



## Automatic Ribbing Attachment

A KNITMASTER PRODUCTION!

# INSTRUCTION MANUAL

for using the Ribmaster with Knitmaster Models 3500 & 4500

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## INTRODUCTION TO THE RIBMASTER

**What is the Ribmaster?** The All-British Ribmaster (Patent Pending) is the Automatic Ribbing Attachment which enables you to knit **automatically** practically any rib on your Knitmaster. Up to now **automatic** ribbing was only possible on costly double bed machines and with devices using Combs, Weights and Clamps. On single bed machines of the Knitmaster type, ribbing could only be produced with the aid of Hand Tools which, although a reliable method, was **not** automatic or speedy enough for many knitters.

After years of intensive research, Knitmaster Technicians, who pioneered and perfected the modern Home Knitting Machine, have, thanks to their constant lead and priceless "head start", been able to make available the wonderful Ribmaster at a cost within the reach of every knitter.

Until now it has been possible to knit automatically at high speed on a Knitmaster, but ribbing (as on all single bed machines) had to be done with Hand Tools. Now, at last, you can also rib **automatically** by adding the Ribmaster Automatic Ribbing Attachment to your Knitmaster. The Ribmaster is a low-priced and simple Attachment to add to your Knitmaster. The Ribmaster, in fact, makes your Knitmaster **2 machines in 1**—giving you all the advantages of a costly double bed machine at practically half the price—and so much simpler to use—no Weights to drag the knitting down, no Combs to fumble with and no Clamps to spoil your favourite table!

The Ribmaster is, in fact, as revolutionary an invention as the new Automatic Knitmaster itself and is the first and only device which enables you to rib **automatically** for a low initial outlay **without** the inconvenience of Weights, Combs, Clamps or Hand Tools. The Ribmaster will appeal particularly to those thousands of Knitmaster knitters who wish to produce lots of ribbing (including real Fisherman's Rib and the exclusive Brioche Rib) **automatically** at speed, and to those who require their Knitmaster for a more commercial use than just the family knitting!

A further advantage of the Ribmaster is the fact that your ribbing is **completely visible** all the time, being produced right in front of you at the **edge** of the table, instead of being pulled down with Weights and Combs and coming out of the machine between two beds—no need for "blind" ribbing with the Ribmaster!

Although the operation of the Ribmaster Automatic Ribbing Attachment is basically very simple, it requires a certain technique which must be mastered carefully in order to use it to its full advantage. Do not, however, become discouraged if you find the Ribmaster a little difficult at first, as, in the beginning, some practice may be necessary. It is essential to follow the instructions in this Manual carefully and, first of all, **learn to use the Knitmaster properly WITHOUT the Ribbing Attachment**. If you need any further help, advice or free tuition in the use of the Ribmaster, you are always welcome to call at any of the Knitmaster Knitting Centres.

#### **SPECIAL NOTE!**

It is most important that the beginner should become thoroughly familiar with the Knitmaster before attempting to use the Automatic Ribbing Attachment. We, therefore, suggest **AT LEAST ONE WEEK'S PRACTICE on the Knitmaster BY ITSELF before any attempt is made to use the Ribmaster**. For the non-technical person, it would be rather too much to attempt to master both the Knitmaster and the Ribmaster at the same time—it would be like trying to run before you learn to walk! This Instruction Manual is, therefore, planned and written bearing this fact in mind.

We do strongly advise that the Ribmaster is not unpacked or touched for at least **ONE WEEK, until 100% proficiency is reached in the use of the Knitmaster WITHOUT the Attachment!**

The first part of this Instruction Manual deals with the fixing of the Ribmaster to the Knitmaster and all other relevant technical details. The second part explains the principle of automatic ribbing by using the Ribmaster in conjunction with the Knitmaster.

### **Important**

The Ribmaster Automatic Ribbing Attachment **cannot be used on early type Knitmaster Models 2500 and 3300**. These were the Knitmaster machines which had Weights, Combs and Clamps and were made **prior to March 1954**.

The Ribmaster has been designed specially for use with the new Automatic Knitmaster Models 3500 and 4500 **Type R** (Type R Machines can be easily identified as they bear the letter "R" in front of the Serial Number). Naturally, a number of modifications and improvements had to be made to the new Automatic Knitmaster (Type R) as these were essential to ensure perfect working of the Machine in conjunction with the Ribmaster Automatic Ribbing Attachment. The new Automatic Knitmaster **Type R** was brought out early in **May 1955** and on any Machines delivered after this date and bearing the letter "R", it will be easy to fit the Ribmaster yourself, since these Type R Machines have been specially constructed to take the Automatic Ribbing Attachment.

**For all new Automatic Knitmasters NOT bearing the letter "R" and manufactured between March 1954 and the end of April 1955, certain works modifications will have to be carried out IN OUR FACTORY.** The conversion of these Knitmasters to the new Type R will require the following alterations:—

- (1) New type Rubber Suction Feet.
- (2) New type Sinkers with modified Hooks.
- (3) Gate Cam Release Lever Assembly fitted to Cam Box.
- (4) New type Needle Sinker Cam in Cam Box.

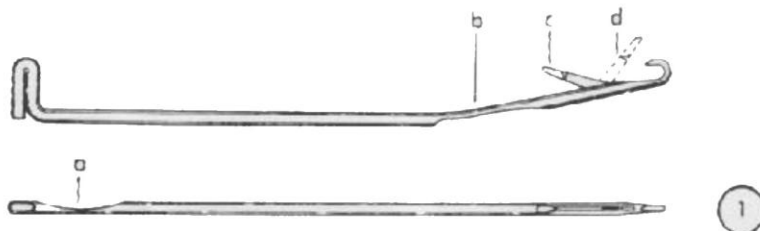
Most of these modifications are of a highly specialised engineering nature and can only be done properly at our Factory. If, therefore, your Knitmaster is **not** Type R, will you please let us have its exact Serial Number and Model Number (i.e. 3500 or 4500), when we will send you an estimate for the nominal cost of the Factory conversion **over and above** the net price of the Ribmaster.

**Unless your Knitmaster is of the Type R, do not attempt to fit the Ribmaster, as you will NOT be able to use it and may cause serious damage to both the Machine and the Ribbing Attachment.** It should be noted that the Ribmaster will not fit any other make of knitting machine.

