

PASSAP
Automatic



Knitting-Machine

To all who love beautiful knitting!

We welcome you as the proud owner of your beautiful new knitting machine "PASSAP-AUTOMATIC" and wish you many happy hours of successful knitting.

The "PASSAP-AUTOMATIC" has been designed specially with YOU in mind—to make home knitting easier for YOU and more enjoyable.

Its special advantages are:

Best quality materials — Swiss Precision engineering — simplicity in use and maintenance and the beautiful, hand-knit-like texture of the fabric produced.

This is not surprising — for we are able to draw on almost 20 years' of experience in designing, manufacturing and marketing of our PASSAP Handknitting Machines.

Its special advantages are:

Best quality materials — Swiss Precision engineering — simplicity in use and maintenance and the beautiful, hand-knit-like texture of the fabric produced.

In 1939, at the Swiss National Exhibition in Zurich, the first home knitting machine was shown under the name

Patent Schnell Strick Apparat

(Patented apparatus for fast knitting)

For nearly 10 years, PASSAP was the sole hand knitting machine on the market and it was not until some time later that other makes appeared. The trade-name PASSAP with its background of years of pioneer work is your best guarantee for proved quality. Our latest model, the PASSAP-Automatic, gives you the best your money can buy.

Look at these advantages:

- | | |
|---|--|
| Solid, all-steel construction | Swiss precision engineering |
| 201 latch needles | Great width of fabric |
| 7 needles to the inch | minimum retraction of fabric |
| Perfected Wool Feed | Maximum speed with minimum effort — including the ability to use additional colours without breaking the yarn. |
| Four basic positions of the latch needles including two working positions | Fairisle Patterns and individual shaping as if done by hand. |

And when presently you buy the Passap Ribbing Attachment you will even be able to knit double-sided Fisherman's Rib automatically! In the main part of this book under the heading "The A-B-C of PASSAP Knitting" you will find a wealth of information. In addition to this we give you on the last pages a few special tips for pattern work which, later on, when you have become an expert PASSAP-knitter will be very useful to you in creating your own ideas. You will be amazed at the versatility of the PASSAP-AUTOMATIC and will soon prove for yourself that

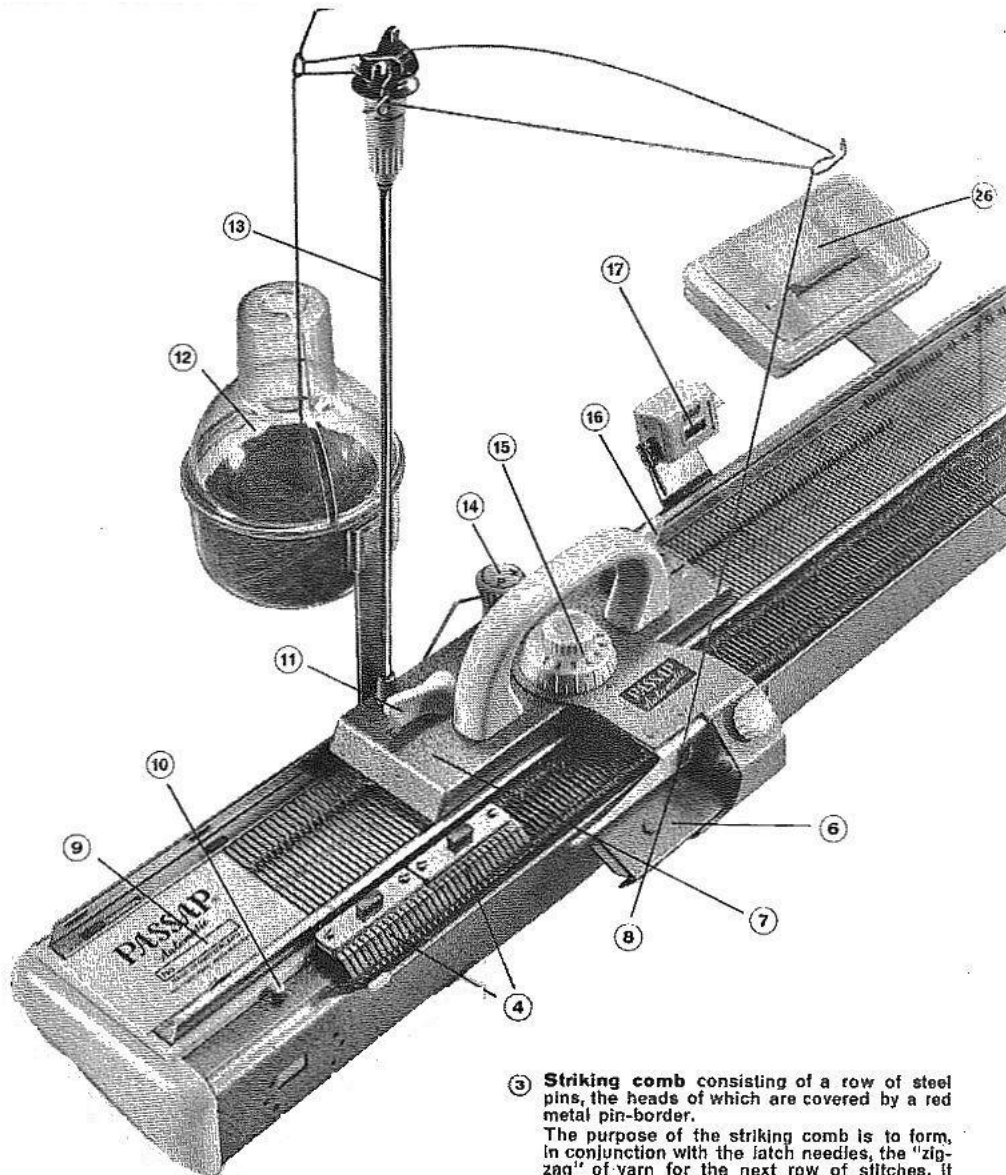
with PASSAP ambition is unlimited
and PASSAP-knitting means pleasure!

PASSAP-Export, Zurich

NOTE:

There is a Passap dealer in nearly every sizeable town in Great Britain. By our conditions of dealership each Passap dealer has a member of his staff "PASSAP" trained to help YOU. Every Passap dealer will gladly give you **free tuition and advice** in his premises so please call on him and enjoy the full benefits of having become a member of the "PASSAP Family". In case of difficulty please do not hesitate to write to:—

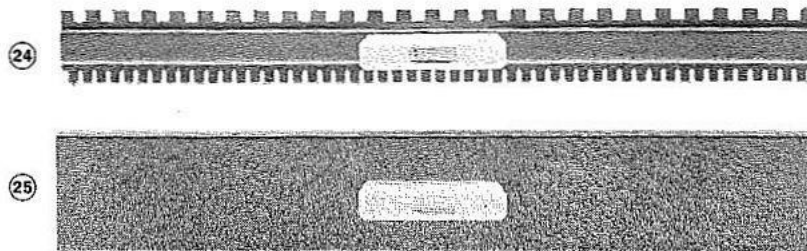
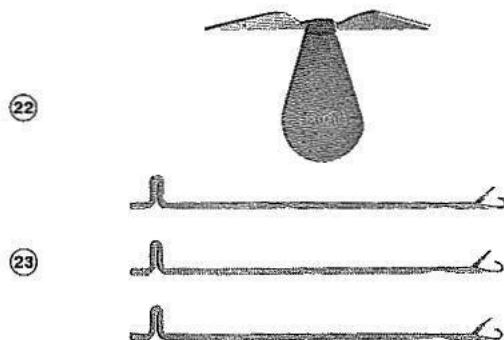
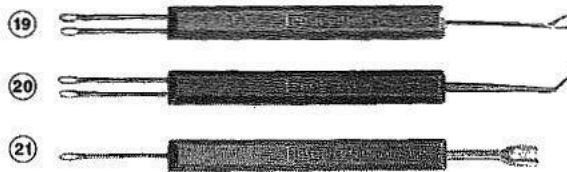
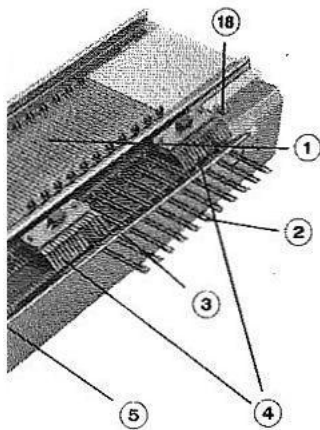
Passap Limited
Albany House
365, Euston Road
London, N.W. 1



PASSAP Automatic

- ① Needle-bed of rust protected steel with 201 separate needle channels.
- ② 201 latch needles of high grade steel, moving smoothly in the needle channels which carry the stitches of the knitting.

- ③ Striking comb consisting of a row of steel pins, the heads of which are covered by a red metal pin-border. The purpose of the striking comb is to form, in conjunction with the latch needles, the "zig-zag" of yarn for the next row of stitches. It also serves, in conjunction with the stripper, to press down the previous row of stitches.
- ④ Feathercombs of spring steel with red securing knob. To be placed onto the pegs (situated in advance of the front rail) to cover the last few needles in use on either side of the knitting. They ensure the perfect knitting of the border stitches.
- ⑤ Stitch-scale, a red metal strip affixed to the front rail enables the knitter to count up to 201 stitches. It is numbered from the central point of the needle-bed, to left and right, from 1 to 100.
- ⑥ Stripper to be fixed to the front of the lock with an adjustment screw. Its purpose: to press the previous row of knitting down against the striking comb so that the next row of stitches may be formed. The stripper avoids the necessity of weights or sinkers.
- ⑦ Sliding lock, for operating the needles knitting.



- ⑧ **Feeding Eyelet** above the stripper. Through this eyelet the yarn is guided into the open needle heads when knitting. To enable colour changes without breaking off the yarn, the feeding eyelet is furnished with a slit.
- ⑨ **PASSAP Trademark** with serial number of the machine.
- ⑩ **End-stop release left**, enables the sliding lock to be removed from the machine from the left hand side.
- ⑪ **F-G-Lever** (left-hand lever) to lock the spring side cams.
- ⑫ **Yarn-holder with lid and bracket**. The bracket is to be inserted into the slit at the left-hand side of rear of lock at the same time as the mast is fixed in place.
- ⑬ **Wool Feed** consisting of metal mast, tension arm, tension discs with tension regulator and various conducting eyelets. It is to be inserted into the metal boss at the left-hand side of rear of lock (behind F-G-lever). It also secures the bracket of the yarn-holder.
- ⑭ **N-P-knob** operating the centre cam of the lock.
- ⑮ **Stitch Regulator** with adjustment knob. To adjust the lock to required size of stitch according to the thickness of the wool being used.
- ⑯ **A-B-C lever** (right-hand lever) operating the side cams of the lock.

- ⑰ **Row Counter** with three way action, counts forwards, backwards and snaps back to 000. To be inserted into one of the three slits provided at the back of the machine.
- ⑱ **End-stop release right**, enables the sliding lock to be removed from the machine from the right hand side.
- ⑲ **Green tool** comprising one single latch needle at one end and, at the other end, one double-decker needle.
- ⑳ **Red tool** comprising an angled point at one end and a double-decker needle at the other.
- ㉑ **Blue tool** comprising at one end a cup-end (fitting the needle feet) for moving the latch needles and a single decker-needle at the other end.
- ㉒ **Latch opener (Cupid's Bow)**. Its straight edge to be guided along the hooks of the latch needles thus opening the latches.
- ㉓ **Three spare latch needles**.
- ㉔ **Pattern ruler** for group selection of the latch needles when patterning. One side for 1-1 division, other side for 2-2 division of the needles.
- ㉕ **Block ruler**, for altering the position of the latch needles for pattern work or for steadying the needle feet when casting on, transferring stitches, etc.
- ㉖ **Accessory box** for the standard tools to be inserted at the back of the machine body.

The latch needle in the needle bed
 Four basic positions — How a stitch is formed — Replacement of a latch needle —
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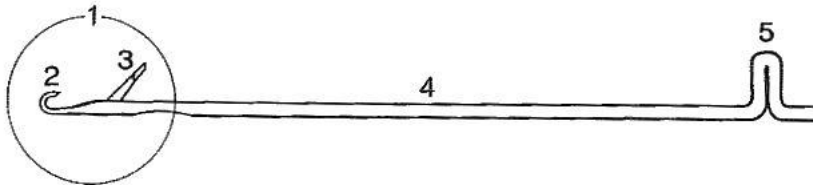


Some Fundamental Explanations



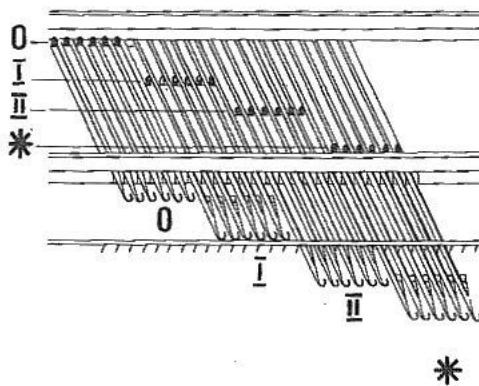
These explanations will help you considerably to fully understand your machine and how it works

The Latch Needle in the Needle-bed



1 = needle head, 2 = hook, 3 = movable latch (tongue), 4 = needle shaft, 5 = needle foot

The Four basic positions of the latch needles



0 = **The Neutral Position.** The needles are fully withdrawn in the needle-bed with the needle feet touching the rear rail. In this position, the needles are completely out of function

I = **The Working Position.** (For automatic feeding of the yarn). The needle feet are in the rear third of the needle-bed with the needle-heads just behind the striking comb.

II = **The Yarn-receiving Position.** (For hand feeding of the yarn). The needle feet are in the front third of the needle-bed with the tongues of the open latches level with the pins of the striking comb and the stitches are held on the needle shafts behind the open latches.

* = **The Rest Position.** The needles are fully extended in a forward position with the stitches held on the needle shafts further behind the open latches and against the striking comb. In this position the needles are out of function. This position is used for turning heels, graduations, patterning with "loops", etc.

How the latch needle forms a stitch

The dotted line shows the fixed position of the striking comb.

Needle in working position, the stitch being held in the hook of the needle. Fig. 1.

The needle moves forward and the old stitch automatically opens the latch. Fig. 2.

The needle moves forward to the limit of its forward movement and the stitch slides behind the open latch (Yarn-Receiving Position). Fig. 3.

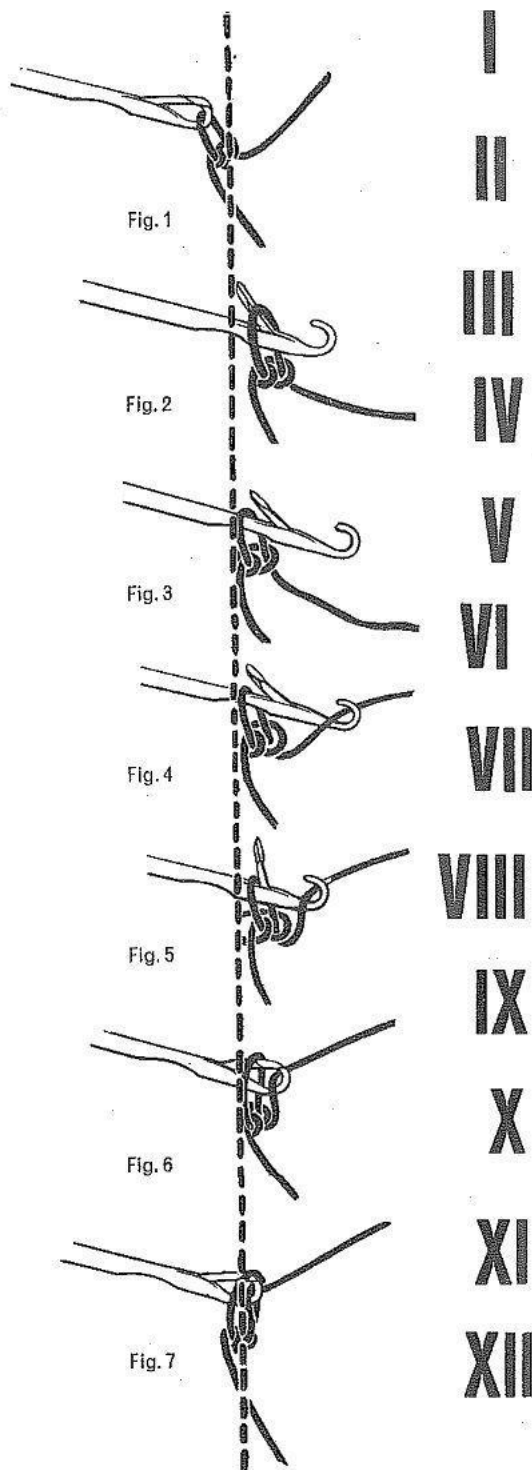
At this stage the yarn is automatically fed into the hook of the latch needle. Fig. 4.

The needle now moves to the rear and the old stitch begins to close the latch. Fig. 5.

The needle moves still further to the rear, the old stitch closing the latch. The yarn is thus trapped in the closed head of the latch needle. Fig. 6.

The needle now moves back into Working Position. The old stitch slides forward over the closed needle head: exactly the same cycle of movements is repeated and the new stitch is formed. Fig. 7.

This movement is repeated continuously however many latch needles are in use. Since this cycle of movements is always the same, it follows, that always the same type of basic stitch is formed, namely STOCKING STITCH with the purl side facing the knitter.



Replacement of a latch needle

The needles are made of finest quality steel and will stand up to hardest use. In spite of this, a needle can be damaged once in a while (for instance a latch could possibly get bent) but it can easily be replaced.

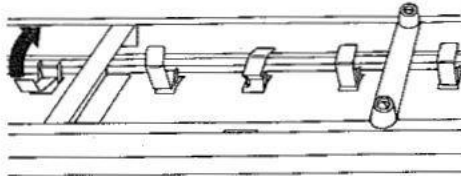


Fig. 8

Remove the lock and turn the machine upside down. It will then rest on the red pin border of the striking comb. Open the fixing clamps now visible behind the front sliding rail, Fig. 8. In order to replace 1 needle, about 4 or 5 of the clamps should be opened.

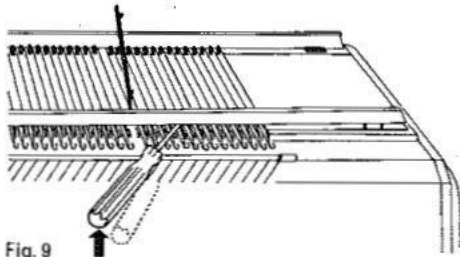


Fig. 9

Place machine on its rubber feet again. Giving a slight lift to the front sliding rail, take the foot of the damaged needle, push lightly forward, then lift it and pull the needle out from the rear. Fig. 9. Insert new needle with closed latch under the front rail from behind then press down the front rail and projecting clamps.

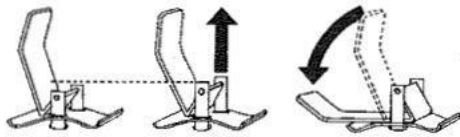


Fig. 10

Turn the machine upside down again and close the fixing clamps by first lifting and then pressing them forwards and downwards.

The clamp is not correctly fixed, unless the little steel plate lies, flat on the underside of the machine body. Fig. 10.

Cleaning of the needlebed

Inevitably particles of wool (wool dust) will accumulate on the needlebed as a result of knitting. The needle channels must therefore be cleaned from time to time with a soft clean dusting brush. The rails should also be polished with a soft cloth.

After having cleaned the needlebed, slightly oil the needle feet and along the sliding rails. A few drops of PASSAP-Bellodor oil on a soft cloth are sufficient.

If the movement of the lock appears stiff and the needles do not slide easily in their channels, it is a sure sign that your machine needs cleaning. If this is the case, you are strongly advised to send your PASSAP-Automatic (carefully packed, please!) to the nearest PASSAP-service dealer for a general check-up and thorough cleaning.



The Lock

How to remove the lock from the machine

Press the end stop release button at right or left of the machine and slide the lock from needle bed. Fig. 11.

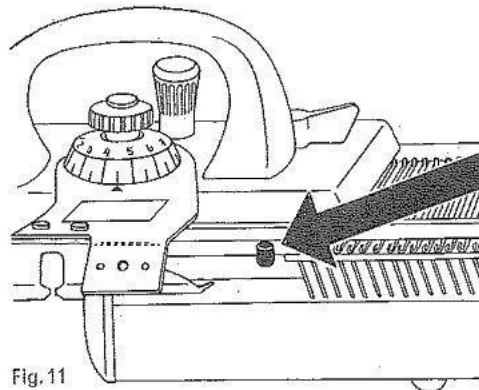


Fig. 11

This is the under-side of the lock

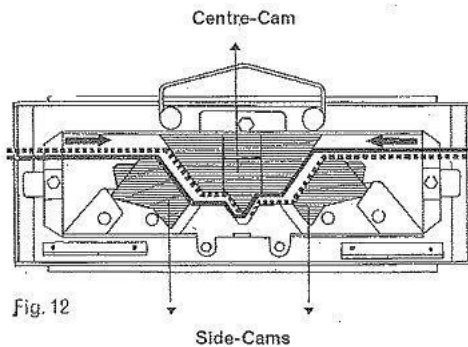


Fig. 12

The Centre-Cam. This is controlled by the N-P knob. When the N-P knob is pressed down and set at N for knitting basic stocking stitch, the movement of the lock across the needle-bed causes the needle feet to follow a path along the edges of the cams as indicated by the black dotted line (Fig. 12) thus causing the needles to follow the cycle of movements as described in Figs. 1 to 7. When the N-P knob is pressed down and is set at P the tip of the centre cam is withdrawn: this is to enable you to knit double-sided Fisherman's Rib with the Ribbing Attachment.

The Side-Cams are operated by the A-B-C-lever (right-hand lever) and can be locked by the F-G-lever (left-hand lever).

How to oil the lock

Before the lock is taken into use and later on from time to time, the under-side of the lock should be thoroughly cleaned with a dry soft cloth and then lightly oiled with a slightly oily cloth along all edges of the various cams (see black markings) Fig. 13. Use PASSAP-Bellodor oil or, failing this, only the finest sewing-machine oil. **Never** use ordinary mineral oils, vaseline oil, vegetable or salad oil.

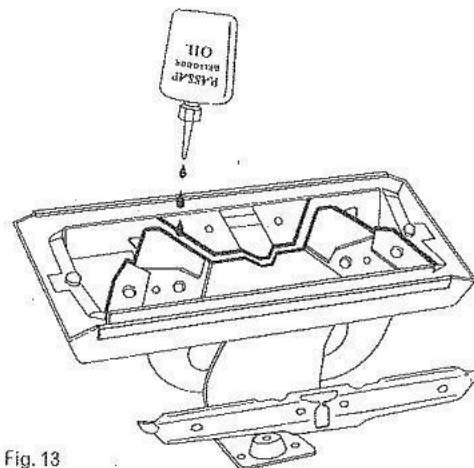


Fig. 13

Too much oil does more damage than too little oil!

Important. Fruit and other acids adversely affect the machine, latch needles and lock — therefore the greatest care should be taken that the hands are clean when handling both the machine and the knitting!





Explanation of the levers of the lock and their use

The A-B-C-lever (right-hand lever)

The function of the A-B-C-lever is to enable the side cams to be raised or lowered so that the path followed by the feet of the latch needles may be altered according to the required knitting procedure.

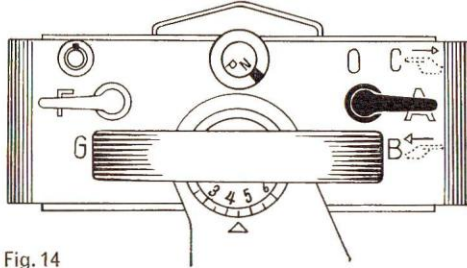


Fig. 14

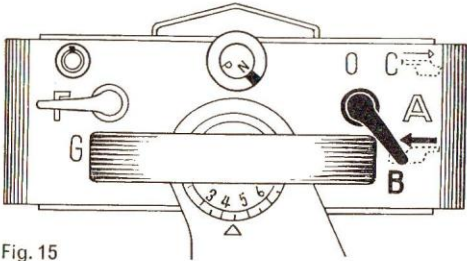


Fig. 15

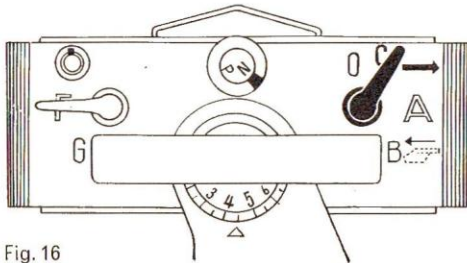


Fig. 16

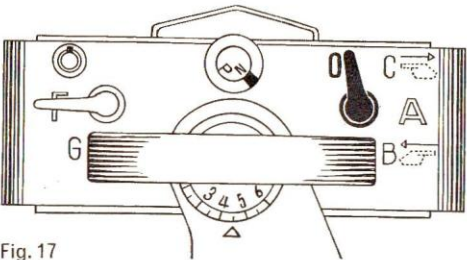


Fig. 17

A = Normal position for knitting plain stocking stitch with the Automatic Wool Feed. Both side cams are in the lower position and are therefore in function. Fig. 14.

B ← to return the needles from the Yarn-Receiving Position to the Working Position when the lock is on the right of the machine. The left hand cam is raised and is therefore out of function. The arrow indicates the direction of the lock movement to the left. Fig. 15. After knitting the row return lever to A.

C → to return the needles from the Yarn-Receiving Position to the Working Position when the lock is on the left of the machine. Now the right hand cam is raised and is therefore out of function. The arrow indicates the direction of the lock movement to the right. Fig. 16. After knitting the row return lever to A.

0 = In this position both side cams are raised and are therefore out of function. By pulling up the N-P knob at the same time (see Fig. 22) the centre cam is also put out of function and the lock may be moved from side to side of the machine without any movement of the needles.

The hand indications are used in certain pattern work and are explained in a later instruction.

The F-G lever (left hand lever)

The function of this lever is to enable the side cams to be locked (when set at G) when the yarn is fed by hand.

F = **Normal Position** when knitting with wool feed. Fig. 18.

G = For knitting when the yarn is hand fed (the needles being in Yarn-Receiving Position). The side cams are locked. Fig. 19. It is advisable also to set the lever at G when knitting with the less elastic yarns such as crochet cotton, synthetic raffia etc.

It will help you if you try out the different positions of the levers and knobs and see how they affect the operation of the various cams on the under-side of the lock. In this way you will get to know the working procedure of your Automatic-Lock.

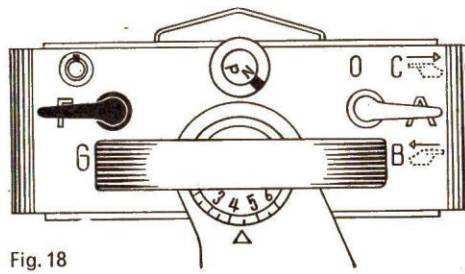


Fig. 18

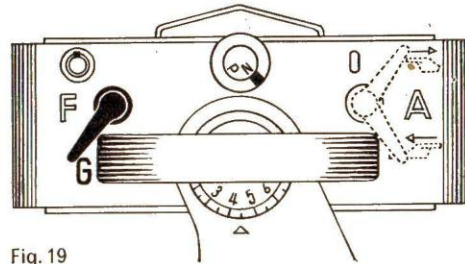


Fig. 19

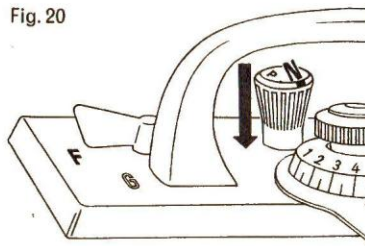


Fig. 20

The N-P Knob

The N-P Knob controls the centre cam and enables its function to be varied as set out hereunder.

Pressed down and set to N:

Normal Position for all normal working except when knitting double-sided Fisherman's Rib with the Ribbing Attachment. Fig. 20.

Pressed down and set to P: For double-sided Fisherman's Rib with the Ribbing Attachment **only**. Fig. 21.

Pulled up: The centre cam is put out of function. It is also in this position for certain Fairisle work (as described in later pages) and also enables the lock to be moved from side to side of the machine without the needles knitting (Fig. 22) when the A-B-C-lever (right-hand lever) is set to 0 (see Fig. 17).

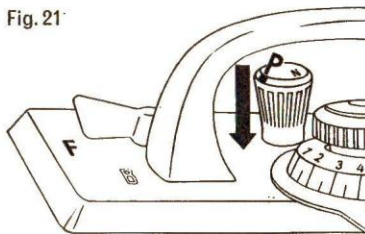


Fig. 21

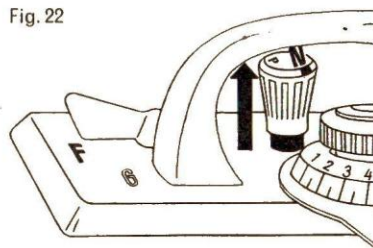


Fig. 22

**General Guide
to adjustments for various thickness of wool**

Material	Size of Stitch No.	Texture of Fabric
Crochet Cotton	1 -3	Knitting with consecutive needles in use
1 ply Wool	1 -2	Knitting with consecutive needles in use
2 ply Wool	1 -3	Knitting with consecutive needles in use
3 ply Wool	1½-4½	Knitting with consecutive needles in use
4 ply Wool	3½-5	Knitting with consecutive needles in use
Crochet Cotton	4 -5	Open-work fabric
Synthetic Raffia	5	Open-work fabric
Double Knitting	4½-6½	Plain knitting with alternate needles in use

IMPORTANT! Note: The foregoing is only a general guide and it is absolutely essential that, before you knit a garment from any pattern, you first knit your tension square to check that you have the correct number of stitches and rows to the inch.

The numbers given on the Stitch Regulator **do not** correspond with the numbers of handknitting needles.

IV

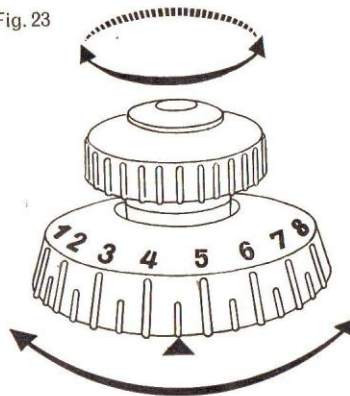
How to alter the stitch size for various thicknesses of wool

The Stitch Regulator

Just as in handknitting you vary the size of your knitting needles to the thickness of wool which you are using, so with the Passap Automatic lock you adjust the size of stitch by means of the numbers shown on the Stitch Regulator. For thick wool you use high numbers, for finer yarns you use low numbers.

Unscrew adjustment knob and turn the disc of the stitch regulator until the small red arrow points to the required number. Fig. 23. Then tighten the knob again to secure the disc at the selected stitch number.

Fig. 23



How to knit your tension square

With the yarn you propose to use cast on 70 stitches and knit 70 rows in the chosen pattern. Remove this tension square from the machine without casting-off (after finishing the garment, you can unravel this square and use the wool for making seams), lay it out flat on the table but without stretching and leave it for 24 hours. Now with a tape-measure, count the stitches and rows required to make 2" (measuring in the middle of the tension square). For patterned garments always knit and measure the tension square over a complete pattern section.

When you have noted the measurements of your tension square you can easily relate it to your paper pattern and calculate how many stitches are to be cast on, how many rows are to be knitted, as well as the number of stitches to be increased or decreased.

For example. Your tension square shows that you have 20 stitches to 2 inches. This is of course, 10 stitches to the inch. Therefore, if you need 16 inches for the waist (32 inches circumference) you need to cast-on 160 stitches to give you 16 inches of knitted fabric. In the same way you can easily work out the number of rows required to be knitted for the particular pattern.

To make a paper pattern see pages 43 and 44.

V

The Wool Feed

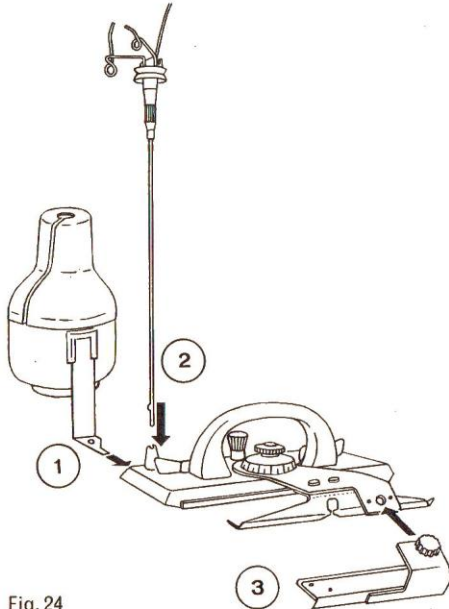


Fig. 24

How to mount the Yarn Holder and the Stripper

1. Insert bracket of yarn-holder into the slit at left-hand side of rear of lock and place yarn-holder on to its bracket.
2. Place mast of Wool Feed into the metal boss (behind F-G-lever) so that the key on the mast fits into the niche in the boss, thereby securing the bracket of the yarn-holder in place.
3. Screw on stripper at front of lock.

