



INSTRUCTIONS

for the



HOME KNITTING MACHINE

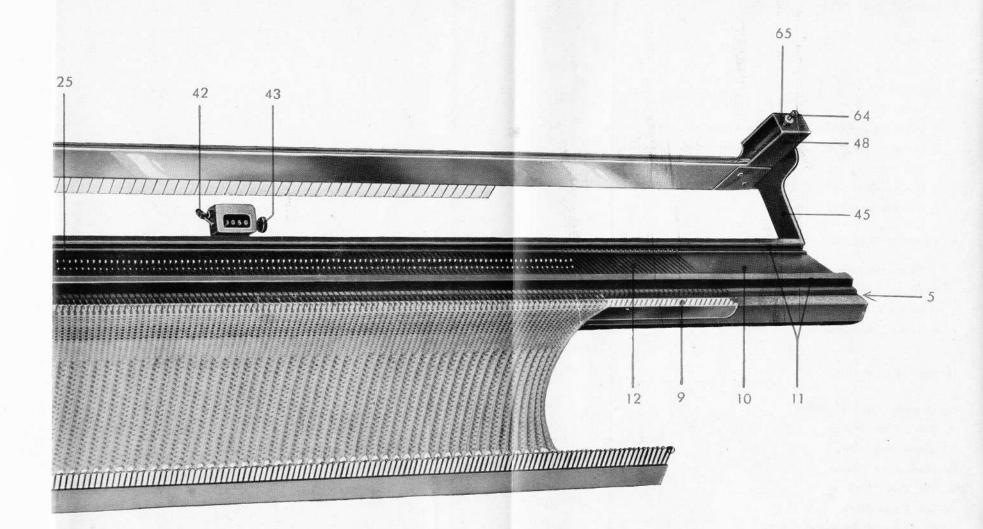
with

RIBBING ATTACHMENT

INDEX

A DESCRIPTION	+
1.) MACHINE WITHOUT ATTACHMENT	4
a) The Base	4
b) The Needle-Bed	4
c) The Slide	6
d) The Wool Feed Control	7
e) Row Counter	7
f) Accessories	8
2.) RIBBING ATTACHMENT	10
a) Main Bar and Supporting Arms	10
b) Needle-Bed	11
c) The Racking Handle	11
d) Cable Assembly	11
e) Accessories	12
B HOW TO WORK THE KNITTING MACHINE	13
1.) BASIC MODEL (without Attachment)	13
a) Setting up of Machine	13
b) Preparing for Casting-on	13
c) Quick Cast-on with Open Stitches	14
d) Stocking Stitch	15
e) Cast on by Winding (for finished edge)	18
f) Ripping out knit-work on Machinee	19
g) Maintaining Balance by use of Weights	20
.) RIBBING ATTACHMENT	20
a) Preparing	20
b) Casting-on	22
c) Ribbing	00

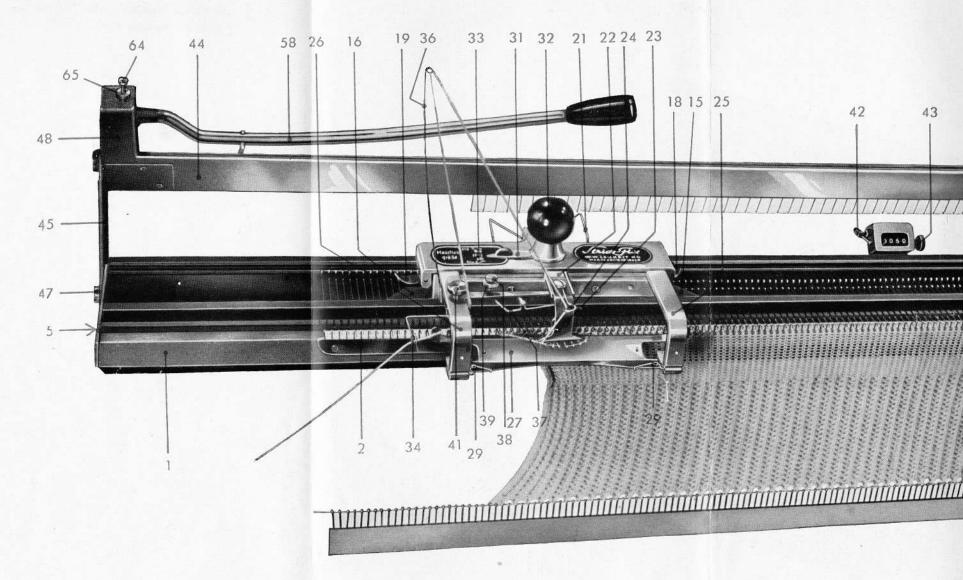
C SHAPING AND PATTERN MAKING	25
1.) SHAPING	25
a) Increasing	25
b) Casting off	26
c) Decreasing	27
d) Increasing and Decreasing in the centre of a row	27
e) Changing from Ribbing to Stocking Stitch and	
vice versa	27
f) How to shape neckline	28
g) Button-holes and Pockets	28
2.) PATTERN MAKING	28
a) Pattern in inches	28
b) Making a sample	29
c) Pattern in Stitches and Rows	29
d) Taking Measurements	29
D STITCH PATTERNS	30
1.) Changing Size of Stitches	30
2.) Turning the Work	30
3.) Transferring Stitches	31
4.) Leaving out Needles	31
5.) The Tuck Stitch	32
6.) The Patent Stitch	33
7.) Variations of the Patent Stitch	. 34
8.) Imitation Tuck with Ribbing Attachment	34
E CARE AND MAINTENANCE OF MACHINE	35
INDEX OF ILLUSTRATIONS	36



- 26 Left Arm of Slide
- 27 Stitch Rejector Blade
- 29 Adjusting Spring
- 31 Tension Indicator
- 32 Knob
- 33 Tension Scale
- 34 Wool Feed Eye

- 36 Upright Wire Spring
- 37 Brake Lever
- 38 Set. Screw
- 39 Locking Nut
- 41 Holding Screw
- 42 Row Counter Arm
- 43 Row Counter Winder

- 44 Ribbing Attachment Plate
- 45 Supporting Arm
- 47 Rear Fastening Screw
- 48 Casing
- 58 Racking Handle
- 64 Adjusting Screw
- 65 Locking Nut



- 1 Base
- 2 Stitch Former
- 5 Front of Base
- 9 Stitch-Numbering Scale
- 10 Needle-Bed
- 11 Guide Rails
- 12 Needle Grooves
- 15 Right Cam Plate