## I. MECHANICAL SPECIFICATION

### Description of the Ribmaster Automatic Ribbing Attachment

As on the Knitmaster, the Needle Bed of the Ribmaster also consists of a number of shockproof bakelite sections which are mounted on the metal base by means of two Slider Rails. The End Sections have no needle grooves and contain on the reverse side the Fixing Mechanism (Fig. 2). The Needles (Fig. 1) are quite different to those of the Knitmaster. They have spring Latches which automatically open themselves (d) and remain open in use (c). The Needle Shaft is so constructed that the front and rear part each act as a spring.

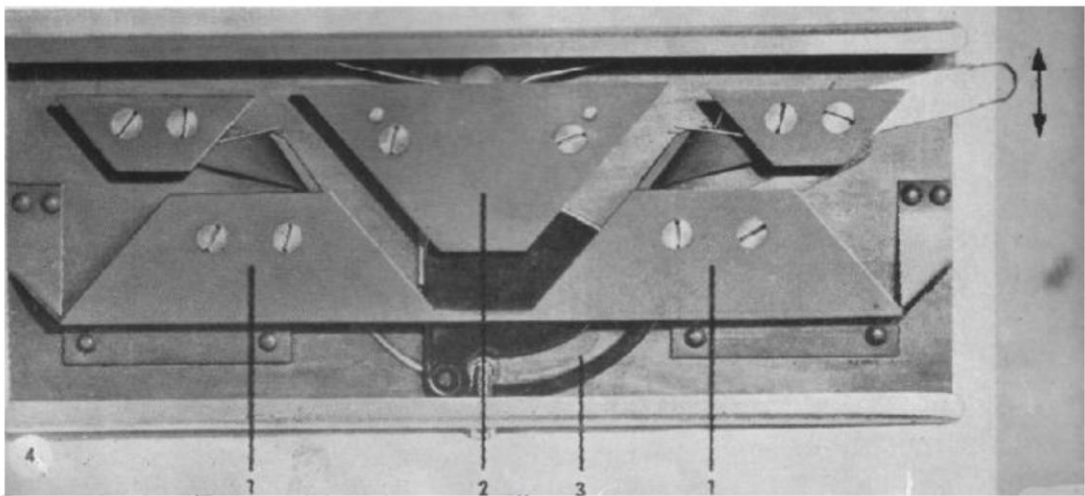
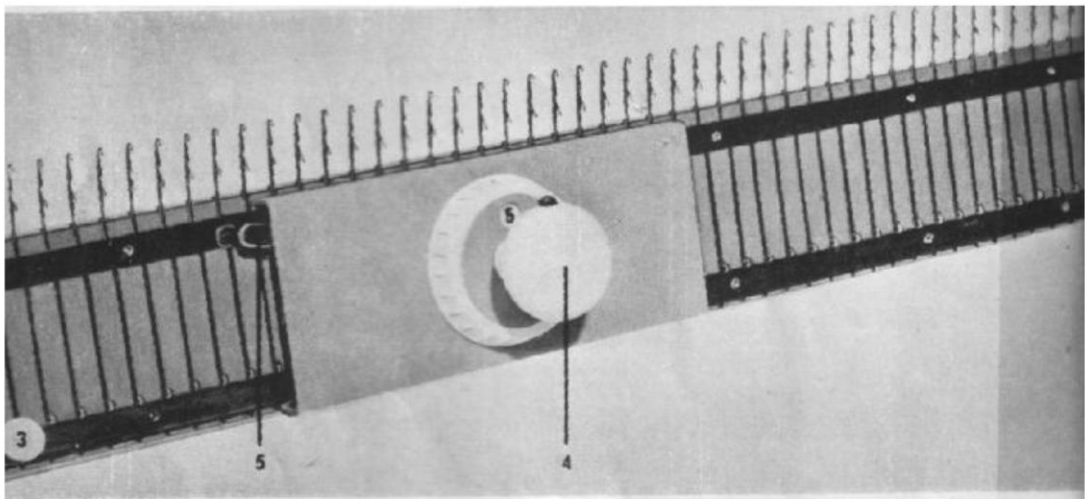
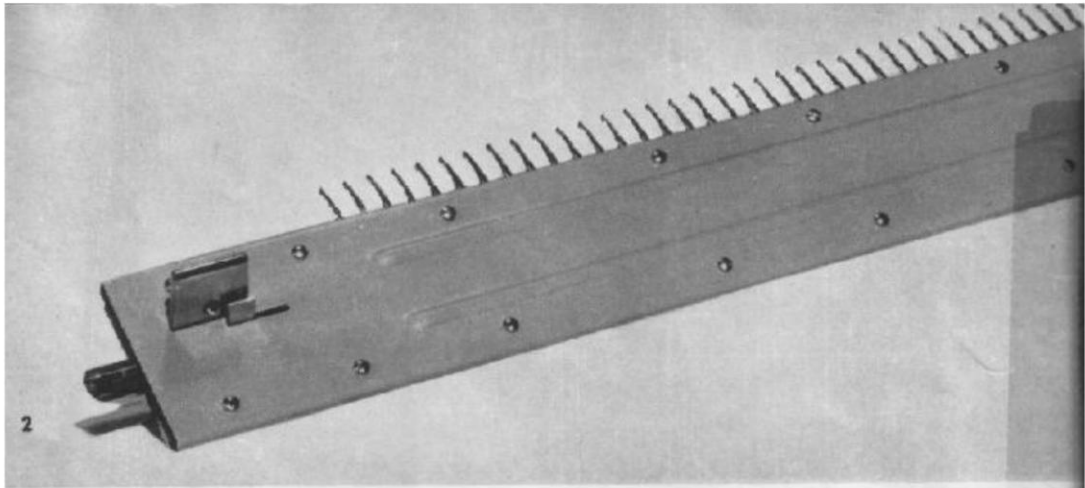


The rear spring (a) prevents the Needle from slipping down in the Needle Bed and the front spring (b) helps to form the stitches. The Cam Box (Figs. 3 and 4) is basically similar to that of the Knitmaster. The Needles of the Ribbing Attachment operate in the same manner as those on the Knitmaster. The Control Cams (1) are fixed and cannot be moved. The Needle Sinker (2) can, as on the Knitmaster, be set at 10 various tensions with the aid of the Tele-Tension Dial. A special mechanism (3) enables the Needle Sinker to be lifted by turning the Control Handle (4) to the left. This is necessary for the formation of patterns using the Retaining Position. The Gate Cam Release Lever (5) on the left side of the Cam Box is also used for these patterns. This Lever enables one Gate Cam to be released so that, when moving the Cam Box from left to right, the Needle Butts do not travel over, but slide under the Gate Cam. This results in the stitches remaining on top of the open Latches, known as the Retaining Position. (It is also necessary to have a similar Gate Cam Release Lever on the right-hand side of the Cam Box of the Knitmaster when using the Automatic Ribbing Attachment. This Lever mechanism is already fitted to all Knitmaster Type R Cam Boxes).