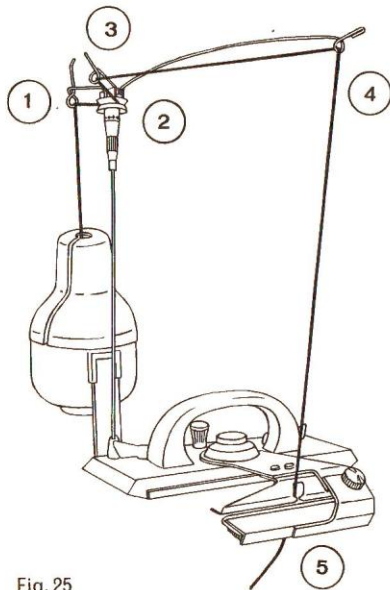


Fig. 25

How to thread the yarn.

Place ball of woole in the yarn holder, pick up loose end of wool with the right-hand and pull it through hole in lid, and thread in as follows:

1. Behind the mast and slightly to the right upwards through rear eyelet.
2. Forwards between the tension discs on the right hand side
3. From above through the centre eyelet.
4. From left and above through front eyelet on tension arm.
5. It is then passed through the slit of the feeding eyelet immediately above the stripper and from the left between stripper and striking comb as shown in following Fig. 26.

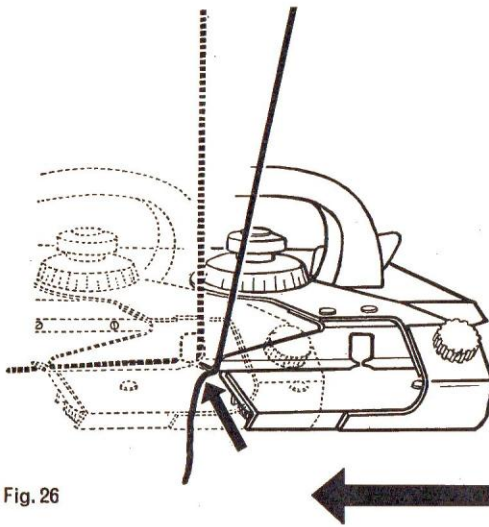


Fig. 26

Now move the lock slightly to the left and hold the yarn lightly and it will automatically pass into the central position. Fig. 26.

The Tension Discs to regulate the tension of the yarn

The tension of the yarn is regulated by these discs at the top of the mast. For smooth, even knitting the tension arm should be bent forward at a right angle to the mast. If the tension is insufficient (i.e. the tension arm is pointing upwards) the white plastic tension regulator below the discs should be turned in the "+" direction. If the tension is too strong (i.e. the tension arm is bent downwards) the white plastic tension regulator should be turned in the "-" direction. This enables you to vary your tension according to your requirements. Fig. 27.

The yarn must always run smoothly and evenly from the ball, to ensure a nice evenly knitted fabric. If the yarn does not run smoothly from the ball, its passage through the eyelets and tension discs becomes jerky and will affect the even tension of the fabric. A wool-winder to produce a ball which pulls from the centre is an asset but is not essential provided the yarn flows freely from the yarn holder.

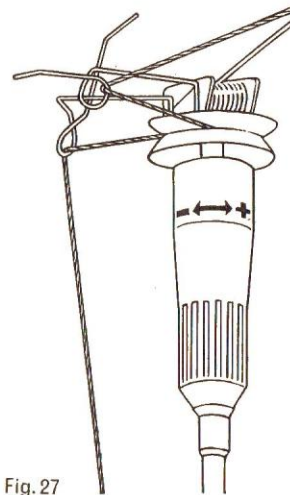
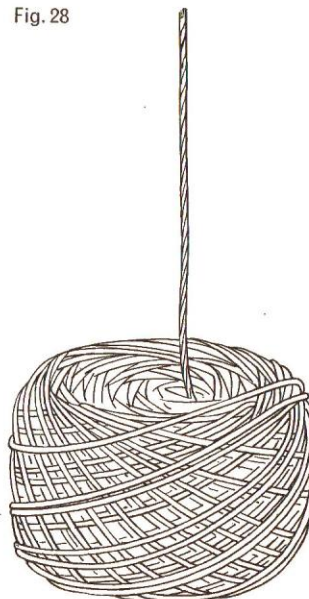


Fig. 27

Fig. 28



VI

Accessories to be mounted on the machine

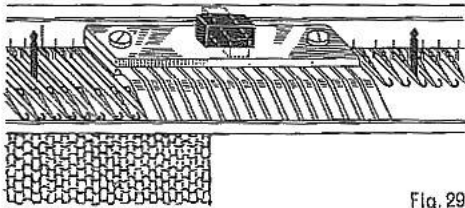


Fig. 29

The Feathercombs to ensure that the border stitches are knitted

In order to ensure perfect knitting of the border stitches the feathercombs must be fixed over the last two or three needles on each side of the work.

To remove feathercomb. Turn the red knob at right angles to the stitch scale and lift off.

To reset feathercomb. On the underside of the feathercomb there are two holes. These fit on to the pegs situated in front of the stitch scale. Place the combs on the appropriate pegs so that at least the last 2 or 3 needles in use are covered and turn the red knob parallel to the stitch scale to lock feathercomb in position.

Important. Make sure that two or three latch needles are completely covered and that no open needle head is jammed in the feathercomb.

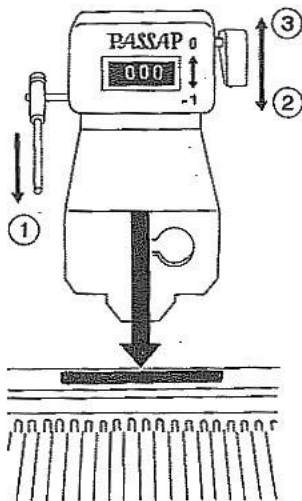


Fig. 30

The Row Counter

When the row counter is used, it is inserted into one of the three slits provided at the back of the machine body according to which part of the machine is being used. Fig. 30. The PASSAP row counter works with a three-way action:

1. When the driving lever at the left side of the row counter is pressed backwards one figure is added. This is done automatically when the lock is moved from one side to the other of the machine, past the row counter.
2. When the white reset handle at right hand side of row counter is pressed downwards to the (-1) mark, one figure is deducted (backward counting).
3. When the white reset handle at right hand side of row counter is pressed upwards to the "0" mark, all figures snap back to 000.

The plastic accessory box

The plastic box may be inserted conveniently into one of the three slits provided at the back of the machine body, fig. 31. It contains an assortment of small tools illustrated on the inside-cover page (nos. 19-23).

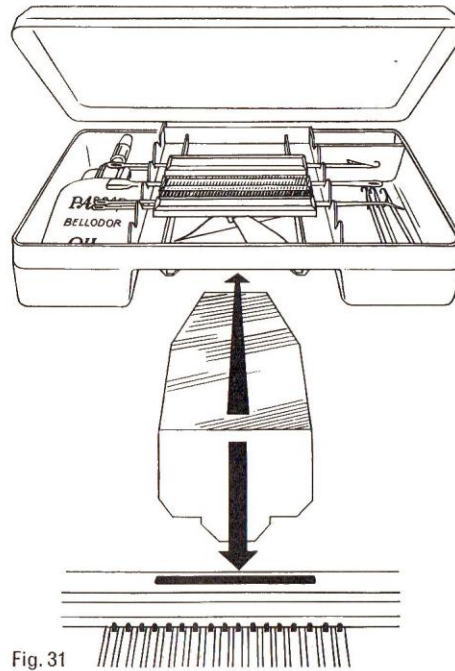


Fig. 31

Patterns for PASSAP owners

Passap is supported by a very comprehensive pattern service. There are more than 200 knitting leaflets designed exclusively for British owners of PASSAP. The range of knitting patterns is constantly being enlarged and revised to take account of current fashion trends. The store where you purchased your PASSAP has a full range of specimen patterns and is able to supply any pattern from our range to you.

To keep PASSAP owners up to date with additions to our range of patterns we have our Pattern News Service. This Service has been designed to ensure that all PASSAP owners can have up to date news of pattern leaflets and books as they are made available for a modest sum.

For details of this service please write to:

For Great Britain: PASSAP Limited,
Albany House, 365, Euston Road, London, NW. 1.

For U.S.A. and Canada: SPEED-O-KNIT Home Knitting Institute
1142 South San Julian Street, Los Angeles 15 (Calif.)

For other Countries: PASSAP-Export, Zurich 27, P. B. 350 (Switzerland)

The A-B-C of PASSAP-Knitting

VII

Casting on and Knitting

Caution. The lock must NEVER be moved across the bed of the machine when the needles are empty, unless ALL needles are in Neutral Position.

To be practised as a test square. Beginners should use a light coloured 3 or 4 ply wool.

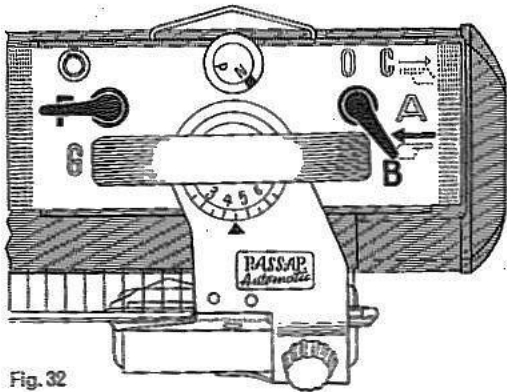


Fig. 32

Starting Position (Levers at B, F, N. Stitch size $4\frac{1}{2}$) Lock on the right. Fig. 32.

In the exact centre of the needlebed bring approx. 70 needles forward into Rest Position, place block ruler behind needle fee and open all latches. Fig. 33.

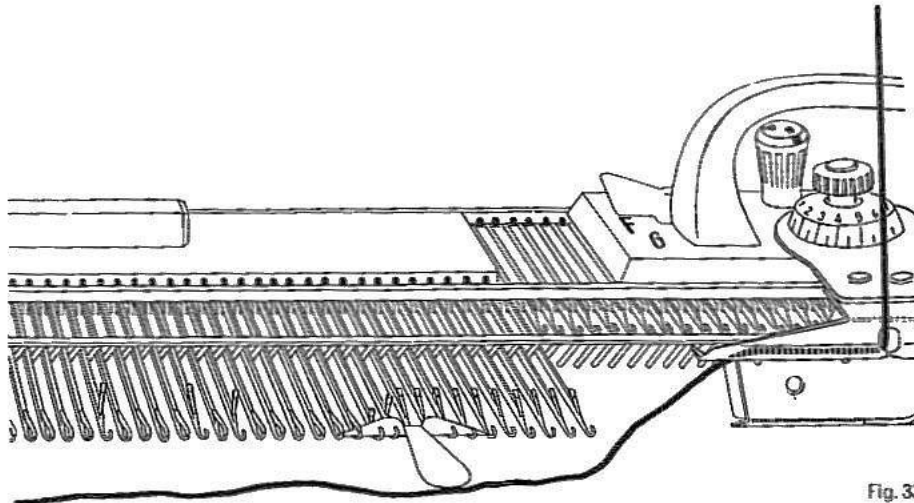


Fig. 33

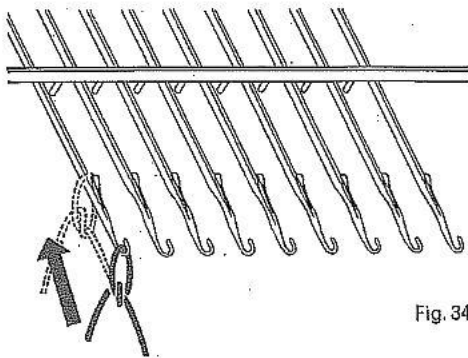


Fig. 34

Pull out a sufficient length of yarn below the stripper, make a loop with a slip knot round the first needle on the left and push the loop behind the open latch. Fig. 34.

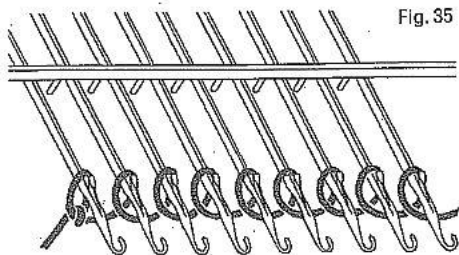


Fig. 35

Now wind the yarn fairly loosely around each successive needle in turn, in an anti-clockwise direction, (exactly as you would write the small letter "e") passing the loops behind the latches. Fig. 35. Place feathercombs over the last 2 or 3 needles in use on each side (see Fig. 29).

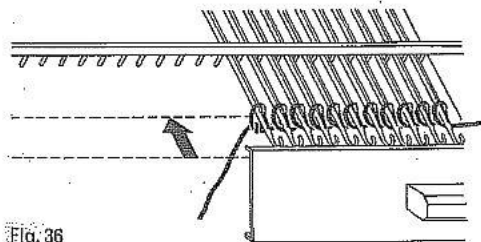


Fig. 36

With the block ruler push the needles back into Yarn-Reveiving Position. Fig. 36.

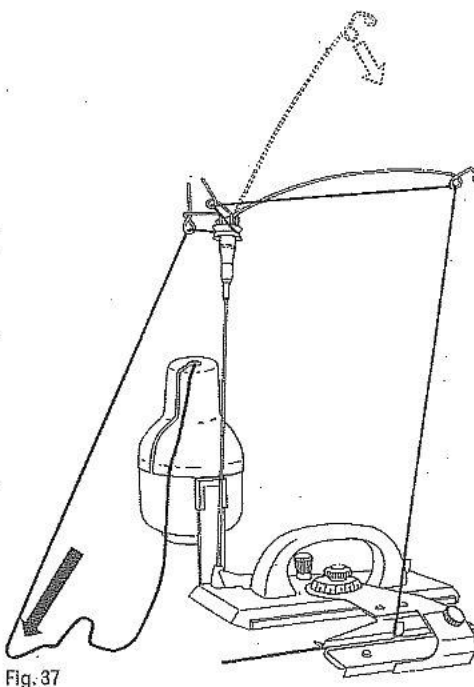


Fig. 37

Pull down the yarn behind mast between rear eyelet and yarn holder until the tension arm is bent forward into a right angle position. Fig. 37. Adjust tension discs if necessary. (Fig. 27).

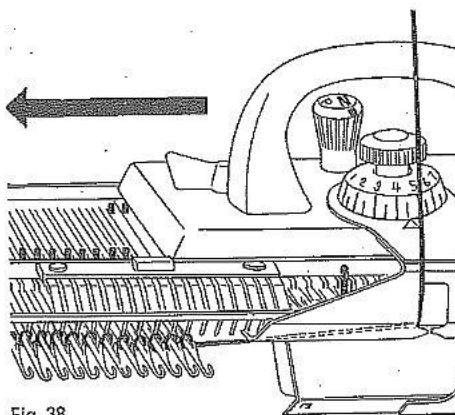


Fig. 38

1st row: Set row counter at 0. Move lock slowly and smoothly over all needles in use in a left hand direction, (Fig. 38), until it has completely passed all needles in use. The needles are now in Working Position.

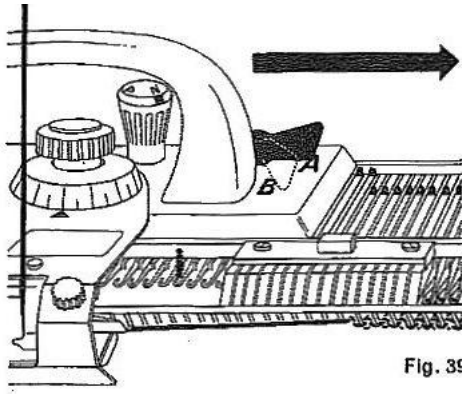


Fig. 39

2nd row. Set A-B-C-lever (right hand lever) to A. Move the lock slowly and smoothly over all needles in use in a right hand direction until it has again passed all needles in use. Fig. 39.

From now on simply move the lock to and fro in even rhythm until the row counter reads 30 rows.

The lock must be moved in one direction only. Once you have started to move the lock across the needles be sure to complete the row. Any attempt to move the lock in the reverse direction will almost certainly result in dropped stitches or even the breaking of the needles.

In case your work is interrupted - before recommencing pull down the yarn behind the mast and check that it is properly threaded through the feeding eyelet as shown in Fig. 38 if lock is on the left or as in Fig. 40 if lock is on the right. Check also that your tension is correct as shown Fig. 37.

Should the lock jam. If the lock has jammed, it is due to your having made a mistake and you should pull up N-P knob and set A-B-C-lever (right hand lever) to 0. Fig. 41. Now the lock can be moved freely either to the right or to the left without the needles knitting and without danger of dropped stitches and you can correct your mistake.

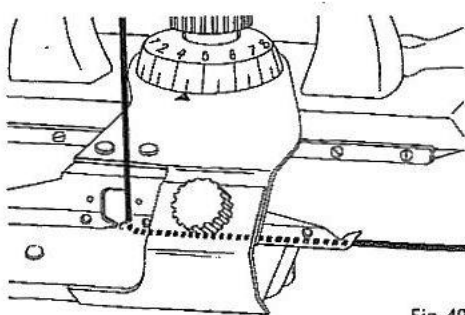


Fig. 40

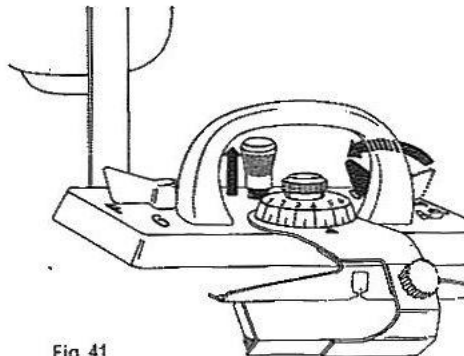


Fig. 41



Increasing, Decreasing and Casting Off

This is done either on right or left of the work on the side of the machine where the lock is.

Increasing

Increasing 1 stitch on the right. Bring 1 additional needle forward, wind the yarn round the open needle head in **anti-clockwise** direction and put the needle into Yarn-Receiving Position. Set A-B-C-lever (right-hand lever) to B (Fig. 42) knit the row. Re-set lever to A and continue knitting.

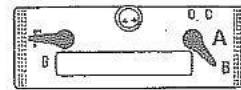
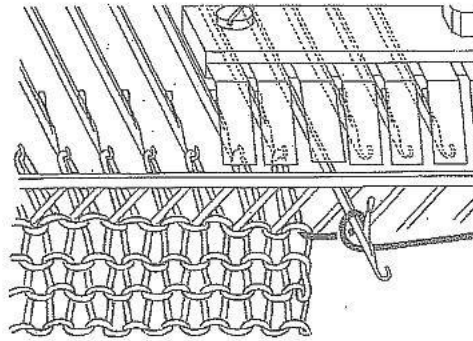


Fig. 42



Increasing 1 stitch on the left. Proceed in the same way as for right but wind the yarn in a **clockwise** direction and set A-B-C-lever (right-hand lever) at first to C (Fig. 43) knit the row then re-set to A and continue knitting.

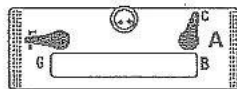
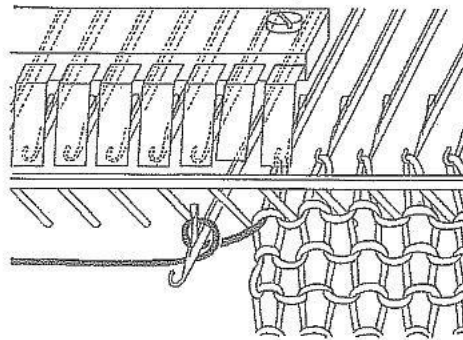
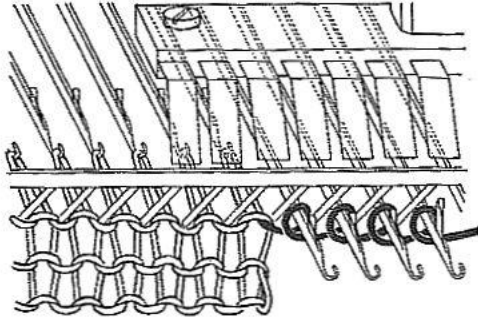


Fig. 43



Increasing of several stitches. Wind the yarn round the required number of needles in turn as for casting on. Before you continue knitting make sure that the last 2 or 3 needles are covered by the feather-combs.

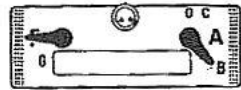
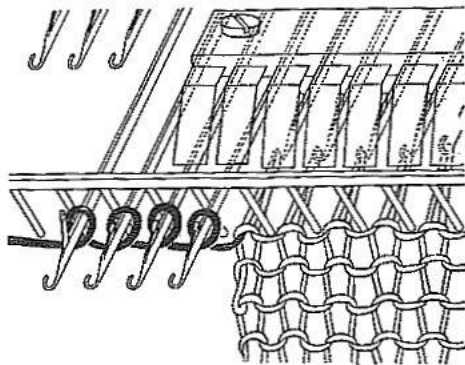


Fig. 44

Increasing on the right (anti-clockwise). A-B-C lever (right-hand lever) to B (Fig. 44) knit 1 row. Lever to A, continue knitting.



Increasing on the left (clockwise). A-B-C-lever (right-hand lever) to C (Fig. 45) knit 1 row. Lever to A, continue knitting.

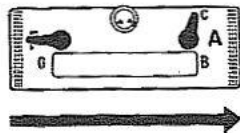


Fig. 45

Decreasing

Decreasing one stitch. This is carried out in exactly the same way on either side of the work.

The example shown is for the right-hand side of the work.

Bring forward slightly the last latch needle in use and hook the eye of the decker needle into the hook of this needle which you now pull further forward until the stitch is behind the open latch. Fig. 46.

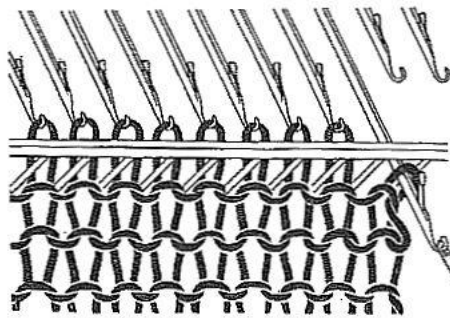


Fig. 46

Push the needle back so that the stitch slides over the closing latch and onto the decker needle. Fig. 47.

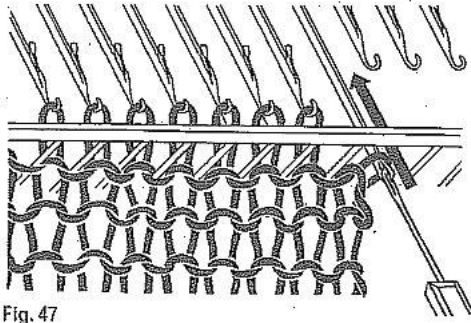


Fig. 47

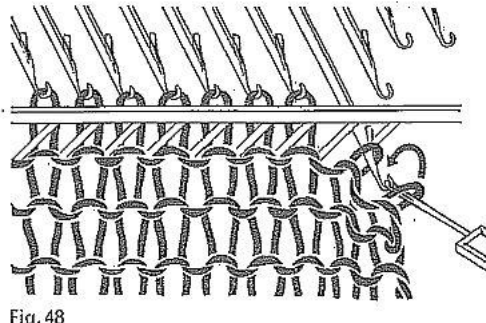


Fig. 48

Place the eye of the decker needle into the hook of the next needle and transfer the stitch from the decker needle into the open hook of that needle. Fig. 48. Check that the feathercomb still covers at least the last two needles in use! Continue knitting.

Decreasing of several stitches. This can be carried out in the same manner on either side of the work but only on the side where the lock is (i. e. where the yarn is available). The example shown is for the right hand side of the work.

With the latch needle end of the green tool pick up the last two stitches one after the other. Fig. 49.

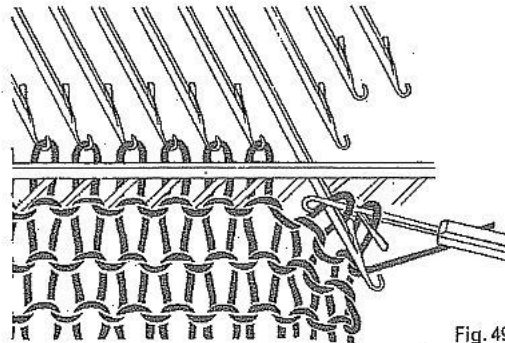


Fig. 49

Pass the yarn over the hook of the tool in front of its open latch and draw the yarn through the two stitches. Fig. 50. 1 stitch remains behind the latch of the green tool. Fig. 51.

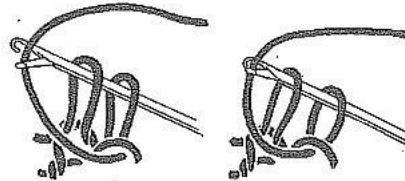


Fig. 50

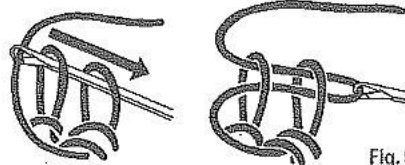


Fig. 51

Take the next stitch from the machine, proceed as before, drawing the thread through and crocheting a new stitch. Fig. 51.

Now you have decreased 3 stitches and you transfer the stitch from the latch end of the green tool into the hook of the fourth needle (last needle in use) Fig. 52. You return the three empty needles to Neutral Position and continue knitting.

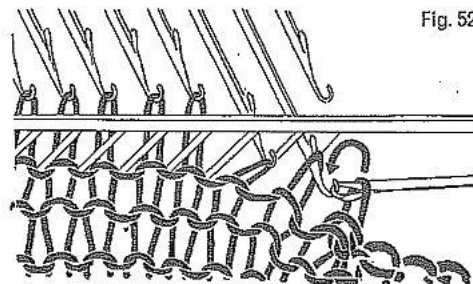


Fig. 52

How to cast off.

For the final casting off of the work, proceed according to Figs. 49-51 over the whole row of stitches.

IX

Buttonhole - Corrections - Crocheting

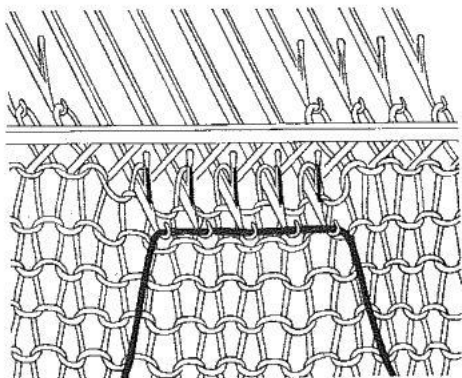


Fig. 53

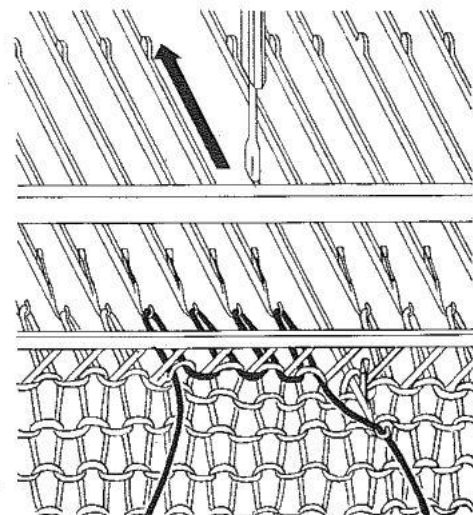


Fig. 54

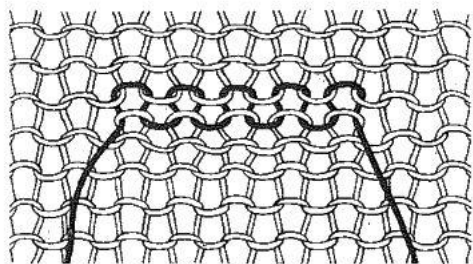


Fig. 55

The knitted-in buttonhole

The best buttonhole is achieved when it is knitted with a separate odd length of yarn in contrasting colour and it is reinforced when the knitting has been finished.

For example, bring 5 needles forward into Yarn-Receiving Position and place the oddment of yarn into the open needle heads. Fig. 53.

With the cup-end of the blue tool move the needles back into Working Position, one after the other so that the odd yarn is knitted. Fig. 54. Continue knitting.

The odd yarn has thus been knitted where the buttonhole is required. Fig. 55.

When the work has been finished the odd yarn is removed leaving a number of open stitches. Fig. 56.

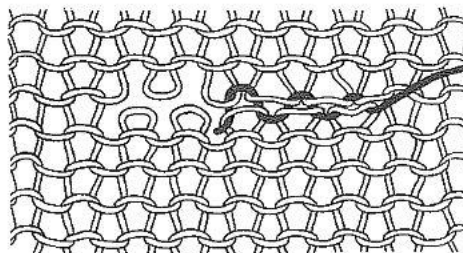


Fig. 56

Pick up the open stitches with a darning needle and a double thread of the yarn in use (Fig. 57) and finish off with button-hole stitch. (s. Fig. 117)

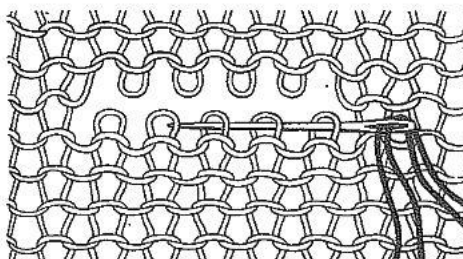


Fig. 57

How to unravel rows

If you have made a mistake or have knitted too many rows you can easily correct your error by unravelling. First remove the yarn from the feeding eyelet.

Holding the work firmly in your hand with a downward pressure and ensuring that the stitches remain held in the hooks of the latches and that they do not pass back on to the needle shafts, pull the yarn gently but firmly until it becomes taut. It will be seen that the stitches of the previous row are now nearly riding over the tops of the hooks of the needles. Holding the yarn away from you, towards the bed of the machine, it will now be removed from the needles Fig. 58, and the row will be unravelled.

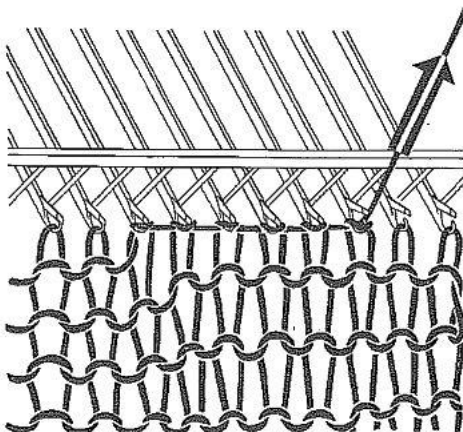


Fig. 58

Remember to correct the row counter!

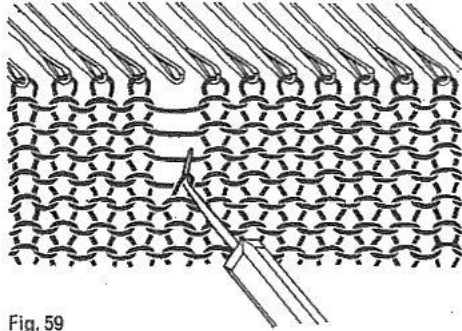


Fig. 59

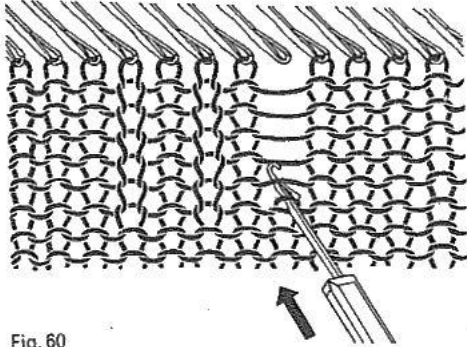


Fig. 60

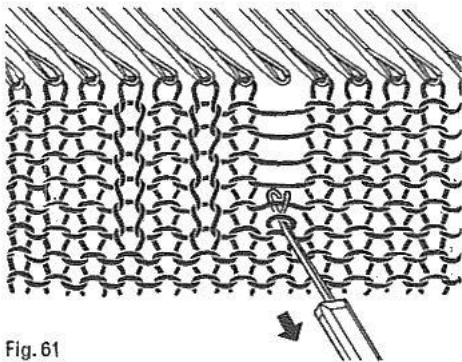


Fig. 61

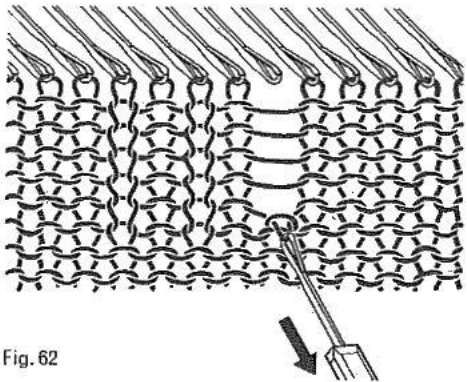


Fig. 62

Crocheting plain stitches on the purl (wrong) side of the work.

This method is used, for example, for welts, cuffs, etc. Remove one stitch from the latch needle and drop it the required number of rows (in making welts drop as far as the cast on edge).

You can now see the cross threads of the rows, which you dropped, Fig. 59. Now catch the loop of the stitch in the latch end of the green tool with the open hook of the tool facing the machine. (If you have difficulty in catching the loop in the latch end of the green tool, it is easy to open the loop slightly by means of the angled end of the red tool, Fig. 59.) It is easiest if the tool is held in a nearly perpendicular position. Push the tool forward towards the machine so that the stitch held in the latch of the tool passes onto the needle shaft of the tool. The latch will open as you push the tool forwards, Fig. 60, and as you withdraw the tool towards you, you catch the next cross thread above in the closing needle-head, Fig. 61, thus knitting the stitch.