- 16 Left Cam Plate
- 18 Right Needle Guide
- 19 Left Needle. Guide
- 21 Row counter Trip
- 22 Centre Arm of Slide
- 23 Wool Guide
- 24 Wool Guide Eye
- 25 Right Arm of Slide

- 26 Left Arm of Slide
- 27 Stitch Rejector Blade
- 29 Adjusting Spring
- 31 Tension Indicator
- 32 Knob
- 33 Tension Scale
- 34 Wool Feed Eye

A. DESCRIPTION

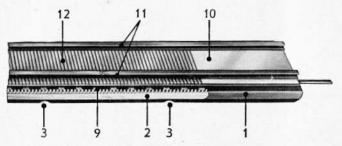
1.) MACHINE WITHOUT ATTACHMENT

a) The Base (1) (ill. 2 and 3)

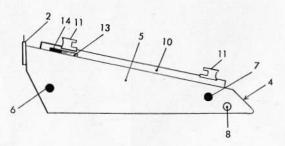
This carries the needle-bed and, on its front, the stitch former (2). On the back there are three sets of holes (4), into which the moveable row-counter may be fitted. On front of base (5) there are also four holes (3) in any of which the table-clamps may be inserted. At each end of the machine there are screw holes (6, 7) for fastening the ribbing attachment. The stitch numbering scale (9) for 181 needles is placed between the needle-bed and the stitch former.

b) The Needle-Bed (ill. 2 and 3)

The needle-beed (10) has 181 grooves (12) in which the needles are placed, and also two guide rails (11) for the Slide. Under the front rail there is a groove (13) stretching along the entire length of needle-bed. The groove is filled out by a Pertinax bar (14). When changing needles, remove bar and lift out needles.



ill. 2 Base and Needle-Bed

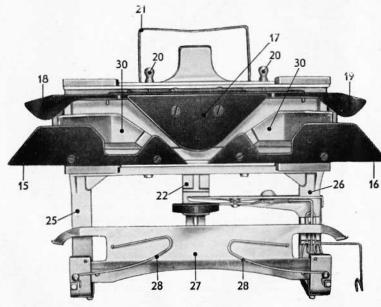


ill. 3 Base and Needle-bed side - view

e) The Slide (ill. 4 and 5)

The Slide consists of a body with four brass guides, keeping it on the rails. The body of the Slide has three cam plates (15, 16, 17), two needle guides (18, 19) which can be put out of action by moving the needle guide control knobs (20) on the back of the Slide. In addition there is the row counter trip (21) on back of Slide.

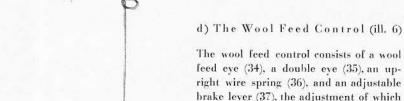
The Slide frame has on its centre arm (22) the wool guide (23) and the wool guide eye (24). The stitch rejector blade (27) is carried by the right (25) and left (26) arm of the Slide and kept in position by adjusting springs (28, 29), which are themselves fixed to the arms of the Slide frame. On each side of the Slide there is a hinge (30) holding the needle guide plates. The indicator (31) is controlled by the knob (32) on top of the Slide, to determine the size of stitches. This indicator moves on a scale (33), indicating twenty sizes, and is fixed or loosened by turning the knob.



ill. 5 Underside of Slide

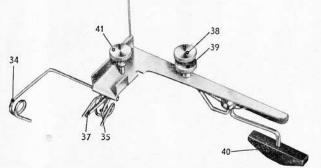


ill. 4 Slide



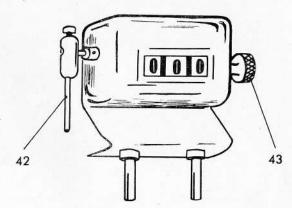
feed eye (34), a double eye (35), an upright wire spring (36), and an adjustable brake lever (37), the adjustment of which can be controlled by a set screw and nut (38, 39), the brake lever (37) moving on the needles in working position. The wool feed control is fixed by a holding screw (41) to the left arm of the Slide frame.

ill. 6 Wool Feed Control



e) Row Counter (ill. 7)

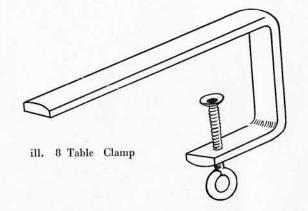
The row counter may be set at three different positions on base of frame. It operates by means of an arm (42), counting rows automatically each time the Slide passes. In order to set back the counter to 000, turn winder (43) backwards.

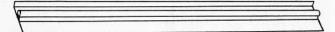


ill 7 Row Counter

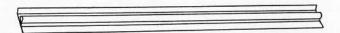
f) Accessories

2 Table Clamps	(ill. 8)
2 Wide and 2 Narrow Bars for holding needles in position.	(ill. 9 and 10)
1 Three-part Comb for rapid Casting-on	(ill. 11)
4 Weights, 5 oz.	(ill. 12)
2 Weights, 10 oz.	(ill. 13)
6 Hooks for Weights	(ill. 14)
1 Patent Crochet Hook	(ill. 15)
1 Latch Hook.—	(ill. 16)
Auxiliary Wool Guide.	(ill. 17)
Spare Needles.	

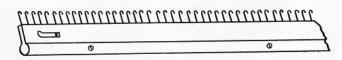




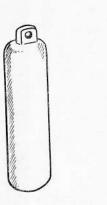
ill. 9 Wide Bar



ill. 10 Narrow Bar



ill. 11 Three-part Comb for Casting-on

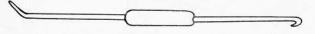




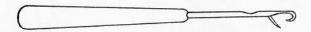


ill. 12 Weight 5 oz. ill. 13 Weight 10 oz.

