

Instruction and Pattern Book



The World's Largest Home Knitting Machine Manufacturers!

INSTRUCTION AND PATTERN BOOK

for Knitmaster Automatic Models '3500' & '4500'



KNITMASTER LTD.

Knitmaster Knitting Contres at:

(Head Office) 192-194 KENSINGTON CHURCH STREET, LONDON, W.8

18 SUFFOLK ST. BIRMINGHAM, I 36 CHURCH BANK, BRADFORD, I 2 UNION STREET, HARROGATE 7 BEDFORD STREET, BELFAST

KNITMASTER WAS AWARDED 5 GOLD MEDALS AT INTERNATIONAL EXHIBITIONS!

CONTENTS

Know Your Knitmaster							3
I. Mechanical Details							
Description of the Machine							6
Care and Self-Servicing of the							8
Formation of the Stitches	•••						10
II. Basic Principles of	Knittin	g					
A 31 (2) (3) (20)		_					11
		• • • •	•••	•••	• • • •		12
Open Edge Casting-on				• • • •	•••		13
Closed Edge Casting-on		•••					13
Increasing, Decreasing, Casti					•••		15
III. Special Knitted Effe	_				•••		
17-34-1 YY.	ces an		,				19
Easy-Rib without Hand Too	lq.	***			***	A	19
Diameter 1 December 1 Transaction of	•••						19
Th. '1 1 1			• • • •				19
Turning the Knitting				•••		• • • •	21
			,,,				22
Knitting Several Pieces at the				***			22
Vertical Slits and Neck Oper							23
Buttonholes and Horizontal			• • •				24
Shaping of Heels and Darted	1 Effect:						26
Knitting and Ribbing with E	lastic T	hread		•••		• • •	28
Looped Fabric				•••		• • •	29
Angora Knitting			• • •				29
IV. Patterns							
Introduction to Pattern Knit				•••	• • •	• • •	30
Patterns based on Multi-Ten			• • •	***			31
Patterns based on Omitted S	titches	• • •	• • •	• • •			32
Lace Patterns		···				•••	33
Patterns using Special Holdin			• • •	• • • •	• • •	•••	34
Patterns based on Ribbing P				• • •	• • •	•••	35
Patterns based on Lifted Stit		• • •	•••	•••		• • • •	36
Cable and Crossed Stitch Pa		Vouna	• • •	• • •		• • •	37
Patterns using Beads and Au			***	• • •	• • •	• • • •	38 39
Fair-Isle and Patterns using a Patterns combining various I				•••	•••	• • • •	41
			•••	•••	•••	•••	41
V. Preparing to Knit a							
Use and Adaptation of Knit	ting Ins	tructio	ns	•••		`	43
Personal Measurement Chart	t		• • •				44
Hints for Better Knitting			***			•••	45
Tweed Fabric and Ribs with	out Ha	nd To	ois	***		• • •	46
VI. A Practical Selectio	n of K	nitma	ster	Garm	ents		
Gossamer Lace Jumper							49
Glamorous Batwing Jumper	• • • •	•••	•••	***		***	51
Angora Bolero		•••					53
Exotic Evening Jumper				• • • •			55
Classic Tailored Dress							57
Ladies' Casual Waistcoat		•••					. 59
Sunray Pleated Skirt				•••	•••		60
Cosy Bed Jacket	•••				•••	,	63
Ladies' Strapless Vest				,			65
Man's Sporty Lumber Jacket				• • •			67
Man's Sleeveless Pullover				•••			6 9
Knitmaster "Everlasting" S	ocks fo	r Men	and	Childre	n	•••	71
Child's Sun or Swim Suit							73
Child's Party Dress			• • •			• • • •	75
Child's Twinset with Bonnet			• • •	•••	• • •		77
List of Knitmaster Knitting P	ublicatio	ons	•••		•••	•••	78
Description of Machine Parts a	nd Tool	\$		1	nside	Back	Cover

KNOW YOUR KNITMASTER

Until recently, the most speedy and efficient Home Knitting Machines available were Knitmaster Models "2500" & "3300", both simplified versions of the most up-to-date and reliable industrial Knitting Machines using Weights and Latch Needles. Until now, Weights were the only means of obtaining "one-stroke" action at high speed. Years of intensive research and the progressive policy of the Knitmaster Organization have at last resulted in the greatest step forward in Knitting Machine design by producing the new Knitmaster Automatic Models "3500" and "4500" on which all Weights and Combs are completely eliminated and replaced by the wonderful new precision Stitch-Sinker mechanism, giving even greater speed and efficiency.

Whereas on the previous Knitmaster machines the whole of the fabric was held down by Weights hung on a Comb, this wonderful new Stitch-Sinker mechanism holds down each newly-formed stitch separately and automatically feeds the full width finished knitting out of the machine, thus dispensing altogether with a Comb and heavy Weights, the combined work of which is now done by this marvel of precision engineering. Now, for the first time, it is possible to cast on and knit at great speed without any form of Comb whatever—the knitted fabric actually rolls off the front of the machine! This amazing automatic Stitch-Sinker mechanism has made knitting history overnight and the new Knitmaster has been acclaimed the greatest Home Fashion advance since the invention of the sewing machine. The complete absence of a Comb and Weights and, above all, the unbelievably smooth and easy action of the new Automatic Knitmaster, means that there is no need to clamp the machine to a table any more. It merely stands on four soft rubber pads that cannot harm the most highly polished surface. Your new Knitmaster is therefore completely mobile, much lighter and can be easily moved from place to place, with the knitting still on it if required, or used by invalids in bed. Furthermore, the knitting is not stretched and you can now see at a glance exactly how much has been knitted at any time, thus making the measuring of the work a very simple matter.

The new Automatic Knitmaster still uses precision industrial Latch Needles and produces knitting exactly like the most perfect hand knitting at even greater speeds and with no limit to the length of the knitting! At the same time it is much simpler to use, as there is no need to raise Comb or Weights as the knitting progresses. In other words, Knitmaster Automatic Models "3500" and "4500" have all the advantages and speed of the "weighted" principle without the inconvenience of cumbersome Weights, Combs or Clamps.

The complete absence of Weights should not lead you to confuse the new Automatic Knitmaster with various other slow knitting appliances having crude pins or hooks instead of proper industrial Latch Needles, and not using Weights or a Stitch-Sinker mechanism. These appliances have instead an awkward weighted Comb or a series of Combs that must be juggled with before each row is completed, the knitting having to be tugged down by hand after every row, resulting in most cases in a mere 4 or 5 rows per minute at the best!

On the new Automatic Knitmaster, however, beyond placing the wool across the Needles and passing the Cam Box rapidly to and fro, there is no other manual operation necessary—one rapid movement knits one complete row and this "one-stroke" action easily produces the amazing speed of 30 rows per minute and over, or approximately 4,050 and 5,070 stitches per minute on Models "3500" and "4500" respectively. Knitmaster is the only Home Knitting Machine having this unique "one-stroke" action, the new patented automatic Stitch-Sinker mechanism and the now famous "super-speed" Lightning Latch Opener for faster and better knitting—yet having no Weights or Combs of any kind!

Another revolutionary improvement on these latest models is the provision of an extra needle position, known as the Holding Position, which, for the first time on a Home Knitting Machine, enables you to knit a large number of varied, intricate and attractive fancy stitches

without the use of any hand tool! This also means that you can now turn in the middle of a row and knit back to the beginning, a feature which makes it possible to turn the heel and knit the toe of a sock in no time at all, or shape darts and shoulders, etc., without having to remove the stitches from the Needles. The special Holding Position is also indispensable for knitting circular articles such as berets, table mats, curved yokes etc., and enables you to knit a perfectly shaped garment in one length without a shoulder seam, as well as greatly simplifying Fair-Isle.

Furthermore, only the very specialised design of a Knitmaster makes it possible to introduce elastic thread, invaluable for so many practical and decorative purposes, such as preventing sagging and stretching, giving an extra snug fitting to a waistline, bathing costume or underwear, and for smocked and shirred effects, etc. This process makes it easy to produce the exclusive Knitmaster Elastic Rib, which is so much quicker to knit than an ordinary rib, and is so useful for socks with elastic tops, puff sleeves, children's wear, firm fitting necklines, etc., etc.

Yet another sensational improvement exclusive to Knitmaster Automatic Models "3500" and "4500" is the amazing new single control Tele-Tension Dial, on the principle of a telephone dial and graduated for 10 clearly visible settings. You merely choose the tension number you require and turn the device until it clicks into position—it enables you to change tensions with great ease and rapidity as there is now no need to unscrew or screw down any knobs. You merely "dial the number" you require and the tension remains firm and constant at each setting—it just cannot move out of position!

Of course, all the outstanding advantages of previous models remain. You can use any yarn or wool from fine 1-ply to Double Knitting wools and knit a wider range of tensions than is obtainable on any other Knitting Machine in the world. You can vary the number of stitches per inch in precisely the same way as in hand knitting, which makes it a simple matter to use ordinary hand knitting leaflets with ease. As the stitches are formed by the same principle, you cannot tell the difference between rapid Knitmaster knitting and the work of the most expert hand knitter! In fact, you can if you wish, start a garment on your Knitmaster, transfer it to ordinary hand needles for knitting in 'bus or tube, and when convenient put it back on your Knitmaster to be continued 50 times faster by the automatic machine process. You can unpick the fabric, re-use the yarn for another garment and, in fact, unravel the knitting without even taking the work off the machine—just another exclusive Knitmaster feature!

Apart from Looped Fabric and the many other exclusive Knitmaster patterns shown in this Instruction Book, intricate designs of all types, including Fair-Isle, can be produced much more easily and quickly than on any other Home Knitting Machine due to the special design of the Knitmaster Needle Bed which also enables you to knit several parts of a garment at the same time.

It should be noted that the smaller machine, Model "3500", now has 135 Needles (4 more than on the earlier Model), and the larger machine, Model "4500", now has 169 Needles (5 more than previously). The new Automatic Knitmaster is without doubt the easiest machine on which to increase and decrease within the row for fully-fashioned shaping, you can increase or decrease the width as required. The Stitch-Sinker mechanism, by the way, enables you to increase as many stitches as you require in one direction or the other in one simple operation in a matter of a few seconds, compared to the laborious methods used on other machines. Knitmaster is quickest and simplest for casting-on and is specially designed for horizontal, vertical and diagonal buttonholes and slits for pockets, etc., neck openings of all shapes and countless other intricate knitting effects, many of which are practically impossible or even slower than by hand on all other types of Home Knitting Machines.

The new Automatic Knitmaster, however, is so simple that even a child can operate it without difficulty, and its light weight and ease of operation, together with the fact of

having no Weights or Clamps, makes it ideal for use in the sickroom and for Occupational Therapy. There is no need for lessons or tuition of any kind if you follow this Instruction Manual carefully, step by step, particularly in the beginning. Remember that after a few hours' practice you will be able to make any type of knitted article—cardigans, twin-sets, pullovers, dresses, socks, gloves, baby wear, evening wear, scarves, tea cosies and table mats, etc. The fact that they can be made so much more quickly than by hand opens up a new field of unlimited possibilities for building up an extremely profitable home business and earning extra money in your spare time, as well as doing your own knitting at record speed. The new Automatic Knitmaster is, in fact, indispensable in every home and takes first place in the list of essential labour-saving appliances. Days, weeks and even months of tedious hand-knitting are now but an evening's pleasant pastime—your Knitmaster will soon pay for itself by the money it makes and saves. That knitted dress you've always wanted has at last become an easy reality—it's yours for a few hours' agreeable occupation and will be of better quality and at a fraction of shop costs!

Your new Automatic Knitmaster is a real precision-engineered Knitting Machine and therefore free of Purchase Tax. It is guaranteed and good for a lifetime of fast knitting. You may wonder why the new Knitmaster costs so little and yet offers so much in quality, finish, special knitting features and faithful service. Here is the threefold secret of Knitmaster value. Firstly, Knitmaster machines are manufactured in an ultra-modern Factory with top-efficiency methods drastically reducing costs—they are made on the same high precision engineering plant used for costly industrial Knitting Machines. Secondly, they are 100% British made and entirely free from high import duty. Thirdly, the fact that you are able to buy direct from the actual Manufacturers cuts out trade discounts and further helps to keep prices to a minimum. All these factors combine to make a Knitmaster much cheaper and far better in quality than slow knitting foreign appliances, often costing much more, and give Knitmaster users **full value** for their money.

Your Knitmaster was carefully inspected and tested before despatch and the knitted sample was actually produced on your machine. This is just part of the rigorous testing to which each Knitmaster is subjected before leaving our Factory to make sure that every machine is 100% perfect. Please return the Guarantee Registration Card that comes with your Knitmaster to our London Knitting Centre within 7 days of receipt so that your 12 months' Guarantee can be registered without delay.

Should any spare parts ever be required due to rough handling or dropping, these can always be supplied promptly and at nominal cost by writing to The Service Manager, Knitmaster Ltd., 192-194, Kensington Church Street, London, W.8. not forgetting to mention the Model and Serial Number of your machine. With normal care your Knitmaster should give you years of trouble-free knitting, but when necessary it can easily be serviced and overhauled by you yourself due to its special simplified "unit assembly" manufacture.

When in London, you are cordially invited to see a demonstration and ask for further useful hints and advice on any knitting problems from one of our Knitting Experts at the Knitmaster Knitting Centre—just another feature of Knitmaster Service! You are always welcome at the Knitmaster Knitting Centres at Birmingham, Bradford, Harrogate and Belfast—see full addresses on page 1. Should you have any knitting queries and are unable to call for a practical demonstration, do not hesitate to write to our Technical Department, who will be only too pleased to help you by letter. We are continually issuing new Pattern Books and Leaflets of practical, attractive and easily made Knitmaster garments. Please write in for details or ask to see these when you call—you will find a complete list of those already published on page 78.

In conclusion, we take this opportunity of wishing you many happy years of enjoyable and efficient knitting with the new Knitmaster "Super-Knit" Technique. We feel sure you will be satisfied and hope you will recommend us to all your knitting friends—thanks in anticipation!

I. MECHANICAL DETAILS

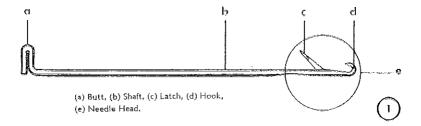
Description of the Machine

(Please refer to illustration on inside Back Cover)

The Needle Bed (4) is made up of a number of plastic sections of the finest quality. These Needle Bed Sections and 2 Slider Rails (5 and 6) are fastened to the chassis by means of nuts and bolts. The Needle Bed is designed with equally spaced grooves to take the Latch Needles (8) and the Stitch Sinkers (7). Below the Latch Needles there is a channel running lengthwise under the Front Slider Rail (6). In this channel there is a special braided woollen cord called a Needle Retaining Strip. As the name implies, the purpose of this cord is to act as a brake, thus restricting the Needles somewhat in their movement and preventing them from slipping out of position when in operation. After some time, this Strip may begin to wear and replacements are supplied at 1/3d. and 1/6d. post free for Models "3500" and "4500" respectively.

As the Front Slider Rail (6) is engraved with Needle numbers, from now on it will be called the Numbered Gauge. This Gauge makes it easy to count the number of Needles (stitches) in operation, when casting-on increasing, decreasing and following patterns. The Needles are numbered at each side in units of 5, commencing at centre of machine marked O. Throughout this Book, Needles at right of O will be denoted by the letter R and those at left by the letter L.

In addition, there is on the front edge of the Needle Bed a second channel, this time partly visible, along which there runs a tempered steel rod. This rod, on which the Stitch Sinkers rest, acts as a supporting shaft, enabling them to move up and down.



The Latch Needles (8) are made of the best high tensile polished steel. Each and every one is a piece of precision engineering in itself. In spite of their slender appearance, these Needles are so strong that it is impossible to break them without the aid of a tool of some kind. However, in case a Needle Latch should break as a result of misuse, five spare Needles are sent free of charge with each machine. Further replacements can be supplied at 9d. each post free, should these be necessary. As the Needles are held in their grooves by the Numbered Gauge, it is necessary to remove this in order to change the Needles (see Chapter on Care of the Machine).

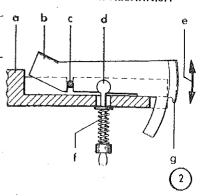
The Stitch Sinkers (7), which are made of best hardened and tempered steel, operate in conjunction with the Latch Needles in order to hold down the stitches and feed the finished knitting out of the machine. When the machine is in operation, the Needles move backwards and forwards in their grooves and the Stitch Sinkers move up and down in a vertical direction (Fig. 2). During this process a constant downward tension is exerted on the Stitch Sinkers by springs which lie under the Front Cover (9), where they cannot be seen. The Cam Box (10), which during knitting is moved to and fro along the Needle Bed on the two Slider

STITCH SINKER MECHANISM

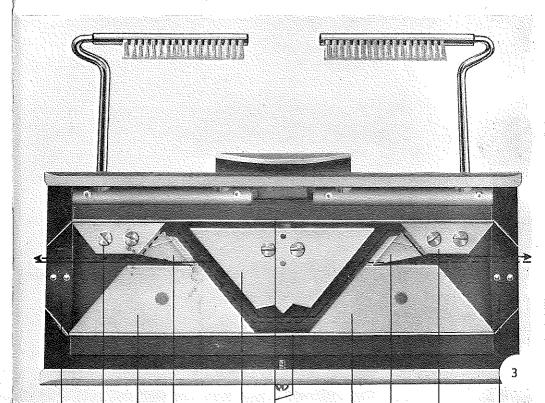
(a) Needle Bed; (b) Sinker Head; (c) Sinker Supporting Shaft; (d) Sinker Pivot; (e) Direction of Travel; (f) Sinker Spring; (g) Sinker Hook,

Rails, is equipped with a mechanism which controls the travel of the Needles and movement of the Stitch Sinkers.

The mechanism which operates the Needles is situated between the two Guide Strips inside the Cam Box (Fig. 3, 29), whereas the Stitch Sinker Cam (14), which moves the Stitch Sinkers, is on the outside front edge of the Cam Box.



In Fig. 3, which shows an inside view of the Cam Box, the travel of the Needle Butts is shown by a black line when the Cam Box is moved from right to left, and by a dotted line when the Cam Box is moved in the opposite direction. After the Needles have passed the space between the first Fixed Cam (25) and the first Control Cam (26) the Needle Butts slide under the first Gate Cam (27), after which they are guided downwards by the Needle Sinker (28). When they have reached the lowest position and have passed the bottom edge of the Needle Sinker (28) with its projecting tooth, they are pushed upwards again by the second Control Cam (30) and slide over the second Gate Cam (31) and are finally guided by the second Fixed Cam (32) into the Knitting Position.



In order to make it possible to move the Cam Box along the machine without operating certain Needles, the Needle Control mechanism is bounded by two Guide Strips (29) inside the Cam Box. In this way, when the Butts of the Needles are outside the two Guide Strips or are resting against the Back or Front Slider Rail, the Cam Box can slide over these Needles without moving them, since they are not affected by the Needle Control mechanism. (When the Needle Butts are pushed right up to the Numbered Gauge, the Needles assume the Holding Position. When pushed right down to Back Slider Rail they are in the Non-Working Position.) In order to prevent the Needle Butts from knocking against the Guide Strips, special Needle Deflectors (24 and 33) are fitted. If a Needle happens to be in an unsuitable intermediate position, these Needle Deflectors guide the Needle Butt either into the Needle Control mechanism or clear of it.

The parts which can be adjusted from the top of the Cam Box are the Needle Sinker and the two Control Cams.

The Tele-Tension Dial (13) operates the Needle Sinker. By turning this dial either clockwise or anti-clockwise, it is possible to set the Needle Sinker either higher or lower, which causes the knitted stitches to be either smaller or larger. The Tele-Tension Dial clicks into ten different positions. There is a hole on the top of the dial through which can be seen the numbers from 1 to 10 (1 = small stitches, or tight tension; 10 = large stitches, or loose tension; thus 5 would indicate a medium tension).

By means of the two Cam Knobs (12 and 15) under the Cam Box Handle, it is possible to raise the Control Cams either separately or together, so that they cease to operate the Needle Butts. In this way the Needles are no longer moved by the Control Cam or Cams which have been raised.

The special Brushes of the Lightning Latch Opener (16) open the Needle Latches when commencing work and prevent their closing until required during the actual knitting. When, after some time, these Brushes begin to wear, we can supply two new Brushes in chromed metal holder—price complete, 4/6d. post free. This, you can easily fit yourself in a couple of minutes by screwing into the same position as the original fitting. When dismantling the Brush Holder, the lock nuts should be removed with a 6BA box spanner before the screws are taken out.

There are two Casting-on Eyelets (3 and 17) on the right and left of the Front Cover of the machine. The beginning of the wool is fastened to either one of these by winding it round the Eyelet.

A Rib Holding Device (23), two Single Transfer Tools, one combined with a Latch Needle Tool (22), and one combined with a Work Hook (21) and also two Double Transfer Tools (20), are supplied as standard accessories. The use of these tools is explained later when dealing with the operations concerned.

Care and Self-Servicing of the Machine

Your Knitmaster must always be kept clean and should never be left uncovered and exposed to dust when not in use. It is a good plan to clean it now and again with a brush, to remove any wool fibres and dirt.

The Gate and Control Cams in the Cam Box, the Needle Butts and the Stitch Sinker Heads require to be oiled regularly. It is also most important to lubricate the two Slider Rails, where they come into contact with the Cam Box, i.e. the underneath outside edges. Only best quality thin sewing-machine oil should be used. It is advisable to use a small camel-hair brush and lightly coat the parts in question with the oil. The machine should never be over-oiled, however, or the Needles may tend to slip and the oil will be inclined to soil the knitting.

If a general cleaning should be required, the Needles and Stitch Sinkers can be easily taken out of the machine for this purpose. Doing this simple job yourself will save time

and packing and carriage charges, but if you are not sufficiently mechanically minded, our Service Department will be pleased to give you a quotation for the work in question. However, those who wish to do it themselves should follow these instructions:-

To remove the Cam Box from the machine, one of the two Stop Screws (2 or 18) must first be unscrewed.

To remove the Needles, the Numbered Gauge should also be taken off. An ordinary 6BA box spanner should be used to remove the nuts underneath the machine which hold the Numbered Gauge in place. (In no case should the Back Slider Rail be removed, or else the Needle Bed Sections will come out of position). The Needles can now be taken out of their grooves and wiped over with a clean rag. After removing the Needle Retaining Strip which lies in a channel under the Needles, it is easy to clean the Needle grooves using a small brush or pointed piece of wood. The machine is re-assembled in the reverse order, which means that the Needle Retaining Strip is put back first, being careful not to stretch it, after which the Needles are laid into their grooves. Finally, the Numbered Gauge is fixed into place, making sure that it rests up against the small step in the Needle Bed. When replacing the nuts, they should all be put on finger tight before using the spanner. Make sure that all nuts are screwed on firmly so that the Needles only have a very small amount of play, but do not use undue force or you may damage the thread. After the machine has been re-assembled in this way the Needle Butts should be oiled lightly.

A good way of cleaning the Needles without dismantling the machine is to knit a few rows across the full width of the Needle Bed and then push all Needles into the Holding Position. Repeat once or twice.

SHOULD A NEEDLE BED SECTION BE DAMAGED ACCIDENTALLY OR IN TRANSIT, PROCEED AS FOLLOWS:—

(1) Remove Front Cover.
(2) Take out Sinkers from the broken Needle Bed only (see below "In order to remove the Stitch Sinkers").

