Knit this row by moving the machine carriage only, from left to right—leaving the ribber carriage on the left side.  
(Fig. 70—C)

**3rd row** Machine carriage now on right with the ribber carriage on left. Move the machine carriage from right to left to knit this row.  
(Fig. 70—D)

**4th row** Both carriages now on the left. Couple these two carriages together, and move them simultaneously from left to right.  
(Fig. 70—E)

Detach ribber carriage from machine carriage.\*

For a complete pattern repeat from \* to \*.

**Pattern No. 6 (K3 P1 Rib with Tucking on Both Ribber and Machine) ... Fig. 71**

After casting-on, transfer stitches as shown in Fig. 72—A.

Carriage settings as follows (see Fig. 73—A and B):

- |                     |       |                                |       |        |
|---------------------|-------|--------------------------------|-------|--------|
| On machine carriage | ..... | MAS Knobs                      | ..... | at 'A' |
| (Fig. 73—A)         |       | T-C Lever                      | ..... | at 'T' |
|                     |       | Needle Selection Control Knobs | ...   | at '4' |
|                     |       | Return Cam Levers              | ..... | at '2' |
|                     |       | Tension Dial                   | ..... | at '5' |

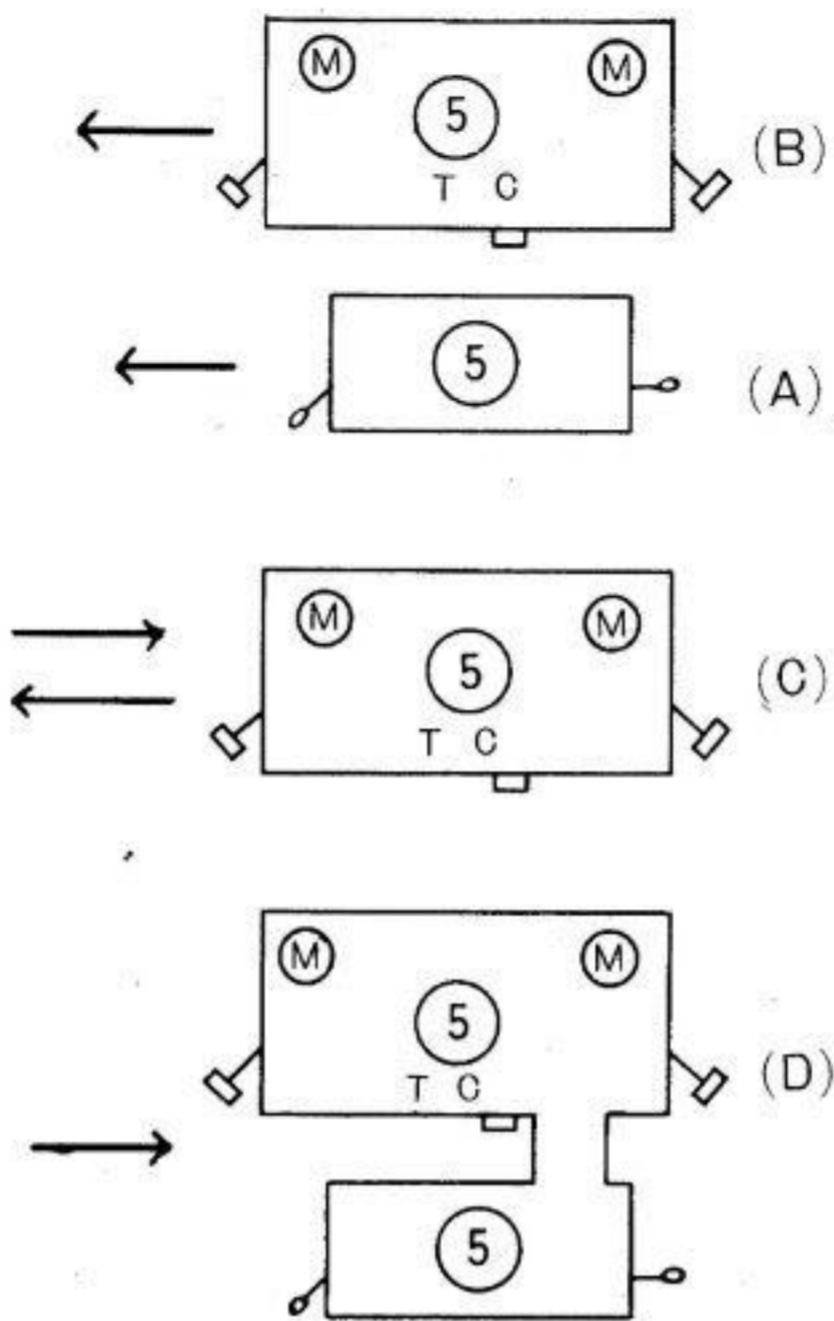


Fig. 70

On ribber carriage ..... Shifting Cam Lever L/H ..... Downward  
 (Fig. 73—(B)) Shifting Cam Lever R/H ..... Upward  
 Tension Dial ..... at '5'