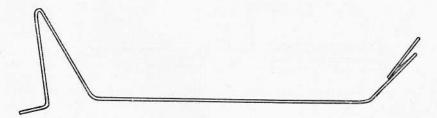
ill. 14 Hook for Weight



ill. 15 Patent Crochet Hook



ill. 16 Latch Hook



ill. 17 Auxiliary Wool Guide

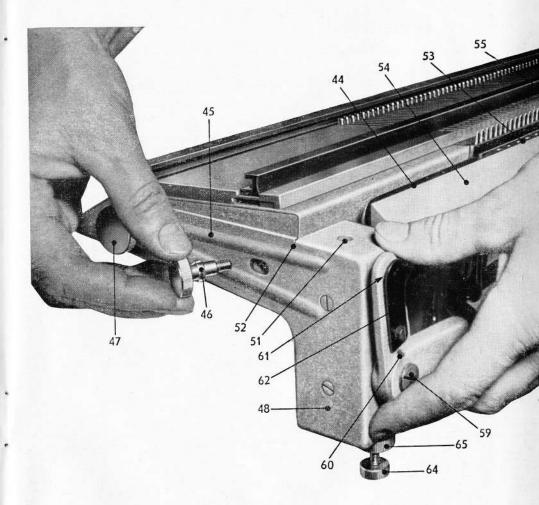


ill. 18 Plain-Needle

2). RIBBING ATTACHMENT

a) Main Bar and Supporting Arms

The latter are firmly connected by means of the plate (44). Each side is provided with slots (50) to receive the cable ends and with holes (51) to lubricate the guide bars. On the supporting arms are red indicators (52), to mark the correct position of the attachment.



ill. 19 Fixing Ribbing Attachment to Machine

b) Needle Bed

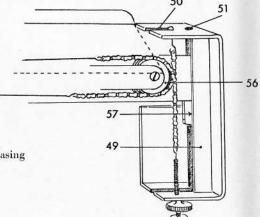
Consists of a bar carrying the needles (53) with 90 holes to receive the ribbing needles. The bar is fixed by screws to the main bar (54). In order to keep the ribbing needles in place ten metal bands (55) provided with catches are edged between needle bed and the main bar.

Pulleys (56) are located to right and left of the main bar of the cable assembly. The two extreme ends of the needle bar are fitted with roller bearings (57) which move in the guide bars of the casing. (ill. 20)

c) The Racking Handle (58)

Is maintained in starting position by a bearing (59) which is fixed in the casing on the left side by nut and retaining ring. To lubricate

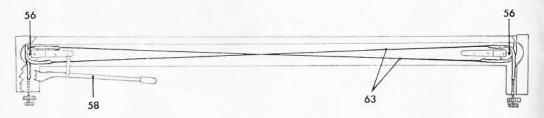
this bearing there is a small hole (60). An U-shaped transverse connects the long arm of the lever with the needle-bed. A short arm contains a steel-ball (61) which is pressed against the casing by the position spring (62); this is where the ball clicks in, thereby setting the correct position of the handle.



ill. 20 Sectional View of Right Hand Casing

d) Cable Assembly (ill. 21)

This construction consists of twin cables (63), the two pulleys (56) already mentioned, and the two adjusting screws (64) with locking nut (65) for adjusting the cables.



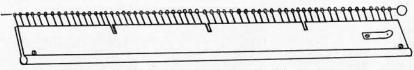
ill. 21 Diagram of Cable Assembly

e) Accessories

1 long and 1 short Casting-on Comb with Closing Wire
1 long and 1 short Flat-Weight
3 Hooks for Flat Weights
1 Latch Opener
Spare Needles
(ill. 23)
(ill. 24 and 25)
(ill. 26)
(ill. 27)



ill. 22 Purl-Needle



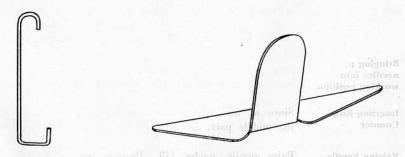
ill. 23 Casting-on Comb with Closing Wire



ill. 24 Long Flat-Weight



ill. 25 Short Flat-Weight



ill. 26 Hook for Flat-Weight

ill. 27 Latch Opener

Guides

B. HOW TO WORK THE KNITTING MACHINE

1.) BASIC MODEL

(without Attachment)

a) Setting up of Machine

How to clamp the Machine

The machine is clamped to the table edge. The clamps must hold down the opposite underneath edge of the machine. Thereby the machine is secured against tilting and slipping. It is essential that the table surface should be perfectly even.

When putting attachment out of action

All plain needles are pushed to rear.

Folding back of Ribbing Attachment Take out two front fastening screws (46) of the ribbing attachment. Slightly loosen the two rear fixing screws (47), pull attachment forward and then fold back.

Fitting in the Slide

The Slide (page 6) is inserted from the right hand side into the guide rails (11). Leave on right hand side of machine.

b) Preparing for Casting-on

Setting Size of Stitches

For your first attempt use medium wool. Now set tension indicator at number 10. In order to set tension turn knob (32) to the left until indicator (31) can be moved. After having set stitch-size fasten knob.

Bringing plain needles into working position

Bring forward limited number of needles — say 58 — in centre of machine (29 on each side of 0 — see scale).

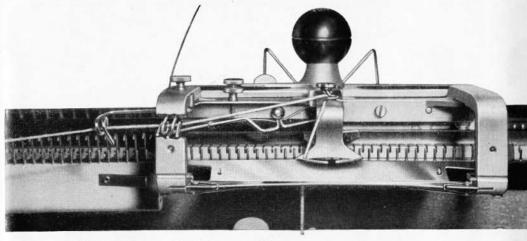
Inserting Row Counter Since at our first attempt at knitting we work with the middle part, fix row counter in the middle position.

Raising Needle Guides Raise needle guides (18, 19) by moving knobs (20) at back of Slide to the right.

Inserting of thread (ill. 28)

The brake lever (37) of the wool feed control (page 7) is pressed out of the double eye (35). Now thread woolend from the left through wool feed eye (34), then thread through double eye (35), through guide eye (24), through opening of guide (23), allowing wool end to fall between stitch rejector blade (27) and stitch former (2).

The stitch rejector blade (27) may be used in two positions:



til. 28 Threaded Wool

Setting of Stitch Rejector Blade Position 1, for plain knitting, the edge sits close to the stitch former.

Position 2, for ribbing, the edge is pushed back $^{1}/_{2}\,^{\prime\prime}$ from the stitch former.

In both positions the blade is spring retained.

As the present exercise is plain knitting, set the stitch rejector in Position 1.

 c) Quick Cast-on with Open Stitches (ill. 29)

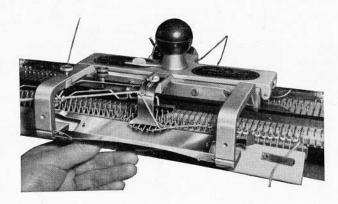
Using the Comb

The back of the comb (ill. 11, page 3) should face the machine, its hooks uppermost. Hold comb at an angle of 45 0 and insert hooks between the needles in use, so that they sit close behind the stitch former (2). Hold comb in left hand with wool supply running over back of left wrist.

Casting-on

Push the Slide towards the needles, and hold the loose end of wool taut, until the wool guide (23) introduces the wool into the first needle. The wool end may then be released. Continue pushing Slide across needles until the stitch rejector blade is clear of the comb. Allow the comb to hang, after a gentle pull downwards. The cast-on wool should now have been passed in zig-zag fashion round the needles and the hooks of the comb.