(3) From base of machine remove all Nuts and Washers.

- (4) Now, with a screw driver gently lift up Num-bered Gauge and take off same.
- (5) All Needles should now be taken out of the Needle Beds. (6) Next, place machine face downwards on the
- table and the base can then be lifted away from the Needle Beds.
- (7) It will now be quite easy to lift out the broken Needle Bed Section in question and replace same.

- (8) The base can then be placed on and the Washers and Nuts replaced into the Back Slider Rail.
- (9) Before finally tightening the Nuts make sure that all Needle Bed Sections are butted closely
- (10) The Needle Retaining Strip should now be laid evenly in the channel provided and the Needles reassembled.
- (11) The Numbered Gauge can then be replaced and the Washers and Nuts put on and tightened.
- (12) All that now remains is for the Sinkers to be replaced and the Front Cover put back into position.

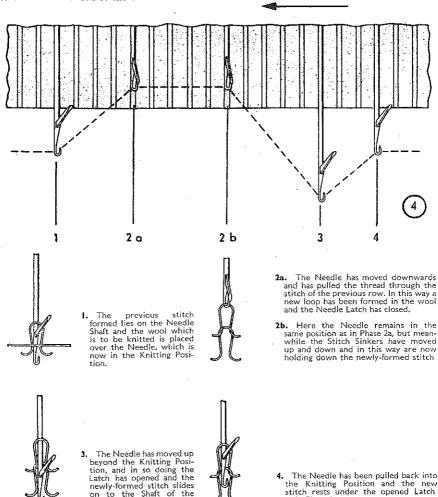
In order to remove the Stitch Sinkers, it is necessary to take off the Front Cover. This is easily done by merely pushing the two spring clips towards the back of the machine. The Front Cover can now be released by sliding it downwards. (When replacing the Front Cover, make sure that the top edge fits into the groove provided for the purpose on the underside of the Needle Bed). There is now free access to the Stitch Sinker Mechanism which can be taken out as follows. Hold the Sinker Pivot between the thumb and forefinger and push it upwards against the Spring until the Sinker has been lifted about half an inch. Using your free hand, exert a slight lateral pressure on the Sinker either to the right or to the left. This releases the Sinker from the Sinker Pivot so that both parts can be taken out, the Sinker Pivot being pulled out from bottom of Needle Bed.

When all the Stitch Sinkers have been removed it is possible to take out the Sinker Supporting Shaft, which is the thin rod lying in the longitudinal channel in the Needle Bed at front of Numbered Gauge. This makes it possible to clean the slots for the Stitch Sinkers in the same way as the Needle Grooves. Clean the Sinkers with a mixture of paraffin and oil.

After the Sinker Supporting Shaft has been replaced, the clean Sinkers are fitted back again. To do this, each Sinker Pivot is inserted from below into the special opening in the front of the Needle Bed, and pressed up as far as possible. Using your other hand, guide each Stitch Sinker into its slot, at the same time inserting the round head of the Sinker pivot laterally into the circular aperture at bottom of Sinker. By so doing the Sinker, which is now pulled downwards by the tension of the Spring, will slide down with its small square recess resting on the Sinker Supporting Shaft. After lightly oiling all the Sinker Heads and replacing the Front Cover, the assembly is complete and the Cam Box can be put back again. It is essential that the Cam Box should move freely and smoothly along the two Slider Rails.

Formation of the Stitches

After a number of Needles have been brought into the Knitting Position and the Cam Box has been moved from right to left over the Needles, the needle positions produced are as shown in Fig. 4. From this it is possible to see the individual phases of the stitch formation. The to and fro movement of the Cam Box makes the Needles go up and down rapidly in quick succession as the cycle described below is repeated by all the Needles consecutively across the full width of the knitted fabric.



Needle.

as in Phase I,

11. BASIC PRINCIPLES OF KNITTING

Adjusting the Tension

When knitting with hand needles the size of the stitches depends mainly on the thickness of the needles and the wool. At the same time, the individual technique of different hand knitters also has a distinct effect on the tension of the stitches formed. For instance, one person knitting on No. 9 needles may produce much tighter or looser work than someone else knitting on the same size needles. For this reason, it is difficult to make a hard and fast rule, and the following comparative Table is only to give a general idea. Before starting the knitted article, therefore, it is always a good plan to knit a small trial piece with the wool you propose using, so as to verify your tension (see Section V).

Comparative Tension Table

Wool	Tele- Tension Setting	Hand Needles (approx, equivalent)	No. of Stitches per inch	No. of Rows per inch
I-ply and 2-ply	2 4 6 8 10	16 13 10 8 6	9 <u>1</u> 9 <u>1</u> 8 7 6	16 13 12 10 <u>1</u> 9
3-ply	2* 4 6 8 10	15 13 11 10 9	10 9 8 7 7	17 15 12 10 8½
4-ply	4* 6 8 10	13 12 10	8½ 8 7 6½	14 12 10 9
Double Knitting Wool	6* 8 10	13 1 8	8 7 6	12 11 9

^{*} These tensions are really too tight for the particular wools indicated and should never be used for more than a few rows, e.g., for a welt or cuffs.

As the settings given above only represent every alternate number on the Tele-Tension Dial, this means that it is possible to regulate the tension even more closely, so that practically any desired stitch size can be obtained to suit all purposes and all tastes. Naturally, the tighter settings cannot be used with thick wools, whilst fine wools can be knitted at any tension. When knitting heavy winter garments in the thicker wools and Double Knitting Wool, if you desire an even looser tension than is obtainable on setting No. 10, you can easily produce a more open fabric by putting every second Needle out of action and knitting

on a somewhat tighter tension setting (see Fig. No. 43). Remember that different makes of wool, even if they are the same ply, may vary and knit at different tensions. This is another good reason for knitting a small trial piece for every different brand of wool. If you keep a record of the tensions obtained with the various wools you use, you will find these notes helpful for future reference.

Preparing to Knit

Your Knitmaster may be placed on any steady table, but preferably without a tablecloth so as to get the maximum degree of firmness. The ball of wool is best placed in a box or tin on the floor, so as to unwind quite freely. Before starting to knit, make sure that both Cam Knobs are pressed down, as the machine will not operate if this is not done. As previously stated, the Latch Needles must be pre-set in certain special positions according to the functions they have to perform. We differentiate between the three positions as follows:—

Non-Working Position

Here the Needle Butts rest against the Back Slider Rail (see left of Fig. 5) and are not operated by the Needle Control Mechanism of the Cam Box when the latter is moved to and fro.

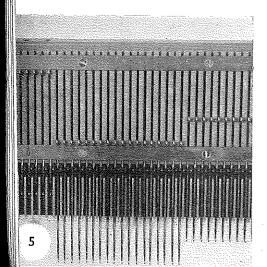
Holding Position

The Needle Butts rest against the Numbered Gauge (see centre of Fig. 5). This position is required for various special knitting effects which are described later.

Knitting Position

This position is obtained by the Needle Butts first being pushed up by hand, approximately halfway between the Back Slider Rail and the Numbered Gauge. The Cam Box must then be moved across the Needle Bed slowly once, when the Needles automatically assume the correct Knitting Position (see right-hand side of Fig. 5). At the same time the Latches are opened by the Brushes of the Lightning Latch Opener. When working, the Knitting Position also implies that the stitches are behind the open Latches.

NOTE:—An ordinary ruler is very useful for quickly pushing the Needles into the required positions.



When the required number of Needles have been brought into the Knitting Position in this way, you are ready to cast-on. In general, and particularly when knitting a symmetrically-shaped article, you should work in the middle of the machine, counting your Needles evenly on either side of the centre, marked O on Numbered Gauge. However, when knitting several pieces at the same time or knitting an irregularly shaped article, you may cast-on using any suitable part of the Needle Bed.

It is a good plan to wind your wool around a small wad of paper, as this allows it to unwind more freely when you get towards the end of the ball.

Open Edge Casting-on (mainly for tension tests, samplers, etc.)

The Open Edge method is primarily used for tension test pieces and small experimental samplers, etc., for which it is very useful. However, we do not recommend this method for general use in garments, except when making a knitted hem, as the first few rows are inclined to run very easily.

Set tension at No. 8 or No. 9. Place Cam Box at left of Needle Bed and wind the beginning of the wool round the Left Casting-on Eyelet. Lay the wool across the Needle Heads, making sure all Latches are open (Fig. 6). Holding the wool lightly between the fingers of your right hand so that it can slip through them freely and evenly, pass the Cam Box across the Needle Bed with a slow, steady movement and a slight downwards pressure. In this way, a row of loops is formed known as an Open Edge, i.e. when the knitting is taken off the machine it will be found to start with open stitches. Some wools may be cast on more easily on a tighter tension such as No. 5 or No. 6.

Closed Edge Casting-on (usual method—as in hand knitting)

Most knitted work is commenced with this type of edge. Place Cam Box at left of Needle Bed, and wind the beginning of the wool round the Left Casting-on Eyelet. Now, wind the wool round the Needle Heads and Sinker Hooks in an anti-clockwise direction, starting with the Sinker Hook before the first Needle, around the first Needle, under the second Sinker Hook, around the second Needle, and so on (see inset, Fig. 7). Make sure that the wool is taken under the Sinker Hooks (see Fig. 2.g.) and not under the complete Sinkers.

The wool should not be drawn too tightly, but just enough for the Sinkers to be raised about $\frac{1}{3}'' - \frac{1}{4}''$ depending on the thickness of the wool. The Sinkers must be kept raised and not allowed to drop again, so that when the casting on is complete, these Sinkers will be higher than those not in action. Set tension at No. 1 and pass the Cam Box across the Needle Bed with a slow, steady movement and a slight downwards pressure. This will put the stitches behind the Latches and complete the casting-on.

Should the Cast-on Edge need tightening, this can easily be done after the work is completed, by drawing up each cast-on loop (commencing at end of row and working towards the beginning). The surplus wool can then be used for stitching the seam.

Knitting Procedure

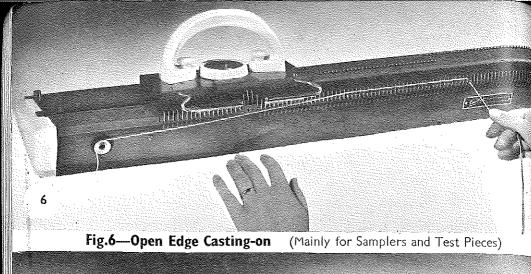
Before starting to knit, it is necessary to reset the Tele-Tension Dial to the setting required, according to the wool and pattern being used. Knitting can now be commenced by laying the wool across the Needle Heads and passing the Cam Box across the Needle Bed. Continue in this way from side to side. Each time the Cam Box is passed across the Needle Bed in one direction a complete row is knitted.

Before beginning each row, the wool must always be taken under the outer Sinker Hook before it is laid across the Needles (see inset, Fig. 8). The yarn will automatically come to lie underneath the Sinker Hook at the end of each row if it is held properly in the following manner whilst knitting. The wool should be held close up and parallel to the front edge of the Needle Bed when looked at from above, and slightly inclined from the last Needle to the hand holding the wool when seen from the front. The hand holding the wool should be close up against the Front Cover of the machine and well below the level of the Needles in order to prevent any possibility of the wool coming off the Needle Heads whilst knitting the row (see illustrations on pages 14 and 23).

When knitting, the wool should always be allowed to run very freely and evenly through the fingers, with just sufficient tension to prevent it from going slack. If the Cam Box appears unduly stiff or hard to operate, this is either because the wool is being held too tightly between the fingers and is not running in freely enough, or else is due to the tension chosen being too tight for the thickness of the wool used. Be careful never to pull the wool at the beginning of the row as the outer Sinker must never be raised.

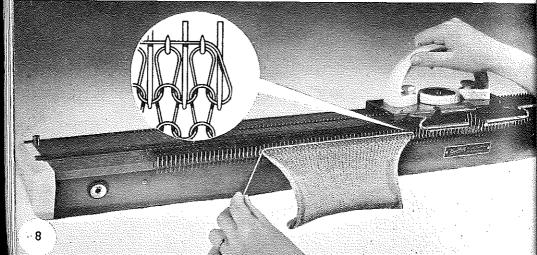
There should always be a slight **downwards** pressure on the Cam Box as it is passed to and fro across the Needle Bed. You may also find it better to hold the handle more to one side rather than at the top, so as to get more strength behind each stroke with no extra effort. Sit at a comfortable height and use a good quality pure wool to practice on until you are more accustomed to the machine.

It is important to avoid jerky movement of the Cam Box which sometimes occurs with a beginner but is soon overcome with a little practice. The Cam Box should be passed across the Needle Bed in one smooth, swinging movement without any hesitancy by sliding it gently into each row, gathering up speed and momentum as you go. It is also better to change hands after every row, i.e. use the right hand to push the Cam Box from right to left and vice-versa.



o Alaka

Fig.7—Closed Edge Casting-on (Usual Method for all Garments)



Increasing, Decreasing, Casting-off

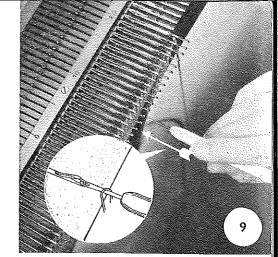
The shaping of each piece of knitting is done by decreasing and increasing, in just the same way as with ordinary hand knitting. This can be carried out in various ways, according to the purpose for which the knitting is to be used. As a rule, Closed Edges are usual on all sides and much more satisfactory, but it is also possible to knit to the desired shape with Open Edges. In the latter case, the open stitches must be sewn up at the seam when joining the pieces together, so that the knitting will not unrayel.

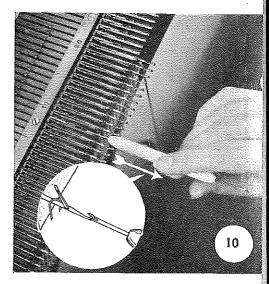
With open stitches, increasing and decreasing is simpler and faster. All that has to be done is to bring the extra Needles required into the Knitting Position, or to push the Needles which are no longer required out of the Knitting Position. This must always be done at the end of the row farthest away from the wool leading to the ball. If an open cast-off edge is required, the knitting can be removed from the Needles by moving the Cam Box once across the Needle Bed without laying any wool over the Needles.

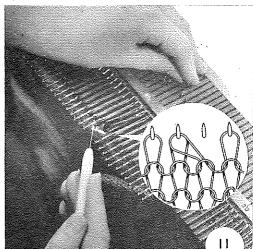
For increasing and decreasing in the usual way with closed stitches, we shall first of all describe the use of the Transfer Tools (21 and 22). These tools are used for lifting certain stitches off the Latch Needles and hanging them on to others as required.

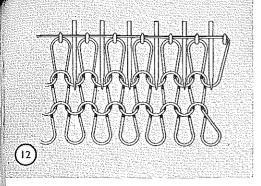
In order to lift a stitch off its Needle the Transfer Tool is inserted with its eye in the Hook of the Latch Needle, so that the Latch Needle and the Transfer Tool are in line (Fig. 9). The Transfer Tool is then pushed, together with the Latch Needle, towards the Needle Bed. In this way the Latch closes and the stitch slides on to the Transfer Tool.

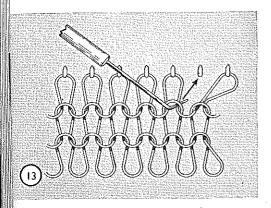
When transferring the stitch to another Needle, the process is similar. The eye is inserted in the Hook of the Latch Needle which is then eased down slightly into the Needle Bed by its Butt. Then, holding the Transfer Tool in line with the Needle, pull it away from the Needle Bed so that the stitch slides from the Transfer Tool on to the Latch Needle (Fig. 10).

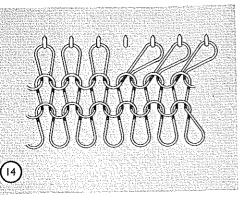


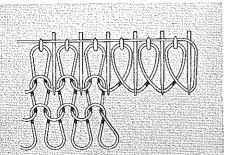












When it is necessary to transfer a stitch on to an adjacent Needle which already has a stitch on it, the Latch can first be closed by pushing the Needle down slightly by its Butt, using your free hand. This enables you to slip the stitch from the Transfer Tool easily over the closed Latch (Fig. 11). The Needle must then be brought back into the Knitting Position with both stitches behind the open Latch.

Increasing Single Stitches

There are two methods for increasing single stitches. The first method is much quicker and simpler, but gives slightly looser stitches along the selvedges. The second method is rather slower but produces the usual firm selvedge stitches. Where the selvedge is to be sewn into a seam, the first method is quite satisfactory. In both cases it is possible to increase at the beginning and end of the same row.

In the first method, an additional Needle is brought into the Knitting Position and the wool laid across the Needle Heads in the usual way. When increasing at the beginning of the row, however, the wool should be taken under the Sinker Hook and over the additional Needle before laying the wool right across (Fig. 12).

For the second method, the stitch at the end of the row is transferred on to the additional Needle by means of the Transfer Tool. Then, using the Work Hook (21), pick up the stitch below the third Needle on the previous row and place it behind the Latch of the empty Needle (Fig. 13).

In the same way it is possible to increase single stitches within the row by moving a number of stitches one Needle outwards (Fig. 14). Two stitches can be transferred simultaneously if the Double Transfer Tool (20) is used. This is the method used for certain types of fully-fashioned shaping. In each case the stitch below the adjacent Needle on the previous row should be placed behind the Latch of the empty Needle.

Increasing by Several Stitches

The process is basically the same as for Closed Edge Casting-on (see Fig. 7). As the wool leading to the ball is required for this, it is only possible to increase at this end of the row. If the wool is on the left hand side, it is looped in a clockwise direction around the requisite number of additional Needles and Sinker Hooks. If the increasing is required on the right-hand side, the loops are wound in an anti-clockwise direction (Fig. 15).

The next step is to place these new stitches behind the Latches of the additional Needles. This is done by pushing the Needles by their Butts slightly towards you. The Needles must then be pushed back into the Knitting Position, i.e., in line with all the other Needles in use. It is then possible to continue knitting after passing the wool round the outermost Sinker Hook (Fig. 15).

Decreasing Single Stitches

This can be done at the beginning and end of the same row if required. Using the Transfer Tool, the outermost stitch is transferred one Needle inwards, making sure to place it behind the Latch, and the knitting then continued in the usual way (Fig. 16). In the same manner, it is possible to decrease single stitches within the row by moving a number of stitches one Needle inwards. This is used for certain types of fully-fashioned shaping.

When knitting slanting or diagonal edges where the decreases have to be made at each end of every row, it is advisable to add in some extra stitches to ensure that the edge is not drawn up tightly.

This process can only be done at the beginning of the row and the decreasing at the end of the row must be worked in the way previously described. The extra stitches at the beginning of the rows are produced by laying the wool over the first Needle Head and knitting the stitch by hand (by pushing the Needle down by its Butt and then back into the Knitting Position with the newly-formed stitch behind the Latch—see Stitch Formation, Fig. 4). You can now transfer this stitch for decreasing in the usual way, being sure to pass the wool under the outermost Sinker Hook before knitting the row. If a particularly loose edge is required, it is possible to add in several extra hand-made stitches one after the other, instead of just one.

Decreasing by Several Stitches and Casting Off

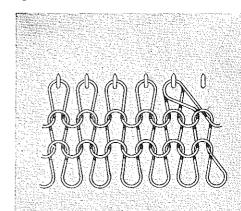
If several stitches are to be decreased, as for an armhole, the process just described must be carried out successively on the required number of Needles. This is merely a matter of knitting two stitches together all along the row by hand as follows:—

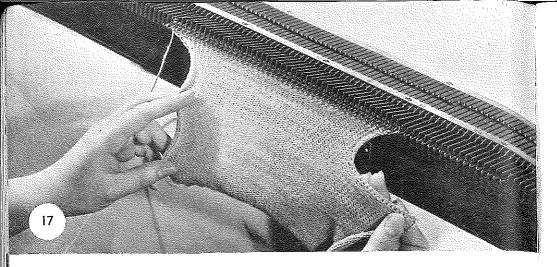
Transfer the end stitch to its adjacent Needle and place it behind the Latch. Lay the wool over this Needle and knit the two stitches together by hand. Transfer this new stitch

to the adjacent Needle and continue in the same way right across the row. When the desired number of stitches have been decreased, knitting is continued in the usual manner (Fig. 17). If a looser edge is required, you should add in an extra stitch by hand before transferring each stitch to its adjacent Needle.

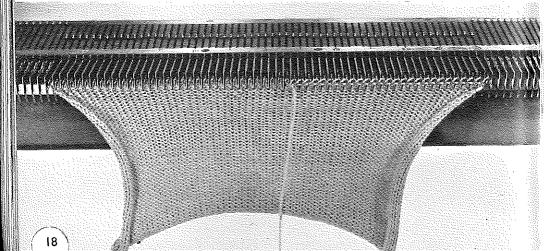
If the whole piece of knitting has to be cast-off, there are three different methods as follows:—

(1) In this first method the process is the same as above, but when you come to the last stitch the wool must be cut from the ball and threaded through the stitch.





- (2) Another way of casting-off is by using the following method (Fig. 18). Once again, the wool is laid over the first Needle and a stitch formed by hand. However, this is not transferred by means of the Transfer Tool but is merely placed over the second Latch Needle and behind its Latch by means of the Work Hook. When this has been done, the stitch will therefore lie over two Needles. The wool is now laid over the second Needle and a new stitch formed by hand, which is then drawn over the third Needle, and so forth. With this method of casting-off the stitches remain hanging on the Needles all along the row. When all the stitches have been cast-off, the knitting is taken from the machine by moving the Cam Box once over the Needle Bed.
- (3) With the third method, the last row of the work must be knitted at tension No. 10. Then remove the work from the machine by passing the Cam Box across without inserting any wool and join up the open stitches in the following way, starting at the end opposite the ball of wool. Insert the Latch Needle Tool into the first open stitch and form a new stitch with the loop of the second open stitch, another with the third stitch, and so on, until the end of the row. If preferred, these stitches can be cast-off on the machine, taking each stitch off its Needle as it is pulled through the preceding stitch on the Latch Needle Tool. In this case it will be necessary to push all the Needles into the Holding Position and pass the Cam Box once across the Needle Bed in order to release the work from the Sinker Hooks.



III. SPECIAL KNITTING EFFECTS & PROCEDURE

Knitted Hem

Cast-on with a Closed Edge and knit a piece twice as long as the depth of hem required. Then starting from the right-hand side, the loops of the stitches all along the Closed Edge are hung separately on to the Latch Needles, using the Work Hook. When the loops have been placed behind the open Latches together with the stitches of the last knitted row, and all Needles are in the Knitting Position, the first row should be knitted slowly and the knitting continued in the usual way.

An alternative method is to cast on with an Open Edge in wool of a contrasting colour. Knit 6 or 7 rows, then change to the wool being used for the garment. Knit twice the depth of the hem required, knitting the last row with Cam Knobs raised. Place the loops of the first row of the hem onto the Needles in the same way as for Turning the Knitting (see page 21). Unravel the rows knitted in contrasting colour and complete hem as above.