### Adapting the Knitmaster for Fitting the Ribmaster

With a Knitmaster having the letter "R" in front of the serial number these instructions should be carefully followed:—

- (1) Slide the Ribmaster Cam Box into the centre of the Needle Bed. Stand the Ribmaster on the table with the Needles pointing upwards and the Ribmaster will stand balanced forward with the Control Handle on the table. Take one Holding Bracket with the Locating Pin facing upwards and towards you. With the other hand, press one of the Spring Levers at the end of the Ribmaster as far in as it will go and clip on the Holding Bracket, so that the Locating Pin fits snugly into the hole in the Locating Lug on the Ribmaster, releasing the Spring Lever. Attach the other Holding Bracket in the same way. Remove the Ribmaster Cam Box. Put the Ribmaster on one side.
- (2) Remove the Cam Box from the Knitmaster and turn the machine over with the Rubber Feet facing upwards. Using a 6BA Box Spanner or suitable pliers, remove each of the 4 outer nuts and washers of the Slider Rails at both ends of the machine. These four nuts and washers are those which hold in position the screws in the 2 ungrooved sections of the Needle Bed at either end of the machine.
- (3) Fit the Ribmaster Holding Brackets over the 8 screws and replace the nuts and washers (see Fig. 5). Push down one Ribmaster Needle near the centre of the bed and position it between 2 Sinkers of the Knitmaster. Now tighten up the 8 nuts and when correctly fitted the Knitmaster can be turned right side up again and both Cam Boxes replaced. Make sure that the Knitmaster sits at the edge of the table to enable the Ribmaster to be in the correct position for knitting.



## Joining the Ribmaster for Use

Putting the Ribmaster into use for Ribbing is very easy and is done as shown in Fig. 6.

Place the Knitmaster so that the front of it is flush with the edge of the table.

Holding the Ribmaster at both ends, you now follow these simple instructions:

- (1) Push in the two protruding Spring Levers at either end to the full extent of their journey.
- (2) The two Locating Lugs at the back of the Ribmaster are now carefully aligned and laid on to the Holding Brackets at each end of the Knitmaster.
- (3) Push the Ribmaster gently inwards so as to slide the Locating Lugs as far as they will go into the channels of the Holding Brackets.
- (4) Exert a slight downwards pressure and, at the same time, release both Spring Levers. The Ribmaster should then fix firmly into position, that is to say, the hole in each Locating Lug should fit snugly over the head of the Locating Pin in each Holding Bracket on the Knitmaster.

When joining or taking off your Ribmaster see that all needles are in the **NON WORKING** position.

All this will be quite easy providing you make sure that, when inserting the Locating Lugs into the two Holding Brackets at the base of the machine, the Ribmaster is held at the **same angle** as the diagram in Fig. 6.

## Taking Off the Ribmaster when Not in Use

This is done simply by:—

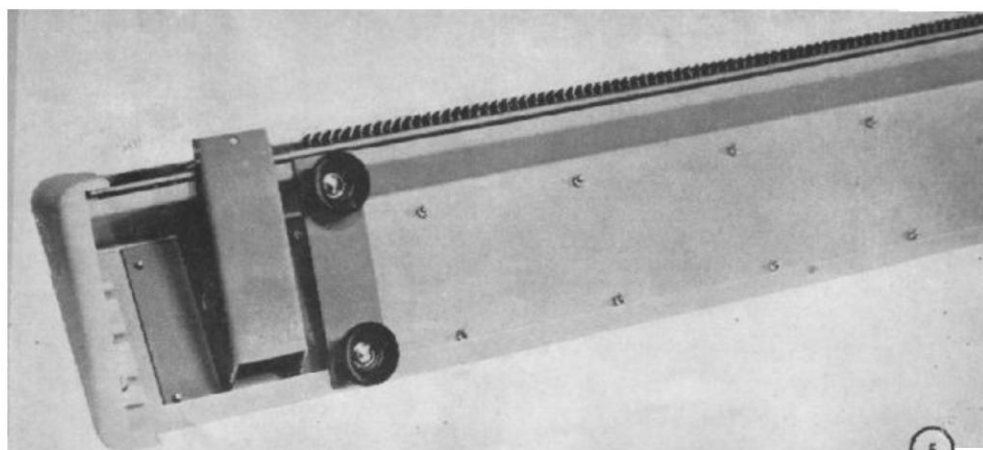
Pressing the Spring Levers inwards, pulling the Ribmaster gently towards you and, at the same time, slightly tilting it upwards, when it is easily released from the Holding Brackets.

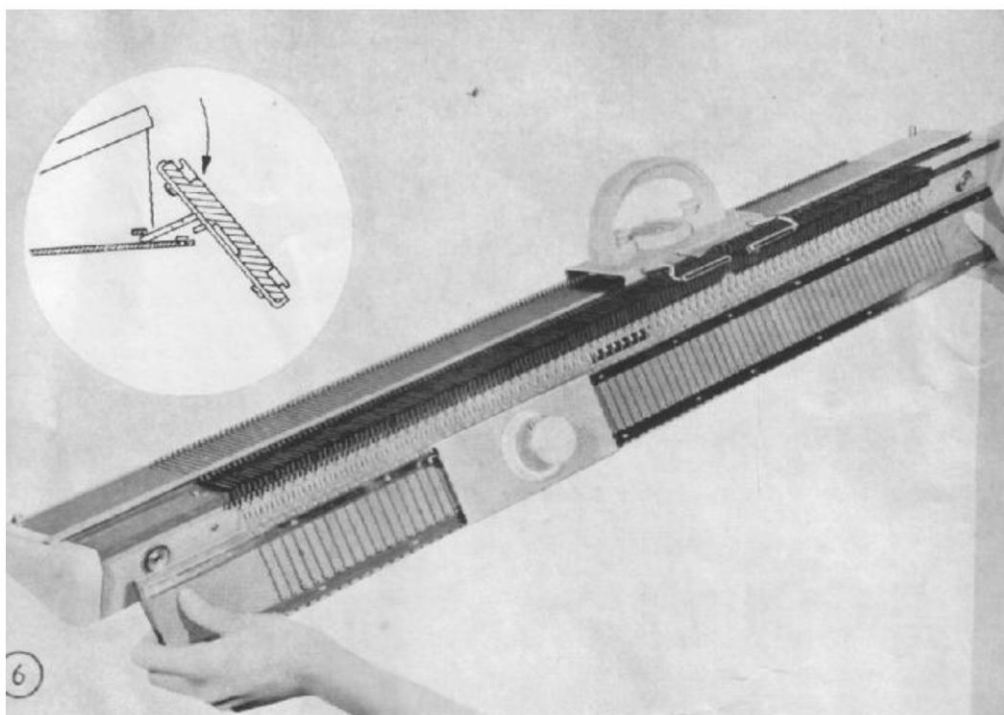
## How the Ribmaster Works

The basic principle of knitting on the Knitmaster is fully explained in the **Instruction Book** supplied with the machine. Before even attempting to use the Ribmaster you should be fully conversant with the Knitmaster Instruction Book and the working of the machine, as this Manual is a supplement of the main Book, but dealing specifically with automatic ribbing.

