

PASSAP M 201



PASSAP M 201[®]

Take care of your handknitter!

In USA

SPEED-*Q*-KNIT[®]

You will always enjoy knitting and avoid repairs if you observe the following points:

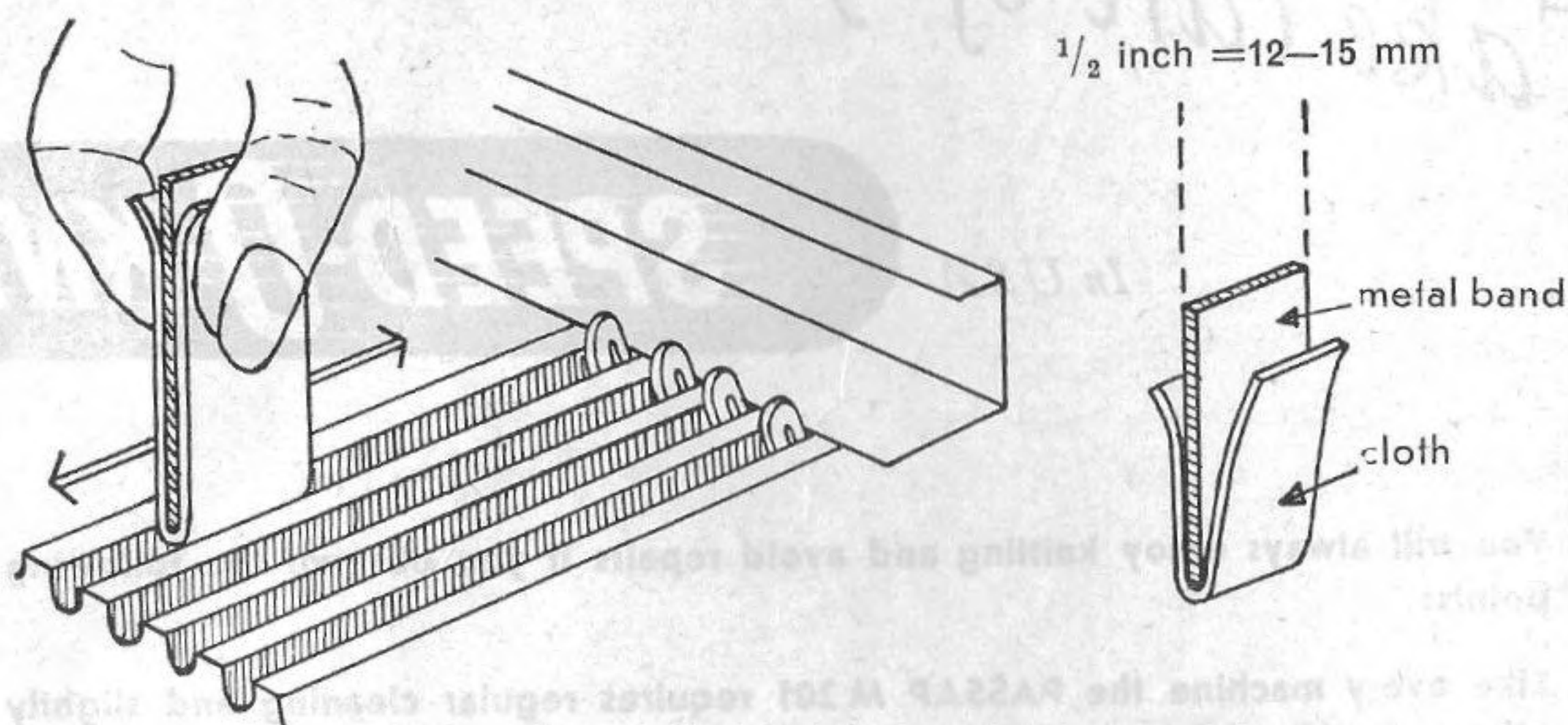
Like every machine the PASSAP M 201 requires regular cleaning and slightly oiling of all movable parts. If you neglect this you risk that some parts of the machine will not function properly and when forced may take damage. We know from experience that most handknitters we receive «for repair» do lack nothing but thorough cleaning and proper oiling.

Cleaning:

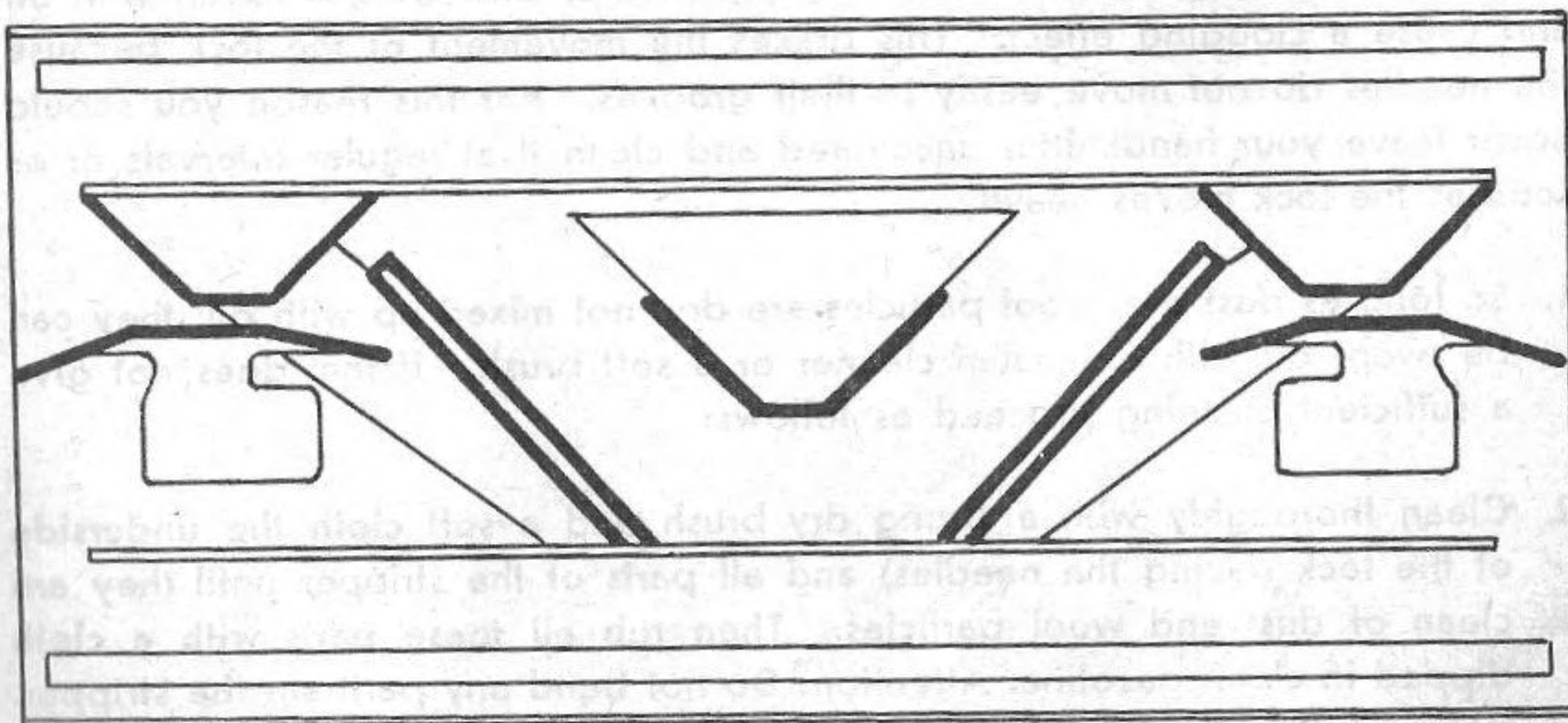
The machine may get soiled with wool particles or dust which mix up with oil and cause a clogging effect. This brakes the movement of the lock because the needles do not move easily in their grooves. For this reason you should never leave your handknitter uncovered and clean it at regular intervals or as soon as the lock moves heavily.

1. So long as dust and wool particles are dry, not mixed up with oil, they can be swept off with a vacuum cleaner or a soft brush. If that does not give a sufficient cleaning proceed as follows:
2. Clean thoroughly with a strong dry brush and a soft cloth the underside of the lock (facing the needles) and all parts of the stripper until they are clean of dust and wool particles. Then rub all these parts with a cloth dipped in clean gasoline. Attention: Do not bend any parts on the stripper. Wipe well the front and back rails on the lock.

3. Clean front and back rail on the needle bed on which the lock glides, with a soft cloth until they get bright again. Then oil **lightly**. (Dirtening of the rails makes movement of lock difficult.)
4. Push the latch-needles forward into rest-position and clean the needle bed. To do this wrap a cloth dipped in clean gasoline round a strip of sheet metal (about $\frac{1}{2}$ " wide) and wipe the needle grooves backwards and forwards with it (see design). Afterwards do the same with a dry cloth.



5. With a rag soaked in PASSAP-Bellodor-Oil, oil the needle feet lightly. (Do not use too much oil.)
 6. On the under-side of the lock along all edges of the various cams and needle rejectors pass a brush, slightly soaked in oil (see design). Remove surplus oil with cloth so that no wool particles may adhere.
- If no PASSAP-Bellodor-Oil is available, care must be taken, that only the finest sewing machine oil is used, and **never** mineral oils such as vaseline oil as these clog the machine after a short while.



7. If the lock clogs this may have two reasons:

- a) The foot of a latch needle has received a notch through a knock. This being the case you have to replace the latch needle (see below).
- b) A needle groove has received a bulge through a knock. In this case it must be replaced and this is best done by a PASSAP agent.

To find out the needle which causes the clogging push the lock several times slowly over the section where it clogs and push the easily sliding needles forwards into rest position. By this the needle causing trouble is gradually located and then you can examine the needle foot and the needle groove.

ATTENTION! Acids, and especially fruit acids, attack the latch needles and other parts of the handknitter, causing RUST. You will therefore do well to take every care when handling the machine to keep your hands clean of these acids, especially after eating fruit.

Furthermore care has to be taken, that the machine is not placed near a heater or exposed to the direct sunlight, as the influence of radiate heat is prejudicial on the machine.

Minor repairs you can do yourself:

Replacement of latch needles

The needles are made of first class hardened steel and stand up to the most severe use. If, however, in spite of this a needle should take damage it can be replaced easily.

1. Tilt the handknitter backwards so that it rests on the red needle bar as well as on the needlebed.
2. Open shutting clamps on front rails.
3. Place machine on its feet again.
4. Lift the front rail on both sides of the defective needle. Then grasp needle at foot, push slightly forward, lift it and pull it out backwards.
5. Replace new needle under the front rail from behind until it lies in the needle-groove. Then press front rail down again.
6. Tilt machine backward like under 1. Close shutting clamps by first lifting and then pressing down. In doing so the clamps which hold the front rail must stick out and the little steel plate must lie flat on the body of the machine.

Replacement of the brushes on the stripper

Although the brushes on the stripper are made of tough nylon fibre they wear out through severe use within 6—12 months. You can get new brushes from your PASSAP agent and fit them on the machine yourself.

1. Loosen the two nickelplated hexagonal screws of the brush holder (with narrow end of spanner).
2. Take out the defective brush from the side.
3. Shift in the new brush with the straight cut, longer bristles outward, flush with the outer end of the brush holder.
4. Tighten screws again.

Replacement of the adjustment springs right and left

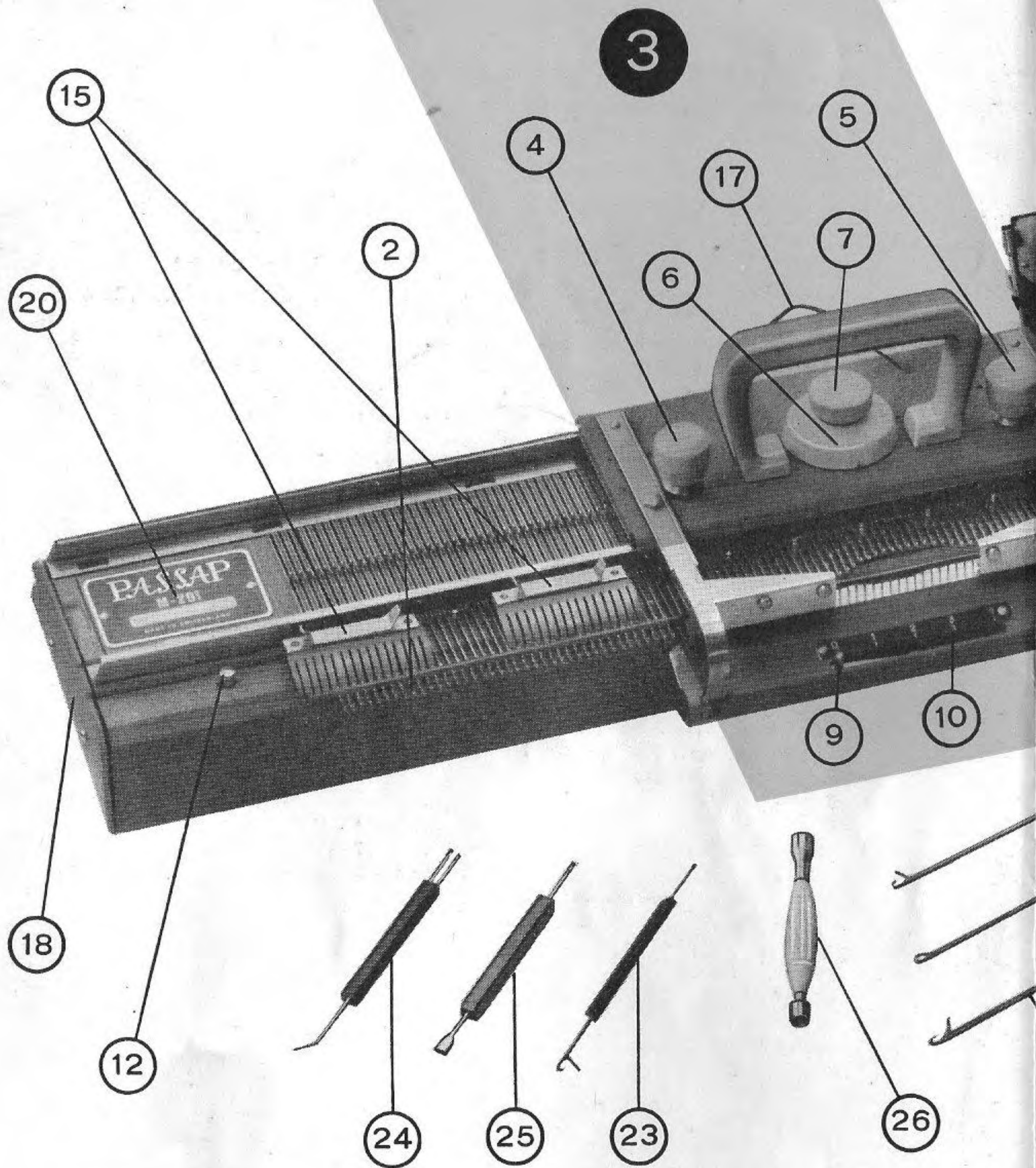
In order to bring back the needle feet into their original position after each knitted row, two T-shaped adjustment springs made of spring steel are provided at the underside of the lock, fastened with two hexagonal screws. When the adjustment springs get a severe knock the steel may break. In such a case the agent can supply replacement. The best thing to do is to unscrew the defective part and send it to the agent. For fixing the adjustment springs the thick end of the spanner is used.

The manipulation of the feathercombs

The feathercombs are planted in their two bolts, and if the red handle is parallel to the stitch scale, they are blocked and can not be taken off.

When taking them off, turn the red handle crosswise to the front.

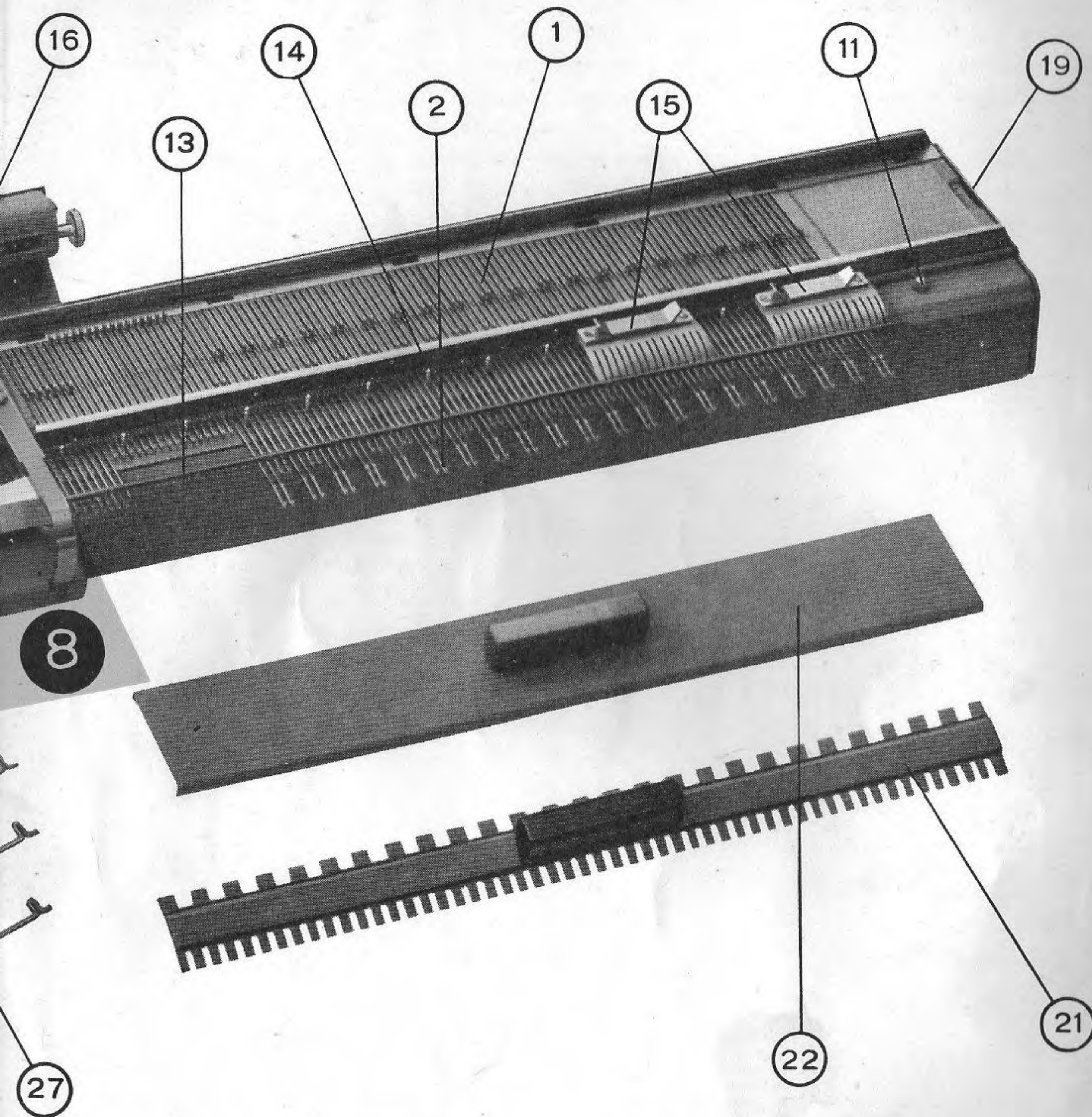
When planting them, first turn red handle crosswise to front, place comb, then turn handle parallel to stitch scale.



Handknitter

Passap M 201

- 1 **Needle bed** of rust protected steel with 201 needle grooves
- 2 **201 latch needles**, to which the knitting is permanently attached and which slide in the needle grooves of the needle bed
- 3 **Sliding lock**, by the operation of which the latch needles move backwards and forwards. This is referred to as "the lock"
- 4 **Freesetter left**, to bring the latch needles into free move position from the left
- 5 **Freesetter right**, to bring the latch needles into free move position from the right
- 6 **Adjustment disc**, for variation of the size of stitch
- 7 **Adjustment knob**, for fixing adjustment disc at size of stitch required
- 8 **Stripper** with adjustable spring, for pressing the knitting down against the striking comb



- 9 **Pointer for adjusting spring on the stripper**, for use when knitting patterns
- 10 **Scale** for adjusting spring on stripper
- 11 **Press Button right**, for removing the sliding lock
- 12 **Press Button left**, for removing the sliding lock
- 13 **Striking comb**, which keeps the yarn evenly distributed between the latch needles and presses the new row of stitches downwards
- 14 **Stitch Scale**, numbered to 201 stitches
- 15 **Feather combs**, to be fixed over the border stitches
- 16 **Row counter**, to be fixed centrally at back of machine. This is not a standard accessory
- 17 **Tripper for the row counter**, mounted on the sliding lock
- 18 **Side plate**
- 19 **Drawer right**, to keep the various crochet needles

- 20 **Name plate PASSAP** with serial number of machine
- 21 **Pattern ruler**, to select the latch needles groupwise for pattern knitting, one side for 1x1 division, other side for 2x2 division
- 22 **Block ruler**, to keep in line the feet of the latch needles when casting on and for pattern knitting and correction of knitting errors
- 23 **Crochet needle green**, one end with latch needle, the other end with eye, called "decker" needle
- 24 **Crochet needle red**, one end with angled point, other end 2 "decker needles"
- 25 **Crochet needle blue**, one end a small cup, called needle mover, other end 1 "decker needle"
- 26 **Spanner**, for assembling detachable parts of hand-knitter
- 27 **Three spare latch needles**

I N D E X

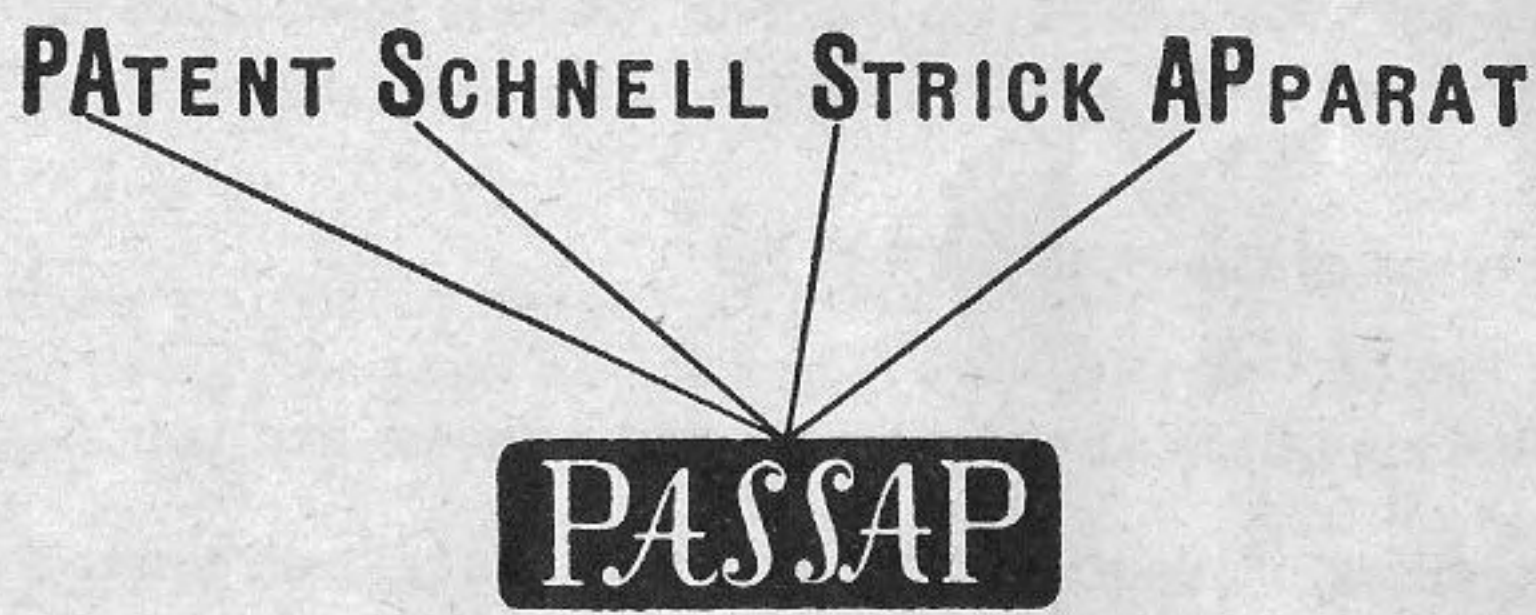
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May we present: **PASSAP M 201**

What does "PASSAP" mean? To answer this question we have to look back to 1939, when at the Swiss National exhibition our first handknitter was shown under the name

PATENT SCHNELL STRICK APPARAT



PASSAP

(Patented apparatus for fast knitting)

This was the very first handknitter on the market. Until then only the big industrial knitting machines for serial production of ready made articles were known and a simple handknitter with which housewives and homeknitters could knit individual garments was at this time new and outstanding. For nearly 10 years we were the only designers, manufacturers and sellers of handknitters until later on, when other similar products also appeared on the market. Today "handknitters" are well known to every housewife and homeknitter and the trade name "PASSAP" is a guarantee of proved quality, because of the years of pioneer work, which had been given to this problem.

Today there are two basic systems of handknitting by machines:

1. Handknitters with the "open needle" system such as the PASSAP-D evolving from the original PASSAP machine of 1939. With this handknitter **the knitting work is attached to a comb**, and the stitches are formed by lifting the rows over freely. With the PASSAP-D stocking stitch as well as garter stitch can be knitted and in fact almost all the patterns which can be knitted upon a pair of needles.

2. Handknitters with the "closed" or latch needle system like PASSAP M 201 evolving from the industrial knitting machine. With this machine **the knitting work is attached to mobile machine needles** (called latch needles), and the stitches are formed automatically. This type of machine is intended primarily for the fast knitting of stocking stitch. Garter stitch cannot be knitted by this system, but very attractive multicoloured patterns can be done by use of the special tools provided with this machine.

The PASSAP M 201 is a latch needle machine of latest construction, with 201 machine needles (the meaning of "M 201"). Its latch needles move in a needle bed of solid rust protected steel. The needles are moved by the "lock". When the lock is moved across the whole width of the machine, all the 201 needles function successively to knit one row. On the front of the lock the "stripper" is fixed by two pieces of shaped steel. This stripper has a mechanism with springs and slides along the striking comb, thus stripping down the preceding row. By means of this ingenious patent the knitting does not need to be pulled down by weights—as is the case with industrial knitting machines. Therefore knitting with PASSAP M 201 is very fast and simple. Just place the yarn over the needles, slide lock to the other side and a row is knitted.

PASSAP M 201 knits plain stocking stitch as a basic stitch. Multicoloured patterns can be knitted row by row by means of the special pattern rulers. Open work, patterns, purls, cables etc. are done with the help of crochet hooks. The speed is really quite exceptional.

Some special features of the PASSAP M 201

Rustprotected steel needlebed: unbreakable and no wear and tear.

201 strong latch needles, made of first class steel and practically unbreakable.

Narrow space between needles. Unlike other machines the PASSAP M 201 has more latch needles (namely $6\frac{1}{3}$) to the inch giving a total width of needlebed of $31\frac{1}{4}$ " so that even with the greatest number of needles of any latch machine the width of the machine is not excessive and is still comfortably easy in operation.

The narrow space between the needles ensures no stretching of the fabric so that the width of the total number of needles used is approximately the same as the width of the fabric. Varying, of course, according to the thickness of the wool used the maximum width of fabric produced varies between $28\frac{3}{4}$ " and $31\frac{1}{4}$ ".

Four basic positions of latch needles are: the neutral position, the working position, the free move position and the rest position. The desired number of stitches can as a result be disengaged entirely, or temporarily only. Rows can therefore be undone and the knitting yarn can be laid in from either side of the knitting work as may be desired.

Double adjustment: the adjustable disc on the lock permits adjustment of the mechanism according to the thickness of yarn used—exactly as one uses thicker or thinner needles in handknitting. The spring on the stripper controls the pressure of the stripper on the stitches and ensures ability to knit complicated fair Isle patterns.

Feather combs: for ensuring faultless (fool proof) knitting of the border stitch.

Solid end stop for the lock, so that the lock cannot slide out of the machine during fast knitting. These stops can be released by two press buttons at either end enabling the lock to be removed from the machine, if necessary.

Row counter, situated in full view of the knitter.

Sturdy finishing of accessories, which include the pattern ruler for selecting the needles, the block ruler to block needle feet for certain patterns and the crochet needles, easily distinguished by their different colours.

Detachable lock, which can easily be fixed underneath the machine for safe transit and storing.

The need was an instrument for housewives and homeknitters, sturdily built and easy to operate. This led us to produce the PASSAP M 201.

It was by design that we chose the narrow space between the needles, as we had learned by careful study of the problem, that only by this means could true, evenly knitted fabric be guaranteed.

We decided upon 201 needles in order to be able to knit with thick wool as well as with finer ply: even when every second needle is in the rest position you still have 100 needles with which to knit.

Deliberately we dispensed with a yarn guide since this is only worthwhile if a garment is being made in **one** colour. As soon as you knit in more than one colour the value of a yarn guide is lost through the necessity to break the yarn and re-thread with a new colour.

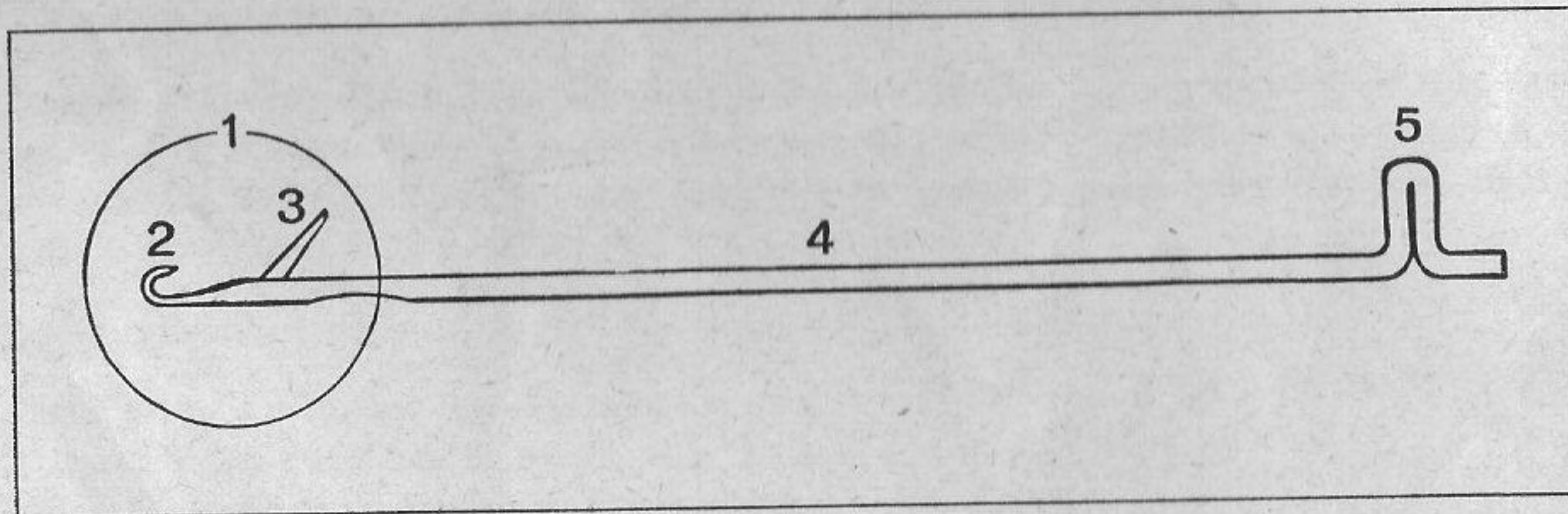
The M 201 also enables persons who have never seen a handknitter before to learn everything about it quite easily. Furthermore (as is the case of our other PASSAP-handknitters) we regularly produce knitting instructions for the PASSAP M 201. However, since the PASSAP M 201 is so very easy to operate, anyone can adapt ordinary knitting instructions so long as the basic stitch of the garment is stocking stitch.

All these advantages of the PASSAP M 201, the product of solid Swiss precision engineering are your guarantee that you own a first class, efficient latch needle handknitter and that you have fine value for your money. We therefore welcome you as a proud owner of our PASSAP M 201 and wish you many happy hours and success in your knitting.

PASSAP / Zurich

Instructions for knitting with PASSAP M 201

The latch needle



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

How does a movable latch needle form a stitch?

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

Starting position, former stitch behind the opened latch, place yarn into hook of opened latch. Fig. 1.

The needle moves backwards and with this movement the previous stitch raises the tongue. Fig. 2.

The needle moves further backwards, and the previous stitch closes the latch, which means that the yarn for the next stitch is held in the closed needle head. Fig. 3.

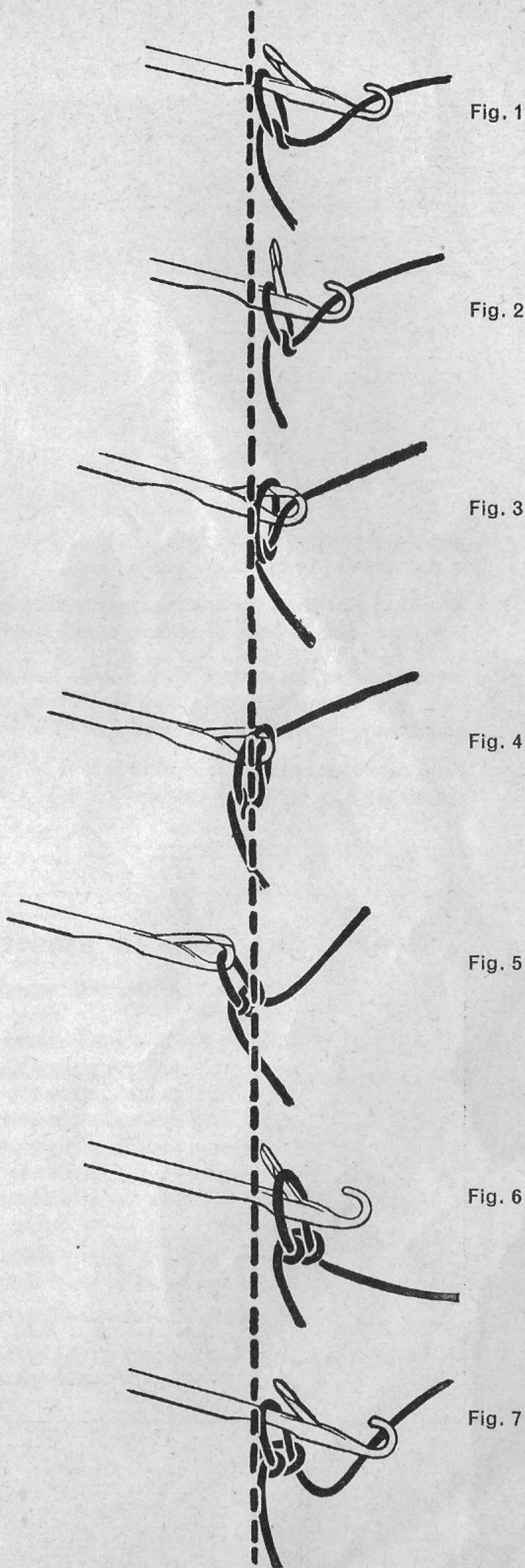
The needle moves still further backwards, the striking comb holding up the "captured" yarn, while the previous stitch slips down forwards over the closed needle head. Fig. 4.

The new stitch is held now in the closed needle head. Fig. 5.

The needle moves forward again, so that the new stitch opens the latch. Fig. 6.

The needle moves still further forward, the stitch slides over the opening latch, as starting position for the next stitch. Fig. 7.

This "crocheting" of the latch needle as described is performed by every latch needle, one after the other, when the sliding lock is moved. As the procedure is always the same, the one type of stitch only is produced, namely stocking stitch with the purl stitch side facing knitter.



The four basic positions of the latch needle of the PASSAP M 201

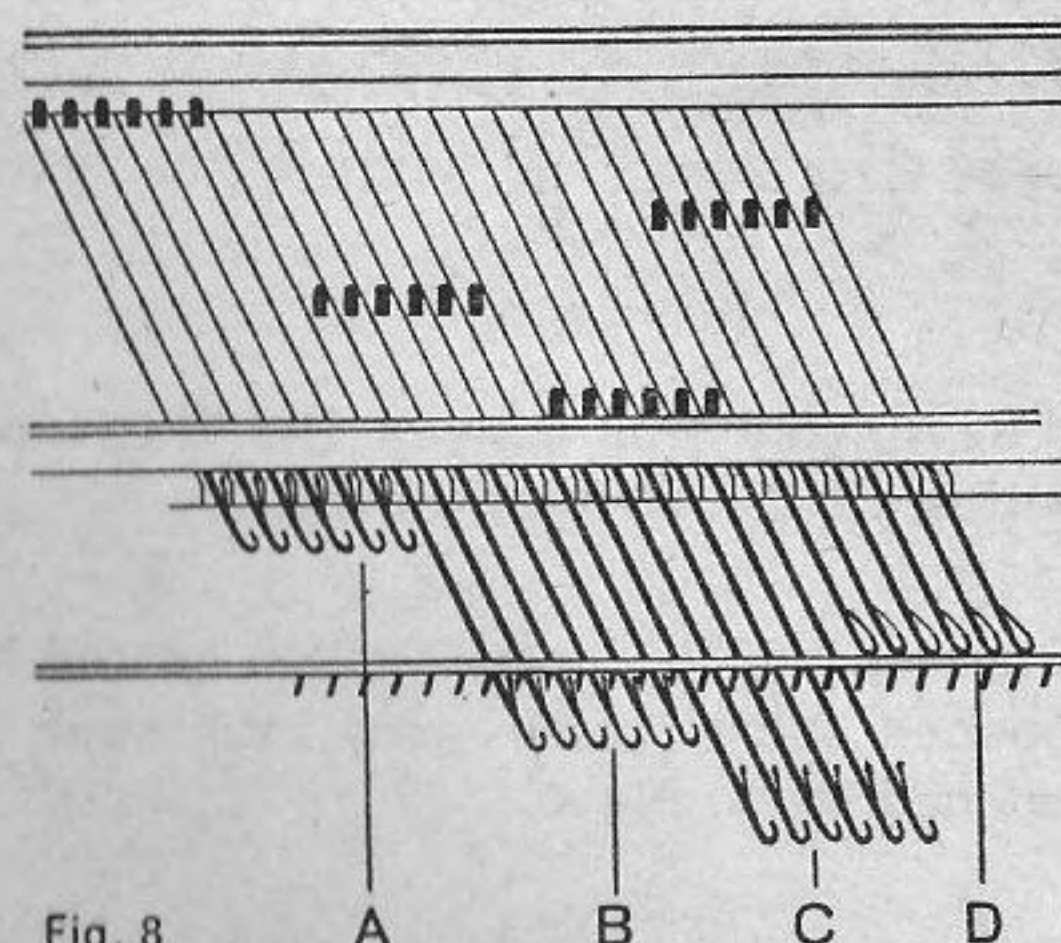


Fig. 8

Neutral position, needle foot is touching the extreme back of needle bed, the needle itself is completely out of action. Fig. 8A

Working position, for knitting, needle foot is in front third of needle bed. Needle head with open latch in front of striking comb, and the stitch behind the open latch. Fig. 8B

Rest position, for pattern work, needle foot at extreme front of the needle bed, the needle head with open latch protruding far in front of the striking comb, needle is out of action temporarily, the stitch is on needle shaft in front of striking comb. Fig. 8C

Free move position, the needle foot is in back third of needle bed, the needle head with closed latch is behind the striking comb and the stitch is in the closed needle head. Fig. 8D

General directions for adjustments in plain knitting

1. For normal knitting, when consecutive needles are in working position:

Double Knitting wool approx. sizes 7—8

4-ply wool approx. sizes 4½—6

3-ply wool approx. sizes 2½—4½

2-ply wool approx. sizes 2—4

1-ply wool approx. sizes 1½—3

Cotton yarns are variable in size but with experience you will quickly learn to adjust the size of stitch to the thickness of the yarn you wish to use.