Here the needlehead is shown fully closed with the loop drawn through. Fig. 62.

These stitches (crocheted up stitches) are formed by the latch of the green tool in precisely the same way as is shown in Figs. 1 to 7 which explain "How the latch needle forms a stitch."

Here the successive rows of dropped stitches are shown crocheted up and the last stitch transferred to the needle from which you first dropped the stitch. The stitches thus formed are plain stitches knitted on the purl (wrong) side of the work and appear as purl stitches on the plain (right) side of the work.

Crocheting up two cross threads

Insert the latch needle of the green tool into the dropped stitch and slide upwards under 2 cross threads, catching the upper thread only and drawing it through the dropped stitch. Fig. 64.

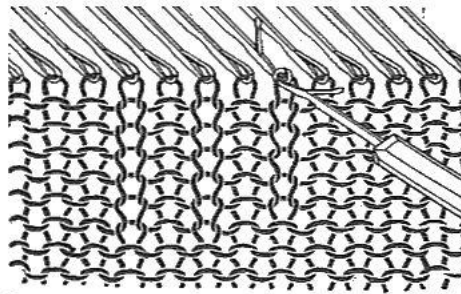


Fig. 63

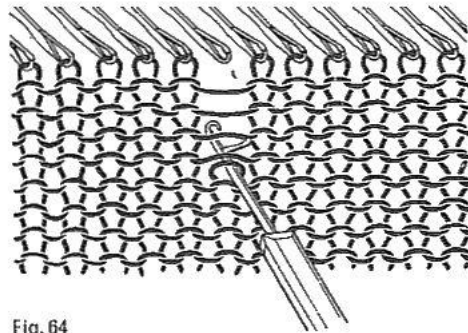


Fig. 64

The lower of the 2 cross threads will be caught automatically. Fig. 65.

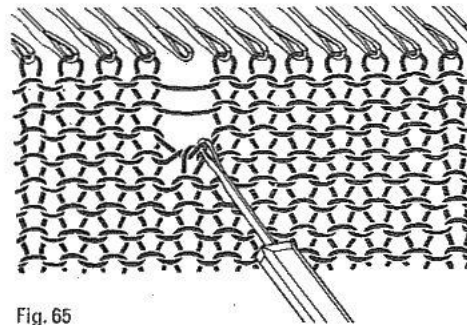


Fig. 65

Crocheting plain stitches on the knit side (right side) of the work

This is the method for picking up dropped stitches.

If a stitch drops without your noticing, and you continue knitting, a new stitch will form above the dropped stitch. To correct, remove this stitch from the needle and run back to where originally dropped. (You now have just the one original stitch.) Insert latch end of the green tool from behind the work with the latch facing away from you and crochet back up in the same way as you did in fig. 59 to 63. As you crochet upwards, the latch opens, fig. 66.

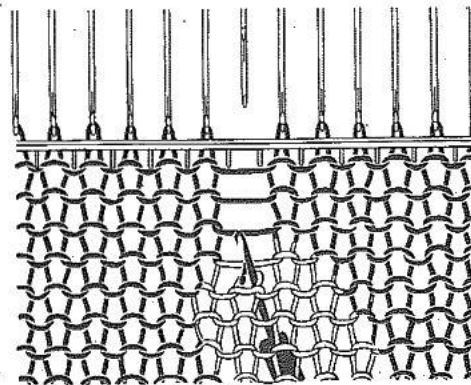
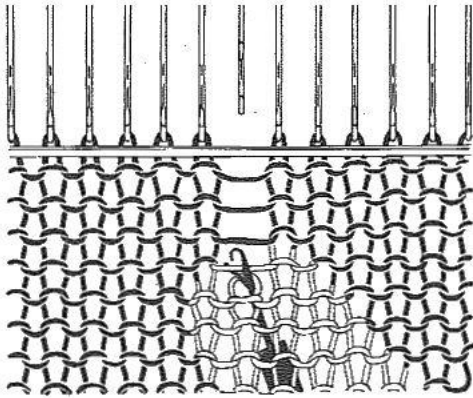
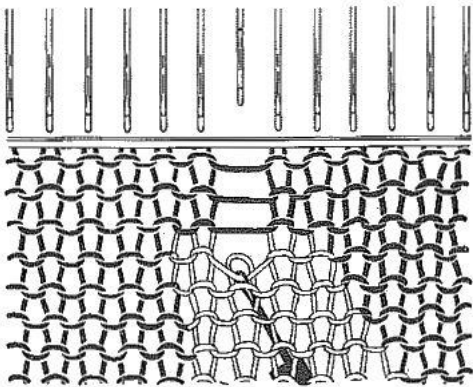


Fig. 66



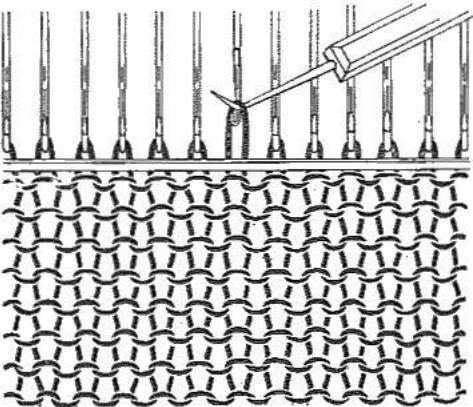
Catching the successive cross threads,
fig. 67

Fig. 67



the latch closes automatically, fig. 68.

Fig. 68



Now with the angled end of the red tool
remove the last crocheted stitch from the
latch of the green tool and place it into
the open latch of the needle from which
it was dropped. Fig. 69.

Fig. 69



How to knit Graduations (Short rows)

To shape a garment (for example, to shape the bust-line of a sweater etc.) it is necessary to omit knitting certain groups of stitches. The stitches remain on the needle shafts, the needles being brought forward into Rest-Position.

Graduated decreasing :

The example shows the knitting of 4 graduations of 6 stitches each on the left of the work so that more rows are knitted on the right-hand side than on the left-hand side of the work.

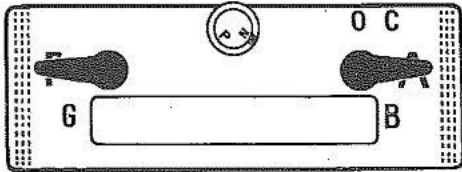


Fig. 70

Starting position lock on right (Levers at A, N, F) Fig. 70.

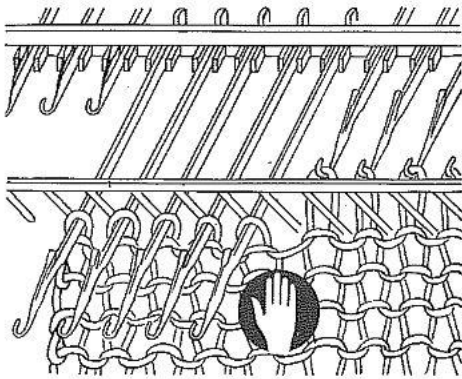


Fig. 71

On the left bring 5 needles (not 6 needles) into Rest-Position pressing the work against the striking comb by hand. Fig. 71. Knit 1 row.

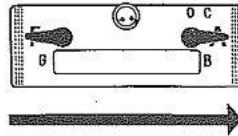
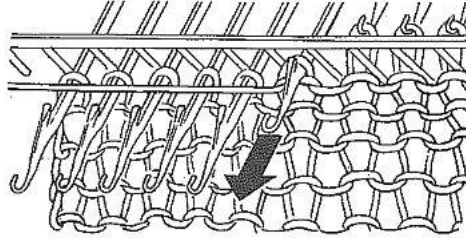


Fig. 72

In order that holes between the two graduations are avoided the 6th needle of the graduation is now brought forward into Rest-Position. Fig. 72. Knit 1 row. Repeat the procedure illustrated in Figs. 71 and 72 three times, so that 24 needles are in Rest-Position on the left side of the machine. (Lock is on the right).

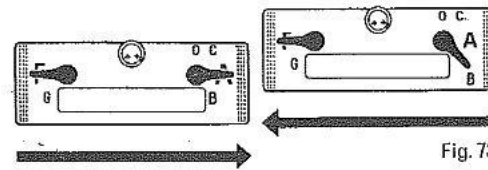
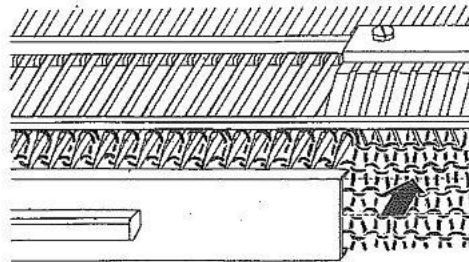


Fig. 73

Bring the 24 Rest-Position needles back into Yarn-Receiving Position, set A-B-C-lever (right-hand lever) to B and knit 1 row. Set lever to A and continue knitting. Fig. 73.



XI

How to knit a baby-sock, form a hem, and turn a toe and heel

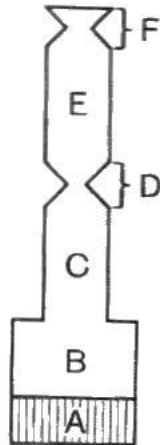


Fig. 74

This shows the drawing of a sock before it has been sewn together. This pattern can be used for making both children's and adult's socks by varying the number of stitches and rows.

Section A, Hem: lock with threaded yarn on the right of machine. Bring 32 needles forward into Rest Position and open the latches.

With pattern ruler in 1-1 division push every alternate needle back into Neutral Position. Fig. 75. Fix leathercombs.

Cast on to the remaining 16 needles and bring the needles into Yarn-Receiving Position. Set row counter at 000. Fig. 76.

Fig. 75

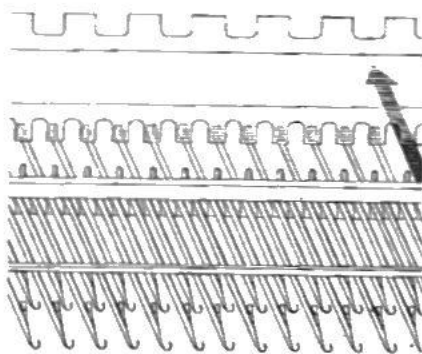
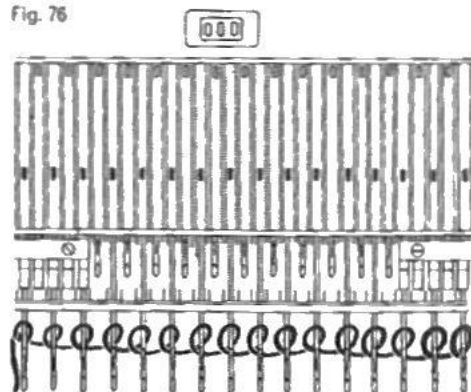


Fig. 76



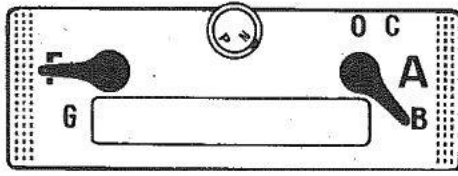


Fig. 77

1st row: set A-B-C-lever (right-hand lever) to B, move the lock to the left. Fig. 77.

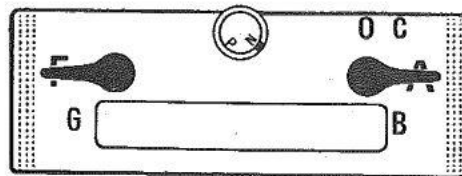


Fig. 78

2nd row: set A-B-C-lever (right-hand lever) to A, move the lock to the right. Fig. 78.

Knit until row counter indicates 24 rows. Reset row counter to 000.

Bring the 16 Neutral Position needles (see Fig. 75) forward into Working Position so that you have a complete row of 32 needles in Working Position. To turn up the hem pick up the loops of the cast on edge with the single decker tool and, preferably with a twist, place them into the open hooks of the empty needles, working from the right to the left of the work. Fig. 79.

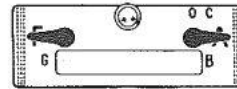
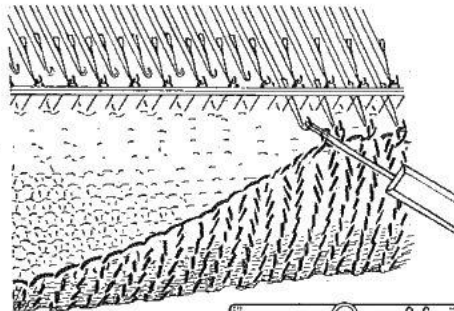


Fig. 79

Section B, Leg: Knit 20 rows, then reset row counter to 000. With an odd length of a contrasting colour yarn and at the left side of the machine knit 3 rows over 8 consecutive needles (one quarter width of sock) by the following method.

Bring the last 8 needles on the left into Yarn Receiving Position. *Place an oddment of yarn into the open hooks. Now with the cup end of the blue tool move every single needle first back into Working Position, then forward into the Yarn Receiving Position. Repeat from *twice, then push these needles back into Neutral Position, thus removing the 8 stitches from the needles. Fig. 80. Knit 1 row over the remaining 24 stitches.

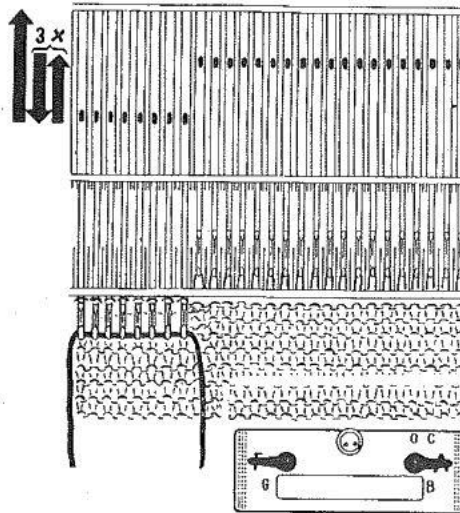


Fig. 80



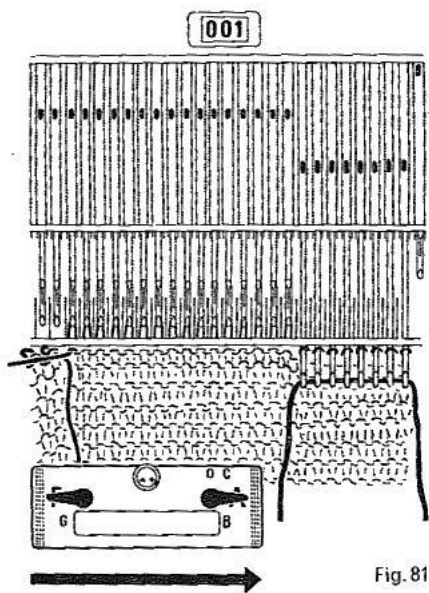


Fig. 81

Repeat the procedure with the last 8 stitches on the right hand side of the work. 16 needles now remain in Working Position. Fig. 81. (The two sets of stitches right and left will later on be grafted to the finished heel with a knit stitch.)

Section C, Instep: set feathercombs over the whole row of working needles. Knit until row counter indicates 30 rows.

Section D, Toe: At first you make Graduated Decreasing

Bring 1 needle on the same side as the lock into Rest Position, fig. 82. Knit the row.

Bring 1 needle on the same side as the lock into Rest Position. Fig. 83. Knit the row.

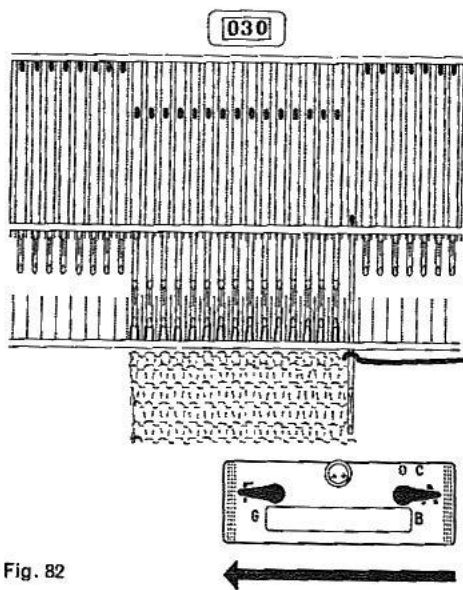


Fig. 82

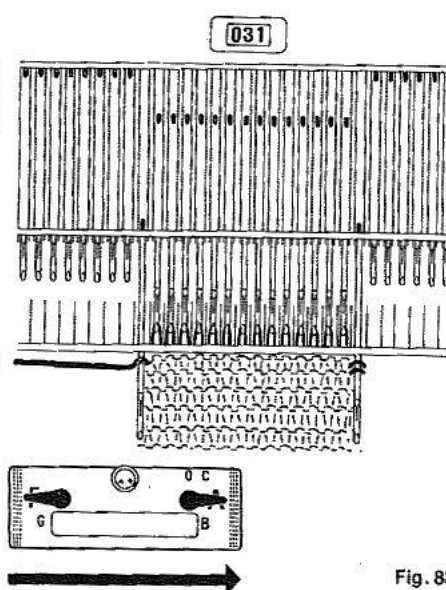


Fig. 83

Repeat this procedure until 4 needles only (one quarter of all needles) are still in Working Position at the exact centre. Fig. 84.

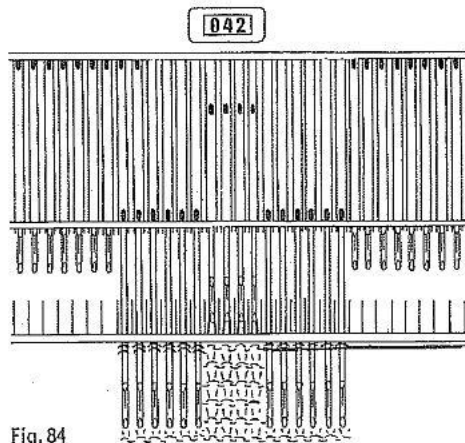


Fig. 84

Then you make Graduated Increasing

Bring the Rest Position needle nearest to the lock back into Yarn-Receiving Position. Set A-B-C-lever (right-hand lever) to B (if the lock is on the right), Fig. 85. Or to C (if the lock is on the left, Fig. 86) Knit the row. (The needle is now in Working Position again.)

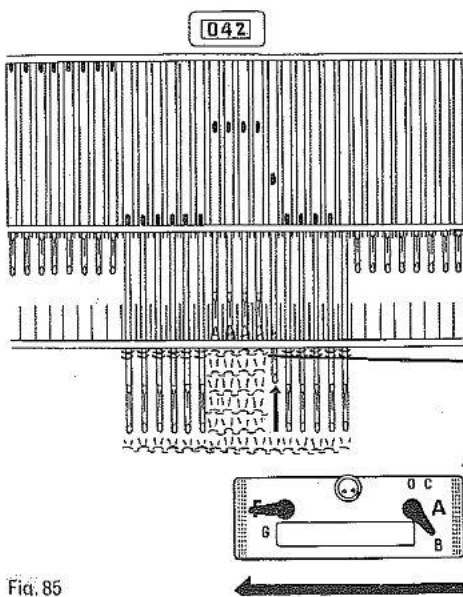


Fig. 85

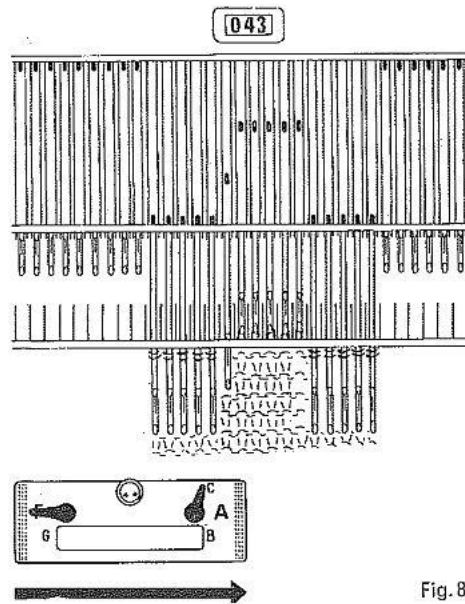


Fig. 86



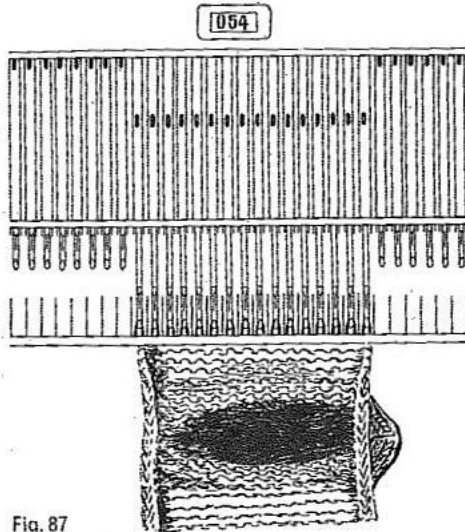


Fig. 87

Repeat this operation until all 16 needles are back in Working Position. Fig. 87. Row counter should indicate 54 rows. Reset to 000.

Section E. Sole: reset A-B-C-lever (right-hand lever) to A, Fig. 88, and knit 30 rows.

Section F. Heel: work exactly as for the toe (Section D) but decreasing until only 6 stitches in the centre remain in Working Position. Row counter indicates 50 rows.

When the heel is finished knit 1 row over all 16 needles then work 3 rows with an oddment of a contrasting colour yarn as described for Fig. 80, Section B, Leg. Alternatively, you may knit these stitches with the lock using a contrasting colour of wool as shown in "Patternings with Colour Change" on page 36, Fig. 105.

Now disconnect the wool from the feeding eyelet and move the lock across the machine thus removing your work from the machine.

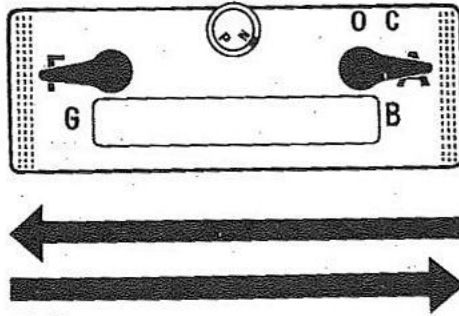


Fig. 88

To make up: stitch the seam at the back of the leg (leaving the hem open). Graft the two sets of 8 stitches each to the 16 heel stitches on the purl side (wrong side) of the work as shown in Figs. 89 and 90. To do this, place the knit side (right side) to the knit side and always pick up those cross threads visible between the rows knitted with the contrasting colour yarn. Fig. 90. When the grafting is completed simply withdraw the contrasting colour yarn. Join the sole to the instep. If required draw a length of elastic through the hem. If elastic is not required complete by slip-stitching hem.

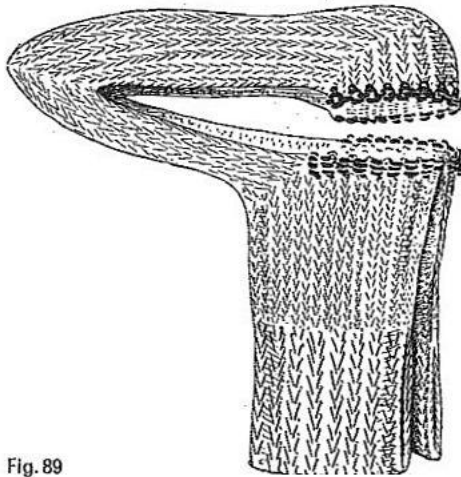


Fig. 89



Fig. 90

XII

Attractive Basic PATTERNS for the PASSAP-Automatic

In all the following pattern instructions the starting position of the lock is on the right. Fig. 91.

When the needles are brought forward into Rest Position the work must be pressed against the striking comb at the same time as the block ruler is used to push the needles forward. This is essential so that only the selected needles come forward into Rest Position.

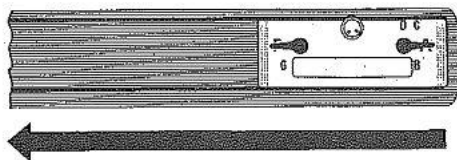
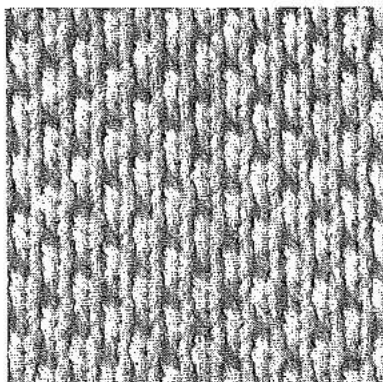


Fig. 91

Abbreviations: St., sts. = stitch, stitches; beg. = beginning; W.P. = Working Position; R.P. = Rest Position; alt. = alternate; N.P. = Neutral Position; Y.R.P. = Yarn-Receiving Position.

“Loop” Patterns

1. One colour «Rice Stitch» in 1-1 division



Pattern 1

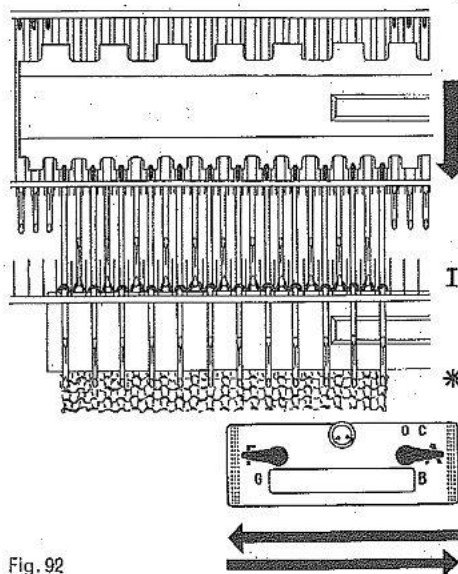


Fig. 92

1st and 2nd rows. Place pattern ruler in 1-1 division behind the 1st needle and bring every alt. needle into R.P. Fig. 92. Knit 2 rows. (Two unknitted threads are formed on the shafts of the R.P. needles. These unknitted threads are called “loops”).



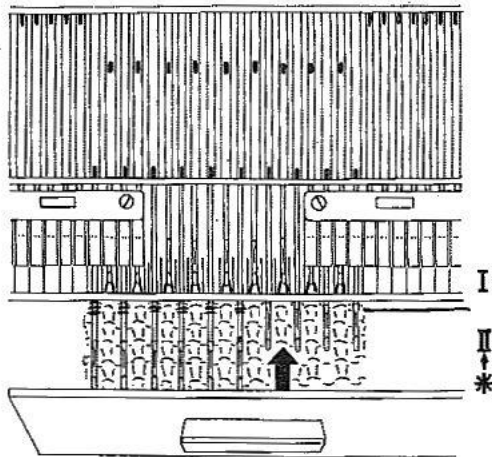
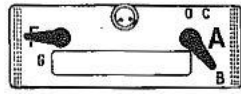


Fig. 93



3rd row. Push R. P. needles back into Y. R. P. set A-B-C-lever (right-hand lever) to B, fig. 93 and knit the row.

(All needles are back in W. P. and the loops have automatically been knitted up.)

4th row. Reset A-B-C-lever (right-hand lever) to A, Fig. 94 and knit the row.

5th-8th rows. As 1st-4th rows, but bring the 2nd and every alt. needle into R. P. Repeat throughout.

The "wrong" side of this pattern is also most attractive.

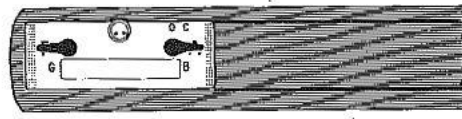
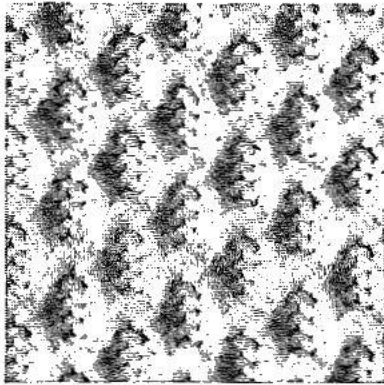


Fig. 94

2. One colour "Shell" Pattern in 3-1 division

This pattern is devised so that the purl side is the "right" side.

1st row. Place pattern ruler in 2-2 division behind the first pair of needles and bring the needles into R. P. in pairs. Fig. 95.



Pattern 2 — Wrong Side

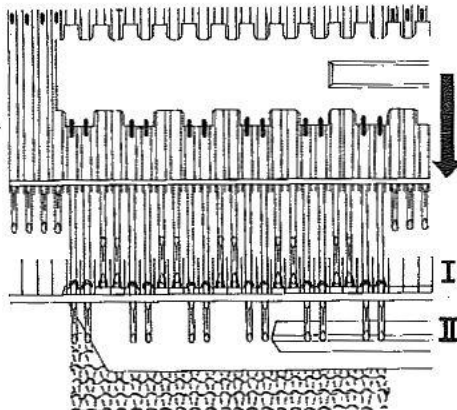
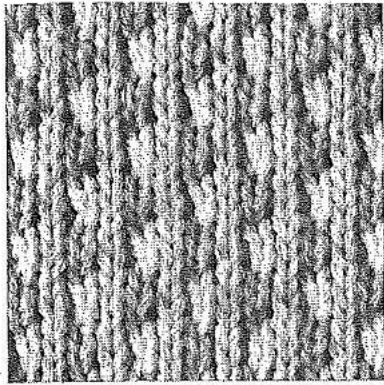


Fig. 95



Pattern 2, Right Side

Now, placing the 2-2 side of the pattern ruler in front of the needle feet return every right hand needle of the needle pairs into Y.R.P. Fig. 96.

Set A-B-C-lever (right-hand lever) to B and knit the row. Fig. 97. (1 loop is thus formed over every needle in R.P.)

2nd and 3rd rows: Reset A-B-C-lever (right hand lever) to A fig. 98 and knit 2 rows. (3 loops in 3-1 division in all)

4th row: Return R.P. needles into Y.R.P. Set A-B-C-lever (right hand lever) to C, Fig. 99 and knit the row. (All needles are in W.P.)

5th-8th rows: As 1st-4th rows, however reversed, i.e., place pattern ruler behind the 3rd and 4th needles. Repeat throughout.

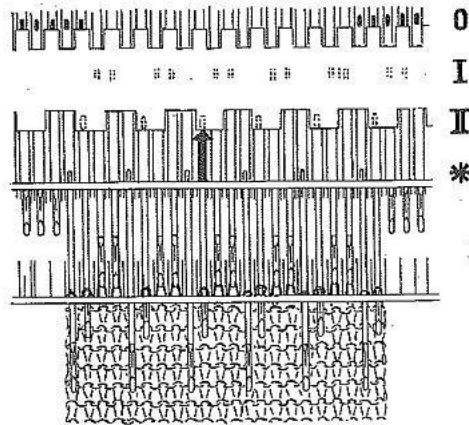


Fig. 96

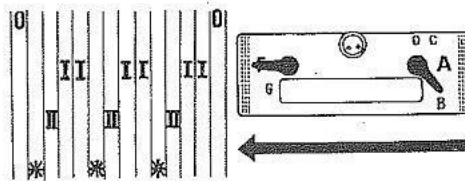


Fig. 97

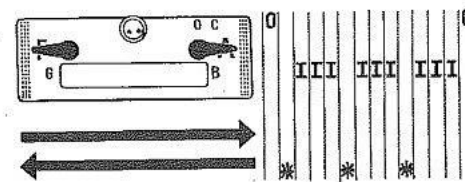


Fig. 98

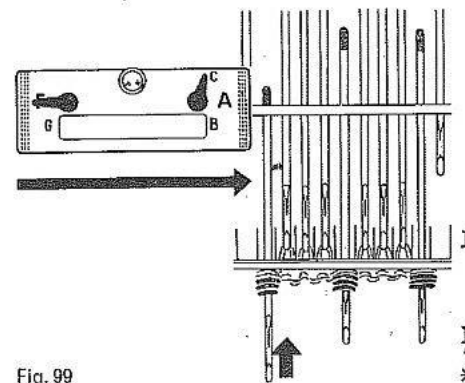


Fig. 99



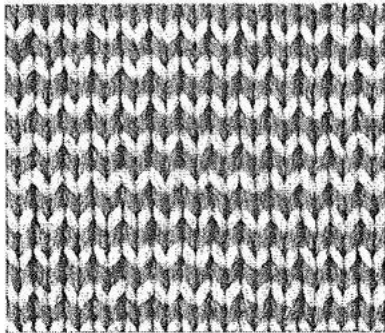
Two-colour patterns with trimming colour to be hand fed

(in Yarn-Receiving Position)

Before starting these patterns, set F-G-lever (left-hand lever) to G and leave there.

3. "Candy Stripes" — 1 row red, 1 row white

Automatic feeding of the red yarn. Bring all needles into Y.R.P. (make sure, that all the latches are open) place the white yarn into the open needle heads by hand, Fig. 100 and move lock across. You have now automatically knitted 2 actual rows, one white, one red. Fig. 100 shows working from right to left, Fig. 101 shows working from left to right. Repeat throughout.

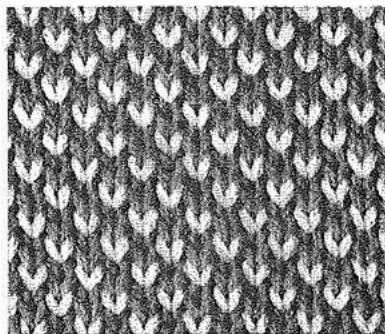


Pattern 3

4. Two colour "Tweed Stitch" in 1-1 division

1st row. Automatic feeding of the red yarn. Place pattern ruler in 1-1 division behind 1st needle and bring every alt. needle forward into Y.R.P. (Make sure that all latches are open.) Place the white yarn into the open needle heads and knit the row.