Easy-Rib Welt without Hand Tools

A firm and attractive welt, almost indistinguishable from ordinary ribbing, can be quickly and easily produced in the following way (see photograph at bottom of page). Use a tension 2 degrees tighter than the rest of the garment and cast on with a Closed Edge, leaving every third Needle in the Non-Working Position. Knit twice the depth of welt required. Bring Needles from the Non-Working Position into the Knitting Position. Turn up a hem as above, placing a running thread from the first row onto each of the empty Needles. After the hem has been completed, change tension and continue according to the pattern. A double thread of shirring elastic should be threaded in at the top of the welt for extra firmness at the waist or, if preferred, the elastic may be knitted in on the second and last row of the hem (see page 28),

Plain and Purl Knitting

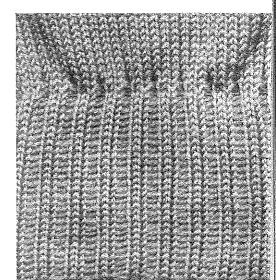
The Knitmaster knits stocking-stitch automatically and at a very high speed. This basic stitch is by far the most generally used and forms about 90% of all hand knitting. If it is necessary to alternate plain and purl, the plain stitches will have to be converted into purl stitches, that is to say, they will have to be reversed on the machine (see Ribbing and Turning the Knitting).

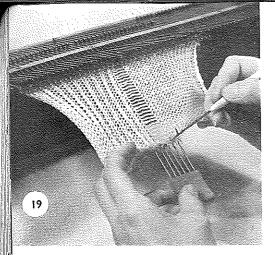
Ribbing

Better Knitting"),

To produce a ribbed welt, the stitches which are to be reversed are dropped and then picked up on the purl side of the work. which is the side of the knitting facing the operator. In this way plain stitches will be formed on the purl side. You must pick up the first vertical line of stitches before you let the next line drop. For this process the Latch Needle Tool (22) and the Rib Holding Device (23) are used. The knitting should be held taut by the Rib Holding Device, which makes the ribbing very quick and easy. This Device is hooked on to the bottom edge of the knitting (Fig. 19). If a Latch Needle is now pushed back into the Non-Working Position, the stitch can be dropped down by exerting a slight downwards \P A Hem can be made even more quickly and easily if the special Knitmaster Reversing Bar is used (write in for free copy of "Aids to

Easy-Rib Welt Without Hand Tools





NOTE: See alternative methods without hand tools fast Elastic Ribbing on page 28, and Simple Ribbing on page 32, Fig. 45, and other Ribs on pages 46 and 47.

pressure on the knitting. Before dropping a line of stitches, insert the Latch Needle Tool into the last stitch of the line.

The Latch Needle Tool should be held in the same way as you would a pencil, and the stitches are then picked up in the following way. Push the Latch Needle Tool away from you so that the Latch opens and the stitch slips behind it. Then pull the tool towards you, at the same time drawing the running thread above into the Hook of the Latch Needle Tool (Fig. 20). A quick movement of the tool towards you will now close the Latch and pull the running thread through the previous stitch, thus forming a new one. Continue this process all the way up the line of dropped stitches and hang the last one back on to its Latch Needle.

After picking up the first few stitches of each line, you may find it more convenient to let go the Rib Holding Device and hold the work with your hand.

The above process may at first seem a little slow, but after some practice, you will be able to do it many times faster than on hand knitting needles and the rhythmic movement will become second nature.

If the stitches are dropped only as far as the first row from the Casting-on a firmer edge is obtained, but if a stitch should drop right down to the cast-on edge it should be picked up as follows. The Latch Needle Tool is hooked on to the bottom running thread with the hook pointing downwards. Then give it a clockwise half twist so that the hook is pointing upwards. This reproduces the loop of the Closed Edge (Fig. 20) and you may proceed to pick up the line of stitches as described above.

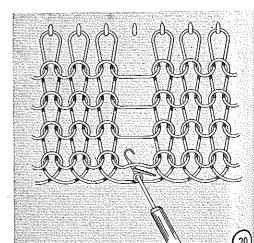
When forming a ribbed band inside the knitted piece (not right down as far as the bottom edge), it is a good plan to mark the row to which the stitches are to be dropped. This is best done by knitting in a thin thread of a different colour, e.g., sewing cotton, and merely laying it over the Needles together with the wool and knitting it in as a marker. Afterwards, when the knitting is finished, this thread can be easily removed. In this case it is possible to dispense with the use of the Rib Holding Device because it is quite easy to hold the knitting by hand.

If, during the Ribbing process, every alternate running thread only is picked up, or if two threads at a time are picked up together, attractive fancy ribbed patterns are obtained.

Picking up Stitches Invisibly on the Plain Side of the Work

Should you inadvertently drop a stitch in the course of your knitting, it can be picked up invisibly (without forming a rib) in the following manner. First, push the empty Needle down to the Non-Working Position and out of the way. Then release the top running thread from under the Stitch Sinkers by pressing down on the Sinker Butts at either side

See Fisherman Rib and other Ribs without Hand Tools pages 46 and 47.



of the empty Needle, at the same time inserting the Latch Needle Tool behind the running threads from the top of the work. You can now let the Sinkers spring back into position, leaving the Latch Needle Tool behind the running threads. If it is found easier, the stitches at either side can also be released from under the Sinkers. Holding the knitting very slightly towards you with your left hand, insert the Hook of the Latch Needle Tool into the dropped stitch, and form the new stitches in the same way as for ribbing. This process is basically the same as ribbing but worked behind the knitting instead of in front. As the tool is held vertically instead of horizontally, it is sometimes necessary to hold the latch open with one's finger where required.

NOTE:—In a "One-by-One" Rib every alternate line of stitches is reversed, and in a "Two-by-One" Rib only every third line of stitches is reversed. In hand knitting, the former is equivalent to a K.I., P.I. Rib and the latter to a K.Z., P.I. Rib.

Turning the Knitting

If it is desired to introduce one or more rows of puri right across the plain knitting horizontally, it will be necessary to reverse the work so that the plain side is facing you, and turn it back again when required.

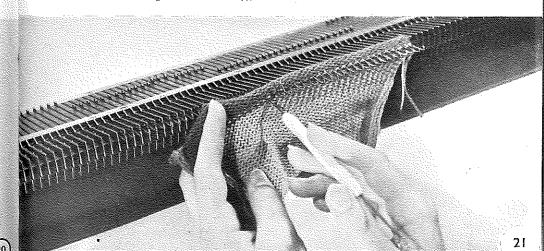
This is done as follows:-

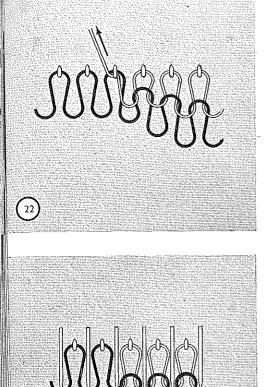
From the row where the knitting has to be turned, continue to knit at least six extra rows with a yarn of a different colour. Then take the knitting off the machine by passing the Cam Box across the Needle Bed without laying any wool over the Needles.

Now bring the Needles into the Knitting Position, at the same time making sure that the Cam Box is on the same side as the wool leading to the ball after the work has been turned. The Needle Hooks are then pushed down into the Needle Bed, using the palm of your hand, far enough for them to no longer protrude beyond the Stitch Sinkers. When the knitting has been turned, start from the right-hand side and insert the Transfer Tool into the stitches of the last row in the original colour, placing them one by one on to their corresponding Latch Needles as follows:—

After the Transfer Tool has been inserted into each stitch, the eye is placed over and into the Hook of the appropriate Latch Needle and pulled towards you so that the stitch slides from the Transfer Tool on to the Latch Needle, which should be pulled forwards into the Holding Position (Fig. 21). When all the stitches are on the Needles, the rows in the contrasting colour are unravelled, the Needles are brought into the Knitting Position, and knitting continued. The first row after the work has been turned should be knitted slowly as the stitches are not yet under the Sinker Hooks.¶

¶Turning the knitting is much quicker and easier if the special Knitmaster Reversing Bar is used (described in "Aids to Better Knitting"—write for free copy).





[23]

Unravelling

If you should wish to unravel a few rows of knitting, it is not necessary to take the work off the Needles, as this would waste a lot of time in putting it back. It is very easy to unravel on the machine in the following way.

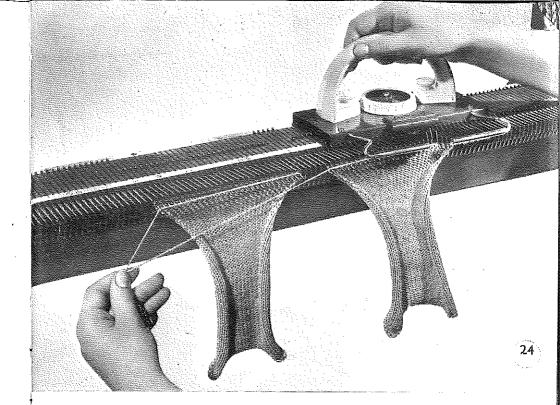
The stitches must first be brought in front of the Latches, and the Heads of the Needles pushed back flush with the edge of the Needle Bed. This position is obtained by knitting another row with both Cam Knobs pulled up. The end of the wool is now pulled alternately upwards and downwards. By pulling upwards, the first stitch is released from the Needle and the stitch below in the previous row is lifted and automatically pulled up over the Needle Hook, replacing the unravelled stitch (Fig. 22). When pulled downwards, the wool becomes released from the Sinker Hook (Fig. 23). The upwards and downwards movement of the wool can be repeated in rapid succession so that it only takes a few seconds to unravel a row. Before recommending, do not forget to press down both Cam Knobs and bring the Needles into the Knitting Position.

Should the Cam Box be at the end opposite the wool leading to the ball, the Needles should be brought back into the Knitting Position by passing the Cam Box across at tension No. I with both Cam Knobs pressed down, Reset tension before continuing.

Knitting Several Pieces at the Same Time

If several narrow pieces are to be knitted, such as shoulder straps, sleeves for children's carments, cuffs, socks, and similar small articles, it is possible to knit two or more pieces at the same time, that is to say, you can knit a row on to several strips with the one movement of the Cam Box.

The operations which have to be carried out by hand, such as laying the wool across the Needle Heads, increasing and decreasing, etc., have to be done one after the other on the separate parts in question, but only one movement of the Cam Box knits a row on to all the pieces at once. A separate ball of wool will be required for each individual piece being knitted. The wool is laid over the Needles of each article in the usual manner and when knitting, each end of wool must slide loosely through the fingers, however many ends there might be (Fig. 24).

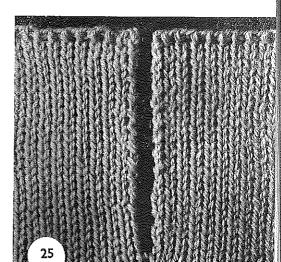


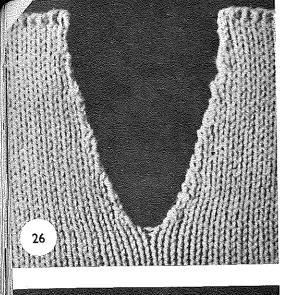
Vertical Slits and Neck Openings

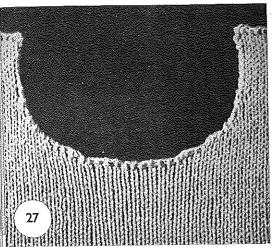
The knitting of slits and openings depends on the same basic principle as the knitting of several parts at the same time. For instance, if it is necessary to introduce a vertical slit into a piece of knitting (Fig. 25), the work must be divided at the place where the slit begins and the knitting must then be continued in two parts.

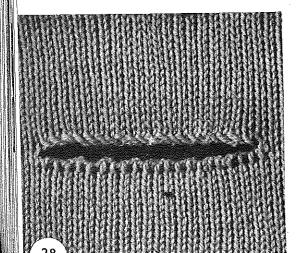
You will need a separate ball of wool for each side of the opening. The wool from the original ball is laid across the Needles up to the position in the row where the slit begins. The wool from the second ball is laid over the remaining Needles. In this way there are two working threads lying over the Needles, the first running from the beginning of the row to the slit, and the second running from the slit to the end of the row. It is now possible to continue knitting in the way described for knitting several pieces at the same time.

When working a neck opening the knitting is divided in the same way and knitting continued with two balls of wool. Decreases will be made according to the shape required.









A V-shape (Fig. 26) will be obtained if a decrease is made on both sides of the opening in every second, third, or fourth row as required. For narrow pointed openings the decreasing will be less frequent, and for wider openings the decreasing will take place more often.

When making a square neck opening the required number of stitches, counted evenly from the centre, should be cast-off, using a second ball of wool and starting at the side nearest the Cam Box. After casting-off, this wool is laid over the remaining stitches to the end of the row. The wool from the original ball is laid over the Needles from the beginning of the row to the point where the casting-off began. Now continue the knitting up to the shoulder in two parts without any decreasing.

When making round openings (Fig. 27) a number of stitches are cast-off, counted evenly from the centre as in square neck openings above. Stitches should now be decreased on either side according to the shape required. In the case of a deep round opening, fewer stitches will have to be decreased and more rows knitted in between. In the case of a shallow opening, a greater number of stitches will have to be decreased and fewer rows knitted in between.

Buttonholes and Horizontal Slits

Knitting vertical buttonholes is done in the same way as knitting vertical slits. The knitting first of all has to be divided and then continued in two sections, using two balls of wool. When the desired length of the buttonhole is reached, the knitting is continued in the normal manner, using one ball of wool only (Fig. 29). The end of the yarn remaining at the buttonhole may either be sewn in at the back or used for stitching round the buttonhole (Fig. 30).

As buttonholes are usually finished off by hand to make them stronger and give them a better appearance, when making horizontal buttonholes it is not necessary to cast-off with closed stitches inside the hole. One should always have a needle and thread handy, so that the open stitches can be drawn on to the thread and fastened with a buttonhole stitch (Figs. 31 and 32). Knitting horizontal buttonholes with open stitches is very simple. It is only necessary to remove from the Needles the stitches corresponding to the length of the buttonhole, and bring the Needles back into the Knitting Position before knitting the next row.

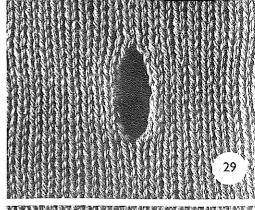
Another method of making horizontalbuttonholes is to lay an odd length of wool of a different colour over the Needles corresponding to the length required. Knit the row in the usual manner, but see that the main wool is taken underneath the Needles covered with the contrasting wool, When the knitting is finished, the contrasting wool is removed leaving open stitches which should be fastened with a buttonhole stitch. If you prefer, you can knit the buttonhole stitches in the contrasting colour by hand and then knit the row in the usual way, laying the main wool over all the Needles of the row. This will make an even neater buttonhole.

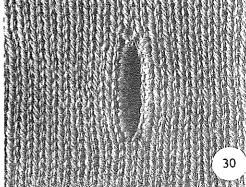
A horizontal slit with closed cast-off edges is knitted as follows (Fig. 28). When using the finer varns, it is more satisfactory to adopt this method for horizontal buttonholes as well.

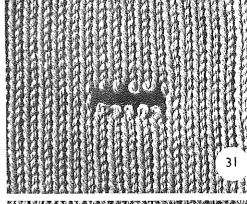
Take a short length of wool, the same as used for the garment and cast-off the number of stitches required for the buttonhole or slit. Using the same wool, cast-on over the empty Needles with a Closed Edge and place these new stitches in the Knitting Position behind the open Latches. Using the wool leading to the ball, continue knitting in the usual way. The ends of wool remaining at the slit may either be sewn in at the back or used for finishing with a buttonhole stitch.

To Join in a New Ball of Wool

Lay the new wool across the Needles with the loose end on the same side as the Cam Box. Hold the end of the old ball and the beginning of the new ball securely at the beginning of the row and pass the Cam Box across, allowing the new ball to run in freely. The two ends should now be tied together and darned into the seam later.





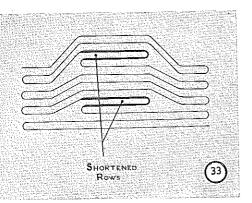


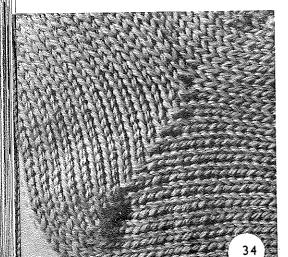


Shaping of Heels and Darted Effects

Due to its being the only Home Knitting Machine having the exclusive Holding Position, the new Automatic Knitmaster easily produces bulged effects, heels and darts, as well as flat circular articles, such as berets, table mats, lace doyleys, curved yokes, runners and stoles with semi-circular ends, etc.

A bulged effect is obtained by knitting in a number of additional rows, shorter than the main rows of the knitted articles (Fig. 33). If only a few comparatively long additional rows are knitted in, a large shallow bulge is produced. If, on the other hand, a very large number of short rows are knitted in, the result is a smaller but much deeper bulge, for example, a heel. Differently shaped bulges are produced if the shorter rows are progressively increased or decreased. A dart is obtained by progressively shortening the rows, a number of stitches at a time, in the position required, and it is also possible to knit a raised section at one side by arranging the shorter rows at this side only instead of in the centre. Unlike the step-like slope obtained by casting-off a few stitches at a time, a flat smooth slope is obtained by knitting in a few shorter rows on one side before casting-off, e.g., shoulder shapings, etc. When knitting the shorter rows all the remaining Needles of the row must be pushed into the Holding Position by hand.





When using a hand knitting pattern the instructions for the above process would be given as in the following example where, say, 40 stitches would be on the Needles:—

1st Row: Knit to the last 10 sts., turn.
2nd Row: Purl to the last 10 sts turn.
3rd Row: Knit to the last 14 sts., turn.
4th Row: Purl to the last 14 sts., turn.

5th Row: Knit to end. 6th Row: Purl to end.

On the Knitmaster this would be done as follows (see theory of shortened rows diagrammatically illustrated in Fig. 33):

1st Row: Take the last 10 stitches, at the end of the row, opposite the Cam Box, out of the Knitting Position and into the Holding Position. Lay the wool across all the remaining Needles and pass the Cam Box over the Needle Bed, thus knitting the row.

2nd Row: As 1st Row.

3rd Row: Take 4 more Needles, at the end opposite the Cam Box, out of the Knitting Position and into the Holding Position. Knit the row.

4th Row: As 3rd Row.

5th Row: Bring all Needles from the Holding Position at the end of the row back into the Knitting Position. Knit the row.

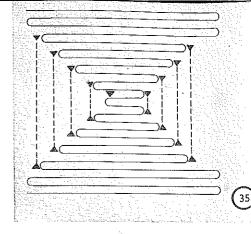
6th Row: As 5th Row.

Never lay the wool across the Needles in the Holding Position when knitting shortened rows.

In order to avoid the occurrence of holes at the ends of the shorter rows, the wool should always be taken under and laid over the nearest Needle in the Holding Position, before laying it across the row.

A deep bulge or a heel (Fig. 34) is made by continuously knitting with shorter rows. When doing this the consecutive shorter rows must first decrease in length and then increase until they attain the length of the first shorter row (Fig. 35).

First of all, the number of Needles corresponding to the desired shortening must be put in the Holding Position on the side opposite the Cam Box and one row knitted. The same should then be done on the other side and a further row knitted. In all cases



The ends of the rows which are marked by arrows and connected by dotted lines, are joined together when increasing the length of the shorter rows.

you must remember to pass the wool under and lay it over the nearest Needle in the Holding Position. Only the number of Needles necessary for making the heel or bulge are now in the Knitting Position.

Bring one more Needle into the Holding Position on the side opposite the Cam Box, and knit the row. Continue knitting, placing one extra Needle into the Holding Position on the end of each row.

When the minimum number of stitches corresponding to the required shape has been reached, one extra Needle at a time must be brought back into the Knitting Position on the end of each row.

When the original length of the shorter rows has been reached, the Needles which are in the Holding Position and outside the heel or bulge must be put back into the Knitting Position, always doing this on the side opposite the Cam Box.

A complete circle is produced as in the following example:-

Cast-on 20 stitches and knit 1 row. Continue as follows, placing the stitches which are not to be knitted into the Holding Position.

*Rows 1 and 2:	Knit over first 4 Needles.	Turn	and	knit	back	to b	eginning	₹.
Rows 3 and 4:	Knit over first 8 Needles.	21	,,	,,			,,	-
Rows 5 and 6:	Knit over first 12 Needles.				-		12	
Rows 7 and 8:	Knit over first 16 Needles.						,,	:k:*
Rows 9 and 10:	Knit over all 20 Needles			.,	•		• • • • • • • • • • • • • • • • • • • •	4.4.

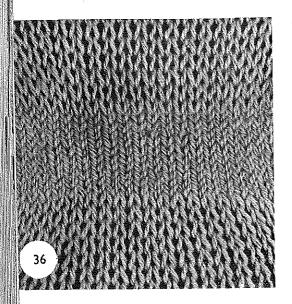
Repeat from * to ** once, which completes two sections. Repeat these two sections until circle is complete.

A very smart full-flared skirt can be knitted in this way with only one seam, i.e., knitted horizontally from seam to seam, and not from hem to waist. Of course, a larger number of full-length rows would have to be knitted in order to obtain a circular hole in the centre large enough for the waist.

For a runner, a semi-circle only is knitted. Then continue without shaping over the total number of stitches, until the desired length is reached. Knit another semi-circle in the same way and continue knitting a length without shaping as before. Cast-off. Sew the cast-off and cast-on edges together, and seam up the centre where the two unshaped edges meet.

Knitting and Ribbing with Elastic Thread

Elastic welts, cuffs, waist shapings, etc., are quickly and successfully made by knitting in elastic thread. A remarkably good ribbed effect can be obtained in this manner, with the added advantage of being much faster than ordinary ribbing, since there is no necessity to use hand tools of any kind. The elastic is laid over the Needles in such a way that it is knitted into certain stitches and only visible on the wrong side of the work.

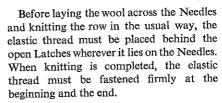


The first way (Figs. 36 and 37) is particularly suitable in conjunction with a welt or hem, for making neater fitting garments. This method can be used very satisfactorily in place of ordinary ribbing, which has been the usual process up to now. One selects a thin elastic thread as near as possible to the colour of the knitting wool being used. The tension for the elastic knitting should be one or two settings tighter than for the main body of the garment. In order to give an appearance similar to that of ordinary ribbing, every second or third Needle is put out of action into the Non-Working position, after the very first row has been knitted. A Needle is put out of action by transferring its stitch on to the adjacent Needle. The empty Needle must then be pushed down to the Non-Working Position. If desired, you may cast-on with the requisite Needles out of action.

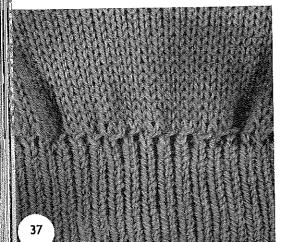
As a rule it is sufficient to introduce the elastic thread only at every third or fourth

row, depending on the elasticity required. The elasticity also depends to some extent on the thickness of the elastic selected. It is fastened to the Casting-on Eyelet and laid over every second working Needle and under the intervening Needles, then stretched and looped round the outer Needle as shown in Fig. 38. The tighter the elastic is pulled the firmer the welt, and fine wools require a greater tension on the elastic than thicker wools. The elastic should be held taut until the next row is knitted or fastened, still under tension, to the opposite Casting-on Eyelet.

Always lay the elastic over the same Needles.