2. Every second latch needle in working position:

Swift knit types of wool approx. sizes 5½—8

For pattern work the adjustment disc should be set one size lower.

Important: When setting the spring of the stripper, the adjustment disc for the size of stitch should be set one number lower.

Adjustment for size of stitch with adjustment disc

In order to adjust the size of the stitch (just as one uses different sizes of needles when knitting by hand), the adjustment disc numbered from 1—8 with divisions also for half sizes, has to be set.

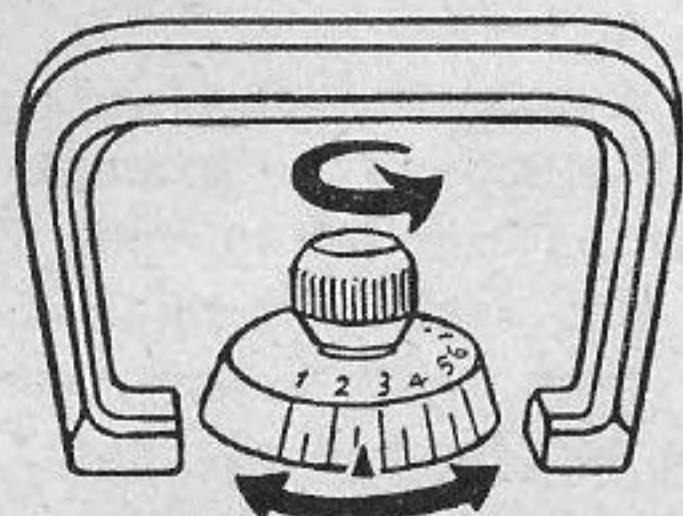


Fig. 9

Unscrew the adjustment knob anti clockwise and turn the the disc until the black arrow points to the required number. Fig.9.

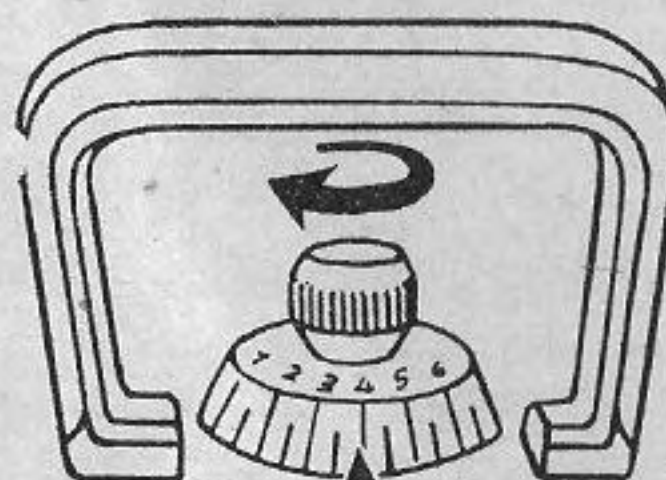


Fig. 10

Now turn the adjustment knob clockwise to refix. Fig. 10.

Remember:

High numbers = large stitches

Low numbers = small stitches

Adjustment of the spring on stripper of the lock

The spring on the stripper numbered from 0 to 4, movable from left to right, has to be set specially for certain patterns only. For plain knitting the spring should be set on number "0". If thicker wool is being used, or if in succeeding pattern rows certain needles are set in rest position, with the result that yarn not to be knitted is lying on the needles in front of the previous stitches (e.g. in a fair isle pattern), the pointer for adjusting the spring should be set on numbers 1, 2, 3 or 4, according to the thickness of yarn being used. Fig. 11.

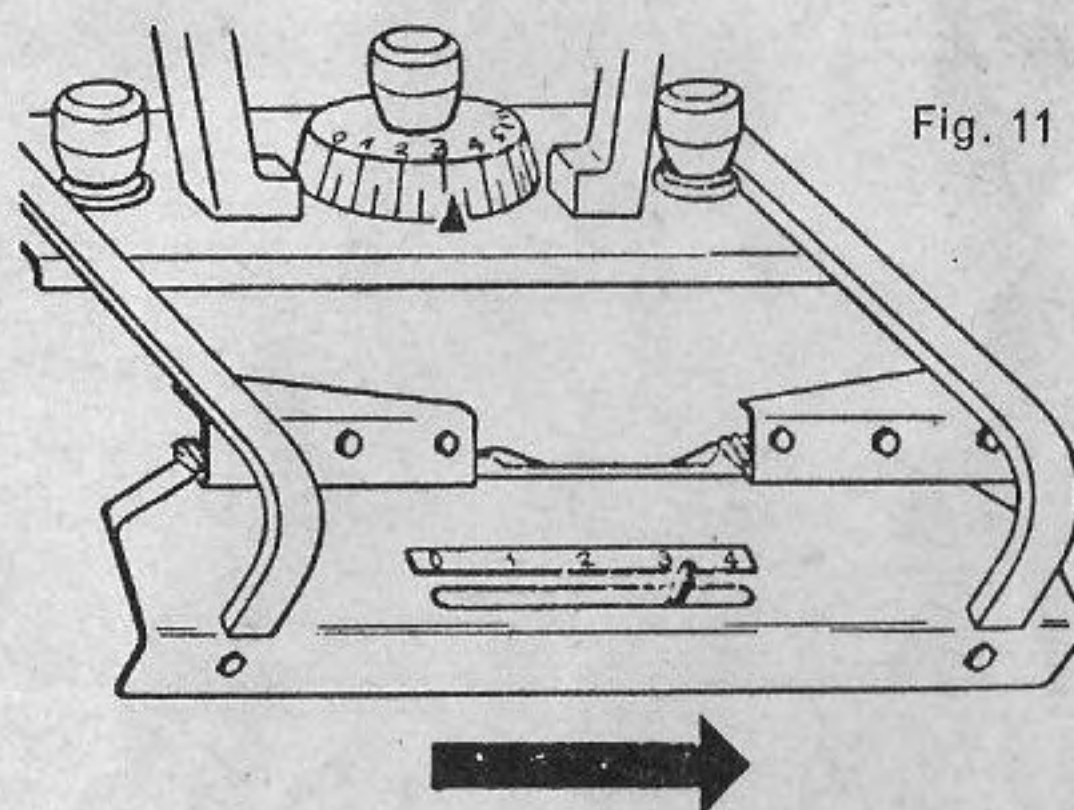


Fig. 11

To guarantee foolproof knitting of the border stitches the feather combs have to be fixed over the border stitches of the knitting. Four feathercombs are supplied with each handknitter, so that two pieces of fabric can be knitted at the same time. The feathercombs are set on two pins and when the red knob is parallel with the knitting scale the comb is fixed. **To remove**, turn the red knob into a vertical position and lift. **To set in position**, with the red knob in a vertical position place the comb on the pins and turn to parallel with the knitting scale. Fig. 12.

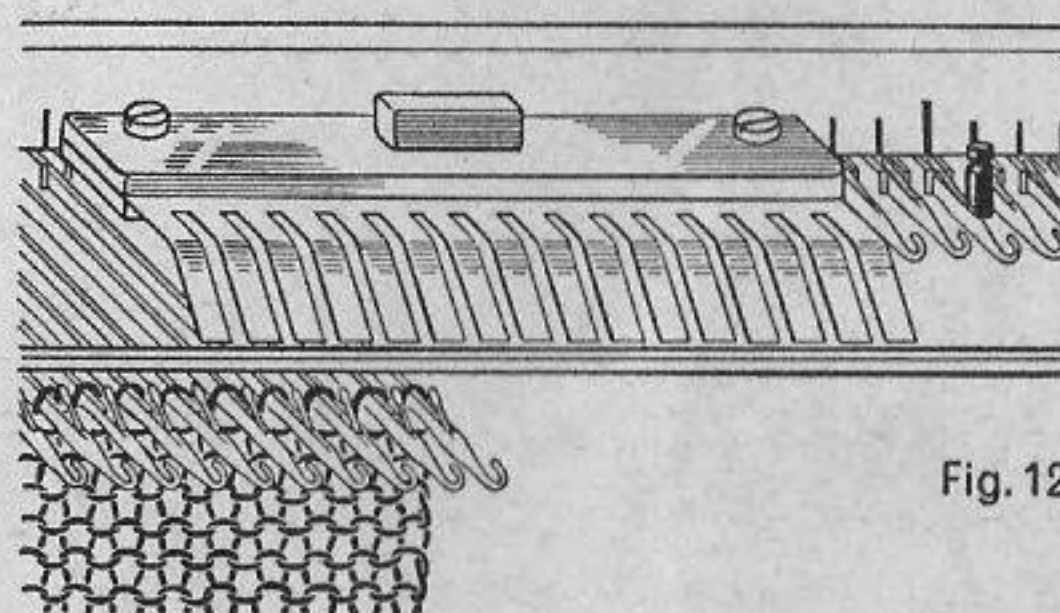


Fig. 12

There are two ways to cast on

Here's how to cast on with closed stitches

If you knit a garment, you always cast on with closed stitches. Our example shows how to cast on from left to right. You can of course also cast on in opposite direction, i. e. from right to left (very convenient for left handed persons). In this case you wind the yarn clockwise around the needles as shown in Fig. 29.

Set the adjustment disc at the required number as in Fig. 9 and 10, for example at size 4.

Place the block ruler behind the needle feet and with it push forward the required number of needles into working position. Fig. 13.

Remove block ruler from needle bed.

Move lock several times to and fro, thus automatically opening the latches. Leave lock on the right hand side of the advanced needles and place the block ruler behind the needle feet. Fig. 14.

Tie the yarn with a simple knot on the first latch needle to be used and push it behind the open latch. Fig. 15.

Twist yarn anti clockwise around each following latch needle Fig. 16. It is advisable to wind the yarn with the right hand while the left hand pushes the previous loop behind the open latch.

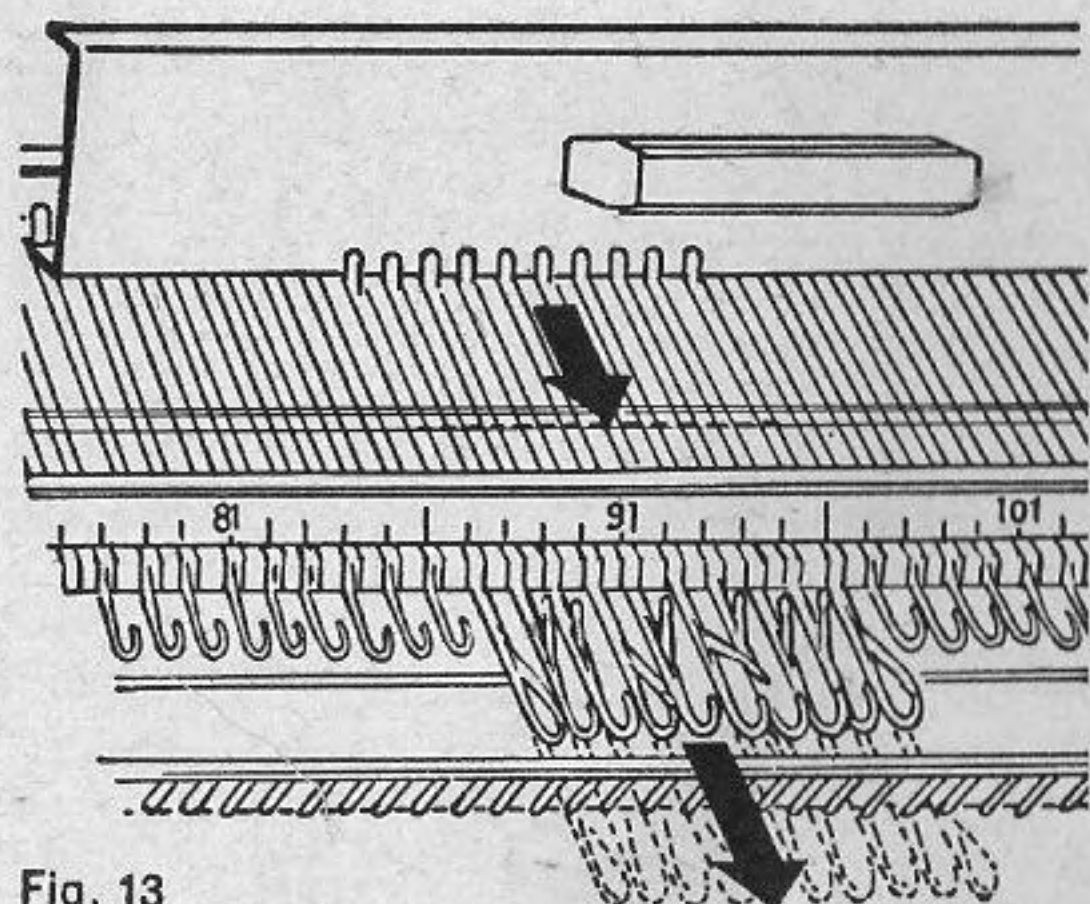


Fig. 13

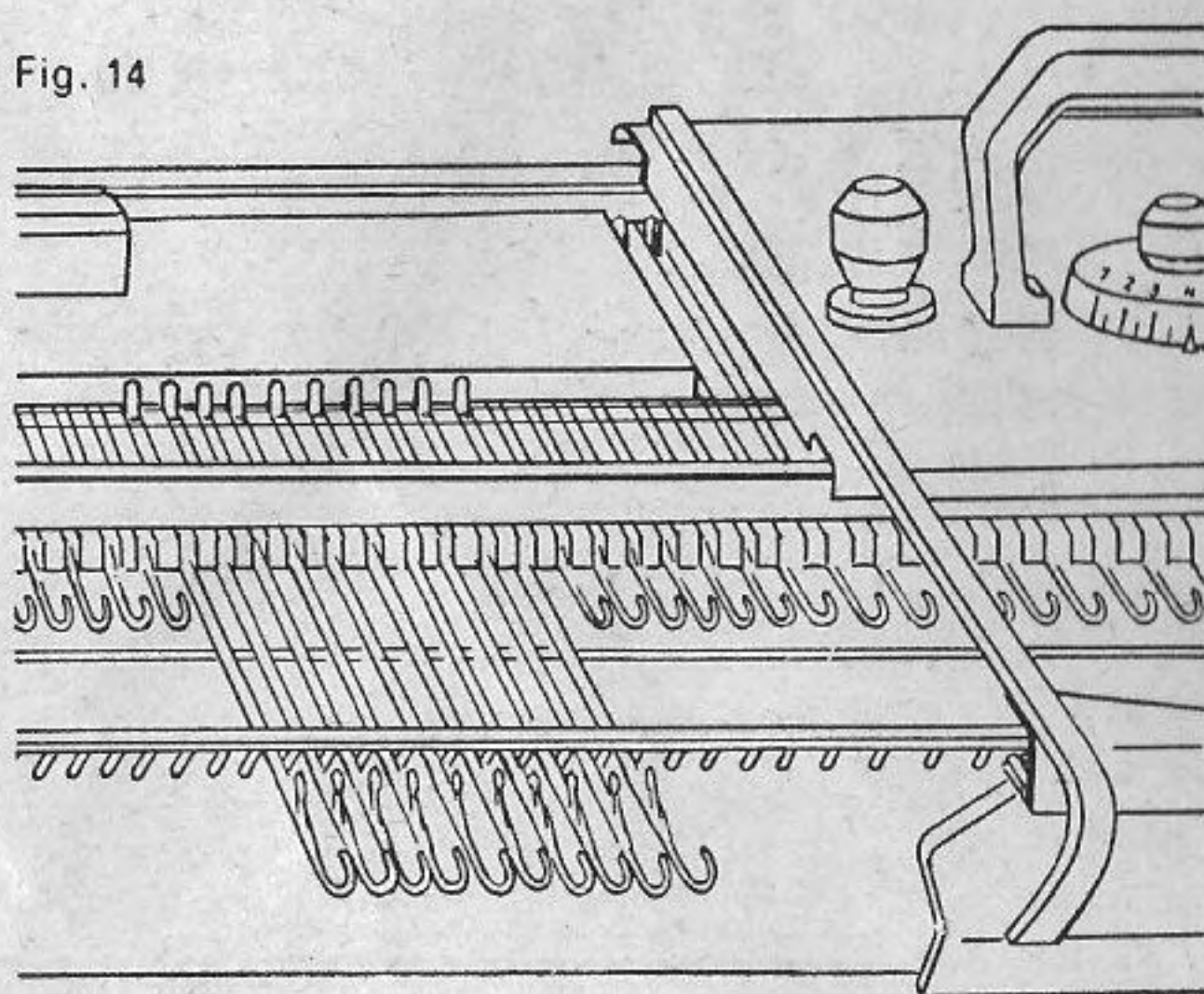


Fig. 14

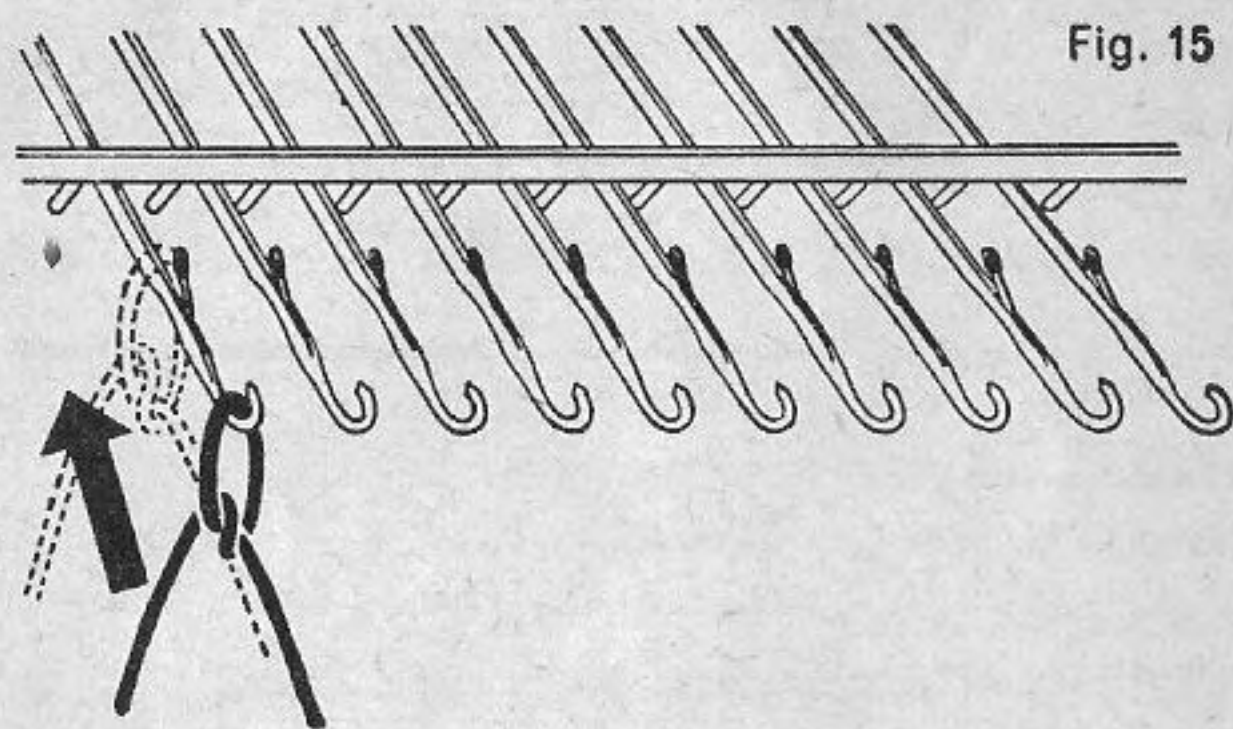


Fig. 15



Fig. 16

At the last latch needle lay the yarn the same way, then guide it upwards and from right to left into the open needle heads. Fig. 17.

Remove the block ruler from behind the needle feet and holding it in front of the needle heads push back the needles into the working position, until the open latch points are between the bars of the striking comb. Fig. 18.

Here's how to knit

Move the sliding lock smoothly from right to left. Fig. 19. By this movement every latch needle, one after the other, performs the movements described in Figs. 1 to 7, forming the first row of stitches. Finish with the sliding lock on the left of the latch needles which are being used. For the next row place the yarn from left to right into the open needle heads and move the sliding lock in the same direction, thus forming the second row. Now continue working once from the right, once from the left and so on.

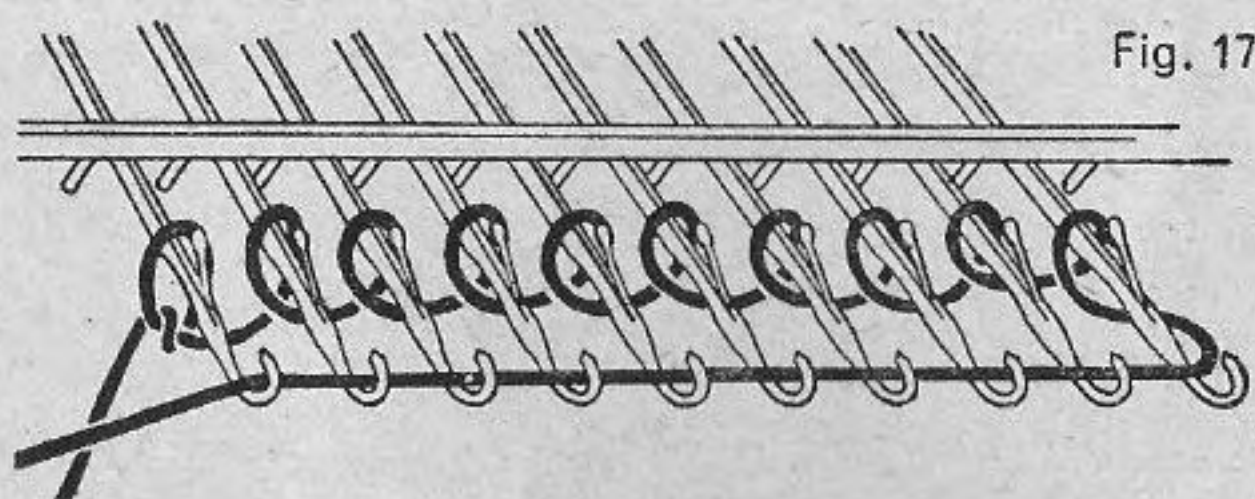


Fig. 17

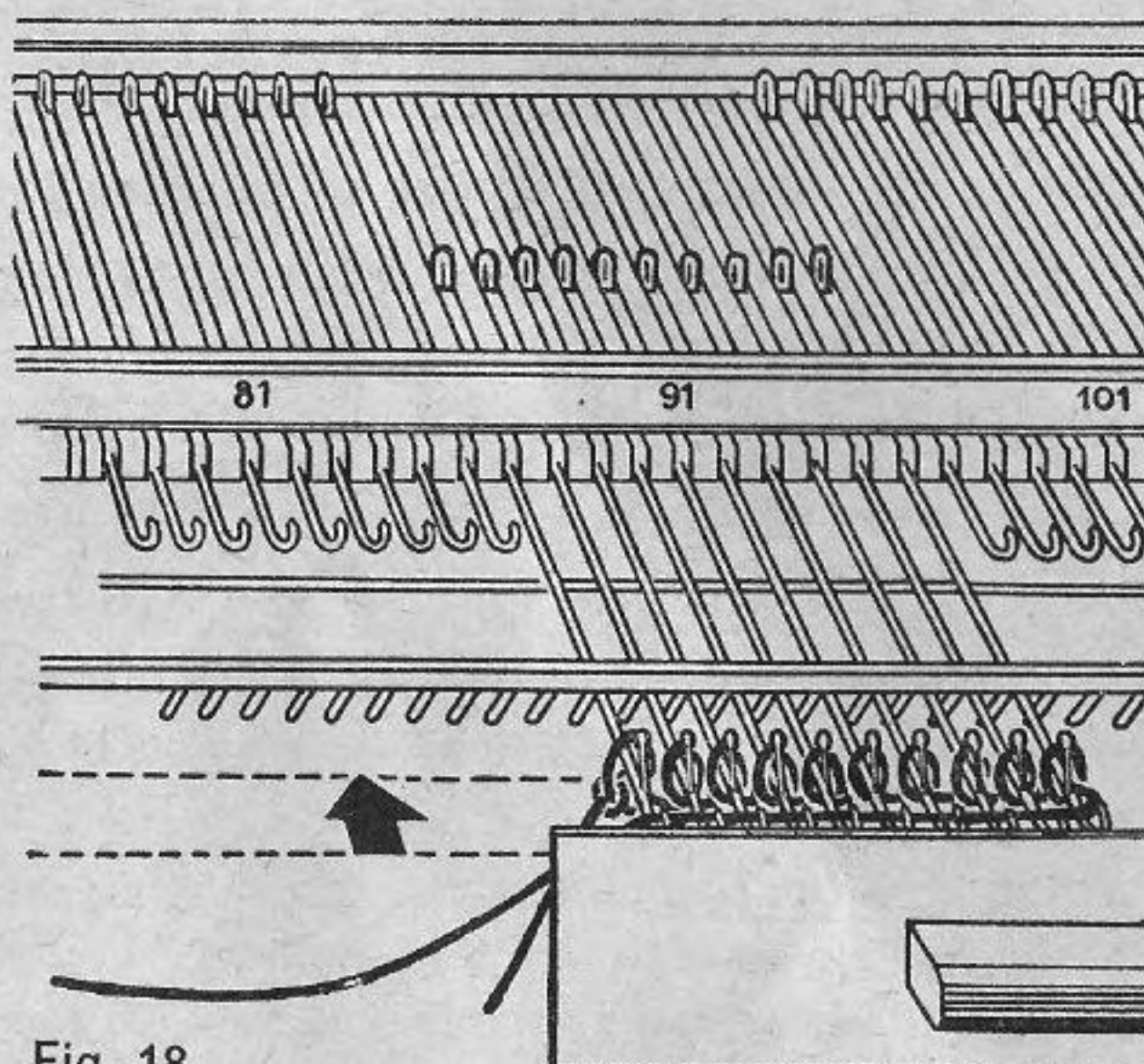


Fig. 18

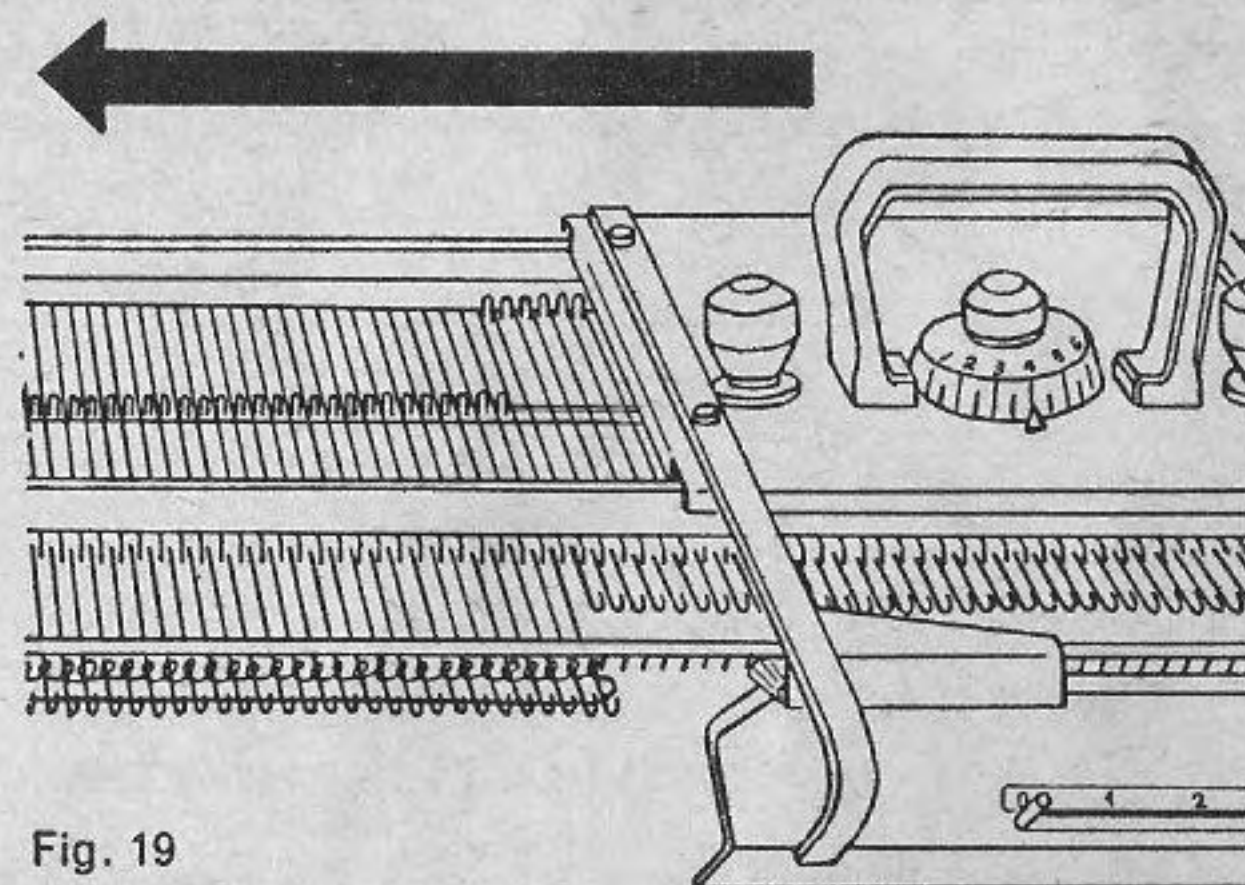
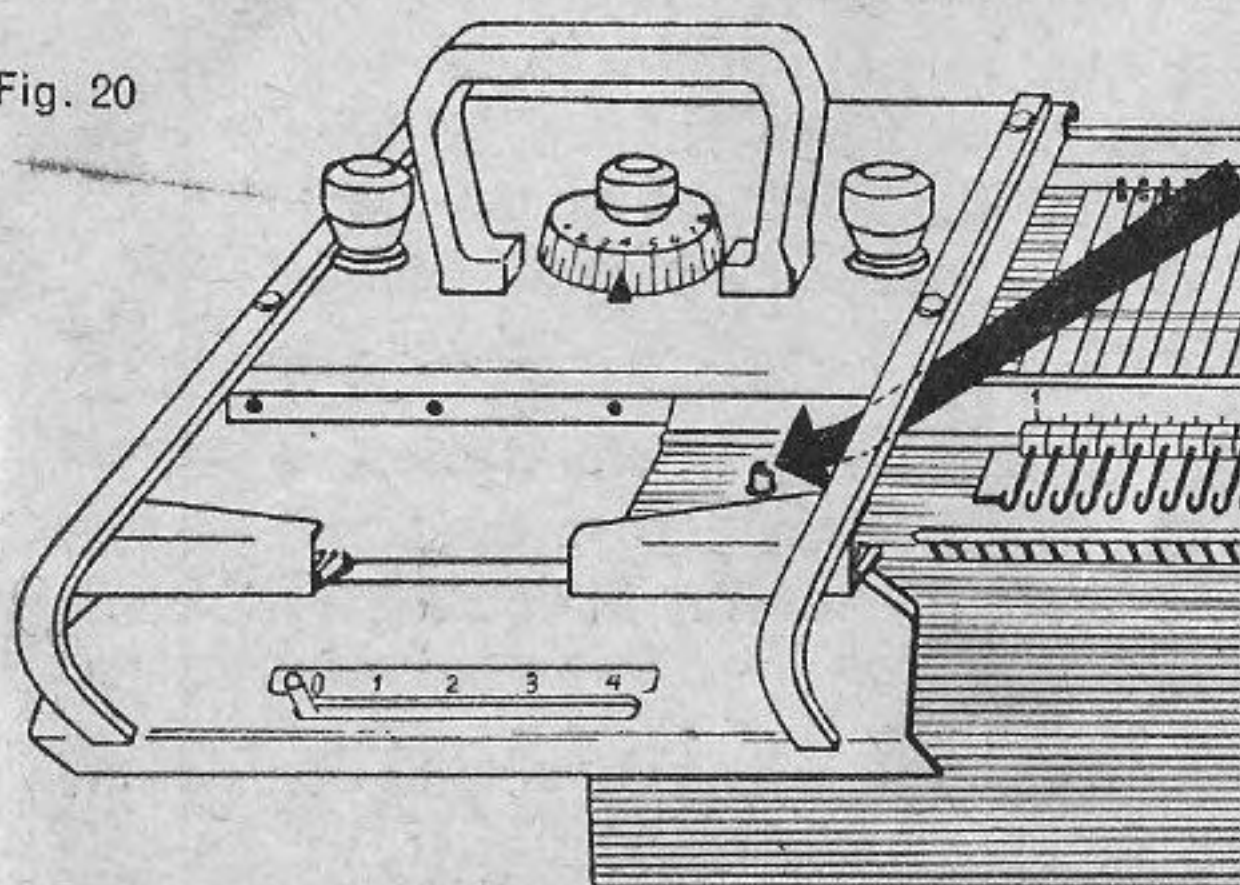


Fig. 19

Fig. 20



If the lock is on the wrong side

To commence knitting, the sliding lock must be on the same side as the free yarn which is to be knitted because the lock must be moved in the same direction as that in which the yarn is placed in the open needle heads.

If you have made a mistake and the lock is on the wrong side, you can remove it from the machine and replace it from the opposite side. This is done by depressing the press buttons on the left or the right of the machine. Fig. 20.

Casting on with open stitches

Before commencing to knit a garment it is advisable to knit a small sample in order to find out the correct adjustment for the size of stitch for the yarn being used and to check with your pattern and to ascertain how many stitches and rows there are to the inch. For this it is not necessary to cast on as described on page 8, since this is only a temporary sample. For knitting such samples use the faster "casting on with open stitches".

- **Set the adjustment disc for size of stitch at number 6 as in Figs. 9 and 10.**
- **Advance required number of needles into working position.**
- **Move lock across needles in order to open latches and leave it on right hand side of machine.**
- **Place yarn from right to left in the open needle heads.**
- **Slide lock to the left so that the yarn lies loosely in a zig zag.**
- **Set adjustment disc for size of stitch required for example at size 4.**
- **Place yarn from left to right in the needle heads and move sliding lock from left to right and the first row has been knitted.**

Casting on with open stitches leaves an open row of stitches at the lower edge of the knitting. Consequently you also use this method if you wish to join, for example a waistborder, after having knitted the main part. In this case you start work with 6—8 rows of a different colour. When the main part of the garment is completed, these first rows are then undone and the stitches are replaced on the latch needles, placing two stitches together where required to reduce the width of the waist border. Having done this, you then knit your waistborder downwards.

Important:

Like a flat iron: When knitting, hold the lock like a flat iron, with a slight downwards pressure on the needle bed.

Never without yarn: Take care never to move the lock unless the yarn lies in the open needle heads. If the needles are in the working position and you move the lock without the yarn, the former row of stitches slides over the needle heads which automatically close when knitting, without being caught by the new row of stitches and the work falls off the needles. For the same reason it is important to take care that all latches are open when in the working position.

Only in one direction at a time: The lock must be moved only in one direction at a time. Once you have started to slide the lock across the work, never change the direction: if you try to reverse the direction, the needles are liable to break.

The free move is a great help in the following operations:

The complete free move for: Undoing previous rows, crochet patterns and corrections, storing of the handknitter.

The single free move for: Multicoloured patterns.

"Freemove" means to move the lock across the work without knitting a row. This can only be done when the latch needles are in a particular retracted position, and when the stitches are in the closed needle heads and not behind the latches on the needle shafts. To achieve the "free move position", you use the two freesetters at right and left of the lock handle. The right freesetter is used to move the lock from right to left, the left freesetter is used to move the lock from left to right. If in these circumstances you wish to move the lock from left to right, you pull up the left freesetter, or conversely, from right to left, you pull up the right freesetter. The yarn must be placed across the open needle heads before you move the lock in the direction required thus knitting a final row before the latch needles are in their free move position.

The complete free move

Example:

Starting position: yarn right, sliding lock right.

Pull up the right hand side freesetter to put it out of action. The needles still remain for the time being, in their working position. Fig. 21.