2nd row. As the 1st row, but place pattern ruler behind the 2nd needle. (Both colours will be knitted automatically in every row.) Repeat.



Pattern 4

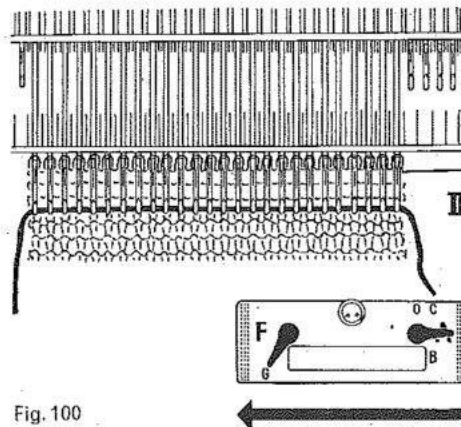


Fig. 100

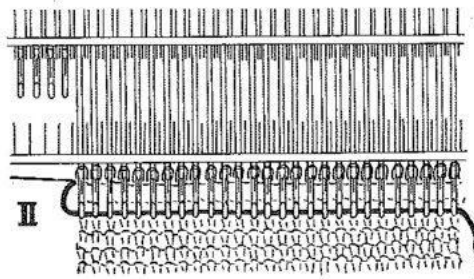


Fig. 101

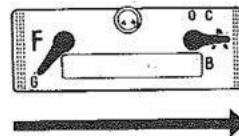


Fig 102

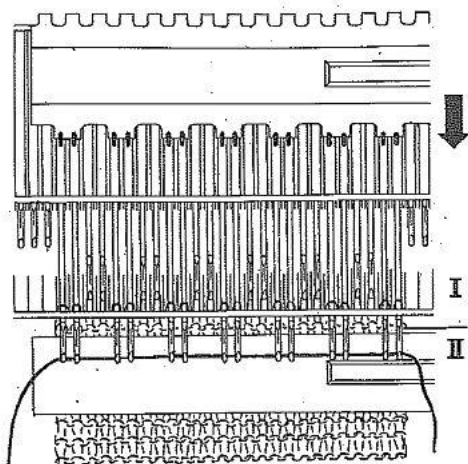
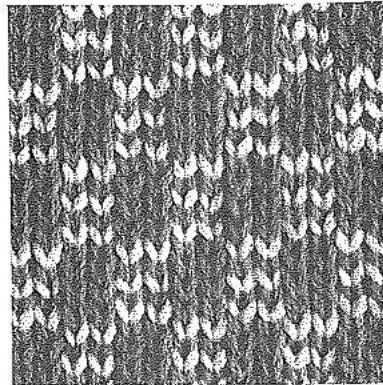


Fig. 103

5. Two colour "String-Pattern" in 2-2 division



Pattern 5

1st pattern Series. Red yarn threaded in Wool Feed. Place pattern ruler in 2-2 division behind the first pair of needles and bring every alt. needle pair into Y.R.P. (make sure that all latches are open). Place the white yarn by hand into the open needle heads and knit. Repeat this procedure twice.

2nd Pattern Series. This is as the 1st series but this time the 2-2 side of pattern ruler is placed behind the 2nd pair of needles (i.e., the third and fourth). This also is repeated twice making three times in all.

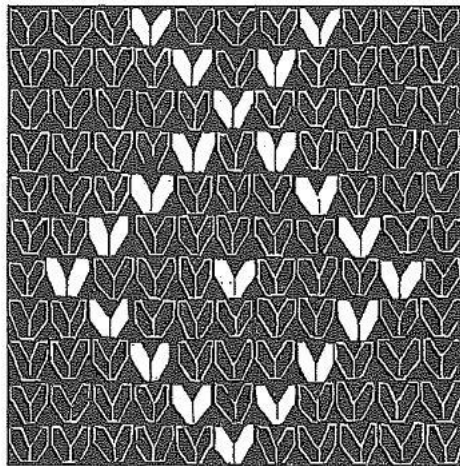
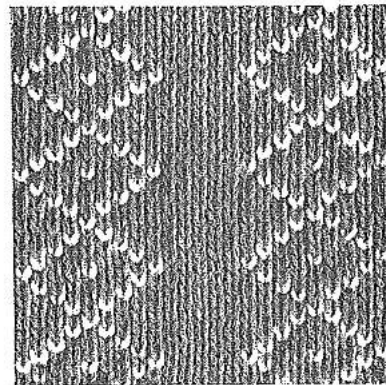


Fig. 104

6. Two colour "Outline Designs"



Pattern 6

The example shows how to knit a diamond outline.
Red yarn threaded in Wool Feed.

For example, bring every 14th needle (point of the diamond-centre needle) into Y.R.P. (open the latches) place the white yarn into the open needle heads by hand and knit the row.

Bring every 13th and 15th needle into Y.R.P. lay white yarn in by hand, knit the row.

Bring every 12th and 16th needle into Y.R.P. lay in white yarn by hand and knit the row.

Bring every 11th and 17th needle into Y.R.P. lay in white yarn by hand and knit the row.

Bring every 10th, 14th and 18th needle into Y.R.P. lay in white yarn by hand and knit the row.

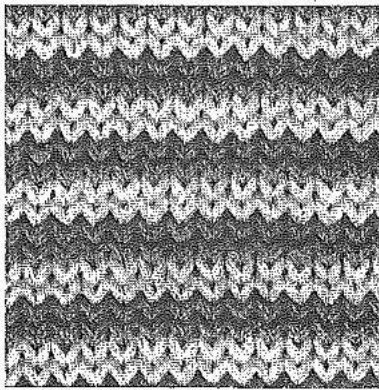
With the completion of this row the first half of the diamond is formed. Now reverse the procedure until pattern is completed (i.e. first knit on the 11th and 17th needles in Y.R.P. laying white yarn in by hand and so on).



Patterning with Colour Change

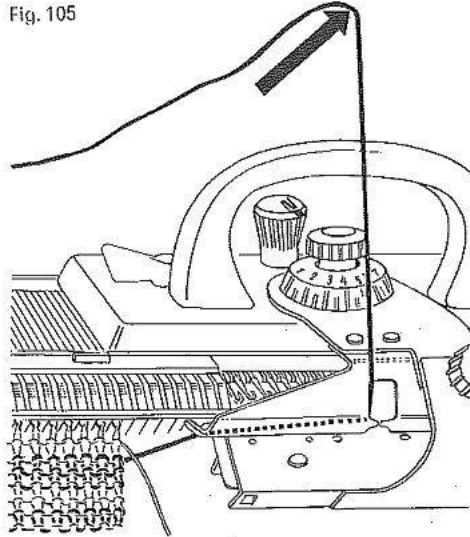
You must first remove the yarn completely from the wool feed. To do this use the reverse procedure from that which you followed in threading in. First take the yarn out of the feeding eyelet, then from the front eyelet on the tension arm, then from the centre eyelet, from between the tension discs, from the rear eyelet and remove the ball of wool from the yarn holder. Now place the yarn in a convenient receptacle on the floor. Set the levers to A, F and N (lock is on the right). Re-thread the wool into the feeding eyelet and holding it about 6 inches above the lock proceed as shown in the following instructions.

7. "Horizontal Stripes" - 2 rows red, 2 rows white



Pattern 7

Fig. 105



Using red yarn and moving the lock gently knit two rows in red. Now remove the red yarn from the feeding eyelet and replace it by the white yarn. Knit two rows in white yarn. And so on. You will find with practice that if you hold the yarn horizontally towards you and move the lock gently to the left until the first needle heads slightly protrude above the stripper, that by a slight upward movement of the yarn you will cause it to slip automatically into the feeding eyelet. Fig. 105.

8. Three colour "Loop Pattern" in 3-1 division

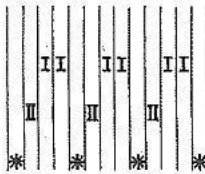


Fig. 106

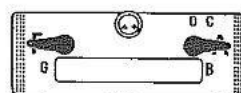
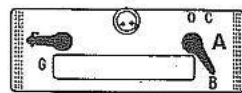
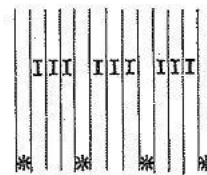


Fig. 107



1st Pattern Series. With the pattern ruler arrange needles in 3-1 division. 1 needle R.P. 1 needle Y.R.P. 2 needles working position etc. Insert blue yarn into feeding eyelet, set A-B-C-lever (right-hand lever) to B, Fig. 106, knit 1 row. Reset lever to A and knit 2 rows. Fig. 107.

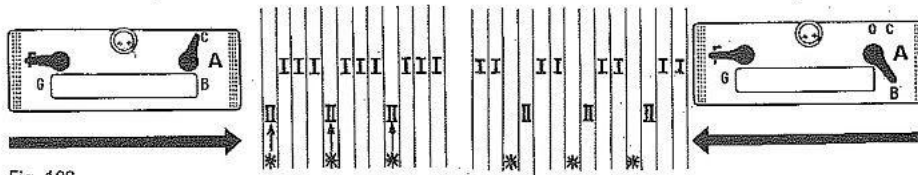


Fig. 108

Fig. 109

Return R.P. needles into Y.R.P. set A-B-C-lever (right-hand lever) to C, Fig. 108, and knit 1 row with all needles.

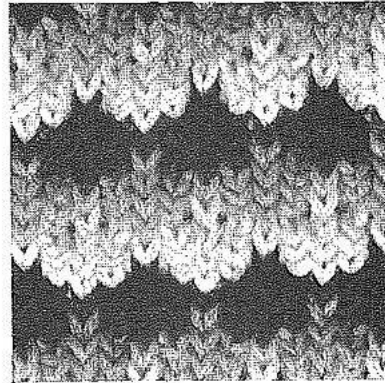
2nd Pattern Series. This is the same as the first series but the 3-1 division is reversed, the arrangement of needles being as in Fig. 109 and the white yarn being used.

3rd Pattern Series. As 1st series but using red yarn.

4th Pattern Series. As 2nd series but using blue yarn.

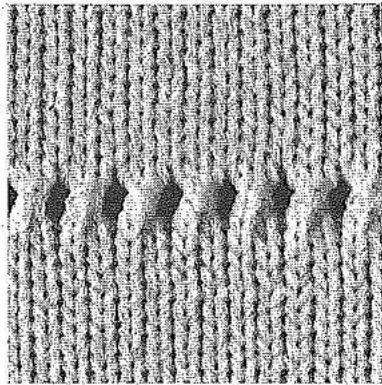
5th Pattern Series. As 1st series but using white yarn.

6th Pattern Series. As 2nd series but using red yarn. Repeat.



Pattern 8

Open Work Designs



Pattern 9

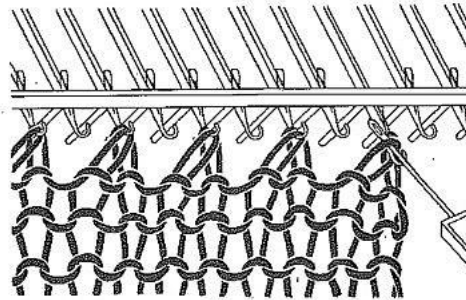


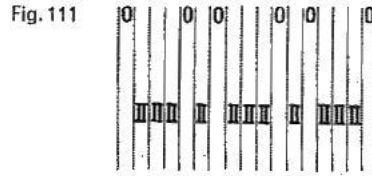
Fig. 110

9. Open work row for insertion or for making a picot edge to a hem

Remove feathercombs. With the decker-needle of the blue tool place every 2nd stitch on to the next needle (the empty needles with open latches to be left in W.P.) Replace feathercombs and knit the row taking care to move the lock slowly and holding the work down slightly by hand in order to ensure that all stitches are correctly knitted.



10. Open work pattern quickly and easily made



0 = needle in N.P.
 II = needle in Y.R.P.

Needle division as for Fig. 111.

Cast on in this division, set A-B-C-lever (right hand lever) to B, knit 1 row, reset lever to A, knit one row, Fig. 111.

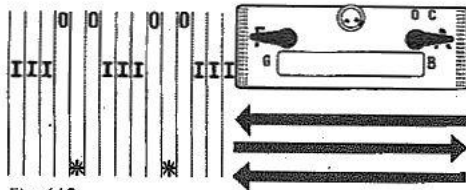
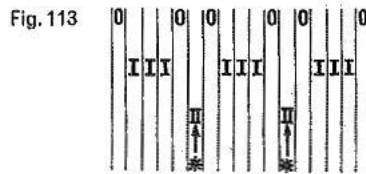
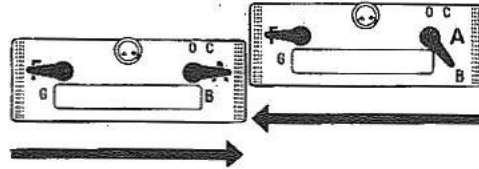
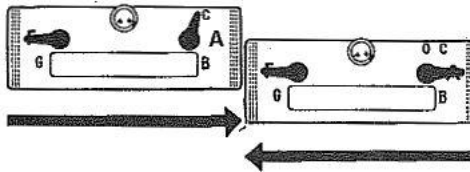
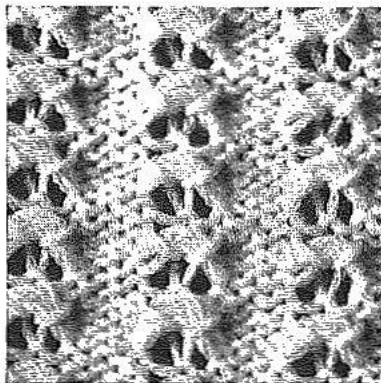


Fig. 112.

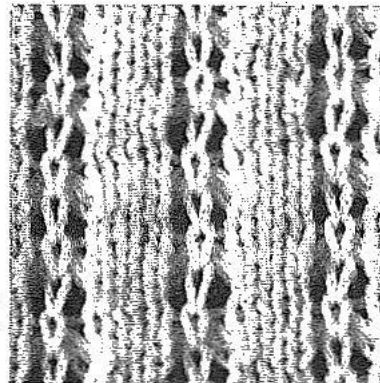


1st Pattern Series. Bring the single needles into R.P. Fig. 112 and knit 3 rows (3 loops are formed) Return R.P. needles into Y.R.P. set A-B-C-lever (right hand lever) to C and knit 1 row. Reset lever to A and knit the row. Fig. 113. (The lock is now on the left.)

2nd Pattern Series. As the 1st series, however, A-B-C-lever (right hand lever) is first to be set to B, the lock being on the right. — Repeat both pattern series alternately.



Pattern 10
 Wrong Side
 ◀



Pattern 10
 Right Side
 ▶

Special Guidance

for the Advanced PASSAP Knitter

You should **NOT** consult these pages until you have completely absorbed the A-B-C of PASSAP Knitting.

With a darning needle ...

The Flat Seam

This is done on the purl (wrong)-side of the knitting using a special stitch, as shown in fig. 114. Always work in the direction towards the cast-on edge.

Fig. 114

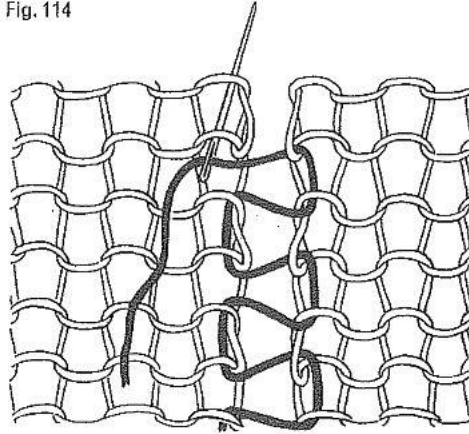
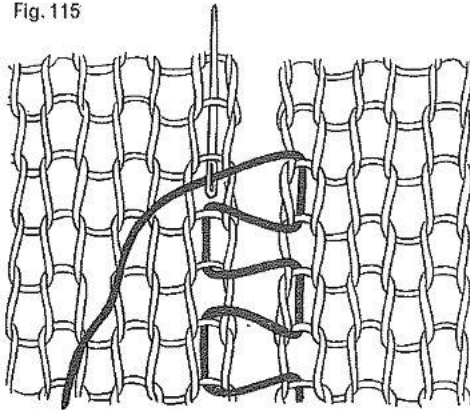


Fig. 115



The Mattress Stitch

This is done on the plain side of the knitting to form inconspicuous seams, fig. 115.

Grafting on the plain (right) side of the work, fig. 116.

(The knit stitch on the purl-side of work is described in making up the baby-sock — see page 30, fig. 90.)

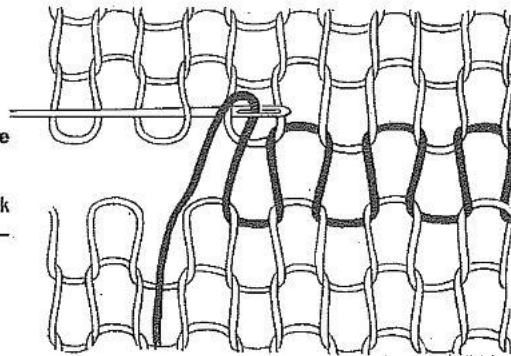
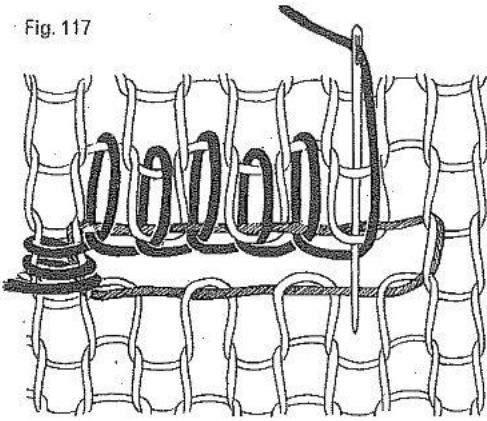


Fig. 116



Fig. 117



Finishing the buttonhole

Remove the oddment of contrasting colour yarn and pick up the open stitches with a length of the working colour (if necessary use a double thread) as described Fig. 57. Use ordinary buttonhole stitch as shown in Fig. 117.

Knitting in Yarn-Receiving Position - i. e., without the Wool Feed

With the PASSAP-Automatic you may feed the yarn by hand as easily as when using the automatic wool feed. Use this method for fairisle patterning with knitted-in threads on the purl (wrong)-side of the knitting; for working two parts at the same time or to shape a neckline, etc.

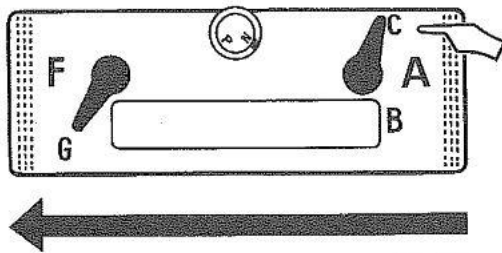


Fig. 118

Important! Set F-G-lever (left hand lever) to G and A-B-C-lever (right hand lever) always in the direction indicated by the hands. Ignore the arrow indications.

Preparations: Remove the yarn from the wool feed. Set A-B-C-lever (right hand lever) to C (if the lock is on the right) Fig. 118...

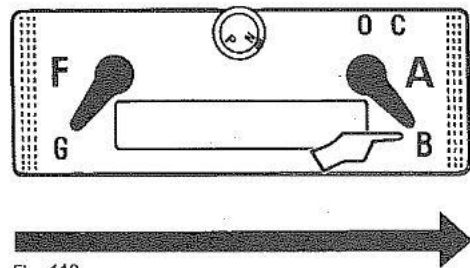
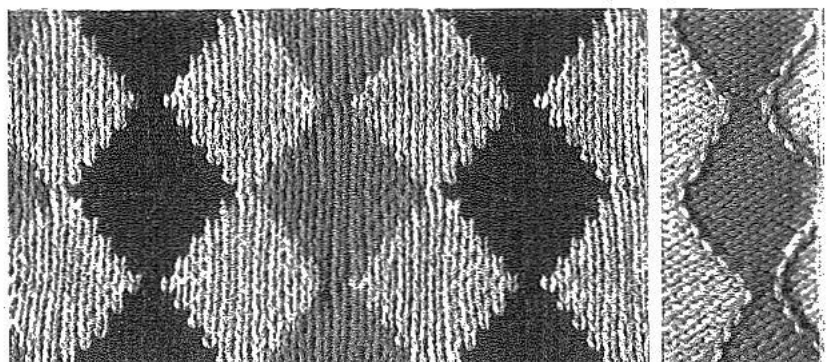


Fig. 119

...or to B (if the lock is on the left) Fig. 119, i. e., hand indications apply. Move the lock across the needlebed thus bringing the needles automatically into Yarn-Receiving Position.

Example. Diamond check



Right Side

Wrong Side

How to knit: Place the different colours required to form the pattern, into the open needle heads of the selected needles in such a way that the next colour to be used is pulled up from below the preceding colour and crosses it between two needles. (In this way you may use as many different colours as you wish) Set right hand lever in the direction indicated by the hands and move the lock across the needlebed thus causing the needles to knit. As each row is knitted the needles return in Yarn-Receiving Position. Repeat the directions given between two * below.

1st pattern series. Place in the various colours as follows: * 1 needle grey, 11 needles red, 1 needle grey, 11 needles blue *. Knit the row. Now, working from the other side of the needlebed, place the same colours over the same needles, not forgetting to cross the threads between two needles. Knit the row.

2nd pattern series. 2 needles grey, * 9 needles red, 3 needles grey, 9 needles blue, 3 needles grey *. Knit 2 rows.

3rd pattern series. 3 needles grey, * 7 needles red, 5 needles grey, 7 needles blue, 5 needles grey *. Knit 2 rows.

4th pattern series. 4 needles grey, * 5 needles red, 7 needles grey, 5 needles blue, 7 needles grey *. Knit 2 rows.

5th pattern series. 5 needles grey, * 3 needles red, 9 needles grey, 3 needles blue, 9 needles grey *. Knit 2 rows.

6th pattern series. 6 needles grey, * 1 needle red, 11 needles grey, 1 needle blue, 11 needles grey, *. Knit 2 rows.

Continue the pattern by knitting the series in reversed order starting with 5th pattern series, down to the first and then recommencing from the second.

How to return from Yarn-Receiving Position to Working Position to recommence knitting with the automatic wool feed

Thread the required colour into the wool feed, set A-B-C-lever (right hand lever) to B (if the lock is on the right) or to C (if the lock is on the left) and knit the row. Reset A-B-C-lever (right hand lever) to A and F-G-lever (left hand lever) to F. Now the arrow indications apply to the right hand lever.

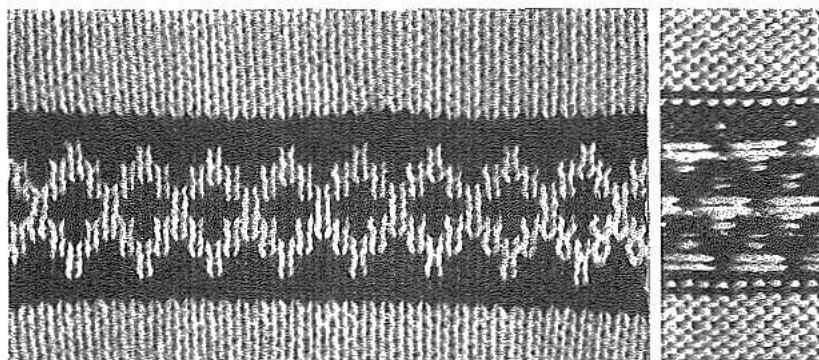
Genuine Fairisle Patterns

In these patterns the wrong side of knitting shows loose threads

Pull up N-P-knob and set left-hand lever to G. Take main colour out of the feeding eyelet above the stripper and place it behind the nearest end plate of the machine.

Bring the required number of needles into the Yarn-Receiving Position, place the contrasting colour into the open needle heads by hand and move the lock to the other side. Repeat. Before knitting each row, the required needles must be put into the Yarn-Receiving Position so that the contrasting colour may be placed into the open needle heads by hand. Take care to ensure that all latches are open before the wool is laid across the needle hooks. Before continuing with the main colour wool, re-thread it through the feeding eyelet, pull down the wool behind the mast and press down the N-P-knob.

Example: Two coloured Fairisle Trimming



Right Side

Wrong Side

Example: Remove main colour from wool feed. Insert yellow yarn into feeding eyelet (as for Fig. 105) and knit 14 rows. Change to brown yarn and knit 2 rows. Pull up N-P-knob and from now on work according to the graph. Fig. 120.

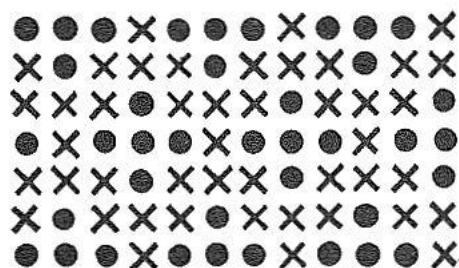


Fig. 120

For each pattern row, at first bring into Yarn-Receiving Position the needles marked with ●, place the brown wool into the open needle heads by hand and move the lock to the other side. Repeat. Now bring into Yarn-Receiving Position the needles marked with X, place yellow wool into the open needle heads by hand and knit the row. Repeat. For each pattern row of the graph 2 rows brown and 2 rows yellow are to be knitted. Complete with 2 rows brown and 14 rows yellow.

How to cut your own paper pattern!

Take a large sheet of paper (a plain wrapping paper will do). First you need the following two measurements: Your bust and length from shoulder to waist. Now cut the width of the paper down so that it measures half the bust circumference. (For example if the bust measurement is 36 inches [total width] you reduce it to 18 inches). In respect of the length the paper is of the exact measurement from shoulder to waist. See Fig. 121. Fold this paper in half, lengthwise, and fill in the points from A to G as illustrated in Fig. 121, by taking the additional measurements specified below.

Ordinary basic pattern with set-in sleeves, back and front part

- A—A = $\frac{1}{4}$ circumference of waist
- A—B = depth of waistwelt
- C—C = $\frac{1}{4}$ bust circumference
- G—G = $\frac{1}{2}$ width across back
- D—D = $\frac{1}{6}$ width of back
- D—E = width of shoulder
- B—D = length of back
- D—F = depth of front neckline $2\frac{1}{2}'' - 3''$
- C—E = depth of armhole $7'' - 7\frac{1}{2}''$
- XXX = paper-fold

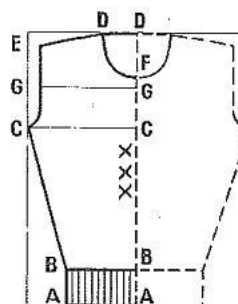


Fig. 121

Now draw checklines from all points A to G on the diagram and you will get half the outline of your sweater. Keeping the paper folded in half cut along the outlines of your diagram. Unfold the paper and you have the complete outline of your sweater for both front and back.

Proceed in the same manner for the sleeve (the diagram shows a long sleeve). Cut out a paper to the size of your upper arm width and inner sleeve length plus $6'' - 6\frac{1}{2}''$ for the top (the height of the top should be $1''$ less than the depth of the armhole). Fold the paper in half lengthwise, and fill in the points from H to M as shown in the diagram, Fig. 122.

Now draw checklines from all points H to M on the diagram and you will get half the outline of your sleeve. Keeping the paper folded in half, cut along the outlines of your diagram. Unfold the paper and you have the complete outline of your sleeve.

- H—H = $\frac{1}{2}$ circumference of wrist
- H—J = height of cuff
- K—K = $\frac{1}{2}$ upper arm circumference
- J—K = sleeve seam
- L—M = $1''$
- K—L = height of top portion
- J—L = length of sleeve
- XXX = paper-fold

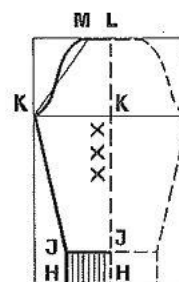


Fig. 122

Deviations from the basic pattern

Raglan pattern with short sleeves, front and back parts

First copy the basic pattern, then fill in the additional checklines as per Figs. 123, 124.

- C — C1 = 1" — 1½" deeper
- D — D1 = ½" removed from depth of front neck edge
- D — D2 = ½" removed from back neck edge
- XXX = paper-fold

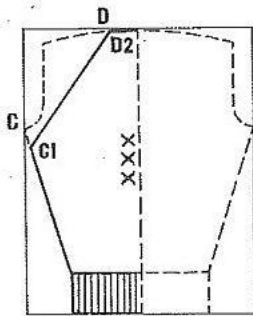


Fig. 123

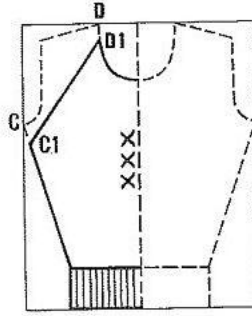


Fig. 124

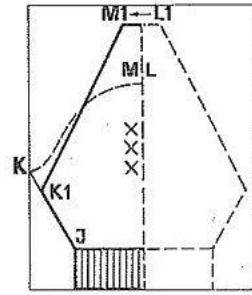


Fig. 125

Raglan sleeve

First copy the basic pattern, then fill in the additional checklines as per Fig. 125.

Shorten sleeve seam as required and draw in cuff to fit width of arm.

- K — J = sleeve seam (as required)
- L — L1 = to be lengthened to the length of armhole
- L1 — M1 = ½" from the centre
- XXX = paper-fold

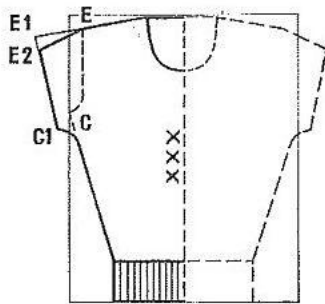


Fig. 126

Dolman pattern with short sleeve, front and back parts

First copy the basic pattern, then fill in the additional checklines as per Fig. 126.

- C — C1 = 1" — 1½" deeper and about 1" sloping outwards
- E — E1 = lengthen shoulder line
- C1 — E2 = ½ circumference of upper arm

Dolman pattern with ¾ sleeves, front and back parts

First copy the basic pattern, then fill in the additional checklines as per Fig. 127.

- A — A = ½ lower sleeve circumference
- B — B = ½ upper sleeve circumference
- A — B = inner-sleeve length without cuff
- B — D = underarm shaping
- D — C = length of sideseam excluding waistwelt
- C — C = ¼ waist circumference
- D — D = ¼ bust circumference
- E — F = ⅙ width across back
- E — G = 2½" — 3" depth of front neckline
- E — C = length of back excluding waistwelt
- XXX = paper-fold

This type dolman is knitted crossways, starting at A-A.

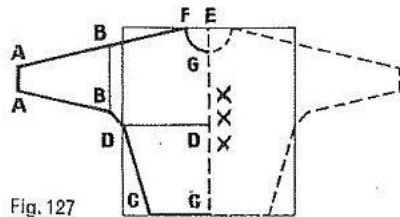


Fig. 127

A Tip for Increasing

Here we are telling you of another method for increasing on the side of the work. This method enables you to increase on either side of the work independently of the position of the lock (and yarn). For example, if you have in use 20 needles you bring into use an additional needle (21st needle). Using the decker needle you transfer the stitch from the 20th needle on to the 21st needle. You then pick up the loop below the 19th needle and transfer this to the 20th needle and knit the row. For the method by which a stitch is transferred from one needle to another by using a decker needle see Figs. 46 to 48.

A Tip for Decreasing

You will get a better shaping in decreasing in respect of armholes if you avoid decreasing at both ends of every alternate row. The best method is to decrease one stitch only at the beginning of every row. You must remember, however, that you can only decrease on the side where the lock (and yarn) is. Use the method already described (Figs. 49-52) but bring the next needle in use forward so that the two stitches are lying behind the open latch: place the yarn in the open hook and draw through thus knitting the two stitches together on the one needle.

**PASSAP-EXPORT, Zurich 27, Bederstrasse 1, P. B. 350
(Switzerland)**

Telephone (051) 23 69 90 and 23 95 77

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A Tip for Decreasing

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Deviations from the basic pattern

Raglan pattern with short sleeves, front and back parts

First copy the basic pattern, then fill in the additional checklines as per Figs. 123, 124.

- C — C1 = 1" — 1½" deeper
- D — D1 = ½" removed from depth of front neck edge
- D — D2 = ½" removed from back neck edge
- XXX = paper-fold

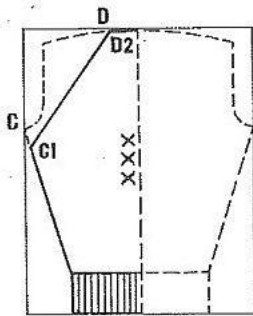


Fig. 123

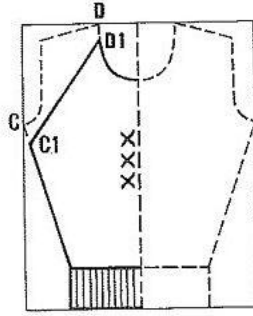


Fig. 124

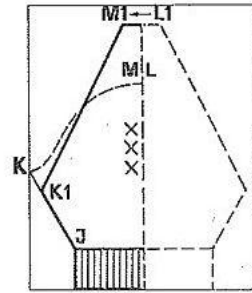


Fig. 125

Raglan sleeve

First copy the basic pattern, then fill in the additional checklines as per Fig. 125.