\*1st row Both carriages on right. First move ribber carriage from right to left as shown in Fig. 73—(A), and then move machine carriage to left across needles. (Fig. 73—(B))

2nd row Carriages on left. Move machine carriage only from left to right, leaving the ribber carriage on left. (Fig. 73—(C))

3rd row Machine carriage now on right with the ribber carriage on left. Return the machine carriage from right to left. (Fig. 73—(C))

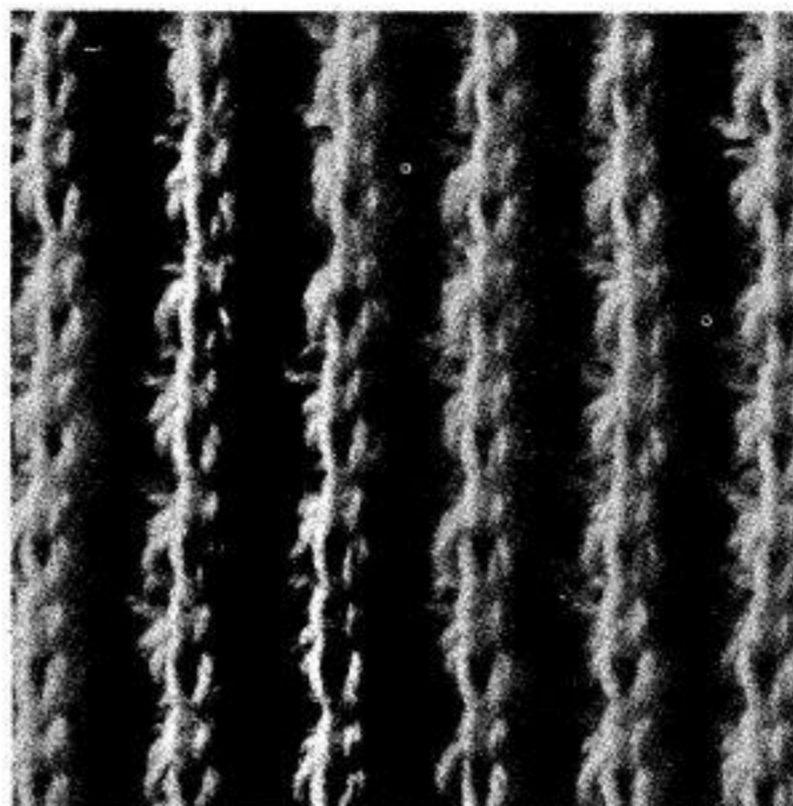


Fig. 71

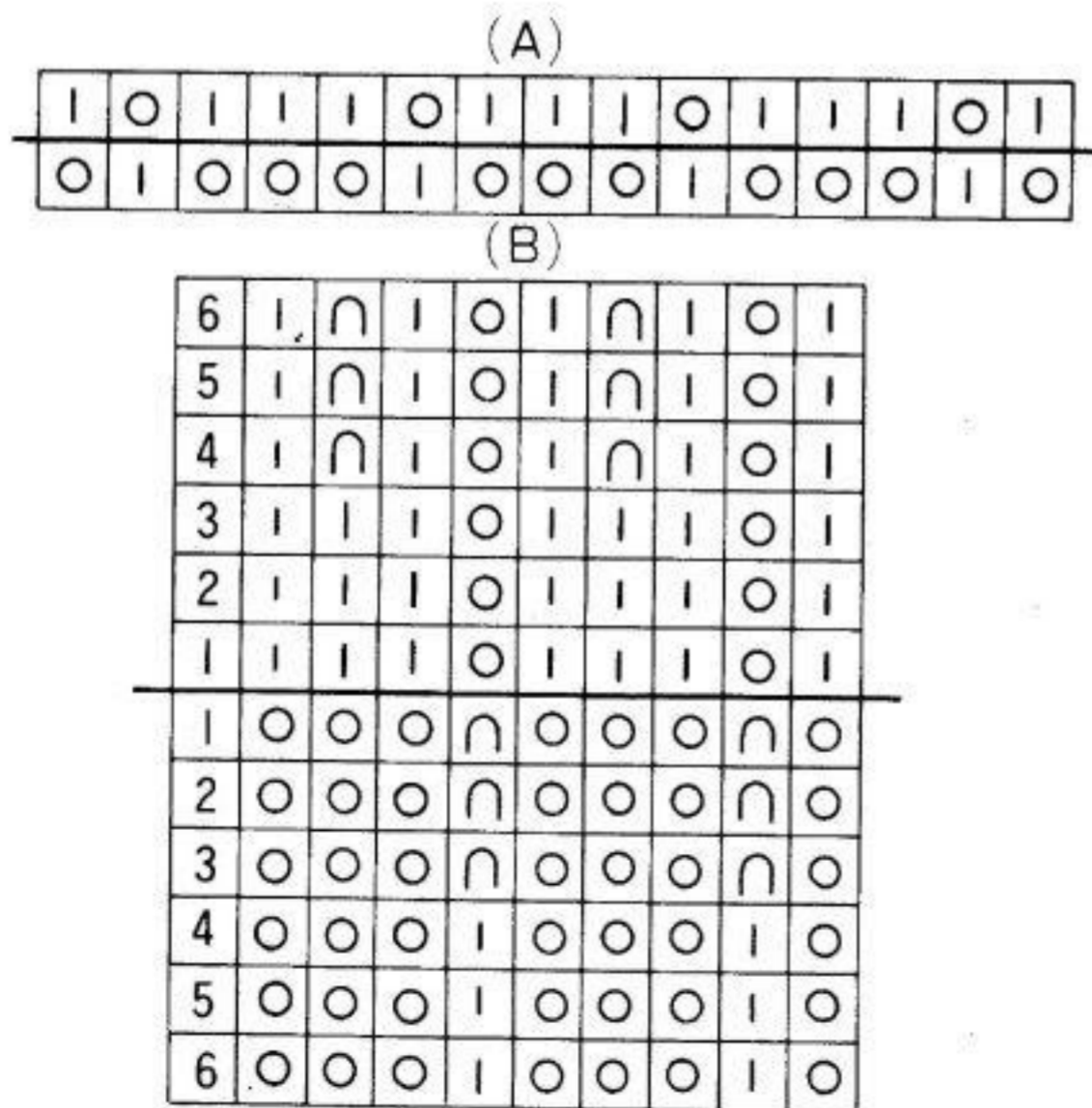


Fig. 72

**4th row** Both carriages on the left, couple the carriages together. On the ribber carriage bring the L/H shifting cam lever into the upward position. At the L/H end of the machine, push back into Position (B) the centre needle of the first group of 3 needles in Position (C).

Knit this row by moving both carriages to the right.

(Fig. 73—D)

**5th row** Carriages on right. On the machine at the R/H end, push back into Position (B) the centre needle of the first group of 3 needles in Position (C). Knit this row by moving both carriages to left.