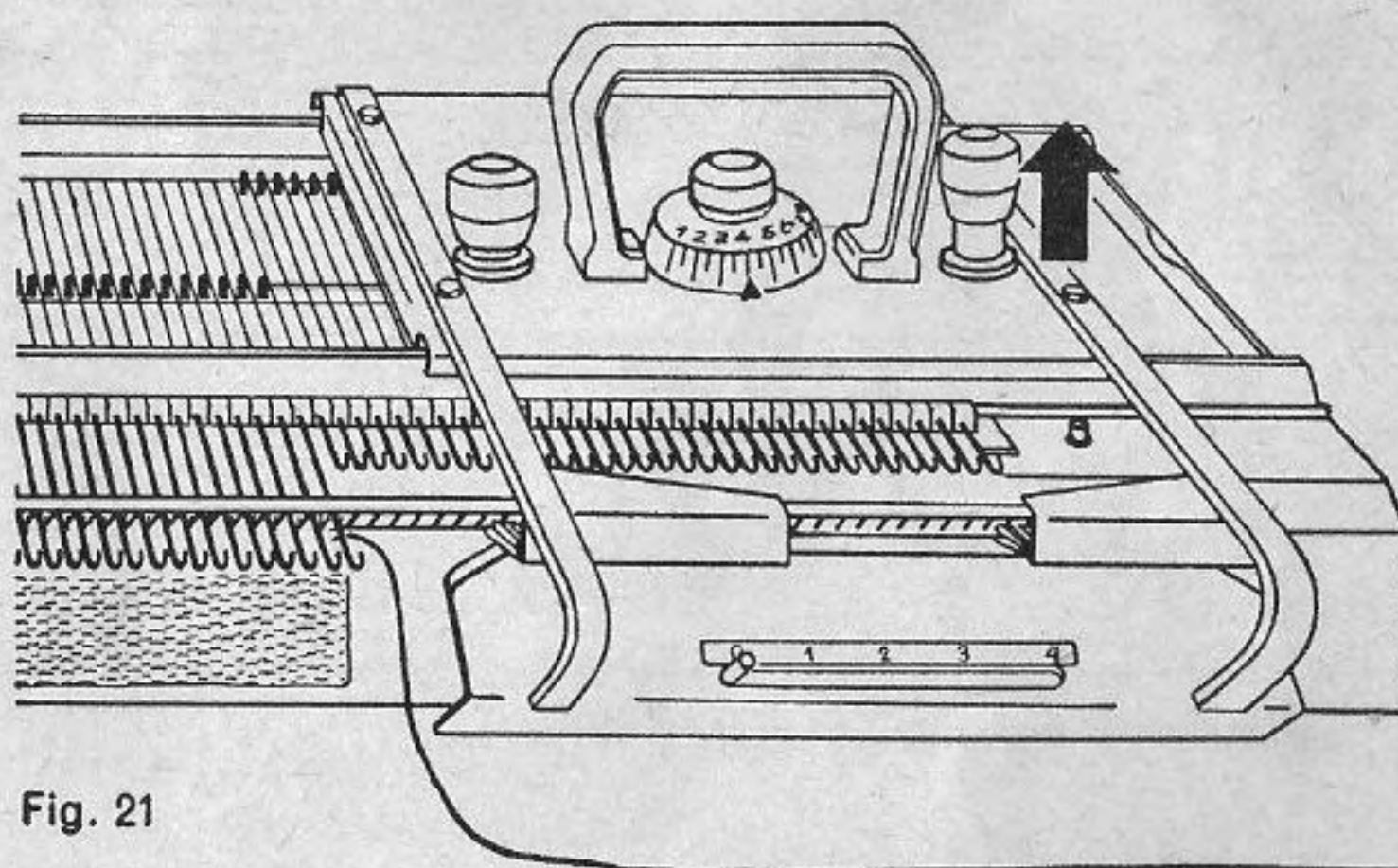


Fig. 21

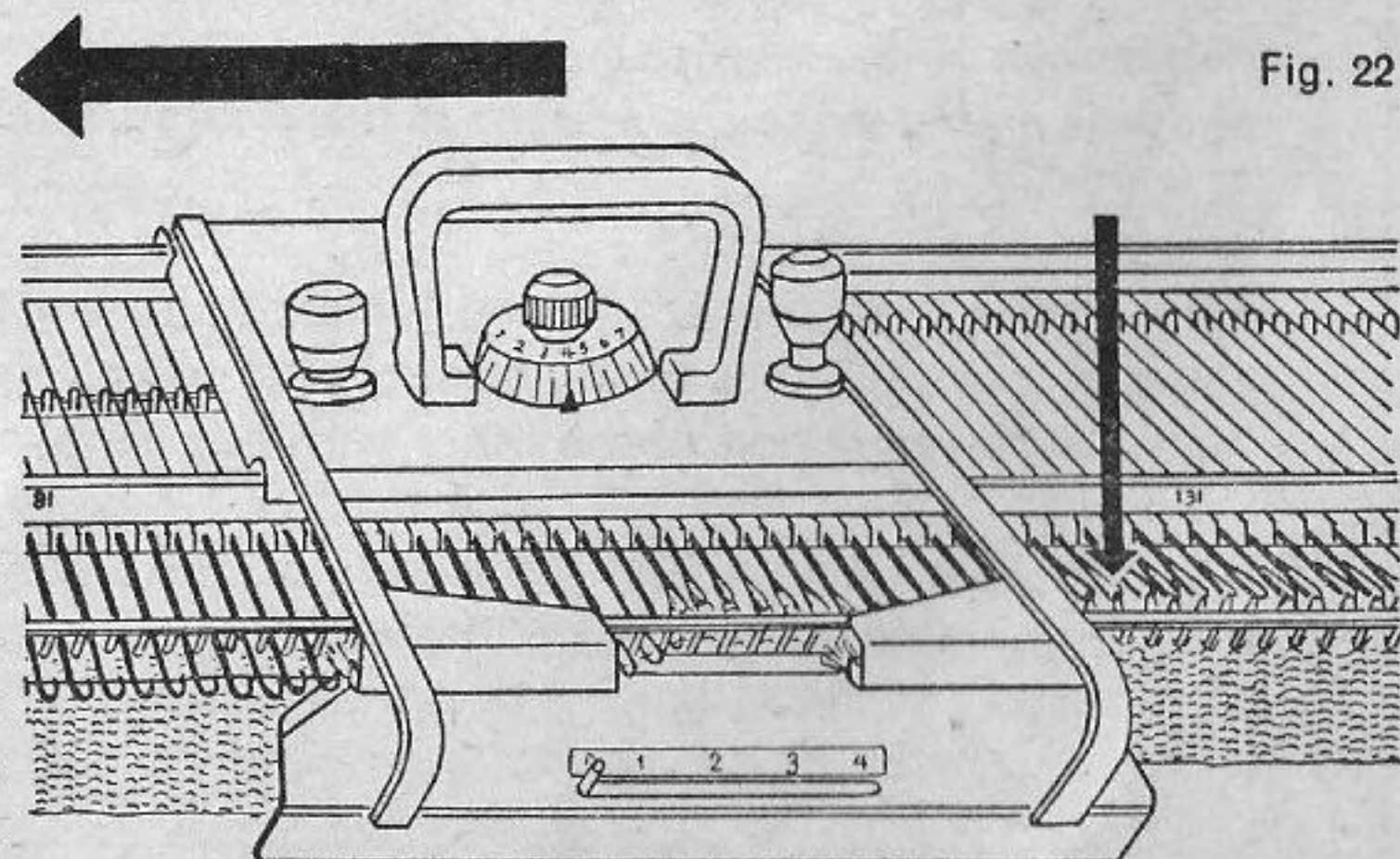
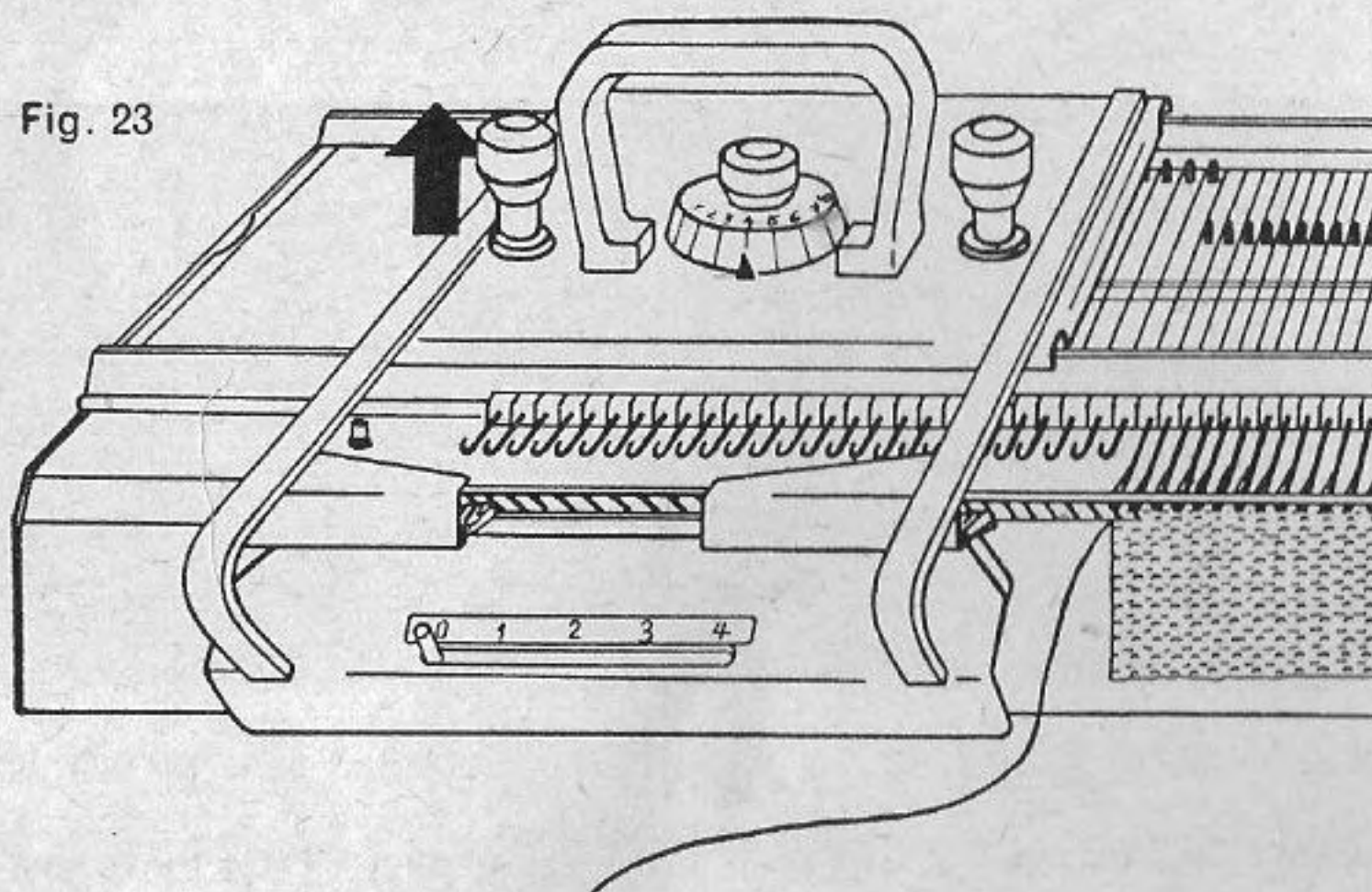


Fig. 22

Place the yarn across the needles and slide the lock from right to left, thus forming a new row and at the same time bringing the needles into the free move position. Fig. 22.

Fig. 23



When the sliding lock is on the left hand side of the machine, pull up the left freesetter also to put it out of action. Fig. 23.

Now all the needles are in the free move position and you can move the sliding lock freely to and fro. For starting when the sliding lock is at the left, use the reverse procedure.

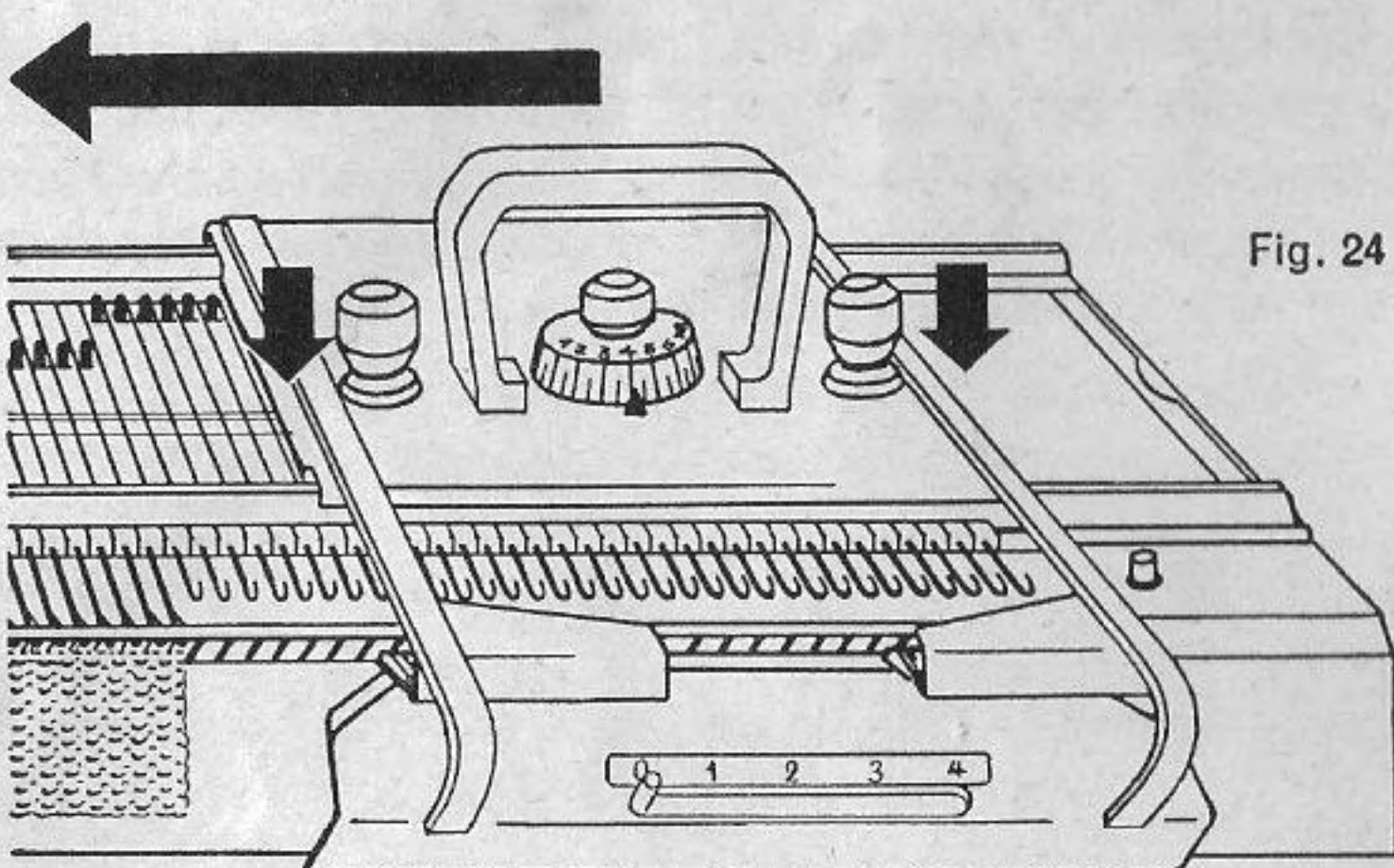


Fig. 24

To recommence knitting move the sliding lock to the side opposite to where the yarn is and push both freesetters down (Fig. 24) and slide the lock freely to the other side. This brings the needles into working position again and you may continue knitting.

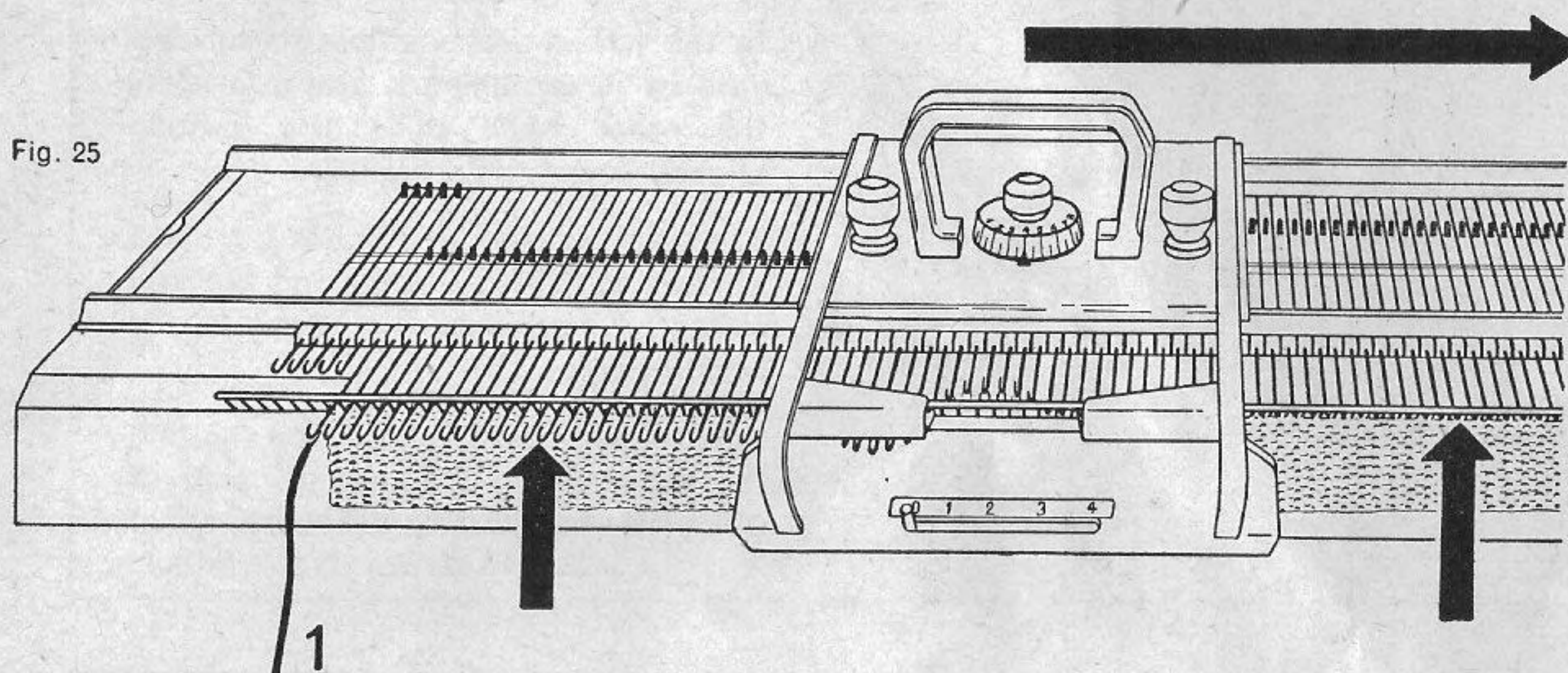
The complete free move is used when it is essential to ensure against the knitting being removed from the needles: that is for example when storing the handknitter without wishing to remove the work from the needles, for crochet patterns and to make corrections to the knitting, such as undoing previous rows etc.

The single free move is used for knitting with two and more colours, so that you can move the lock to the correct side to knit the required colour. Don't forget that this pre-selection of the other yarn has always to be planned one row ahead.

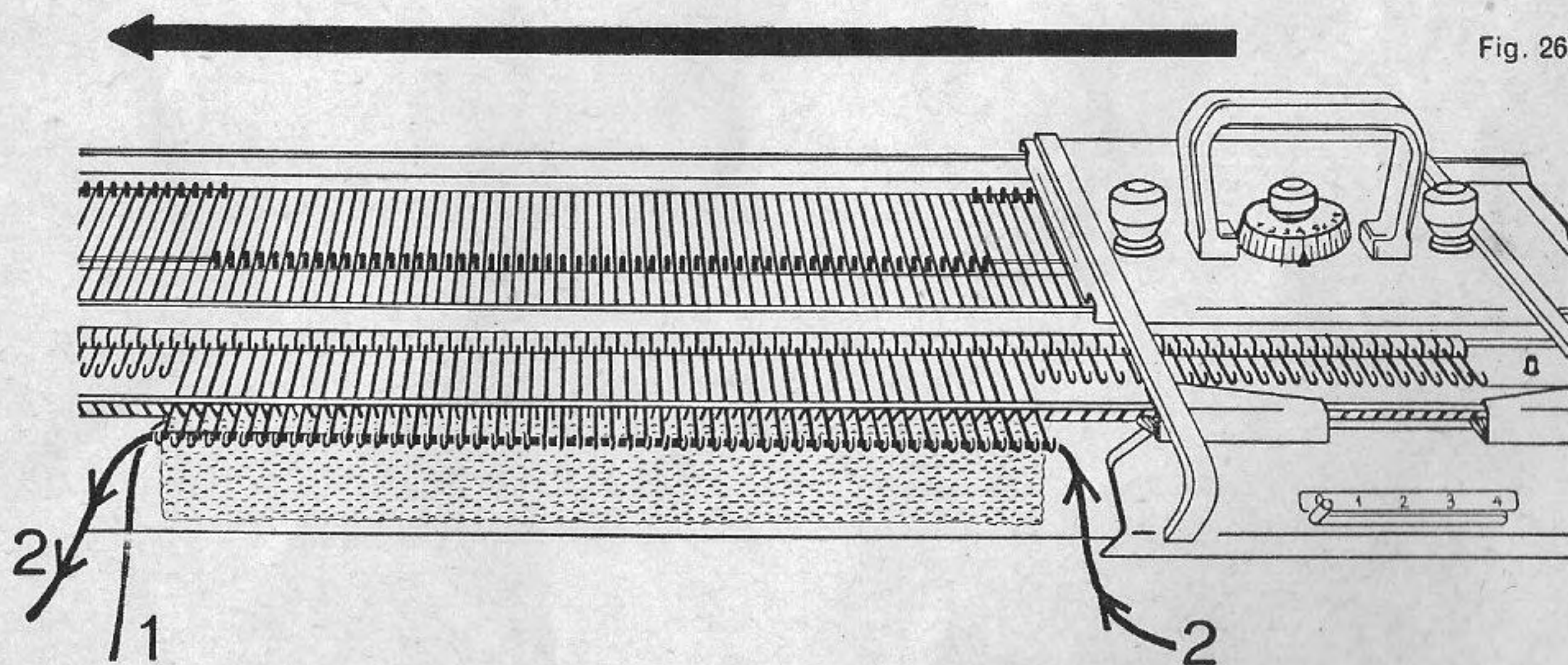
If you make a mistake and the lock is on the wrong side, you can always remove it from the machine and place it on the other side as in Fig. 20.

The single free move

Example: Starting position: two yarns of different colours on the right, lock on right. Pull up right side freesetter, as shown in Fig. 21 and knit one row with the first colour as in Fig. 22.



Now push freesetter down again and move the lock freely to the right, Fig. 25, which brings the needles again into working position.

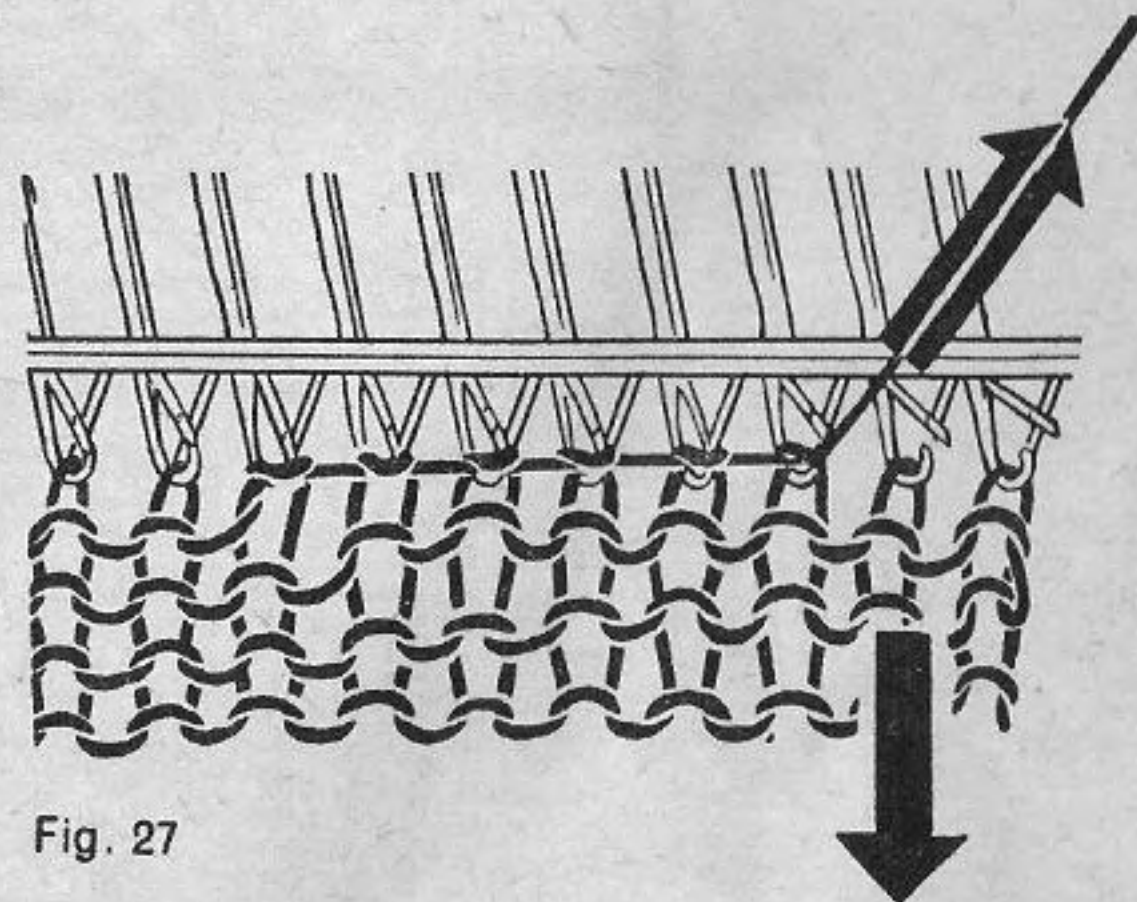


Now knit with the second colour, thus both colours are at the same end of the row. Fig. 26.

For starting with two threads and the lock at **left** pull up left side free setter and knit one row with the first colour, now push left free setter down again and move the lock freely to the left which brings the needles again into the working position and you are ready to knit with your second colour from the left.

For undoing rows, always use the free move position

Example: Assuming that the lock has been moved in the free move position from the left, the yarn is on the right.



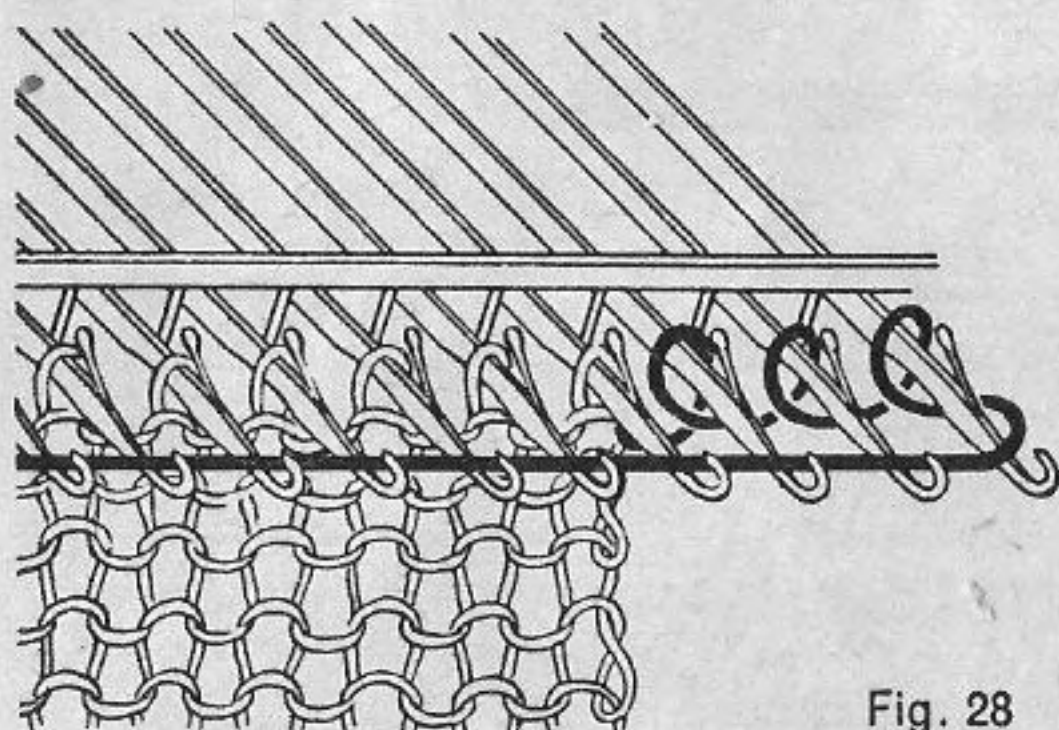
In the free move position stretch the yarn by jerks pulling it upwards while the other hand pulls the knitting slightly downwards. Fig. 27.

Thus the last row of stitches becomes straight yarn and the second but last row slips back into the hooks of the latch needles.

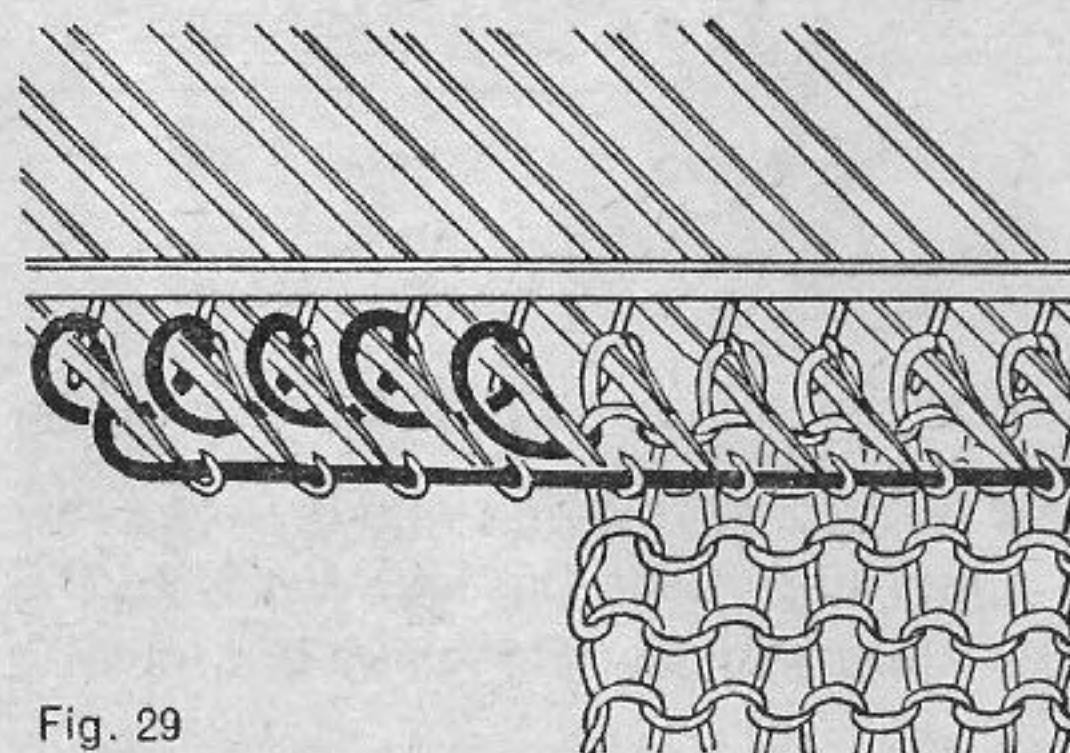
Alternatively, if the yarn is on the left, the same procedure applies but, of course, in reverse.

Increasing:

Increase at the side where the free yarn is in the same way as for casting on.



Increasing right Fig. 28, wind yarn on **anti clockwise**.



Increasing left, Fig. 29, wind yarn on **clockwise**.

Decreasing and Casting off

Decreasing of a single stitch can be done either on the right or left of work, no matter whether the yarn is free or not.

Place the eye of the decker needle into the hook of the latch needle. Fig. 30.

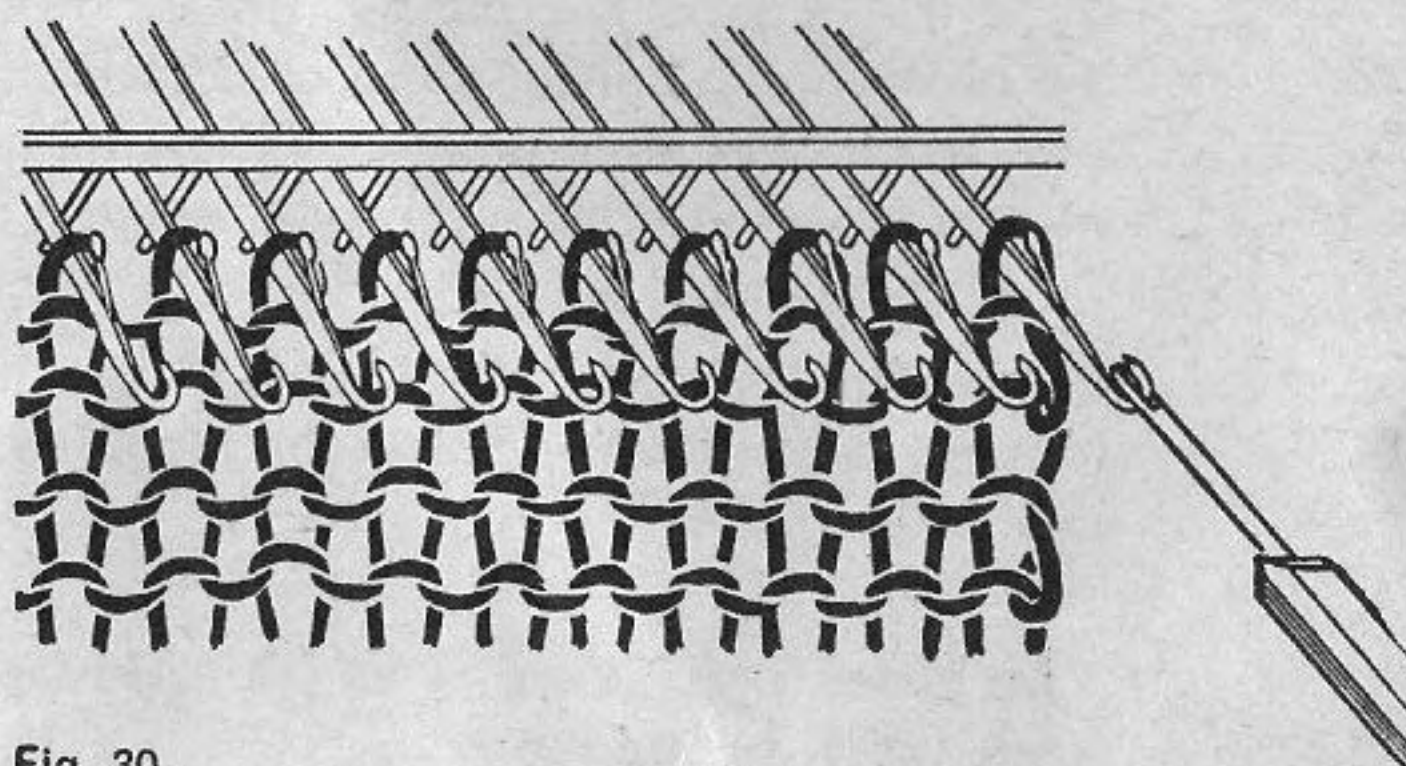


Fig. 30

Push the needle back as in Fig. 31, and the stitch will slide over the closing latch and needle head on to the decker needle.

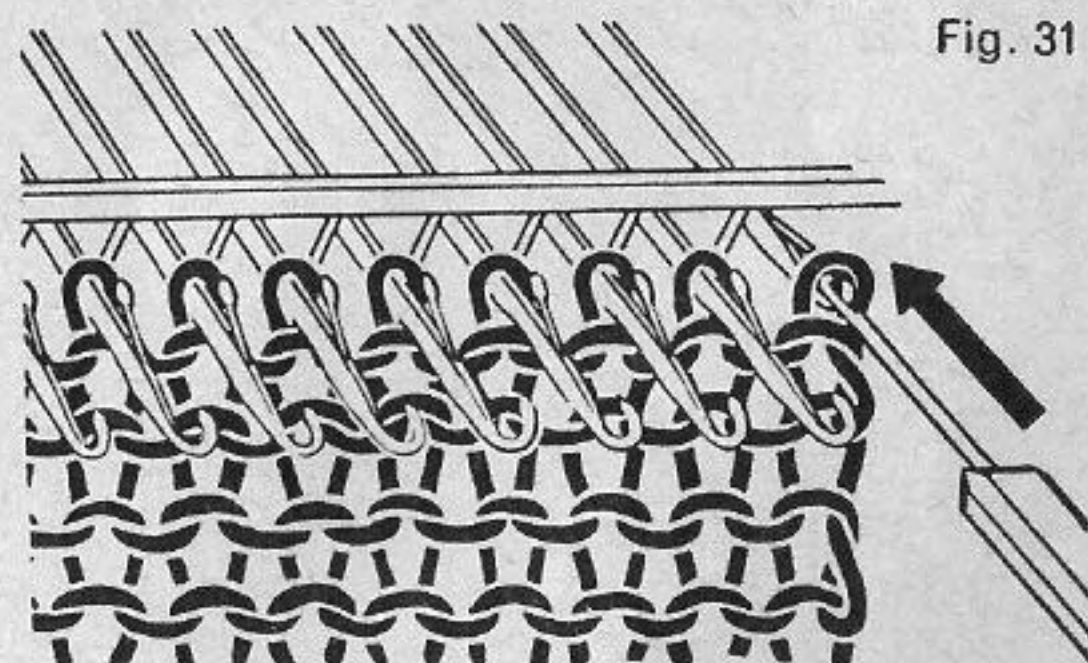


Fig. 31

Transfer this stitch from the decker needle into the hook of the next latch needle (Fig. 32) and push it behind the open latch. Now there are two stitches behind the open latch. They will be knitted together automatically with the next row.

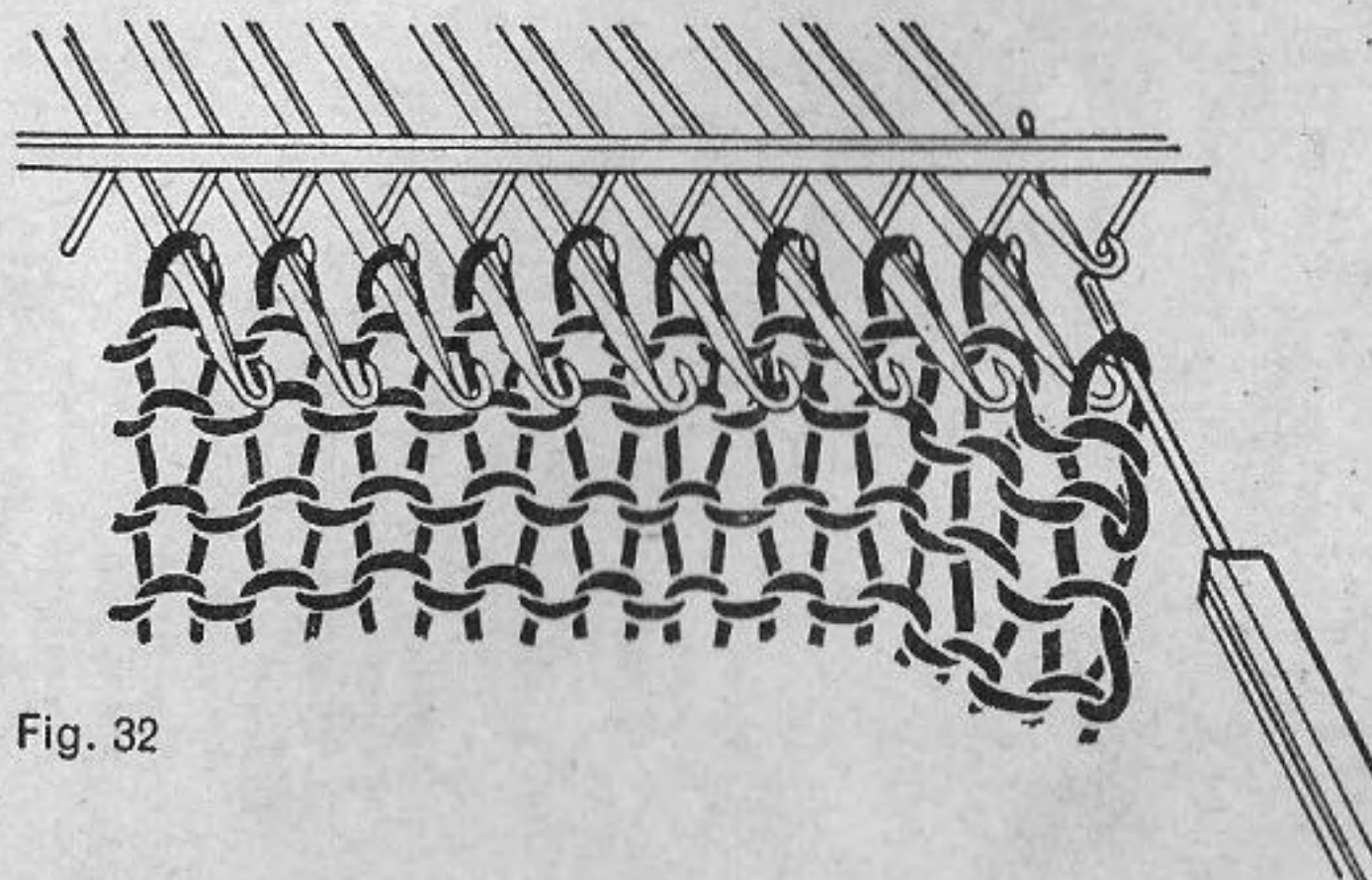


Fig. 32

Decreasing several stitches

at once is only possible, when the yarn is free. The following example will make it apparent to you that the same procedure can be followed when the yarn is on the left side of the knitting.

Continuing from Fig. 32 place the yarn across the open latch and with the needle mover of the blue crochet hook move the latch needle first backwards, Fig. 33, and then forwards, Fig. 34 thus knitting both stitches together. The newly formed stitch is to be placed in the following latch needle, as in Figs. 30—32, and repeat Figs. 33—35.