When ribbing, the stitches formed on the Knitmaster are the **plain** stitches and those produced on the Ribmaster are the **purl** stitches. Therefore, when a certain number of plain stitches is required the corresponding number of Needles is brought into the Working Position on the Knitmaster and for the purl stitches the corresponding number of Needles on the Ribmaster.

When ribbing, the two Cam Boxes are moved alternately, i.e. when the Cam Box of the Knitmaster is used, plain stitches are knitted and the wool forms loops along the Needle Heads of the Ribmaster. When the Ribmaster Cam Box is moved along, these loops are knitted to form the purl stitches and vice-versa. To form **one row** of stitches it is, therefore, necessary to carry out **two movements**—one with **each** Cam Box.





## Care and Maintenance of the Ribmaster

Broadly, the same instructions apply for the Ribmaster as for the Knitmaster. After use, you should always clean off all particles of dust and wool-fluff with the aid of a soft brush. When not in use the Ribmaster should be carefully covered up and safely stored away so that nothing damages the protruding Needles and their latches.

### Normal Oiling and Cleaning

If you have had the Ribmaster stored away for some time, you should always inspect it before use and give it a clean if necessary. The Needle Butts and the Slider Rails require a drop of oil from time to time. Only good quality thin sewing-machine oil should be used. These rules should be adhered to, if the Ribmaster is to remain in perfect condition and give years of trouble-free service.

The best results are obtained by using either a small camel-hair brush or the tip of one's finger dipped in oil. Never oil to such an extent that the oil drips all over the Ribmaster. If too much oil is applied to the Ribmaster, it will not function properly, the knitting will be spoilt and dust and fluff will tend to stick to the Ribbing Attachment more easily.

### Periodical Overhauling

Although under normal working conditions this should not be necessary, the Ribmaster can be dismantled for a thorough cleaning from time to time. For this, the Top Slider Rail must be removed (the Lower Slider Rail must not be removed) and the Needles carefully taken out of the grooves in the Needle Bed. After taking the Needles out, carefully clean them with a good quality lighter fuel, and also clean each Needle Bed groove by brushing out the dust and fluff. When replacing the Needles, you must be certain to replace them in the same order as they were taken out, i.e. each Needle must go back into its original groove. Before putting the Cam Box back, this should also be cleaned carefully and all wool particles and dust taken out. Give it a light oiling and make sure that all parts move freely.

This periodical overhauling is something that you may hardly ever require, and in any case, it should not be necessary for at least 12 months or more. You may find this overhauling rather complicated and we, therefore, suggest that it is carried out by our experienced mechanics. For this, your Ribmaster should be sent back to our main London Factory when the work will be carried out at a reasonable cost. Please write in for an estimate BEFORE returning your Ribmaster for this servicing!

## 2. HOW TO KNIT WITH THE RIBMASTER

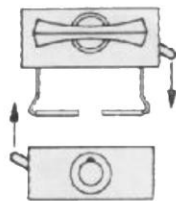
### Setting the Gate Cam Release Levers

The use of the Gate Cam Release Lever on the Ribmaster has already been explained. On the Knitmaster Cam Box this Lever is situated on the right-hand side and on the Ribmaster Cam Box it is on the left-hand side. When both Levers are pointing towards the Needle Heads, both Gate Cams are in operation.

If one or the other Gate Cam is to be put out of action, the respective Lever must be pushed towards the Needle Butts. To obtain the various plain and purl variations the following Lever positions are necessary:—

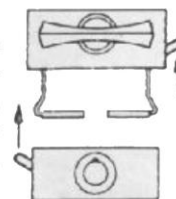
#### 1 × 1, 3 × 1, 5 × 1 AND SIMILAR RIBS (see Figs. 11 and 15)

1 plain—1 purl  
3 plain—1 purl  
5 plain—1 purl



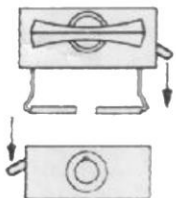
#### 1 × 1 FISHERMAN'S RIB ON PURL SIDE (see Fig. 12)

The Retaining Position is used on the Knitmaster Cam Box only, forming the ribbed pattern facing the knitter.



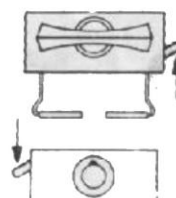
#### 1 × 1 FISHERMAN'S RIB ON PLAIN SIDE (see Fig. 13)

The Retaining Position is used on the Ribmaster Cam Box only, forming the ribbed pattern turned away from the knitter.



#### 1 × 1 DOUBLE-SIDED FANCY RIB OR BRIOCHE (see Fig. 14)

For this type of stitch the Retaining Position is used on both the Knitmaster and Ribmaster Cam Boxes.



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### Adjustment of Tension

Basically, the process of tension setting on the Ribmaster is the same as on the Knitmaster Tele-Tension Dial. Therefore, the size of stitch of the plain and purl knitting corresponds to the size of stitch of the plain knitting. Small variations which may arise due to the differing thicknesses of various yarns will be noticed by working a sample piece and any necessary adjustments can then be made.

### Positions of Needles

Contrary to the Knitmaster, the Ribmaster has no Holding Position. There are, therefore, only the following two positions:—

- (1) Non-working Position      (2) Knitting Position

In the Non-working Position the Needle Butts rest on the Lower Slider Rail and are not operated by the Cam Box mechanism. To bring the Needles into the Knitting Position, they must be pushed up to the Top Slider Rail where the Ribmaster Cam Box automatically brings them into the correct Knitting Position.