A piece is knitted in this way twice the depth of the hem required, after which two rows are knitted without the elastic thread. The Needles which had previously been put out of action, must now be brought back into the Knitting Position. Using the Work Hook, pick up the stitches below the



adjacent Needles in the previous row and place them on to the empty Needles and behind the Latches (Fig. 13). Now, the hem is formed by hanging the loops of the Cast-on edge on to the corresponding Needles, as explained for "Knitted Hem". This completes the elastic hem and knitting can be continued with the tension setting required for the rest of the garment.

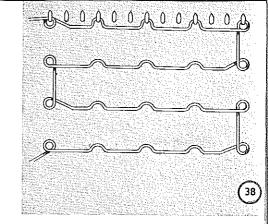
The second method (Fig. 39) is used where a rib effect is not required, e.g. ladies' under-wear and summer garments, waist-lines, bathing costumes and shirred effects, etc. The elastic is introduced in a similar manner to the first method but it is not necessary to put any Needles out of action (Fig. 38). The tension should be the same as used for the rest of the garment.

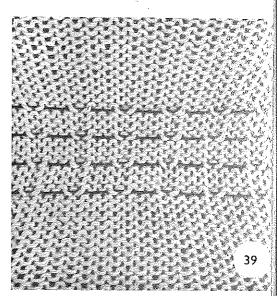
Looped Fabric

Just another exclusive Knitmaster stitchideal for cosy Bed Jackets! The loops are formed by winding the wool in the following manner around a thin rod or piece of wooden dowelling as long as the width of knitting. Knit 4 rows ending with Cam Box at right of Needle Bed. *Raise Right Cam Knob and knit 1 row. Return Cam Box to right of Needle Bed without inserting any wool. Holding the rod in your left hand about 11 inches below the Needles, and working from the left, wind the wool in an anti-clockwise direction around the rod and the first Needle. Continue winding the wool around the rod and the Needles in a similar manner to casting-on with a Closed Edge, and gradually sliding the rod along through the loops already formed as you proceed. Place the loops behind the Latches together with the stitches of the last row. Press down Right Cam Knob and knit 4 rows, Remove the rod.* Repeat from * to * as often as required.

Angora Knitting

Angora wool is knitted very easily on the Knitmaster with excellent results. During the knitting, the pile is inclined to be flattened slightly. When the garment is finished, therefore, it should be shaken vigorously and left in a warm atmosphere for a few hours to bring up the pile, and shaken again if necessary. Angora knitted in this way is less likely to shed its pile than when hand knitted.





Looped Fabric



IV. PATTERNS

Introduction to Pattern Knitting

A unique and invaluable feature of the new Automatic Knitmaster is the provision of the exclusive Holding Position, enabling certain stitches, according to pattern requirements, to be held without having to take them off the machine. This new Knitmaster feature gives a wider range of exclusive stitches and simplifies the knitting of intricate patterns, many of which can now be produced without the use of hand tools—in fact, almost automatically!

In the following pages we explain some of the main basic patterns and give a few examples of each. By combining or modifying these basic patterns it is possible to obtain countless interesting variations, so that patterns can be selected to suit all tastes and to answer all purposes. After trying a few of these stitches and becoming more accustomed to your Knitmaster, you will soon be able to work out new ideas and enjoy the added pleasure of producing original patterns of your own. In order to help you in this direction, we are including a few examples of such combinations.

After preparing a row according to the pattern required, make sure that all stitches are behind the latches, and that all latches are open. An easy way of checking this is to run a finger or a Transfer Tool along the Needle Heads when a closed latch will soon be felt.

The knitting of Fair-Isle patterns has been made considerably simpler on the new Automatic Knitmaster, now making it much easier and faster than on any other Home Knitting Machine. Fair-Isle produced on a Knitmaster has a much smoother and neater appearance than when knitted by hand and can be worked according to two different methods.

With the first of these, the various coloured threads are laid into the Hooks of the Needles so that the different colours run over or under the Needles according to the pattern or chart. When the Cam Box is operated, the threads which are lying on top of the Needles form stitches, whilst those carried across underneath the Needles are not knitted but remain unseen on the wrong side of the work. When placing the various colours over the Needles, always bring the new colour up behind the previous colour. In this way a twist is made which ensures a perfectly even finish. It is advisable, when knitting Fair-Isle over a considerable number of stitches, to lay the various coloured wools over approximately 50 stitches only at one time. Pass the Cam Box across to this point and then repeat the procedure until the row has been completed. In this way, the finished Fair-Isle retains more elasticity and a very even appearance.

The second method is an exclusive feature of the new Automatic Knitmaster and is worked with the aid of the unique Holding Position. This method enables Fair-Isle to be knitted without having to take the various colours over and under the Needles, and is particularly useful where colours have to be changed at very short intervals, or when using more than two colours in the same row. As each colour is used separately, all twisting is eliminated and the different colours do not become entangled (see Fig. 69).

In hand knitted Fair-Isle and colour knitting, the strands at the back of the work are sometimes woven in. This is not necessary on the Knitmaster unless the wool is being taken across behind a considerable number of stitches. In this case, the wool at the back is simply twisted around the wool being laid over the Needles, in between every fourth or fifth Needle. If preferred, however, the wool can be twisted at closer intervals.

Patterns based on Multi-Tension Effects

A number of rows are knitted with a coarse stitch and a fine stitch, alternating according to pattern. This gives a striped texture effect to the knitting.

Example I

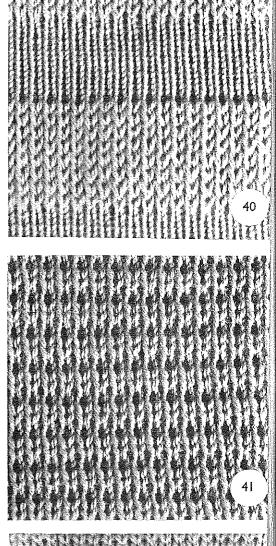
- 1. Knit 13 rows with tension set at 3.
- 2. Knit 10 rows with tension set at 10.
- 3. Repeat steps I and 2.

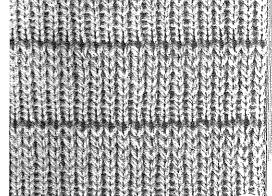
Example 2

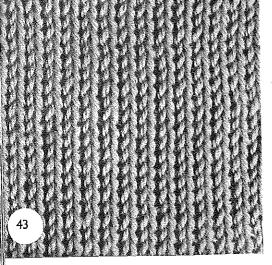
- 1. Knit 2 rows with tension set at 3.
- 2. Knit 2 rows with tension set at 10.
- 3. Repeat steps I and 2.

Example 3

- 1. Knit one row each at tensions 3, 4 5, 6, etc., up to 10.
- 2. Repeat step 1.







44

Patterns based on Omitted Stitches

Needles are put out of action at certain distances from each other, so that at these points there is always a wider interval between two stitches. A Needle is put out of action by transferring its stitch to an adjacent Needle and pushing the empty Needle into the Non-Working Position.

Example I

- 1. Put every second Needle out of action.
- Knit in the usual way. In this manner you can
 obtain a much looser tension than is possible on
 the loosest tension setting of the Tele-Tension
 Dial.

Example 2

- Put every second Needle out of action. The Needles left out of action must be an odd number. Knit in this way for desired length.
- Bring the outside right and left Needles out of the Non-Working Position into the Knitting Position.
- 3. Knit across twice.
- Bring the next outside right and left Needles into the Knitting Position.
- 5. Knit across twice.
- Repeat steps 2-5 until all Needles are back in the Knitting Position.

Example 3—Easy-Rib without Hand Tools

- 1. Put every fourth Needle out of action.
- 2. Knit in this manner for length desired.
- 3. Bring the omitted Needles back into the Knitting Position.
- Using the Work Hook, lift the stitches of the previous row below the adjacent Needles on to the empty Needles and behind the Latches (Fig. 13).
- 5. Continue knitting in the usual way.

NOTE.

A very pleasing Rib is produced in this simple way which is recommended for over-all rib patterns as it is so much faster than ordinary ribbing. When made into a hem, a firm welt is produced which is almost indistinguishable from an ordinary rib. A double thread of shirring elastic should be threaded in at the top for extra firmness at the waist (see photograph on nage 19).

See also Fisherman Rib and other Ribs without hand tools on pages 46 and 47.

Lace Patterns

Using the Transfer Tool, a stitch is hung on to the adjacent Needle either to the right or left. The empty Needle is left in the Knitting Position. After two rows have been knitted, a small hole will have been formed at the point where the stitch was transferred. When following a hand knitting pattern this is equivalent to wl.fwd., K.2 tog.

Example I

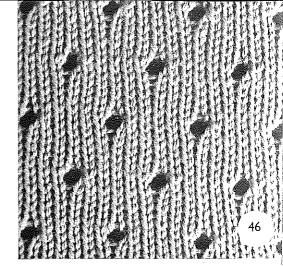
- Transfer every sixth stitch on to the adjacent Needle either to the right or left.
- 2. Leave all Needles in the Knitting Position.
- 3. Knit seven rows.
- 4. Repeat steps 1-3, moving the pattern along so that every hole is placed exactly half way between each two holes of the previous pattern row.

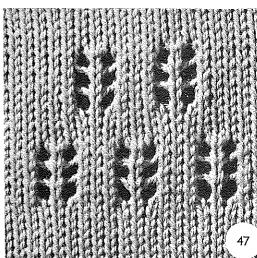
Example 2

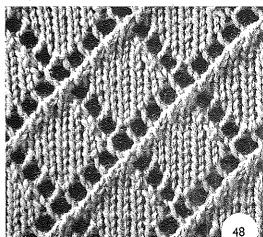
- 1. Always counting from the left, transfer the 4th and every following 6th stitch to their adjacent Needles at left, and the 6th and every following 6th stitch on to their adjacent Needles at right.
- 2. Leaving the empty Needles in the Knitting Position, knit across twice.
- Repeat steps I and 2 twice more.
- 4. Knit 5 rows and then move the pattern along as in the previous example.

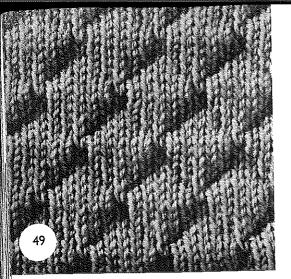
Example 3

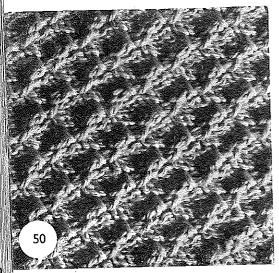
- Always counting from the left, transfer every eighth stitch to its adjacent Needle at left. Knit across twice.
- Again counting from the left, transfer stitches 9, 17, 25, 33, etc., to their adjacent Needles at right, and stitches 7, 15, 23, 31, etc., to their adjacent Needles at left. Knit across twice.
- Counting from the left, transfer stitches 10, 18, 26, 34, etc., to their adjacent Needles at right, and stitches 6, 14, 22, 30, etc., to their adjacent Needles at left. Knit across twice.
- 4. Transfer stitches 5, 13, 21, 29, etc., to their adjacent Needles on the left and stitches 11, 19, 27. 35, etc., to their adjacent Needles at right. Knit across twice.
- Repeat steps 1-4, moving the pattern 4 stitches

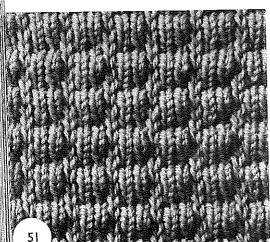












Patterns using Special Holding Position

Needles are pushed into the Holding Position at the desired distance from each other. When knitting, the wool remains over the Needle Shafts at these points. When the Needles, which are in the Holding Position, are brought back into the Knitting Position and the knitting continued in the ordinary way, the threads over the Shafts of the Needles from the Holding Position are knitted in with the newly-formed stitches.

Example 1

- I. Knit 3 rows.
- 2. Push every sixth Needle into the Holding Position.
- 3. Knit 5 rows.
- 4. Bring the Needles back into the Knitting Position.
- Repeat steps 1-4, but move the pattern along so that each Needle in the Holding Position is placed exactly halfway between two of the previous pattern row.

Example 2

- I. Knit 5 rows.
- Counting from the left, push Needles 4, 8, 12, and every following fourth Needle into the Holding Position.
- 3. Knit 5 rows.
- Push all Needles from the Holding Position back into the Knitting Position, and put Needles 2, 6, 10 and every following fourth Needle into the Holding Position.
- 5. Repeat steps 1-4.

Example 3

- I. Knit 3 rows.
- Push every third Needle into the Holding Position.
- 3. Knit 4 rows
- 4. Push all Needles into the Knitting Position
- 5. Repeat steps 1-4 without moving the pattern along.

A very large number of lovely patterns can be produced by this method, including the exclusive Tweed Fabrics and Corduroy and Moss-Stitch Effects—see page 46. Although it is simple to move the Needles with your fingers, the special Knitmaster Adjustable Needle Selector, costing but a few shillings, makes these patterns very much quicker and easier, as this device can be pre-set to move a number of Needles simultaneously according to pattern requirements, (described in "Aids to Better Knitting"—write for free copy).

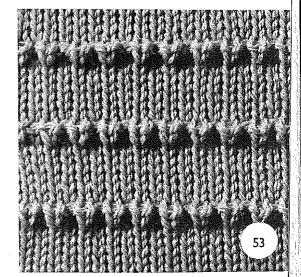
Patterns based on Ribbing Process

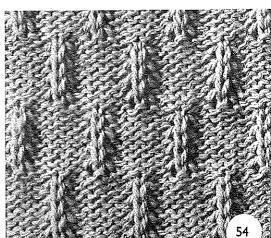
These patterns are produced by letting certain stitches drop and then picking them up again on the purl side of the knitting, using the Latch Needle Tool (see Fig. 19).

Example I

- I. Knit the required number of rows.
- 2. Drop every third and fourth stitch in turn.
- 3. Pick up each dropped stitch as for ribbing.

52



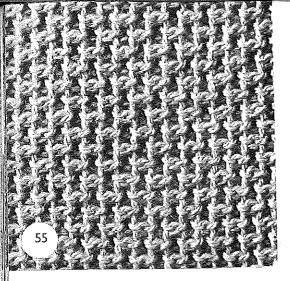


Example 2

- I. Knit 8 rows.
- Let every second stitch in turn drop down three rows. Insert the Latch Needle Tool into the dropped stitch and upwards behind the running threads. Form a stitch with the top running thread only and hang it on the empty Needle.
- 3 Repeat steps I and 2.

Example 3

- I. Knit 8 rows.
- 2. Let every sixth stitch in turn drop 8 rows.
- Pick up the dropped stitches using the Latch Needle Tool, but forming the new stitches with every second running thread only.
- 4. Repeat steps I-3, moving the pattern along.

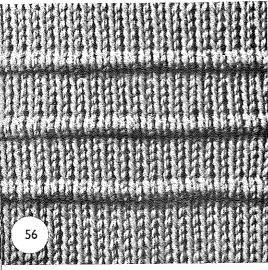


Patterns based on Lifted Stitches

These patterns are made by drawing out certain stitches from previous rows and hanging them for a second time on the required Needles.

Example 1

- 1. Knit 2 rows.
- Using the Transfer Tool, drop every second stitch in turn two rows down, lifting each stitch up in front of the resulting running threads and hanging it on the empty Needle.
- 3. Repeat steps I and 2, moving the pattern along one



- I. Knit 9 rows.
- 2. Insert the Work Hook into each stitch in turn 3 rows below the Needles, raising each stitch on to the Needle above. Place these lifted stitches behind the Latches together with the original stitches.
- 3. Repeat steps I and 2.



- I. Cast-on the same number of Needles at each side of O.
- Knit 5 rows.
 Using the Work Hook, lift the stitches from 4 rows below the stated Needles and hang them on to and behind the Latches of the Needles indicated: Lift stitches I on to Needles I, crossing over at centre. Lift stitches 5 on to Needles 7 on either side of O. Lift stitches II on to Needles 13 on either side of O and so on.
- 4. Knit 5 rows.
- 5. Prepare row as in Step 3, but commence by lifting stitches I on to Needles 3 on either side, 7 to 9, and so on.
- Prepare row as in step 5, but commence with stitches 3 to Needles 5, 9 to 11, and so on.
- 8. Repeat steps 2-7.

Cable and Crossed Stitch Patterns

Using a Single or Double Transfer Tool, certain stitches are lifted off the Needles, crossed over and hung on Needles again. When crossing them over, care must be taken to see that the stitches are brought over and under in the same way each time, unless directed otherwise.

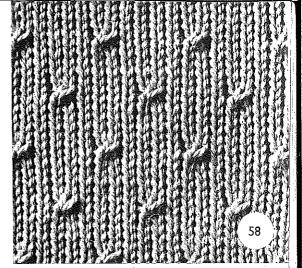
Example I

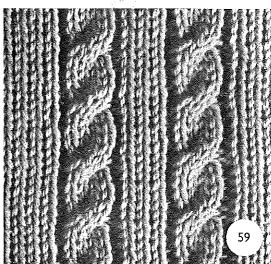
- 1. Knit 6 rows.
- Using a Single Transfer Tool, cross over stitches 7 and 8, 13 and 14, 19 and 20, 25 and 26, and so on.
- Repeat steps 1 and 2, but move the pattern along as desired.

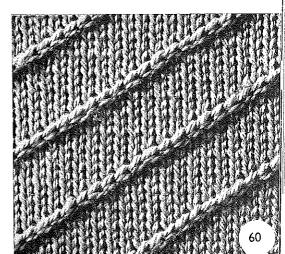


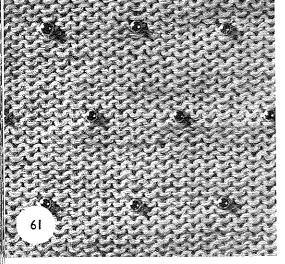
- Counting from the left of the work, transfer stitches 9, 14, 18 and 23, etc., on to their adjacent Needles. Put the empty Needles back into the Knitting Position and knit 6 rows.
- Counting from the left, drop stitches 9, 14, 18 and 23, etc., down the six rows, leaving the empty Needles in the Knitting Position.
- Using the Double Transfer Tools, cross stitches 10 and 11 with 12 and 13, 19 and 20 with 21 and 22, and so on.
- 4. Knit 6 rows.
- 5. Repeat steps 2-4 as often as required.
- Using the Latch Needle Tool, pick up the dropped stitches as in Ribbing.

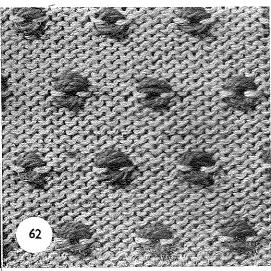
- 1. Using the Single Transfer Tool and counting from the left of the work, cross over stitches 7 and 8, 15 and 16, 23 and 24, and so on. Knit across once.
- 2. As step I, but move the pattern along one stitch.
- 3. Repeat step 2 as often as required.

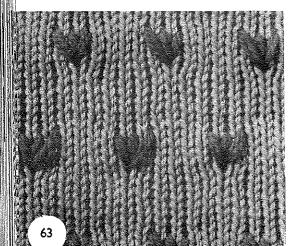












Patterns using Beads and Auxiliary Yarns

To make these patterns an auxiliary yarn is used which may be either of the same colour as the main shade, or a contrast.

Example I

- Thread the required number of beads on to the auxiliary thread (use the same yarn as the intermediate rows).
- After knitting the required number of rows with the main shade, lay the auxiliary thread over the Needles. Place the beads, each between two Needles, at the desired distance from each other. Knit one row slowly, making sure that the beads do not move out of place.
- Knit another row with the auxiliary thread but without beads.
- 4. Knit 8 rows using the main shade.
- Repeat steps 2-4, but move the pattern along as desired. When finished, the beads may be pushed through so that they show on the plain side of the work if preferred.

Example 2

- Counting from the left, put Needles 5 and 6, 11 and 12, 17 and 18, 23 and 24, etc., into the Holding Position.
- Wind the auxiliary thread four times round Needles 5 and 6.
- Take stitches 7 to 10 on to Transfer Tools and bring the auxiliary thread across behind these stitches before hanging them back on to the Needles again.
- Wind the auxiliary thread four times round Needles 11 and 12. Bring the auxiliary thread across behind the work as described in step 3, and wind it round Needles 17 and 18, and so on.
- 5 Bring all Needles into the Knitting Position and knit 8 rows.
- Repeat steps 1-5, but move the pattern along as desired.

- After knitting the desired number of rows, push
 the Latch Needle Tool through the 6th stitch,
 6 rows down from the Needles and insert it upwards behind the work bringing it up between the
 4th and 5th Needles.
- Lay the auxiliary thread over the Needles and withdraw the Latch Needle Tool with the auxiliary thread in its hook, thus making a loop. Hang this loop on the 5th Needle.
- Push the Latch Needle Tool through the same stitch and insert it upwards between the 5th and 6th Needles. Take up the auxiliary thread, pull it through as before and hang the loop on the 6th Needle.
- 4. Push the Latch Needle Tool through the same stitch and insert it upwards between the 6th and 7th Needles. Take up the auxiliary thread, pull it through and hang the loop on the 7th Needle.
- Repeat steps 1-4 on the stitches below every following 6th Needle.
- Place behind the Latches, all new stitches made with the auxiliary thread and the auxiliary thread itself. Knit 12 rows.
- Repeat steps I-6, moving the pattern along as desired.

Fair-Isle and Patterns using Several Colours

When introducing single row stripes or stripes that have an odd number of rows, it is necessary to pass the Cam Box to the other side without knitting in order to pick up the other working thread. This means that before knitting the last row of the stripe, the outer Cam Knob must be raised. i.e., if the Cam Box is at the right of the Needle Bed the Right Cam Knob must be raised, and vice versa. Knit the final row of the stripe. Return the Cam Box to the other end of the Needle Bed without laying any wool over the Needles and with the Cam Knob in the same position. Make sure that both Cam Knobs are pressed down before continuing unless, of course, you wish to change colour again after the following row.

Example I

rn

ne

the

er-

rish

the wo

er.

ads

but

hed

the

and ling

ing hes ain. und ead

and

as

ush tch. up. the and this

ame

and pull

the

ame

and

II it

ery

ade

e as

- 1. Knit 6 rows using the contrasting shade. 2. Knit 2 rows with the main shade.
- 3. Knit 6 rows using the contrasting shade,

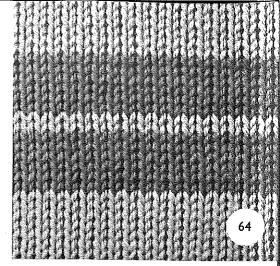
Example 2

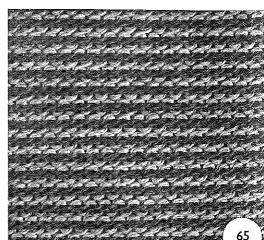
- I. Knit one row using the main shade.
- 2. Pull up the outer Cam Knob. Knit one row in a contrasting shade, then return the Cam Box to the other side without using any wool. Press down the Cam Knob.
- 3. Repeat steps I and 2 as often as required.

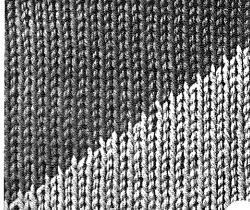
Example 3

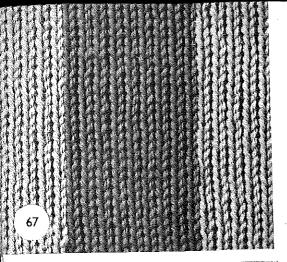
- 1. Knit two rows using the main shade.
- Lay the main shade over the Needles, but bring the wool down between the last Needle and the second last Needle.
- 3. Lay the contrasting shade over the last Needle of the row.
- 4. Knit across once, letting both threads run fréely,
- Lay the contrasting shade over the first two Needles of the row. Lay the main shade over the remaining Needles.
- 6. Knit across once.
- Repeat steps 2-6, moving the colours along one Needle in each row.