Shorten sleeve seam as required and draw in cuff to fit width of arm.

- K — J = sleeve seam (as required)
- L — L1 = to be lengthened to the length of armhole
- L1 — M1 = ½" from the centre
- XXX = paper-fold

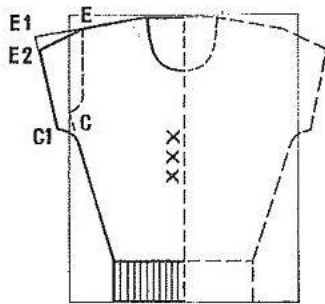


Fig. 126

Dolman pattern with short sleeve, front and back parts

First copy the basic pattern, then fill in the additional checklines as per Fig. 126.

- C — C1 = 1" — 1½" deeper and about 1" sloping outwards
- E — E1 = lengthen shoulder line
- C1 — E2 = ½ circumference of upper arm

Dolman pattern with ¾ sleeves, front and back parts

First copy the basic pattern, then fill in the additional checklines as per Fig. 127.

- A — A = ½ lower sleeve circumference
- B — B = ½ upper sleeve circumference
- A — B = inner-sleeve length without cuff
- B — D = underarm shaping
- D — C = length of sideseam excluding waistwelt
- C — C = ¼ waist circumference
- D — D = ¼ bust circumference
- E — F = ⅙ width across back
- E — G = 2½" — 3" depth of front neckline
- E — C = length of back excluding waistwelt
- XXX = paper-fold

This type dolman is knitted crossways, starting at A-A.

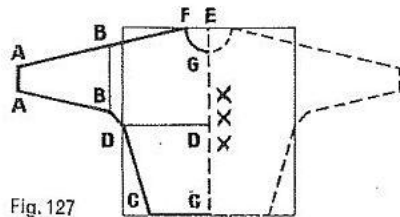


Fig. 127

How to cut your own paper pattern!

Take a large sheet of paper (a plain wrapping paper will do). First you need the following two measurements: Your bust and length from shoulder to waist. Now cut the width of the paper down so that it measures half the bust circumference. (For example if the bust measurement is 36 inches [total width] you reduce it to 18 inches). In respect of the length the paper is of the exact measurement from shoulder to waist. See Fig. 121. Fold this paper in half, lengthwise, and fill in the points from A to G as illustrated in Fig. 121, by taking the additional measurements specified below.

Ordinary basic pattern with set-in sleeves, back and front part

- A—A = $\frac{1}{4}$ circumference of waist
- A—B = depth of waistwelt
- C—C = $\frac{1}{4}$ bust circumference
- G—G = $\frac{1}{2}$ width across back
- D—D = $\frac{1}{6}$ width of back
- D—E = width of shoulder
- B—D = length of back
- D—F = depth of front neckline $2\frac{1}{2}'' - 3''$
- C—E = depth of armhole $7'' - 7\frac{1}{2}''$
- XXX = paper-fold

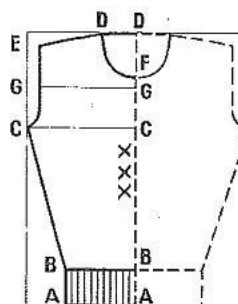


Fig. 121

Now draw checklines from all points A to G on the diagram and you will get half the outline of your sweater. Keeping the paper folded in half cut along the outlines of your diagram. Unfold the paper and you have the complete outline of your sweater for both front and back.

Proceed in the same manner for the sleeve (the diagram shows a long sleeve). Cut out a paper to the size of your upper arm width and inner sleeve length plus $6'' - 6\frac{1}{2}''$ for the top (the height of the top should be $1''$ less than the depth of the armhole). Fold the paper in half lengthwise, and fill in the points from H to M as shown in the diagram. Fig. 122.

Now draw checklines from all points H to M on the diagram and you will get half the outline of your sleeve. Keeping the paper folded in half, cut along the outlines of your diagram. Unfold the paper and you have the complete outline of your sleeve.

- H—H = $\frac{1}{2}$ circumference of wrist
- H—J = height of cuff
- K—K = $\frac{1}{2}$ upper arm circumference
- J—K = sleeve seam
- L—M = $1''$
- K—L = height of top portion
- J—L = length of sleeve
- XXX = paper-fold

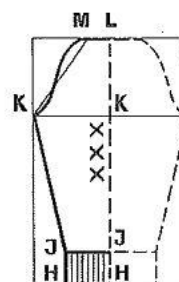


Fig. 122

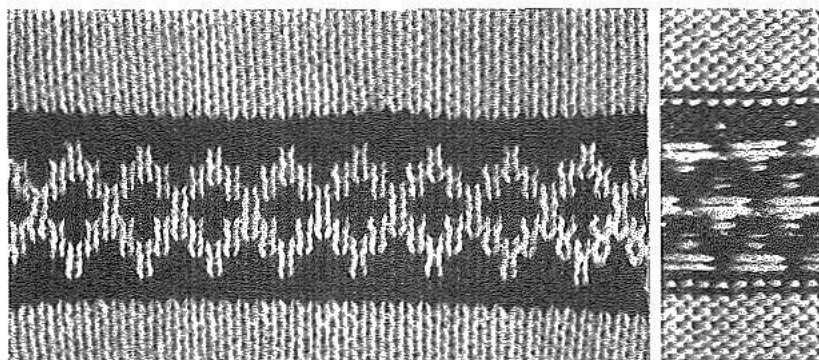
Genuine Fairisle Patterns

In these patterns the wrong side of knitting shows loose threads

Pull up N-P-knob and set left-hand lever to G. Take main colour out of the feeding eyelet above the stripper and place it behind the nearest end plate of the machine.

Bring the required number of needles into the Yarn-Receiving Position, place the contrasting colour into the open needle heads by hand and move the lock to the other side. Repeat. Before knitting each row, the required needles must be put into the Yarn-Receiving Position so that the contrasting colour may be placed into the open needle heads by hand. Take care to ensure that all latches are open before the wool is laid across the needle hooks. Before continuing with the main colour wool, re-thread it through the feeding eyelet, pull down the wool behind the mast and press down the N-P-knob.

Example: Two coloured Fairisle Trimming



Right Side

Wrong Side

Example: Remove main colour from wool feed. Insert yellow yarn into feeding eyelet (as for Fig. 105) and knit 14 rows. Change to brown yarn and knit 2 rows. Pull up N-P-knob and from now on work according to the graph. Fig. 120.

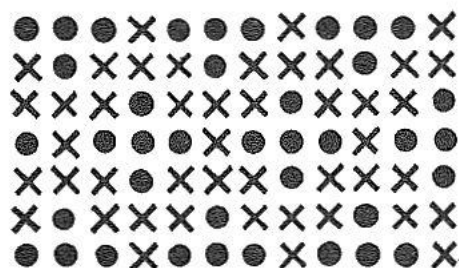
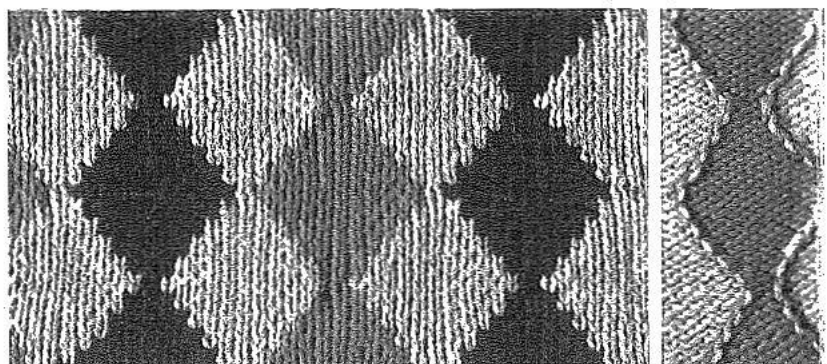


Fig. 120

For each pattern row, at first bring into Yarn-Receiving Position the needles marked with ●, place the brown wool into the open needle heads by hand and move the lock to the other side. Repeat. Now bring into Yarn-Receiving Position the needles marked with X, place yellow wool into the open needle heads by hand and knit the row. Repeat. For each pattern row of the graph 2 rows brown and 2 rows yellow are to be knitted. Complete with 2 rows brown and 14 rows yellow.

Example. Diamond check



Right Side

Wrong Side

How to knit: Place the different colours required to form the pattern, into the open needle heads of the selected needles in such a way that the next colour to be used is pulled up from below the preceding colour and crosses it between two needles. (In this way you may use as many different colours as you wish) Set right hand lever in the direction indicated by the hands and move the lock across the needlebed thus causing the needles to knit. As each row is knitted the needles return in Yarn-Receiving Position. Repeat the directions given between two * below.

1st pattern series. Place in the various colours as follows: * 1 needle grey, 11 needles red, 1 needle grey, 11 needles blue *. Knit the row. Now, working from the other side of the needlebed, place the same colours over the same needles, not forgetting to cross the threads between two needles. Knit the row.

2nd pattern series. 2 needles grey, * 9 needles red, 3 needles grey, 9 needles blue, 3 needles grey *. Knit 2 rows.

3rd pattern series. 3 needles grey, * 7 needles red, 5 needles grey, 7 needles blue, 5 needles grey *. Knit 2 rows.

4th pattern series. 4 needles grey, * 5 needles red, 7 needles grey, 5 needles blue, 7 needles grey *. Knit 2 rows.

5th pattern series. 5 needles grey, * 3 needles red, 9 needles grey, 3 needles blue, 9 needles grey *. Knit 2 rows.

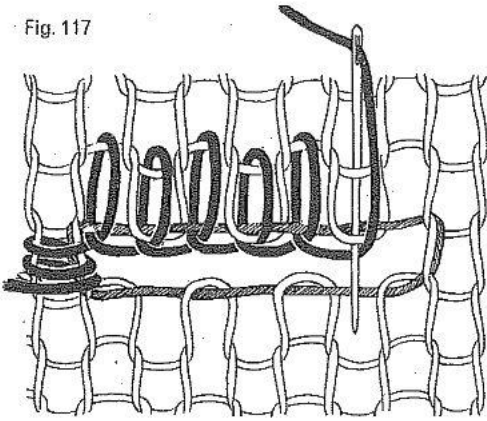
6th pattern series. 6 needles grey, * 1 needle red, 11 needles grey, 1 needle blue, 11 needles grey, *. Knit 2 rows.

Continue the pattern by knitting the series in reversed order starting with 5th pattern series, down to the first and then recommencing from the second.

How to return from Yarn-Receiving Position to Working Position to recommence knitting with the automatic wool feed

Thread the required colour into the wool feed, set A-B-C-lever (right hand lever) to B (if the lock is on the right) or to C (if the lock is on the left) and knit the row. Reset A-B-C-lever (right hand lever) to A and F-G-lever (left hand lever) to F. Now the arrow indications apply to the right hand lever.

Fig. 117



Finishing the buttonhole

Remove the oddment of contrasting colour yarn and pick up the open stitches with a length of the working colour (if necessary use a double thread) as described Fig. 57. Use ordinary buttonhole stitch as shown in Fig. 117.

Knitting in Yarn-Receiving Position - i. e., without the Wool Feed

With the PASSAP-Automatic you may feed the yarn by hand as easily as when using the automatic wool feed. Use this method for fairisle patterning with knitted-in threads on the purl (wrong)-side of the knitting; for working two parts at the same time or to shape a neckline, etc.

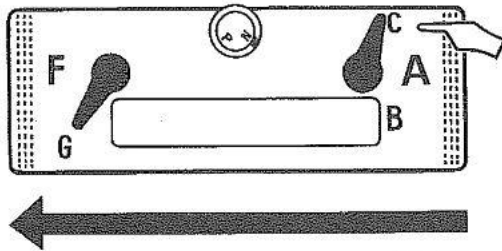


Fig. 118

Important! Set F-G-lever (left hand lever) to G and A-B-C-lever (right hand lever) always in the direction indicated by the hands. Ignore the arrow indications.

Preparations: Remove the yarn from the wool feed. Set A-B-C-lever (right hand lever) to C (if the lock is on the right) Fig. 118...

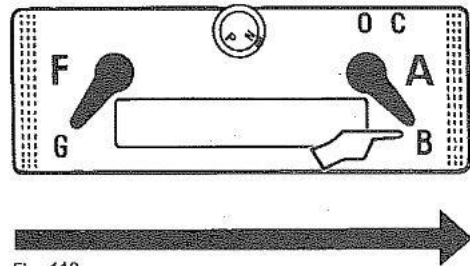


Fig. 119

... or to B (if the lock is on the left) Fig. 119, i. e., hand indications apply. Move the lock across the needlebed thus bringing the needles automatically into Yarn-Receiving Position.

Special Guidance

for the Advanced PASSAP Knitter

You should **NOT** consult these pages until you have completely absorbed the A-B-C of PASSAP Knitting.

With a darning needle . . .

The Flat Seam

This is done on the purl (wrong)-side of the knitting using a special stitch, as shown in fig. 114. Always work in the direction towards the cast-on edge.

Fig. 114

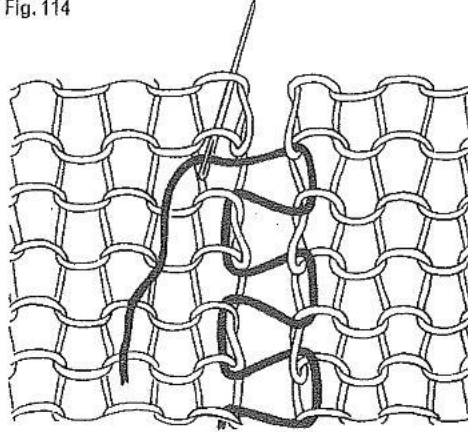
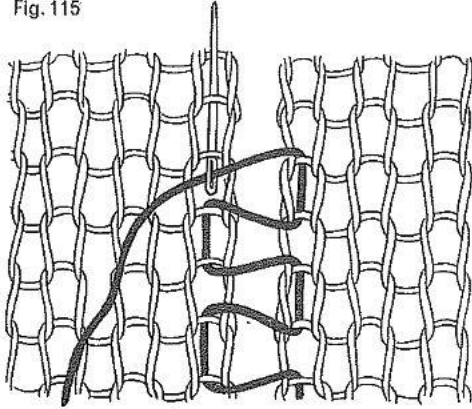


Fig. 115



The Mattress Stitch

This is done on the plain side of the knitting to form inconspicuous seams, fig. 115.

Grafting on the plain (right) side of the work, fig. 116.

(The knit stitch on the purl-side of work is described in making up the baby-sock — see page 30, fig. 90.)

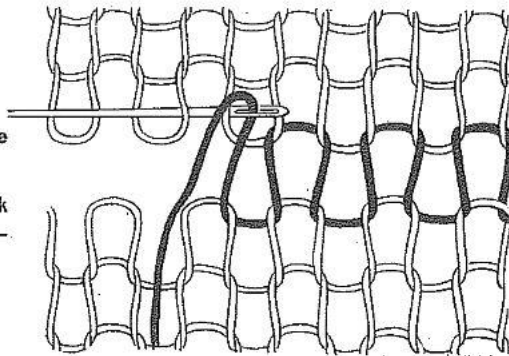
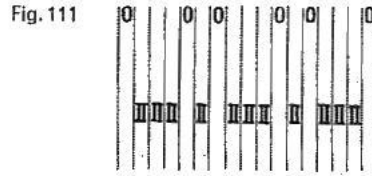


Fig. 116



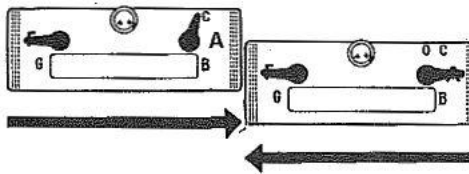
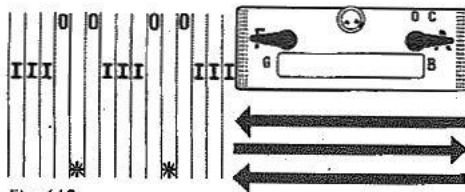
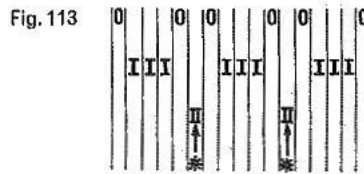
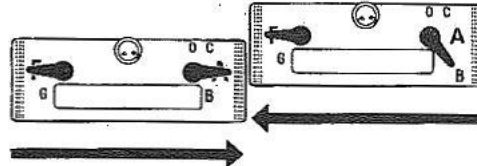
10. Open work pattern quickly and easily made



0 = needle in N.P.
 II = needle in Y.R.P.

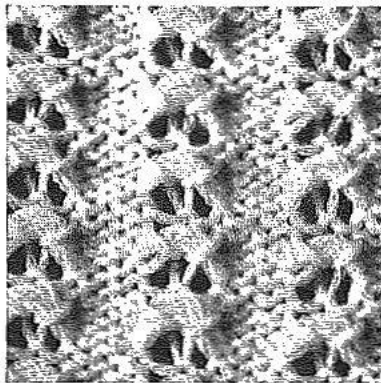
Needle division as for Fig. 111.

Cast on in this division, set A-B-C-lever (right hand lever) to B, knit 1 row, reset lever to A, knit one row, Fig. 111.

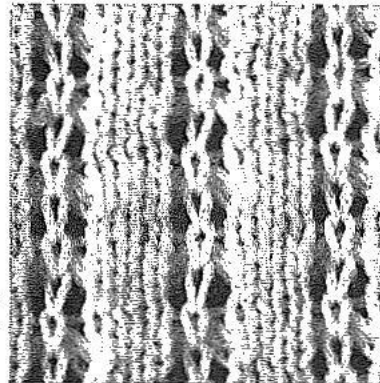


1st Pattern Series. Bring the single needles into R.P. Fig. 112 and knit 3 rows (3 loops are formed) Return R.P. needles into Y.R.P. set A-B-C-lever (right hand lever) to C and knit 1 row. Reset lever to A and knit the row. Fig. 113. (The lock is now on the left.)

2nd Pattern Series. As the 1st series, however, A-B-C-lever (right hand lever) is first to be set to B, the lock being on the right. — Repeat both pattern series alternately.



Pattern 10
 Wrong Side
 ◀



Pattern 10
 Right Side
 ▶

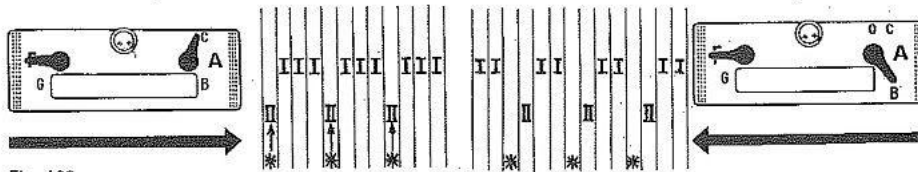


Fig. 108

Fig. 109

Return R.P. needles into Y.R.P. set A-B-C-lever (right-hand lever) to C, Fig. 108, and knit 1 row with all needles.

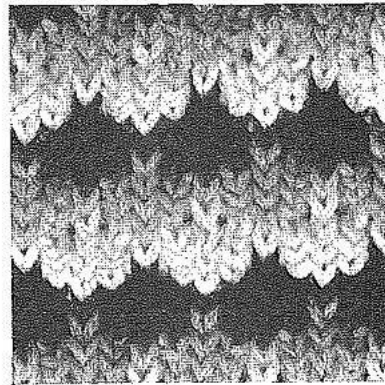
2nd Pattern Series. This is the same as the first series but the 3-1 division is reversed, the arrangement of needles being as in Fig. 109 and the white yarn being used.

3rd Pattern Series. As 1st series but using red yarn.

4th Pattern Series. As 2nd series but using blue yarn.

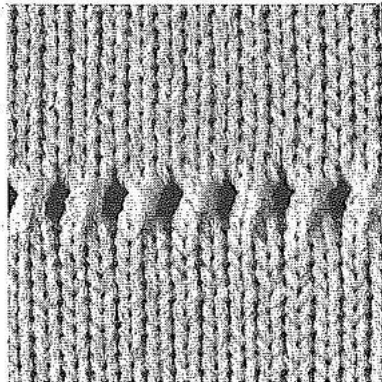
5th Pattern Series. As 1st series but using white yarn.

6th Pattern Series. As 2nd series but using red yarn. Repeat.



Pattern 8

Open Work Designs



Pattern 9

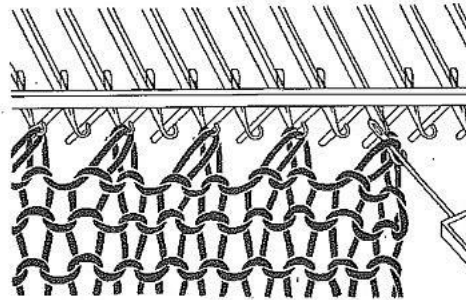


Fig. 110

9. Open work row for insertion or for making a picot edge to a hem

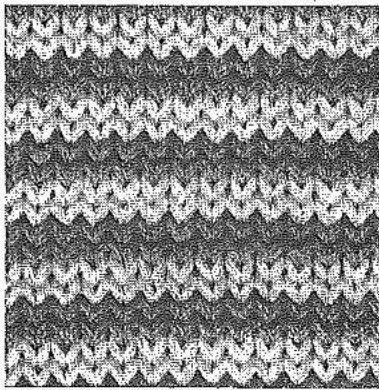
Remove feathercombs. With the decker-needle of the blue tool place every 2nd stitch on to the next needle (the empty needles with open latches to be left in W.P.) Replace feathercombs and knit the row taking care to move the lock slowly and holding the work down slightly by hand in order to ensure that all stitches are correctly knitted.



Patterning with Colour Change

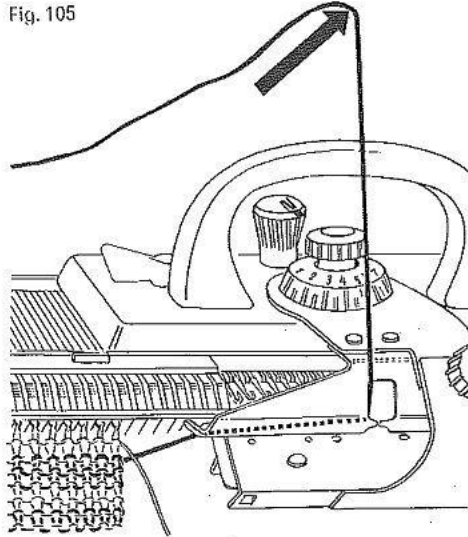
You must first remove the yarn completely from the wool feed. To do this use the reverse procedure from that which you followed in threading in. First take the yarn out of the feeding eyelet, then from the front eyelet on the tension arm, then from the centre eyelet, from between the tension discs, from the rear eyelet and remove the ball of wool from the yarn holder. Now place the yarn in a convenient receptacle on the floor. Set the levers to A, F and N (lock is on the right). Re-thread the wool into the feeding eyelet and holding it about 6 inches above the lock proceed as shown in the following instructions.

7. "Horizontal Stripes" - 2 rows red, 2 rows white



Pattern 7

Fig. 105



Using red yarn and moving the lock gently knit two rows in red. Now remove the red yarn from the feeding eyelet and replace it by the white yarn. Knit two rows in white yarn. And so on. You will find with practice that if you hold the yarn horizontally towards you and move the lock gently to the left until the first needle heads slightly protrude above the stripper, that by a slight upward movement of the yarn you will cause it to slip automatically into the feeding eyelet. Fig. 105.

8. Three colour "Loop Pattern" in 3-1 division

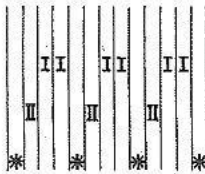


Fig. 106

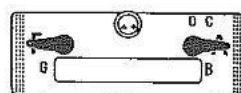
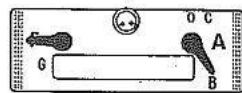
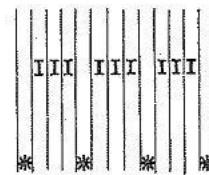


Fig. 107



1st Pattern Series. With the pattern ruler arrange needles in 3-1 division. 1 needle R.P. 1 needle Y.R.P. 2 needles working position etc. Insert blue yarn into feeding eyelet, set A-B-C-lever (right-hand lever) to B, Fig. 106, knit 1 row.

Reset lever to A and knit 2 rows. Fig. 107.

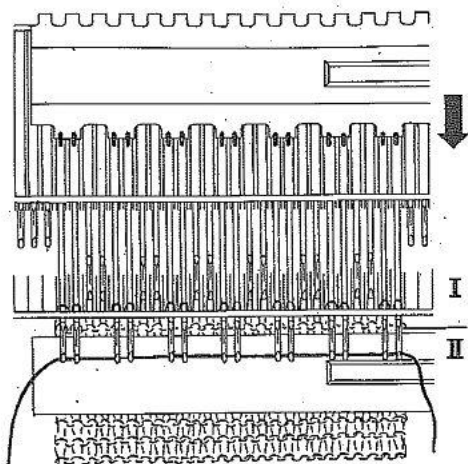
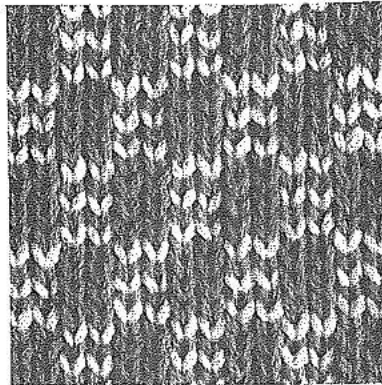


Fig. 103

5. Two colour "String-Pattern" in 2-2 division



Pattern 5

1st pattern Series. Red yarn threaded in Wool Feed. Place pattern ruler in 2-2 division behind the first pair of needles and bring every alt. needle pair into Y.R.P. (make sure that all latches are open). Place the white yarn by hand into the open needle heads and knit. Repeat this procedure twice.

2nd Pattern Series. This is as the 1st series but this time the 2-2 side of pattern ruler is placed behind the 2nd pair of needles (i.e., the third and fourth). This also is repeated twice making three times in all.

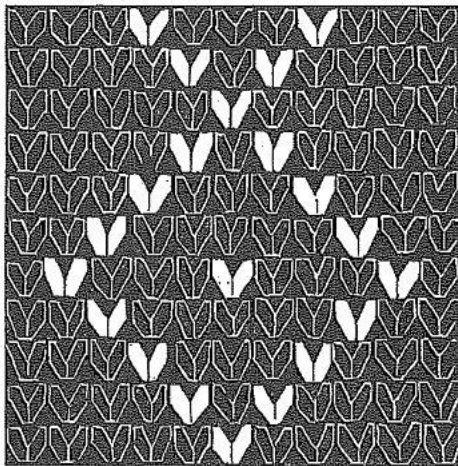
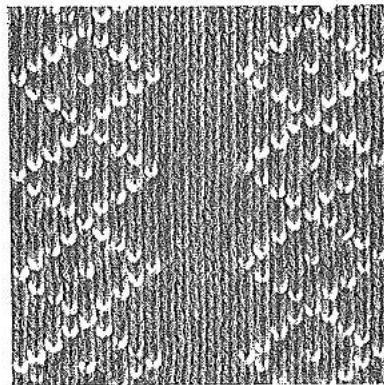


Fig. 104

6. Two colour "Outline Designs"



Pattern 6

The example shows how to knit a diamond outline.
Red yarn threaded in Wool Feed.

For example, bring every 14th needle (point of the diamond-centre needle) into Y.R.P. (open the latches) place the white yarn into the open needle heads by hand and knit the row.
Bring every 13th and 15th needle into Y.R.P. lay white yarn in by hand, knit the row.
Bring every 12th and 16th needle into Y.R.P. lay in white yarn by hand and knit the row.
Bring every 11th and 17th needle into Y.R.P. lay in white yarn by hand and knit the row.
Bring every 10th, 14th and 18th needle into Y.R.P. lay in white yarn by hand and knit the row.
With the completion of this row the first half of the diamond is formed. Now reverse the procedure until pattern is completed (i.e. first knit on the 11th and 17th needles in Y.R.P. laying white yarn in by hand and so on).



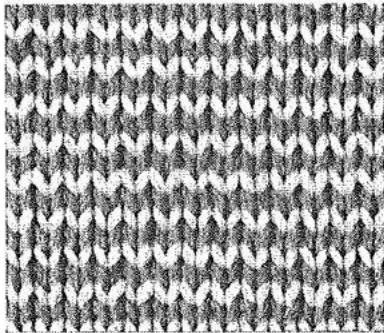
Two-colour patterns with trimming colour to be hand fed

(in Yarn-Receiving Position)

Before starting these patterns, set F-G-lever (left-hand lever) to G and leave there.

3. "Candy Stripes" — 1 row red, 1 row white

Automatic feeding of the red yarn. Bring all needles into Y.R.P. (make sure, that all the latches are open) place the white yarn into the open needle heads by hand, Fig. 100 and move lock across. You have now automatically knitted 2 actual rows, one white, one red. Fig. 100 shows working from right to left, Fig. 101 shows working from left to right. Repeat throughout.

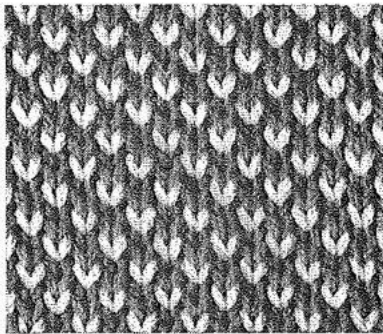


Pattern 3

4. Two colour "Tweed Stitch" in 1-1 division

1st row. Automatic feeding of the red yarn. Place pattern ruler in 1-1 division behind 1st needle and bring every alt. needle forward into Y.R.P. (Make sure that all latches are open.) Place the white yarn into the open needle heads and knit the row.

2nd row. As the 1st row, but place pattern ruler behind the 2nd needle. (Both colours will be knitted automatically in every row.) Repeat.



Pattern 4

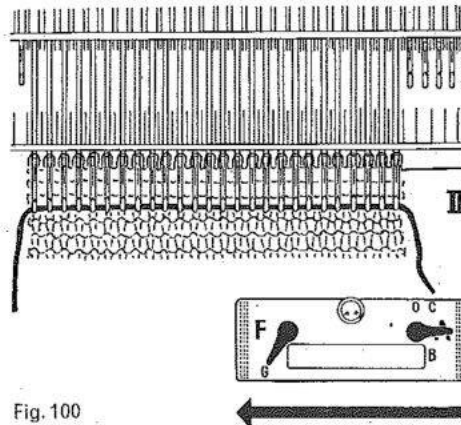


Fig. 100

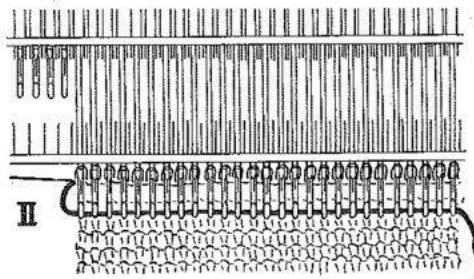


Fig. 101

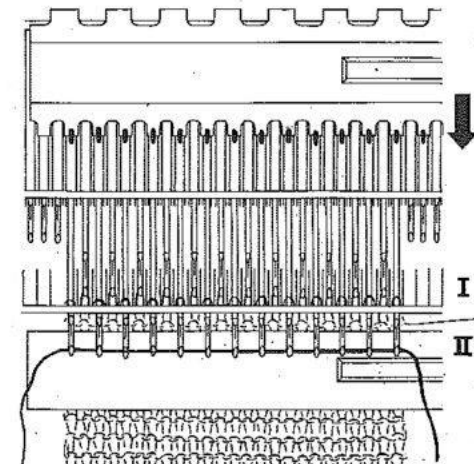
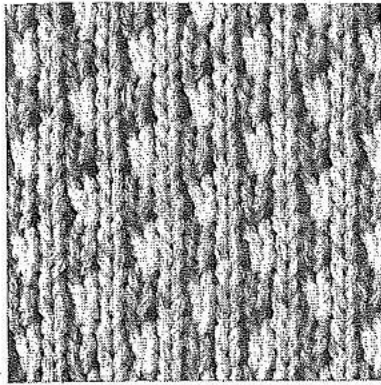


Fig 102



Pattern 2, Right Side

Now, placing the 2-2 side of the pattern ruler in front of the needle feet return every right hand needle of the needle pairs into Y.R.P. Fig. 96.

Set A-B-C-lever (right-hand lever) to B and knit the row. Fig. 97. (1 loop is thus formed over every needle in R.P.)

2nd and 3rd rows: Reset A-B-C-lever (right hand lever) to A fig. 98 and knit 2 rows. (3 loops in 3-1 division in all)

4th row: Return R.P. needles into Y.R.P. Set A-B-C-lever (right hand lever) to C, Fig. 99 and knit the row. (All needles are in W.P.)

5th-8th rows: As 1st-4th rows, however reversed, i.e., place pattern ruler behind the 3rd and 4th needles. Repeat throughout.