To avoid holes between the cast off stitches and those left on the machine always cast off one stitch less than needed. Place the last off stitch on to the first stitch remaining on the machine, which effects the final casting off.

Example: If you have to cast off 7 stitches, cast off 6 as in Figs. 30—35, and place the last loop on to the first stitch on the machine. To finish knitting the entire row has to be cast off in this manner.

The same procedure is to be followed the whole row through for casting off when your work is finished.

Fig. 33

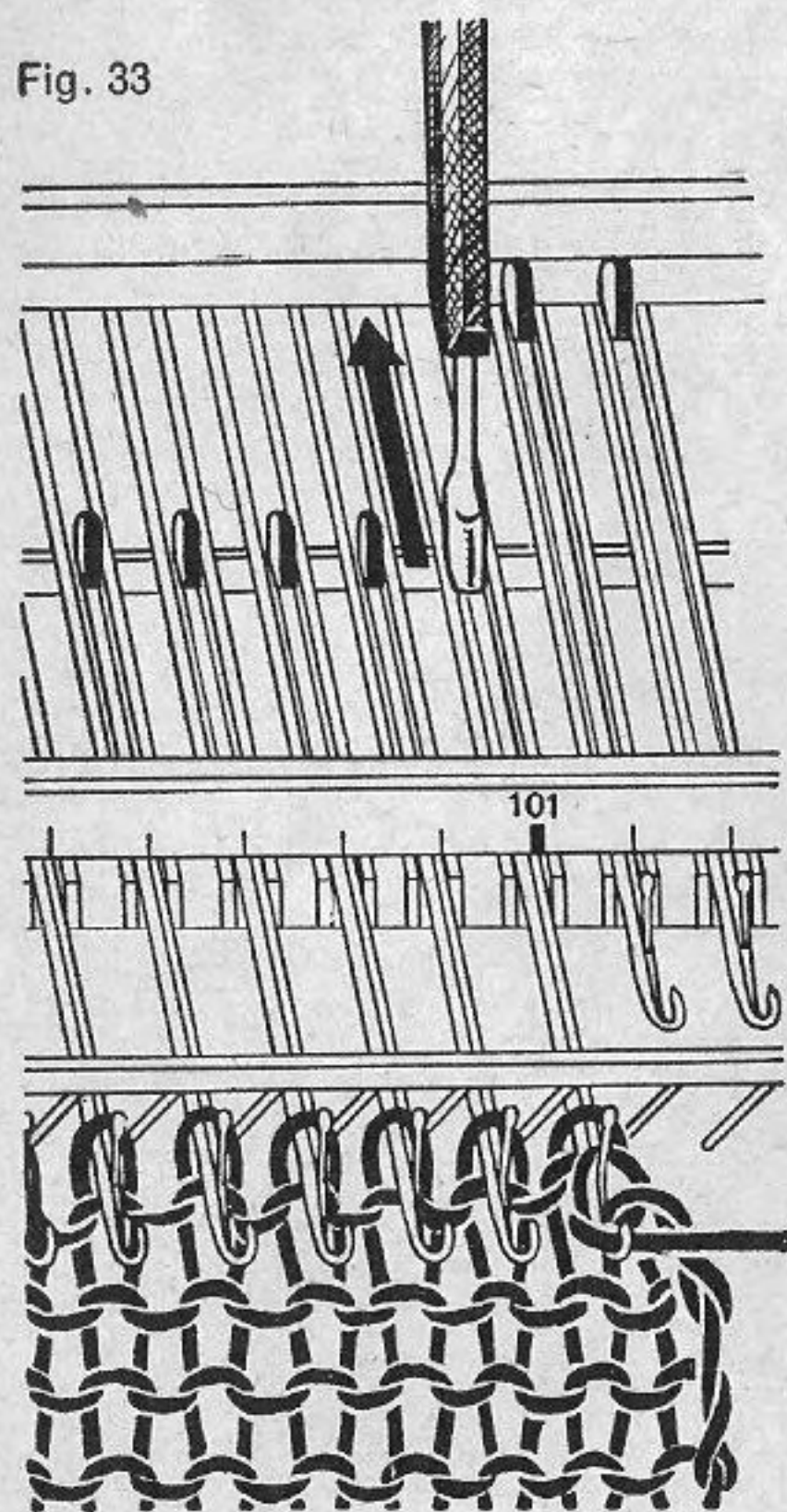


Fig. 34

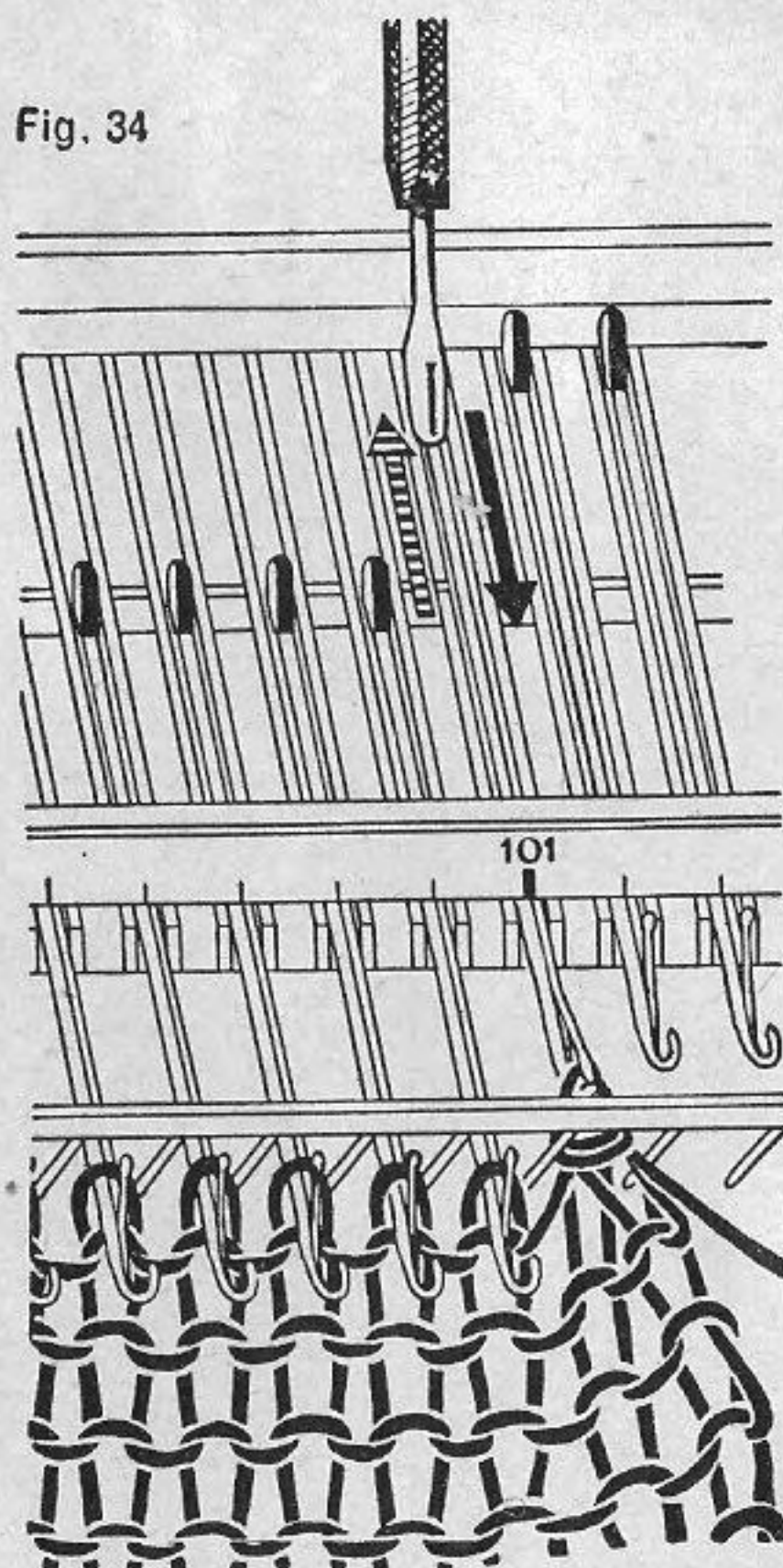
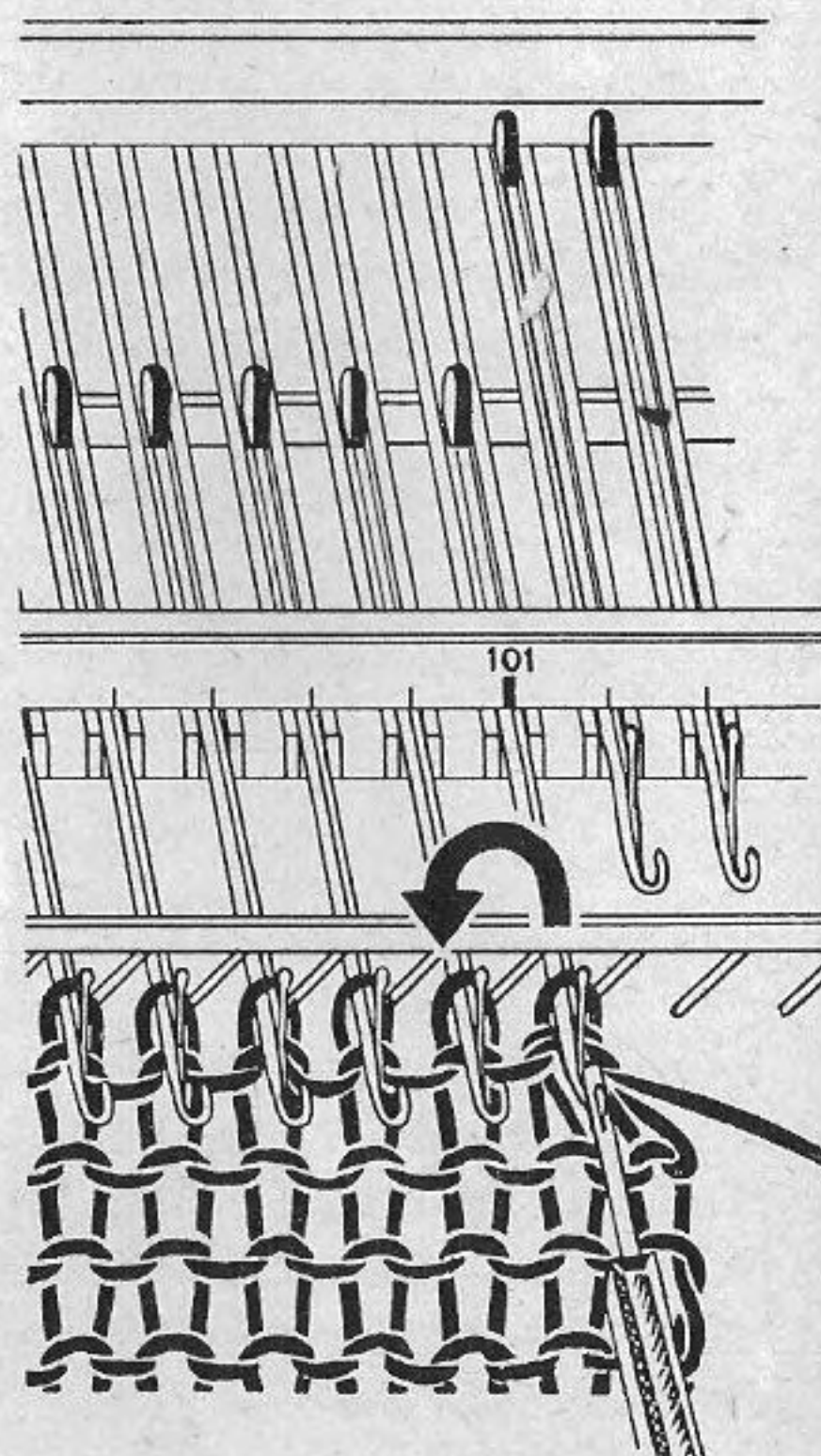


Fig. 35



An Open work pattern Needles in the free move position.

In the same way as for decreasing, with the decker needle place one stitch on to the next stitch—either from left to right or from right to left—or from right and left onto the middle stitch, so that three stitches are on the latch. Fig. 36.

Bring all needles back in working position, including empty needles and make sure the latches are open. Continue normally. A new stitch will now be made automatically on each vacant latch needle.

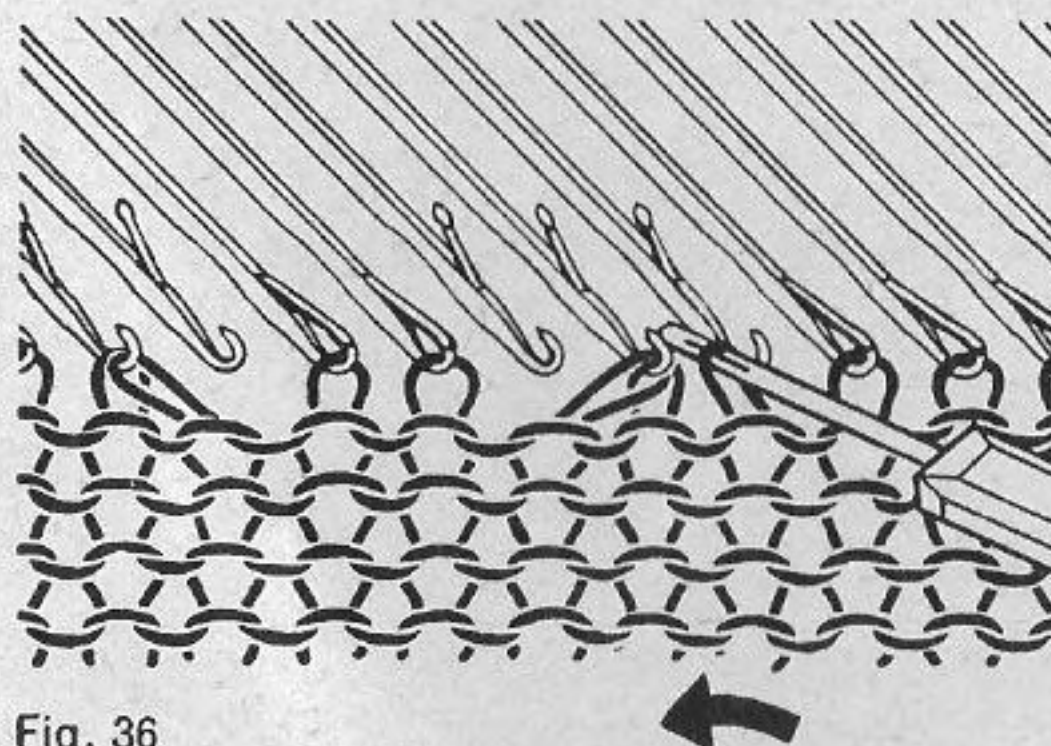


Fig. 36

Crossed over stitches, cables etc. Needles in the free move position.

Open latches as required and place the two decker needles of the red auxiliary needle into two latch needles. Firstly pull the needles forward, so that the stitches slip behind the opened latches, then push the needles far enough back to make the stitches slip forward, close the latches and slip over the needle heads on to the decker needles. Fig. 37.

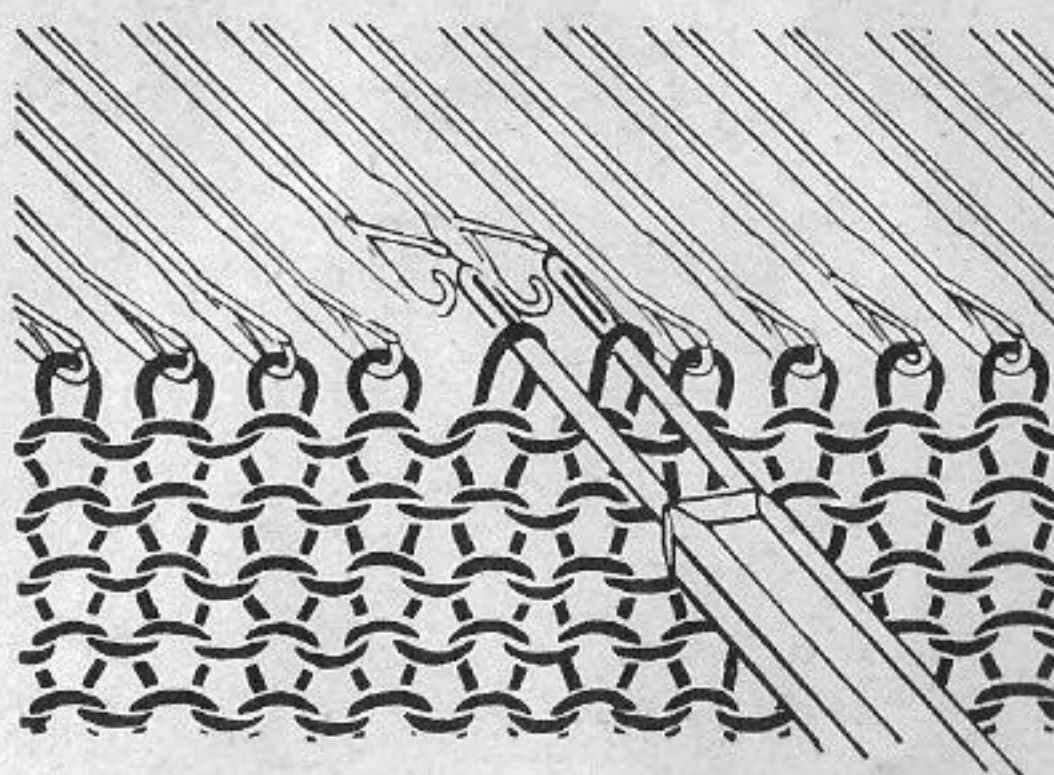


Fig. 37

Twist the red auxiliary needle either to left or right and place the stitches, which are now crossed, in to the hooks of the latch needles. Fig. 38.

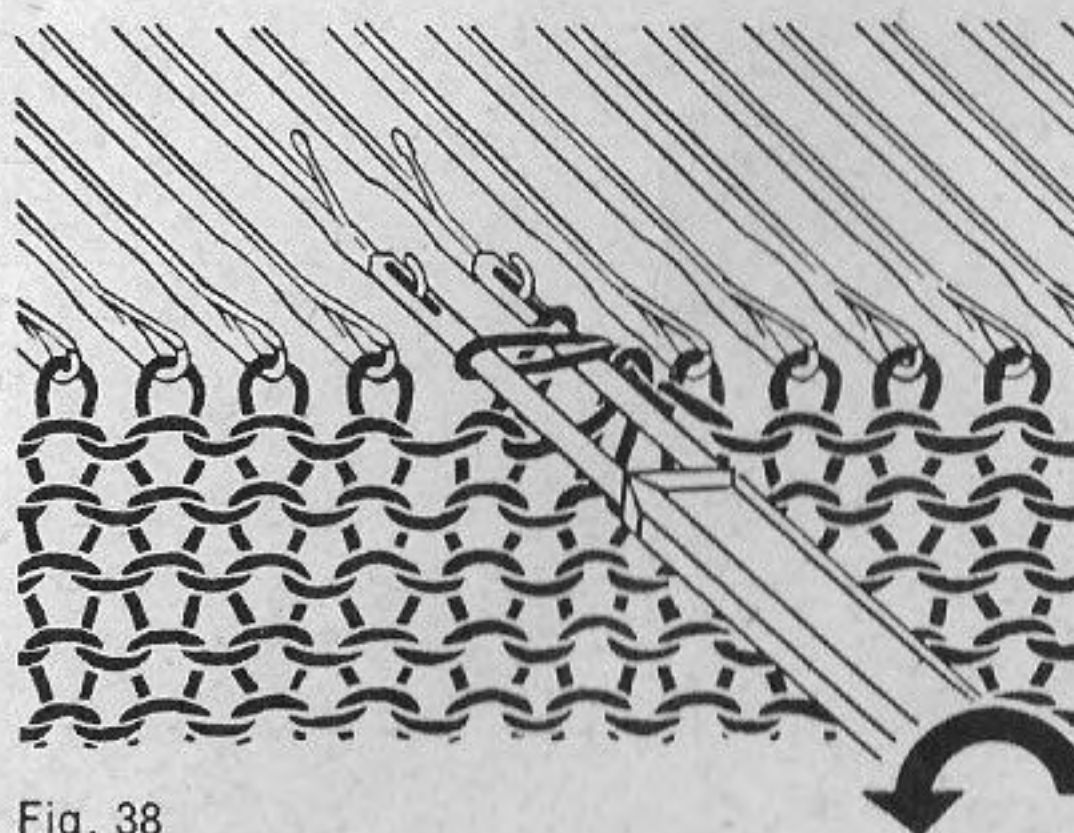


Fig. 38

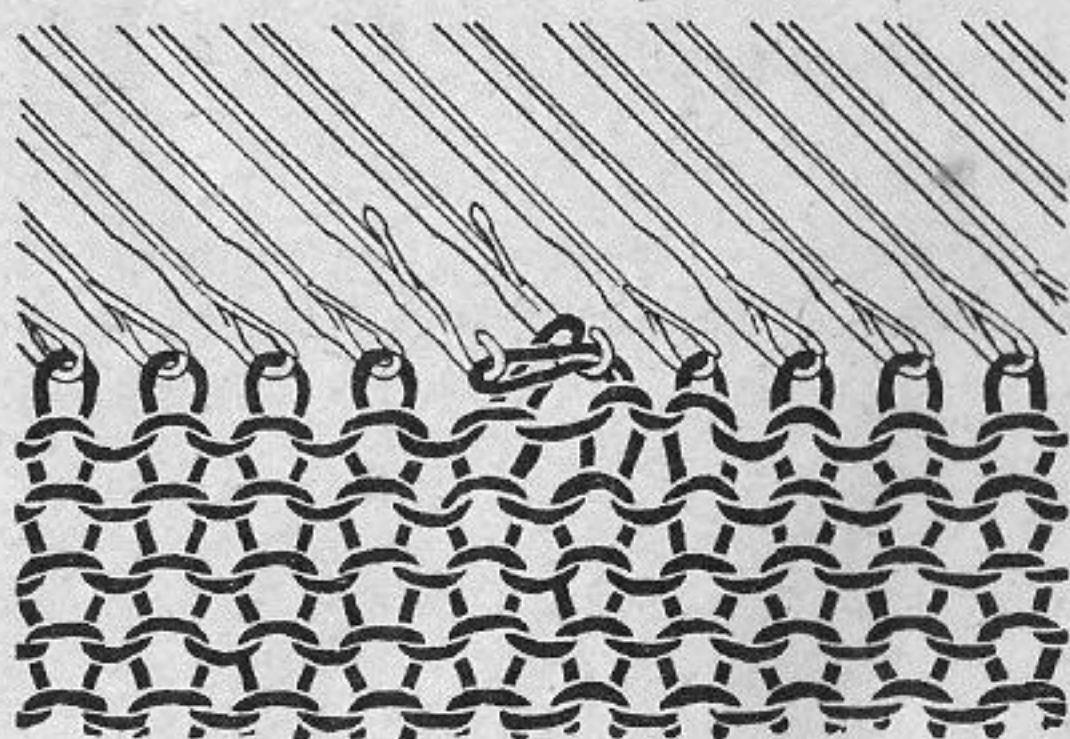


Fig. 39

In crossing, the front stitch is more stretched since it lies across both hooks. Fig. 39.

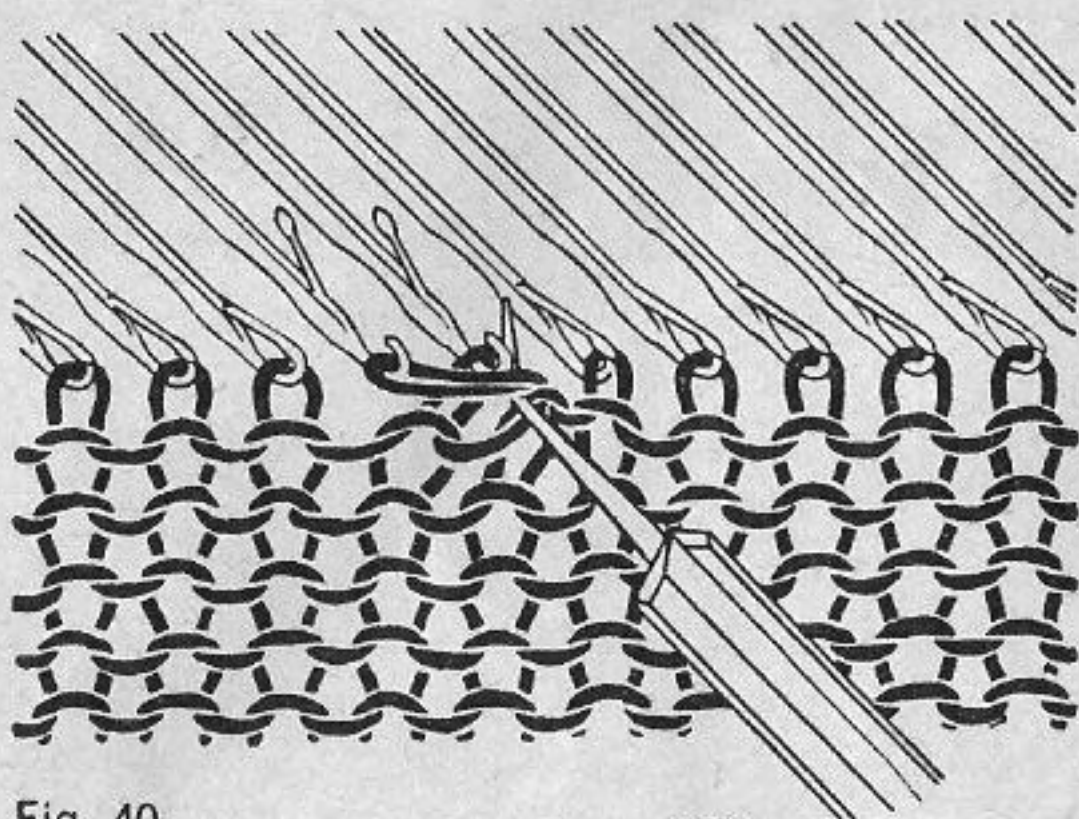


Fig. 40

Therefore remove this stitch from one hook by means of the angled end of the red auxiliary needle. Fig. 40.

For crossing 4 stitches, see pattern 3.

The buttonhole

Needles in working position.

You achieve the best button hole when making it with separate yarn reinforcing it after the work is finished.

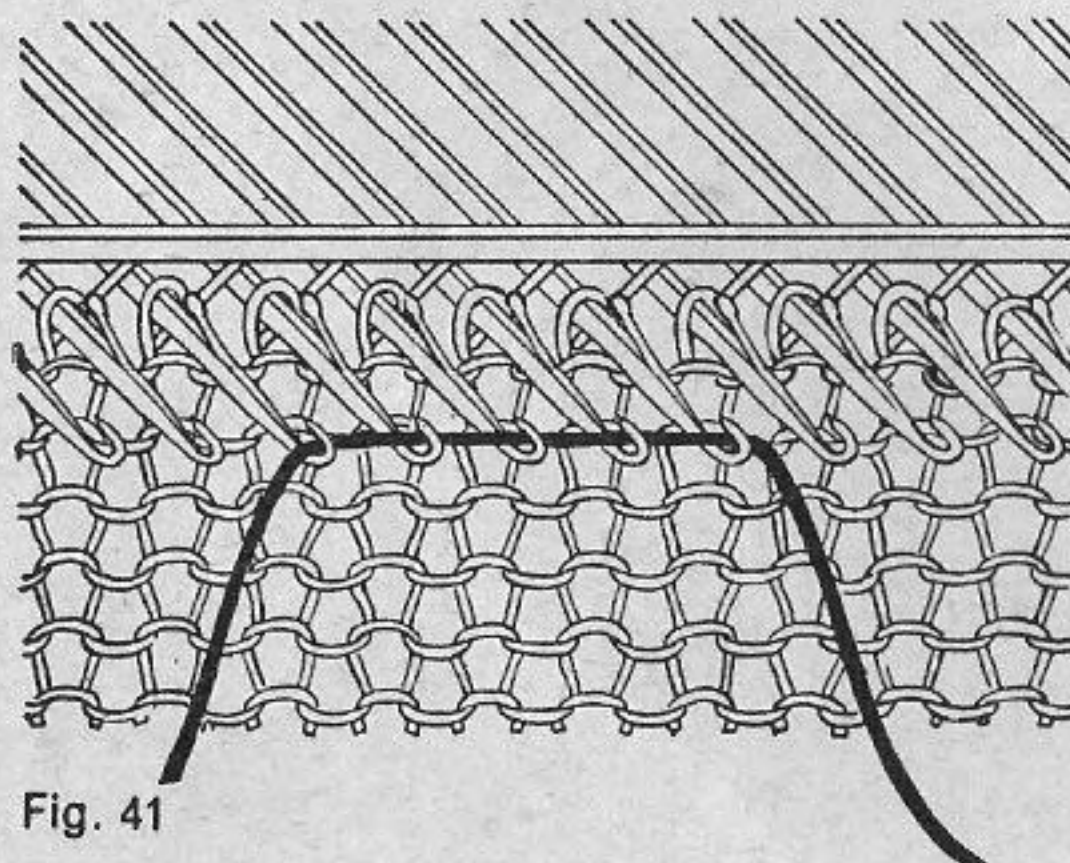


Fig. 41

Place a short length of yarn across the required number of needles. Fig. 41.

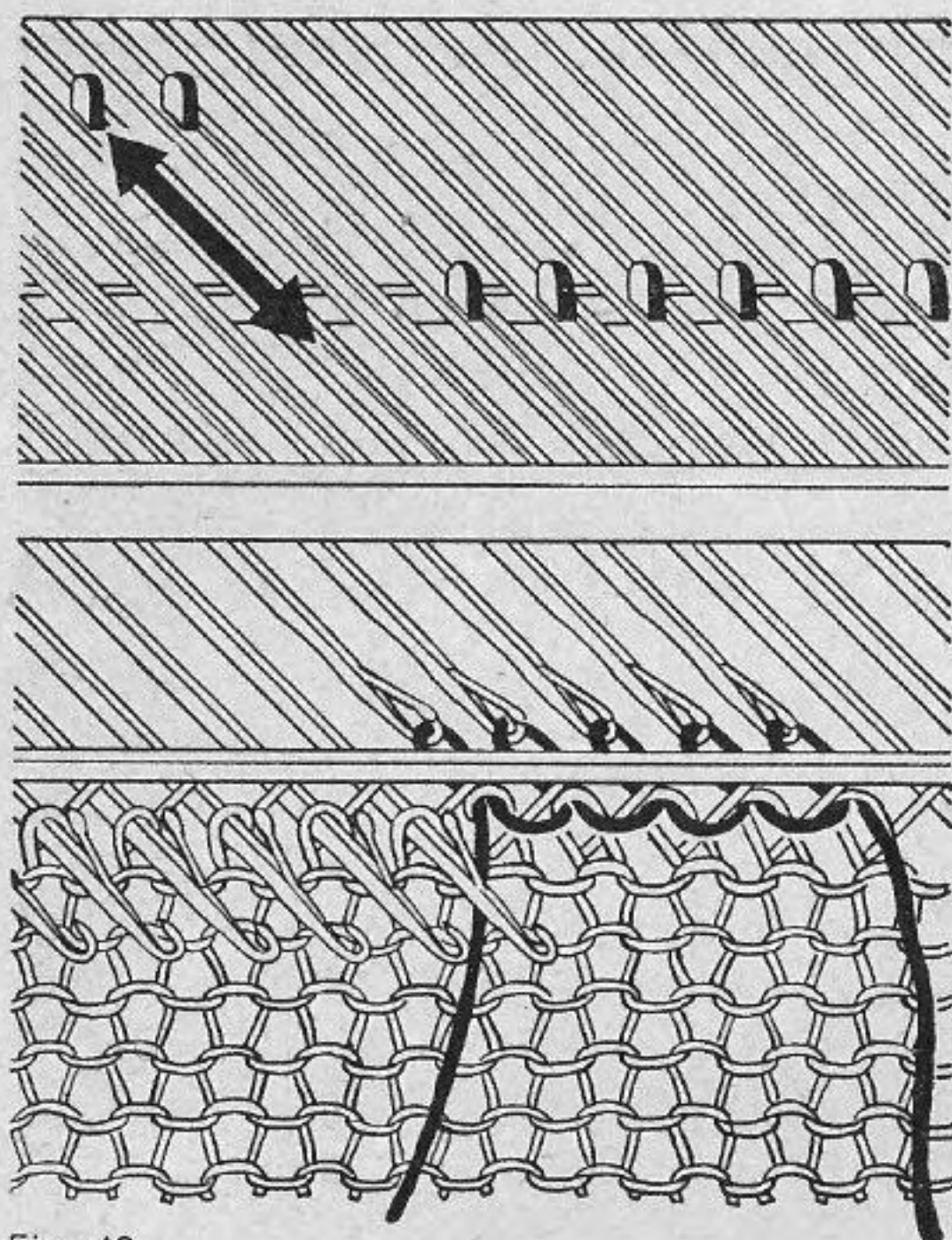


Fig. 42

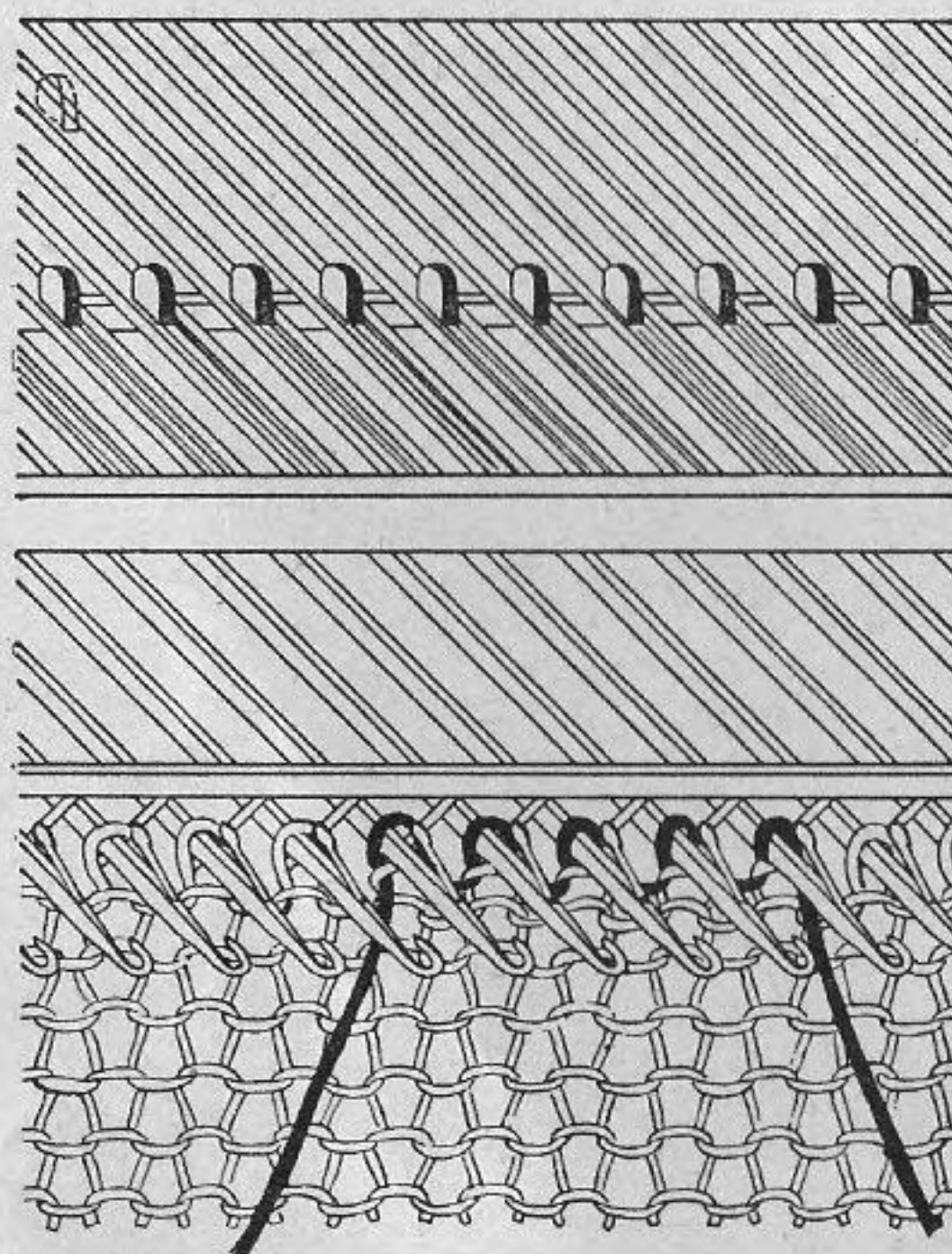


Fig. 43

By hand or with the needle mover move the needle feet first backwards and then forwards thus forming new stitches with this separate yarn. Figs. 42 and 43. Continue knitting.

Where buttonhole is required the new yarn has then been knitted in. Fig. 44.

When the garment is completed this separate length of yarn is removed, thus leaving open stitches. Fig. 45.

Pick up these open stitches with a sewing needle (it is best to sew twice or three times all round, according to the thickness of the yarn) and finish with buttonhole stitch. Fig. 46.