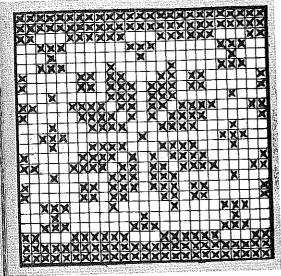
(further examples on next page)

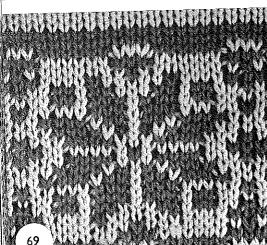












Fair-Isle and Patterns using several colours

(continued from previous page)

When making the divisions between the colours either vertical or sloping, the threads must be twisted round each other where the colours meet to prevent a slit.

Example 4

This pattern is worked, using a separate ball of wool each side of the dark stripe, even if these are the same colour. This also applies when knitting a Fair-Isle figure or animal on a plain background.

- Lay the first thread over the Needles from the left and bring it down between the 4th and 5th Needles.
- Bring the second thread up between the 4th and 5th Needles and lay it towards the right over the next 9 Needles, bringing it down between the 13th and 14th Needles.
- Bring the third thread up between the 13th and 14th Needles and lay it over the remaining Needles towards the right.
- Knit across once.
- Repeat steps 1-4 in the reverse direction, i.e., bring the third thread down between the 13th and 14th Needles, bring the second thread from the 13th Needle down between the 4th and 5th Needles and lay the first thread from the 4th Needle across towards the left.
- Repeat steps 1-5.

Example 5

There are two different methods of knitting Fair-Isle Patterns which are often worked from a chart (see Introduction to Pattern Knitting in which the first method is fully explained). In the second method, the Needles for one colour only are left in the Knitting Position, all others being pushed into the Holding Position, Lay the wool of the chosen colour across all the Needles and knit the row in the usual manner. When one colour has been knitted in, it will be necessary to push all the Needles into the Holding Position in order to return the Cam Box to the beginning of the row for the next colour. The second and any other additional colours must be knitted in the same way before proceeding to the next row. An ordinary ruler is very useful for pushing all the Needles quickly into the Holding Position.

When the above method is used, it means that the Cam Box will have to be operated several times for the same row depending on the number of different colours. If a Row Counter is used, care must be taken to see that the number of rows are counted correctly. A Row Counter counts the number of journeys of the Cam Box. As extra journeys are necessary for this method of knitting Fair-Isle, the total of the additional and return journeys must be subtracted from the total shown on the dial of the Counter. It is probably better, therefore, to take a note of the number of rows knitted up to the commencement of the Fair-Isle, dispense with the Row Counter when working the Fair-Isle, and re-set it when the Fair-Isle has been completed.

Patterns combining various Basic Stitches

Unlimited possibilities of producing very attractive patterns are offered by combining various basic stitches. The following examples will show you just a few of these combinations.

Example I

ıe

o

nd

he

nd ng

e., nd he

rst he ing all

ing the ind in An les the

ent

ken

tly. the

his nal

tal

er. ted

nse

and

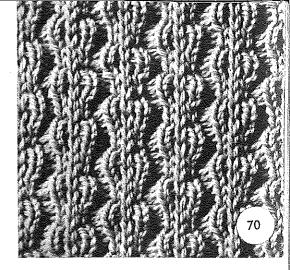
- Always counting from the left of the work, transfer stitches 4, 8, 12, etc., to their adjacent Needles and put the empty Needles in the Non-Working Position.
- Put Needles 2, 10, 18 and every following 8th Needle into the Holding Position.
- 3. Knit 4 rows.
- Put the Needles from the Holding Position into the Knitting Position, and put Needles 6, 14, 22 and every following 8th Needle into the Holding Position.
- 5. Knit 4 rows.
- Repeat steps 2-5.

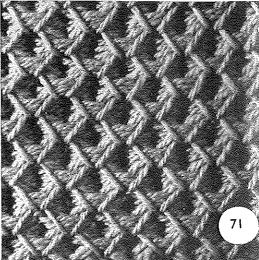
Example 2

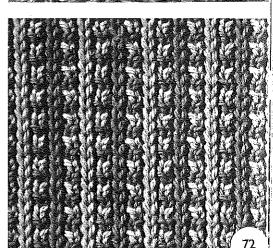
- Put every second Needle out of action and into the Non-Working Position.
- Of the Needles left in the Knitting Position, put every second into the Holding Position.
- 3. Knit 6 rows.
- Push the Needles from the Holding Position into the Knitting Position, and Needles from the Knitting Position into the Holding Position.
- Repeat steps 3-4.

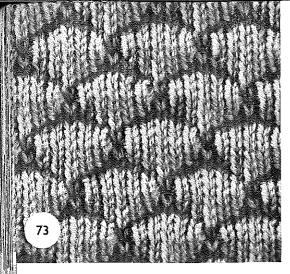
- 1. Counting from the left, push Needles 4, 8, 12, 16, etc., into the Holding Position.
- Knit 2 rows using a contrasting colour, then bring all Needles back into the Knitting Position.
 Push Needles 2, 6, 10, 14, etc., into the Holding
- Position.

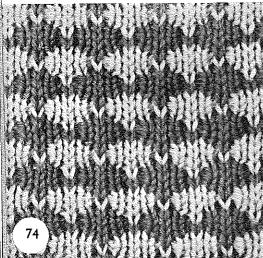
 4. Knit 2 rows with the main shade, then bring all Needles back into the Knitting Position.
- 5. Repeat steps 1-4.

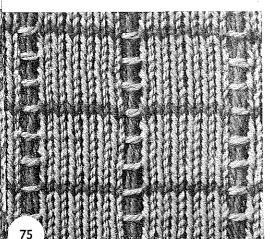












Example 4

- Raise the outer Cam Knob, knit one row using a contrasting colour, bring the Cam Box back to the other side and press the Cam Knob down again.
- 2. Knit I row with the main colour.
- Counting from the left, push Needles 6, 12, 18, 24, etc., into the Holding Position.
- 4. Knit 6 rows using the main colour, then bring the Needles back into the Knitting Position.
- Raise the outer Cam Knob, knit one row, using the contrasting colour, return Cam Box to the opposite side and press the Cam Knob down again.
- 6. Knit one row with the main colour.
- Repeat steps 3-6, moving the pattern three Needles along.

Example 5

- Knit one row, using a contrasting colour and, counting from the left, push Needles 4, 8, 12, 16, etc., into the Holding Position.
- Knit 3 rows using the contrasting colour and bring the Needles back into the Knitting Position.
- 3. Knit one row using the main colour and push Needles 2, 6, 10, 14, etc., into the Holding Position.
- Knit 3 rows using the main colour and bring all Needles back into the Knitting Position.
- 5. Repeat steps I-4.

- Put every 7th Needle out of action and into the Non-Working Position.
- Knit 9 rows using the main colour.
- Raise the outer Cam Knob, knit one row using a contrasting colour, return the Cam Box to the other side and press the Cam Knob down again.
- Repeat steps 2 and 3 for the desired length.
- When the knitting has been completed, thread a Tapestry or large Darning Needle with four strands of the contrasting colour and weave it over and under the running threads produced by the Needles which were put out of action.

V. PREPARING TO KNIT A GARMENT

Use and Adaptation of Knitting Instructions

When following a hand knitting pattern, the first step is to make sure your tension is the same as that given in the pattern. This is easily done by means of a stitch test which must be carried out each time you use a different make of wool, even if it is the same ply, and whenever you wish to knit at a different tension on a yarn you have used before. If you keep a record of the different tensions you obtain with the various wools, you will find it useful for future reference. The test should be about 40 stitches wide and 40 rows long. It should then be pulled several times lengthwise and crosswise and also diagonally across the corners, ending with a lengthwise pull. In this way, the stitches will assume the form they will take later in the finished garment when worn. If you wish you may press the test piece lightly before measuring in the following way. It is advisable to use a piece of cardboard in which has been cut a square hole, 2 inches by 2 inches. First spread out the test piece and secure it with pins to a flat surface. Now lay the piece of cardboard on the knitting and count the number of stitches horizontally and vertically inside the square. If you halve the result in each case, it will give you an accurate calculation of the number of stitches and rows per inch.

As in hand knitting, your individual technique may give you a tension differing slightly from the pattern, in the same way the tension you obtain on the machine may not always agree in both stitches and rows per inch. In this case, it is usually more advisable to ensure that the number of stitches per inch is the same as that given in the pattern. It is then quite an easy matter to adjust the number of rows to be knitted if the number of rows per inch does not quite agree, see paragraph (b) below. On the other hand, if the pattern you are using is not exactly to your measurements, you must adjust this also, in the same way as you would if knitting by hand. Both these adjustments are very easy once you have calculated your tension as above, and the following example will show you how it is done.

If you draw a rough diagram of the article to be knitted and mark on it the required measurements, you will find these calculations a very simple matter.

Tension: 7 stitches and 10 rows per inch.

Measurements:

Waist—12 inches. Length from Waist to Armhole—9 inches. Bust—16 inches.

Note: The above figures for waist and bust are half the actual measurements, and are for the front or back of a garment only.

- a) How many stitches must be cast-on at the waist?
 12 inches × 7 stitches (per inch) = 84 stitches.
- b) How many rows must be knitted from waist to armhole?
 9 inches × 10 rows (per inch) = 90 rows.
- c) How many stitches must be increased from waist to bust? (increasing commences from the waist and is usually completed a few inches before the armhole, in this case approximately 2 inches or 20 rows, i.e., 70 rows from the waist).

16 inches \times 7 stitches (per inch) = 112 stitches.

This means that 28 stitches (112 minus 84), or 14 stitches on each side, must be increased over approximately 70 rows. 70 divided by 14 equals 5. Therefore, you must increase one stitch at each end of every 5th row.

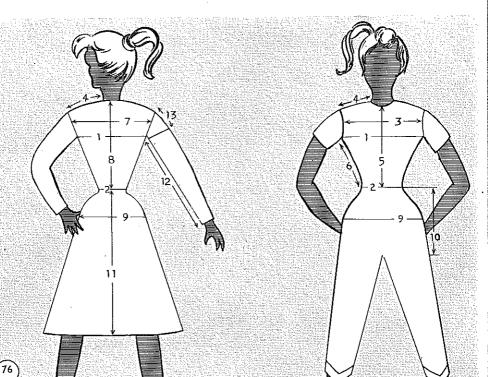
If your tension has the same number of stitches per inch as the pattern, but differs in the number of rows to the inch, you may still follow the armhole shaping from the pattern, but it will be necessary to knit a few more (or less) rows up to the shoulder. The same applies to neck shaping.

NOTE:—Knitmaster Automatic Row Counter can be supplied at a small extra cost. Write in for further details of this precision made 3-figure Counter with instantaneous reset knob—a flick of the fingers brings it back to 0! (Full details in "Aids to Better Knitting"—free copy available on application).

Personal Measurement Chart

The measuring instructions given for chest, back and hips are for adults. For children these must be changed in proportion.

- 1. Chest or Bust at Underarm: Measure over the widest part of the back, under the arms and loosely over the widest part of the chest. For the front of the garment, count half the total measurement plus $\frac{1}{4} \frac{1}{2}$ inch. The back is also calculated as being half the total measurement plus $\frac{1}{4} \frac{1}{2}$ inch.
- 2. Waist: Measure around the waist.
- 3. Width of Chest from Arm to Arm: Measure approximately 3 inches below the neck.
- 4. Width of Shoulder: Measure from base of neck to beginning of arm.
- 5. Length of Front: Measure from neck to waist.
- Length of Side: Place a ruler horizontally under the arm and measure from the top edge of the ruler to the waist.
- 7. Width of Back: Measure from arm to arm approximately 3½ inches below the neck.
- 8. Length of Back: Measure from neck to waist.
- 9. Hips: Measure loosely round the hips approximately 8 inches below the waist.
- 10. Seat Height: Measure whilst sitting, from the waist to the chair.
- 11. Skirt Length: Measure from waist to hem.
- 12. Sleeve Seam: Measure from armhole to beginning of hand, or length desired.
- 13. Length of Shaping for Top of Sleeve: Let arm hang straight down. Pass one end of the tape measure round the arm at the level of the armpit. Measure from top of arm to top edge of tape.



Hints for Better Knitting

The aim of every knitter should always be to achieve the maximum of effect and finish in the minimum of time, and we give below a few useful tips towards this end.

A great deal of time can be saved on the Knitmaster by employing the various rapid methods of ribbing without hand tools, and full use of these should be made wherever possible.

The Easy-Rib (Fig. 45) can be used most successfully for neckbands, armbands and borders if made into a hem before casting-off. Firm welts, almost indistinguishable from ordinary ribbing, can be quickly and easily produced in this way by turning up a hem (see photograph on page 19). The Easy-Rib is also ideal for all-over rib patterns or where required in the body of a garment. (See also Corduroy Effects and other ribs on next page.)

Elastic Ribbing (page 28) is widely used for welts and cuffs both by home and professional knitters. It is very quick to make, has a most pleasing appearance and keeps its elasticity better.

Ordinary ribbing is given longer life and a much better finish if elastic thread is introduced at the top of the welt and cuffs. It can either be knitted in after the ribbing has been completed (two rows are sufficient), or threaded through with an ordinary sewing needle when the garment is finished

This kind of ribbing should always be pressed in the following manner. Using a very damp cloth and hot iron, press very lightly until the ribbing is quite steamy. Then pull it quickly and firmly in a lengthwise direction before it gets cold.

The appearance of the finished garment depends to a great extent on the tension used. Too loose a tension can spoil an otherwise well knitted garment which will not keep its shape so well when washed. On the other hand, too tight a tension can make the fabric rather hard in appearance and texture. There is a tendency amongst many knitters to knit too loosely and it is a good plan, therefore, to try your wool on a few different tensions before commencing the garment, in order to choose the most suitable tensions. Remember that a slightly tighter tension may give just that professional touch you are looking for.

Remember, too, that the appearance of your garment depends on the quality of the wool used. The Knitmaster will knit any yarn or wool but, just as in hand knitting, the best results are obtained with the better quality wools.

The purl side of the knitted fabric can be exploited in innumerable ways for effective contrasts. The following method of making borders is highly recommended for a neat and attractive finish. The appearance is very similar to garter-stitch but is firmer and much quicker to make, having the added advantage of keeping its shape much better. You should use a somewhat tighter tension than the rest of the garment, say one or two settings, and knit to the necessary length but slightly more than double the width required. Sew on the border with the purl side showing.

This type of border can be used for neckbands and cuffs (see pattern for Batwing Jumper) as well as for button and buttonhole borders. They should be made one or two inches shorter and stretched into position before sewing. Buttonholes should be knitted in as you proceed, and vertical buttonholes are recommended for speed and neatness in this type of border. Two slits will have to be made for each buttonhole and so placed that when the border is folded back, one slit lies directly above the other. They should then be finished with a buttonhole stitch.

The purl side can also be used very effectively as a contrast for yokes and insets. In this case, of course, the tension should be the same as for the rest of the garment.

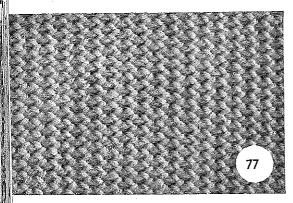
Very attractive garments can be made by knitting horizontally instead of vertically. This method is frequently used in hand knitting for Batwing jumpers which are often knitted from sleeve to sleeve, but the same idea can be used successfully with a Raglan or set-in sleeve by knitting from side seam to side seam instead of the usual way from waist to shoulder. In many cases you will find this a much quicker method as the shaping is easier and the finished effect can be extremely charming. The back and fronts of a cardigan can be knitted in one piece, the side shaping being made with the use of the Holding Position in a similar manner to shoulder shaping. Much wider garments can be knitted in this way on Model "3500" but practically any size can be made on Model "4500" even on the finest tensions.

Of course, good making-up is essential for a well finished garment and you should always be prepared to spend sufficient time and care on this all-important process.

Before making up, all parts should be pressed as follows. Lay each piece, wrong side up, on an ironing board. Place a tape measure across the bust line and pin out to the correct width. Lay the tape measure lengthwise from shoulder to lower edge and pin out to the length required. Now pin all the edges to the ironing board and press firmly with a warm iron and damp cloth, but not the ribbing, as this should be pressed in the manner already described. Elastic ribbing should not be pressed at all.

Seams should be made by placing the two pieces together with right sides facing and joining with a back-stitch about \(\frac{1}{8}'' \) from the edge. If you have a sewing machine, you will find it much quicker, easier and neater for making up a garment. The sleeves should be tacked into position before sewing but straight seams can be sewn without tacking. Many people prefer this method and it has the added advantage of enabling you to correct mistakes in shaping. In the case of babies' garments and underwear, a more suitable seam is obtained by over-sewing which can only be done by hand.

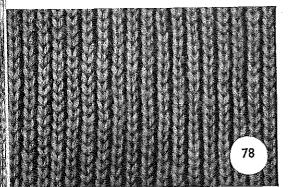
Tweed Fabric and Ribs without Hand Tools



Exclusive Tweed Fabric (77)

- Put every alternate Needle into the Holding Position, leaving the others in the Knitting Position.
- 2. Knit 2 rows.
- Push Needles from the Holding Position into the Knitting Position and vice-versa.
- 4. Repeat steps 2 and 3.

This beautiful Tweed Fabric (77) has the appearance and durability as well as the texture of a double woven cloth, and is not merely ordinary knitting with a tweed effect. It does not lose its shape when worn, and can be cut with scissors and made up like a woven fabric. This new Tweed Fabric is the fashion rage in Paris where it is used for tailored suits, dresses, overcoats and sportswear, and is very easily made on a Knitmaster due to its having the exclusive Holding Position.¶



"One-and-One" Rib (78)

This is knitted in exactly the same way as the Tweed Fabric except that only one row is knitted between each transposition of the Needles. The pattern appears on the reverse side and has a pleasing fine Corduroy Rib effect. In general, Corduroy effects are obtained where the Needles are transposed after every row.

The reverse side of this pattern has a fine Moss Stitch effect, and lovely smocked effects can be obtained by transposing the Needles after every third or fourth rows.

Although it is simple to move the Needles with your fingers, the special Knitmaster Adjustable Needle Selector, costing but a few shillings, makes patterns of this kind very much quicker and easier as this device can be pre-set to move a number of Needles simultaneously according to pattern requirements (write in for free copy of "Aids to Better Knitting").

"Two-and-One" Rib (79)

- Put every third Needle into the Holding Position, leaving the others in the Knitting Position.
- 2. Knit I row.
- Push Needles from the Holding Position into the Knitting Position and vice-versa.
- 4. Repeat steps 2 and 3,

This rib can be varied by knitting two or three rows in the various Needle Positions, or by using wools of different thicknesses.

Fancy Rib (80)

- Leave every fourth Needle in the Non-Working Position, and put the others into the Knitting Position.
- 2. Push two Needles from each group of three into the Holding Position.
- Knit I row. Push Needles from the Holding Position into the Knitting Position and vice-versa.
- Knit 2 rows. Push Needles from the Holding Position into the Knitting Position and vice-versa.
- 5. Repeat steps 3 and 4.

This rib can be varied by knitting one, two or three rows in the various Needle Positions, or by using wools of different thicknesses.

Fisherman Rib (81)

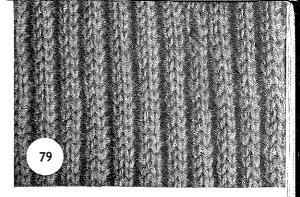
- Leave every alternate Needle out of action in the Non-Working Position.
- Of the remaining Needles, put every second into the Holding Position, leaving the others in the Knitting Position.
- 3. Knit I row,
- Push Needles from the Holding Position into the Knitting Position and vice-versa,
- 5. Repeat steps 3 and 4.

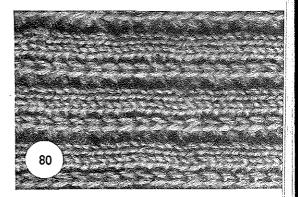
This rib can be varied by knitting one, two or three rows in the various Needle Positions, or by using wools of different thicknesses. Attractive Moss Stitch and Herringbone effects are obtained on the reverse side.

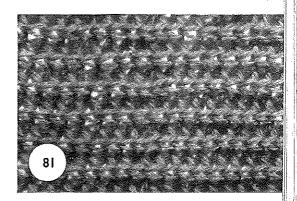
Heavy Fisherman Rib (82)

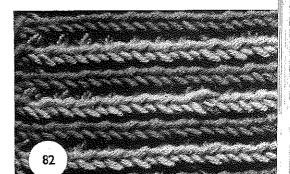
- Arrange Needles as for Fisherman Rib above.
- 2. Knit 2 rows in one colour.
- Push Needles from the Holding Position into the Knitting Position and vice-versa. Knit 2 rows in contrasting colour.
- Push Needles from the Holding Position into the Knitting Position and vice-versa. Knit 2 rows in first colour.
- 5 Repeat steps 3 and 4.

This rib can be varied by knitting one, two, or three rows in the various Needle Positions or by using wools of different thicknesses. In the same way, the other ribs given in this section can be varied by using different coloured wools.











Fairy-like gossamer lace Jumper in 2-ply wool—always a classical favourite!

VI. A PRACTICAL SELECTION OF KNITMASTER GARMENTS

★ SEE COMPLETE LIST OF KNITMASTER PATTERN LEAFLETS & BOOKS ON PAGE 78

Gossamer Lace Jumper

Materials: 6 ozs. 2-ply wool. Crochet hook. 3 or 4 buttons.

Measurements: Bust 34". Length 21". Sleeve Seam 5".

Tension: 7 stitches and 12 rows to 1 inch of pattern. In order to obtain this tension the Tele-Tension Dial was set at No. 4, except for the ribbing when it was set at No. 2.

BACK

Cast on 131 stitches with a Closed Edge. Set tension at No. 2. Knit 70 rows. Drop every 3rd stitch in turn and pick up as for ribbing. If desired, Elastic Ribbing or the Simple Rib may be used for the welt. Set tension at No. 4 and continue knitting in pattern as follows:—
Row 1: Counting from left, transfer 6th stitch to 7th Needle and every following 7th stitch to 8th Needle. Knit the row.

Row 2: Knit plain.
Row 3: Counting from left, transfer 5th stitch to 4th Needle, 7th to 8th and every following 5th to 4th and 7th to 8th. Knit the row.

Row 4: Knit plain.

Row 5: Counting from left, transfer 4th stitch to 3rd Needle, 8th to 9th and every following 3rd to 2nd and 7th to 8th. Knit the row.

Row 6: Knit plain.

Row 7: Counting from left, transfer 3rd stitch to 2nd Needle, 9th to 10th, 11th to 10th and every following 6th to 7th and 8th to 7th. Knit the row.

Row 8: Knit plain. Row 9: As row 3. Row 10: Knit plain.

Rows II-I4: Repeat rows 9 and 10 twice.

These 14 rows complete one pattern.

Continue knitting until 119 rows of pattern have been worked.