The Casting on is now finished, and, after slipping the loose end of the wool behind the spring clip on the comb, continue knitting.



ill. 29 Quick Cast-on

d) Stocking Stitch

Grasp knob (32) on Slide with right hand, with wool passing from wool guide eye (34) and held in the left hand.

Knitting

Push Slide slowly towards the needles with the wool held taut, until, once again, the wool guide has introduced the wool into the first needle. Then allow the wool to run freely trough the hand until the row is completed. Repeat until three rows are completed.

Adjustment of needle Guides

After the third row has been knitted, needle guiden (18, 19) should be lowered. This is done by sliding knobs (20) to the left. This is important when knitting without weights.

Practise Feeding The wool Knit a few more rows applying the slight tension required on the wool until taken by the first needle. Do not forget to allow the wool to run freely when knitting has commenced.

The Wool Supply When in a ball, wool is inclined to unwind too slowly for the machine. A free supply should be ensured by gently loosening with the left hand. The loose skein is to be recommended for machine knitting, and can be laid loosely in a box.

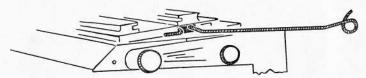
Auxiliary Wool Guide (ill. 30)

Using the Assem-

Control (ill. 32)

bly for Wool Feed

With a free-running supply of wool the auxiliary wool guide (66) should be used. This guide is clipped into position in the groove at the left hand end of the needle bed. (13)



ill. 30 How to fix the auxiliary Wool Guide

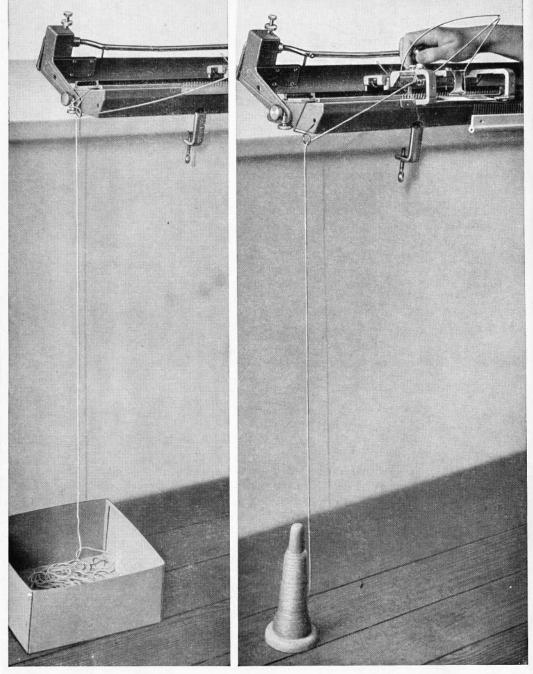
Having practised feeding the wool by hand, now let the wool feed control assembly do the job for you. Make the following adjustments:

Lift wool between guides (35) and (24) and pass through loop at top of spring (36). Do not allow wool to become twisted.

Next press brake lever (37) up between the twin guides (35). Knit another row and you will see how the shoe (40) rides on the needles in use and the brake lever drops to allow the wool to run freely. At the end of the row the shoe drops off the needles, causing the lever to rise and check the run of the wool. The checking of the wool causes the spring to bend. As the Slide approaches the needles for the next row of knitting, the spring straightens, keeping the wool taut until it has been introduced into the first needle.

The power of the brake lever can be adjusted by set screw (38).

Do not move Slide too far past the end of the row; enough to allow the last stitch to be completed should be sufficient.



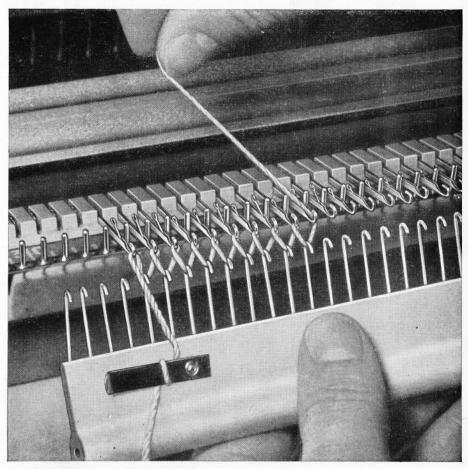
Il. 31 Knitting from skein in box ill. 32 Using Wool Feed Control and Bobbin

e) Cast on by winding (for finished edge) (ill. 33)

In order that the original cast on may be a finished edge, casting on by winding is the method to employ.

Opening Latches

The number of needles required should be brought forward and, in order to open the latches, the Slide is moved slowly across with the needle guides (18, 19) lowered.



ill. 33 Casting-on by Winding

Fixing Needles

To hold the needles steady while casting on, the needleholding bars should be used. The wide bar should sit to the rear, flat on the needle bed. The narrow bar is then eased in between the projections on the needles and the front guide rail. When properly fixed it should not be possible to move the needles at all.

The comb.

Next fasten the end of the wool under the spring clip on the left hand side of the comb. Hold the comb in the left hand with the hooks uppermost and facing away from the machine.

Winding

The wool should now be wound anti-clockwise round each needle and pass alternately under the hooks on the comb. When the wool has been introduced into the needles, the holding bars should be removed. The wool supply can then be fed through the guides on the Slide and knitting commenced.

f) Ripping out knit-work on machine (ill. 50)

In event of a mistake being made while knitting, it may be necessary to rip out work. First steady the needles with the holding bars, and open all the latches. Pull the wool gently but firmly back across the row. As the top row is ripped out the preceding row will take its place on the needles. Repeat until the number of rows required has been ripped out.

When ribbing, ripping out should be done as follows:

- Adjust attachment bed to allow purl needles to be at the same level as the plain needles.
- 2. Open latches.
- 3. Pull wool back across row, round the purl needles, and slightly towards the rear to clear the plain needles. The action is in zig-zag fashion.

ill. 50 Ripping on Machine

g) Maintaining balance by use of weights.

In order to maintain an even tension during knitting, it is necessary to have an even distribution of weights. During increasing and decreasing the weights may become unevenly distributed, and care should be taken to watch for any adjustment necessary.

2.) RIBBING ATTACHMENT

a) Preparing

Firstly remove the Slide and auxiliary wool guide (66) if in use. Lower the attachment and insert front fastening screws (46) and leave loosely screwed. Then ease the attachment into position until the red grooves (52) are in line with the edge of the base.

With the attachment in position first tighten the rear screws and then the front screws.