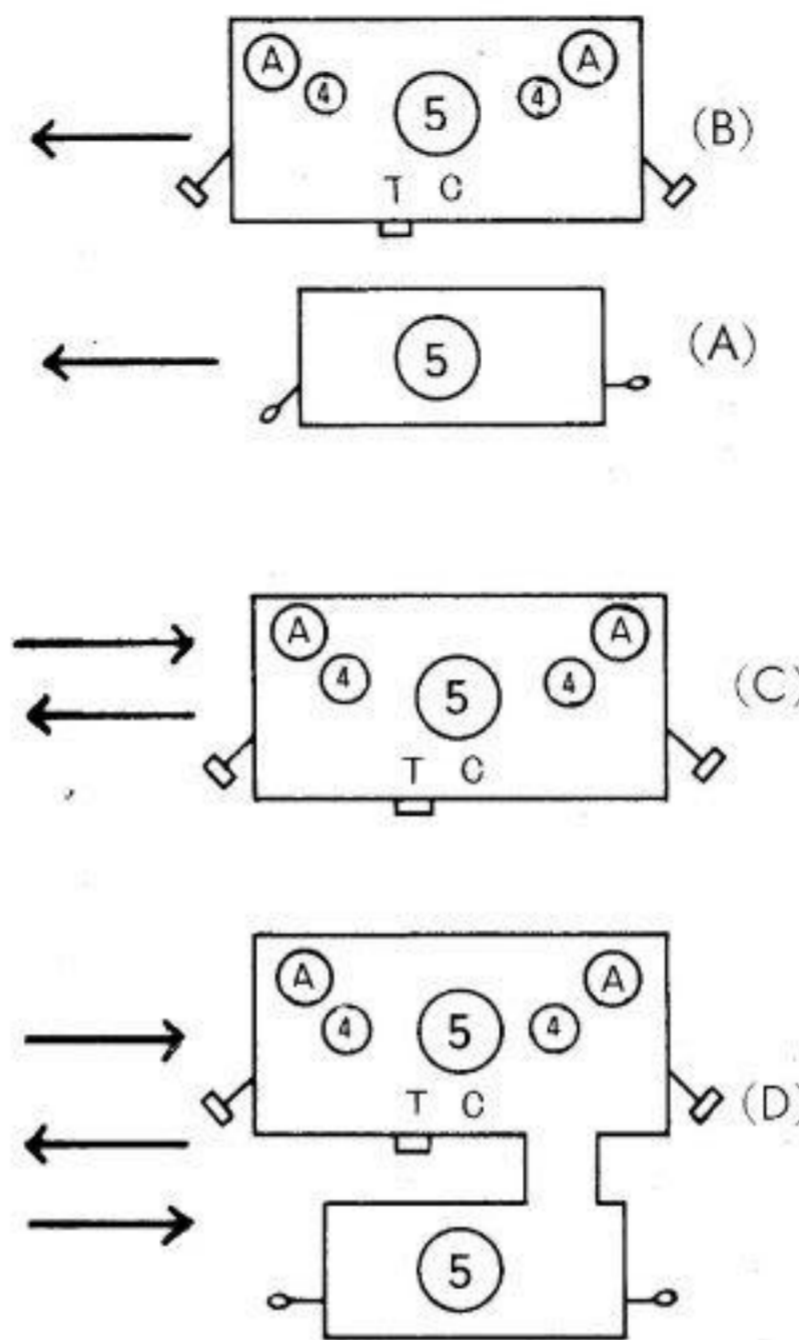


Fig. 73

**6th row** On the machine, at the L/H end, push back into Position (B) the centre needles of the first group of the 3 needles in Position (C). Knit this row by moving both carriages to the right. With both carriages on right, detach the ribber carriage from the machine carriage and, on the ribber carriage, bring the left hand shifting cam lever into the downwards position.\*

For a complete pattern repeat from \* to \*.



## INCREASING STITCHES

### Increasing One Stitch At The Edge

**Method 1:** This can only be done at the start of row. To do this pull forward into working position the next empty needle at the end nearest the carriage, and knit. (Fig. 74)

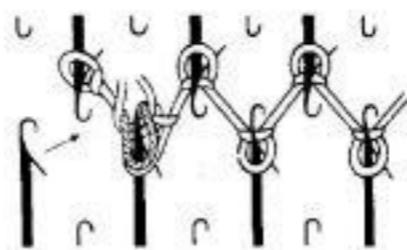


Fig. 74

**Method 2:** This can be done at either or both ends simultaneously.

- Bring the next empty needle into the working position.
- Using the single eye transfer tool, transfer the end stitch onto the empty end needle brought forward into working position – see Fig.75.

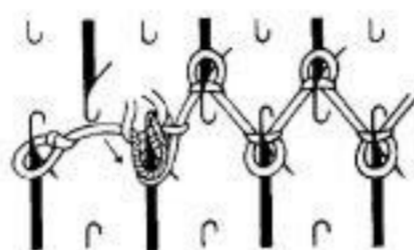


Fig. 75

- Pick up a loop from the next stitch one row below and place it in the empty second needle. (Fig.76)

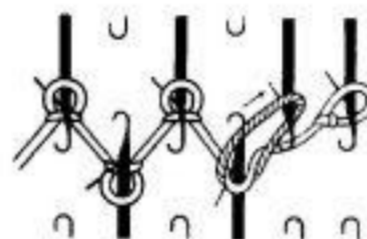


Fig. 76

## DECREASING STITCHES

### Decreasing One Stitch At The Edge

**Method 1:** This can be done at either or both ends simultaneously.

- With the single eye transfer tool, transfer the stitch from the end needle onto the second needle.
- Push empty needle back into the rest position.

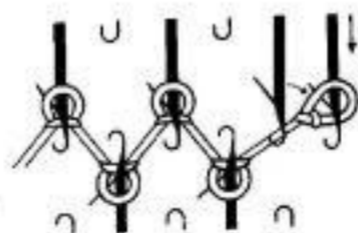


Fig. 77

**Method 2:**

- Transfer the second stitch from edge to the third needle. (Fig.77)
- Transfer the first stitch onto the second needle. (Fig. 78)
- Return the empty end needle to rest position. (Fig. 78)

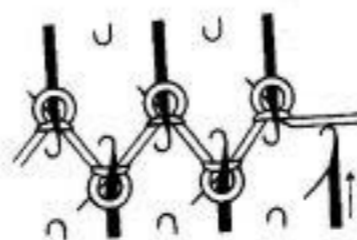


Fig. 78

## TURNING

Make certain that both return cam levers on the machine carriage are set in position '1' (Backward Position) as shown in (Fig. 79)

1. At the end opposite to the carriage, bring forward into Holding Position (E) the required number of machine needles and also bring upward into Holding Position (E) the corresponding number of ribber needles. (Fig. 80)  
Knit one row.