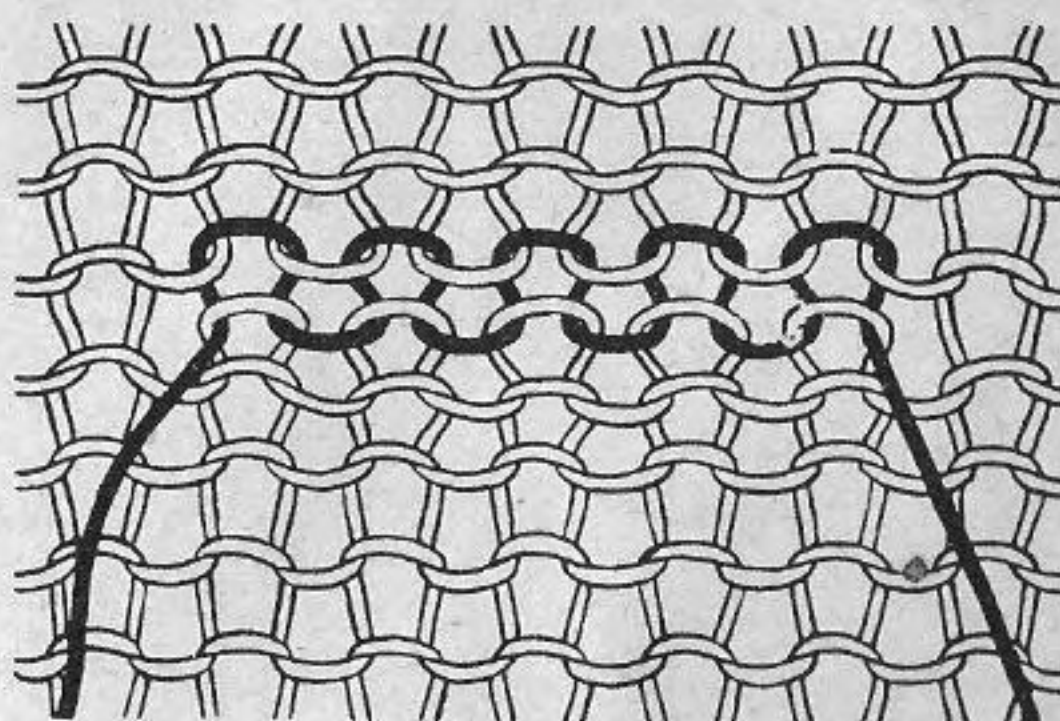


Fig. 44

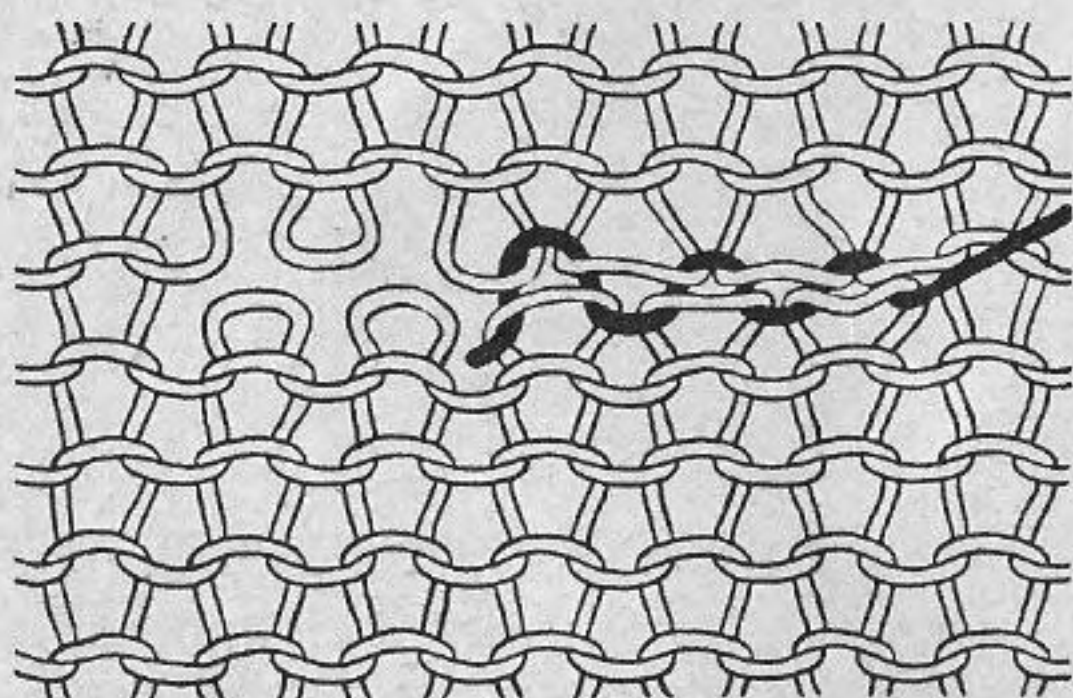


Fig. 45

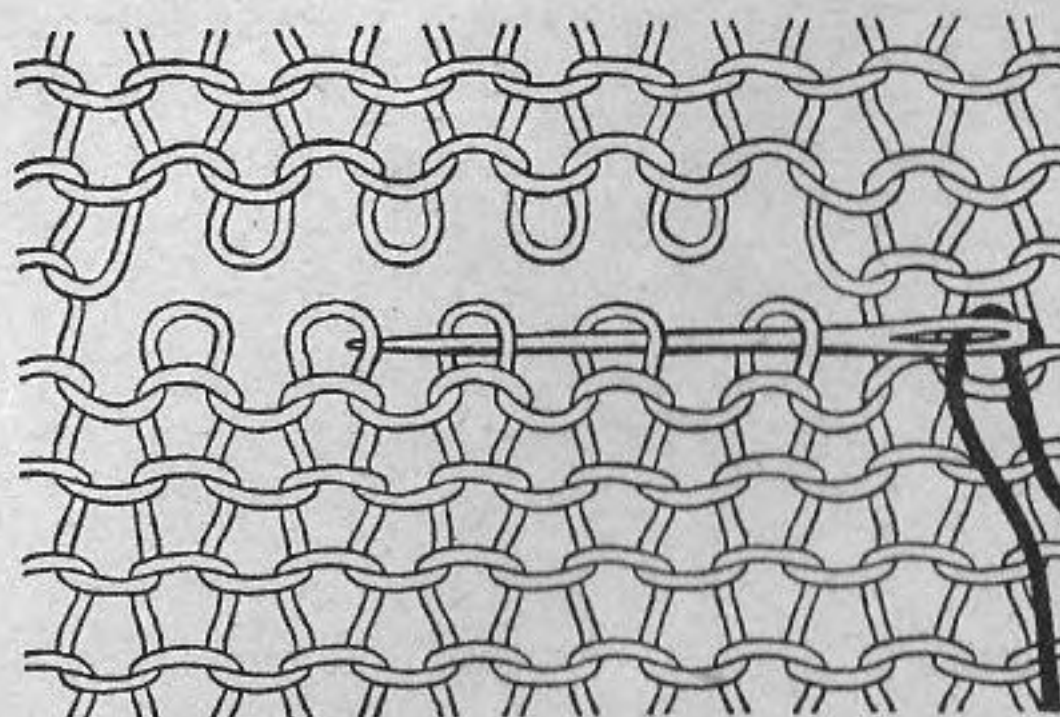


Fig. 46

The crocheting of dropped stitches

for borders, patterns and corrections

By the crocheting up of purposely dropped stitches with green auxiliary needle (latch needle end) not only are corrections performed, but also many attractive patterns. It is possible for example to crochet up plain stitches on the reverse or on the front of the work, or to crochet up every cross thread, or every other cross thread, or to knit in one colour or multicolours, thus obtaining a variety of effects.

For borders of waist, neckline and sleeves etc. first knit the required number of rows and drop then, for instance every second stitch (i. e. 1 plain, 1 purl), or every third and fourth stitch (i. e. 2 plain, 2 purl) and crochet them up as plain stitches on the purl side. This crocheting up is performed in the same way as you pick up ladders in stockings, for example.

Crocheting of plain stitches on the purl side of work,

(i. e. the side facing knitter). This operation forms a vertical row of purl stitches on the plain side of the work, which means a stitch surface of 1 plain, 1 purl, 2 plain, 2 purl, etc. Needles in free move position.

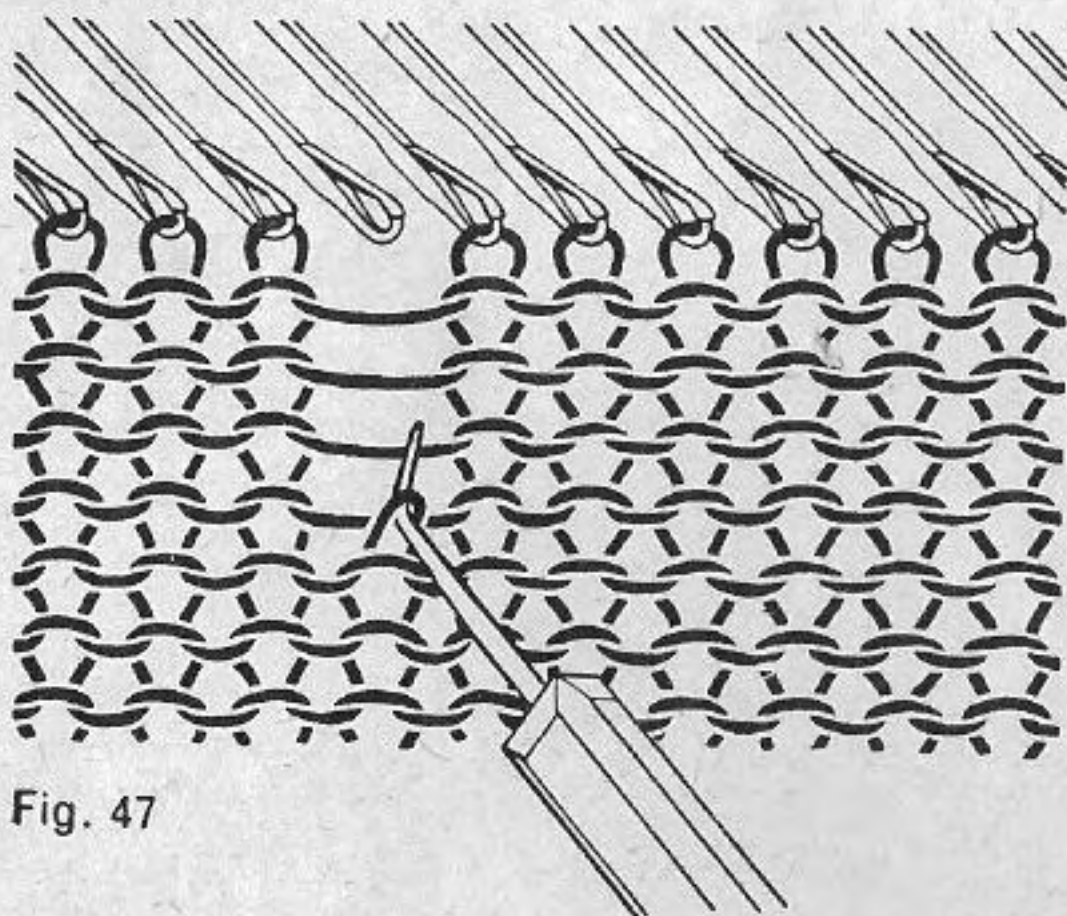


Fig. 47

Remove one stitch from the latch needle and drop it a few rows (for borders to the first row). Then loosen the dropped stitch with the angled end of the red auxiliary needle, Fig. 47, in order to catch the stitch more easily with the green crochet hook.

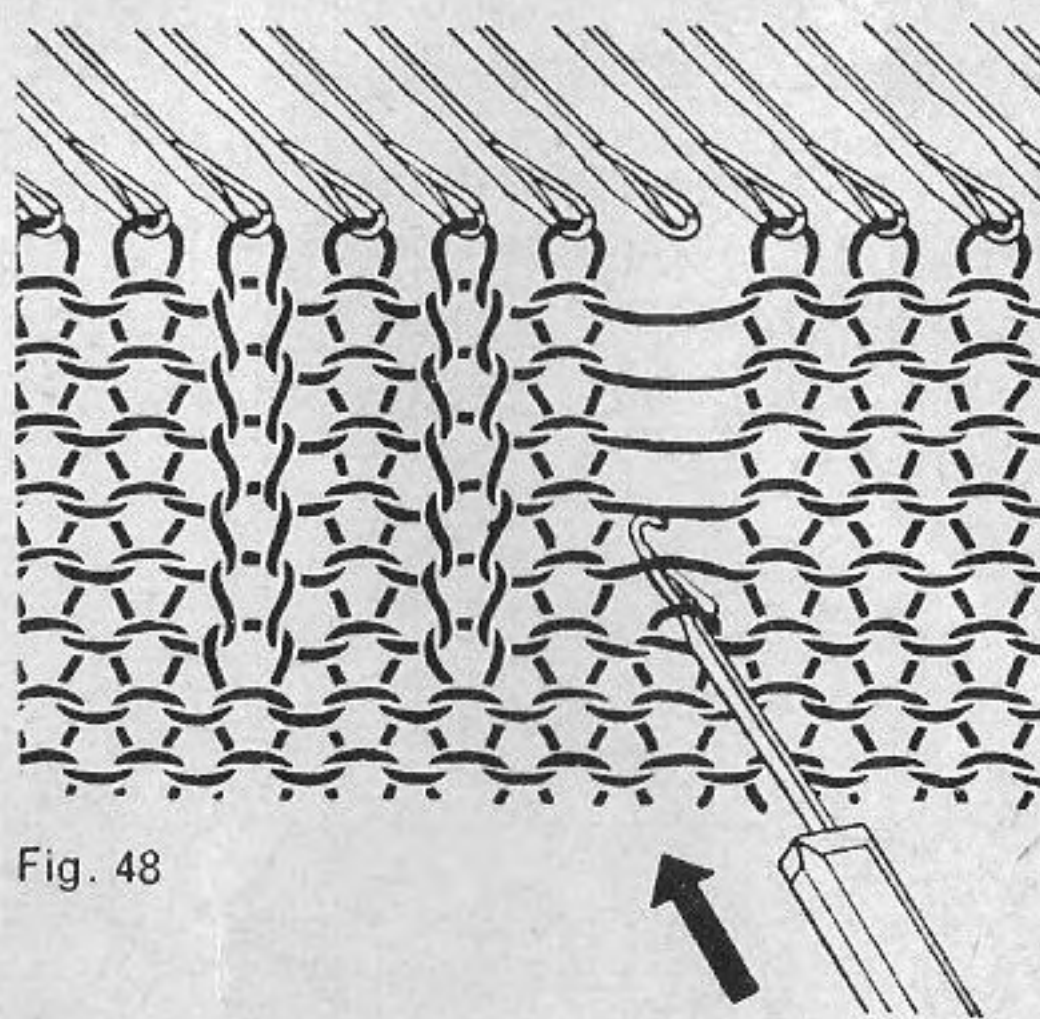


Fig. 48

Insert the green crochet hook (with the latch open) from the front side into the dropped stitch and push it under the thread of the row above. Fig. 48.

With the cross thread in the crochet hook move the crochet hook downwards. Fig. 49. This movement closes the latch and the "captured" cross thread is pulled through the dropped stitch forming the new stitch. Figs. 50 and 51.

Repeat this operation Fig. 52 until the last cross thread has been crocheted.

Finally place the stitch in its respective latch needle. Fig. 53.

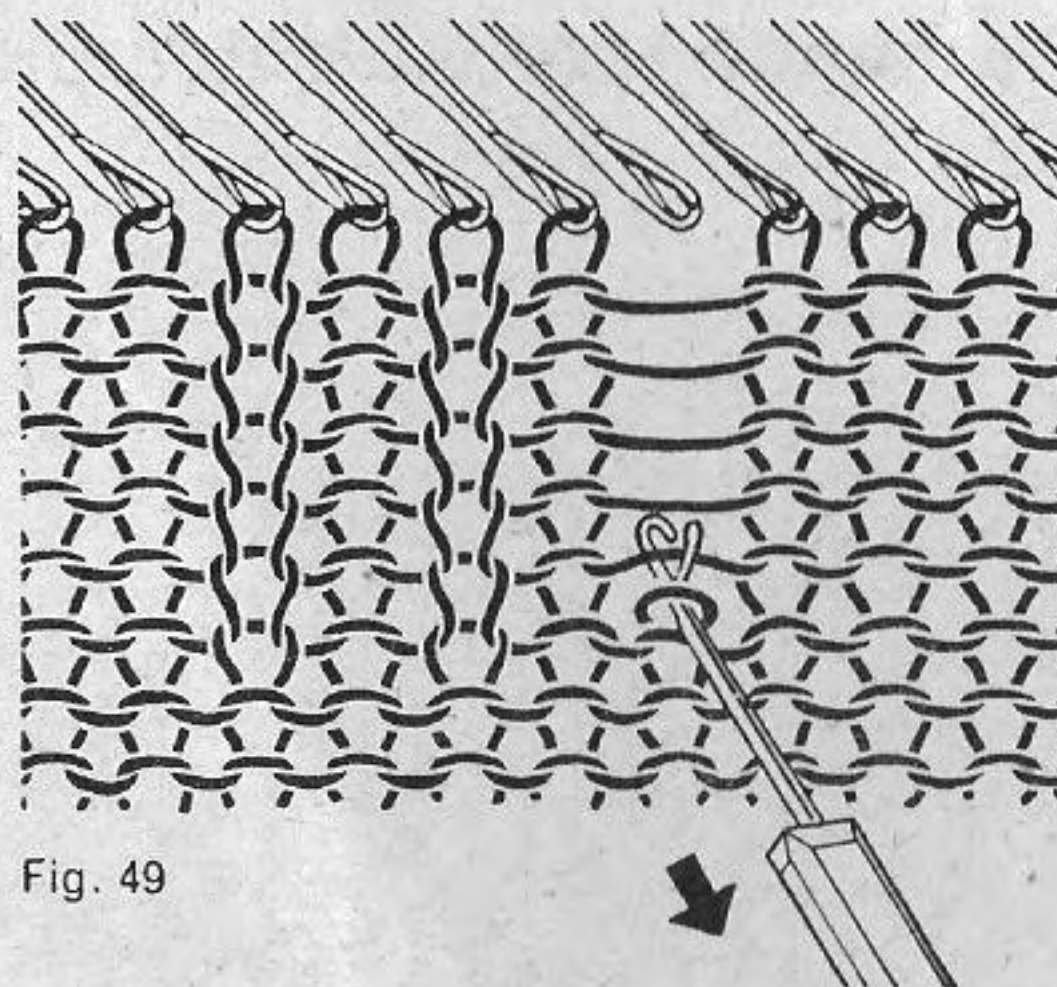


Fig. 49

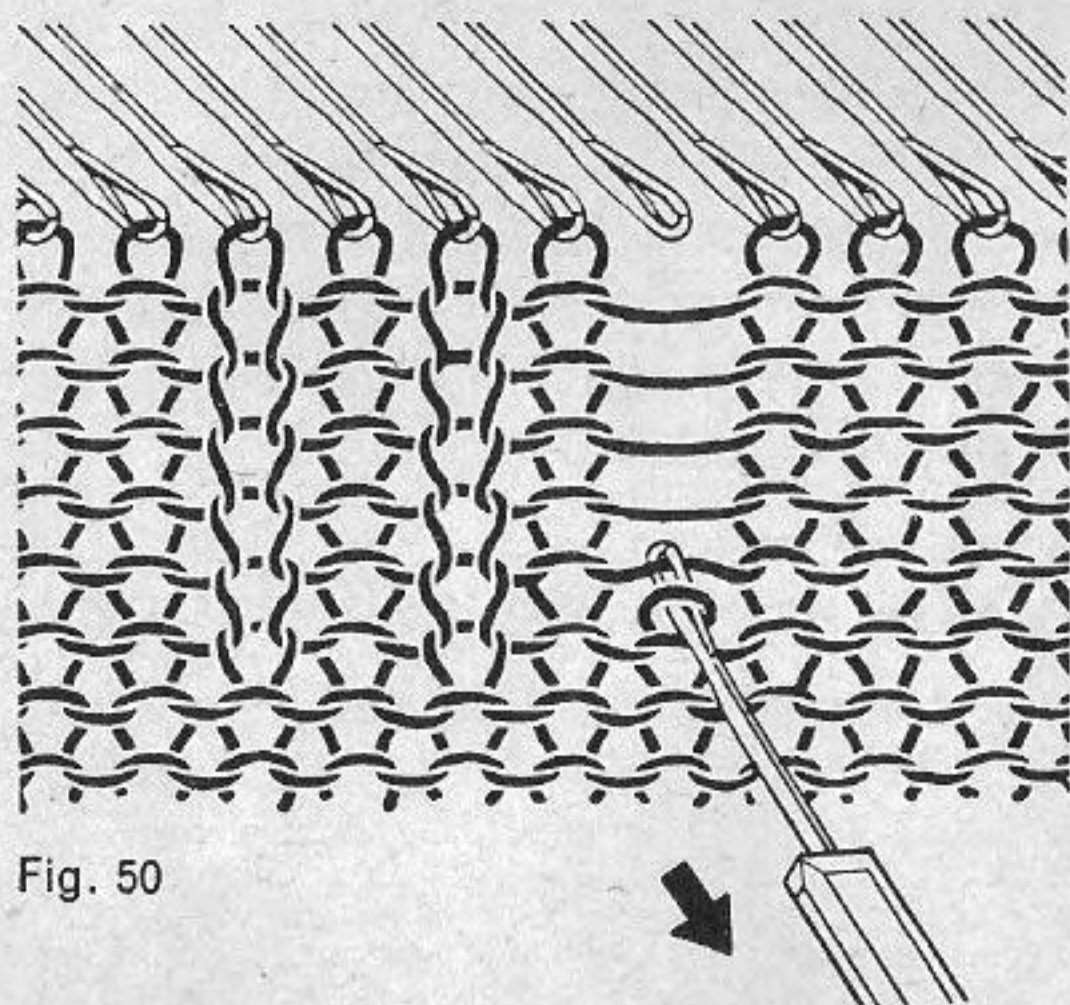


Fig. 50

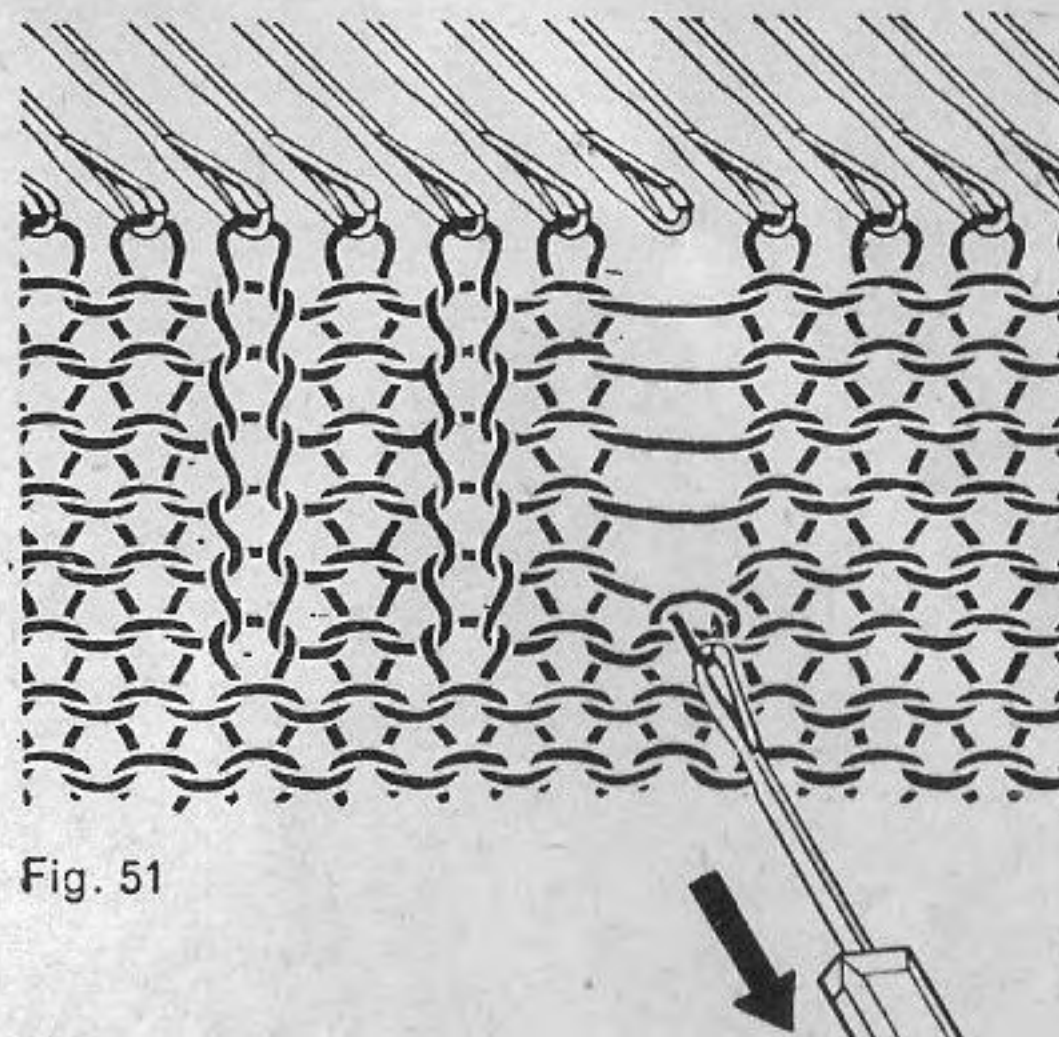


Fig. 51

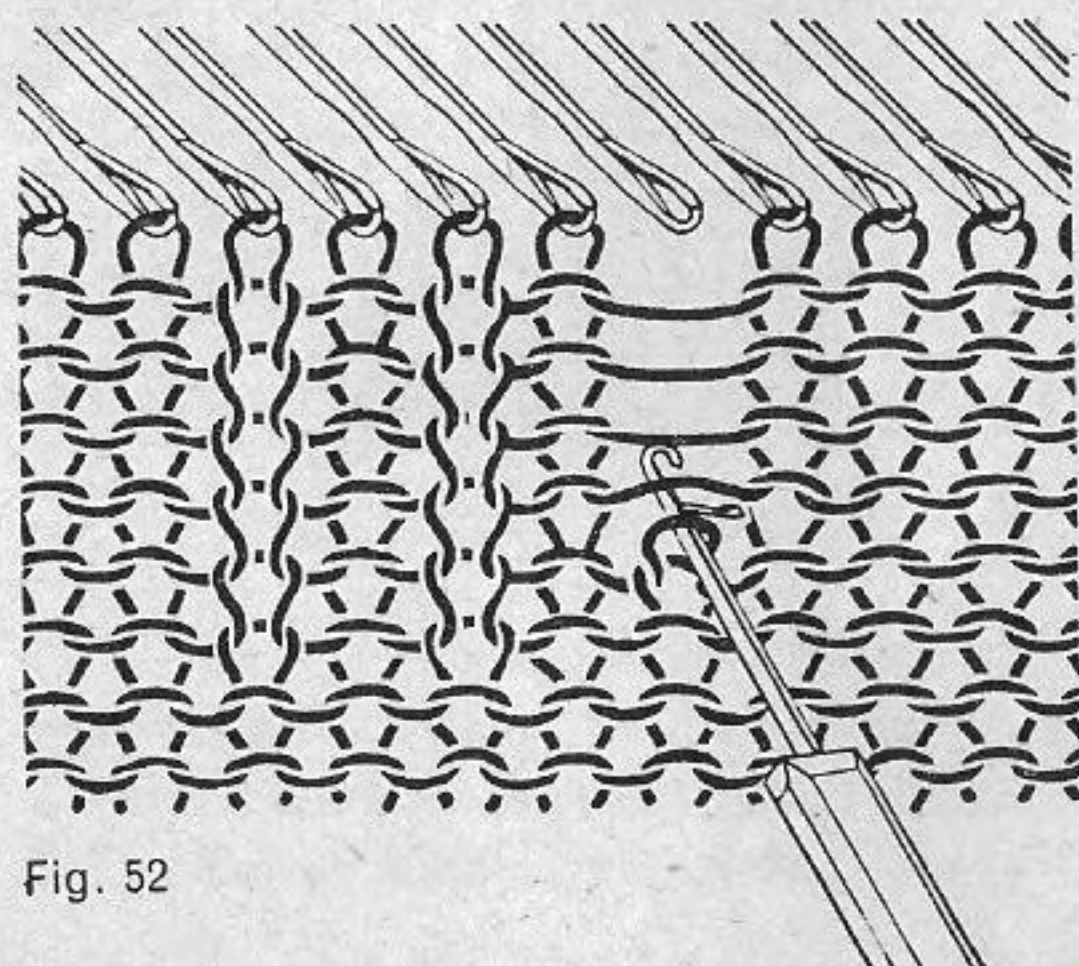


Fig. 52

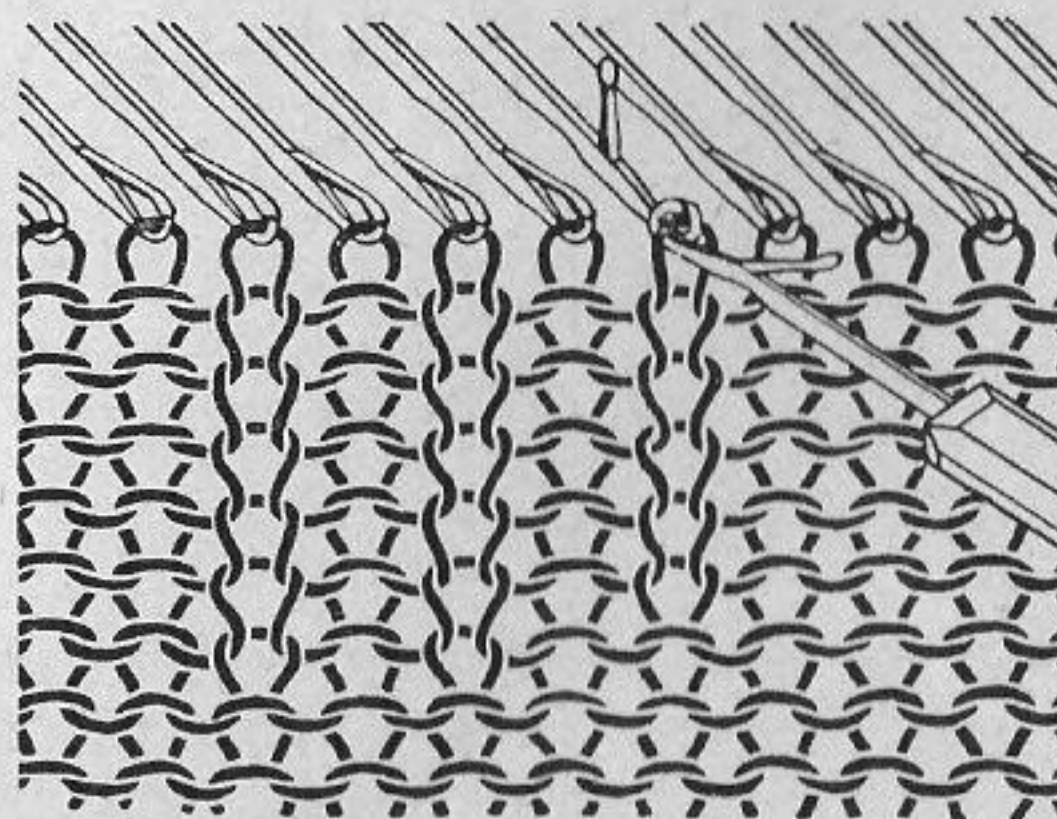


Fig. 53

Crocheting up with two cross threads. Needles in free move position.

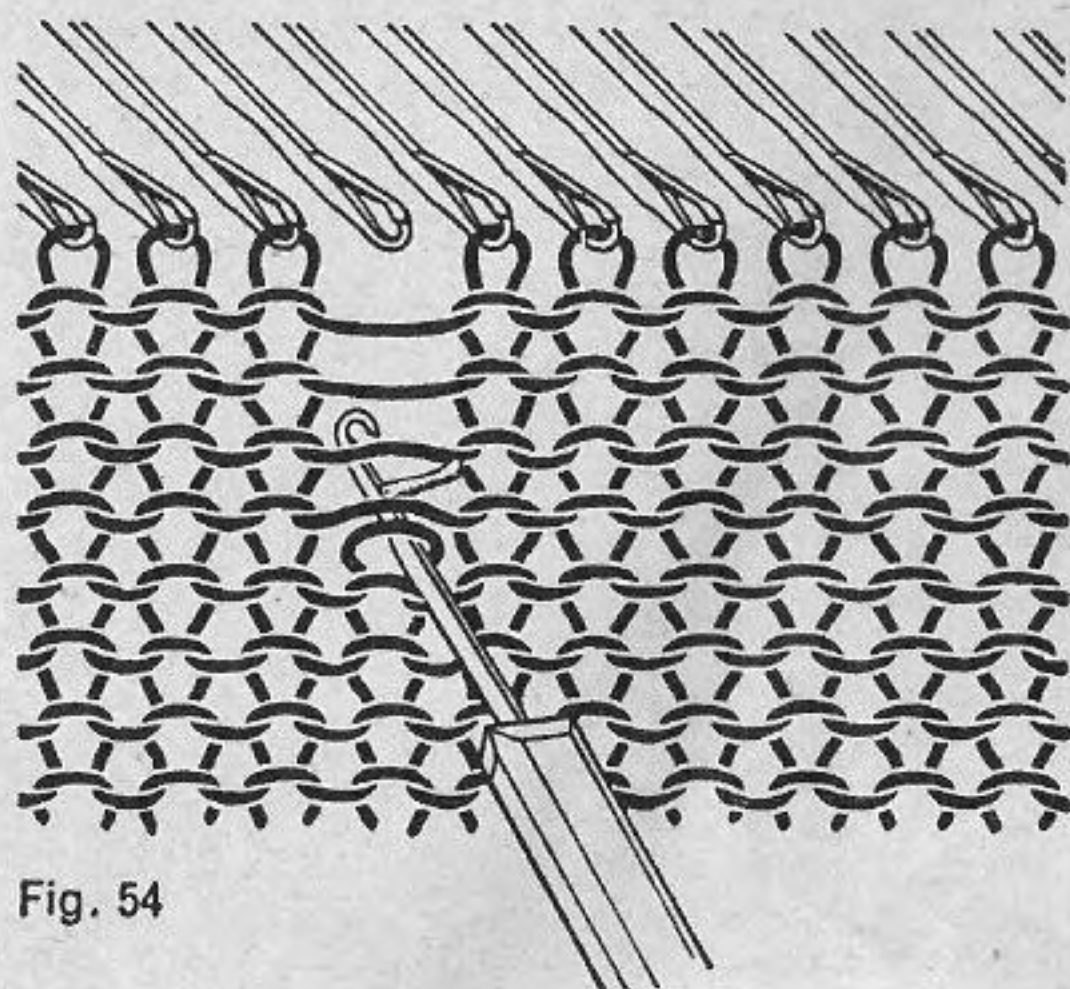


Fig. 54

Place crochet hook in dropped stitch as in Figs. 47 and 48, then behind two cross threads push upwards and crochet only the top cross thread, Fig. 54.

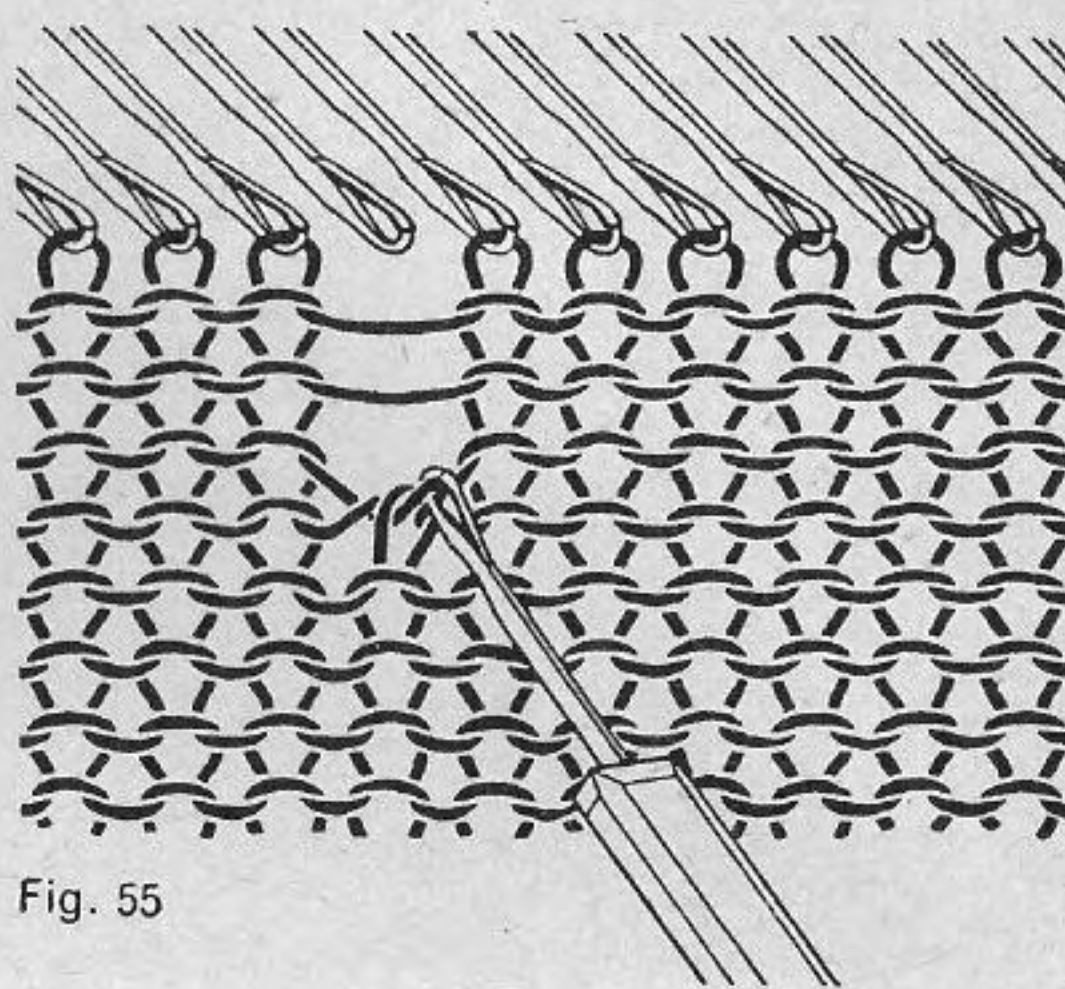


Fig. 55

The lower of the two cross threads will automatically be caught. Fig. 55. For this type of crocheting up it is advisable to drop the stitch for an even number of rows, so that two cross threads are available for crocheting up together to the top.

Crocheting up for corrections on plain stocking stitch side of work, (facing the machine and not the knitter). Needles in the free move position.