Inserting Purl Needles

Plain Needles into working position

Setting-up

For the first attempt try say 56 needles. Starting from 0 on the scale, insert 27 needles to the left and 27 needles to the right. The needles should be inserted into the holes, latch facing outwards, and gently pressed downward until a click indicates they are in position. The plain needles should now be brought into position. Only every other needle is required. It is very important when ribbing that the extreme stitches should be plain ones. Therefore ensure that the needles at the beginning and end of the row are plain needles.

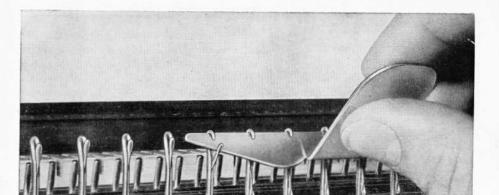
The auxiliary guide (66) may now be clipped into position, and the Slide mounted on the guide rails. Next raise the needle guides (18, 19) on the Slide, and press the stitch rejector blade back into position 2.

The wool should now be threaded through the guides on the Slide in the manner already shown. The loose end must hang over the front of the stitch rejector blade and down between the stitch former (2) and the attachment needle-bed (53).

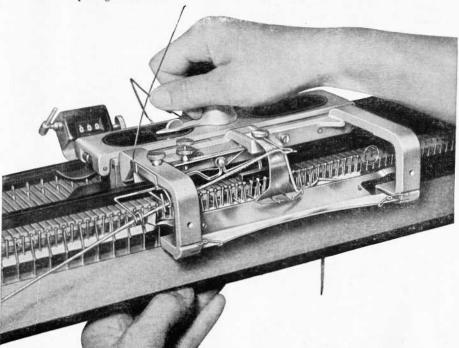
Make sure the attachment needle-bed is in the central position. Movement of the bed is controlled by the racking handle (58). The bed has three positions: central, one movement up, and one down. In each position the retaining plunger can be felt to click into position.

Opening Latches of Purl Needles ill. 34)

The latches of the purl needles may be opened by the patent needle opener (27) which is shown in use in ill. 34.



ill. 34 Opening of Latches



ill. 35 Casting-on with Ribbing Attachment

b) Casting on (ill. 35)

Inserting comb for Ribbing

The ribbing comb should be inserted from underneath the machine between the stitch former (2) and the ribbing attachment plate (44). The closing wire of the comb should show just above the teeth of the stitch former (2). Be sure that the teeth of the comb sit tooth for tooth in front of the stitch former, thus allowing the plain needles free movement.

The loose end of the wool should now be slipped under the spring clip on the comb. Then draw the Slide across the needles, and, when the row is completed, allow the comb to hang. Check that the closing wire is below the plain needles and that the comb is free to move downwards as knitting progresses.

Attaching Bar Weights

Casting-on

The bar weight should now be attached to the comb by means of the hooks provided. III. 38 on page 24 indicates the manner in which the weight should hang. Using the racking handle (58) the attachment needle bed is raised to the up position. This allows the wool round the purl needles to slip behind the latches. Lower the needle bed to the centre position once more.

c) Ribbing

Knitting with the ribbing attachment is done in two operations:

- The plain stitches are formed by the Slide activating the plain needles.
- Stitches on the purl needles are formed by operation of the lever.

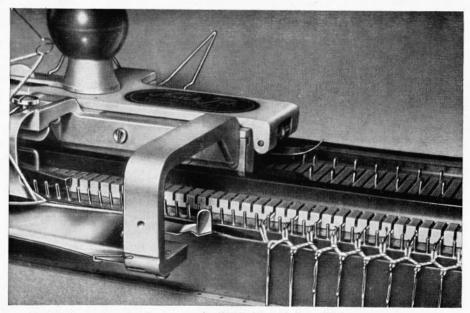
Continue knitting by drawing the Slide once more across the needles. Fresh wool has now been introduced into the latches of the purl needles. The lever is now moved into the down position, allowing the purl needle latches to close upon the wool and be drawn through the stitch previously formed.

In order to prepare the purl needles to receive freshwool, the lever is now moved into the up position and then back to the centre position. The formed stitches should now be sitting behind the latches.

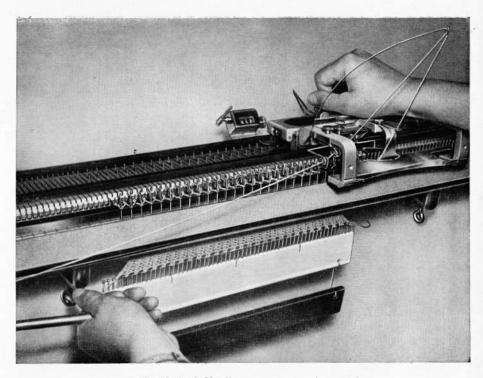
Contiune knitting, moving the lever slowly until the three positions are familiar. Repeat the instructions with each row of knitting.



ill. 36 New Wool on Latches of purl Needles



ill. 37 Formed purl Stitches



ill. 38 Purl Needles open to receive wool

Use of Extra Weights When several rows have been knitted, hang in side weights (5 oz.) one each side of the knitting, and as high up as is possible. These weights should be raised approximately every ten rows.

The heavier weights (10 oz.) should be used according to the size of work in hand, and the texture of the wool. Do not hang nearer than 4" to the edge of the work and, once again, as high up as possible.

Weighting prevents the work from riding up and allows the machine to work smoothly.

Weights do not stretch the work during operation, but should be removed when the machine is not in use.

Wool Control Assembly When ribbing, the wool control assembly may be employed in the same manner as shown earlier when knitting stocking stitch.

The wool brake should be adjusted to suit requirements.

Now you have learned how to knit simple pieces with the Basic Model and the Ribbing attachment, and have become acquainted with the elementary principles of the machine.

In the following chapters it is proposed to show you how to shape, to make patterns, and produce the garmentsyou desire.

C. SHAPING AND PATTERN MAKING

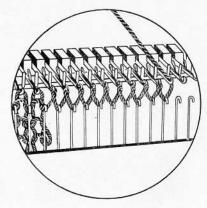
1.) SHAPING

a) Increasing

In order to increase the width of the work, additional needles may be brought into action. The addition should always commence at the beginning of a row.

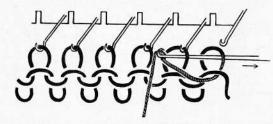
When ribbing, an extra purl needle is added, and, as the end stitch should always be a plain one, bring forward an extra plain needle. Make sure the latch of the purl needle is open before commencing to knit.