**Note :** It will be seen that the yarn passes over the stems of the needles brought into the Holding Position. (Fig. 81)

2. At the same end as the carriage, hold the yarn between the feeder and the needles, slightly upwards. Now select the first needle in Holding Position (i. e. the one nearest to the needles in working position) and guiding the yarn into its hook, push this needle back into working position. (Fig. 82)

The loop of the previous row now closes the latch over the strand just placed in the needle hook.

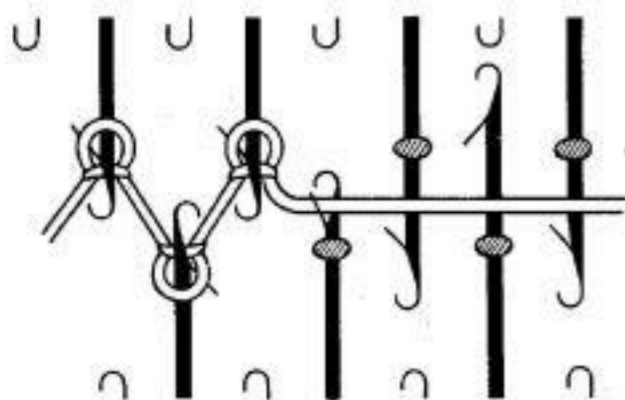


Fig. 82

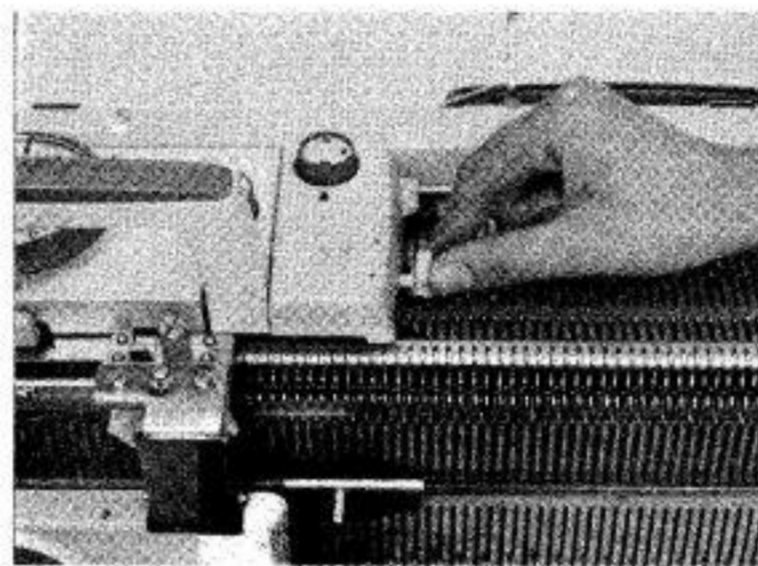


Fig. 79

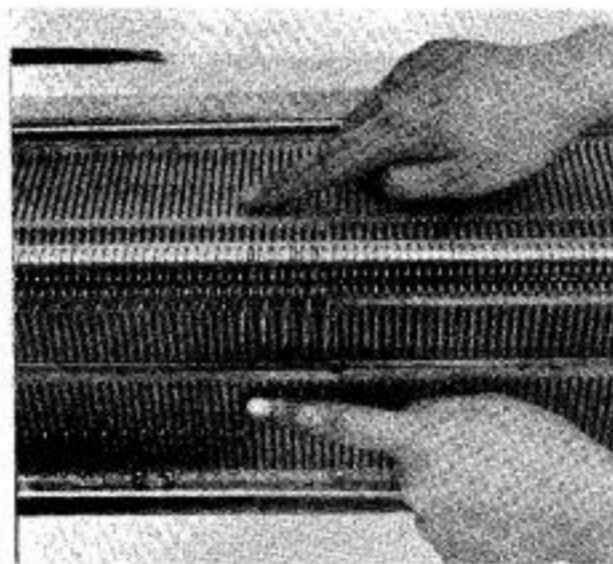


Fig. 80

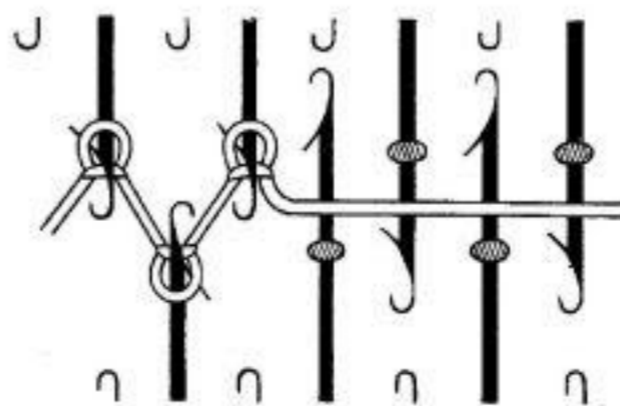


Fig. 81

3. Pass the yarn UNDER the adjacent needle in Holding Position leaving the yarn over the other needles in the Holding Position. (Fig. 83)

Repeat the above procedure until the turning has been completed and continue to knit over all needles by replacing the return cam levers of machine carriage in Position '2' (Forward Position).