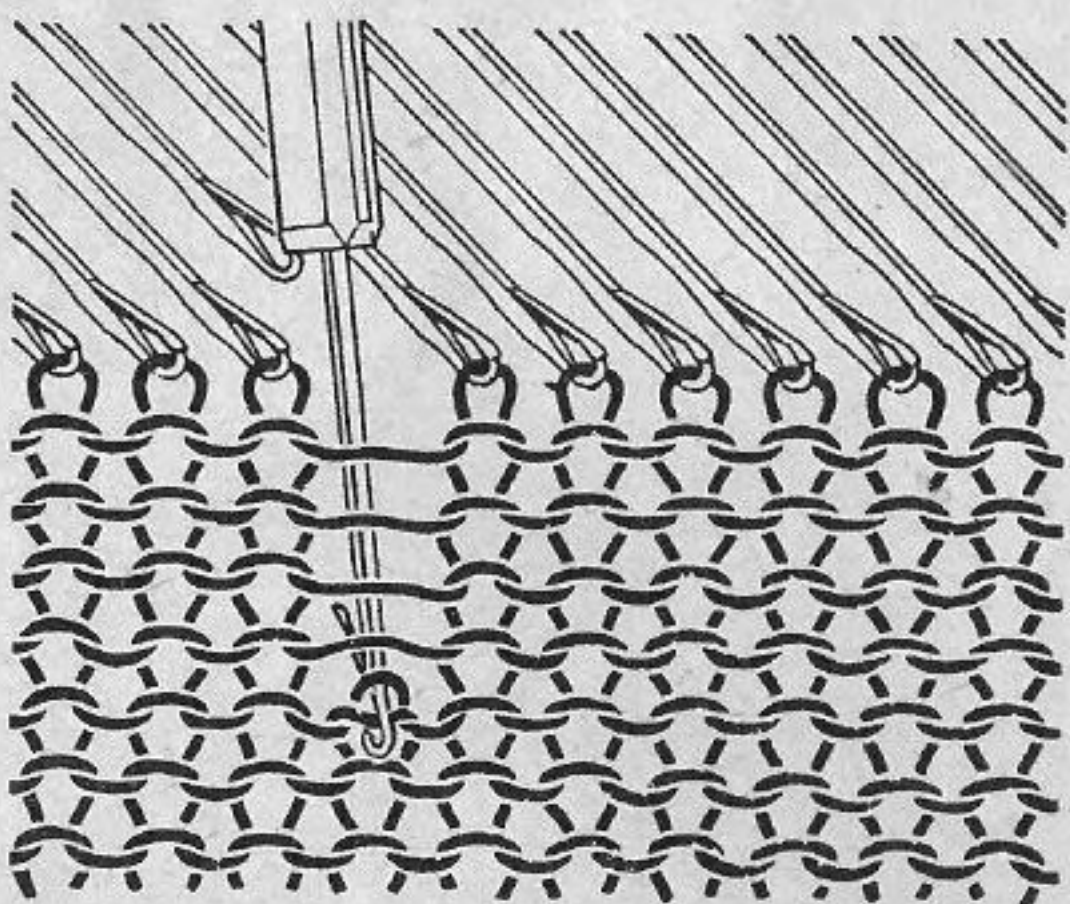


Fig. 56

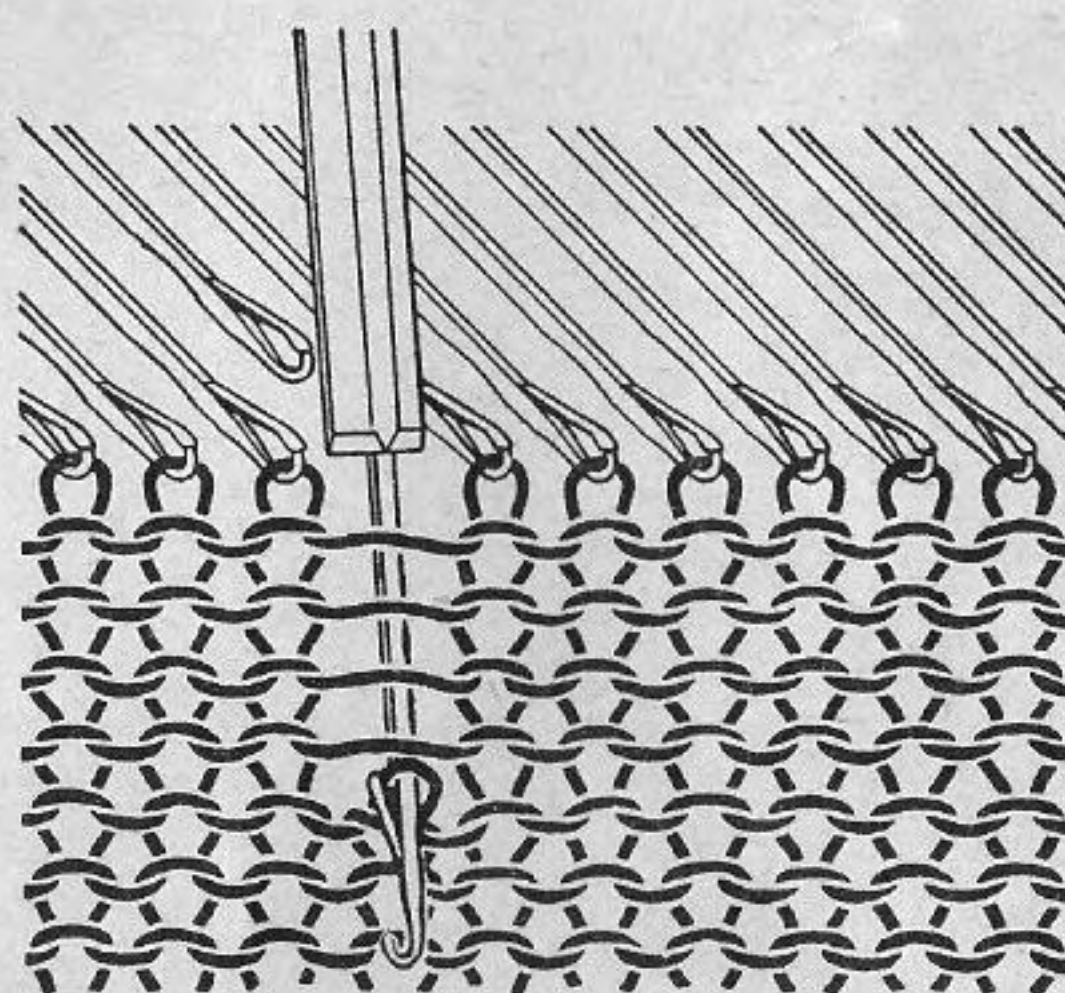


Fig. 57

Drop the stitch and loosen it with the angled end of the auxiliary needle as in Fig. 47. With the latch open, guide the green crochet hook from top downwards behind the cross threads and then push the hook forward through the dropped stitch, Fig. 56, in order that the dropped stitch is behind the open latch. Fig. 57.

Now move the crochet hook slightly upwards and at the same time guide the open latch underneath the lowest cross thread. Fig. 58.

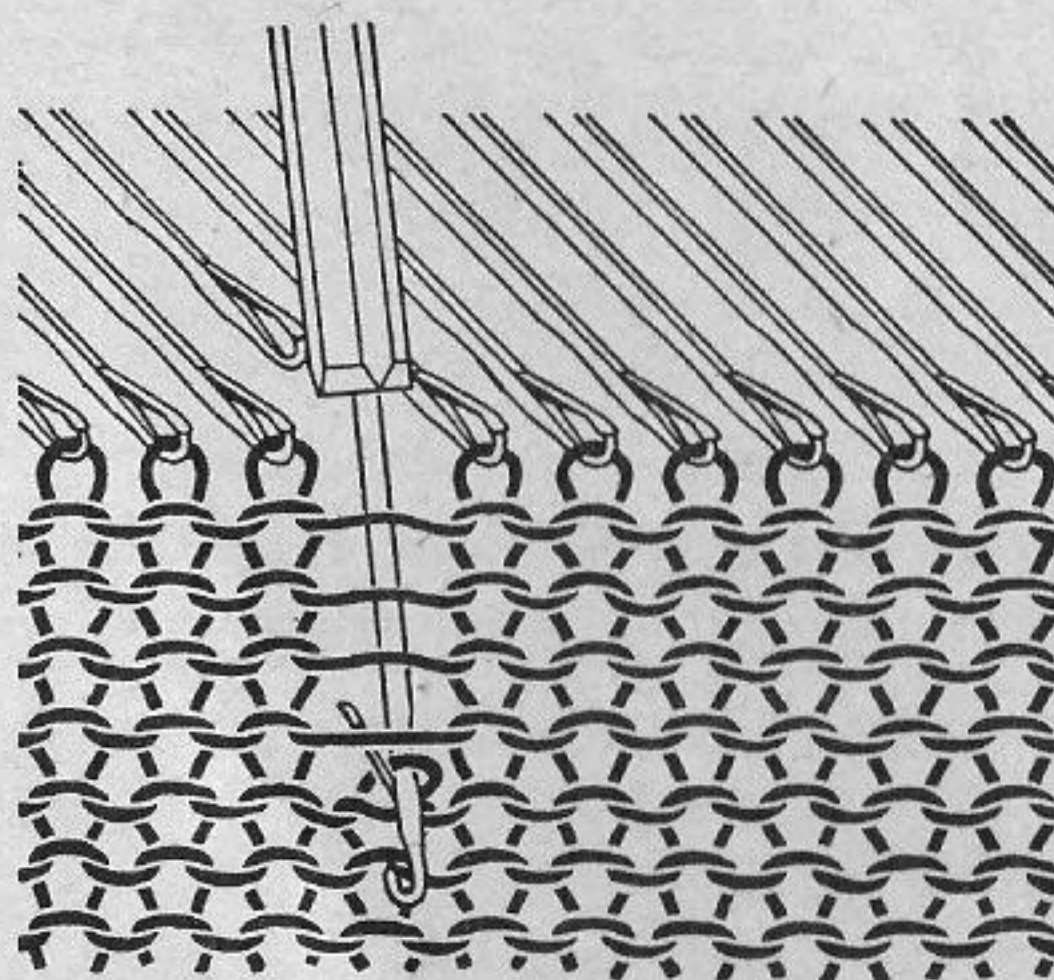


Fig. 58

Pull the "captured" cross thread upwards with the crochet hook, so that the latch closes and the cross thread is drawn as a new stitch through the dropped stitch. Fig. 59.

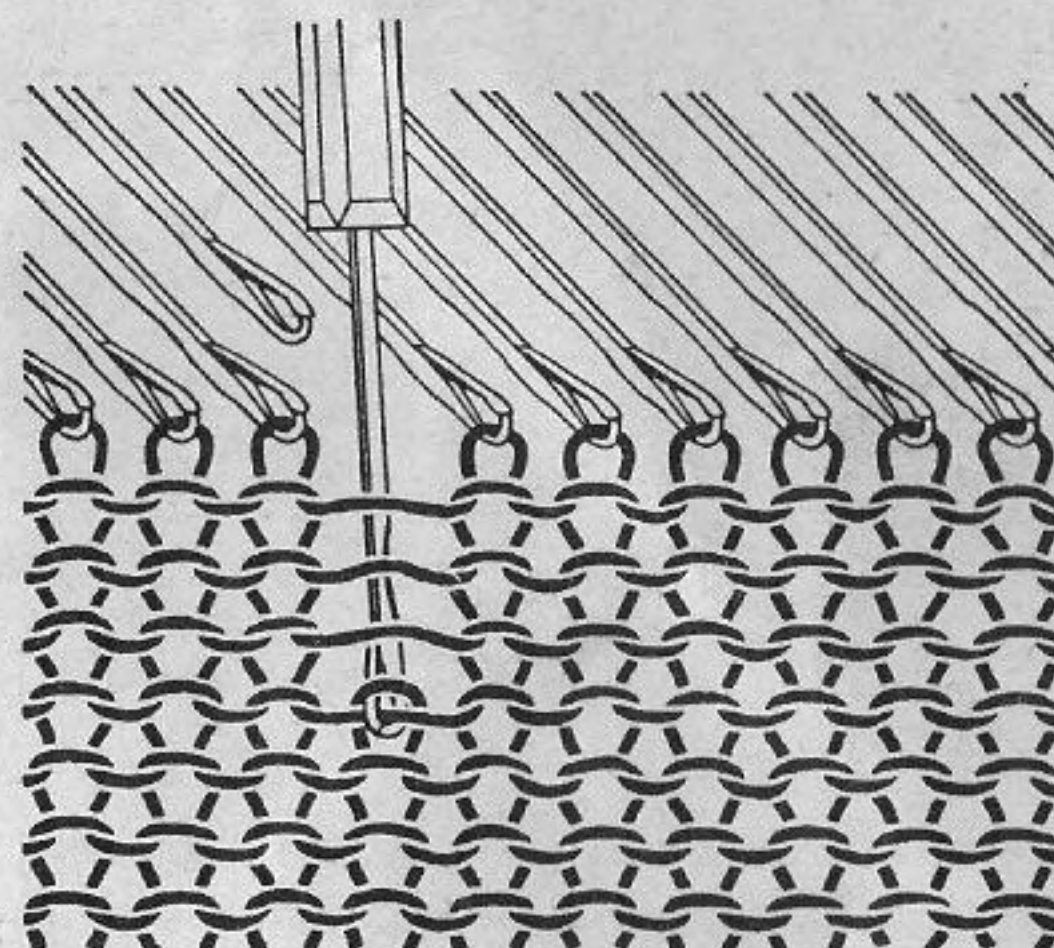


Fig. 59

Crochet up the following cross threads exactly as in Figs. 57—59, and place the last stitch into the latch needle. Fig. 60.

For this way of crocheting up always hold crochet hook with bend facing knitter.

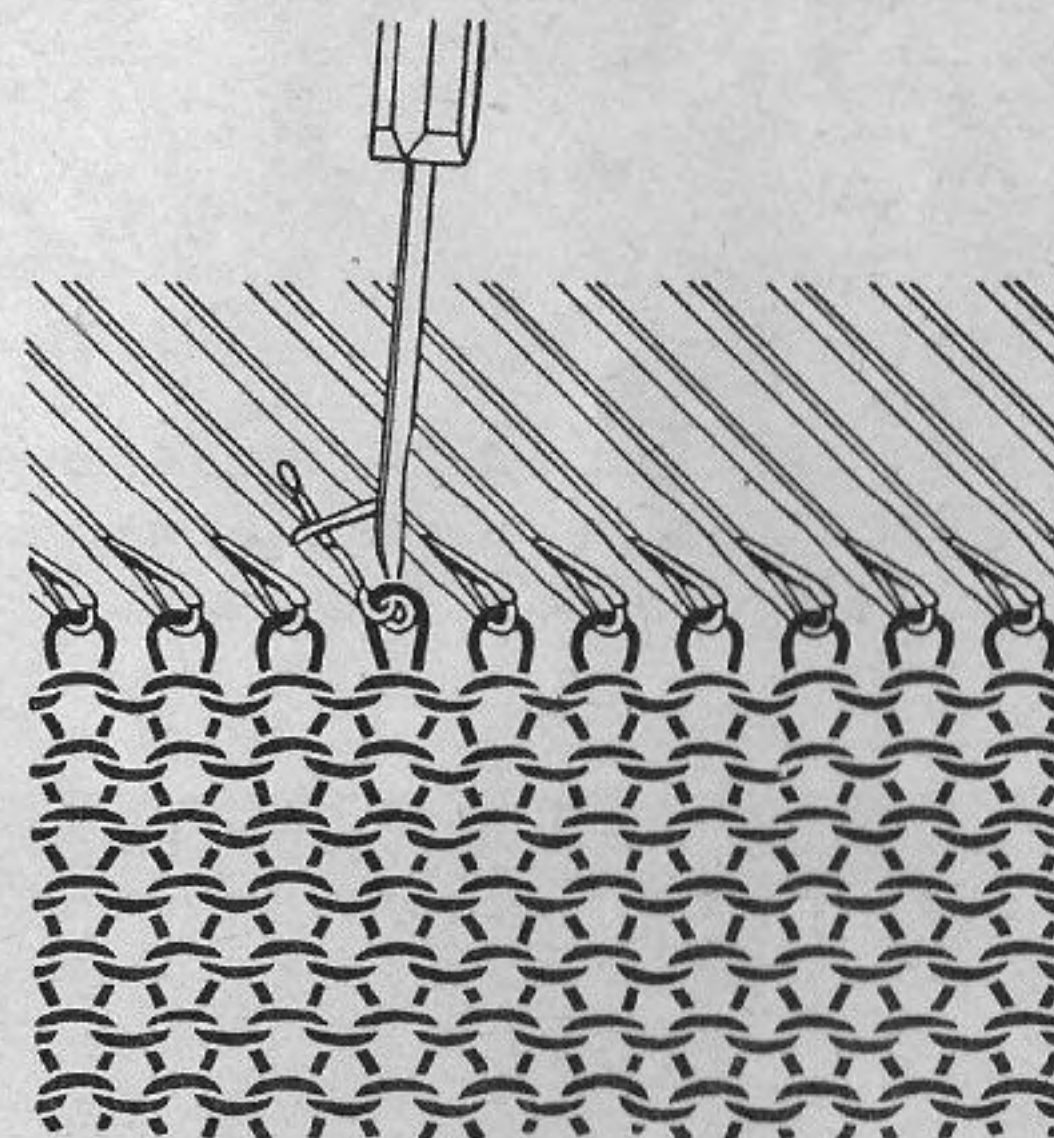


Fig. 60

If the stitch to be corrected is too far down, so that the shaft of the crochet hook touches the top cross thread, crochet up in groups, in the middle of the runner, leading the crochet hook behind the cross threads.

Increasing and decreasing in the middle of a row

Increasing in the middle of a row, for example after waist borders, when the upper part of the knitting is to be widened.

First put all needles being used in the free move position, then transfer all stitches on to a knitting needle. Now place the block ruler behind needle feet in the same way as for casting on.

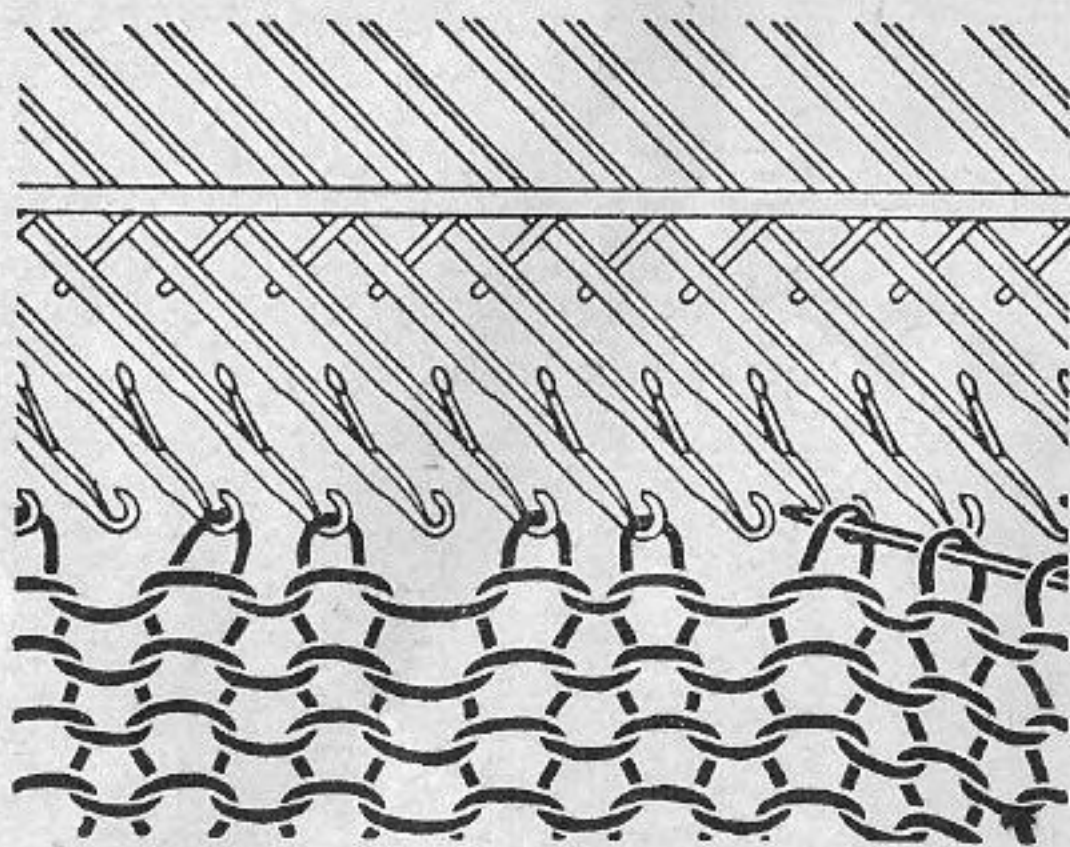


Fig. 61

Slide stitches one by one off the knitting needle into latch needles leaving one latch needle free where each increase is to be made. Fig. 61.

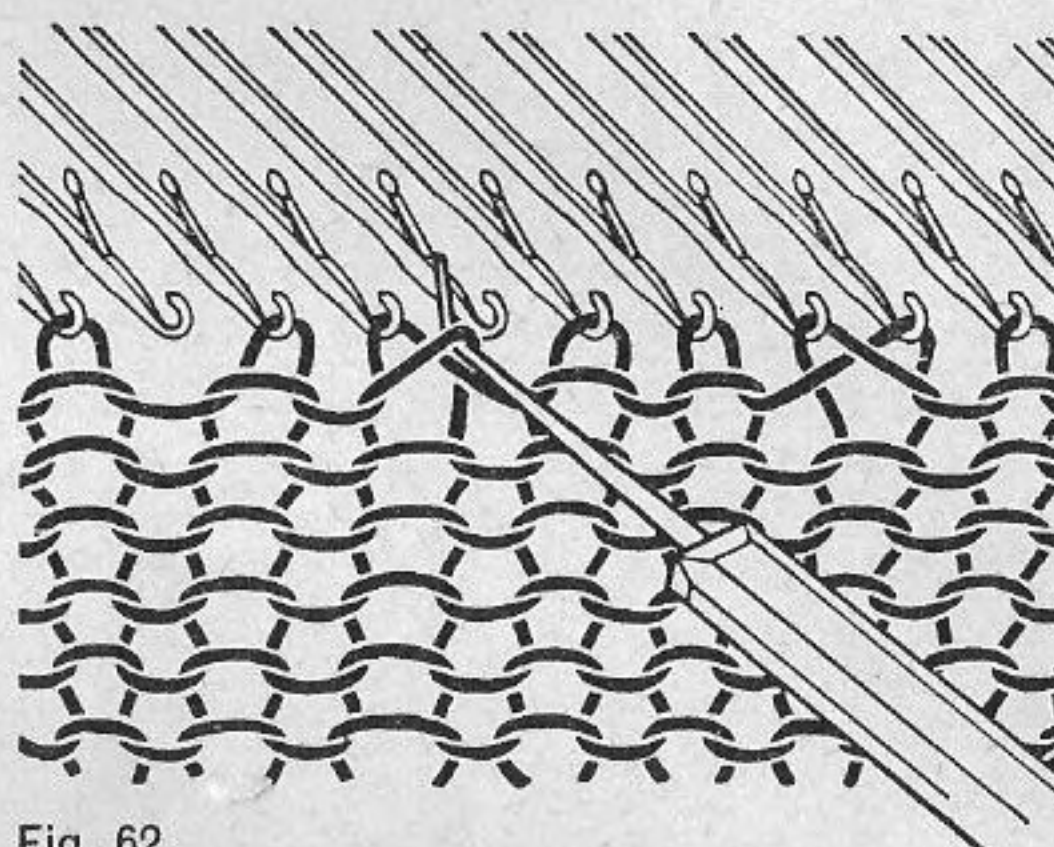


Fig. 62

To avoid a hole where increasing pick up a stitch from the previous row and place this in the latch needle which has been left free. Fig. 62. Now push all the stitches behind the open latches, remove block ruler and continue knitting.

Decreasing in the middle of a row.

For this operation, with the needles in free move position, again transfer all the stitches on to a knitting needle replacing them on to the latches but placing two stitches on to one latch needle where you wish to decrease.

Knitting of graduations

To shape certain garments it is may be necessary to omit knitting certain groups of stitches. For this the required number of needles is put in the rest position.

Graduated decreasing. Starting position: the yarn and the sliding lock on right. The graduations will then be on the left, the knitting being higher (longer) on the right.

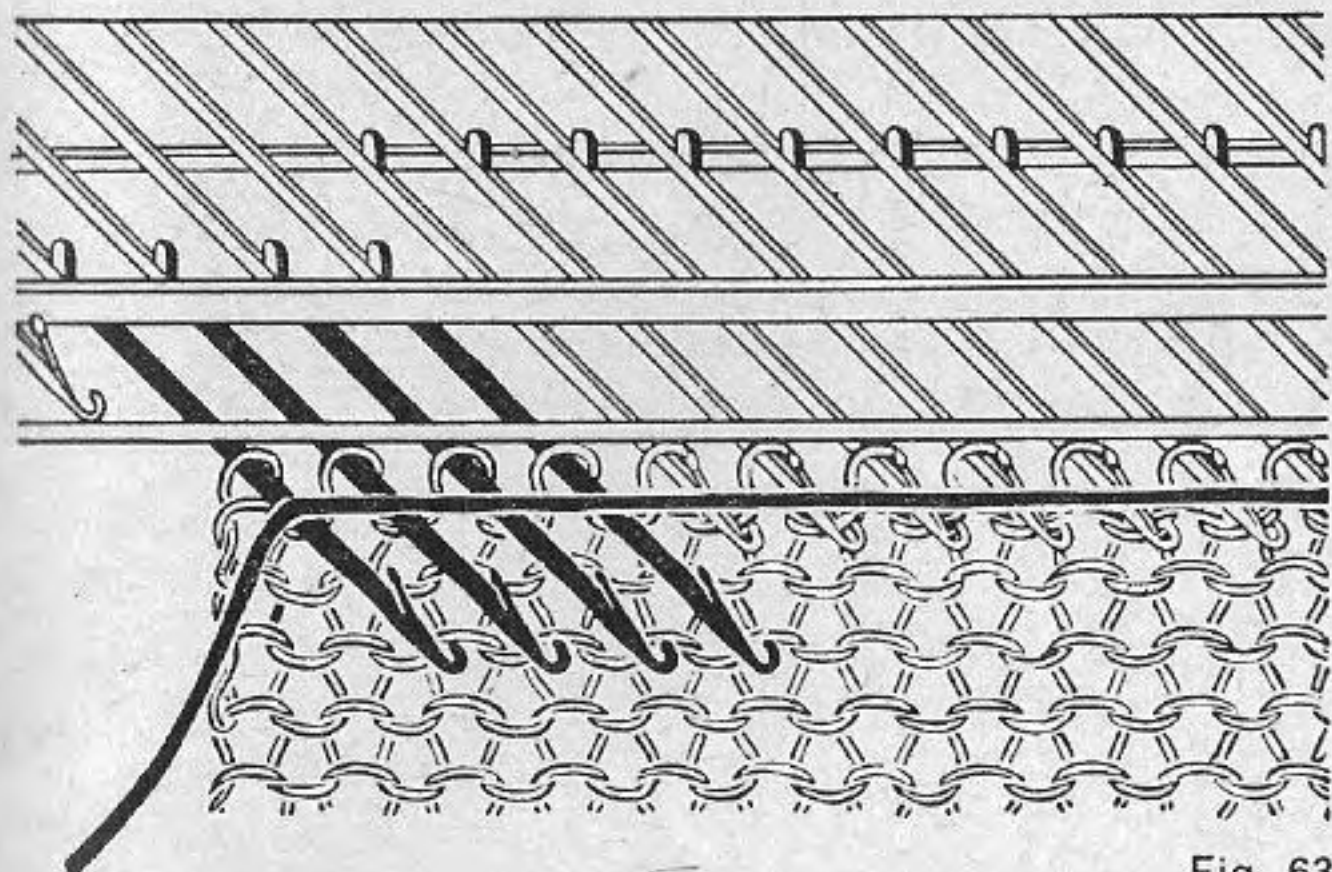


Fig. 63

At left side push first group of needles forward into rest position. Then place the yarn across all the latches, Fig. 63, and knit one row with the remaining needles, which are still in working position, from the right.

Now knit in the reverse direction because only one graduation has been made when two rows have been knitted. To prevent a hole at the end of the graduation, wind yarn upwards around the first needle in the rest position (Fig. 64) before placing the yarn from left to right across the open latches. Then knit in the reverse direction.

On left, set the second group of needles in rest position Fig. 65 and knit — coming from the right — second graduation. Fig. 66

Continue working in the same way, until the graduation is complete. Then with the block ruler push all the needles back into working position (Fig. 67) and so continue knitting with all stitches.

The same procedure is followed but in the reverse directions when a graduation is required on the right of the knitting.

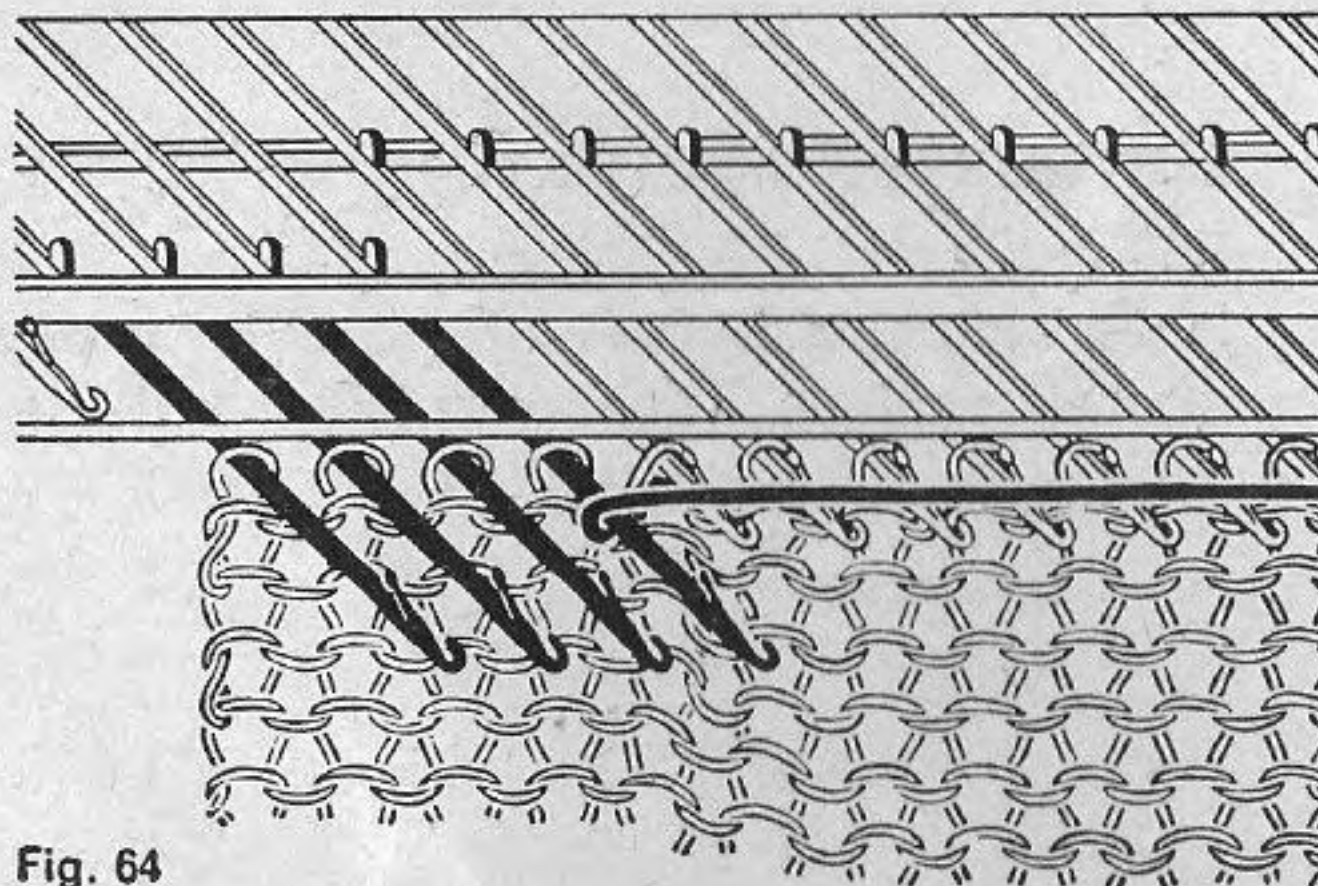


Fig. 64

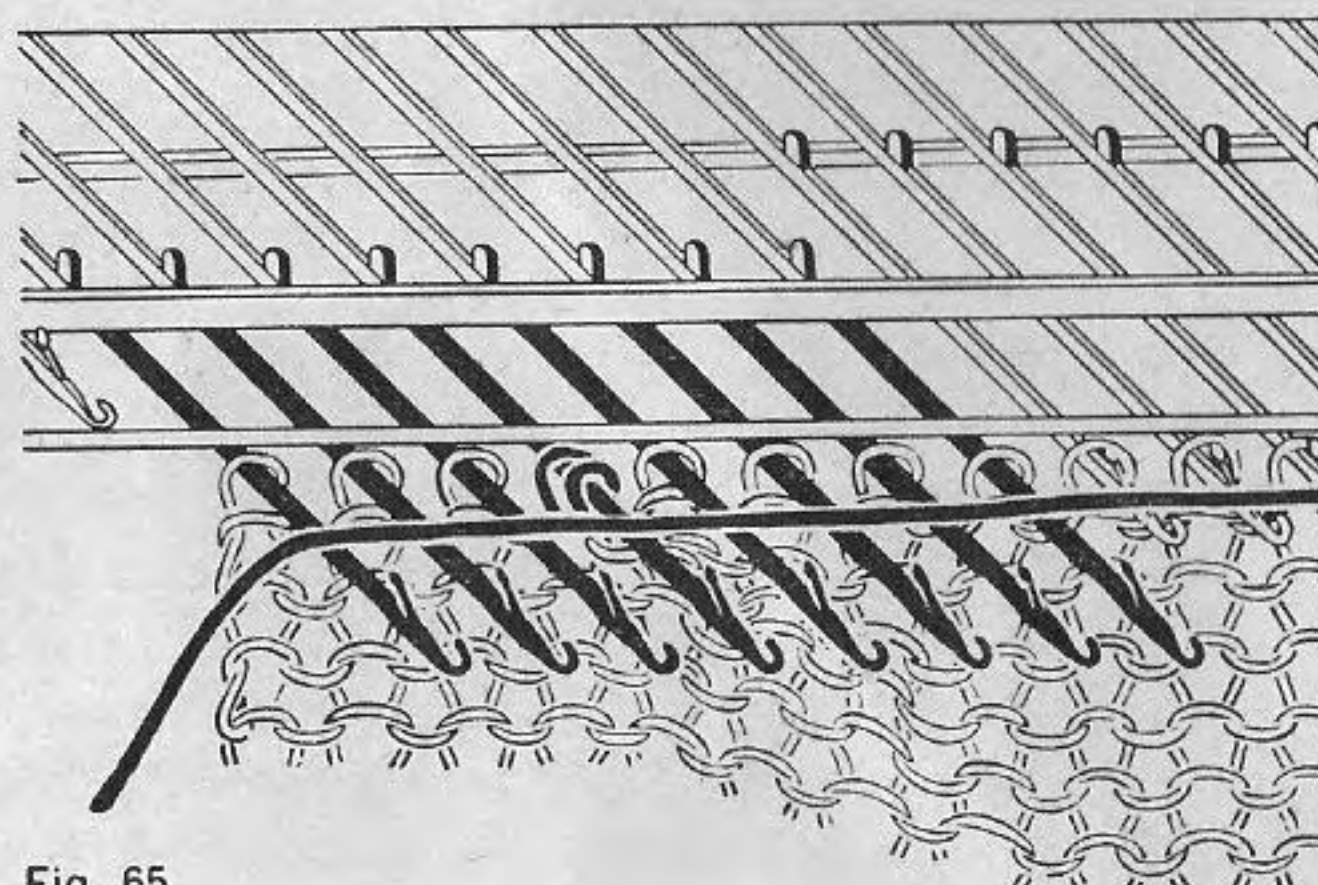


Fig. 65

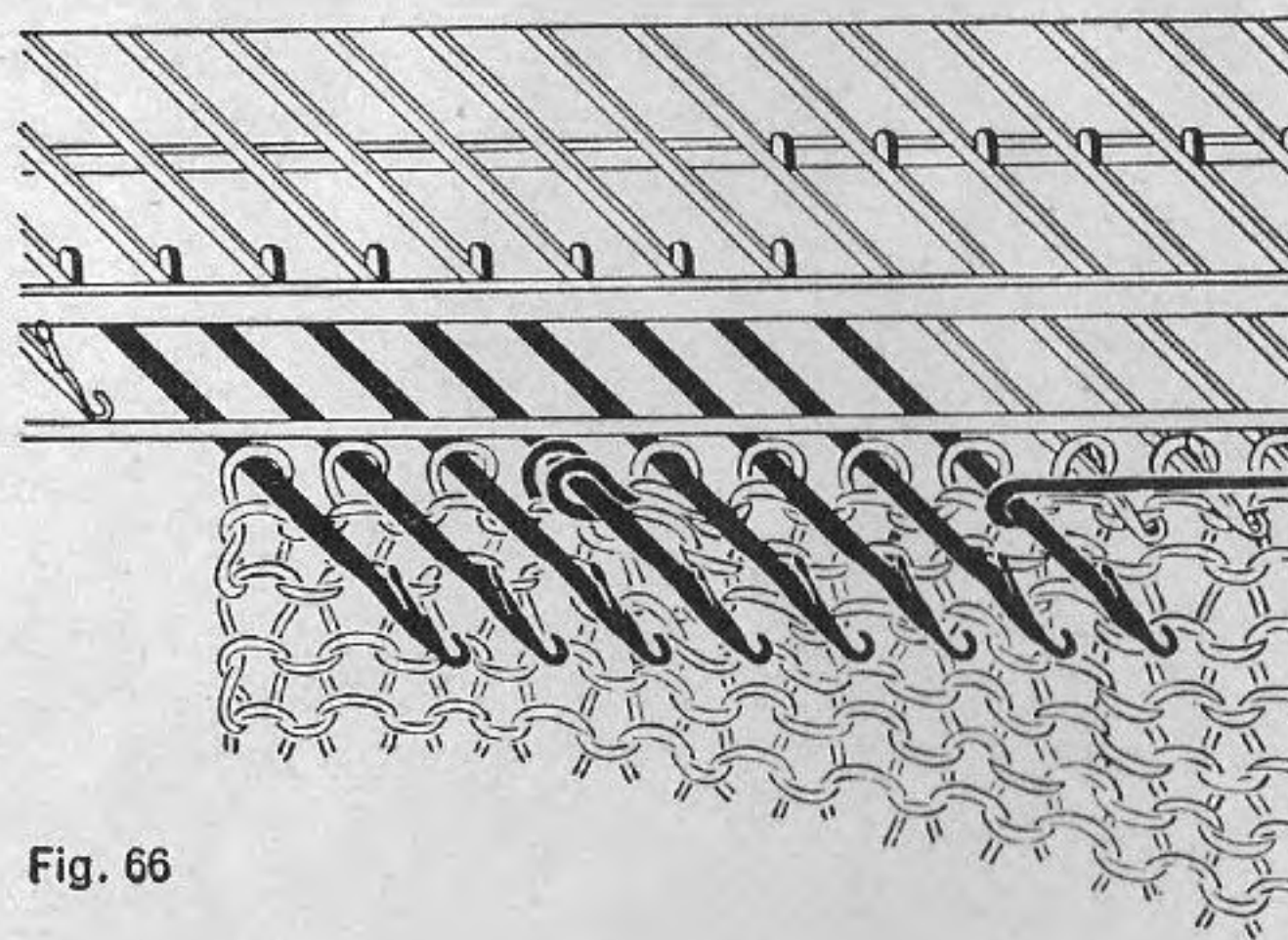


Fig. 66

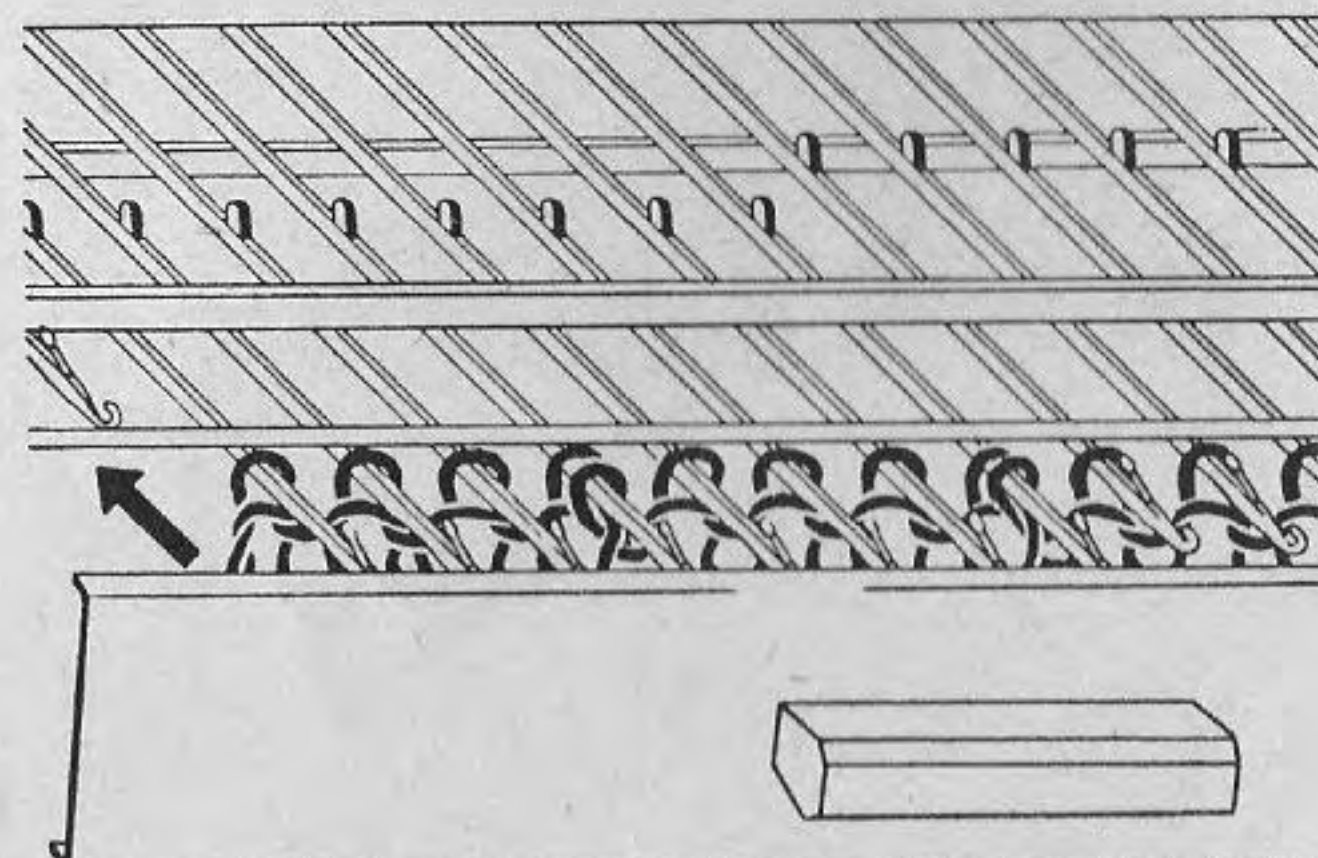


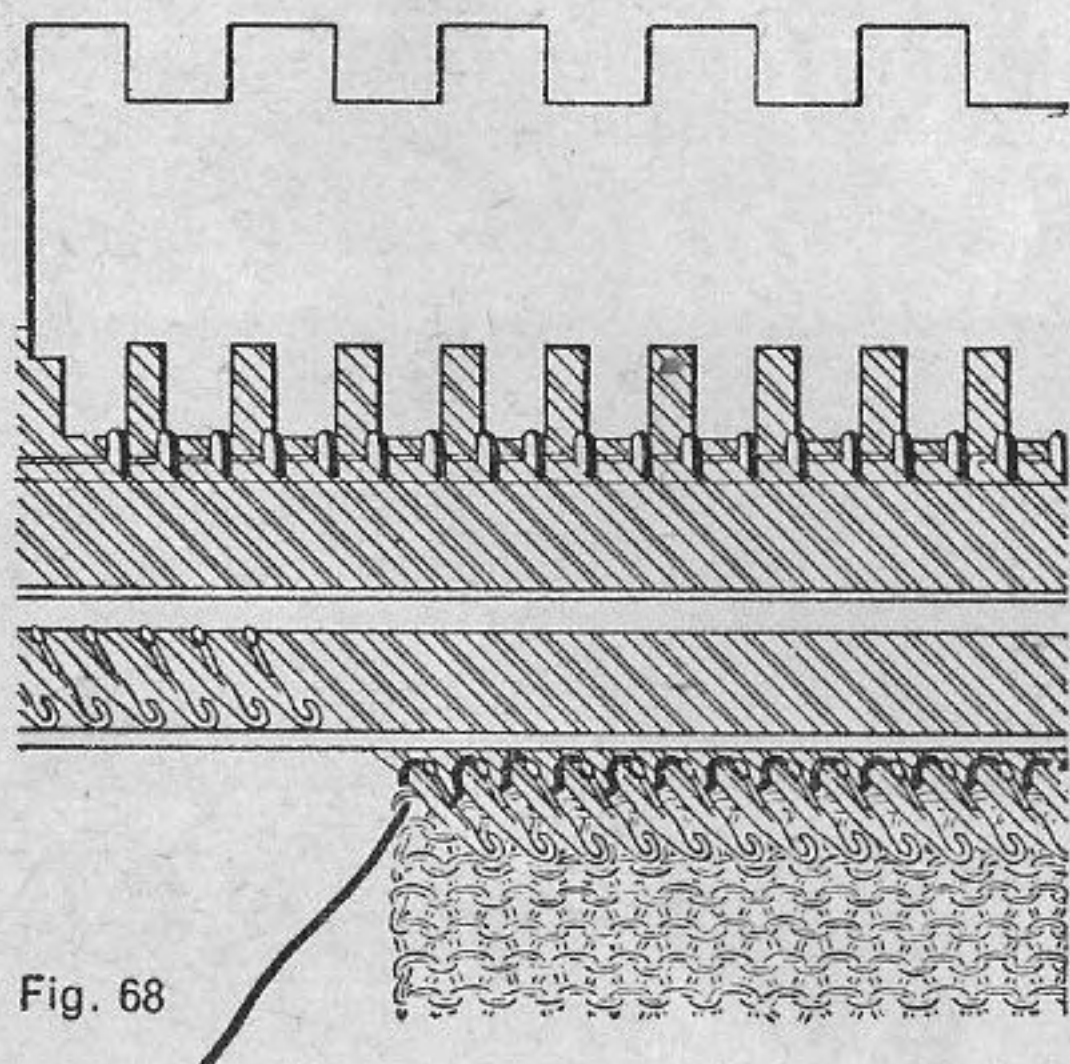
Fig. 67

Graduated increasing

is worked similarly, but in this case the maximum number of latches is brought forward into the rest position. Then, step by step, the new groups containing the required number of latches are brought into the working position.