#### IMPORTANT

The Knitmaster Cam Box must NOT be operated whilst the Ribmaster Needles are at their HIGHEST POINT (before they come into the Knitting Position) as the Lightning Latch Opener of the Knitmaster might catch some of the Ribmaster Needles and cause damage—in other words, ONLY operate the Knitmaster Cam Box when the Ribmaster Needles are in the Knitting Position.

### How to Hold the Wool when Ribbing

The correct way to hold the wool is most important as the Needles of the Ribmaster and the Knitmaster lie at two different angles. The wool must always be laid across the Needle Heads parallel and very close to the Needle Bed of the Knitmaster (Fig. 8).



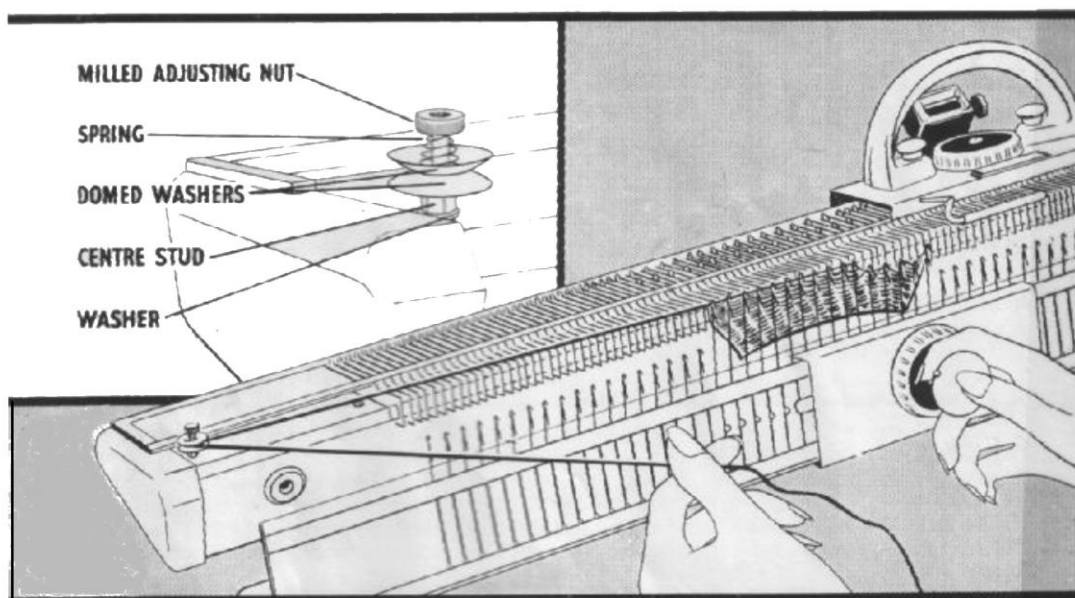
## A HELP FOR THE BEGINNER!

### The Ribmaster Wool Positioners

The correct way to hold the wool is **most important** as the Needles of the Ribmaster and the Knitmaster lie at two different angles. The wool **must always** be laid across the Needle Heads **parallel** and very close to the Needle Bed of the Knitmaster. (Fig. 8, page 11).

The two Wool Positioners are now supplied with the Ribmaster to assist the beginner. The Positioners will ensure that the wool is being held at the correct angle, and tension when the Ribmaster is in use. After a little practice the Positioners can be dispensed with if desired.

When the Ribmaster Cam Box is to be operated the wool is laid across the Needles and round the Positioner as shown in the diagram. When the Knitmaster Cam Box is to be operated the wool must be removed from the Positioner and held at the usual downward angle.



### How to attach the Positioners

It is recommended that you attach one Wool Positioner at a time. The component parts of the Positioners are already assembled in their correct order. The small hexagonal Nut at the bottom of the Centre Stud is supplied only to hold the parts together in transit and is not used in fitting the Positioner to the Knitmaster.

Remove the hexagonal Nut from the Positioner and take off the small Washer. Undo the milled Adjusting Nut at the top of the Centre Stud, and slide off the Spring and two circular Domed Washers.

After removing the Round-headed Screw which is situated in the End Section of the Knitmaster next to the cream End Piece place the small Washer over the screw hole. Insert the short end of the Centre Stud through the Washer and screw up tightly. Replace the two circular Domed Washers, the first with the hollow face downwards and the second with the hollow face upwards. Replace the Conical Spring and Milled Nut. Screw down the Nut to adjust the Positioner for tension as required. Now attach the second Positioner in the same way at the other end of the Knitmaster.

## General Notes on Casting-On

Apart from usual Closed Edge casting-on, the Open Edge method can also be used on the Ribmaster. This type of casting-on is suitable for sample and tension pieces. Whilst being a very fast method of casting-on, the Open Edge may not be strong enough for all types of garments and the Closed Edge might be preferred for Children's wear, etc.

## Open Edge Casting-On

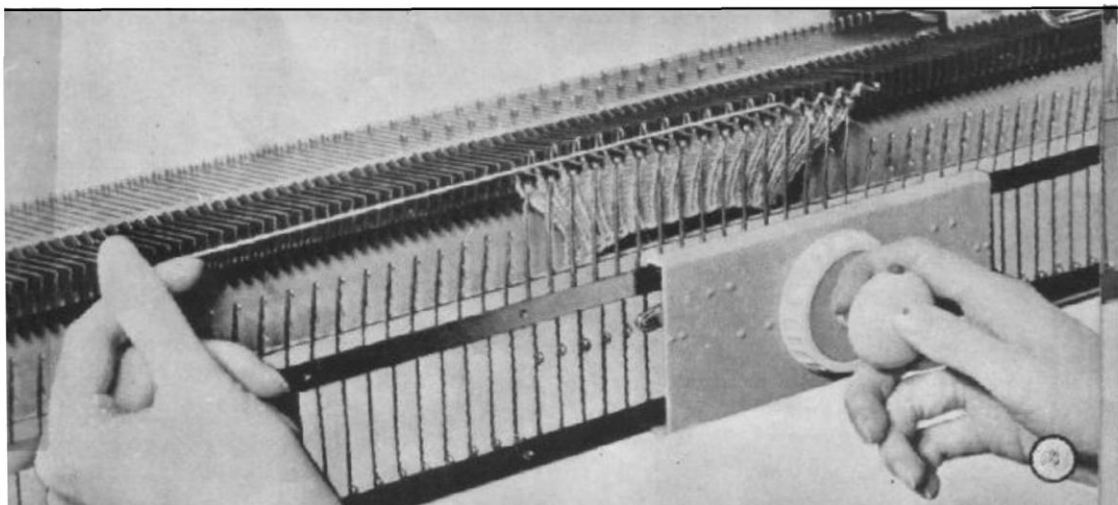
The required number of Needles is brought into the Knitting Position on both the Knitmaster and the Ribmaster. It is important to note that the **outer Needle at each end must always be on the Knitmaster.**