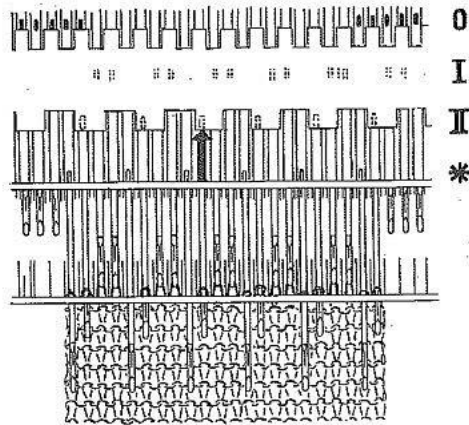


Fig. 96

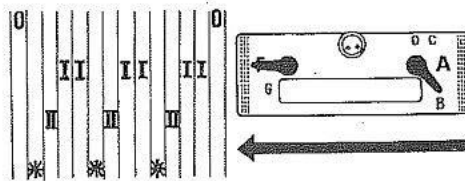


Fig. 97

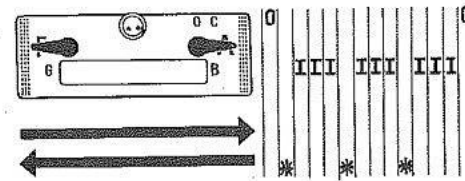


Fig. 98

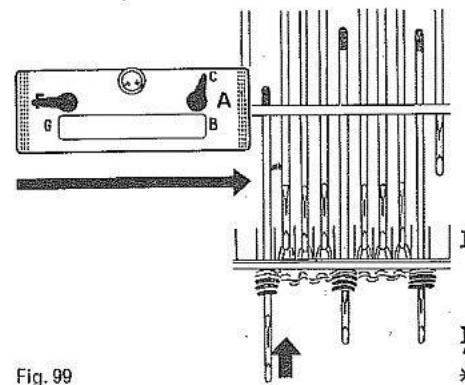


Fig. 99



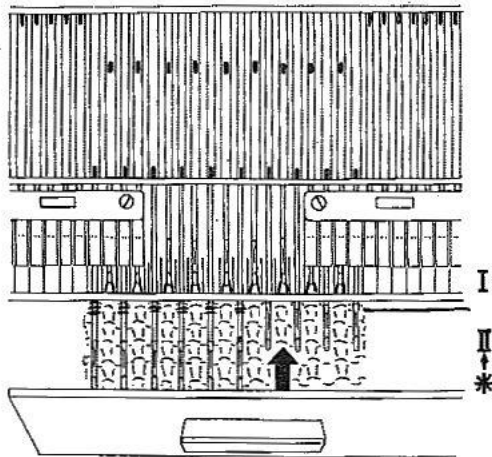
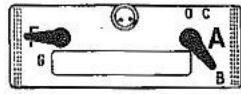


Fig. 93



3rd row. Push R. P. needles back into Y. R. P. set A-B-C-lever (right-hand lever) to B, fig. 93 and knit the row.

(All needles are back in W. P. and the loops have automatically been knitted up.)

4th row. Reset A-B-C-lever (right-hand lever) to A, Fig. 94 and knit the row.

5th-8th rows. As 1st-4th rows, but bring the 2nd and every alt. needle into R. P. Repeat throughout.

The "wrong" side of this pattern is also most attractive.

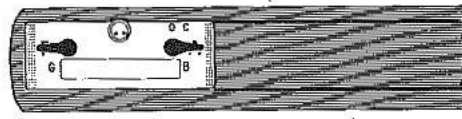
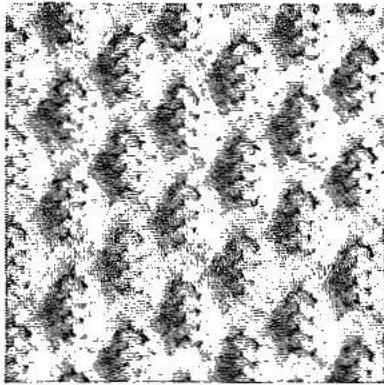


Fig. 94

2. One colour "Shell" Pattern in 3-1 division

This pattern is devised so that the purl side is the "right" side.

1st row. Place pattern ruler in 2-2 division behind the first pair of needles and bring the needles into R. P. in pairs. Fig. 95.



Pattern 2 — Wrong Side

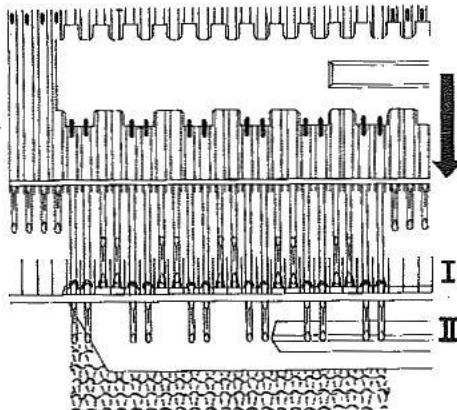


Fig. 95

XII

Attractive Basic PATTERNS for the PASSAP-Automatic

In all the following pattern instructions the starting position of the lock is on the right. Fig. 91.

When the needles are brought forward into Rest Position the work must be pressed against the striking comb at the same time as the block ruler is used to push the needles forward. This is essential so that only the selected needles come forward into Rest Position.

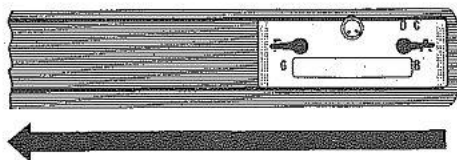
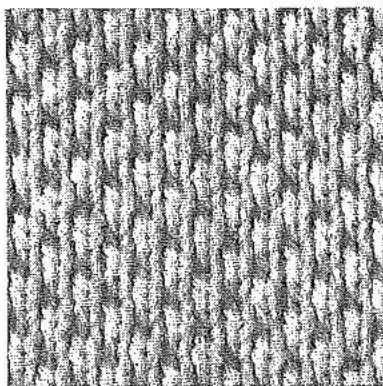


Fig. 91

Abbreviations: St., sts. = stitch, stitches; beg. = beginning; W.P. = Working Position; R.P. = Rest Position; alt. = alternate; N.P. = Neutral Position; Y.R.P. = Yarn-Receiving Position.

“Loop” Patterns

1. One colour «Rice Stitch» in 1-1 division



Pattern 1

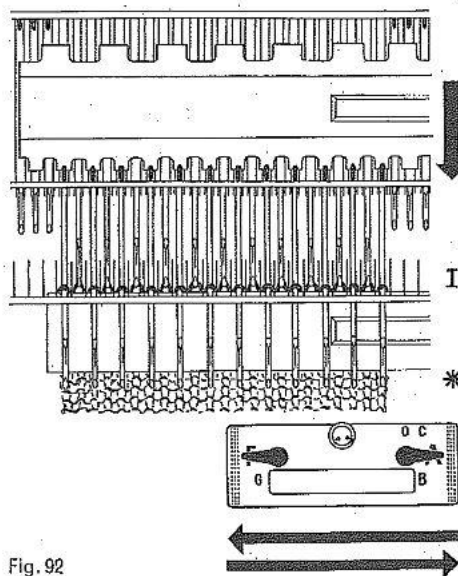


Fig. 92

1st and 2nd rows. Place pattern ruler in 1-1 division behind the 1st needle and bring every alt. needle into R.P. Fig. 92. Knit 2 rows. (Two unknitted threads are formed on the shafts of the R.P. needles. These unknitted threads are called “loops”).



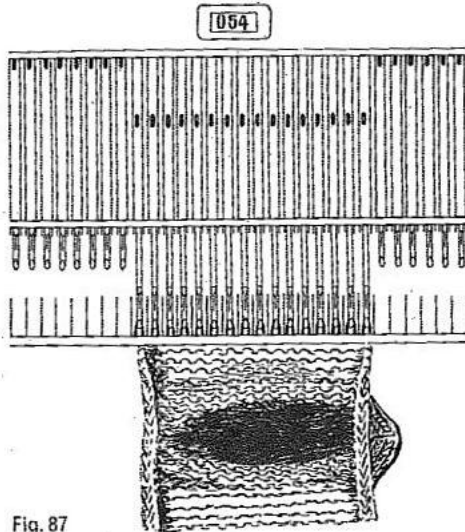


Fig. 87

Repeat this operation until all 16 needles are back in Working Position. Fig. 87. Row counter should indicate 54 rows. Reset to 000.

Section E. Sole: reset A-B-C-lever (right-hand lever) to A, Fig. 88, and knit 30 rows.

Section F. Heel: work exactly as for the toe (Section D) but decreasing until only 6 stitches in the centre remain in Working Position. Row counter indicates 50 rows.

When the heel is finished knit 1 row over all 16 needles then work 3 rows with an oddment of a contrasting colour yarn as described for Fig. 80, Section B, Leg. Alternatively, you may knit these stitches with the lock using a contrasting colour of wool as shown in "Patternings with Colour Change" on page 36, Fig. 105.

Now disconnect the wool from the feeding eyelet and move the lock across the machine thus removing your work from the machine.

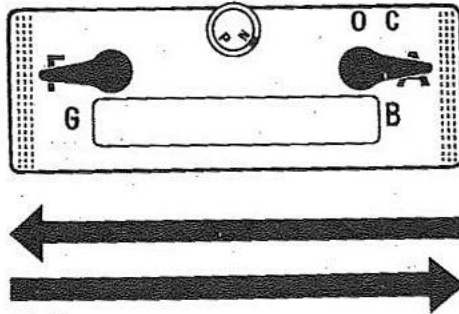


Fig. 88

To make up: stitch the seam at the back of the leg (leaving the hem open). Graft the two sets of 8 stitches each to the 16 heel stitches on the purl side (wrong side) of the work as shown in Figs. 89 and 90. To do this, place the knit side (right side) to the knit side and always pick up those cross threads visible between the rows knitted with the contrasting colour yarn. Fig. 90. When the grafting is completed simply withdraw the contrasting colour yarn. Join the sole to the instep. If required draw a length of elastic through the hem. If elastic is not required complete by slip-stitching hem.

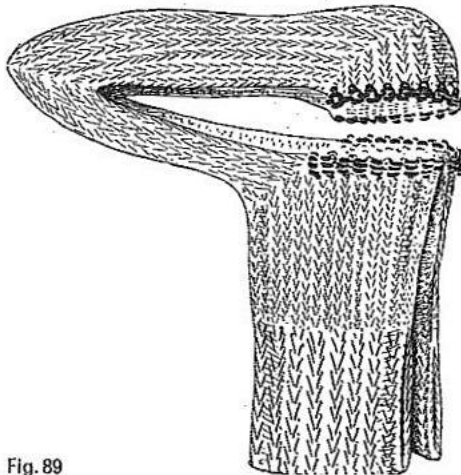


Fig. 89



Fig. 90

Repeat this procedure until 4 needles only (one quarter of all needles) are still in Working Position at the exact centre. Fig. 84.

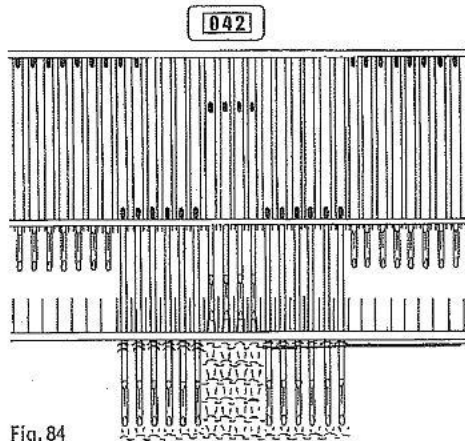


Fig. 84

Then you make Graduated Increasing

Bring the Rest Position needle nearest to the lock back into Yarn-Receiving Position. Set A-B-C-lever (right-hand lever) to B (if the lock is on the right), Fig. 85. Or to C (if the lock is on the left, Fig. 86) Knit the row. (The needle is now in Working Position again.)

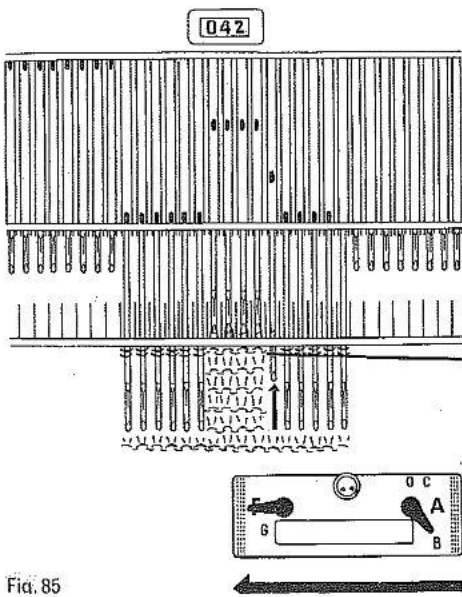


Fig. 85

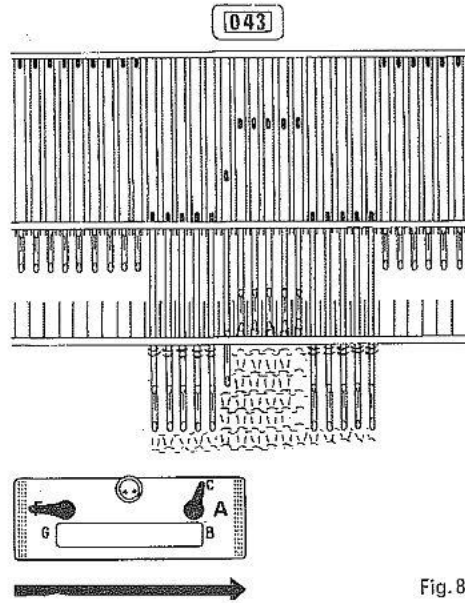


Fig. 86



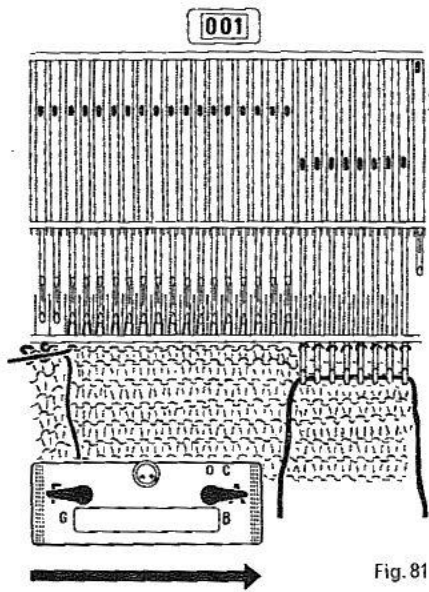


Fig. 81

Repeat the procedure with the last 8 stitches on the right hand side of the work. 16 needles now remain in Working Position. Fig. 81. (The two sets of stitches right and left will later on be grafted to the finished heel with a knit stitch.)

Section C, Instep: set feathercombs over the whole row of working needles. Knit until row counter indicates 30 rows.

Section D, Toe: At first you make Graduated Decreasing

Bring 1 needle on the same side as the lock into Rest Position, fig. 82. Knit the row.

Bring 1 needle on the same side as the lock into Rest Position. Fig. 83. Knit the row.

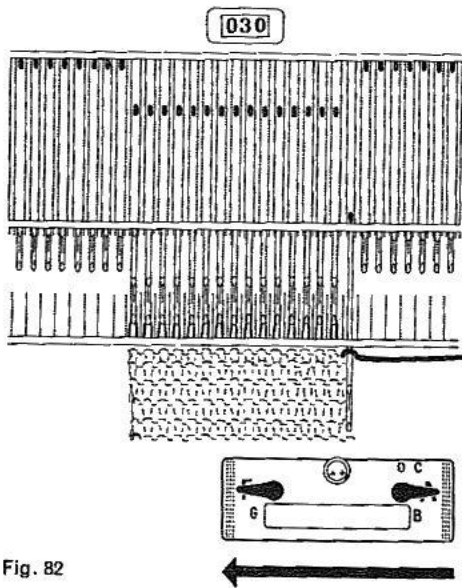


Fig. 82

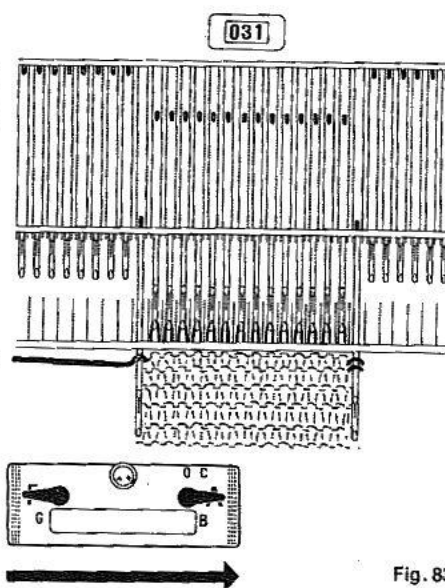


Fig. 83

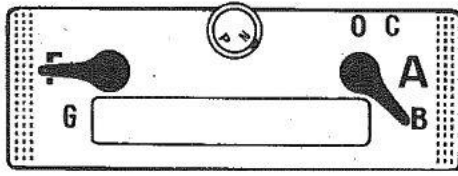


Fig. 77

1st row: set A-B-C-lever (right-hand lever) to B, move the lock to the left. Fig. 77.

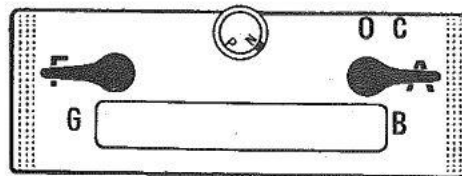


Fig. 78

2nd row: set A-B-C-lever (right-hand lever) to A, move the lock to the right. Fig. 78.

Knit until row counter indicates 24 rows. Reset row counter to 000.

Bring the 16 Neutral Position needles (see Fig. 75) forward into Working Position so that you have a complete row of 32 needles in Working Position. To turn up the hem pick up the loops of the cast on edge with the single decker tool and, preferably with a twist, place them into the open hooks of the empty needles, working from the right to the left of the work. Fig. 79.

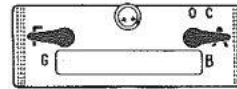
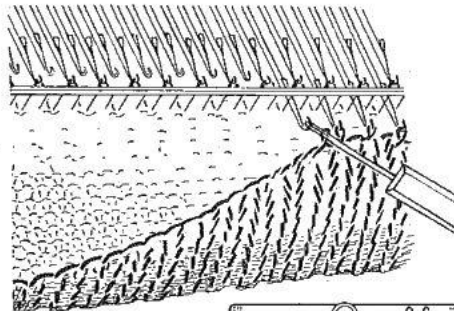


Fig. 79

Section B, Leg: Knit 20 rows, then reset row counter to 000. With an odd length of a contrasting colour yarn and at the left side of the machine knit 3 rows over 8 consecutive needles (one quarter width of sock) by the following method.

Bring the last 8 needles on the left into Yarn Receiving Position. *Place an oddment of yarn into the open hooks. Now with the cup end of the blue tool move every single needle first back into Working Position, then forward into the Yarn Receiving Position. Repeat from *twice, then push these needles back into Neutral Position, thus removing the 8 stitches from the needles. Fig. 80. Knit 1 row over the remaining 24 stitches.

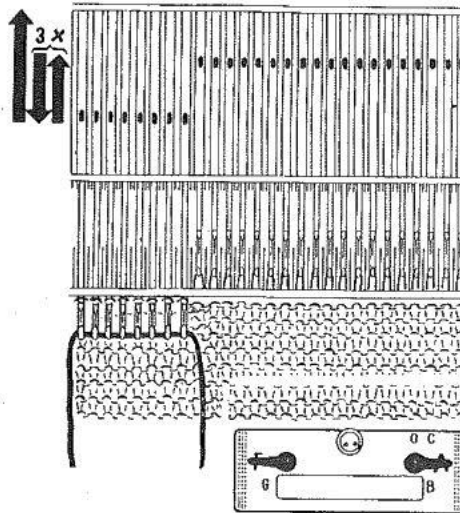


Fig. 80



XI

How to knit a baby-sock, form a hem, and turn a toe and heel

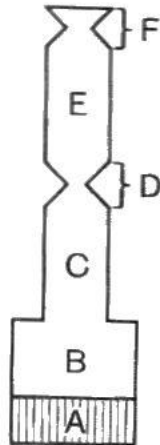


Fig. 74

This shows the drawing of a sock before it has been sewn together. This pattern can be used for making both children's and adult's socks by varying the number of stitches and rows.

Section A, Hem: lock with threaded yarn on the right of machine. Bring 32 needles forward into Rest Position and open the latches.

With pattern ruler in 1-1 division push every alternate needle back into Neutral Position. Fig. 75. Fix leathercombs.

Cast on to the remaining 16 needles and bring the needles into Yarn-Receiving Position. Set row counter at 000. Fig. 76.

Fig. 75

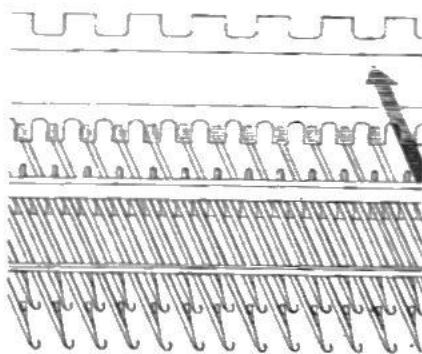
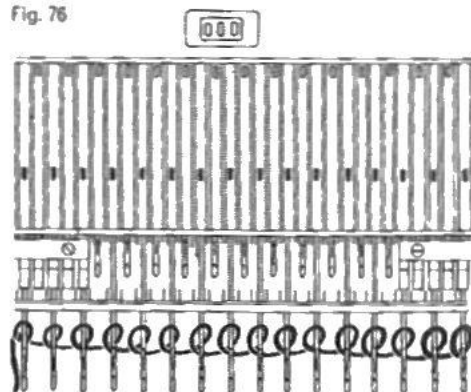


Fig. 76



X

How to knit Graduations (Short rows)

To shape a garment (for example, to shape the bust-line of a sweater etc.) it is necessary to omit knitting certain groups of stitches. The stitches remain on the needle shafts, the needles being brought forward into Rest-Position.

Graduated decreasing :

The example shows the knitting of 4 graduations of 6 stitches each on the left of the work so that more rows are knitted on the right-hand side than on the left-hand side of the work.

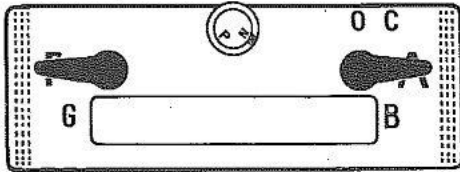


Fig. 70

Starting position lock on right (Levers at A, N, F) Fig. 70.

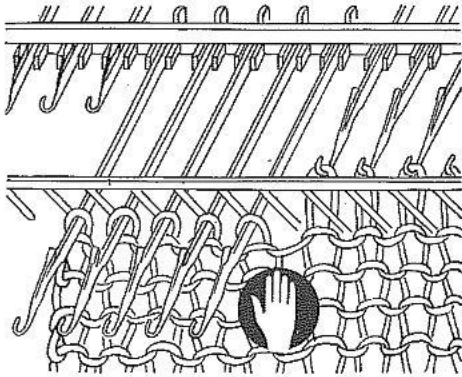


Fig. 71

On the left bring 5 needles (not 6 needles) into Rest-Position pressing the work against the striking comb by hand. Fig. 71. Knit 1 row.

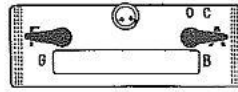
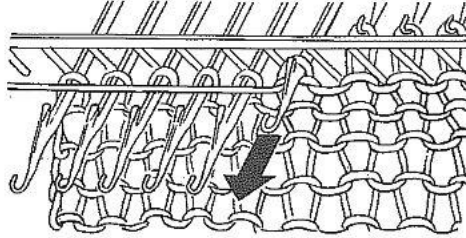


Fig. 72

In order that holes between the two graduations are avoided the 6th needle of the graduation is now brought forward into Rest-Position. Fig. 72. Knit 1 row. Repeat the procedure illustrated in Figs. 71 and 72 three times, so that 24 needles are in Rest-Position on the left side of the machine. (Lock is on the right).

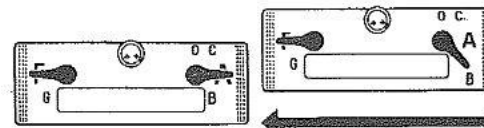
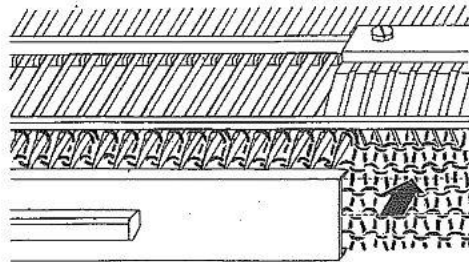
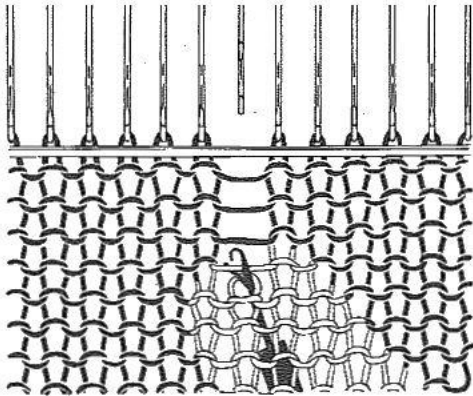


Fig. 73

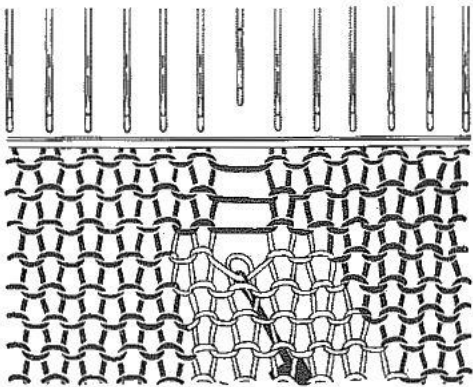
Bring the 24 Rest-Position needles back into Yarn-Receiving Position, set A-B-C-lever (right-hand lever) to B and knit 1 row. Set lever to A and continue knitting. Fig. 73.





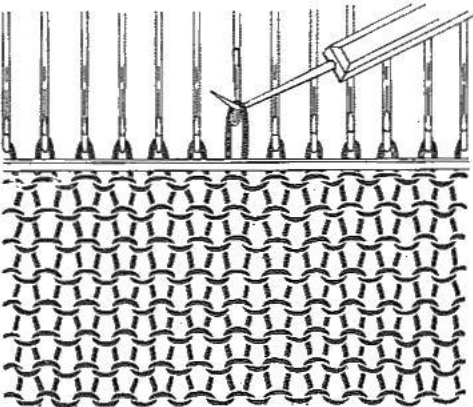
Catching the successive cross threads,
fig. 67

Fig. 67



the latch closes automatically, fig. 68.

Fig. 68



Now with the angled end of the red tool
remove the last crocheted stitch from the
latch of the green tool and place it into
the open latch of the needle from which
it was dropped. Fig. 69.

Fig. 69

These stitches (crocheted up stitches) are formed by the latch of the green tool in precisely the same way as is shown in Figs. 1 to 7 which explain "How the latch needle forms a stitch."

Here the successive rows of dropped stitches are shown crocheted up and the last stitch transferred to the needle from which you first dropped the stitch. The stitches thus formed are plain stitches knitted on the purl (wrong) side of the work and appear as purl stitches on the plain (right) side of the work.

Crocheting up two cross threads

Insert the latch needle of the green tool into the dropped stitch and slide upwards under 2 cross threads, catching the upper thread only and drawing it through the dropped stitch. Fig. 64.

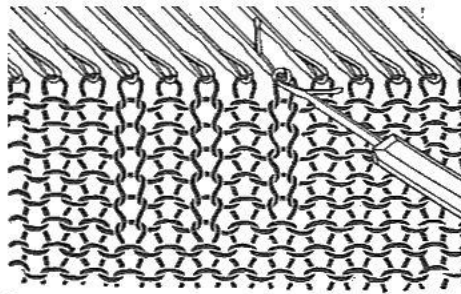


Fig. 63

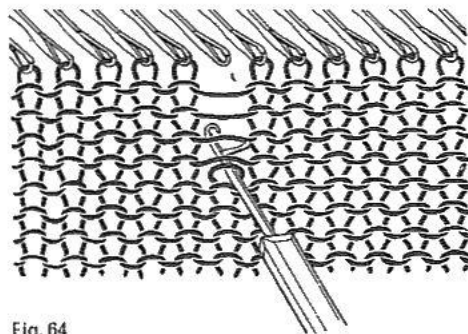


Fig. 64

The lower of the 2 cross threads will be caught automatically. Fig. 65.

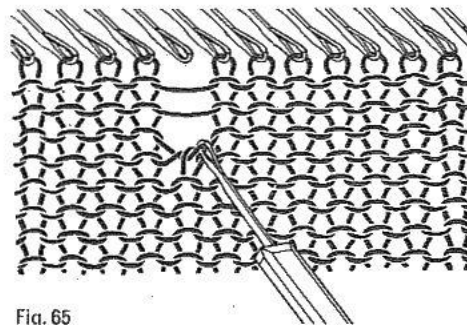


Fig. 65

Crocheting plain stitches on the knit side (right side) of the work

This is the method for picking up dropped stitches.

If a stitch drops without your noticing, and you continue knitting, a new stitch will form above the dropped stitch. To correct, remove this stitch from the needle and run back to where originally dropped. (You now have just the one original stitch.) Insert latch end of the green tool from behind the work with the latch facing away from you and crochet back up in the same way as you did in fig. 59 to 63. As you crochet upwards, the latch opens, fig. 66.

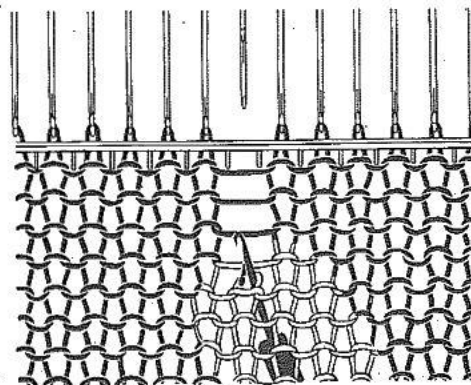


Fig. 66

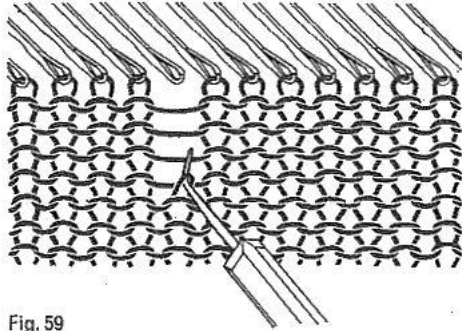


Fig. 59

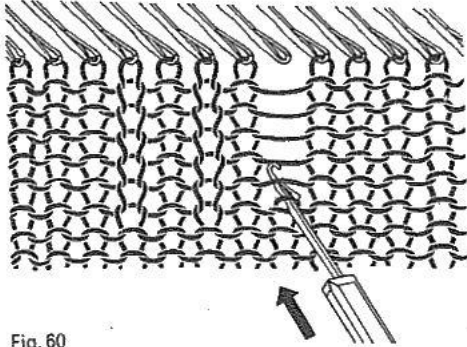


Fig. 60

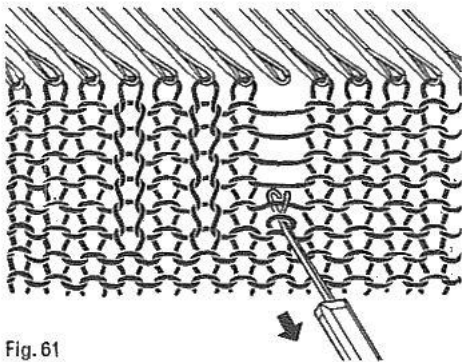


Fig. 61

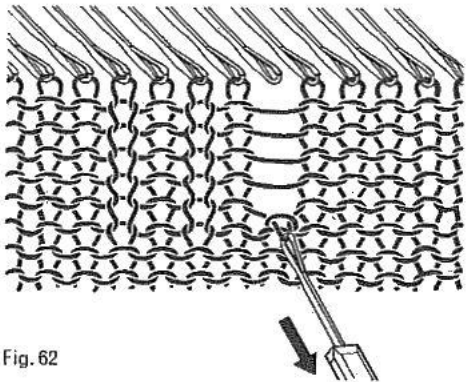


Fig. 62

Crocheting plain stitches on the purl (wrong) side of the work.

This method is used, for example, for welts, cuffs, etc. Remove one stitch from the latch needle and drop it the required number of rows (in making welts drop as far as the cast on edge).

You can now see the cross threads of the rows, which you dropped, Fig. 59. Now catch the loop of the stitch in the latch end of the green tool with the open hook of the tool facing the machine. (If you have difficulty in catching the loop in the latch end of the green tool, it is easy to open the loop slightly by means of the angled end of the red tool, Fig. 59.) It is easiest if the tool is held in a nearly perpendicular position. Push the tool forward towards the machine so that the stitch held in the latch of the tool passes onto the needle shaft of the tool. The latch will open as you push the tool forwards, Fig. 60, and as you withdraw the tool towards you, you catch the next cross thread above in the closing needle-head, Fig. 61, thus knitting the stitch.

Here the needlehead is shown fully closed with the loop drawn through. Fig. 62.

When the work has been finished the odd yarn is removed leaving a number of open stitches. Fig. 56.