Fair isle patterns row by row:

The PASSAP M 201 possesses a great advantage inasmuch as multicoloured patterns can be knitted row by row, without the assistance of a crochet hook. As in handknitting, according to the pattern, you knit certain stitches with ground colour and others with contrast colour. Unlike handknitting, the different colours have to be knitted one after the other and not at the same time, which means that you put those needles which are not required to knit, groupwise into the rest position (the stitches remaining on needle shaft). Knit one or more rows with contrast colour then return the needles from the rest position into the working position again and knit with ground colour. For selecting the needles in groups, the "pattern ruler" is used. On one side the pattern ruler has narrow slots (1×1 division) so that every second needle is selected, and on the other side wider slots (2×2 division) for selection of every third and fourth needle. For easy use the pattern ruler has a little peg at each end, which fit in the needle groove behind the foot of the end needle which is to be moved.



Place the pattern ruler with 1×1 division behind the needle feet so that the small peg on the left fits into the needle groove behind the first needle in the working position. Fig. 68.

With one hand push pattern ruler forward, whilst the other hand presses with the block ruler the knitting towards the striking comb. In this way the respective needle feet are brought to the front edge of the needle bed and are in the rest position. Fig. 69.

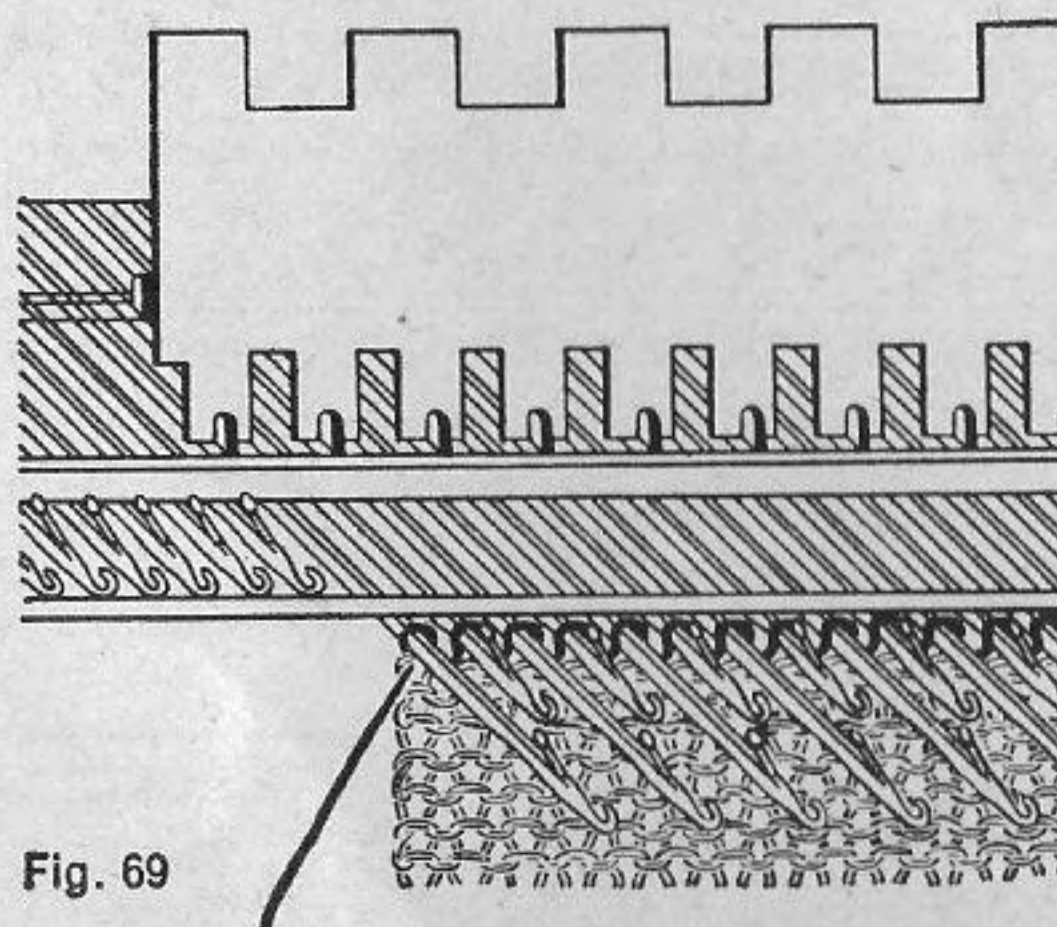


Fig. 69

ATTENTION: Before starting to knit fair isle patterns, set pointer for spring of stripper on number 3 or 4 as shown in Fig. 11.

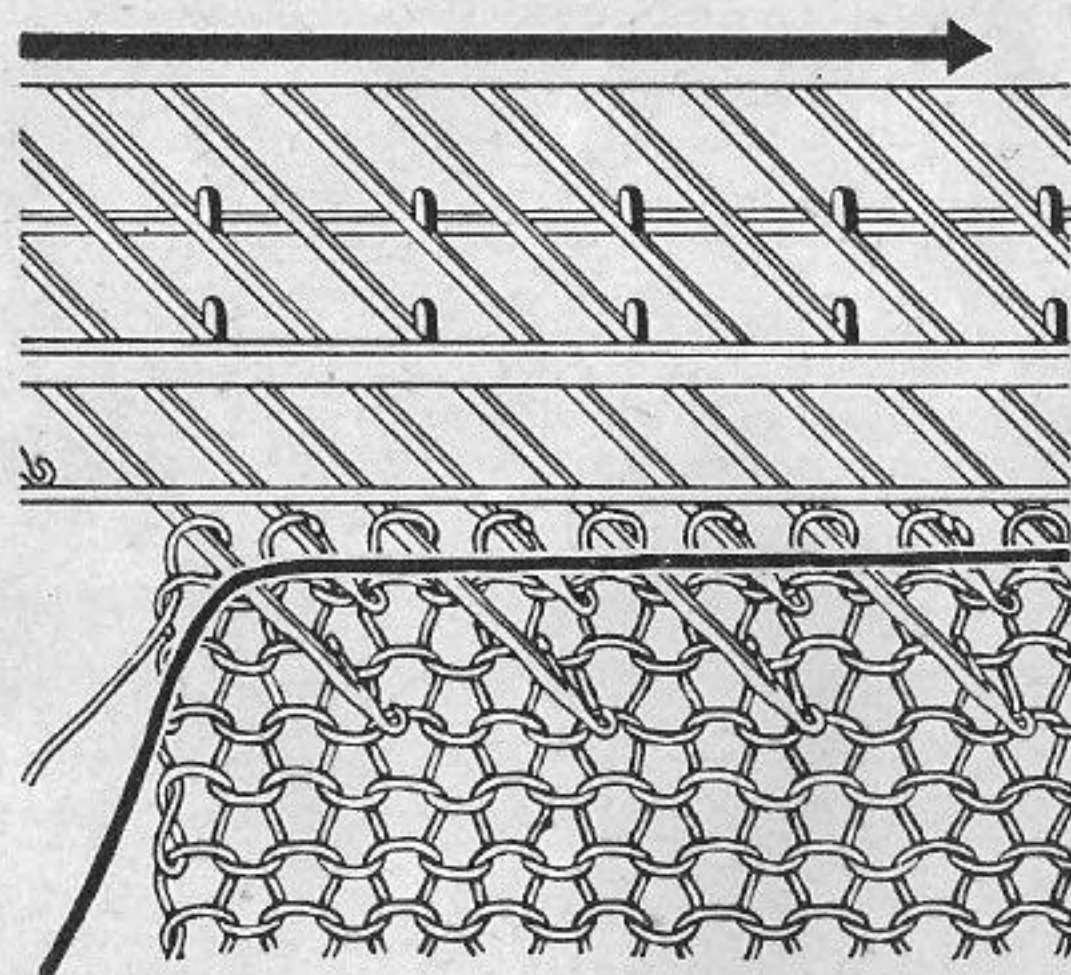


Fig. 70

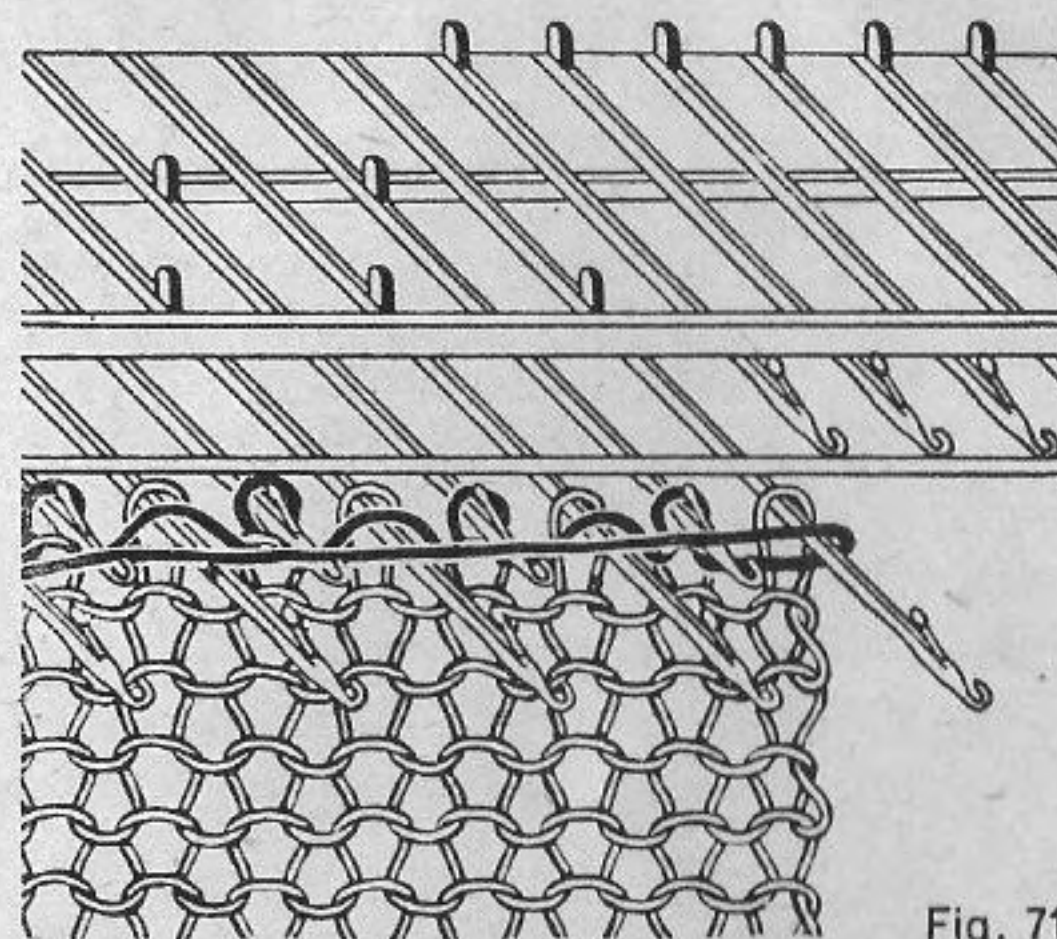


Fig. 71

Now with contrast colour knit the required number of rows with all needles that are in the working position. In respect of those needles in rest position the yarn will lie straight across the needle shaft in front of the existing stitch, without being knitted. Fig. 70—72.

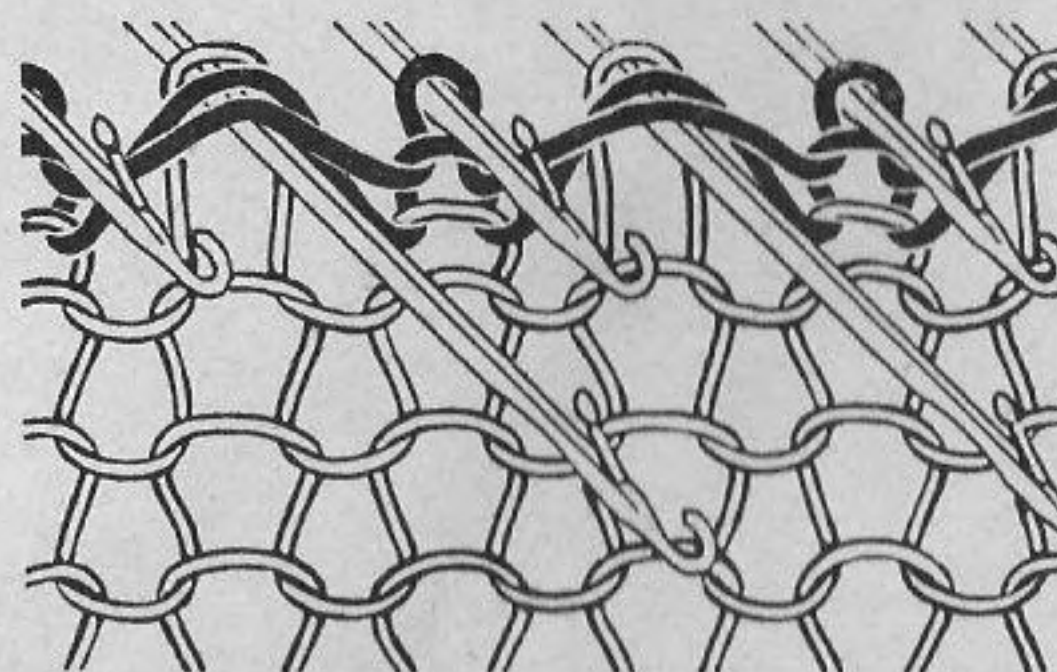


Fig. 72

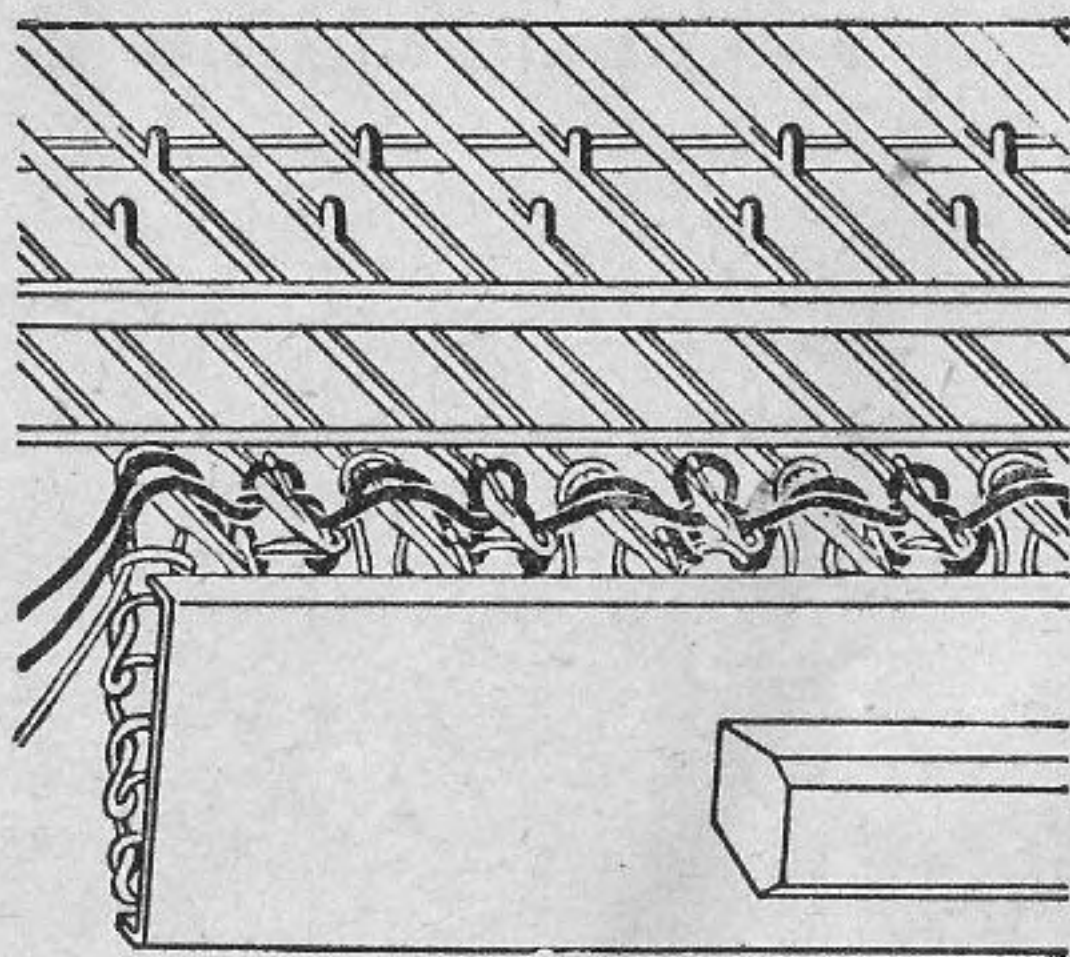


Fig. 73

With block ruler return needles from the rest position into the working position. Fig. 73. Then knit required number of complete rows in the ground colour.

When you repeat the pattern as in Figs. 68 and 69, place the small peg of the pattern ruler in the second needle groove on the left. Fig. 74.

Then knit required number of rows in contrast colour and having set all needles back into working position, knit required number of rows in ground colour.

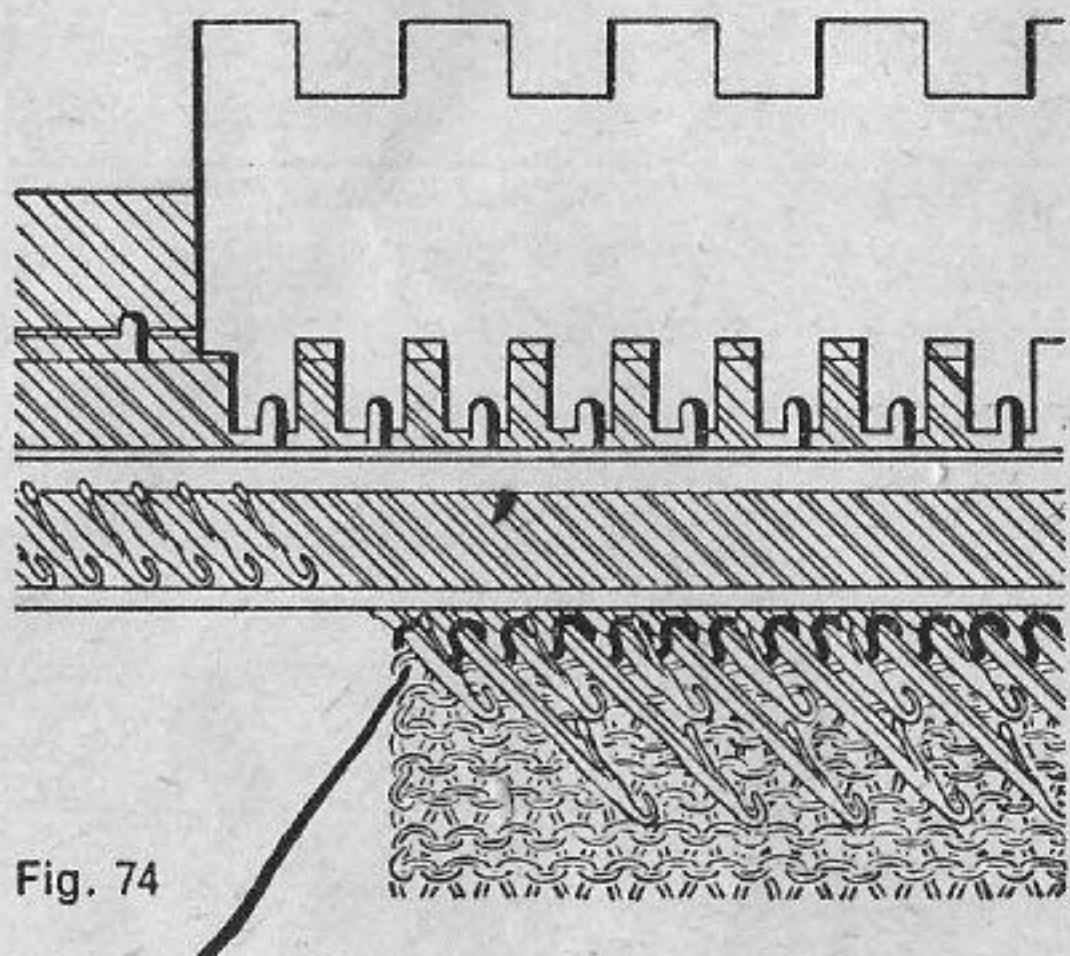


Fig. 74

The same procedure applies when using the 2×2 division of the pattern ruler. Figs. 75 and 76.

It is advisable to knit two pattern rows and then two rows with all stitches. Instructions for further patterns are contained in the last pages of this instruction book.

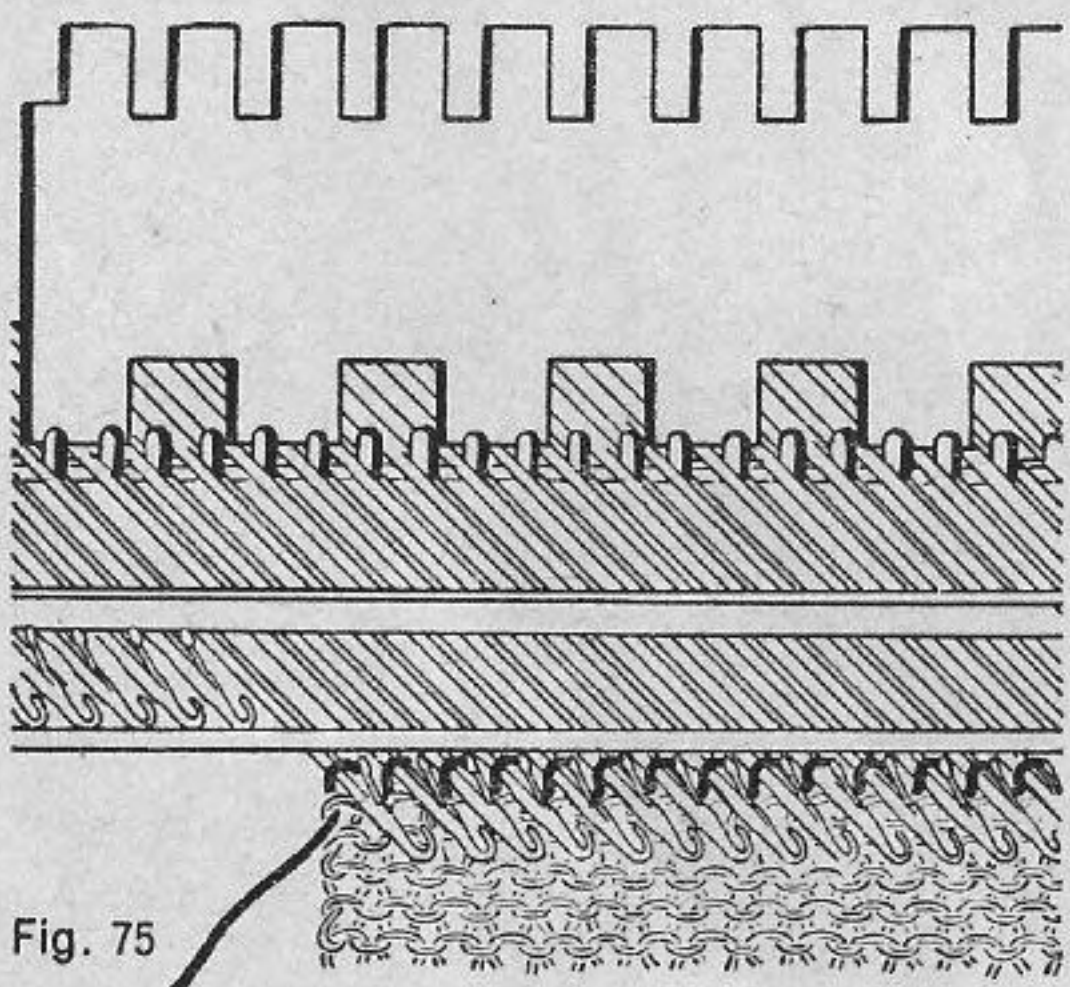


Fig. 75

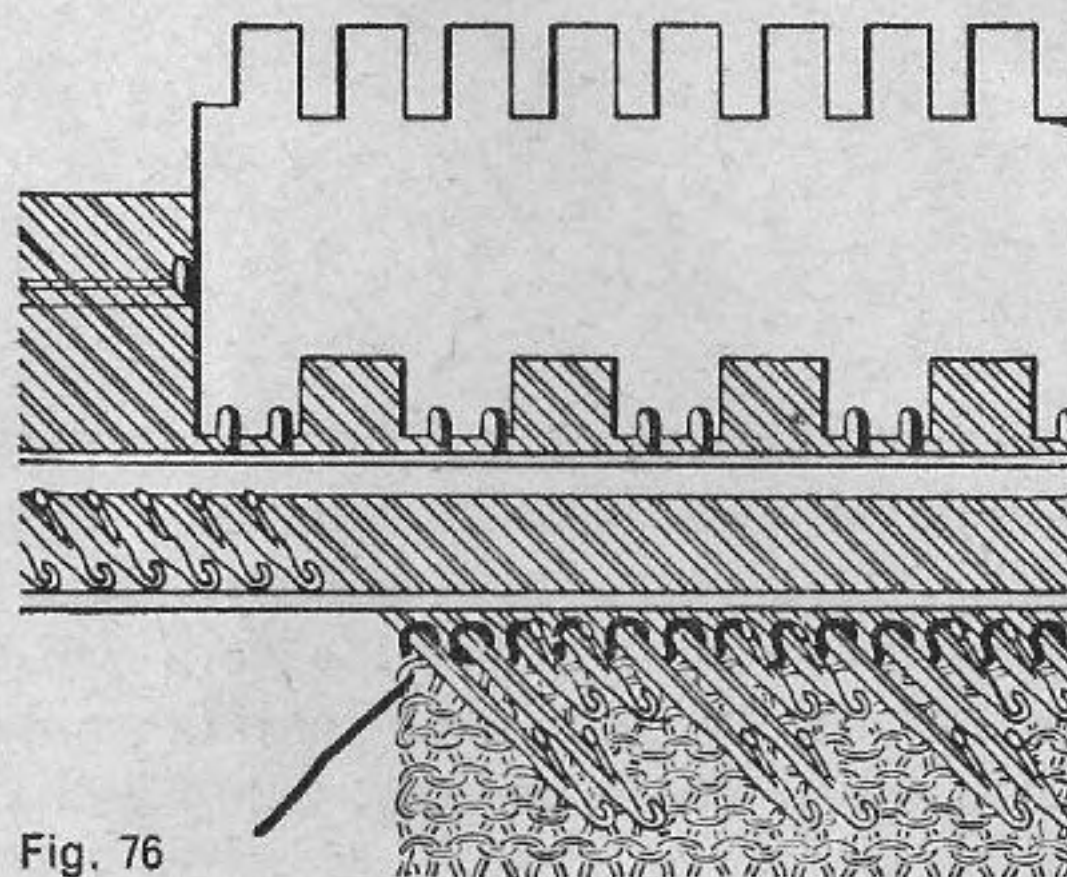


Fig. 76

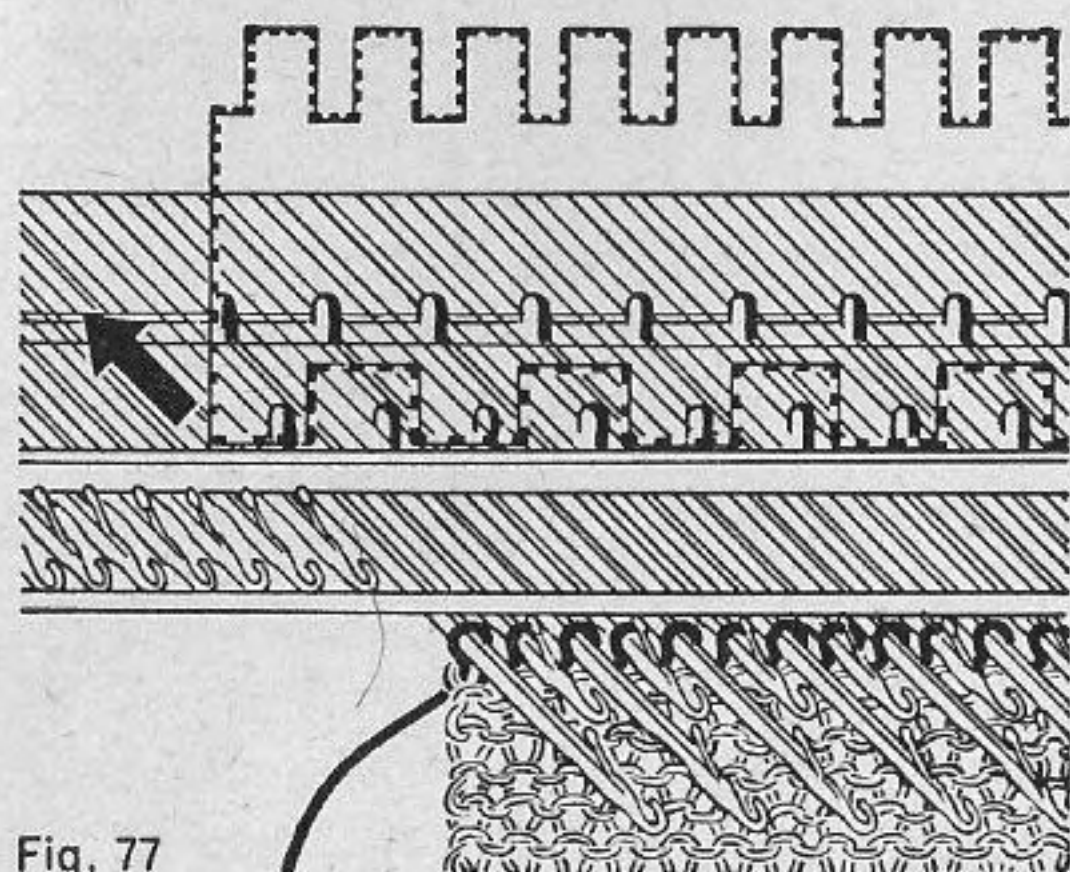


Fig. 77

It is possible to obtain very attractive effects by using both sides of the pattern ruler for selecting needles. First use the 1×1 division as in Figs. 68 and 69, then push the needles back with the 2×2 division (set peg of the pattern ruler in front of the first needle groove). Fig. 77.

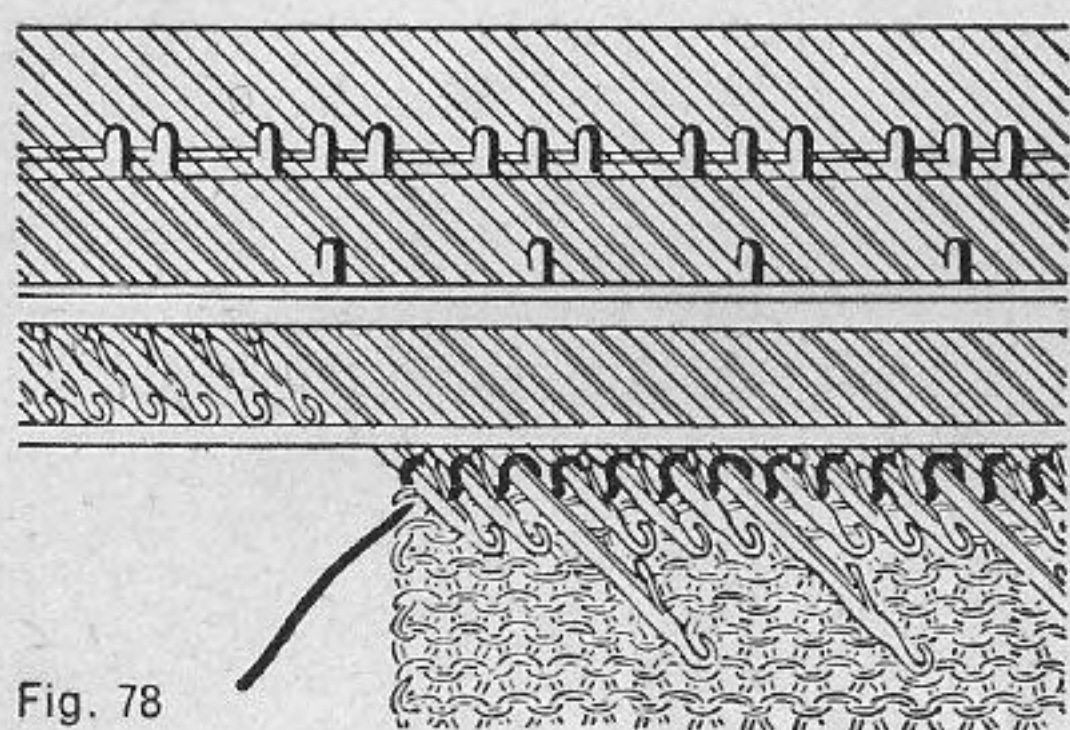


Fig. 78

In this way you obtain a 3×1 division, i. e. 3 stitches in contrast colour and 1 stitch in ground colour, or vice versa. Fig. 78.

Knitting larger groups of stitches in alternate multicolours

When repeating a colour or colours in one row in order to avoid loose loops, it is necessary to have a separate ball of wool for each time the colour is changed as required by the pattern you are using. Place the different colours across the open needle heads and ensure that at each change of colour the two threads are twisted before sliding the lock across and knitting the complete row. By this method it is possible to follow any fair-isle pattern designed for handknitting.

Knitting the heel of a sock (or stocking)

On any flat bed type of knitting machine you must of course, knit the leg portion in an open fashion. First knit the leg to the required length to the top of the heel, then place sixteen stitches from each side of the knitting on to two separate lengths of yarn. This is done by placing the separate lengths of yarn across the necessary stitches and then with the needle mover crocheting the separate length of yarn through each stitch. These two sets each of 16 stitches will be required to knit the heel but first the top half of the foot, is knitted on the stitches remaining in action. Now sew the seam at the back of the leg and then replace the two sets of 16 stitches on to the needles to commence the heel.