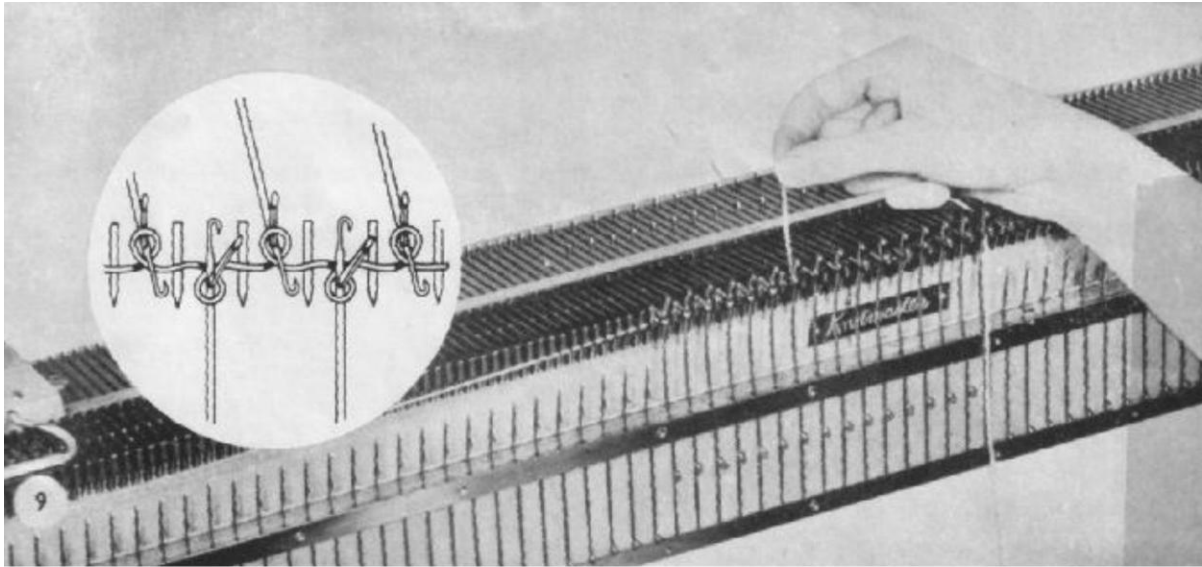
**Remember that the Knitmaster Cam Box must NOT be operated whilst the Needles of the Ribmaster are at their highest position—just before they go into the Knitting Position.**

Have both Cam Boxes at the **left-hand** side of the machine and both Gate Cam Release Levers pointing **upwards** towards the Needle Heads. The latches of the Ribmaster Needles must be **fully open**. Set the tension at No. 1 on both the Knitmaster and Ribmaster Tele-Tension Dials. After winding the wool around the left Casting-on Eyelet on the Knitmaster, lay the wool over the Needles and knit one row with the Knitmaster Cam Box. Then follow across with the Ribmaster Cam Box. Both Cam Boxes are now at the **right-hand** side. After pushing the Gate Cam Release Levers into the correct position for the pattern wanted and setting both Tele-Tension Dials at the required tensions, knitting can be commenced.

## Closed Edge Casting-On

The required number of Needles is brought into the Knitting Position. (The Knitmaster Cam Box must NOT be operated whilst the Ribmaster Needles are at their highest position—just before they go into the Knitting Position.) The Knitmaster Cam Box is on the **left-hand** side and the Ribmaster Cam Box is on the **right-hand** side. The latches of the Ribmaster Needles should be in the half-closed position, i.e. sprung **upwards**. The wool is then wound around the left Casting-on Eyelet of the Knitmaster, the Knitmaster Tele-Tension Dial set at No. 1 and the Ribmaster Tele-Tension Dial set as required. Both Gate Cam Release





Levers must be pointing **upwards** towards the Needle Heads. Casting-on can now be commenced. Wind the wool around the Needle Heads and under the Sinker Hooks, winding in an **anti-clockwise** direction on the Knitmaster, and in a **clockwise** direction on the Ribmaster, starting with the Sinker Hook before the first Needle of the Knitmaster, **anti-clockwise** around the first Needle of the Knitmaster, under the second Sinker Hook and **clockwise** and **behind the latch** around the first Needle of the Ribmaster and so on (see Fig. 9). Pass the Knitmaster Cam Box over to the **right-hand** side. This will put the stitches **behind** the latches of the Knitmaster Needles. **Both** Cam Boxes are now on the **right-hand** side. After pushing the Gate Cam Release Levers into the correct position for the pattern required, knitting can be commenced.

## General Instructions for Ribbing

To obtain the various ribs required, the two Cam Boxes must be moved in a certain sequence.

After having knitted the first row with the Ribmaster Cam Box, it is most important to check and make sure that **ALL** stitches are **UNDER** the open latches of the Ribmaster Needles. (For this first row, some of the stitches may not go behind the latches of the Ribmaster by themselves and you may, therefore, have to release some of the latches by hand so as to place the stitches **behind** them.)

The lifting of the Needle Sinker mechanism requires special attention (see Fig. 4— items 2 and 3).

If the Ribmaster Cam Box has to be passed over the Needles **without** knitting, then the Control Handle with the Red Marker must be turned to the **left** (see Fig. 10). After completing the row, the Control Handle must be turned **back** again with the Red Marker pointing **upwards**.

The instructions that now follow show the sequence of rows and the direction in which the Cam Boxes are passed across the Needles for the various types of ribs.

For 3x1, 5x1 and similar ribbing, cast on as for 1x1 rib and knit one row. This method produces the best edge. Then transfer stitches from Ribmaster to Knitmaster as required to produce ribbed pattern, and continue as instructions (Fig. 15).

## Increasing and Decreasing

In general, increasing and decreasing single stitches is done in the same way as on the Knitmaster. However, the following points should be carefully noted when using the Ribmaster:—

## Decreasing by Single Stitches

For this, it is important to ensure that the last stitch at each end of the row should ALWAYS be on a Knitmaster Needle.

When one stitch is decreased at the end of the row in  $1 \times 1$  rib, the last stitch would be on a Ribmaster Needle and this **must be avoided**. Therefore, before decreasing, the **end stitch** on the Ribmaster Needle must be transferred to the corresponding Needle on the **Knitmaster** and the decrease made in the usual way by transferring the end stitch on the Knitmaster inwards with the Transfer Tool. After one more decrease, the original arrangement will be obtained of **1 Knitmaster stitch at the end of the row**.