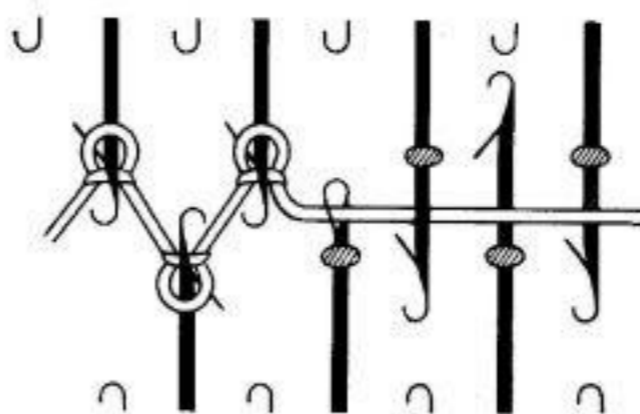


Fig. 83

## HOW TO TRANSFER A STITCH FROM THE RIBBER NEEDLE ONTO THE MACHINE NEEDLE

1. Place the eye of the transfer tool into the open ribber needle hook.
2. Draw out the needle with the tool until the stitch passes behind the latch.
3. Push the needle back until the stitch slips onto the tool.
4. Draw out the opposite empty needle on the machine with your left hand. Make sure that the latch of the empty needle is open.
5. Lift the eye of the transfer tool off the ribber needle and, tilting the handle of the tool towards the machine bed, slide the stitch off the transfer tool into the hook of the empty needle which you have just drawn out with your left hand. (Fig. 84)

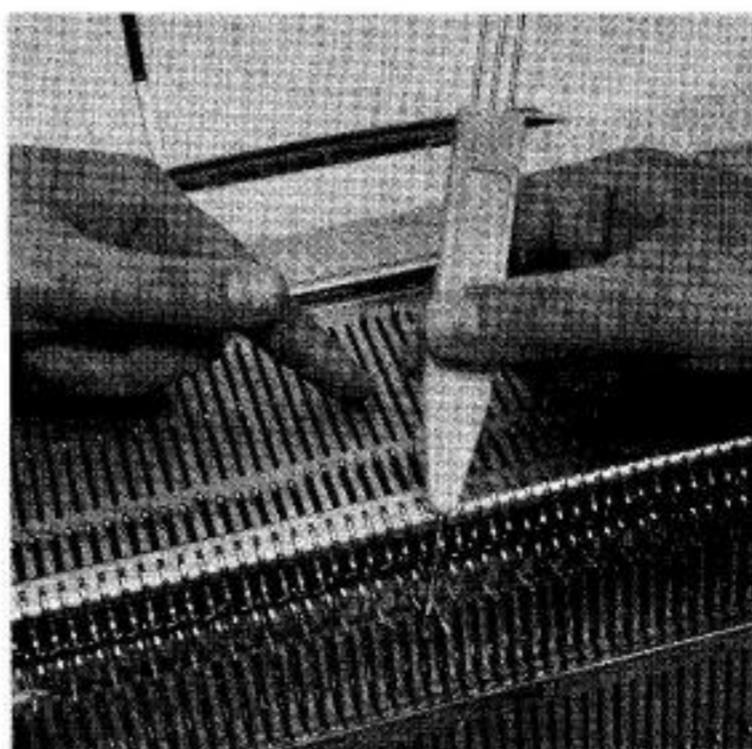


Fig. 84

## HOW TO KNIT WITH MAIN MACHINE ONLY

1. Transfer all the stitches from ribber needles onto the empty machine needles opposite to them.
2. Move both release levers of the ribber outwards so that the ribber bed is lowered.
3. Replace the ribber feeder arm of the machine carriage with the ordinary feeder arm, and knit. (Fig. 85)