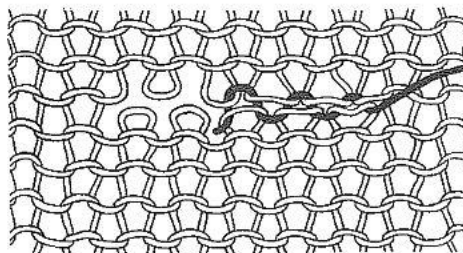


Fig. 56

Pick up the open stitches with a darning needle and a double thread of the yarn in use (Fig. 57) and finish off with button-hole stitch. (s. Fig. 117)

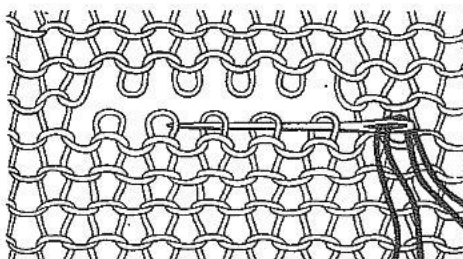


Fig. 57

How to unravel rows

If you have made a mistake or have knitted too many rows you can easily correct your error by unravelling. First remove the yarn from the feeding eyelet.

Holding the work firmly in your hand with a downward pressure and ensuring that the stitches remain held in the hooks of the latches and that they do not pass back on to the needle shafts, pull the yarn gently but firmly until it becomes taut. It will be seen that the stitches of the previous row are now nearly riding over the tops of the hooks of the needles. Holding the yarn away from you, towards the bed of the machine, it will now be removed from the needles Fig. 58, and the row will be unravelled.

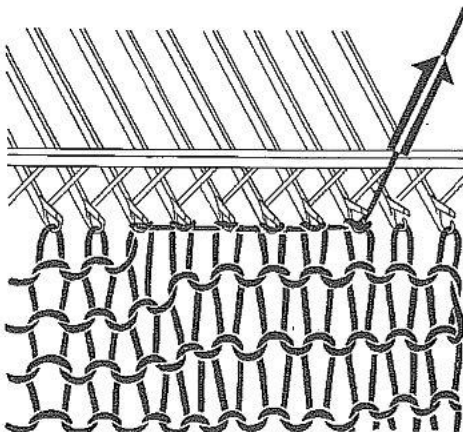


Fig. 58

Remember to correct the row counter!

IX

Buttonhole - Corrections - Crocheting

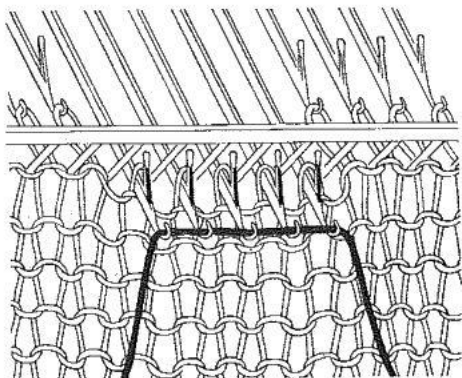


Fig. 53

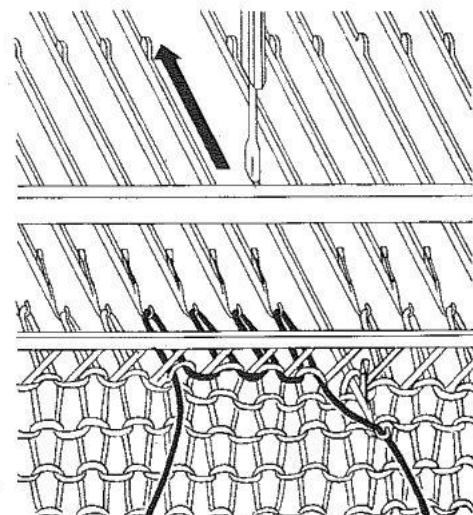


Fig. 54

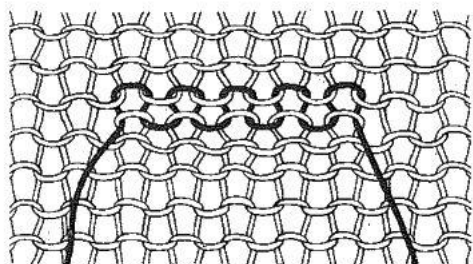


Fig. 55

The knitted-in buttonhole

The best buttonhole is achieved when it is knitted with a separate odd length of yarn in contrasting colour and it is reinforced when the knitting has been finished.

For example, bring 5 needles forward into Yarn-Receiving Position and place the oddment of yarn into the open needle heads. Fig. 53.

With the cup-end of the blue tool move the needles back into Working Position, one after the other so that the odd yarn is knitted. Fig. 54. Continue knitting.

The odd yarn has thus been knitted where the buttonhole is required. Fig. 55.

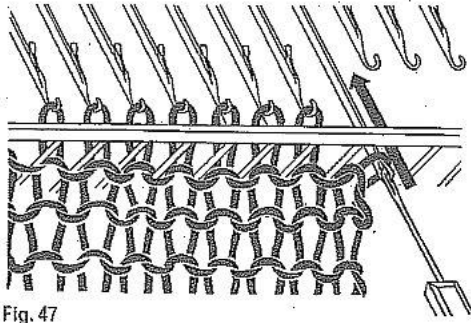


Fig. 47

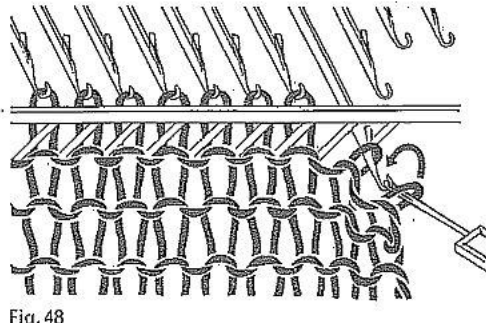


Fig. 48

Place the eye of the decker needle into the hook of the next needle and transfer the stitch from the decker needle into the open hook of that needle. Fig. 48. Check that the feathercomb still covers at least the last two needles in use! Continue knitting.

Decreasing of several stitches. This can be carried out in the same manner on either side of the work but only on the side where the lock is (i. e. where the yarn is available). The example shown is for the right hand side of the work.

With the latch needle end of the green tool pick up the last two stitches one after the other. Fig. 49.

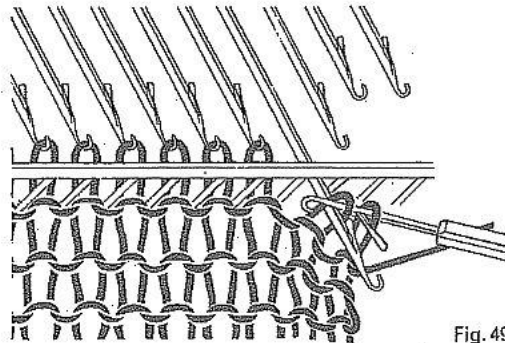


Fig. 49

Pass the yarn over the hook of the tool in front of its open latch and draw the yarn through the two stitches. Fig. 50. 1 stitch remains behind the latch of the green tool. Fig. 51.

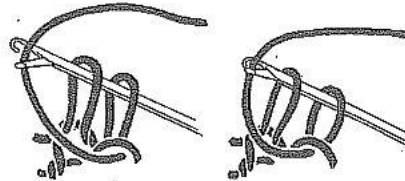


Fig. 50

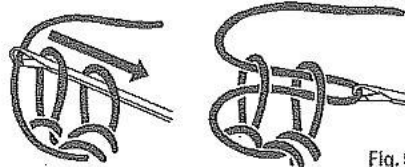


Fig. 51

Take the next stitch from the machine, proceed as before, drawing the thread through and crocheting a new stitch. Fig. 51.

Now you have decreased 3 stitches and you transfer the stitch from the latch end of the green tool into the hook of the fourth needle (last needle in use) Fig. 52. You return the three empty needles to Neutral Position and continue knitting.

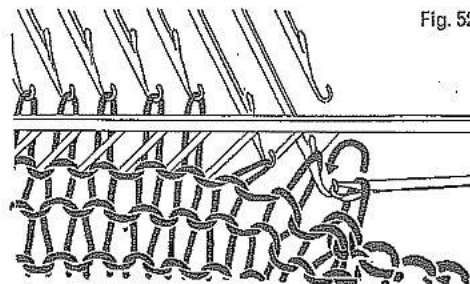
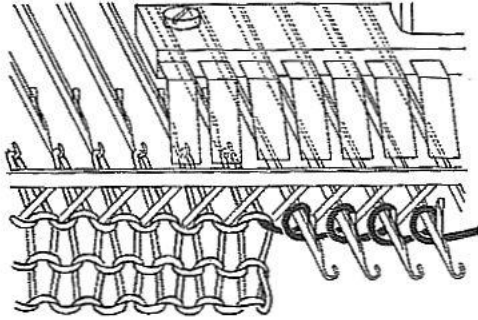


Fig. 52

How to cast off.

For the final casting off of the work, proceed according to Figs. 49-51 over the whole row of stitches.



Increasing of several stitches. Wind the yarn round the required number of needles in turn as for casting on. Before you continue knitting make sure that the last 2 or 3 needles are covered by the feather-combs.

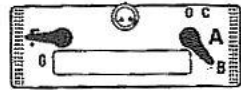
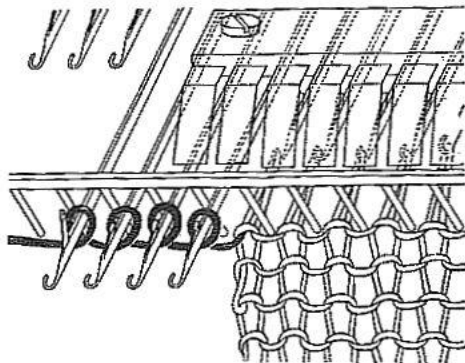


Fig. 44

Increasing on the right (anti-clockwise). A-B-C lever (right-hand lever) to B (Fig. 44) knit 1 row. Lever to A, continue knitting.



Increasing on the left (clockwise). A-B-C-lever (right-hand lever) to C (Fig. 45) knit 1 row. Lever to A, continue knitting.

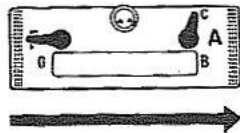


Fig. 45

Decreasing

Decreasing one stitch. This is carried out in exactly the same way on either side of the work.

The example shown is for the right-hand side of the work.

Bring forward slightly the last latch needle in use and hook the eye of the decker needle into the hook of this needle which you now pull further forward until the stitch is behind the open latch. Fig. 46.

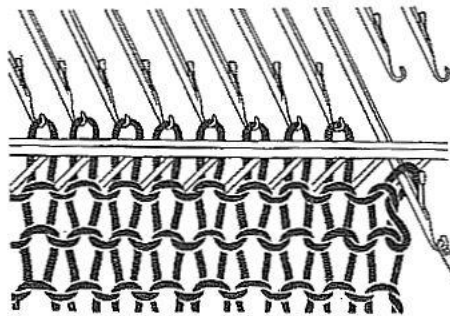


Fig. 46

Push the needle back so that the stitch slides over the closing latch and onto the decker needle. Fig. 47.



Increasing, Decreasing and Casting Off

This is done either on right or left of the work on the side of the machine where the lock is.

Increasing

Increasing 1 stitch on the right. Bring 1 additional needle forward, wind the yarn round the open needle head in **anti-clockwise** direction and put the needle into Yarn-Receiving Position. Set A-B-C-lever (right-hand lever) to B (Fig. 42) knit the row. Re-set lever to A and continue knitting.

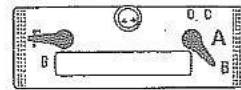
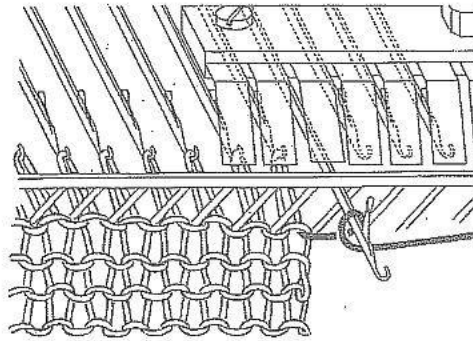


Fig. 42

Increasing 1 stitch on the left. Proceed in the same way as for right but wind the yarn in a **clockwise** direction and set A-B-C-lever (right-hand lever) at first to C (Fig. 43) knit the row then re-set to A and continue knitting.

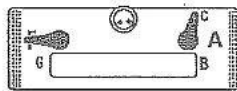
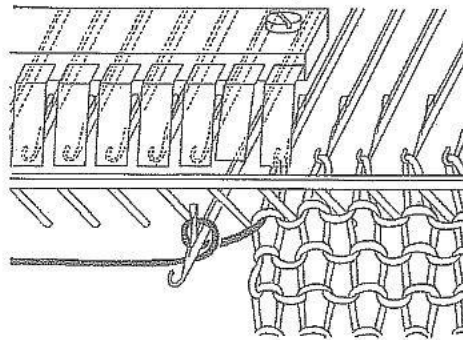


Fig. 43

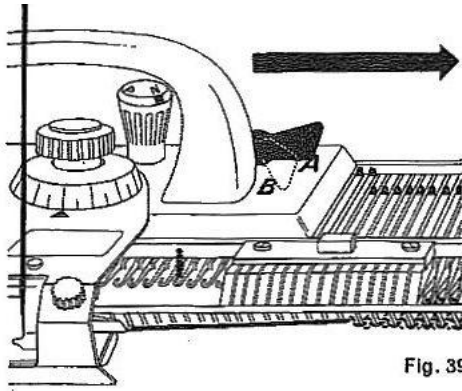


Fig. 39

2nd row. Set A-B-C-lever (right hand lever) to A. Move the lock slowly and smoothly over all needles in use in a right hand direction until it has again passed all needles in use. Fig. 39.

From now on simply move the lock to and fro in even rhythm until the row counter reads 30 rows.

The lock must be moved in one direction only. Once you have started to move the lock across the needles be sure to complete the row. Any attempt to move the lock in the reverse direction will almost certainly result in dropped stitches or even the breaking of the needles.

In case your work is interrupted - before recommencing pull down the yarn behind the mast and check that it is properly threaded through the feeding eyelet as shown in Fig. 38 if lock is on the left or as in Fig. 40 if lock is on the right. Check also that your tension is correct as shown Fig. 37.

Should the lock jam. If the lock has jammed, it is due to your having made a mistake and you should pull up N-P knob and set A-B-C-lever (right hand lever) to 0. Fig. 41. Now the lock can be moved freely either to the right or to the left without the needles knitting and without danger of dropped stitches and you can correct your mistake.

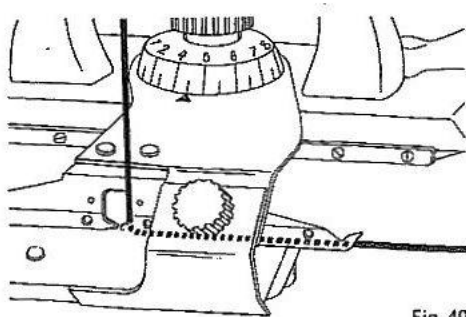


Fig. 40

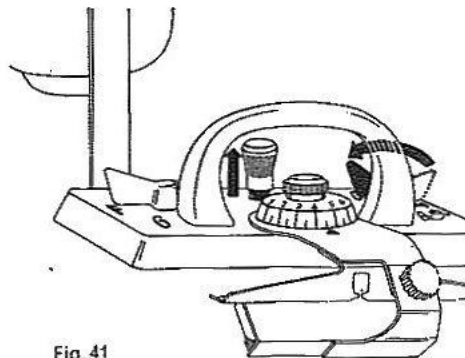


Fig. 41

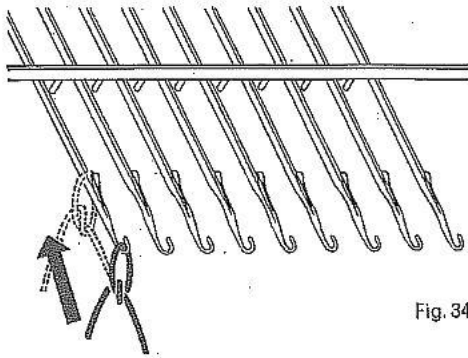


Fig. 34

Pull out a sufficient length of yarn below the stripper, make a loop with a slip knot round the first needle on the left and push the loop behind the open latch. Fig. 34.

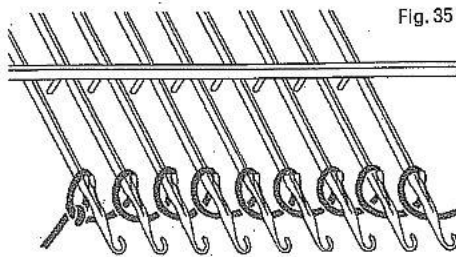


Fig. 35

Now wind the yarn fairly loosely around each successive needle in turn, in an anti-clockwise direction, (exactly as you would write the small letter "e") passing the loops behind the latches. Fig. 35. Place feathercombs over the last 2 or 3 needles in use on each side (see Fig. 29).

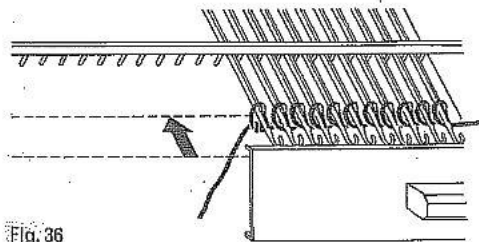


Fig. 36

With the block ruler push the needles back into Yarn-Revealing Position. Fig. 36.

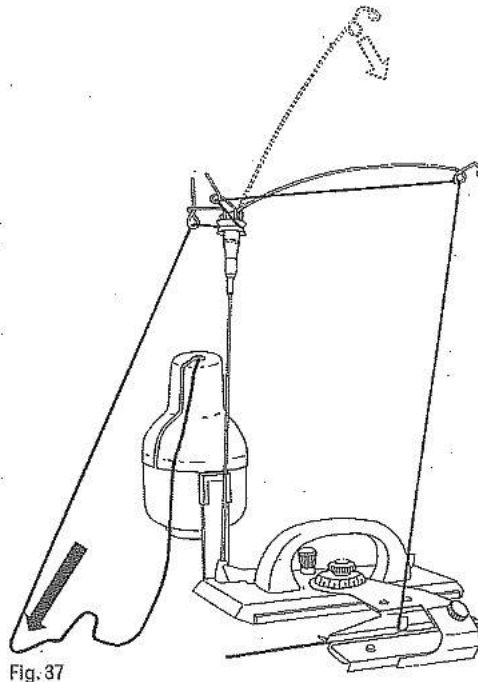


Fig. 37

Pull down the yarn behind mast between rear eyelet and yarn holder until the tension arm is bent forward into a right angle position. Fig. 37. Adjust tension discs if necessary. (Fig. 27).

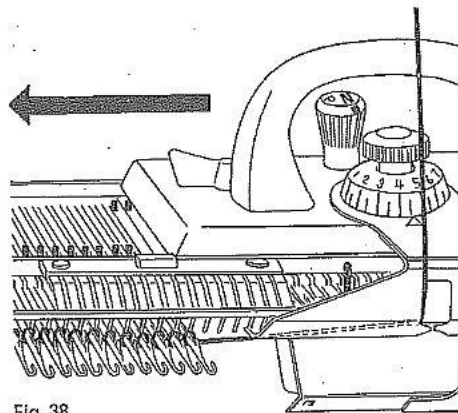


Fig. 38

1st row: Set row counter at 0. Move lock slowly and smoothly over all needles in use in a left hand direction, (Fig. 38), until it has completely passed all needles in use. The needles are now in Working Position.

The A-B-C of PASSAP-Knitting

VII

Casting on and Knitting

Caution. The lock must NEVER be moved across the bed of the machine when the needles are empty, unless ALL needles are in Neutral Position.

To be practised as a test square. Beginners should use a light coloured 3 or 4 ply wool.

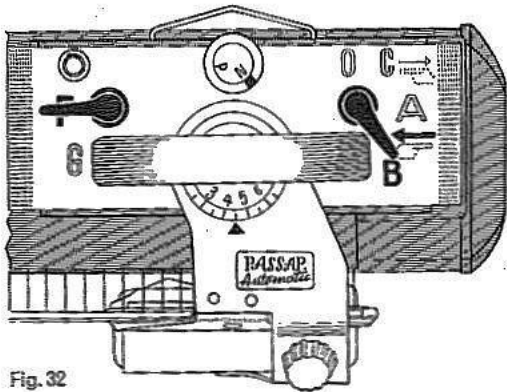


Fig. 32

Starting Position (Levers at B, F, N. Stitch size $4\frac{1}{2}$) Lock on the right. Fig. 32.

In the exact centre of the needlebed bring approx. 70 needles forward into Rest Position, place block ruler behind needle fee and open all latches. Fig. 33.

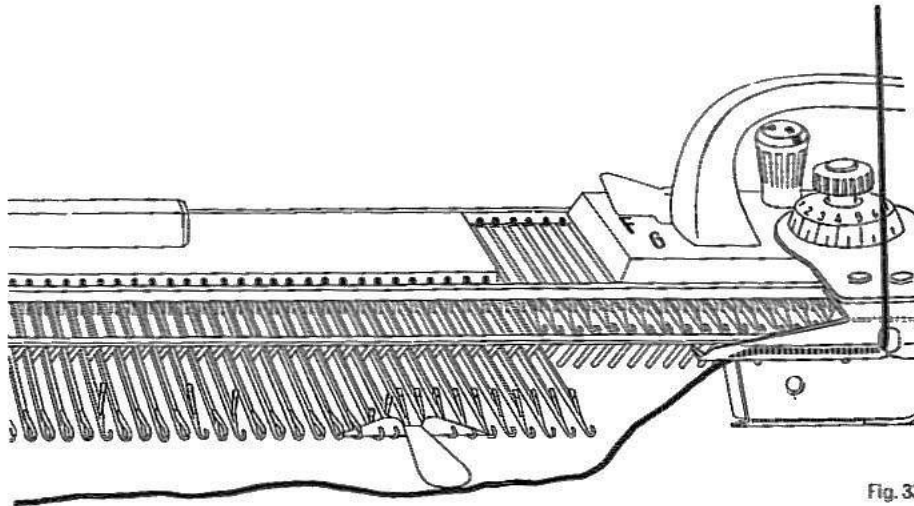


Fig. 33

The plastic accessory box

The plastic box may be inserted conveniently into one of the three slits provided at the back of the machine body, fig. 31. It contains an assortment of small tools illustrated on the inside-cover page (nos. 19-23).

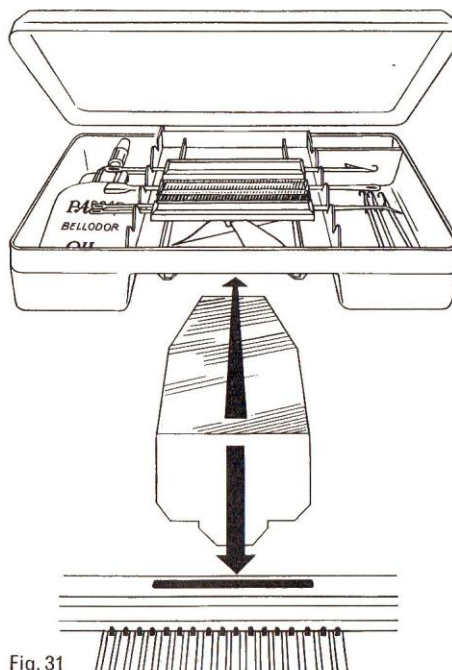


Fig. 31

Patterns for PASSAP owners

Passap is supported by a very comprehensive pattern service. There are more than 200 knitting leaflets designed exclusively for British owners of PASSAP. The range of knitting patterns is constantly being enlarged and revised to take account of current fashion trends. The store where you purchased your PASSAP has a full range of specimen patterns and is able to supply any pattern from our range to you.

To keep PASSAP owners up to date with additions to our range of patterns we have our Pattern News Service. This Service has been designed to ensure that all PASSAP owners can have up to date news of pattern leaflets and books as they are made available for a modest sum.

For details of this service please write to:

For Great Britain: PASSAP Limited,
Albany House, 365, Euston Road, London, NW. 1.

For U.S.A. and Canada: SPEED-O-KNIT Home Knitting Institute
1142 South San Julian Street, Los Angeles 15 (Calif.)

For other Countries: PASSAP-Export, Zurich 27, P. B. 350 (Switzerland)

VI

Accessories to be mounted on the machine

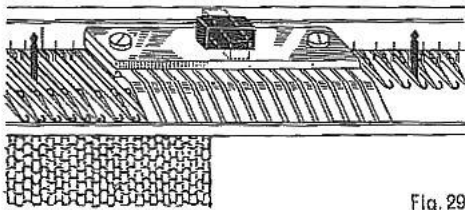


Fig. 29

The Feathercombs to ensure that the border stitches are knitted

In order to ensure perfect knitting of the border stitches the feathercombs must be fixed over the last two or three needles on each side of the work.

To remove feathercomb. Turn the red knob at right angles to the stitch scale and lift off.

To reset feathercomb. On the underside of the feathercomb there are two holes. These fit on to the pegs situated in front of the stitch scale. Place the combs on the appropriate pegs so that at least the last 2 or 3 needles in use are covered and turn the red knob parallel to the stitch scale to lock feathercomb in position. Fig. 29.

Important. Make sure that two or three latch needles are completely covered and that no open needle head is jammed in the feathercomb.

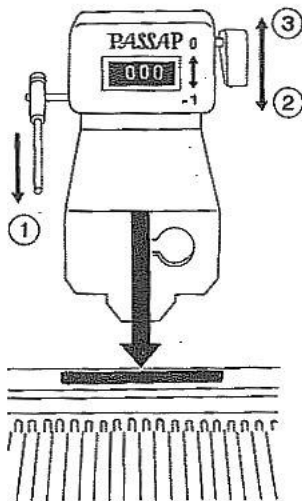


Fig. 30

The Row Counter

When the row counter is used, it is inserted into one of the three slits provided at the back of the machine body according to which part of the machine is being used. Fig. 30. The PASSAP row counter works with a three-way action:

1. When the driving lever at the left side of the row counter is pressed backwards one figure is added. This is done automatically when the lock is moved from one side to the other of the machine, past the row counter.
2. When the white reset handle at right hand side of row counter is pressed downwards to the (-1) mark, one figure is deducted (backward counting).
3. When the white reset handle at right hand side of row counter is pressed upwards to the "0" mark, all figures snap back to 000.

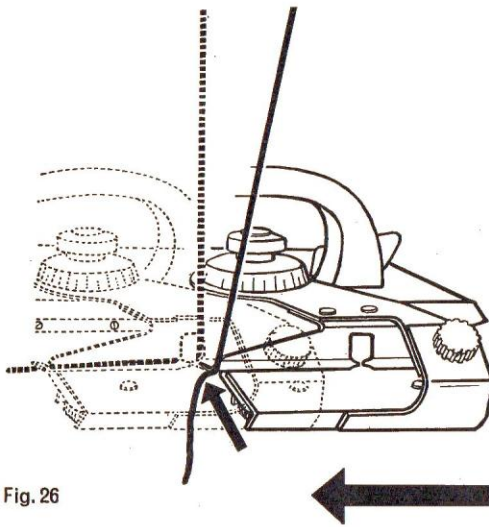


Fig. 26

Now move the lock slightly to the left and hold the yarn lightly and it will automatically pass into the central position. Fig. 26.

The Tension Discs to regulate the tension of the yarn

The tension of the yarn is regulated by these discs at the top of the mast. For smooth, even knitting the tension arm should be bent forward at a right angle to the mast. If the tension is insufficient (i.e. the tension arm is pointing upwards) the white plastic tension regulator below the discs should be turned in the "+" direction. If the tension is too strong (i.e. the tension arm is bent downwards) the white plastic tension regulator should be turned in the "-" direction. This enables you to vary your tension according to your requirements. Fig. 27.

The yarn must always run smoothly and evenly from the ball, to ensure a nice evenly knitted fabric. If the yarn does not run smoothly from the ball, its passage through the eyelets and tension discs becomes jerky and will affect the even tension of the fabric. A wool-winder to produce a ball which pulls from the centre is an asset but is not essential provided the yarn flows freely from the yarn holder.

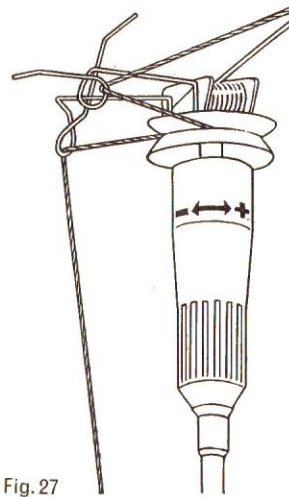
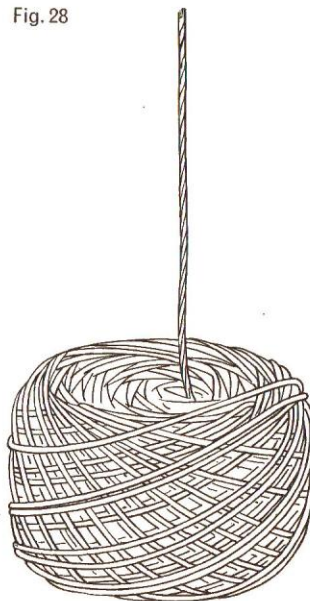


Fig. 27

Fig. 28



V

The Wool Feed

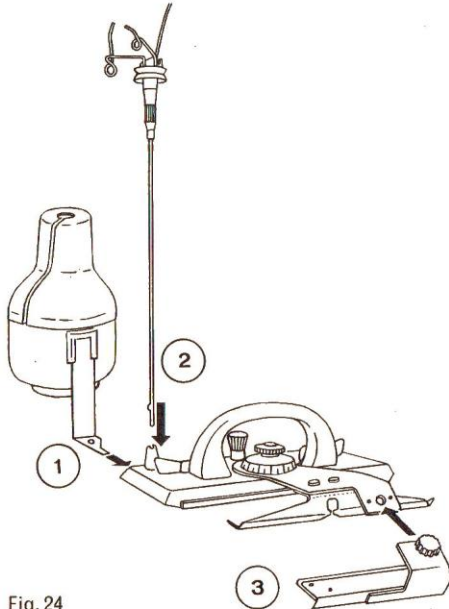


Fig. 24

How to mount the Yarn Holder and the Stripper

1. Insert bracket of yarn-holder into the slit at left-hand side of rear of lock and place yarn-holder on to its bracket.
2. Place mast of Wool Feed into the metal boss (behind F-G-lever) so that the key on the mast fits into the niche in the boss, thereby securing the bracket of the yarn-holder in place.
3. Screw on stripper at front of lock.

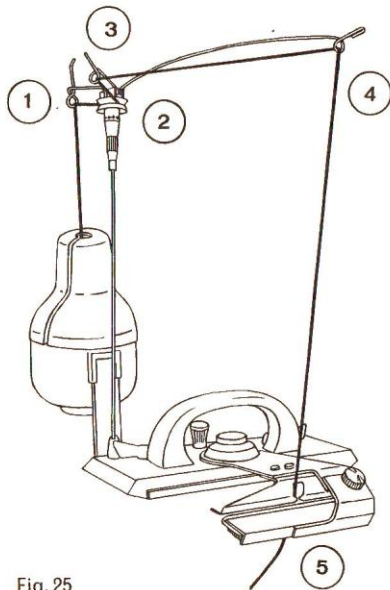


Fig. 25

How to thread the yarn.

Place ball of woole in the yarn holder, pick up loose end of wool with the right-hand and pull it through hole in lid, and thread in as follows:

1. Behind the mast and slightly to the right upwards through rear eyelet.
2. Forwards between the tension discs on the right hand side
3. From above through the centre eyelet.
4. From left and above through front eyelet on tension arm.
5. It is then passed through the slit of the feeding eyelet immediately above the stripper and from the left between stripper and striking comb as shown in following Fig. 26.

IV

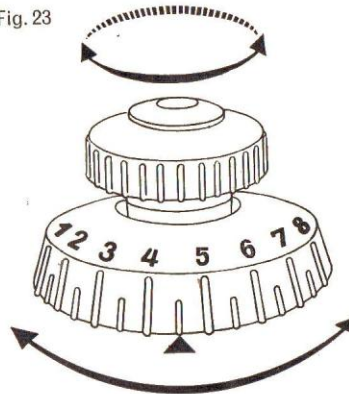
How to alter the stitch size for various thicknesses of wool

The Stitch Regulator

Just as in handknitting you vary the size of your knitting needles to the thickness of wool which you are using, so with the Passap Automatic lock you adjust the size of stitch by means of the numbers shown on the Stitch Regulator. For thick wool you use high numbers, for finer yarns you use low numbers.

Unscrew adjustment knob and turn the disc of the stitch regulator until the small red arrow points to the required number. Fig. 23. Then tighten the knob again to secure the disc at the selected stitch number.

Fig. 23



How to knit your tension square

With the yarn you propose to use cast on 70 stitches and knit 70 rows in the chosen pattern. Remove this tension square from the machine without casting-off (after finishing the garment, you can unravel this square and use the wool for making seams), lay it out flat on the table but without stretching and leave it for 24 hours. Now with a tape-measure, count the stitches and rows required to make 2" (measuring in the middle of the tension square). For patterned garments always knit and measure the tension square over a complete pattern section.

When you have noted the measurements of your tension square you can easily relate it to your paper pattern and calculate how many stitches are to be cast on, how many rows are to be knitted, as well as the number of stitches to be increased or decreased.

For example. Your tension square shows that you have 20 stitches to 2 inches. This is of course, 10 stitches to the inch. Therefore, if you need 16 inches for the waist (32 inches circumference) you need to cast-on 160 stitches to give you 16 inches of knitted fabric. In the same way you can easily work out the number of rows required to be knitted for the particular pattern.