When an increase of more than one stitch is required, it is recommended that the increase be made by the ,,winding on "method (see ill. 39) using the casting-on comb.

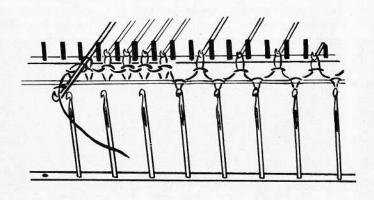


ill. 39 Increasing by winding

Always commence at the end of the last completed row. Pick up the edge stitch on the crochet needle, prick into second stitch, which is left on its needle, and draw wool through both stitches as when crocheting. Now lift the second stitch from its needle. Prick into the third stitch and draw wool through. Lift the third stitch from its needle. Repeat until the required number of stitches have been cast off.



ill. 40 Casting off with Crochet Hook



ill. 41 Casting off while Ribbing

When ribbing, purl stitches should be transferred to plain needles before casting off.

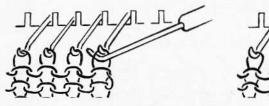
Removing Purl Needles.

After casting off is completed unwanted needles must be put out of action. Purl needles should be removed from the bed by a quarter turn anticlockwise and then lifted.

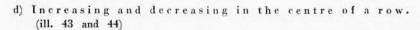
c) Decreasing (ill. 42)

To decrease at the end of a row the end stitch should be transferred to the next needle. The empty needle should then be pushed back and out of action.

When decreasing by a number of stitches, cast off with the crochet hook.

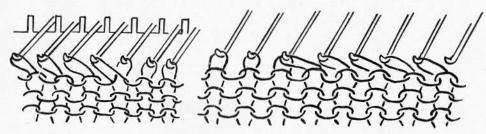


ill. 42 Decreasing



To increase, first remove work on a stitch holder. Then bring forward the additional needles required. Replace stitches from right to left, making stitches where necessary. Stitches are made by lifting the loop stitch of the previous row.

When decreasing, transfer stitches to stitch holder, and put unwanted needles out of action. Then replace stitches on needles and hang two together where decrease is required.



ill. 43 Increasing within knitting

ill. 44 Decreasing within knitting

e) Changing from Ribbing to stocking stitch and vice versa.

When ribbing, only every other plain needle is in use. To change from ribbing to stocking stitch, the plain needles not in use should be brought forward and the purl stitches transferred to them.

The process should be reversed when changing from stocking stitch to ribbing.

f) How to shape neckline.

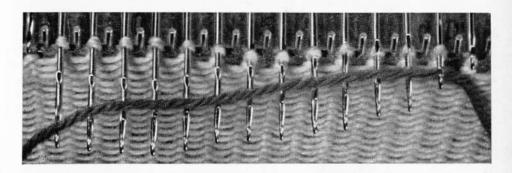
First divide the work as each part must be knitted separately. Transfer section I to a stitch holder and let it hang. Continue knitting section II until completed. Remove, and commence work on section I.

g) Button-holes and pockets. (ill. 45)

Vertical button-holes and pockets are made in the same manner as described with necklines.

When horizontal work is required, use the following method always using plain needles:

- 1. Push needle forward by hand allowing stitch to ride over the latch.
- Introduce wool of contrasting colour into latch and pull needle back to complete the stitch.
- 3. When work is complete the spare wool is pulled through leaving an opening. The stitches edging the opening are finished off by crochet hook in the same way as casting off.



ill. 45 Buttonholes etc., using spare wool

2.) PATTERN MAKING

a) Pattern in inches

When making a pattern, the first task is to convert measurements into stitches and rows. This can be done by making a paper pattern to the shape and size required, and by knitting samples in the ply of wool to be used. From the samples can be calculated how many stitches and rows are required to the inch. This information can then be used to convert the measurements of the paper pattern.

b) Making a sample

To make a good sample it is necessary to cast on about 40 stitches and knit 60 rows. Without casting off, take the sample from the machine and lay it on a flat surface. Do not stretch the sample. With pins mark out a 4" square and count the number of stitches and rows within this measurement.

- e. g. 4" width 28 stitches. 4" length — 40 rows
 - 1" width 7 stitches
 - 1" length 10 rows.

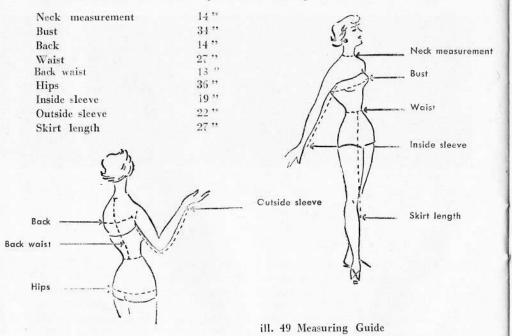
c) Pattern in Stitches and Rows

When the measurements have been converted to stitches and rows, the results should be marked on the pattern which can be referred to while knitting is in progress.

d) Taking Measurements. (ill. 49)

Using the method shown in ill. 49, a measurement chart should be compiled under the headings shown below.

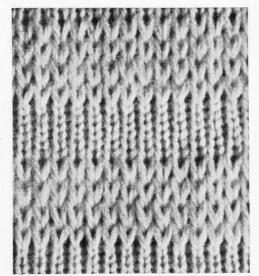
The measurements shown correspond to an average size.

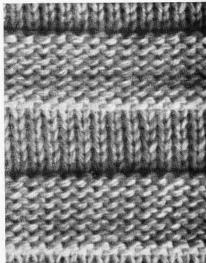


D. STITCH PATTERNS

1. Changing size of stitches (ill. 52)

A variety of stitch patterns is made possible by making simple adjustments to the machine. For example, when knitting stocking stitch, an attractive pattern can be made by changing the size of the stitches. Set the tension scale to five and after knitting a few rows change the tension to 20 and repeat the number of rows. The result gives an attractive stripe effect and may be varied according to taste.





ill. 52 Stripes by changing size of stitches

ill. 53 Turning knitwork

2. Turning the work (ill. 53)

Centinue with stocking stitch and decorative horizontal stripes may also be obtained by repeated turning of the work. The stitches may be removed from the machine by use of a stitchholder, the work reversed, and re-hung on the machine. To turn by hand is naturally a slow process, and may be speeded up considerably by use of a transfer comb.

3. Transferring stitches (ill. 54 and 55)

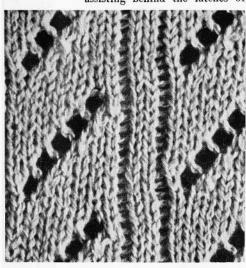
By transferring stitches, holes and twist cord patterns can be made.