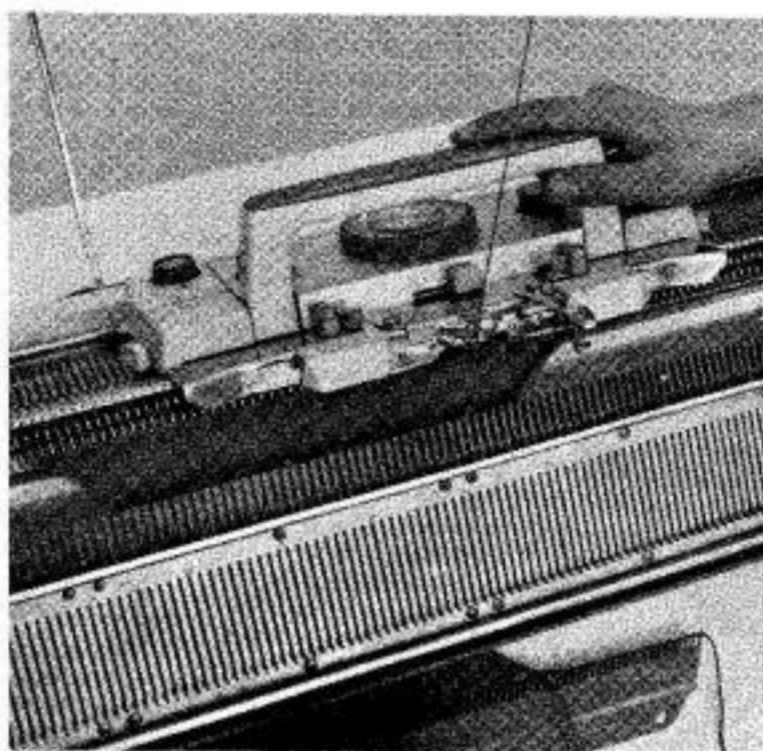


Fig. 85

## USE OF THE SELVEDGE WEIGHTS

If it is found, when knitting a garment all in rib stitch, that there is any tendency for the dropping of end stitches, it is usually due to the lack of weight at the edge of the knitted fabric. In the event of this, the two selvedge hooks should be attached, one to each edge of the knitted fabric, immediately below the working needles and the small selvedge weights are then hung from the selvedge hooks.

(Fig. 86)

The selvedge hooks and weights should be moved up the knitted fabric after every 10 to 15 rows as the knitting proceeds. The selvedge weights and hooks may also be used for pulling down the knitted fabric in the centre of the machine when forming a 'V' neck. In this case they should be moved up every 5 rows.

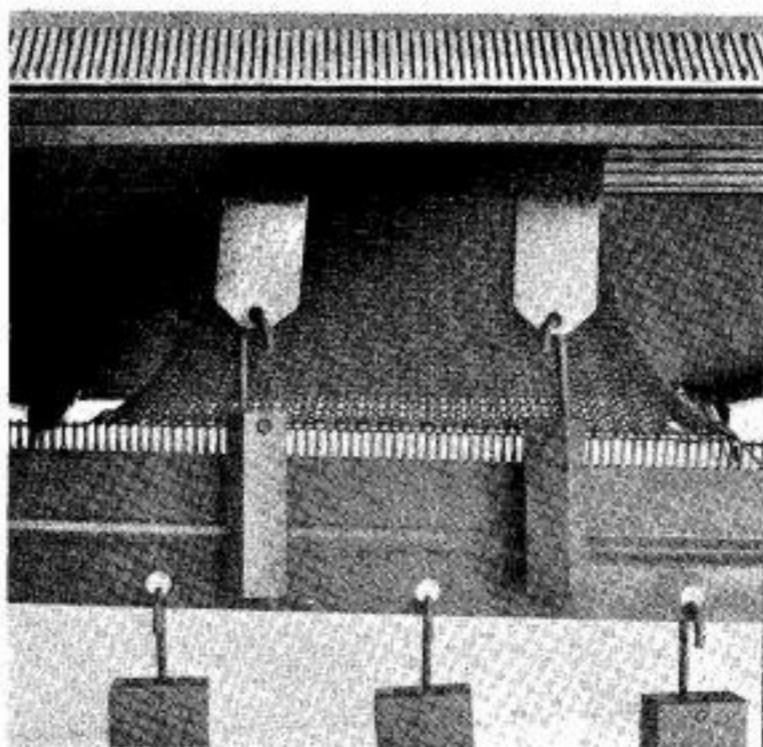


Fig. 86

## HOW TO REPLACE A NEEDLE

1. At the end nearest to the needle to be changed, push in the needle retainer rod with the blade of the screwdriver or something like this until an inch or so of the rod appears through the hole at the opposite end of the machine. (Fig. 87)
2. Pull on the rod until the other end of it is clear of the needle to be changed. It is never necessary to withdraw the rod completely.
3. Change to the new needle. (Fig. 88)  
Push the rod back into its original position.