Continuing in pattern, shape armholes by casting off 8 stitches at beginning of next 2 rows. Decrease I stitch at each end of next 6 rows (103 stitches). Knit in pattern for 88 rows.

Shape shoulders by casting off 12 stitches at beginning of next 6 rows. Cast off.

FRONT

Knit as for Back until Armhole shaping and 74 rows have been worked. Continuing in pattern

shape neck as follows:-

Using a second ball of wool and working from the side nearest Cam Box, cast off 17 stitches at centre of Needle Bed. Knit across both sets of stitches using two balls of wool. Decrease I stitch each side of neck opening on next 7 rows. Knit 10 rows without shaping.

Shape shoulders as for Back.

SHORT SLEEVES

Cast on 96 stitches with a Closed Edge. Set tension at No. 2. Knit 25 rows. Work ribbing as for Back. Set tension at No. 4. Continue knitting in pattern increasing I stitch at each end of every following 5th row until there are 106 stitches on the Needles. Knit 25 rows without shaping.

Continuing in pattern, shape top by casting off 4 stitches at beginning of next 2 rows. Decrease I stitch at each end of next 4 rows. Decrease I stitch at each end of next and every alternate row until 60 stitches remain. Knit 20 rows without shaping. Decrease I stitch at each end of next and every alternate row until 40 stitches remain, then at each end of every row until 20 stitches remain. Cast off and work a second sleeve in the same manner.

NECKBAND

Cast on 120 stitches with a Closed Edge. Set tension at No. 2. Knit 20 rows. Work ribbing as for Back. Cast off loosely. If preferred, the Neckband can be made with a Simple Rib doubled into a hem before it is cast off.

TO MAKE UP

Press all parts on wrong side under a damp cloth. Stitch shoulder seams, leaving a 4" opening on right shoulder. Set in sleeves and sew side and sleeve seams. Sew on neckband with vent at right shoulder. Crochet round right shoulder vent and work buttonholes along one edge. Sew on buttons to correspond. Press all seams.



Gay Batwing with high roll-neck—knitted in striking 2-tone colour combination!

Glamorous Batwing Jumper

The instructions for this garment have been written so that you can make it either with or without the two-colour pattern. If you wish to use the two-colour pattern, read section headed "Two-colour Knitting" in conjunction with the main pattern.

Materials: 10 ozs. 3-ply wool. For the twocolour garment, as illustrated, the amount is divided into 6 ozs. Main Shade (light) and 4 ozs. Contrasting Shade (dark). 7" Zip.

Measurements: Bust 36-38", Length 21", Sleeve Seam 18",

Tension: 7 stitches and 10 rows to 1 inch of stocking-stitch. In order to obtain this tension the Tele-Tension Dial was set at No. 6, except for the waistband, collar and cuffs when it was set at No. 4.

BACK

Cast on 30 stitches at extreme left of Needle Bed, using the Closed Edge method. Set tension. Increase I stitch at right edge of every following 3rd row until there are 90 stitches on the Needles (180 rows).

Increase 5 stitches at right edge of next and every following alternate row until there are 120 stitches on the Needles. Finally, cast on 15 stitches at right edge of next row (135 stitches). Knit 76 rows without shaping.

Cast off 30 stitches at left edge of work, Cast on 30 stitches immediately above the stitches cast off. This completes the back neck opening. Knit 76 rows without shaping.

* Cast off 15 stitches at right edge of next row, knit I row. Cast off 5 stitches at right edge of next and every following alternate row until 90 stitches remain on the Needles.

Decrease I stitch at right edge of every following 3rd row until 30 stitches remain on the Needles. Cast off.

FRONT

Knit as for Back until there are 135 stitches on the Needles. Knit 50 rows without shaping.

Shape neck by casting off 8 stitches at left edge of next row. Decrease I stitch at left edge of next 8 rows. Knit 37 rows without shaping. Increase I stitch at left edge of next 8 rows, then finally cast on 8 stitches thus completing neck shaping. Knit 50 rows without shaping.

Complete Front as Back from * to end.

WAISTBAND

Cast on 45 stitches and knit 300 rows on tension No. 4. Cast off.

CUFFS

Cast on 45 stitches and knit 70 rows. Cast off. Knit another piece to correspond.

COLLAR

Cast on 111 stitches and knit 45 rows. Turn up a hem and cast off loosely.

Two-colour Knitting

If it is desired to knit the jumper in two colours as illustrated, the pattern is worked as follows:—

After casting on the 30 stitches, introduce the contrasting shade over the first 15 stitches at left Needle Bed. Continue knitting, moving the contrasting shade I Needle over to the left after every following 6th row has been knitted until the whole of the stitches are being knitted in the main shade (90 rows). Continue knitting with the Main Shade until 180 rows have been worked.

Join in the Contrasting Shade on the next row, laying it over 5 stitches at the right edge.* Continue knitting, moving the Contrasting Shade 5 stitches to the left on every row until there are 45 stitches in the Main Shade. On every following row move the Contrasting Shade 5 stitches to the right until there are 115 stitches in the Main Shade and 20 stitches in the Contrasting Shade.* Continue knitting in two-colour pattern from * to * until the body part of the garment is complete when there will be only 5 stitches in Contrasting Shade at right edge. Knit in Main Shade only for a further 90 rows.

Join in Contrasting Shade at left over the first Needle. Continue knitting moving the Contrasting Shade I Needle to right after every following 6th row has been knitted. Knit in this manner until there are 15 stitches in Contrasting Shade and 15 in Main Shade. Cast off.

NOTE. When knitting in two-colours the wools must be twisted round each other where the colours meet in order to prevent a slit.

TO MAKE UP

Press all parts on wrong side under a damp cloth. Sew up shoulder, sleeve and side seams. Sew in collar. Fold the waistband into a hem purl side outside and sew onto body of garment neatly sewing the two ends together. Sew on the cuffs in a like manner. Sew in zip-fastener. Press all seams.



Glamorous Bolero in white angora—a smart accessory for that evening date!

Angora Bolero

Materials: 4½ ozs. White Angora.

Measurements: Bust 36". Length 18". Sleeve Seam 5".

Tension: 7 stitches and 10 rows to 1 inch of stocking-stitch. In order to obtain this tension the Tele-Tension Dial was set at No. 6.

BACK

Cast on 106 stitches with a Closed Edge. Set tension at No. 6 and continue knitting, increasing I stitch at each end of every following 9th row until there are 126 stitches on the Needles. Knit 2 rows.

Shape armholes by casting off 8 stitches at beginning of next 2 rows. Decrease 1 stitch at each end of next 5 rows (100 stitches). Knit 80 rows without shaping.

Shape shoulders by casting off 11 stitches at beginning of next 6 rows. Cast off.

LEFT FRONT

Cast on 30 stitches with a Closed Edge. Knit 2 rows ending with Cam Box at right of Needle Bed.

Row 3: Cast on 4 stitches at beginning of row.

Row 4: Knit

Row 5: Cast on 3 stitches at beginning of row.

Row 6: Knit.

Row 7: Increase I stitch at beginning of row.

Row 8: Knit.

Row 9: Increase I stitch at each end of row,

Repeat rows 7 and 8 four times, then row 9 once, followed by rows 7 and 8, twice (48 stitches). Knit 4 rows. Increase I stitch at left edge of next row. Continue knitting, increasing I stitch at left edge of work on every following 9th row until there are 56 stitches on the Needles.

Shape armhole by casting off 8 stitches at left edge of next row. Decrease I stitch at left edge of next 5 rows (43 stitches). Knit 60 rows without shaping ending with the Cam Box at right of Needle Bed.

Shape neck by casting off 6 stitches at beginning of next row. Decrease I stitch at right edge of next 4 rows (33 stitches). Knit I2 rows without shaping, ending with the Cam Box at left of Needle Bed.

Shape shoulders by casting off 11 stitches at beginning of next and every alternate row until all stitches have been cast off.

RIGHT FRONT

Knit as for Left Front substituting the word 'left' for 'right' and vice versa.

SHORT SLEEVES

Cast on 100 stitches with a Closed Edge, Knit 40 rows.

Shape top by casting off 6 stitches at beginning of next 2 rows. Decrease I stitch at each end of next 5 rows. Decrease I stitch at each end of next and every alternate row until 18 stitches remain. Cast off.

Knit another sleeve in the same way.

NECKBAND

Cast on 80 stitches with a Closed Edge and knit 20 rows on tension No. 5. Turn up a hem and cast off loosely.

CUFFS

Cast on 50 stitches with a Closed Edge and knit 20 rows on tension No. 5. Turn up a hem and cast off loosely.

BORDER

Cast on 20 stitches with a Closed Edge and set tension at No. 5. Knit until long enough to stitch along the edge of the bolero. Cast off.

TO MAKE UP

Press all parts on wrong side under a damp cloth. Sew up shoulder seams and set in sleeves. Gather cast on edge of each sleeve into the cuff and stitch securely. Sew up side and sleeve seams. Stitch neckband into position. Fold the border into a hem and stitch along the edge of bolero. Press all seams. Attractive accessories may be attached if desired.



Evening Jumper in shimmering black tinsel wool—the simple style gives an air of sophisticated elegance!

Exotic Evening Jumper

Materials: 6 ozs. Tinsel Wool. Crochet hook.

Measurements: Bust 34". Length 19".

Tension: 7 stitches and 10 rows to 1 inch of stocking-stitch. In order to obtain this tension the Tele-Tension Dial was set at No. 6. For the ribbing the tension was set at No. 4.

BACK

Cast on 106 stitches with a Closed Edge. Set tension at No. 4. Knit 40 rows. Drop every second stitch in turn and pick up as for ribbing. Set tension at No. 6. Continue knitting, increasing I stitch at each end of every following 8th row until there are 126 stitches on the Needles (110 rows from cast on edge). Knit 2 rows. Cast on 4 stitches at the beginning of next 2 rows.* Knit 75 rows without shaping.

Shape shoulders by casting off 4 stitches at beginning of next 8 rows, 8 stitches at beginning of next 4 rows, then 10 stitches at beginning of

next 2 rows. Cast off remaining 50 stitches.

FRONT

Knit as for Back until *. Knit 10 rows without shaping.

Divide work at centre for neck shaping and continue knitting for a further 20 rows, working with two balls of wool. On the next 2 rows cast off 25 stitches at either side of neck opening, then still working with two balls of wool knit a further 48 rows.

Shape shoulders as for Back,

TO MAKE UP

Press all parts on wrong side under a damp cloth. Sew up shoulder and side seams. Crochet a row of double-crochet around neck opening and each sleeve. Press all seams. It is recommended that this garment be half lined, either with knitted fabric in 3-ply botany wool or any woven material.

CLASSIC TAILORED DRESS (Continued from page 57)

at right of Needle Bed in the Holding Position. Push all Needles into the Knitting Position, knit I row. ** Work a buttonhole over next 5 rows. Knit 25 rows without shaping **. Repeat from ** to ** once more. Work another buttonhole over next 5 rows. Knit 20 rows ending with Cam Box at left of Needle Bed.

Shape neck by casting off 22 stitches at beginning of next row. Decrease I stitch at left edge of next 5 rows. Knit 8 rows without shaping, ending with Cam Box at right of Needle Bed.

Shape shoulder by casting off 9 stitches at beginning of next and every alternate row until all stitches have been cast off.

LONG SLEEVES

Cast on 60 stitches with a Closed Edge. Set tension at No. 4. Knit 20 rows. Complete the hem and continue knitting, increasing I stitch at each end of every 6th row until 108 stitches are on the Needles (144 rows). Knit 40 rows without shaping.

Shape top by casting off 6 stitches at beginning of next 2 rows. Decrease I stitch at each end

of next 4 rows. Decrease I stitch at each end of next and every alternate row until 60 stitches remain. Knit 20 rows without shaping. Decrease I stitch at each end of next and every alternate row until 40 stitches remain, then at each end of every row until 20 stitches remain. Cast off. Knit another sleeve in the same manner.

TO MAKE UP

Press all parts on wrong side under a damp cloth. Sew darts in side panels. Join side panels to back panel. Sew in front panel up to pocket flaps. Turn in pocket flaps of front panel and sew into place. Turn back half inch hem on left front of bodice and also on right front, taking the edge of the hem to the buttonholes. Sew shoulder seams. Sew quarter-inch hem round neck opening turning-in flap at back of neck. Set sleeves in armholes. Sew side and sleeve seams. Position skirt to bodice, adjusting waistline by overlapping front panels on side panels. Sew firmly into place. Make two pockets from material and sew on to pocket flaps of skirt. Sew on buttons to correspond with buttonholes. Press all seams.



A snug-fitting and practical Dress—always charming and easily knitted!

Classic Tailored Dress

Materials: 13/4 lbs. 3-ply wool. 5 buttons. Oddment of material for pocket lining. Belt.

Measurements: Bust 36". Waist 26". Sleeve Seam 18". Length from shoulder to skirt hem 47". Skirt length 31".

Tension: 8 stitches and 12 rows to 1 inch of stocking-stitch. In order to obtain this tension the Tele-Tension Dial was set at No. 4.

Skirt

FRONT PANEL

Cast on 120 stitches with a Closed Edge. Set tension at No. 4. Knit 20 rows. Complete the hem and continue knitting decreasing I stitch at each end of every following 13th row until 80 stitches remain (260 rows from hem). Knit 10 rows. Cast on 8 stitches at beginning of next 2 rows. Knit 70 rows without shaping (342 rows). Cast off.

BACK PANEL

Cast on 120 stitches with a Closed Edge. Set tension at No. 4. Knit 20 rows. Complete the hem and continue knitting decreasing I stitch at each end of every 17th row until 80 stitches remain. Knit 2 rows. Cast off.

LEFT SIDE PANEL

Cast on 120 stitches with a Closed Edge. Set tension at No. 4. Knit 20 rows. Complete the hem and continue knitting decreasing 1 stitch at each end of every following 9th row until 60 stitches remain, ending with Cam Box at left of Needle Bed (270 rows). Using two balls of wool, divide work at centre on next row and continue to knit as follows:—

Cast on 8 stitches at right of work. Knit I row. Decrease I stitch at each side of opening on every following 8th row 3 times, then on every following 6th row until there are 20 stitches at left of opening and 28 at right (338 rows). Knit 4 rows over both sets of stitches. Cast off.

RIGHT SIDE PANEL

Knit as left side panel substituting the word 'left' for 'right' and vice versa.

Bodice

BACK

Cast on III stitches with a Closed Edge. Set tension at No. 4. Continue to knit, increasing I stitch at each end of every 6th row until there are 135 stitches on the Needles (72 rows). Knit 6 rows without shaping.

Shape armholes by casting off 6 stitches at beginning of next 2 rows, then 3 stitches at beginning of next 2 rows. Decrease I stitch at each end of next 5 rows (107 stitches). Knit 90 rows without shaping.

Shape shoulders by casting off 9 stitches at beginning of next 8 rows. Knit 6 rows over remaining 32 stitches. Cast off.

LEFT FRONT

Cast on 70 stitches with a Closed Edge. Set tension at No. 4. Continue knitting, increasing I stitch at left edge of every 6th row until there are 82 stitches on the Needles (72 rows). Knit 6 rows without shaping, ending with Cam Box at left of Needle Bed.

Shape armhole. Cast off 8 stitches at beginning of next row. Knit I row. Cast off 3 stitches at beginning of row. Decrease I stitch at left edge of next 6 rows ending with Cam Box at right of Needle Bed.* Push the last 6 Needles of next row into the Holding Position. Knit 2 rows.* Repeat from * to * three times more. There are now 24 Needles in the Holding Position at left of Needle Bed. Push all Needles into the Knitting Position. Knit 85 rows without shaping ending with Cam Box at right of Needle Bed.

Shape neck by casting off 22 stitches at beginning of next row. Decrease I stitch at right edge of next 5 rows. Knit 8 rows without shaping, ending with Cam Box at left of Needle

Shape shoulder by casting off 9 stitches at beginning of next and every alternate row until all stitches have been cast off.

RIGHT FRONT

Cast on 70 stitches with a Closed Edge. Set tension at No. 4. Continue knitting, increasing I stitch at right edge of every 6th row until there are 82 stitches on the Needles and working buttonholes in the following way over the rows indicated:—

Buttonholes. Using a second ball of wool, place thread from the first ball over the Needles from right to left bringing it down between the 8th and 9th Needles from left of work. Place the thread from the second ball over the remaining 8 Needles and knit the row. Knit 4 rows more, keeping the slit between the 8th and 9th Needles from the left.

Using one ball of wool, continue knitting for a further 25 rows. Work a buttonhole over the next 5 rows as previously explained. Knit 25 rows. Work another buttonhole. Increase for the last time at right edge of next row (72 rows and three buttonholes completed). Knit 6 rows without shaping, ending with Cam Box at right of Needle Bed.

Shape armholes by casting off 8 stitches at beginning of next row. Knit I row. Cast off 3 stitches at beginning of next row. Decrease I stitch at right edge of next 6 rows ending with Cam Box at left of Needle Bed. *Push the last 6 Needles of next row into the Holding Position. Knit 2 rows*. Repeat from * to * three times more. There are now 24 Needles

(Continued on page 55).



Novel Sports Waistcoat—specially designed for the outdoor woman!

Ladies' Casual Waistcoat

Materials: 3 ozs. 3-ply wool in brown. 2 ozs. 3-ply wool in beige. 5 buttons.

Measurements: Bust 38". Length 20\fmu".

Tension: 8 stitches and 12 rows to 1 inch of stocking-stitch. In order to obtain this tension the Tele-Tension Dial was set at No. 4. For the ribbing and strappings the tension was set at No. 3.

BACK

Using brown wool, cast on 115 stitches with a Closed Edge. Set tension at No. 3. Knit 40 rows. Drop every second stitch in turn and pick up as for ribbing. Change tension to No. 4. Continue knitting, increasing I stitch at each end of every 10th row until there are 135 stitches on the Needles. Knit 8 rows without shaping (148 rows from cast on edge).

Shape armholes by casting off 8 stitches at beginning of next 2 rows. Decrease I stitch at each end of next 8 rows (103 stitches). Knit

96 rows without shaping.

Shape shoulders by casting off 12 stitches at beginning of next 6 rows. Cast off.

LEFT FRONT

Using brown wool, cast on 3 stitches with a Closed Edge, Set tension at No. 3. Knit 2 rows ending with Cam Box at left of Needle Bed. Continue to knit, increasing I stitch at beginning of every row, until there are 43 stitches on the Needles, and ending with the Cam Box at right of Needle Bed. Cast on 18 stitches at beginning of next row (61 stitches). Knit 40 rows. Drop every other stitch in turn and pick up as for ribbing. Set tension at No. 4.

Pattern. Knit 4 rows in beige. Drop every 4th stitch in turn in the following way. Insert the Work Hook into the stitch 4 rows below the stitch to be dropped (the last row of the previous colour). Drop the stitch from the Needle and insert the Latch Needle Tool down behind the running threads of the dropped stitch. Slip the stitch from the Work Hook on to the Latch Needle Tool and pull it up and over the empty Needle, placing it behind the Latch. Knit 4 rows in brown. Repeat the above process starting from the second stitch of the row and following up with every 4th stitch. These 8 rows comprise the pattern.

Knit in pattern, increasing I stitch at left edge of work on every 10th row until 60 rows of pattern have been worked (67 stitches), ending with Cam Box at right of Needle Bed.

Cast off 8 stitches at beginning of next row. Decrease I stitch at right edge of next 8 rows (51 stitches). Increase I stitch at left edge of next row. Continue to knit in pattern for a further 38 rows, increasing I stitch at left edge of every 10th row (55 stitches), ending with Cam Box at left of Needle Bed.

Shape armhole by casting off 12 stitches at beginning of next row. Decrease I stitch at left edge of next 7 rows (36 stitches). Knit in pattern for a further 108 rows ending with

Cam Box at left of Needle Bed.

Shape shoulders by casting off 12 stitches at beginning of next and every alternate row.

RIGHT FRONT

Knit as for Left Front substituting the word 'left' for 'right' and vice versa.

BUTTON STRIPS

Using brown wool, cast on 19 stitches with a Closed Edge. Set tension at No. 3. Knit 8 rows. * Work 2 buttonholes in next row by placing a short length of wool of contrasting colour over the 4th, 5th and 6th Needles from either end of the row. Place the original colour under these Needles. Knit the row. Knit 16 rows.* Repeat from * to * until 5 buttonholes have been worked. Knit 8 rows. Cast off. Knit another strip without buttonholes 85 rows long.

NECKBAND

Using brown wool, cast on 20 stitches with a Closed Edge. Set tension at No. 3. Knit 390 rows. Cast off.

ARMHOLE BORDERS

Using brown wool, cast on 20 stitches with a Closed Edge, Set tension at No. 3. Knit 270 rows. Cast off. Knit another band in the same way.

TO MAKE UP

Press all parts on wrong side under a damp cloth. Sew side and shoulder seams. Fold buttonhole strip purl sides together and graft buttonhole stitches after removing the contrasting wool. Sew on to right front of waistcoat. Fold the other strip and stitch to left front. Fold neckband and stitch into place. Sew in armhole borders after folding them into a hem. Sew on buttons to correspond with buttonholes. Press all seams.



Sunray Pleated Skirt

Smart Pleated Skirt—easy to knit and most effective in your favourite colour!

Materials: 16 ozs. 3-ply wool. 1 yd. Petersham binding. 8" Zip.

Measurements: Waist 26-28". Length 31".

Tension: 12 rows and 8 stitches to 1 inch of stocking-stitch. In order to obtain this tension the Tele-Tension Dial was set at No. 4.

SKIRT PANELS

Cast on 101 stitches with a Closed Edge. Set tension at No. 4. Knit 19 rows. Decrease I stitch at each end of the next row. Complete the hem and continue knitting, decreasing I stitch at each end of every following 10th row until 31 stitches remain. Knit 5 rows. Cast off.

Knit another 6 pieces in the same way.

NOTE. Any extra length can be introduced immediately after the hem has been completed.

TO MAKE UP

Press all the panels on the wrong side under a damp cloth. Fold each panel down the centre, plain side outside and stitch or machine $\frac{1}{8}$ inch in from the fold. Sew panels together right sides facing, leaving an 8'' vent at the top of one seam for the zipper. Press all seams. Fold in a hem at the top of the skirt and sew the Petersham binding into position. Sew in zip and press pleats carefully.

CHILD'S TWINSET (Continued from page 77)

(Jumper)

wool. Decrease I stitch each side of neck opening on next 2 rows. Change to blue wool. Decrease I stitch each side of neck opening on next 4 rows (24 stitches on each shoulder). Knit 7 rows across both sets of stitches. Work ribbing over last 11 rows.

Shape shoulders by casting off 8 stitches at beginning of next 6 rows extending ribbing as

each row is knitted.

FRONT NECKBAND

With purl side of work facing and using blue wool, pick up 49 stitches round front neck opening. Set tension at No. 3. Knit 20 rows. Work ribbing as for welt. Cast off.

SHORT SLEEVES

Using red wool, cast on 26 stitches with a Closed Edge. Set tension at No. 4. Knit as for Long Sleeves of Cardigan increasing to 44 stitches instead of 90. Knit another sleeve in the same way.

CUFFS

With purl side of work facing and using blue wool, pick up 60 stitches along cuff edge of sleeve. Set tension at No. 3. Knit 15 rows. Work ribbing as for Back. Cast off. Treat the other sleeve in the same way.