To make a paper pattern see pages 43 and 44.

**General Guide
to adjustments for various thickness of wool**

Material	Size of Stitch No.	Texture of Fabric
Crochet Cotton	1 -3	Knitting with consecutive needles in use
1 ply Wool	1 -2	Knitting with consecutive needles in use
2 ply Wool	1 -3	Knitting with consecutive needles in use
3 ply Wool	1½-4½	Knitting with consecutive needles in use
4 ply Wool	3½-5	Knitting with consecutive needles in use
Crochet Cotton	4 -5	Open-work fabric
Synthetic Raffia	5	Open-work fabric
Double Knitting	4½-6½	Plain knitting with alternate needles in use

IMPORTANT! Note: The foregoing is only a general guide and it is absolutely essential that, before you knit a garment from any pattern, you first knit your tension square to check that you have the correct number of stitches and rows to the inch.

The numbers given on the Stitch Regulator **do not** correspond with the numbers of handknitting needles.

The F-G lever (left hand lever)

The function of this lever is to enable the side cams to be locked (when set at G) when the yarn is fed by hand.

F = **Normal Position** when knitting with wool feed. Fig. 18.

G = For knitting when the yarn is hand fed (the needles being in Yarn-Receiving Position). The side cams are locked. Fig. 19. It is advisable also to set the lever at G when knitting with the less elastic yarns such as crochet cotton, synthetic raffia etc.

It will help you if you try out the different positions of the levers and knobs and see how they affect the operation of the various cams on the under-side of the lock. In this way you will get to know the working procedure of your Automatic-Lock.

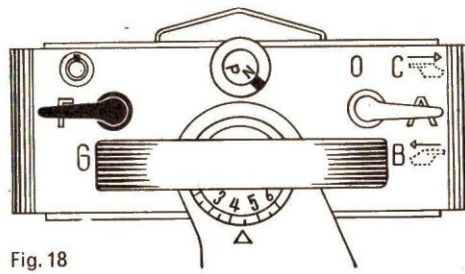


Fig. 18

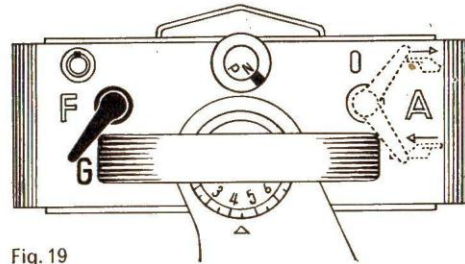


Fig. 19

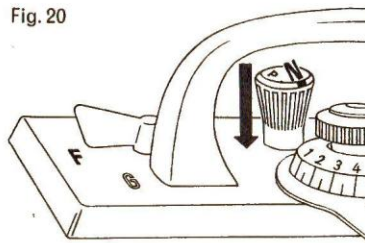


Fig. 20

The N-P Knob

The N-P Knob controls the centre cam and enables its function to be varied as set out hereunder.

Pressed down and set to N:

Normal Position for all normal working except when knitting double-sided Fisherman's Rib with the Ribbing Attachment. Fig. 20.

Pressed down and set to P: For double-sided Fisherman's Rib with the Ribbing Attachment **only**. Fig. 21.

Pulled up: The centre cam is put out of function. It is also in this position for certain Fairisle work (as described in later pages) and also enables the lock to be moved from side to side of the machine without the needles knitting (Fig. 22) when the A-B-C-lever (right-hand lever) is set to 0 (see Fig. 17).

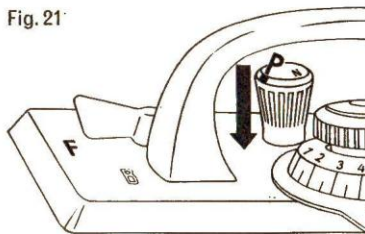


Fig. 21

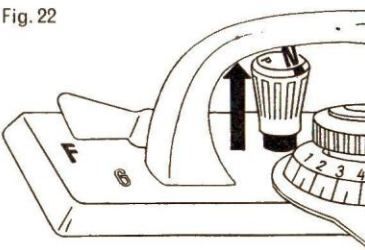


Fig. 22



Explanation of the levers of the lock and their use

The A-B-C-lever (right-hand lever)

The function of the A-B-C-lever is to enable the side cams to be raised or lowered so that the path followed by the feet of the latch needles may be altered according to the required knitting procedure.

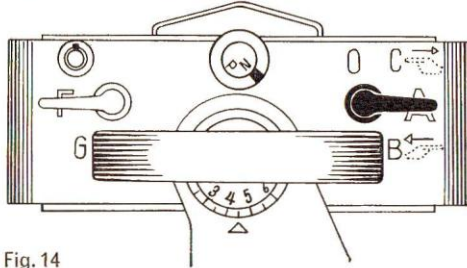


Fig. 14

A = Normal position for knitting plain stocking stitch with the Automatic Wool Feed. Both side cams are in the lower position and are therefore in function. Fig. 14.

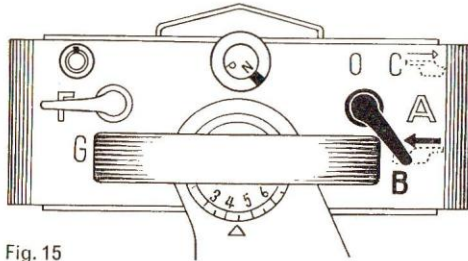


Fig. 15

B ← to return the needles from the Yarn-Receiving Position to the Working Position when the lock is on the right of the machine. The left hand cam is raised and is therefore out of function. The arrow indicates the direction of the lock movement to the left. Fig. 15. After knitting the row return lever to A.

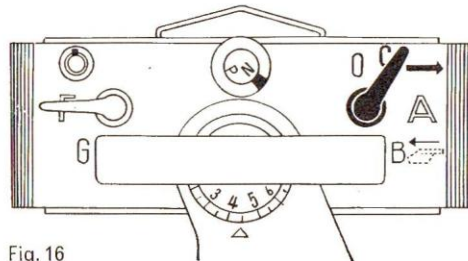


Fig. 16

C → to return the needles from the Yarn-Receiving Position to the Working Position when the lock is on the left of the machine. Now the right hand cam is raised and is therefore out of function. The arrow indicates the direction of the lock movement to the right. Fig. 16. After knitting the row return lever to A.

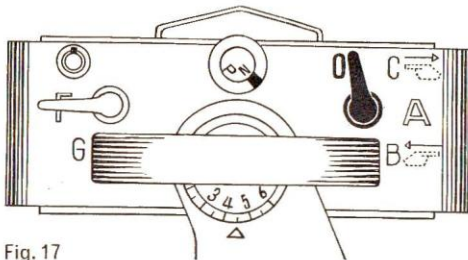


Fig. 17

0 = In this position both side cams are raised and are therefore out of function. By pulling up the N-P knob at the same time (see Fig. 22) the centre cam is also put out of function and the lock may be moved from side to side of the machine without any movement of the needles.

The hand indications are used in certain pattern work and are explained in a later instruction.



The Lock

How to remove the lock from the machine

Press the end stop release button at right or left of the machine and slide the lock from needle bed. Fig. 11.

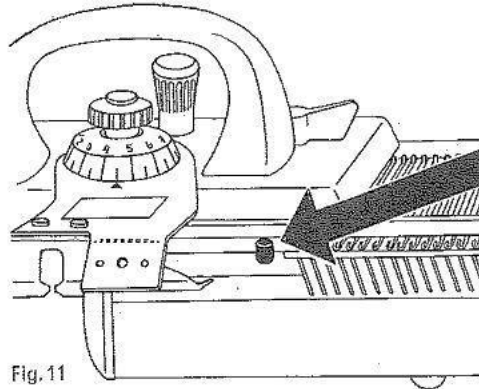


Fig. 11

This is the under-side of the lock

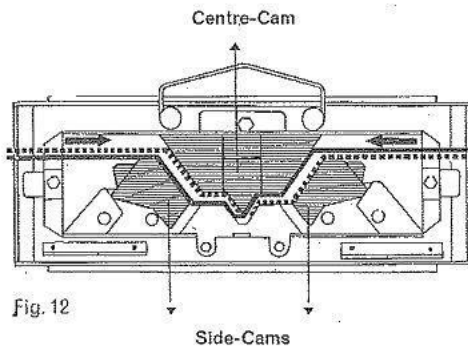


Fig. 12

The Centre-Cam. This is controlled by the N-P knob. When the N-P knob is pressed down and set at N for knitting basic stocking stitch, the movement of the lock across the needle-bed causes the needle feet to follow a path along the edges of the cams as indicated by the black dotted line (Fig. 12) thus causing the needles to follow the cycle of movements as described in Figs. 1 to 7. When the N-P knob is pressed down and is set at P the tip of the centre cam is withdrawn: this is to enable you to knit double-sided Fisherman's Rib with the Ribbing Attachment.

The Side-Cams are operated by the A-B-C-lever (right-hand lever) and can be locked by the F-G-lever (left-hand lever).

How to oil the lock

Before the lock is taken into use and later on from time to time, the under-side of the lock should be thoroughly cleaned with a dry soft cloth and then lightly oiled with a slightly oily cloth along all edges of the various cams (see black markings) Fig. 13. Use PASSAP-Bellodor oil or, failing this, only the finest sewing-machine oil. **Never** use ordinary mineral oils, vaseline oil, vegetable or salad oil.

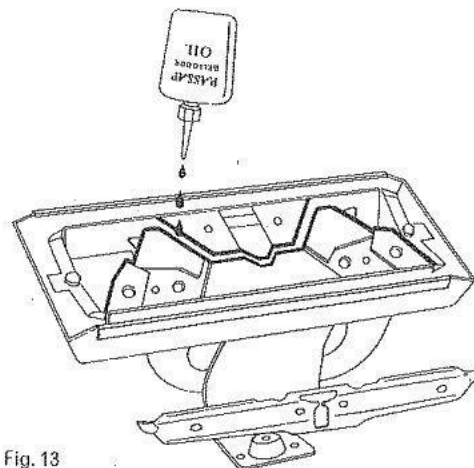


Fig. 13

Too much oil does more damage than too little oil!

Important. Fruit and other acids adversely affect the machine, latch needles and lock — therefore the greatest care should be taken that the hands are clean when handling both the machine and the knitting!



Replacement of a latch needle

The needles are made of finest quality steel and will stand up to hardest use. In spite of this, a needle can be damaged once in a while (for instance a latch could possibly get bent) but it can easily be replaced.

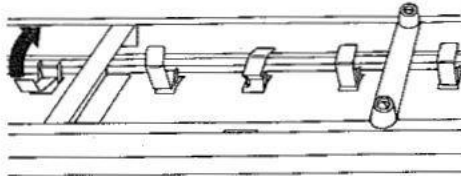


Fig. 8

Remove the lock and turn the machine upside down. It will then rest on the red pin border of the striking comb. Open the fixing clamps now visible behind the front sliding rail, Fig. 8. In order to replace 1 needle, about 4 or 5 of the clamps should be opened.

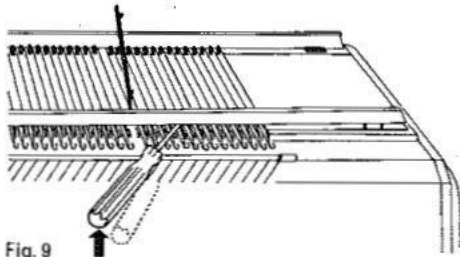


Fig. 9

Place machine on its rubber feet again. Giving a slight lift to the front sliding rail, take the foot of the damaged needle, push lightly forward, then lift it and pull the needle out from the rear. Fig. 9. Insert new needle with closed latch under the front rail from behind then press down the front rail and projecting clamps.

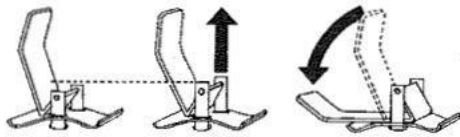


Fig. 10

Turn the machine upside down again and close the fixing clamps by first lifting and then pressing them forwards and downwards.

The clamp is not correctly fixed, unless the little steel plate lies, flat on the underside of the machine body. Fig. 10.

Cleaning of the needlebed

Inevitably particles of wool (wool dust) will accumulate on the needlebed as a result of knitting. The needle channels must therefore be cleaned from time to time with a soft clean dusting brush. The rails should also be polished with a soft cloth.

After having cleaned the needlebed, slightly oil the needle feet and along the sliding rails. A few drops of PASSAP-Bellodor oil on a soft cloth are sufficient.

If the movement of the lock appears stiff and the needles do not slide easily in their channels, it is a sure sign that your machine needs cleaning. If this is the case, you are strongly advised to send your PASSAP-Automatic (carefully packed, please!) to the nearest PASSAP-service dealer for a general check-up and thorough cleaning.

How the latch needle forms a stitch

The dotted line shows the fixed position of the striking comb.

Needle in working position, the stitch being held in the hook of the needle. Fig. 1.

The needle moves forward and the old stitch automatically opens the latch. Fig. 2.

The needle moves forward to the limit of its forward movement and the stitch slides behind the open latch (Yarn-Receiving Position). Fig. 3.

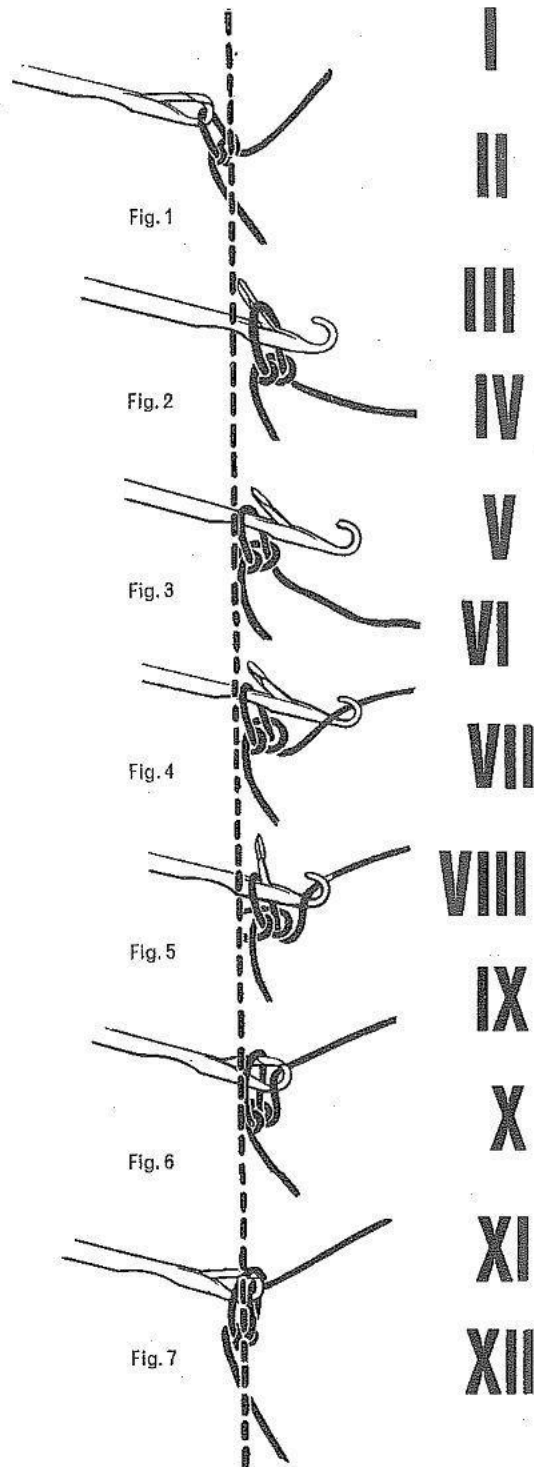
At this stage the yarn is automatically fed into the hook of the latch needle. Fig. 4.

The needle now moves to the rear and the old stitch begins to close the latch. Fig. 5.

The needle moves still further to the rear, the old stitch closing the latch. The yarn is thus trapped in the closed head of the latch needle. Fig. 6.

The needle now moves back into Working Position. The old stitch slides forward over the closed needle head: exactly the same cycle of movements is repeated and the new stitch is formed. Fig. 7.

This movement is repeated continuously however many latch needles are in use. Since this cycle of movements is always the same, it follows, that always the same type of basic stitch is formed, namely STOCKING STITCH with the purl side facing the knitter.

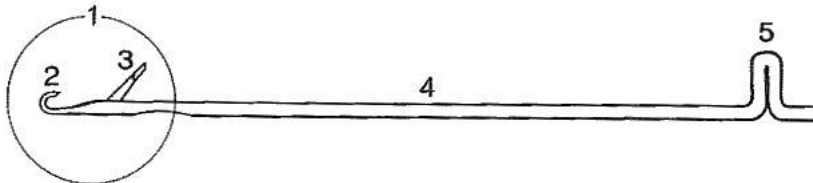


Some Fundamental Explanations



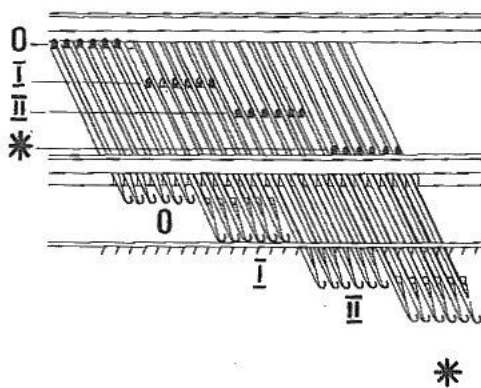
These explanations will help you considerably to fully understand your machine and how it works

The Latch Needle in the Needle-bed



1 = needle head, 2 = hook, 3 = movable latch (tongue), 4 = needle shaft, 5 = needle foot

The Four basic positions of the latch needles



0 = **The Neutral Position.** The needles are fully withdrawn in the needle-bed with the needle feet touching the rear rail. In this position, the needles are completely out of function

I = **The Working Position.** (For automatic feeding of the yarn). The needle feet are in the rear third of the needle-bed with the needle-heads just behind the striking comb.

II = **The Yarn-receiving Position.** (For hand feeding of the yarn). The needle feet are in the front third of the needle-bed with the tongues of the open latches level with the pins of the striking comb and the stitches are held on the needle shafts behind the open latches.

* = **The Rest Position.** The needles are fully extended in a forward position with the stitches held on the needle shafts further behind the open latches and against the striking comb. In this position the needles are out of function. This position is used for turning heels, graduations, patterning with "loops", etc.

The latch needle in the needle bed I
 Four basic positions — How a stitch is formed — Replacement of a latch needle —
 Cleaning of the needle bed

The lock II
 How to remove the lock — The under-side — How to oil the lock

Explanation of the levers of the lock and their use III
 A-B-C-lever — F-G-lever — N-P-knob

How to alter the stitch size IV
 Stitch regulator — Guide to adjustments

The wool feed V
 Mounting — Threading of the yarn — Tension regulation — Yarn ball

Accessoires to be mounted on the machine VI
 Feathercombs — Row-counter — Accessory box

Casting on and knitting VII

Increasing, decreasing and casting off VIII

Buttonhole — Corrections — Crocheting IX

How to knit graduations X

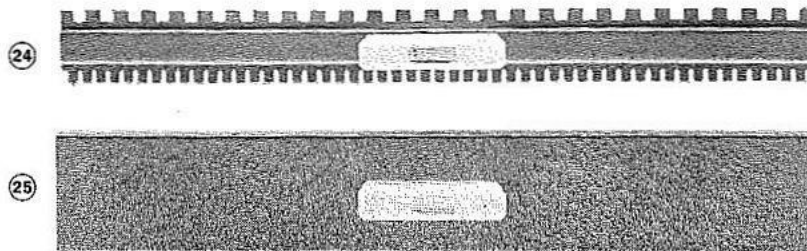
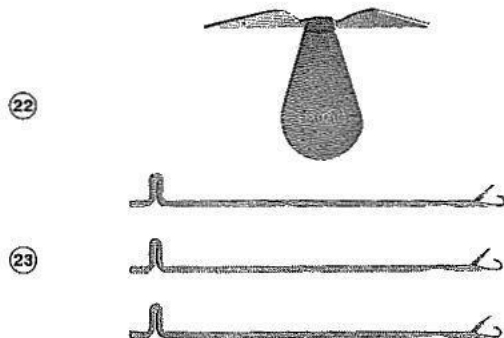
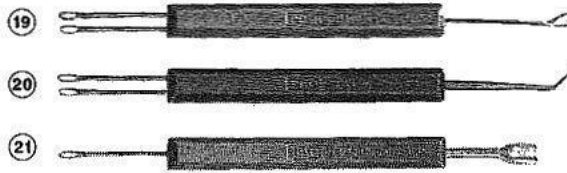
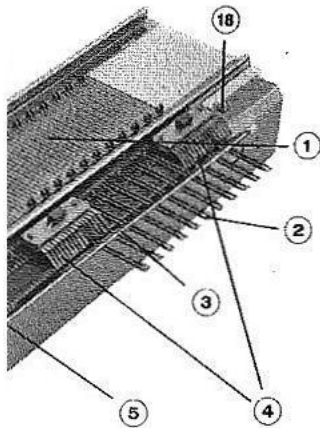
How to knit a baby-sock XI

Attractive basic patterns XII
 "Loop" patterns — Two-colour patterns with hand feeding — Patterning with colour
 change — Open work designs



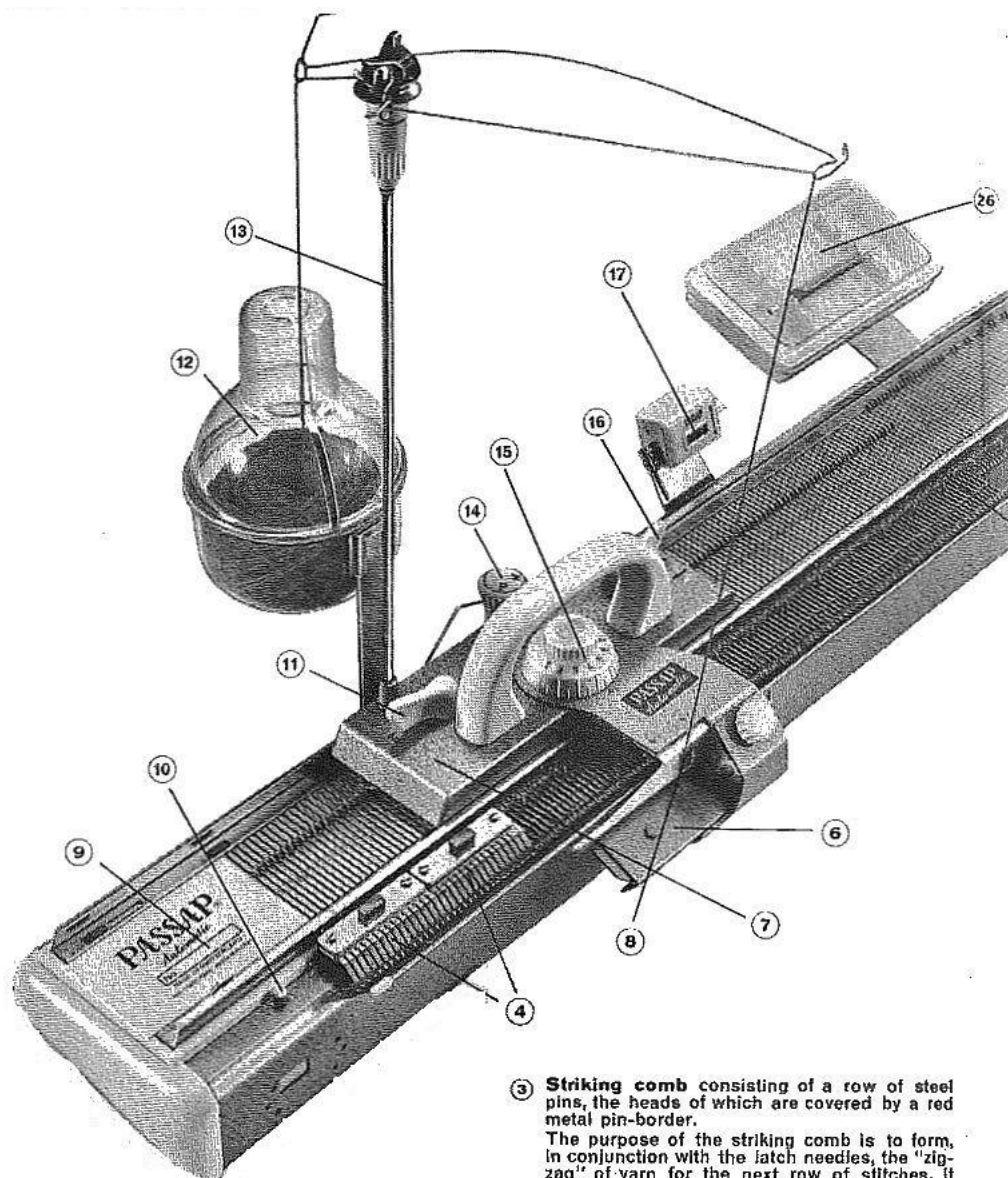
Special guidance for the advanced PASSAP-knitter *
 Seams — Knitting in Yarn-Receiving Position — Basic patterns





- ⑧ **Feeding Eyelet** above the stripper. Through this eyelet the yarn is guided into the open needle heads when knitting. To enable colour changes without breaking off the yarn, the feeding eyelet is furnished with a slit.
- ⑨ **PASSAP Trademark** with serial number of the machine.
- ⑩ **End-stop release left**, enables the sliding lock to be removed from the machine from the left hand side.
- ⑪ **F-G-Lever** (left-hand lever) to lock the spring side cams.
- ⑫ **Yarn-holder with lid and bracket**. The bracket is to be inserted into the slit at the left-hand side of rear of lock at the same time as the mast is fixed in place.
- ⑬ **Wool Feed** consisting of metal mast, tension arm, tension discs with tension regulator and various conducting eyelets. It is to be inserted into the metal boss at the left-hand side of rear of lock (behind F-G-lever). It also secures the bracket of the yarn-holder.
- ⑭ **N-P-knob** operating the centre cam of the lock.
- ⑮ **Stitch Regulator** with adjustment knob. To adjust the lock to required size of stitch according to the thickness of the wool being used.
- ⑯ **A-B-C lever** (right-hand lever) operating the side cams of the lock.

- ⑰ **Row Counter** with three way action, counts forwards, backwards and snaps back to 000. To be inserted into one of the three slits provided at the back of the machine.
- ⑱ **End-stop release right**, enables the sliding lock to be removed from the machine from the right hand side.
- ⑲ **Green tool** comprising one single latch needle at one end and, at the other end, one double-decker needle.
- ⑳ **Red tool** comprising an angled point at one end and a double-decker needle at the other.
- ㉑ **Blue tool** comprising at one end a cup-end (fitting the needle feet) for moving the latch needles and a single decker-needle at the other end.
- ㉒ **Latch opener (Cupid's Bow)**. Its straight edge to be guided along the hooks of the latch needles thus opening the latches.
- ㉓ **Three spare latch needles**.
- ㉔ **Pattern ruler** for group selection of the latch needles when patterning. One side for 1-1 division, other side for 2-2 division of the needles.
- ㉕ **Block ruler**, for altering the position of the latch needles for pattern work or for steadying the needle feet when casting on, transferring stitches, etc.
- ㉖ **Accessory box** for the standard tools to be inserted at the back of the machine body.



PASSAP Automatic

- ① Needle-bed of rust protected steel with 201 separate needle channels.
- ② 201 latch needles of high grade steel, moving smoothly in the needle channels which carry the stitches of the knitting.

- ③ Striking comb consisting of a row of steel pins, the heads of which are covered by a red metal pin-border. The purpose of the striking comb is to form, in conjunction with the latch needles, the "zig-zag" of yarn for the next row of stitches. It also serves, in conjunction with the stripper, to press down the previous row of stitches.
- ④ Feathercombs of spring steel with red securing knob. To be placed onto the pegs (situated in advance of the front rail) to cover the last few needles in use on either side of the knitting. They ensure the perfect knitting of the border stitches.
- ⑤ Stitch-scale, a red metal strip affixed to the front rail enables the knitter to count up to 201 stitches. It is numbered from the central point of the needle-bed, to left and right, from 1 to 100.
- ⑥ Stripper to be fixed to the front of the lock with an adjustment screw. Its purpose: to press the previous row of knitting down against the striking comb so that the next row of stitches may be formed. The stripper avoids the necessity of weights or sinkers.
- ⑦ Sliding lock, for operating the needles knitting.

To all who love beautiful knitting!

We welcome you as the proud owner of your beautiful new knitting machine "PASSAP-AUTOMATIC" and wish you many happy hours of successful knitting.

The "PASSAP-AUTOMATIC" has been designed specially with YOU in mind—to make home knitting easier for YOU and more enjoyable.

Its special advantages are:

Best quality materials — Swiss Precision engineering — simplicity in use and maintenance and the beautiful, hand-knit-like texture of the fabric produced.

This is not surprising — for we are able to draw on almost 20 years' of experience in designing, manufacturing and marketing of our PASSAP Handknitting Machines.

Its special advantages are:

Best quality materials — Swiss Precision engineering — simplicity in use and maintenance and the beautiful, handknit-like texture of the fabric produced.

In 1939, at the Swiss National Exhibition in Zurich, the first home knitting machine was shown under the name

Patent Schnell Strick Apparat

(Patented apparatus for fast knitting)

For nearly 10 years, PASSAP was the sole hand knitting machine on the market and it was not until some time later that other makes appeared. The trade-name PASSAP with its background of years of pioneer work is your best guarantee for proved quality. Our latest model, the PASSAP-Automatic, gives you the best your money can buy.

Look at these advantages:

- | | |
|---|--|
| Solid, all-steel construction | Swiss precision engineering |
| 201 latch needles | Great width of fabric |
| 7 needles to the inch | minimum retraction of fabric |
| Perfected Wool Feed | Maximum speed with minimum effort — including the ability to use additional colours without breaking the yarn. |
| Four basic positions of the latch needles including two working positions | Fairisle Patterns and individual shaping as if done by hand. |

And when presently you buy the Passap Ribbing Attachment you will even be able to knit double-sided Fisherman's Rib automatically! In the main part of this book under the heading "The A-B-C of PASSAP Knitting" you will find a wealth of information. In addition to this we give you on the last pages a few special tips for pattern work which, later on, when you have become an expert PASSAP-knitter will be very useful to you in creating your own ideas. You will be amazed at the versatility of the PASSAP-AUTOMATIC and will soon prove for yourself that

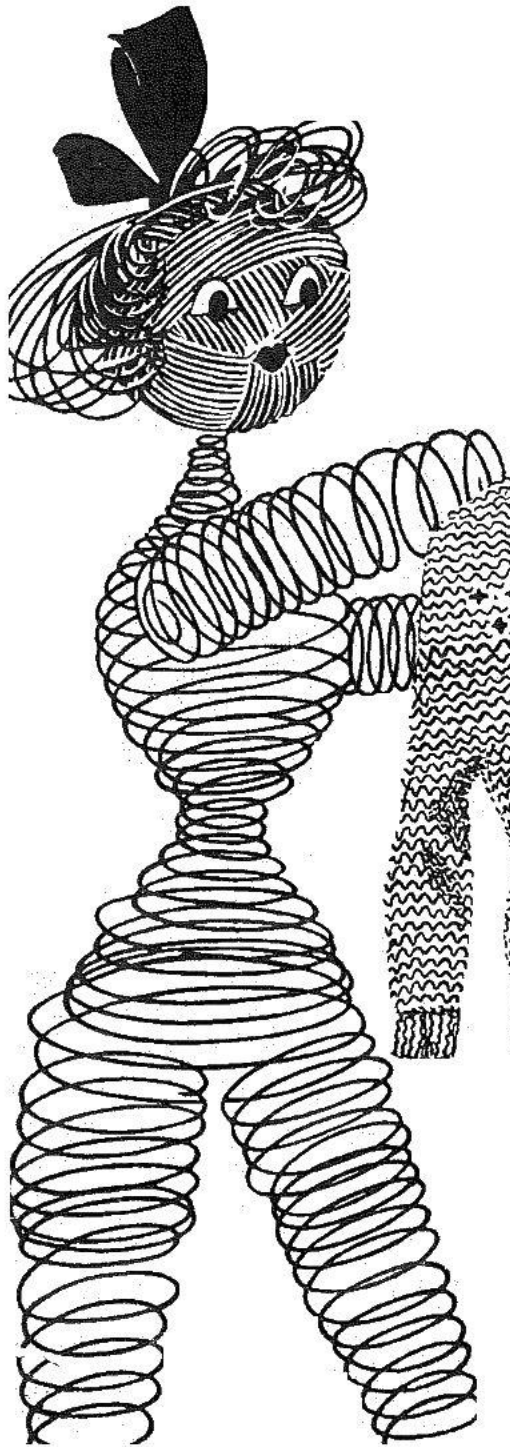
with PASSAP ambition is unlimited
and PASSAP-knitting means pleasure!

PASSAP-Export, Zurich

NOTE:

There is a Passap dealer in nearly every sizeable town in Great Britain. By our conditions of dealership each Passap dealer has a member of his staff "PASSAP" trained to help YOU. Every Passap dealer will gladly give you **free tuition and advice** in his premises so please call on him and enjoy the full benefits of having become a member of the "PASSAP Family". In case of difficulty please do not hesitate to write to:—

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