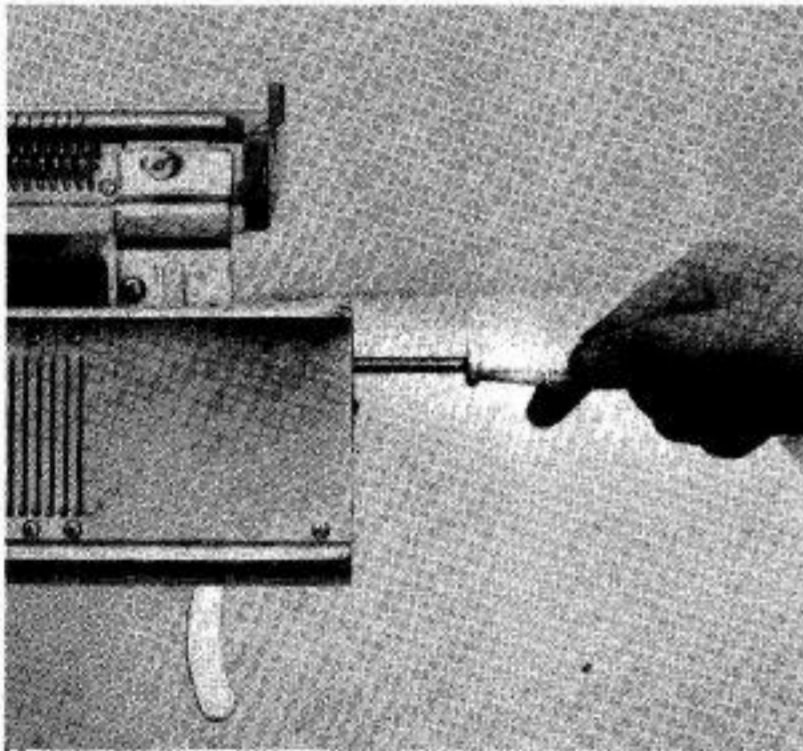


Fig. 87

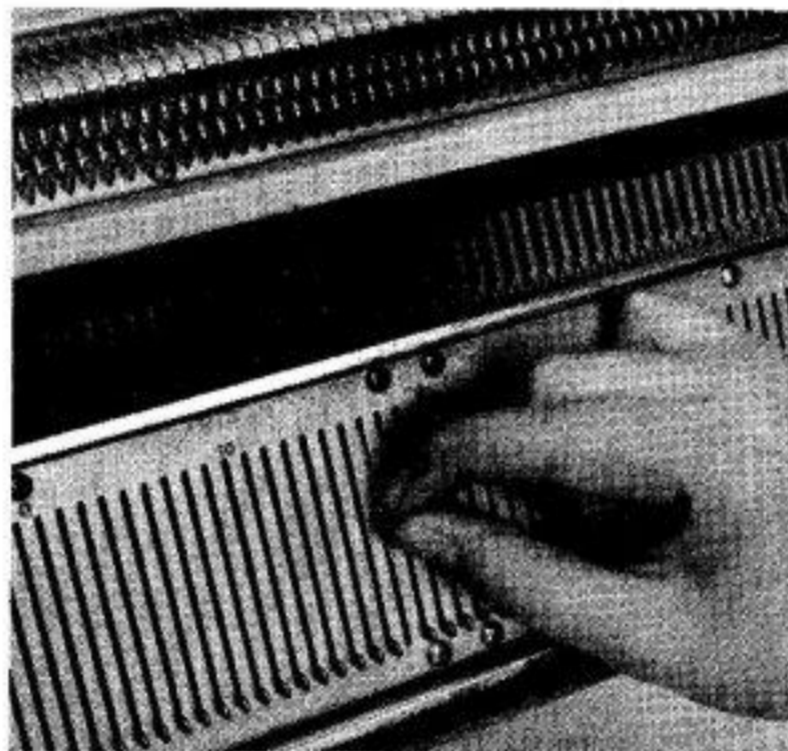


Fig. 88