TO MAKE UP

Press all parts on wrong side under a damp cloth. Fold neckband of back and front into a hem and stitch down. Sew open ends of neckbands. Join shoulder seams to within I' of neckband at either shoulder. Set sleeves in armholes. Sew side and sleeve seams. Crochet round openings at each shoulder working three button loops along front edge of each. Sew on buttons to correspond. Press all seams.

Bonnet

Materials: I oz. 3-ply wool in red. $\frac{1}{2}$ oz. 3-ply wool in blue. I medium sized crochet hook.

MAIN PART

Using blue wool, cast on 90 stitches with a Closed Edge. Set tension at No. 4. Knit 18 rows, Work a "One-by-One" rib. Change to red wool. Knit 45 rows. Change to blue wool. Knit 12 rows. Work ribbing over last 12 rows. Cast off.

BACK PANEL

Using red wool, cast on 30 stitches with a Closed Edge. Set tension at No. 4. Knit 12 rows. Increase I stitch at each edge of next and every following 6th row until there are 40 stitches on the Needles. Knit 6 rows. Decrease I stitch at each end of next row. * Knit 3 rows. Decrease I stitch at each end of next row. * Repeat from * to * once more. Decrease I stitch at each end of next 6 rows. Cast off 3 stitches at beginning of next 4 rows. Cast off.

TRIMMING

Using blue wool, cast on 50 stitches with a Closed Edge. Set tension at No. 3. Knit 12 rows. Work ribbing. Cast off.

TO MAKE UP

Press each part on wrong side under a damp cloth. Sew main part round back panel. Turn up $\frac{1}{2}''$ hem round base of bonnet. Using 4 lengths of red wool, crochet a tie-cord and pass through hem. Make two tassels in red wool and stitch to either end of tie-cord. Sew on trimming down centre of main part from front to back. An extra cord and tassel may be made and attached to top of bonnet if desired. Press seam and hem.

Mittens

Materials: $\frac{1}{2}$ oz. 3-ply wool in red. $\frac{1}{2}$ oz. 3-ply wool in pale blue.

Measurements: Length $6\frac{1}{2}$ ". Width $2\frac{1}{2}$ ".

RIGHT MITTEN

Using red wool, cast on 38 stitches with a Closed Edge. Set tension at No. 4. Knit I row, ending with Cam Box at right of Needle Bed. *Cast on 2 stitches at right edge of next row. Knit I row.* Repeat from * to * 3 times more (46 stitches). Change to blue wool. Knit I4 rows, ending with Cam Box at right. Work ribbing over last I4 rows. Change to red wool. Decrease I stitch at right edge of next 9 rows. Knit I row. Increase I stitch at right edge of next 9 rows. Knit I4 rows, ending with Cam Box at right. Cast off 2 stitches at beginning of next and every alternate row until 38 stitches remain. Cast off.

LEFT MITTEN

Knit as for Right Mitten substituting the word 'right' for 'left' and vice versa.

THUMB

Using red wool, cast on 4 stitches with a Closed Edge. Knit I row. Increase I stitch at beginning of every row until there are 20 stitches on the Needles. Knit I3 rows. * Shape top by placing 2 stitches on to one Needle all along the row. Knit I row.* Repeat from * to * once more before drawing a length of wool through the remaining stitches.

CUFFS

With purl side of work facing pick up 50 stitches along cuff edge of each mitten. Set tension at No. 3. Knit 20 rows. Work ribbing as before. Cast off.

TO MAKE UP

Press all parts on wrong side under a damp cloth. Draw up the wool through the stitches of each thumb, sew the seam and fasten off securely on wrong side of work. Sew up each mitten leaving an opening for the thumb immediately above the ribbing. Sew in thumb. Press seams.



A Bed Jacket for the colder evenings—feather-light, yet cosy and warm!

Cosy Bed Jacket

Materials: 9 ozs. 3-ply wool in Peach. I yd. ribbon I" wide.

Measurements: Bust 36-38". Length 24". Sleeve Seam 18".

Tension: The pattern is worked on tension Nos. 2 and 10.

BACK

Cast on 164 stitches with a Closed Edge. Set

tension at No. 10. Knit 36 rows.

* Transfer every 2nd stitch to its adjacent Needle all along the row. Knit the row with all Needles in the Knitting Position. Change tension to No. 2 and knit 13 rows. Change tension to No. 10 and knit 1 row. Transfer every 2nd stitch to its adjacent Needle all along the row. Knit the row with all Needles in the Knitting Position. Knit a further 12 rows on tension No. 10.*

Repeat from * to * until 134 rows have been

knitted.

Still working in pattern, shape armholes by casting off 10 stitches at beginning of next 2 rows. Decrease I stitch at each end of next 6 rows (130 stitches). Continue knitting until 219 rows have been worked.

Shape shoulders by casting off 15 stitches at

beginning of next 6 rows. Cast off.

LEFT FRONT

Cast on 61 stitches with a Closed Edge. Knit as for Back until 134 rows have been worked, ending with the Cam Box at left of Needle Bed.

Shape armhole by casting off 10 stitches at beginning of next row. Decrease I stitch at left edge of next 6 rows. Knit without shaping until 219 rows have been worked, ending with the Cam Box at left of Needle Bed.

Shape shoulder by casting off 15 stitches at beginning of next and every alternate row until

all stitches have been cast off.

RIGHT FRONT

Knit as for Left Front substituting the word 'left' for 'right' and vice versa,

SLEEVES

Cast on 100 stitches with a Closed Edge. Set tension at No. 10. Knit 14 rows. Continue knitting as for Back from * to * until 166 rows have been worked.

Shape top by casting off 8 stitches at beginning of next 2 rows. Decrease I stitch at each end of next and every alternate row until 20

stitches remain. Cast off.

Knit another sleeve in the same manner.

CUFFS

Cast on 60 stitches with a Closed Edge. Set tension at No. 2. Knit 24 rows. Transfer every 2nd stitch to its adjacent Needle and knit the row with all Needles in Knitting Position. Knit a further 24 rows. Complete the hem and cast off loosely.

Knit another cuff in the same manner.

BORDER

Cast on 140 stitches with a Closed Edge. Set tension at No. 10. Knit 20 rows. Complete the hem and cast off loosely. Knit another piece in the same way.

TO MAKE UP

Sew up shoulder seams. Gather cast on edge of sleeves into the cuffs and sew securely. Set sleeves in armholes. Sew side and sleeve seams. Turn up a I inch hem all round base of jacket. Join border pieces at one end and sew into position along front edges and neck of jacket. Press seams only. Tie ribbon into bow and sew to left front. Sew on hook and eye to fasten jacket.



A classical Winter Vest—easy to knit—practical and warm!

.

Ladies' Strapless Vest

This garment is finished with a neat knitted hem at top as well as at the beginning. Instead of having draw cords, shirring elastic may be knitted in at the waist in rows 4, 6, 9 and 11 (see page 29).

Materials: 4 ozs. 2-ply wool in pale blue, 1 oz. pink. I medium size crochet hook.

Measurements: Bust 34-36". Length 24".

Tension: From hem to waist, $7\frac{1}{2}$ stitches and 10 rows to 1 inch—tension No. 6. From waist to top, 8 stitches and 12 rows to 1 inch-tension No. 4.

FRONT

Using the pale blue wool, cast on 135 stitches and set tension at No. 6. Knit 20 rows and turn up a hem as described on page 19. Knit 13 inches to waist (130 rows). Change tension to No. 4 and knit 10 inches to top as follows:-

NOTE. When knitting the single row stripes in the following pattern, the method described on page 39 should be used.

Row I: Knit row in pink wool. Working from the right, transfer 2nd stitch to 3rd Needle, 4th stitch to 5th Needle, 6th stitch to 7th Needle, and so on to end of row.

Row 2: Knit row in pink wool.

Rows 3 to 6: Knit I row with blue wool, I row in pink, I row blue, and I row pink.

Row 7: Knit row in blue wool. Working from the right, transfer 3rd stitch to 4th Needle, 5th stitch to 6th Needle, 7th stitch to 8th Needle, and so on to end of row.

Rows 8 to 12: Knit I row with blue wool, I row in pink, I row blue, I row pink, and I row

Rows 13 and 14: Repeat rows I and 2, Rows 15 to 38: Knit 24 rows with blue wool. Row 39: Knit row in pink wool. Transfer stitches as in row 1.

Row 40: Knit row in pink wool.

Row 41: Knit row in blue wool. Transfer stitches as in row 7.

Row 42: Knit row in blue wool.

Row 43: Knit row in pink wool. Transfer stitches as in row 1.

Row 44: Knit row in pink wool.

Rows 45 to 52: Repeat rows 41 to 44, twice

(8 rows).

Rows 53 to 76: Knit 24 rows in blue wool. Rows 77 to 114: Repeat rows 39 to 76. Rows 115 to 120: Repeat rows 39 to 44. Rows 121 to 128: Knit 8 rows with blue wool.

Make a hem at top of Vest as follows. Using the Transfer Tool, pick up the stitches 15 rows down (i.e., the last row in blue before the pattern rows) and slip them, one by one, on to the Needles directly above. Place these stitches behind the latches together with the stitches of the previous row and cast off by method (2) or (3). If method (3) is used, it will be necessary to knit one row at tension No. 10 before casting off.

BACK

Work as given for Front.

TO MAKE UP

Press carefully with a damp cloth and hot iron and sew up side seams, taking care to sew the hem at top of Vest in order to allow a cord to pass through. Press side seams. With one strand each of pink and blue wool, crochet four chain stitch cords each 4 feet long. Pass three of the cords through the holes of the waistband pattern to be tied at one side. Pass the other cord through the hem at top of Vest to be tied at centre front. If preferred, a length of \(\frac{1}{2} \) elastic may be passed through the hem at top of Vest instead of the crochet cord.



A gift to please any man—comfortable Lumber Jacket for casual wear!

Man's Sporty Lumber Jacket

Materials: 12 ozs. grey 4-ply wool, $\frac{1}{4}$ oz. wine 4-ply wool, 18 inch Zip fastener.

Measurements: Chest 40". Length 25". Sleeve Seam 20".

Tension: $6\frac{1}{2}$ stitches and 9 rows to 1 inch of stocking-stitch. In order to obtain this tension the Tele-Tension Dial was set at No. 7, except for the ribbing when it was set at No. 5.

BACK

Cast on 135 stitches with a Closed Edge. Set tension at No. 5. Knit 40 rows. Drop every 3rd stitch in turn and pick up as for ribbing. Set tension at No. 7 and knit 108 rows without shaping.

Shape armholes by casting off 10 stitches at beginning of next 2 rows. Decrease I stitch at each end of next 7 rows (101 stitches). Knit 70 rows without shaping.

Shape shoulders by casting off 12 stitches at beginning of next 6 rows. Cast off.

SIDE POCKETS

Using two balls of wool and the Closed Edge method, cast on 30 stitches for each pocket. Set tension at No. 7 and knit 36 rows. Slip stitches on to a stitch holder.

LEFT FRONT

Cast on 66 stitches with a Closed Edge. Set tension at No. 5. Knit 40 rows, ending with Cam Box at right of Needle Bed. Work ribbing as for Back. Set tension at No. 7. Push all but the first 45 Needles of the row into the Holding Position. Knit the row. Cast off 30 stitches from the beginning of this short row and knit I row over the I5 remaining stitches (Cam Box is now at right of Needle Bed). Push all Needles into Knitting Position. With purl side of work towards you, slip the 30 stitches of one pocket on to the 30 empty Needles. Knit 108 rows without shaping, ending with Cam Box at left of Needle Bed.

Shape armhole by casting off 8 stitches at beginning of next row. Decrease 1 stitch at left edge of next 7 rows (51 stitches). Knit 70 rows without shaping, ending with Cam Box at left of Needle Bed.

Shape shoulders by casting off 12 stitches at beginning of next and every alternate row until 15 stitches remain. Cast off.

RIGHT FRONT

Knit as for Left Front substituting the word 'left for 'right' and vice versa.

LONG SLEEVES

Cast on 60 stitches with a Closed Edge. Set tension at No. 5 and knit 40 rows. Work ribbing as for Back. Set tension at No. 7 and continue knitting increasing I stitch at each end of every following 6th row until there are 100 stitches on the Needles (160 rows from cast on edge). Knit 6 rows without shaping.

Shape top by casting off 5 stitches at beginning of next 4 rows. Decrease I stitch at each end of next and every alternate row until 20 stitches remain. Cast off. Knit another sleeve to match.

BREAST POCKET

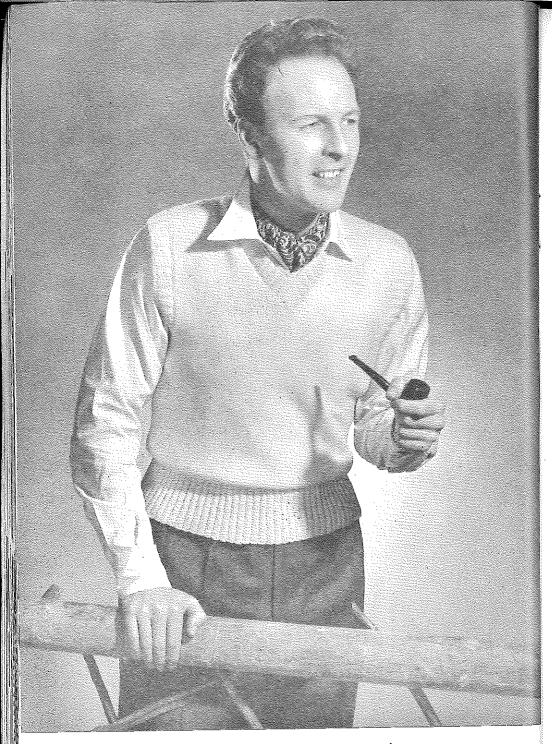
Cast on 30 stitches with a Closed Edge. Set tension at No. 7. Knit 10 rows. Work a rib as for Back. Knit a further 30 rows. Cast off.

LAPEL FACINGS

Using 2 balls of wool and the Closed Edge method, cast on 22 stitches for each lapel. Set tension at No. 5. Knit 70 rows. Cast off.

TO MAKE UP

Press all parts on wrong side under a damp cloth. Sew side pockets. Turn in cast off edge along pocket tops and stitch down. Sew shoulder seams. Stitch on lapel facings. Set sleeves in armholes, sew side and sleeve seams. Stitch in zip fastener. Sew on breast pocket. Press all seams.



A smart Pullover for the sportsman—a winner for all occasions!

Man's Sleeveless Pullover

Knitted in one length without Shoulder Seams

Materials: 8 ozs. 4-ply wool.

Measurements: Chest 40". Length 23".

Tension: 61 stitches and 9 rows to 1 inch of stocking-stitch. In order to obtain this tension the Tele-Tension Dial was set at No. 7. The ribbed welt was knitted on No. 5, and the Neckband and Armhole Borders on No. 8.

FRONT AND BACK

Cast on 131 stitches with a Closed Edge, working in the centre of the Needle Bed. Knit 45 rows on Tension No. 5. Drop every third stitch in turn and pick up as for ribbing. Set tension at No. 7 and knit 86 rows. Shape armhole and neck opening as follows:-

Rows I and 2: Cast off 10 stitches at the

beginning of each row.

Row 3: Transfer the stitch from Needle 0 to its adjacent Needle on the left or right, leaving 55 stitches on each side. Join in a second ball of wool at the opening and knit the row. Continue as follows, using a separate ball of wool for each side.

Row 4: Decrease I stitch at each side of neck opening and on each armhole. Knit the row.

Row 5: Knit without shaping.

Row 6: Decrease I stitch at each armhole, Knit the row.

Row 7: Knit without shaping.

Rows 8 to 19: Repeat rows 4 to 7, three times (43 stitches on each side).

Rows 20 to 70: Decrease I stitch at each side of neck opening in next and every following 5th row until there are 32 stitches on each shoulder.

Rows 71 to 76: Knit 6 rows without shaping. Shape shoulder as follows. Continue knitting, bringing 6 Needles into the Holding Position at the end opposite the Cam Box before knitting each row, until there are 24 Needles in the Holding Position on each shoulder. Using the ball of wool at the neck edge, cast on the 31 stitches between the shoulders for back of neck. Break off this ball of wool and continue from now on with the other ball only. Place the cast on stitches behind the latches, bring Needles 24, 25 and 26 from the side opposite the Cam Box back into the Knitting Position and knit across. Bring Needles 24, 25 and 26 from the other side back into the Knitting Position and knit next row. Bring 6 Needles back into the Knitting Position at the end opposite the Cam Box in the next 4 rows, and 9 Needles in the following 2 rows (95 stitches).

Knit 58 rows without shaping. Increase for armhole shaping as follows. Increase I stitch at each end of next and every alternate row until there are III stitches. Cast on 10 stitches at beginning of next 2 rows (131 stitches). Knit 85 rows. Knit I row introducing a marker as explained on page 20. Set tension at No. 5 and knit 45 rows. Work ribbing as for Front, dropping the stitches down to the marker. Cast off and remove the marker.

NECKBAND

Cast on 131 stitches with a Closed Edge and set tension at No. 8.

Row I: Knit without shaping.

Row 2: Decrease I stitch at each end and knit the row (129 stitches).

Row 3: Knit without shaping.

Row 4: Drop the stitch from the second last Needle at each end, and pick up as for ribbing. Decrease I stitch at each end and knit row (127 stitches).

Row 5: Knit without shaping.

Rows 6 to 9: Repeat rows 2 and 3 twice (123

Rows 10 and 11: Repeat rows 4 and 5 (12)

stitches).

Complete ribbing as for welt by dropping the appropriate stitches and picking them up with the Latch Needle Tool. Cast off using method (3).

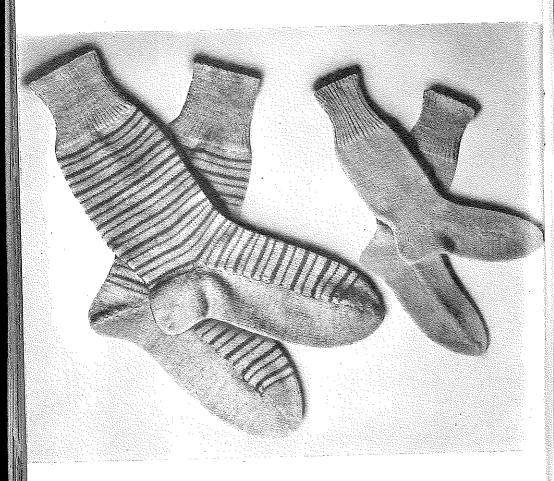
ARMHOLE BORDERS

Cast on 121 stitches with a Closed Edge. Knit 14 rows on tension No. 8. Work ribbing as for welt. Cast off using method (3).

TO MAKE UP

Press all parts with the exception of the ribbing. Set in Neckband and Armhole Borders, stretching them into position before sewing. Join up slanting ends of Neckband. Sew up side seams. Press all seams.

"Everlasting" Socks with Renewable Soles and Heels. Socks are a "must" on your knitting list—easier than ever to make the new Knitmaster way!



These socks are knitted flat in sections. First you knit the leg and instep with the striped effect or any other pattern you may choose, on to which the heel and sole are knitted in stocking-stitch and seamed to either side of instep. This method enables the knitter to detach heel and sole when these are worn out, and re-knit them on the Knitmaster using only about $\frac{1}{4}-\frac{1}{2}$ oz. of wool. With the minimum of labour, and at very little expense, you will be able to produce very quickly another perfect pair of socks as good as new, as the soles and heels can be replaced as often as desired. It will be appreciated that this way of sock knitting constitutes a much greater economy than any other method. Two ways are given—in one, the sock has been knitted in one piece with grafting at the heel, in the other you are shown how to graft at the toe on the machine itself.

A double or reinforced heel can be easily made on the Knitmaster by putting every second Needle into the Holding Position on every alternate row. Always put the same Needles into the Holding Position.

Man's "Everlasting" Socks with Renewable Soles and Heels

Materials: 3 ozs. 3-ply sock wool in fawn, 1 oz. brown.

Measurements: Leg 11". Foot 101".

Tension: 8 stitches and 12 rows to 1 inch of stocking-stitch. In order to obtain this tension the Tele-Tension Dial was set at No. 4, except for the ribbing when it was set at No. 3.

LEG AND INSTEP

Using the fawn wool, cast on 70 stitches with a Closed Edge. Set tension at No. 3 and knit 40 rows. Drop every second stitch in turn and pick up as for ribbing. Set tension at No. 4 and continue in striped pattern as follows. When knitting single row stripes or stripes having an odd number of rows, the method described on page 39 should be used.

Rows I to 4: Knit 4 rows in fawn.
Rows 5 and 6: Knit 2 rows in brown.
Rows 7 to 9: Knit 3 rows in fawn.

Row 10: Knit I row in brown.

Rows II to I4: Knit 4 rows in fawn.
Rows I5 and I6: Knit 2 rows in brown.
Rows I7 to I9: Knit 3 rows in fawn.
Row 20: Knit I row in brown.

The above 20 rows comprise the striped pattern. Repeat the pattern twice more.

Continue in pattern, decreasing I stitch at each end of next and every following 12th row until 64 stitches remain (25 rows). Knit a further 7 rows in pattern (to row 12).

Slip 16 stitches from the end of the row opposite the Cam Box on to a safety pin or stitch holder. Knit I row. Slip 16 stitches

from the other end on to a stitch holder. This leaves 32 stitches on the Needles for the instep. Continue in pattern until instep measures 7 inches (84 rows).

Shape toe as follows, using fawn wool only. * Bring one Needle into the Holding Position at the end opposite the Cam Box before knitting every following row. Continue in this way until there are 12 Needles left in the Knitting Position. Bring one Needle back into the Knitting Position at the end of the row opposite the Cam Box before knitting every following row, until all Needles are back in the Knitting Position.* Slip all stitches on to a stitch holder for grafting to sole. Sew up back seam.

SOLE AND HEEL

With purl side of work facing, slip the 32 heel stitches on to the Needles and shape as for toe from * to *, using fawn wool only. Knit 84 rows. Turn the knitting as described on page 21 so that the stocking-stitch side is facing.

GRAFTING

With the purl side facing slip the stitches from the stitch holder on to the same Needles as the sole, so that there are two stitches on each Needle and the right sides of work are facing each other. Place all stitches behind the latches and cast off by method (2) or (3). If method (3) is used, it will be necessary to knit one row at tension No. 10 before casting off.

To complete the sock, sew up seams at each side of instep and press carefully. Work

another sock to match.

Child's "Everlasting" Socks with Renewable Soles and Heels

Materials: I oz. 3-ply sock wool.

Measurements: Leg 6". Foot 7".

Tension: 8 stitches and 12 rows to 1 inch of stocking-stitch. In order to obtain this tension the Tele-Tension Dial was set at No. 4, except for the ribbing when it was set at No. 3.

Cast on 56 stiches with a Closed Edge. Set tension at No. 3 and knit 30 rows. Drop every second stitch in turn and pick up as for ribbing. Set tension at No. 4. Knit 35 rows.* Decrease stitch at each end of next row. Knit 6 rows without shaping.* Repeat from * to * once (52 stitches).

Slip 13 stitches from the end of row opposite

the Cam Box on to a safety pin or stitch holder. Knit I row. Slip 13 stitches from the other end on to a stitch holder. This leaves 26 stitches on the Needles. Knit 40 rows,

Shape toe as follows. ** Bring one Needle into the Holding Position at the end opposite the Cam Box before knitting every following row, until there are 8 Needles left in the Knitting Position. Bring one Needle back into the Knitting Position at the end opposite the Cam Box before knitting every following row, until all Needles are back in the Knitting Position.**

Knit 40 rows. Shape heel as for toe from ** to **. Slip the stitches on to a knitting needle and graft to leg stitches by hand. Sew up back and instep seams.