## Increasing by Single Stitches

A similar method as above is used for increasing single stitches. For the first increase, a Knitmaster Needle is brought into the Knitting Position and there will now be two Knitmaster Needles at the end of the row. For the next increasing, the stitch on the outer Knitmaster Needle is transferred to the corresponding Ribmaster Needle, so that after completing the increase, the original arrangement will be obtained of **1 Knitmaster stitch at the end of the row**.

## Increasing by Several Stitches at the Same Time

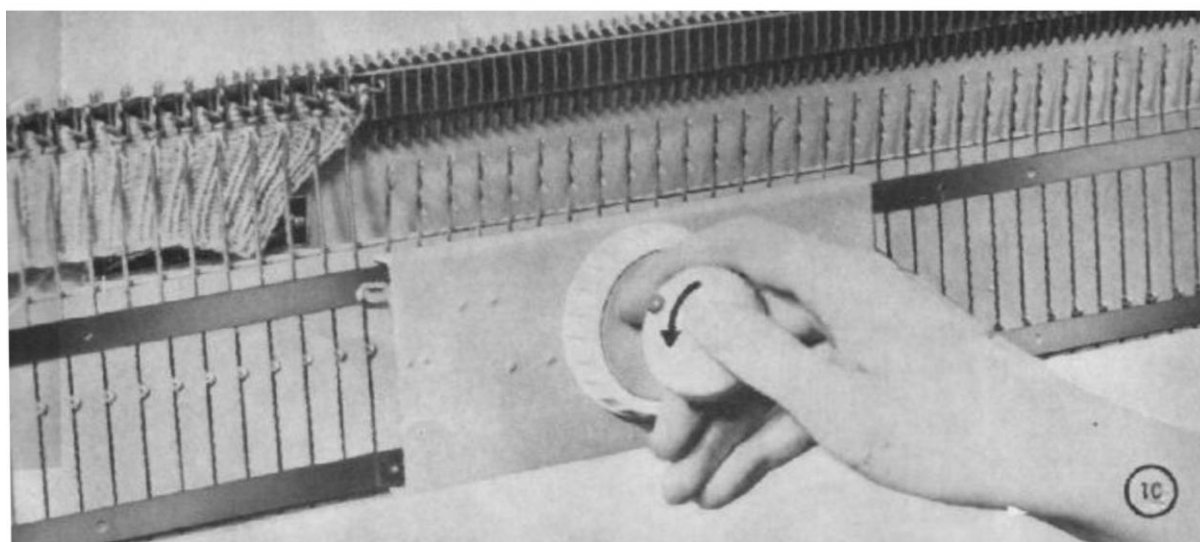
When increasing by more than one stitch at a time, the required number of Knitmaster and Ribmaster Needles is brought into the Knitting Position and the stitches are cast-on in the usual manner. When increasing on the right-hand side, follow the instructions for the usual casting-on method. However, when increasing on the left-hand side, the wool must be wound in the **opposite directions**, i.e. **clockwise** around the Knitmaster Needles and **anti-clockwise** around the Ribmaster Needles, putting the newly-formed stitches **behind** the latches.

It should be noted that when knitting patterns using the Retaining Position, it is important to make sure that the stitches lie **on** or **under** the latches following the arrangement of the other stitches on the Needles.

When decreasing by more than one stitch at a time, **all** the Ribmaster stitches to be decreased must first be transferred to the corresponding Knitmaster Needles, then decrease in the usual way on the Knitmaster. When the decreasing has been completed, at least one Knitmaster Needle **must** remain at the **end** of the row.

## Turning Within the Row

As the Ribmaster Needles have no Holding Position, the Ribmaster stitches must be transferred to the corresponding Knitmaster Needles before one can turn within the row.



## Knitting a Selection of Popular Ribs

### 1 × 1 RIB (Fig. 11).

Both Cam Boxes are on the right-hand side. Both Gate Cam Release Levers are pointing upwards towards the Needle Heads.

- Row 1 (a) Ribmaster Cam Box with wool. ←
- (b) Knitmaster Cam Box without wool. ←
- Row 2 (a) Ribmaster Cam Box with wool. →
- (b) Knitmaster Cam Box without wool. →

### 1 × 1 FISHERMAN'S RIB ON PURL SIDE (Fig. 12).

The same as above pattern, but Gate Cam Release Lever of the Knitmaster Cam Box is pointing downwards towards the Needle Butts and the Gate Cam Release Lever of the Ribmaster Cam Box is pointing upwards towards the Needle Heads.

### 1 × 1 FISHERMAN'S RIB ON PLAIN SIDE (Fig. 13).

Both Cam Boxes are on the right-hand side. The Gate Cam Release Lever of the Knitmaster Cam Box is pointing upwards towards the Needle Heads and the Gate Cam Release Lever of the Ribmaster is pointing downwards towards the Needle Butts.

- Row 1 (a) Knitmaster Cam Box with wool. ←
- (b) Turn the Control Handle with the Red Marker round to left (see Fig. 10). Pass the Ribmaster Cam Box across without wool. ←
- At end of row turn Control Handle back again to original position with Red Marker pointing upwards.
- Row 2 (a) Ribmaster Cam Box with wool. →
- (b) Knitmaster Cam Box without wool. →