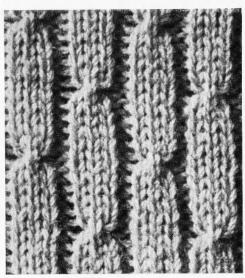
To make a hole, transfer a stitch to the next needle and knit two rows.

A variation on this pattern can be made by knitting only one row after the transfer, and by transferring the loose thread which has formed on the free needle on to the next needle.

To knit the twist cord pattern, insert every second purl needle into the ribbing attachment bed. This leaves three plain needles between purl needles. The twist is made with the plain stitches. Remove the centre stitch, take the other two stitches on to the crochet hook, and switch their positions. The centre stitch should be returned to its needle.

When knitting the next row, remember that the twisted stitches may need assisting behind the latches of the needles. To assist, use the crochet hook.



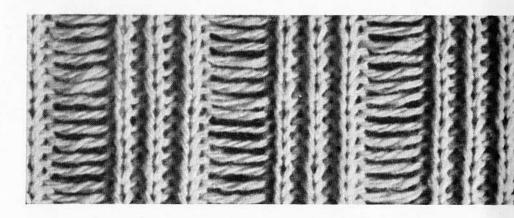


ill. 54 Combined Pattern by transferring stitches with some needles out of action

ill. 55 Twist Cord Pattern

4. Leaving out needles (ill. 54 and 56)

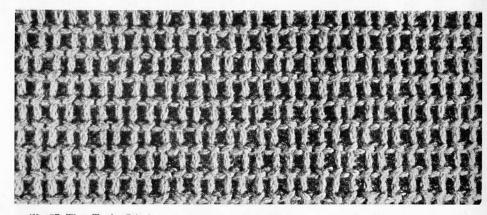
By leaving out neelles here and there, a ladder effect is obtained. When starting this pattern, the stitch is transferred from its respective needle on to the next needle. The empty needle is then pushed back out of action.



ill. 56 Leaving out Needles

5. The Tuck Stitch (ill. 57)

To form this stitch, go two or three rows down the knitting, pick up a stitch and return it to its respective needle. This pattern may be varied by hanging the lifted stitch on to the next needle to the parent needle. The size of the tuck varies with the depth of the row lifted.



ill. 57 The Tuck Stitch

6. The patent stitch (ill. 59)

To make this pattern by hand, drop alternate stitches, and crochet up every second row of the ladder.

With the ribbing attachment the patent stitch is made automatically. Cast on in the usual manner, and proceed as for ordinary ribbing until the third row.

The movement of the racking handle for the third row is as follows:

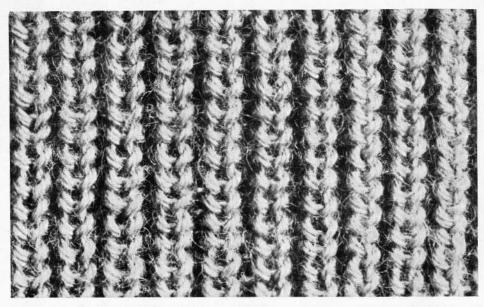
- 1. To the up position.
- 2. Return to the centre position.

For the fourth row the handle action is:

- 1. To the down position.
- 2. To the up position.
- 3. Return to the centre position.

Continue knitting the third and fourth rows alternately.

Variations of the patent stitch are numerous. By leaving out purl needles at intervals and returning them after a few rows, an attractive block pattern is made.



ill. 59 The Patent Stitch

7. Variations of the patent stitch (ill. 60)

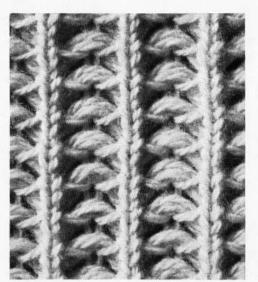
Another method is to cast on in the usual manner and knit two rows as for ordinary ribbing. Then remove three out of every four purb needles, the stitches being transferred to added plain needles. Knit four rows without moving the racking handle. After the fourth row, the racking handle should be operated as follows:

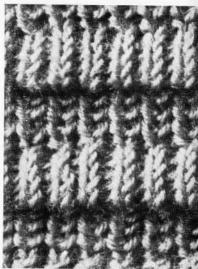
1. To the up position and return to centre.

Knit the fifth row and the handle should be moved:

2. To the down position, then the up position, and return to centre.

Repeat the instructions until required length is achieved. The racking handle should be handled carefully to prevent strain on the purl needles.





ill. 60 Variation of Patent Stitch

ill. 61 Imitation Tuck

8. Imitation tack with ribbing attachment (ill. 61)

Leave the racking handle in the down position, and continue knitting for a few rows only. If desired, a tighter tension may be used for these rows. When the attachment bed is again brought into operation, the purl latches should be cleared in the usual way. i. e. handle to the up position and returned to centre.

Knit as usual for ribbing until another tuck is required, then repeat the instructions.

E. CARE AND MAINTENANCE OF MACHINE

When oiling use only the lightest of machine oil, and use sparingly. The following is a list of parts which must be oiled from time to time:

- 1. Guide rails.
- 2. Projections on plain needles.
- 3. Stitch rejector blade guides.
- 4. Needle guide hinges.
- 5. Racking handle bearings.
- 6. The pulley system (through holes in casing).
- 7. The pulley system chain, should it become noisy.

The projections on the plain needles are oiled with a brush, and care should be taken to prevent oil from running into needle grooves.

Wool fibre accumulating in the needle bed must be removed from time to time with a dry brush.

The Slide and guide rails should be wiped with an oily cloth.

For a thorough cleaning of the needle bed, remove all needles. The Pertinax bar should be pulled completely from its housing, and the needles pushed into the "out-of-action" position. Turn the machine over backwards and shake the needles from their grooves. Needles still remaining should be eased out of position.

After the needle bed has been cleaned, replace the needles. The latch of the needle should be closed before insertion into the groove. When all needles are in position, replace the Pertinax bar.