A pretty Sun or Swim Suit for every child—child's play to knit on your Knitmaster!

_

Child's Sun or Swim Suit

Materials: 2 ozs. 4-ply wool in green. I oz. 4-ply wool in red. I medium sized crochet hook. 2 buttons.

Measurements: Length 15". Hips 24".

Tension: $7\frac{1}{2}$ stitches and 12 rows to 1 inch of stocking-stitch. In order to obtain this tension the Tele-Tension Dial was set at No. 4.

The Suit

The suit is knitted throughout in stripes of 6 rows green and 4 rows red, except for the waistband and strappings which are knitted in green only.

Using green wool cast on 65 stitches with a Closed Edge. Set tension at No. 4. Knit 18 rows. Drop every 3rd stitch in turn and pick up as for ribbing. Shape back as follows:—Rows I and 2: Still working with green wool push 6 Needles into the Holding Position at the end of the row opposite the Cam Box. Knit the row.

Rows 3 and 4: Push another 6 Needles into the Holding Position at the end of the row. Knit the row.

Repeat rows I to 4 once more. On next 2 rows push all Needles into the Knitting Position.

Continue knitting in stripes increasing at each end of every 5th row until there are 91 stitches on the Needles (65 rows).

Leg shaping is as follows:-

Rows I and 2: Push 2 Needles into the Holding Position at the end of the row opposite the Cam Box. Knit the row. Rows 3 and 4: Push another 2 Needles into the Holding Position at the end of the row. Knit the row.

Repeat rows I to 4 until 21 stitches remain in the Knitting Position. Using green wool only push all Needles into the Knitting Position at the end of the row opposite the Cam Box. Knit the row. Push all Needles into the Knitting Position. Cast off 35 stitches at beginning of next 2 rows. Knit 15 rows over the remaining 21 stitches using green wool only.

Continuing in striped pattern and starting with a green row, cast on 35 stitches at the beginning of the next 2 rows, leaving 32 of these stitches in the Holding Position at each end. Bring 2 Needles back into the Knitting Position at the end of each following row until all Needles are in the Knitting Position. Decrease I stitch at each end of next and every 5th row until 65 stitches remain, ending with 4 rows red after final decreasing row.

Using green wool only knit 18 rows without shaping and work ribbing as before, dropping the stitches down the 18 rows only. Continue in striped pattern decreasing I stitch at each end of every 3rd row until 41 stitches remain.

Using a second ball of green wool cast off 25 stitches across centre of work. Knit the two strappings using two balls of wool for 140 rows Cast off.

TO MAKE UP

Press all parts on wrong side under a damp cloth. Sew side seams. Using red wool, crochet around leg openings and around the edges of back, bib and strappings. Crochet a loop at the end of each strap and sew buttons to back of suit to correspond. Press all seams:

CHILD'S PARTY DRESS (Continued from page 75)

for Back. Knit 2 rows with red wool and cast off by method (2).

SLEEVES

Cast on 67 stitches with royal blue wool and work as for Back from row I to row 26 inclusive. Knit I row with blue wool and I row with red, then I2 rows white. Shape top of Sleeve by casting off 6 stitches at beginning of next 2 rows, 2 stitches at beginning of next 4 rows, and I stitch at beginning of next 28 rows. Cast off remaining 19 stitches. Work another Sleeve in the same manner.

TO MAKE UP

Press all parts on wrong side under a damp cloth. Sew up shoulder seams and set in sleeves. Sew up sleeve seams and side seams, taking care to match the stripes and patterns. Fasten the stitches from the stitch holders to ends of collar so that the border curves round the pattern and sew them on neatly on the wrong side. Sew in collar. Crochet round front opening, working 4 loops evenly spaced on edge of right Front. Sew on 4 buttons to correspond. Press all seams. Pass a length of elastic through each Sleeve hem.



A very attractive Party Dress—a popular favourite that will complete any little girl's wardrobe!

Child's Party Dress

Materials: 5 ozs. 4-ply wool in white, 2 ozs. red, 1 oz. royal blue. 4 small buttons, 1 spool white shirring elastic, 1 medium size crechet hook,

Measurements: Length from top of shoulder, $20\frac{1}{2}$ °. Width of skirt at hem, 20°. Sleeve Seam, 4°.

Tension: $6\frac{1}{2}$ stitches and 9 rows to 1 inch. In order to obtain this tension the Tele-Tension Dial was set at No. 7.

BACK

Cast on 131 stitches with blue wool. Set tension at No. 7 and knit 11" up to Waistband in the following way:—

NOTE. When knitting single row stripes or introducing different colours having an odd number of rows as in the following pattern, the method described on page 39 should be used.

Rows I to 8: Knit 8 rows with blue wool and turn up a hem as described on page 19.

Rows 9 to 14: Knit I row with red wool, 4

rows in white, I row red.

Rows 15 to 18: Knit I row with blue wool, then 3 rows in red. Working from the left, drop every 4th stitch in turn and pick them up in the following way. Insert the Work Hook into the stitch three rows below the dropped stitch (i.e. in the last royal blue row) and let the stitch drop right down to the Work Hook. Insert the Latch Needle Tool down behind the running threads, and slip the stitch from the Work Hook into the Latch Needle Tool. Place the stitch from the Latch Needle Tool on the empty Needle and behind its Latch.

Rows 19 to 22: Knit I row with blue wool, then 3 rows in red. Working from the left, drop the 5th, 7th, 13th, 15th and every following 6th and 8th stitches in turn, picking them up as

described above.

Rows 23 to 26: Knit I row with blue wool, then 3 rows in red. Working from left, drop the 6th, 14th and every following 8th stitch in turn and pick them up as described above.

Rows 27 to 30: Repeat rows 15 to 18.

Rows 31 to 34: Knit I row with blue wool, then I row in red. Working from the left, drop the 9th, 11th, 17th, 19th and every following 6th and 8th stitches in turn, picking them up as described above.

Rows 35 to 46: Knit I row with blue wool, I row in red, 4 white, I red, 4 blue, and I red.

Break off red and royal blue wool.

Rows 47 to 106: Knit 60 rows in white wool. Push all Needles into the Holding Position. Hold the knitting down with one hand and pass the Cam Box twice across the Needle Bed, which will release the stitches from the Sinker Hooks and bring the Cam Box back to the beginning of the row. Slip all stitches on to a knitting needle. Place 82 Needles into the

Knitting Position, then push them down into the Needle Bed with the palm of your hand so that they no longer protrude beyond the Stitch Sinkers. Using the Transfer Tool and holding the work with the purl side facing, replace the stitches on the Needles as follows: I stitch on the first Needle, 2 stitches on each of the next 2 Needles. * Leave the next Needle empty, place 2 stitches on each of the next 4 Needles.* Repeat from * to * until there are 6 stitches left. Leave the next Needle empty and place 2 stitches on each of the remaining 3 Needles. Push the empty Needles down to base of Needle Bed. Knit I row. Proceed as follows:-Row I: Lay the shirring elastic, as shown in Fig. 38, over every 1st and 3rd Needle in each group of 4 Needles. Place the elastic behind the Latches of these Needles and knit the row with white wool.

Rows 2 and 3: Knit I row with red wool, and I row in blue.

Rows 4 to 12: Repeat rows I to 3, three times. Break off red and blue wool and continue with white wool only, after pushing all Needles into the Knitting Position.

Knit 4 inches up to armhole without shaping (36 rows). Shape armholes by casting off 5 stitches at the beginning of next 2 rows and decreasing 1 stitch at each end of the next 4 rows (64 stitches). Knit 26 rows without

shaping.

Shape shoulders by casting off 6 stitches at beginning of next 2 rows, and 8 stitches at beginning of next 4 rows. Cast off all remaining stitches.

FRONT

Work as for Back until striped waistband has been completed. Continue in white wool as follows. Knit 10 rows without shaping. Divide for front opening by joining in a second ball of wool at centre of work and knitting each side with a separate ball (41 stitches on each side). Knit 26 rows without shaping. Shape armholes as for Back and knit 20 rows without shaping (32 stitches on each side). Shape neck as follows:—

Row 1: Cast off 5 stitches at one side of neck opening (the side having the wool at the inner

edge). Knit the row.

Row 2: Cast off 5 stitches at other side of neck opening. Knit the row.

Rows 3 to 7: Decrease I stitch at both sides of neck opening on next 5 rows (22 stitches on each side).

Shape shoulders as for Back.

COLLAR

Cast on 81 stitches in royal blue wool and work as for Back from row 1 to row 14 inclusive. Slip 15 stitches off each end of work on to stitch holders or safety pins. Break off white wool and work rows 15 to 26 inclusive as instructed

(Continued on page 73



Child's Twinset with Bonnet and Mittens

Cardigan

Materials: $2\frac{1}{2}$ ozs. 3-ply wool in red. 1oz. 3-ply wool in pale blue. 10 buttons.

Measurements: Chest 24". Length $12\frac{1}{2}$ ". Sleeve Seam $10\frac{1}{2}$ ".

Tension: 8 stitches and 12 rows to 1 inch of stocking-stitch. In order to obtain this tension the Tele-Tension Dial was set at No. 4. For the ribbing of welt and cuffs the tension was set at No. 3. If desired, Elastic Ribbing or the Simple Rib may be used for welt and cuffs.

BACK

Using blue wool, cast on 96 stitches with a Closed Edge. Set tension at No. 3. Knit 35 rows. Drop every other stitch in turn and pick up as for ribbing. Set tension at No. 4. Change to red wool and knit 56 rows without shaping.

Shape armholes by casting off 6 stitches at beginning of next 2 rows. Decrease 1 stitch at each end of next 6 rows (72 stitches). Knit 35 rows without shaping. Change to blue wool and knit 13 rows. Work a "One-by-One" rib over the last 13 rows.

Shape shoulders by casting off 8 stitches at beginning of next 6 rows and extending ribbing as each row is knitted. Cast off.

LEFT FRONT

Using blue wool, cast on 45 stitches with a Closed Edge. Set tension at No. 3, Knit 35 rows. Work ribbing as for Back. Set tension at No. 4. Change to red wool and knit 56 rows without shaping, ending with Cam Box at left of Needle Bed.

Shape armhole by casting off 6 stitches at beginning of next row. Decrease I stitch at left edge of next 6 rows (33 stitches). Knit 34 rows ending with Cam Box at right of Needle Bed. Cast off 4 stitches at beginning of next row. Decrease I stitch at right edge of next 3 rows. Change to blue wool. Knit 2 rows decreasing I stitch at right edge of each. Knit 9 rows without shaping, ending with Cam Box at left of Needle Bed. Work ribbing over last II rows. Cast off 8 stitches at beginning of next and every alternate row, extending ribbing as each row is knitted.

RIGHT FRONT

Knit as for Left Front substituting the word 'left' for 'right' and vice versa.

LONG SLEEVES

Using red wool, cast on 72 stitches with a Closed Edge. Set tension at No. 4. Knit 5 rows. Continue knitting, increasing I stitch at right edge of every alternate row until there are 90 stitches on the Needles. Change to blue wool and knit 18 rows without shaping. Work ribbing over last 18 rows. Change to red wool. Continue to knit, decreasing I stitch at right

edge of every alternate row until 72 stitches remain. Knit 5 rows without shaping. Cast off. Knit another sleeve in the same way.

CUFFS

Using blue wool, cast on 45 stitches with a Closed Edge. Set tension at No. 3. Knit 40 rows. Work ribbing as for Back. Turn up into a hem and cast off loosely. Knit another cuff in the same way.

BUTTON STRIPS

Using blue wool, cast on 11 stitches with a Closed Edge. Set tension at No. 3. Knit 8 rows and rib stitches on Needles 4, 6 and 8. Work a buttonhole over the centre 3 stitches of next row. * Knit 12 rows. Extend ribbing and work a buttonhole on next row.* Repeat from * to * until 9 buttonholes have been made. Knit 9 rows, complete ribbing and cast off. Knit another strip the same length without buttonholes.

NECKBAND

Using blue wool, cast on 60 stitches with a Closed Edge. Set tension at No. 3. Knit 8 rows. Work a buttonhole over 5th to 7th Needles from right, after ribbing up the stitches below. Knit 8 rows more, complete ribbing and cast off.

TO MAKE UP

Press all parts on wrong side under a damp cloth. Stitch shoulder seams. Set sleeves in armholes. Sew side and sleeve seams. Gather sleeves into cuffs and sew securely. Sew buttonhole strip to edge of right front and button strip to left front. Stretch neckband into neck with buttonhole at right and sew into position. Press all seams. Sew on buttons.

Jumper

Materials: 2 ozs. 3-ply wool in red. 1 oz. 3-ply wool in pale blue, 1 medium sized crochet hook. 6 buttons.

Measurements: Chest 24". Length 12½". Sleeve Seam 4".

BACK

Knit as for Back of Cardigan until shoulder shaping has been completed. Set tension at No. 3. Still using blue wool, knit 20 rows on the remaining 24 stitches. Complete the ribbing and cast off.

FRONT

Knit as for Back of Cardigan until armhole shaping has been completed. Knit 5 rows. Change to blue wool and knit 12 rows. Work ribbing over last 12 rows. Change to red wool and knit 18 rows.

Shape neck. Using a second ball of red wool and working from side nearest Cam Box, cast off 12 stitches at centre of Needle Bed. Knit across both sets of stitches using two balls of

(Continued on page 61)

NOW AVAILABLE!

KNITMASTER 'Super-Knit' PATTERN LEAFLETS

Knitmaster '90-Minute' Jumper—Classic style, hip length Jumper with short sleeves, attractive V neckline and knitted belt—only 90 minutes of easy knitting produces this charming garment!

Knitmaster '2-Hour' Jumper—A cap-sleeved Classic with new roll collar, easyrib welt and dainty lace motif. Fashioned for the smart woman and knitted without hand tools in less than 2 hours!

Knitmaster '85-Minute' Dress—An elegant afternoon dress with cap sleeves, crisp white trimming and delicate lace motif—only 85 minutes' easy knitting on Model '4500'!

Knitmaster 'Weekend' Dress—A charming knitted dress with three-quarter dolman sleeves, full flared skirt and striking use of contrasting insets.

Infant's Layette Set—Including patterns for Matinée Coat, Dress, 2 Vests and Bootees,

Classic Twin Set—An ever-popular pattern in 3 sizes.

Lady's Classic Suit—Fashion dictates tailored styling in this striped Suit with the latest pencil line edgings—simple to knit in under 9½ hours on your Knitmaster!

School Pullover—Practical and useful—in 5 popular sizes—sleeveless or with long sleeves.

Jumper with Fair-Isle Borders—In 2 sizes—for Mother and Daughter—an attractive and original design.

Man's Tartan Waistcoat and Tartan Socks to Match—Warmth for a windy day in gay tartan checks!

Man's Cable Pullover with Long Sleeves—A "winner" for all sporting occasions!

Man's Socks, Boy's Turnover Stockings and Girl's Ankle Socks—A composite leaflet showing many practical favourites in several sizes.

Knitmaster '35-Minute' Socks—Shows you how to knit a useful and practical pair of Man's Socks in only 35 minutes!

PRICE: 6d. each, plus 24d. postage.

KNITMASTER 'Super-Knit' PATTERN BOOKLETS

"Know your Knitmaster"—a simple Booklet telling you the easiest way to use anyone's hand knitting leaflets on your Knitmaster—hundreds more patterns now at your finger tips!

PRICE: 1/- plus 2½d. postage.

"Knitmaster Double-Knits for Men and Women"—containing patterns for Lady's Jumper and Coat and Man's Dolman Sweater and casual Jacket—4 specially designed Quick-Knits in Double Knitting wool—easier to knit the new Knitmaster way!

PRICE: I/- plus 2½d, postage.

"The Knitmaster Jumper Book"—contains patterns for 9 very attractive Jumpers for all occasions—easily made in 2 to 4 hours! Also a glamorous evening Stole knitted in less than half an hour! PRICE: 2/6 plus 3d. postage.

"Childrens' Jerseys, Jumpers and Jackets Book"—contains an attractive selection of useful garments for the 2-12 year olds. PRICE: 2/6 plus 3d. postage. "The Knitmaster Twin Set Book"—contains a wide range of Twin Sets in sizes from 36 inch bust to Outsize, in 2, 3 and 4-ply wools. Designed to suit all ages and tastes—stocking stitch classics, lacy patterns and cable features—all with the popular lines, including raglan, dolman, and tailored set-in sleeves—12 lovely garments in all!

PRICE: 2/6 plus 3d. postage.

"The Knitmaster Layette Book"—contains a complete Layette from Bootees to Rompers, including Pram Cover, Sleeping Bag, Shawls and Christening Dress—just everything for Baby from birth to 12 months! PRICE: 3/- plus 3d. postage. "The Knitmaster Man's Book"—contains instructions for a really comprehensive selection of Mens' smart knitted wear—various Pullovers and Cardigans

hensive selection of Mens' smart knitted wear—various Pullovers and Cardigans—an exclusive Sport's Jacket, useful Lumber Jacket and novel Two-Way Waist-coat—even a Tie, Scarf, Gloves and Argyll Socks! PRICE: 3/6 plus 3d. postage.

Although this List of Publications is complete at time of going to press, new Leaflets and Books with exclusive patterns specially designed for the Knitmaster are continually being produced by our Knitting Experts—just another feature of the Knitmaster Service—please send for up-to-date list!

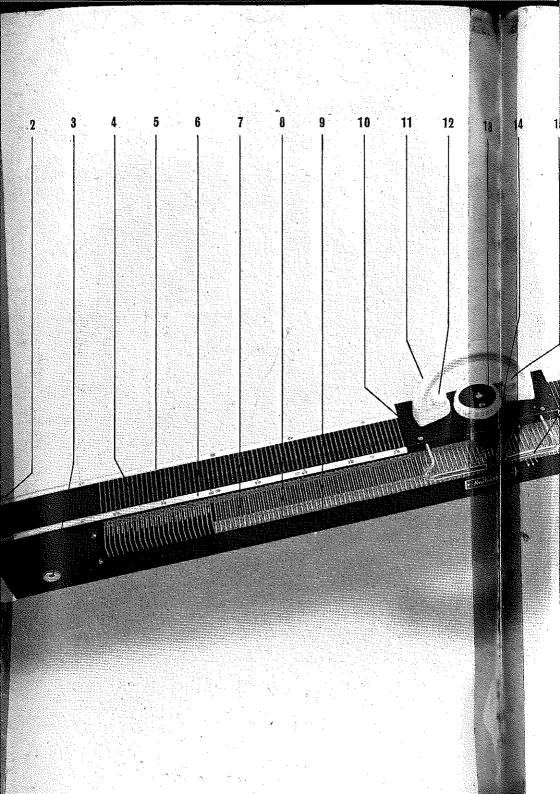
See Illustration of New Automatic Knitmaster and Details of Parts on Inside Back Cover

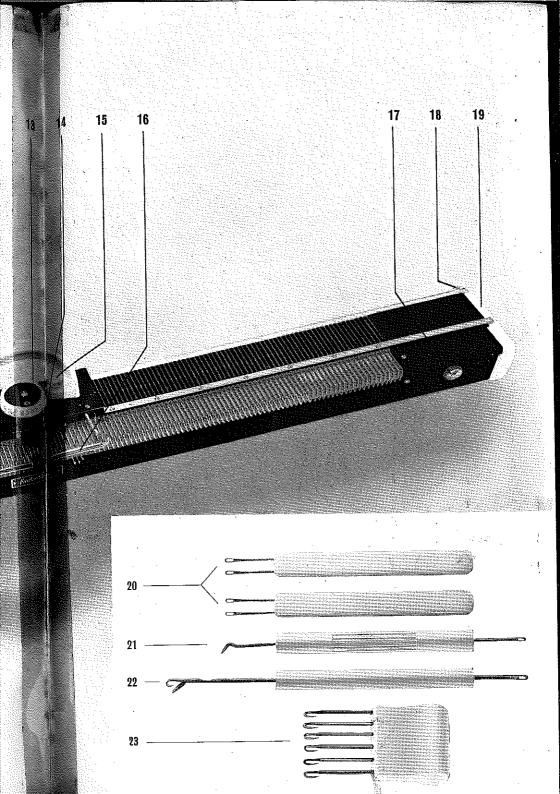


NEW AUTOMATIC MODELS "3500" & "4500"

DESCRIPTION OF MACHINE PARTS AND TOOLS

- 1 Left End Piece
- 2 Left Stop Screw
- 3 Left Casting-on Eyelet
- 4 Needle Bed
- 5 Back Slider Rail
- 6 Front Slider Rail and Numbered Gauge
- 7 Stitch Sinkers
- 8 Latch Needles
- 9 Front Cover
- 10 Cam Box
- 11 Cam Box Handle
- 12 Left Cam Knob
- 13 Tele-Tension Dial
- 14 Stitch Sinker Cam
- 15 Right Cam Knob
- 16 Lightning Latch Opener
- 17 Right Casting-on Eyelet
- 18 Right Stop Screw
- 19 Right End Piece
- 20 Double Transfer Tools
- 21 Work Hook and Single Transfer Tool
- 22 Latch Needle and Single Transfer Tool
- 23 Rib Holding Device





L. 51510 4500 Mis

Lace Patterns Without Hand Tools

By popular request, we have added in the following instructions for several extremely lovely lace patterns which can be produced quickly and without hand tools—thanks to the wonderful Holding Position of the new Automatic Knitmaster (see further Holding Position patterns on page 34).

Abbreviations:

N.W.P. = Non-Working Position;

K.P.=Knitting Position

H.P. = Holding Position.

Gossamer Lace (Bottom Left)

Suggested tension: Tension No. 5 with 2-ply wool. Put every second Needle in the N.W.P. and leave them there throughout the pattern. Continue on the remaining Needles as follows. Put every second Needle into the H.P., leaving the remainder in the K.P. *Knit 6 rows. Put Needles from the H.P. into the K.P. and knit 2 rows. Put every second Needle into the H.P. (those that were previously left in the K.P.).* Repeat from * to *.

A more open pattern is obtained by knitting the two plain rows on a looser tension setting. Another variation, ideal for filmy stoles, is obtained by knitting the pattern on Tension No. 10, and knitting three plain rows instead of two. Other interesting effects are obtained by knitting the plain rows in another colour or leaving two out of every three Needles in the N.W.P.

The finished pattern can be worn unpressed if a more embossed effect is desired, and this is recommended if two colours are used. For an open lacy effect, these patterns should be treated in the same manner as traditional Shetland Lace by retching out the work before pressing as follows. Pin one edge securely to Ironing Board, then pin the opposite edge, stretching the knitting as you led. Next, pin the side edges, stretching outwards. Press with a hot iron a damp cloth and allow the work to become cool and dry before removing After pressing in this manner, the knitting should be gently pulled in wise direction.

tion (Bottom Right)

tch to its adjacent Needle. Transfer stitch at other side onto the so that there are 3 stitches on the centre Needle with an empty h side. Leave these two empty Needles in the N.W.P. *Knit entre Needle into the H.P. Knit 2 rows. Put centre Needle P.* Repeat from * to * for length required.

ace insertion effect which can be repeated at regular intervals attern also looks very attractive on the purl side.