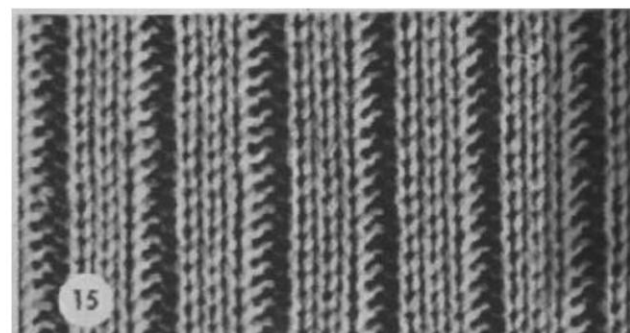
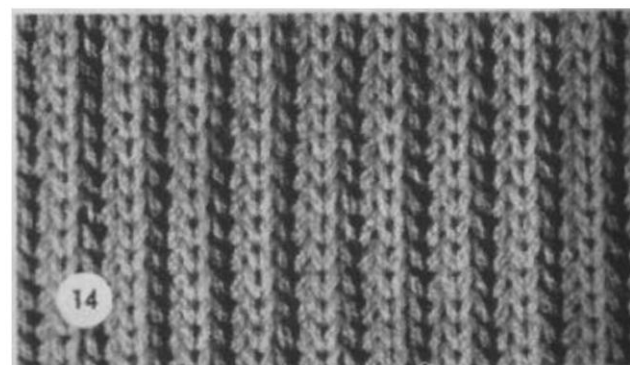
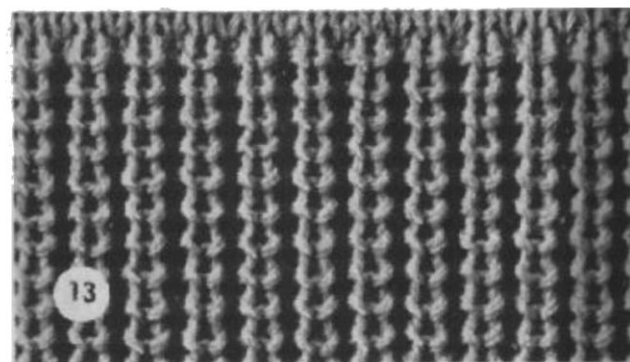
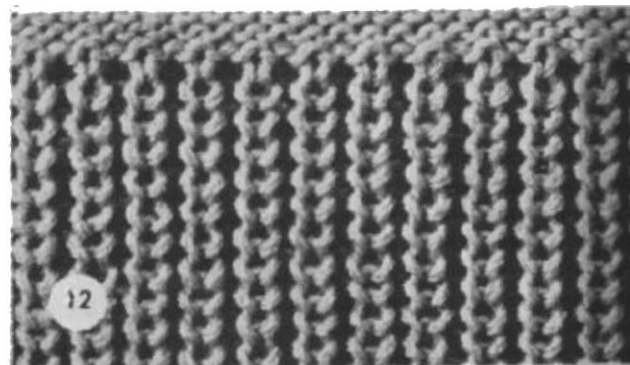
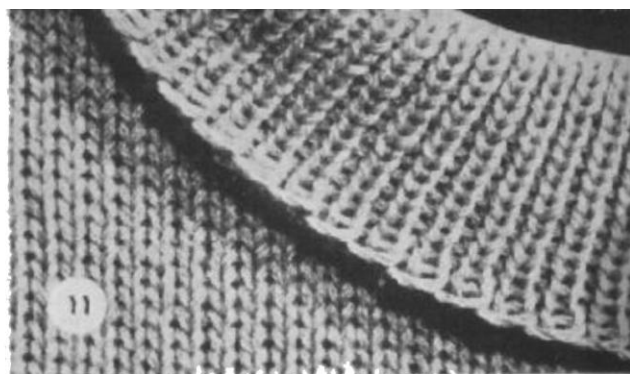
### 1 × 1 DOUBLE-SIDED RIB OR BRIOCHE (Fig. 14).

The same as above pattern, but Gate Cam Release Levers on both the Knitmaster and Ribmaster Cam Boxes are pointing downwards towards the Needle Butts.

### 3 × 1, 5 × 1 AND SIMILAR RIBS (Fig. 15).

Both Cam Boxes are on the right-hand side. Both Gate Cam Release Levers are pointing upwards towards the Needle Heads. The Tele-Tension Dial on the Ribmaster Cam Box should be set at not less than No. 5.

- Row 1 (a) Knitmaster Cam Box with wool. ←
- (b) Ribmaster Cam Box without wool. ←
- Row 2 (a) Knitmaster Cam Box with wool. →
- (b) Ribmaster Cam Box without wool. →



## Suggested Tension Settings for Practice Samples

Fig. 11	Figs. 12, 13 and 14
Knitmaster Tele-Tension Dial set at No. 4. Ribmaster Tele-Tension Dial set at No. 6.	Knitmaster Tele-Tension Dial set at No. 7. Ribmaster Tele-Tension Dial set at No. 9.
Fig. 15	
Knitmaster Tele-Tension Dial set at No. 6. Ribmaster Tele-Tension Dial set at No. 8.	

## Notes on the Use of Double Knitting Wools

For knitting 1 × 1 Rib with double knitting wool, it will usually be found most suitable to set both Ribmaster and Knitmaster Tele-Tension Dials at No. 10. If a Fancy Rib is required in a heavy double knitting wool the Fisherman's Rib (Fig. 12) is recommended at the above tension setting. Remember, double knitting wools vary in thickness and some qualities, therefore, may not be as suitable as others for every variety of Rib.

## Casting Off

All ribbed patterns knitted on the Ribmaster are more elastic than the stocking-stitch on the Knitmaster. Therefore, only one method can be adopted for casting off when using the Ribmaster and that must have an edge with a fair amount of elasticity. It is advisable to knit the last row before casting off at the **loosest** possible tension. If a loose tension is already being used, this row can be knitted by hand, by pulling all the Needles down as far as they will go and forming even looser stitches. You will already have noticed that for all shapings, etc., the Knitmaster Needles are more frequently used than the Ribmaster Needles. This also applies for casting off. All Ribmaster stitches should be transferred on to the corresponding Knitmaster Needles. The Ribmaster is then taken off the front of the Knitmaster as previously explained.

A very loose edge is obtained when the stitches are cast off the Knitmaster by using the Latch Needle Tool, i.e. one stitch is drawn through the other all along the row (as in Method 3 of the Knitmaster Instruction Book).

## Changing Back to Stocking-Stitch after Ribbing

When the required length of ribbing has been knitted, the stitches on the Ribmaster must be transferred on to the corresponding Needles of the Knitmaster. The Tele-Tension Dial on the Knitmaster Cam Box should be re-adjusted as required, and it is important to make sure that the Gate Cam Release Lever on the Knitmaster Cam Box is in the Working Position — pointing upwards towards you before stocking-stitch is commenced.

## Versatility of the Ribmaster

Only a few of the most usual and popular ribs have been described in detail in this Manual, but after a little practice and by using your imagination, you will find yourself producing many other interesting patterns and variations. Broken ribs, cable and open-work rib patterns and basket effects can all be easily and quickly knitted as well as many other attractive designs.

You will find that after a short time you will be able to design many lovely and exclusive knitted fabrics of your own by using the versatile Ribmaster with your Knitmaster!

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*Please address any enquiries concerning this Manual or the Ribmaster to Department RMA1, Knitmaster Knitting Centre, 192-196 Kensington Church Street, London, W.8. Although every reasonable care has been taken to ensure that the instructions in this Manual are correct, Knitmaster Ltd. cannot accept responsibility for any errors which may have occurred in spite of such precautions.*

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