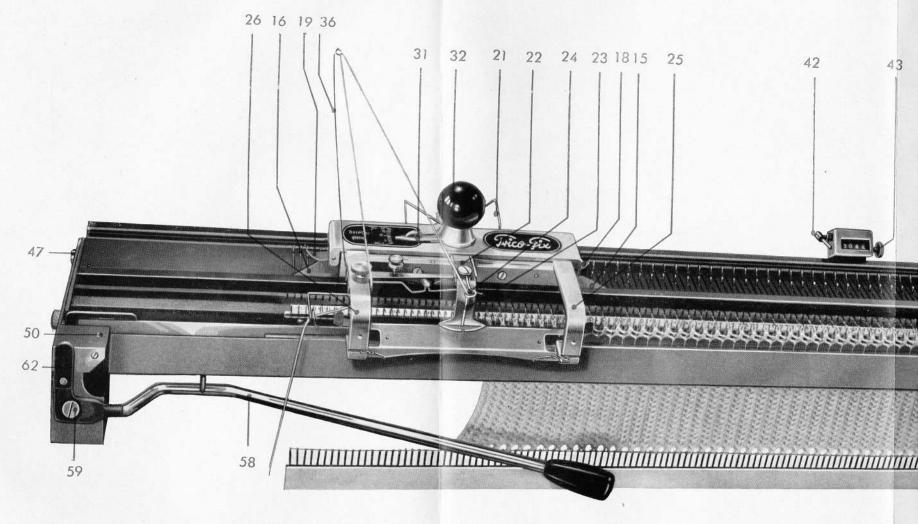
INDEX OF ILLUSTRATION

ill. 1 Handknitting Machine "Trico-Fix" M 54	
by knitting Stocking Stitch	3
ill. 2 Base and Needle-Bed	4
ill. 3 Base and Needle-bed side - view	4
ill. 4 Slide	5
ill. 5 Underside of Slide	6
ill. 6 Wool Feed Control	7
ill. 7 Row Counter	7
ill. 8 Table Clamp	8
ill. 9 Wide Bar	8
ill. 10 Narrow Bar	8
ill. 11 Three-part Comb for Casting-on	8
ill. 12 Weight 5 oz.	9
ill. 13 Weight 10 oz.	9
ill. 14 Hook for Weight	9
ill. 15 Patent Crochet Hook	9
ill. 16 Latch Hook	9
ill. 17 Auxiliary Wool Guide	9
ill. 18 Plain-Needle	9
ill. 19 Fixing Ribbing Attachment to Machine	10
ill. 20 Sectional View of Right Hand Casing	11
ill. 21 Diagram of Cable Assembly	11
ill. 22 Purl-Needle	12
ill. 23 Casting-on Comb with Closing Wire	12
ill. 24 Long Flat-Weight	12
ill. 25 Short Flat-Weight	
ill. 26 Hook for Flat-Weight	12
ill. 27 Latch Opener	12
II. 28 Threaded Wool	12

ill. 29 Quick Cast-on	15
ill. 30 How to fix the auxiliary Wool Guide	16
ill. 31 Knitting from skein in box	17
ill. 32 Using Wool Feed Control and Bobbin	17
ill. 33 Casting-on by Winding	18
ill. 34 Opening of Latches	21
ill. 35 Casting-on with Ribbing Attachment	21
ill. 36 New Wool on Latches of purl Needles	23
ill. 37 Formed purl Stitches	23
ill. 38 Purl Needles open to receive wool	24
ill. 39 Increasing by winding	25
ill. 40 Casting off with Crochet Hook	26
ill. 41 Casting off while Ribbing	26
ill. 42 Decreasing	27
ill. 43 Increasing within knitting	27
ill. 44 Decreasing within knitting	27
ill. 45 Buttonholes etc., using spare wool	28
ill. 49 Measuring Guide	29
ill. 50 Ripping on Machine	19
ill. 52 Stripes by changing size of stitches	30
ill. 53 Turning knitwork	30
ill. 54 Combined Pattern by transferring stitches with	
some needles out of action	31
ill. 55 Twist Cord Pattern	31
ill. 56 Leaving out Needles	32
ill. 57 The Tuck Stitch	32
ill. 59 The Patent Stitch	33
ill. 60 Variation of Patent Stitch	34
ill. 61 Imitation Tuck	34
ill. 62 Handknitting Machine "Trico-Fix" M 54	
knitting with Ribbing Attachment	37a

ill 62 Handknitting Machine ,,Trico-Fix" M 54 knitting with Ribbing Attachment

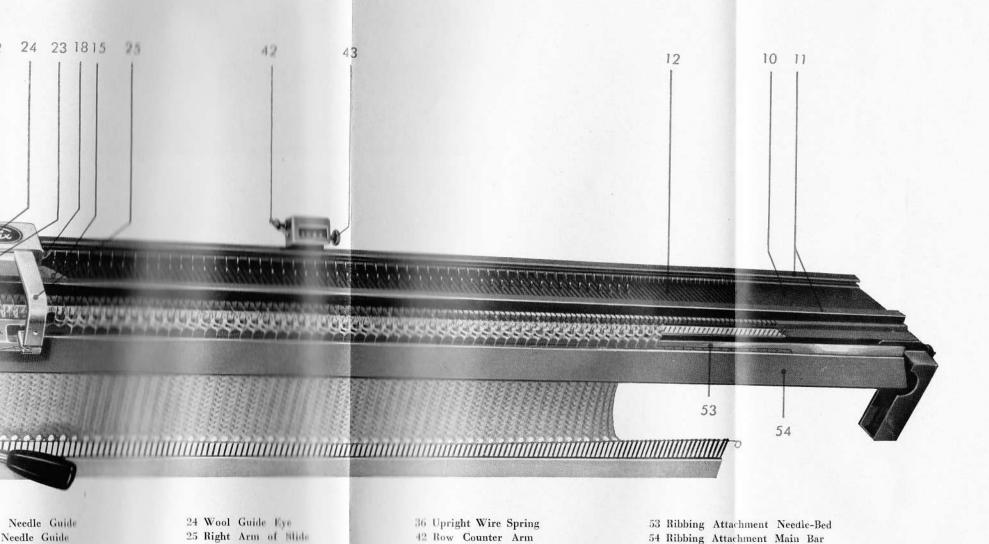
37a



- 10 Needle-Bed
- 11 Guide Rails
- 12 Needle Grooves
- 15 Right Cam Plate
- 16 Left Cam Plate

- 18 Right Needle Guide
- 19 Left Needle Guide
- 21 Row Counter Trip
- 22 Centre Arm of Slide
- 23 Wool Guide

- 24 Wool Guide Eye
- 25 Right Arm of Slide
- 26 Left Arm of Slide
- 31 Tension Indicator
- 32 Knob



43 Row Counter Winder

47 Rear Fastening Screw

50 Slot to receive Cable End

58 Racking Handle

62 Position Spring

59 Bearing

Counter Trip

Guide

e Arm of Slide

26 Left Arm of Mide

31 Tension Indicator

32 Knob