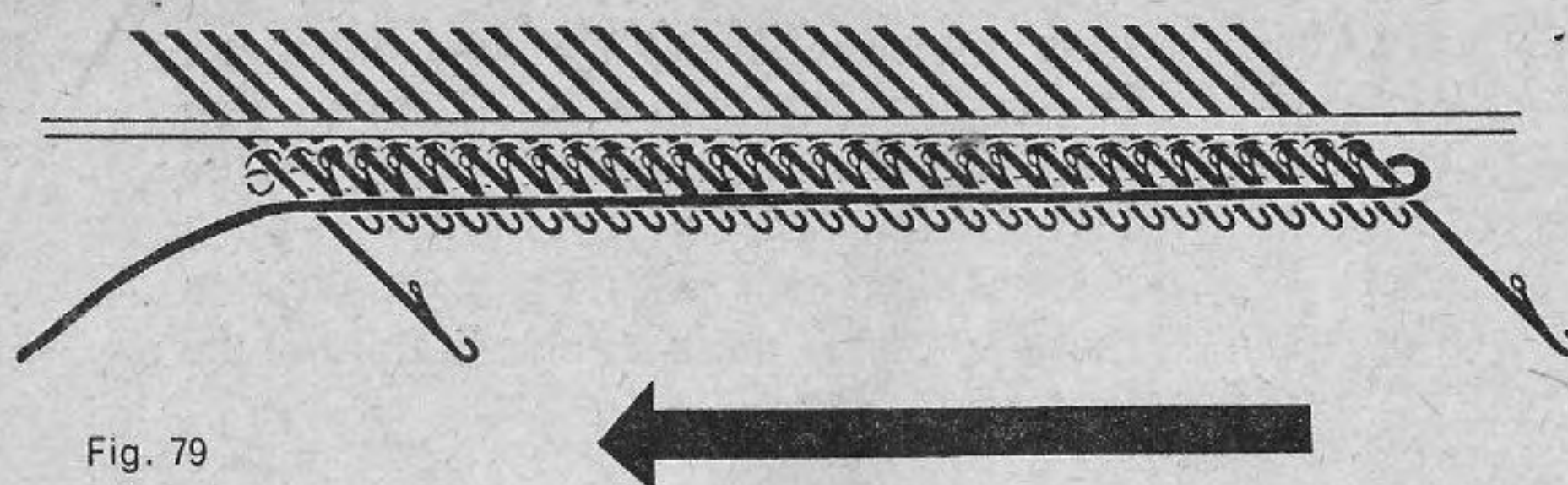


Fig. 79

Start decreasing with the yarn on the left. On the extreme right put one needle in the rest position, and then knit from the left. Then on the extreme left put one needle also into the rest position and knit one row from the right, ensuring that you wind the yarn, on the right, around, the shaft of the needle in rest position. This prevents a hole when you have decreased. Fig. 79.

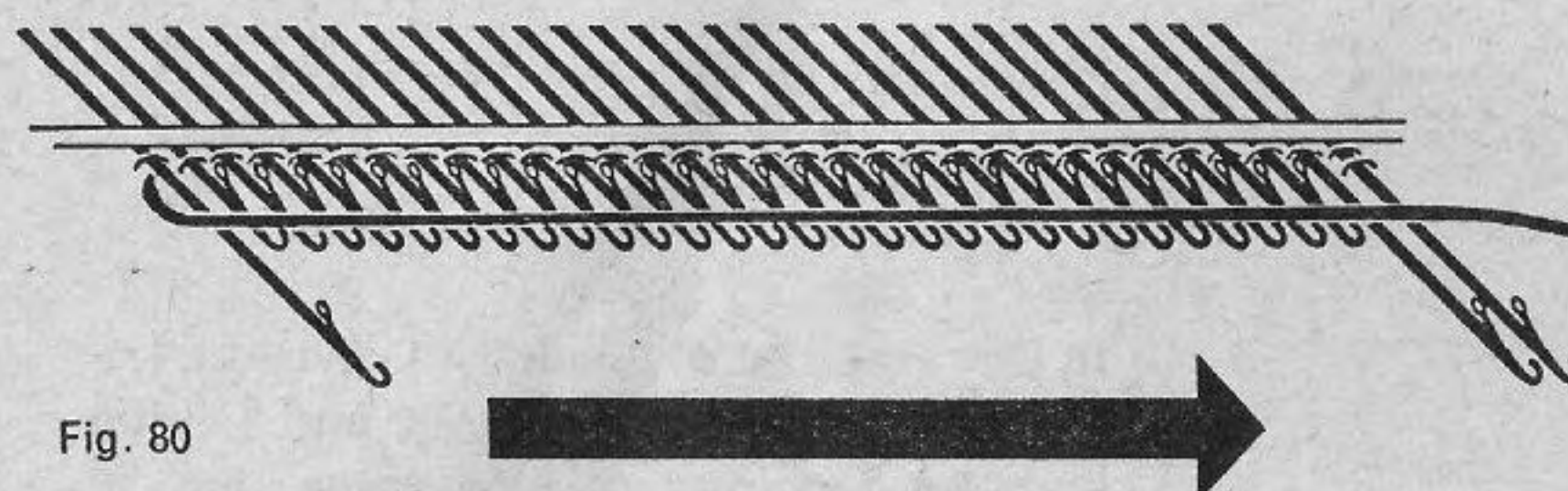


Fig. 80

Now put the next needle on the right into rest position and knit one row from the left, winding the yarn from the left round the needle in the rest position. Fig. 80.

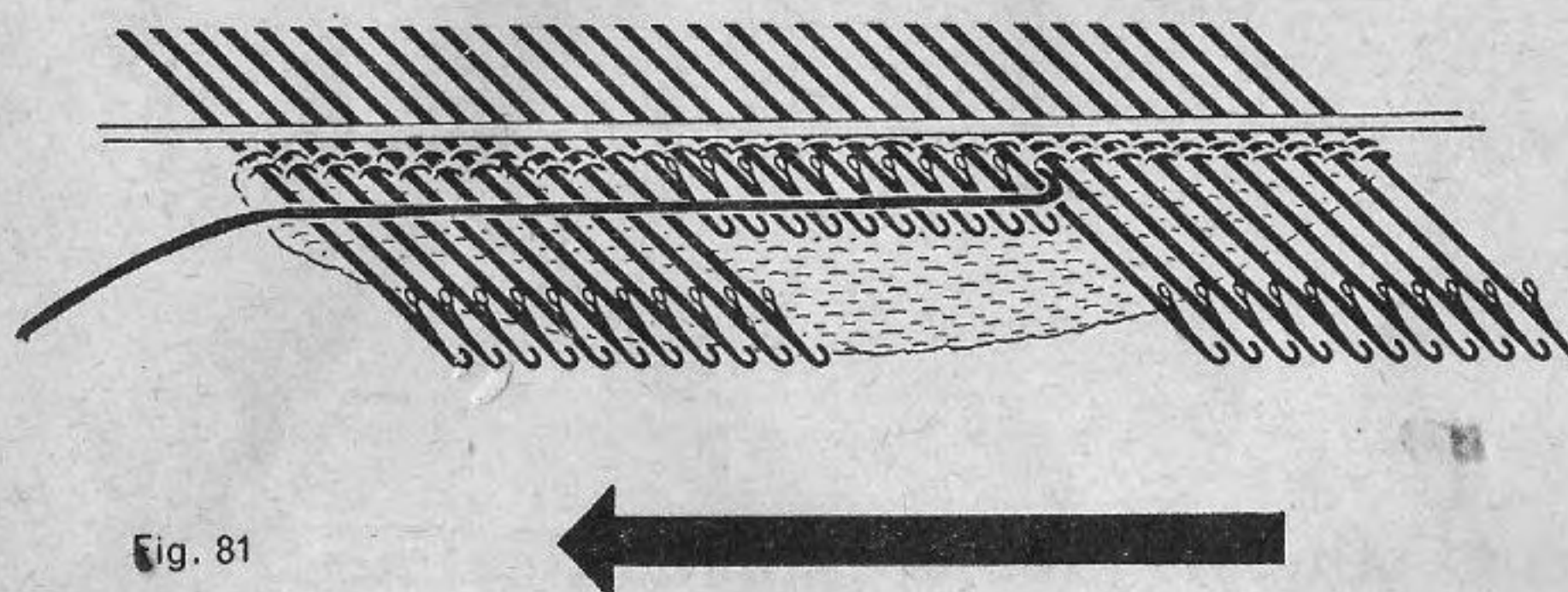


Fig. 81

Continue this, until there are 11 consecutive needles on each side in rest position, leaving in the centre 10 needles in working position (for under part of heel). Fig. 81. Now the decreasing are finished.

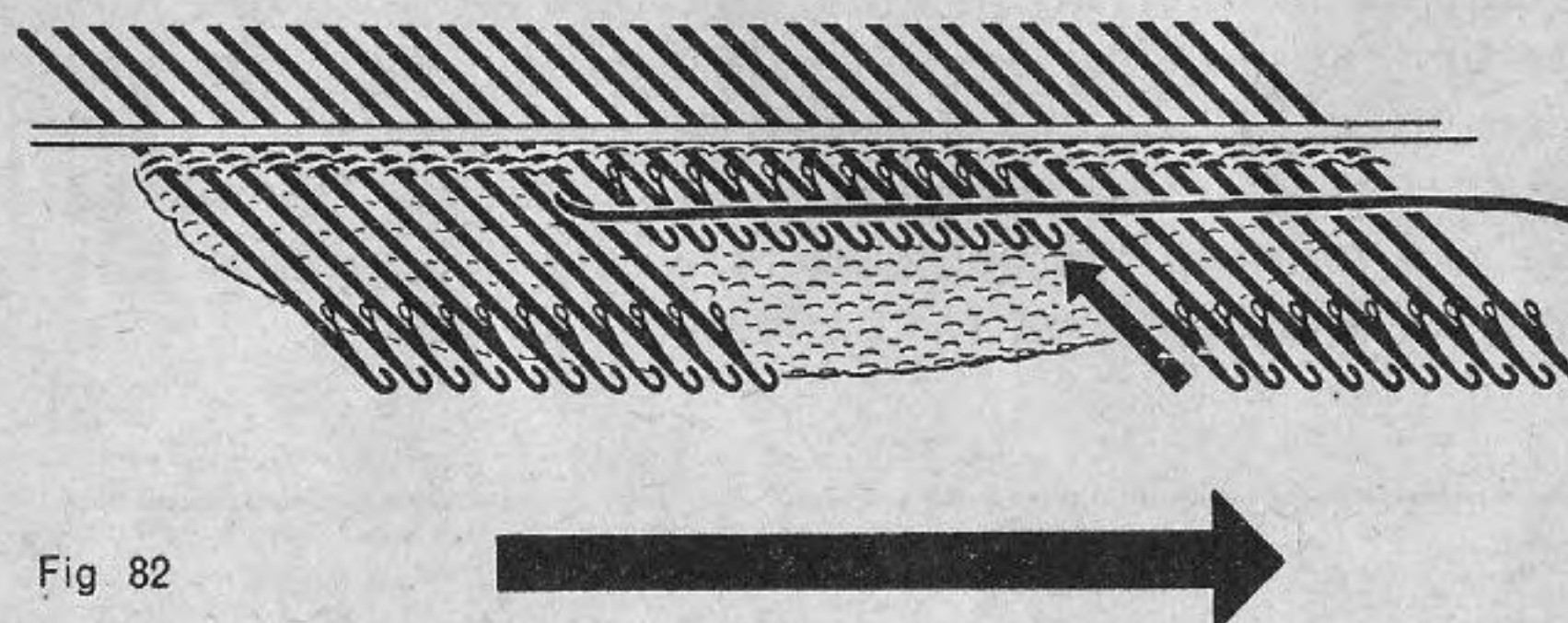


Fig. 82

To increase, starting from the inner right needle, put the needles back one by one into working position, knitting one row from the opposite side of machine each time a needle is put back into working position. Remember as for decreasing the yarn must be wound round the next needle shaft in rest position to avoid leaving a hole. Fig. 82.

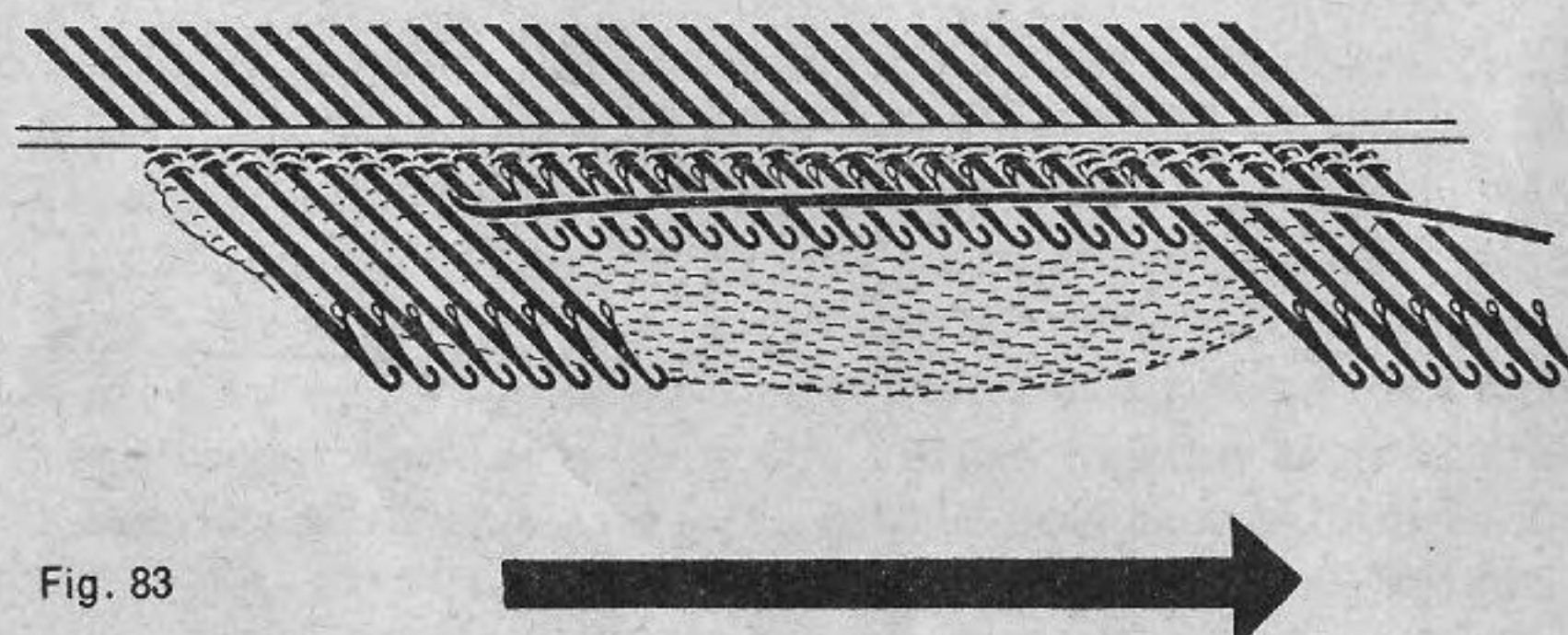
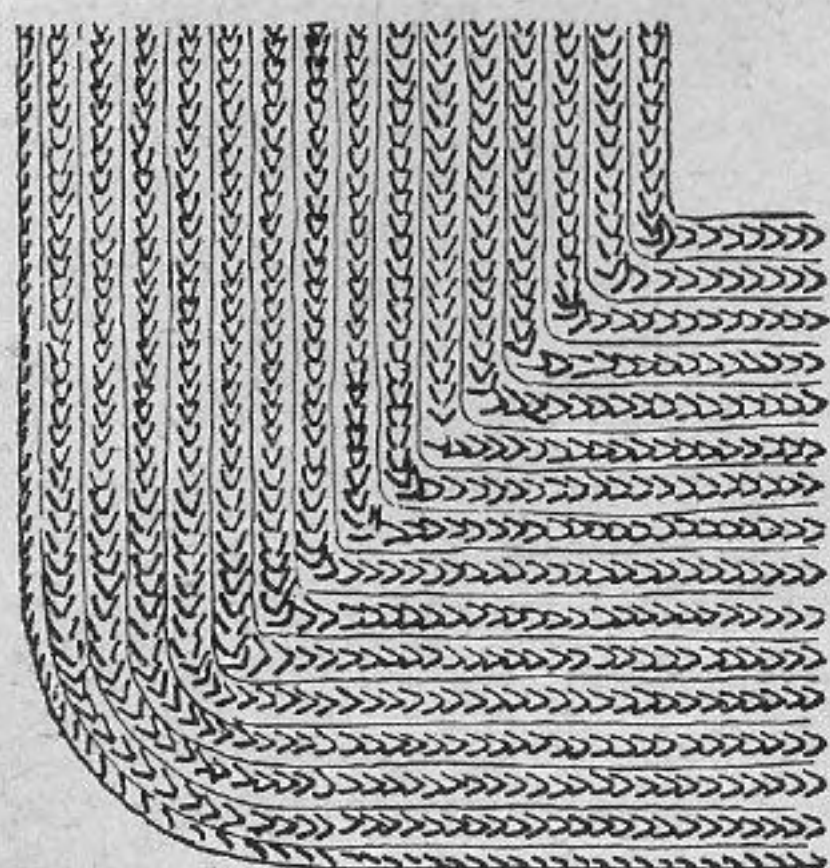


Fig. 83

Continue knitting in same manner as in Fig. 83, until the 11 needles on each side are again in working position.



When all the 32 stitches are in working position again, the heel is finished and you can continue by knitting the sole of the foot. It is advisable to knit a heel once for practise before attempting to knit a complete sock. Fig. 84.

Fig. 84

You can knit attractive hats and caps, bags, collars etc. in the same way as described above, by placing one or several needles in rest position and knitting one or several rows between the increasings and decreasings. Try for yourself with oddments of wool and you will be surprised at the varied effects which can be obtained.

How to knit a hem

Cast on as described in Figs. 13—19, knit 10 rows, then put the needles in the free move position as in Figs. 21—22. Now for the edge of hem knit one open work row, by placing every 3rd stitch on top of the 4th stitch. Bring needles back in working position as in Figs. 23 and 24, then again knit 10 rows and put all needles in the free move position.

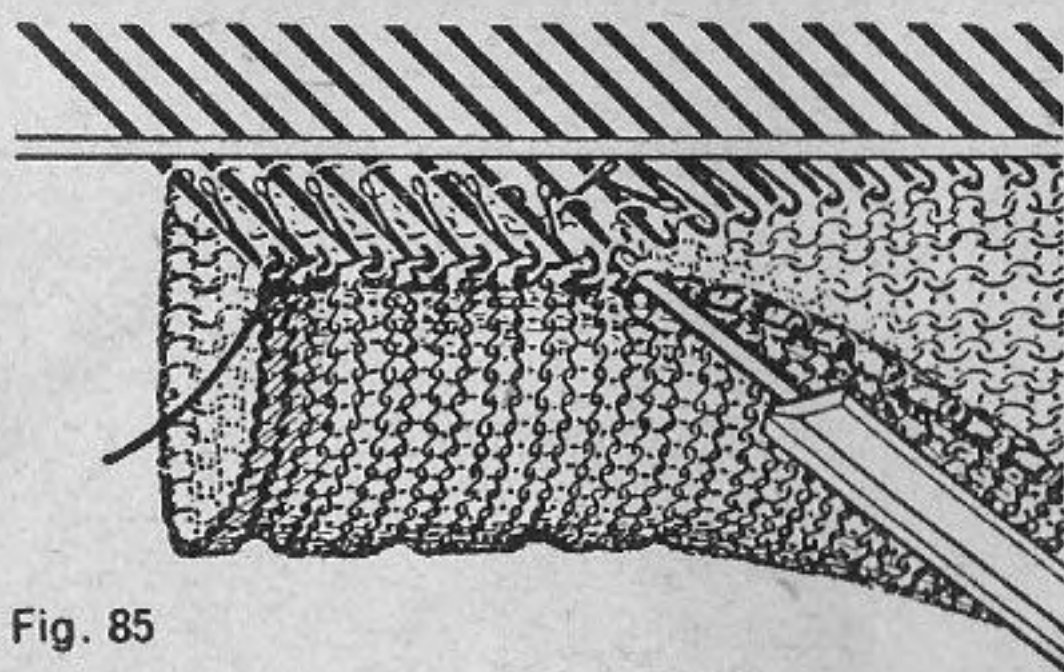


Fig. 85

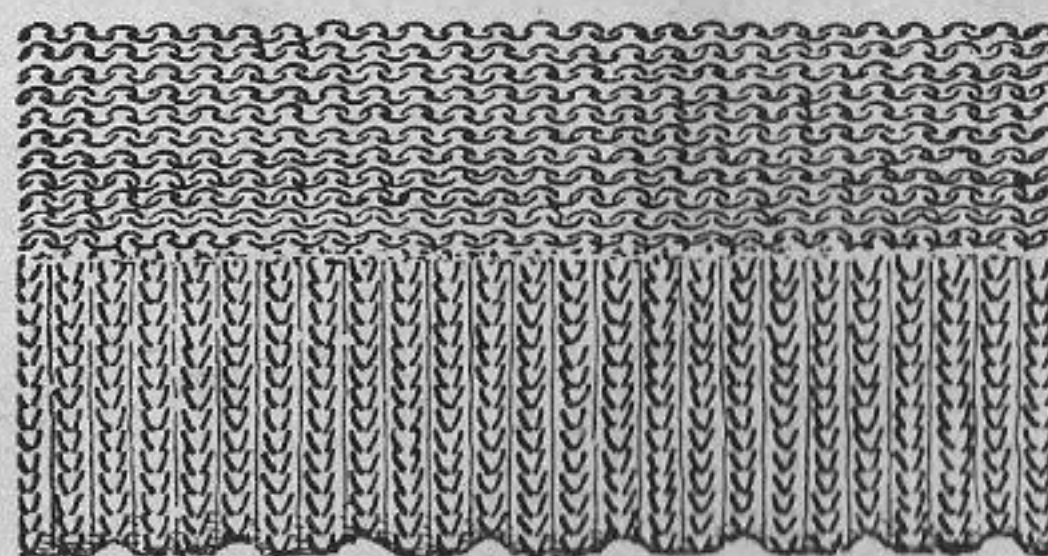


Fig. 86

In the free move position place into the latches, one by one, the loops of the cast on edge (fixing the needle feet with block ruler). Fig. 85. Afterwards bring the needles back into the working position, as Figs. 23 and 24 and continue knitting.

This results in a neat hem through which elastic can be threaded for use in various garments or for borders of pockets etc. Fig. 86.

Twelve attractive patterns

PATTERN 1

A "two colour" design. When using the second colour every second needle is in the rest position. Commence with both colours on one side.

1st row: knit complete row with first colour first having pulled up the freesetter on the side of the lock from which you are starting. Push freesetter down and slide lock to reverse side of machine.

2nd row: with 1×1 division of the pattern ruler select alternate needles, commencing with first stitch, and knit with second colour.

3rd row: as first row.

4th row: as second row, but commencing from second stitch.

These four rows complete one pattern.

PATTERN 2

"Checked design" in two colours: when using the second colour every 3rd and 4th needle is in rest position. Commence with both colours on one side.

1st and 2nd rows: knit every stitch in first colour.

3rd and 4th rows: with 2×2 division of the pattern ruler select every alternate two needles, commencing with first two stitches, and knit with second colour.

5th and 6th rows: as 1st and 2nd rows.

7th and 8th rows: as 3rd and 4th rows, but commencing from 3rd and 4th stitches.

These 8 rows complete one pattern.

PATTERN 3

"Cable pattern". On the plain side of the knitting the pattern appears as follows: 1 purl, 4 plain stitches cabled, 1 purl, 12 plain stitches.

1st, 2nd and 3rd rows: knit every stitch.

4th row: Now pull up the freesetter on the side of the lock from which you are starting and knit every stitch.

5th row: In free move position. Leave 14 stitches. Pick up 17th and 18th stitches

with double decker needle and temporarily place the decker needle into fabric to hold stitches. With single decker-needle transfer the 16th stitch on to the 18th needle and the 15th stitch on to the 17th needle.

Then transfer from double decker needle the 17th stitch on to the 15th needle and the 18th stitch on to the 16th needle. And so on across the whole width of the knitting. Pull up second freesetter and move lock to reverse side.

6th—9th row: Push both freesetters down and repeat rows 1 to 4.

10th row: as 5th row.

11th—14th rows: as 1st to 4th rows.

Now drop back the 14th and 19th stitches etc. (border stitch of cables) to the 1st row then crochet up as "knit" stitches (Figs. 47 to 53).

Remember to replace needles in working position after completing this operation.

15th—18th rows: as 1st to 4th rows.

19th row: as 5th row but starting at 5th to 8th stitches for first cable.

20th to 23rd rows: Repeat as for 6th to 9th rows.

24th row: as 19th row.

25th to 28th rows: as 11th to 14th rows including dropping back and crocheting up of cable border stitches.

The above forms one complete pattern.

Variations

Instead of the "broken" cable effect it is possible of course to produce continuous cable stripes. You will quickly appreciate that other attractive variations of this pattern can be devised.

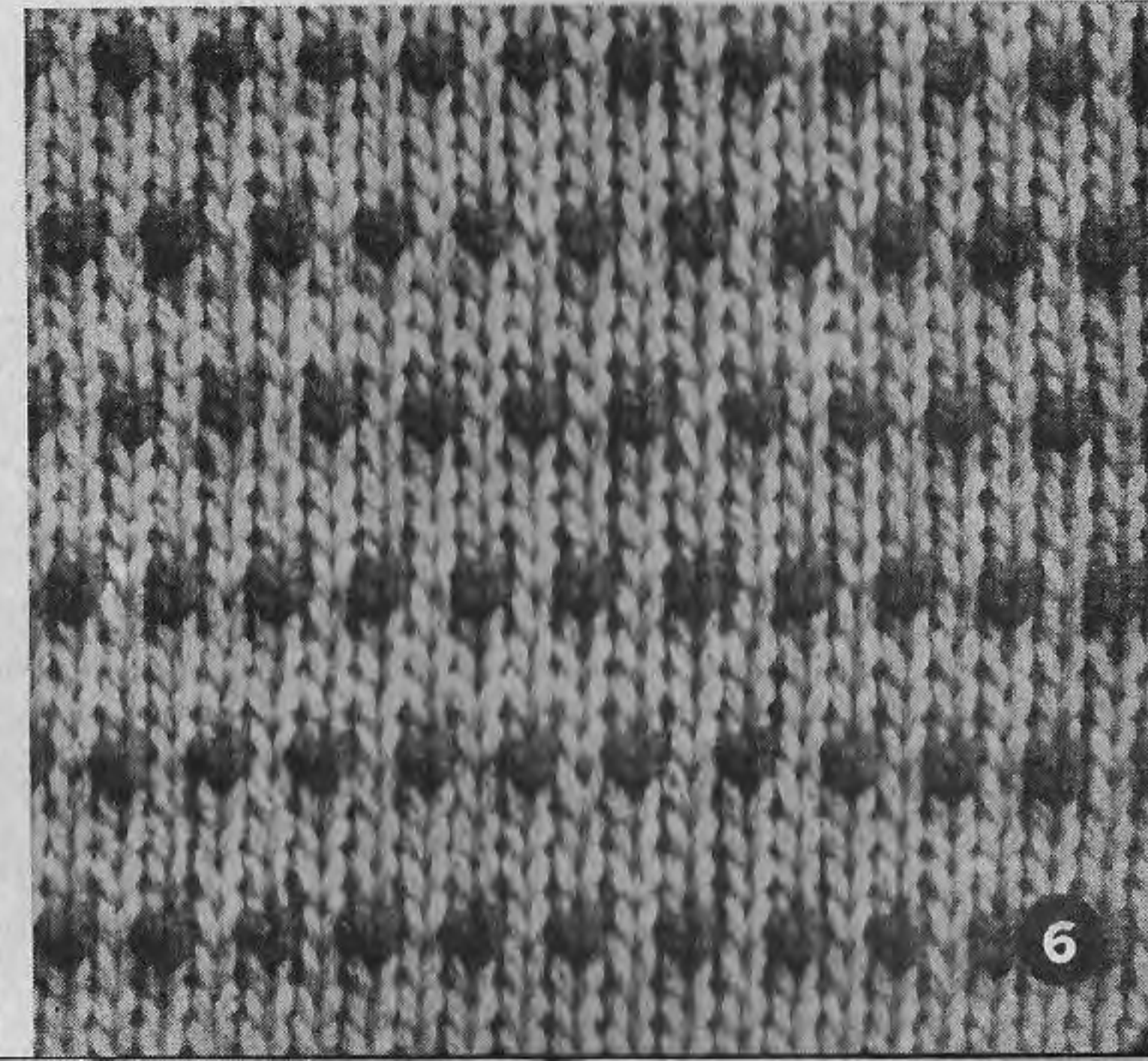
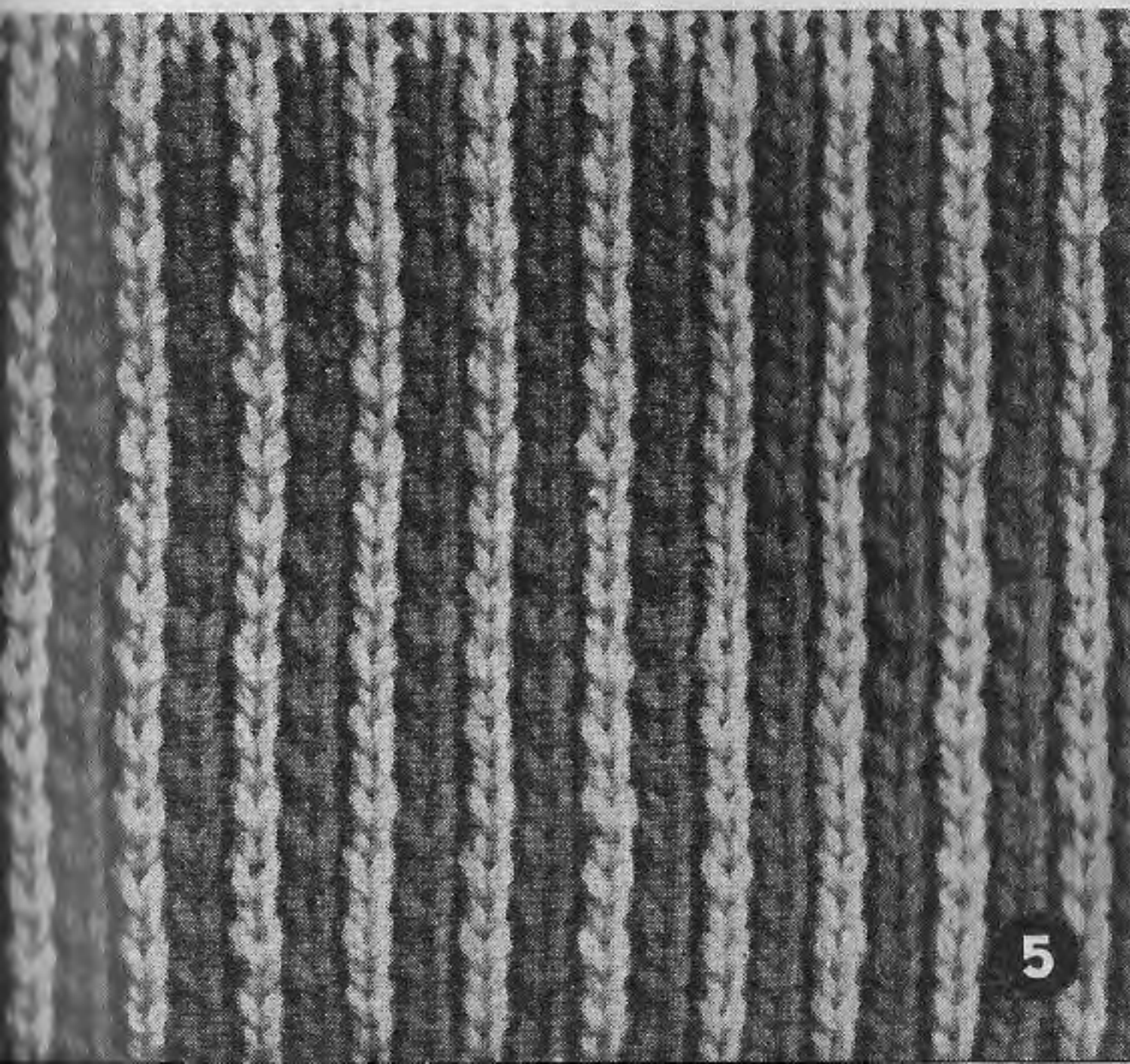
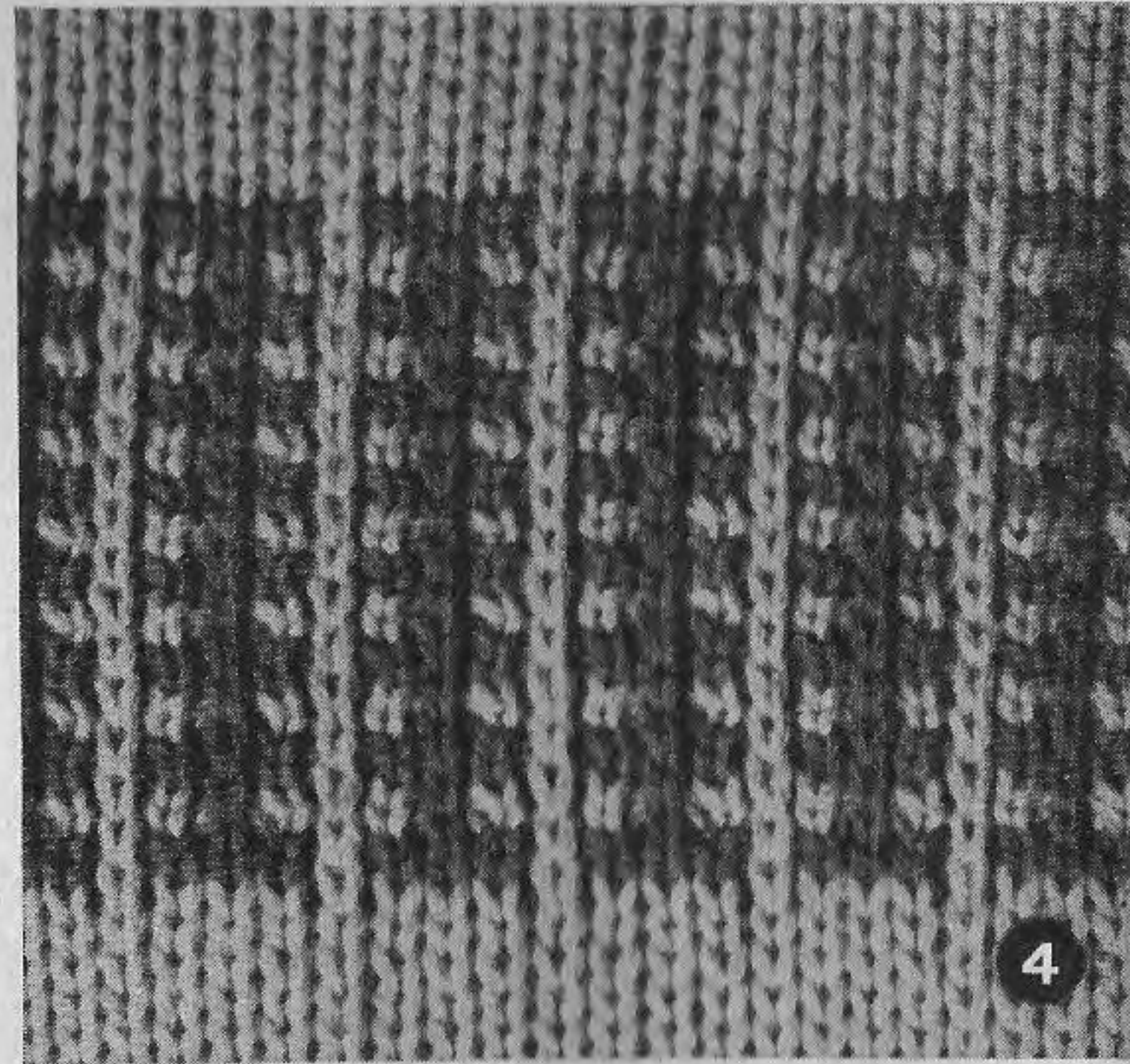
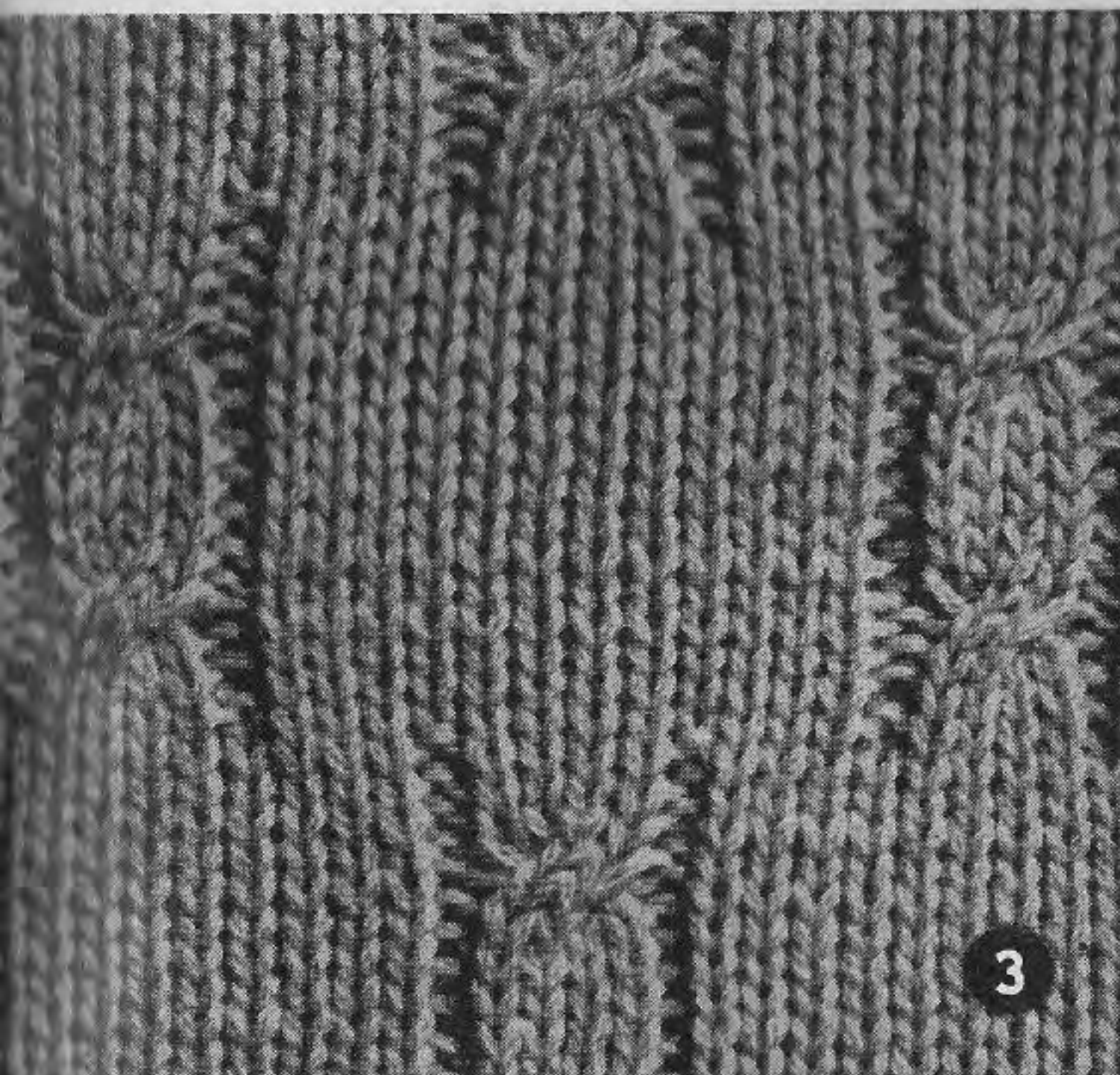
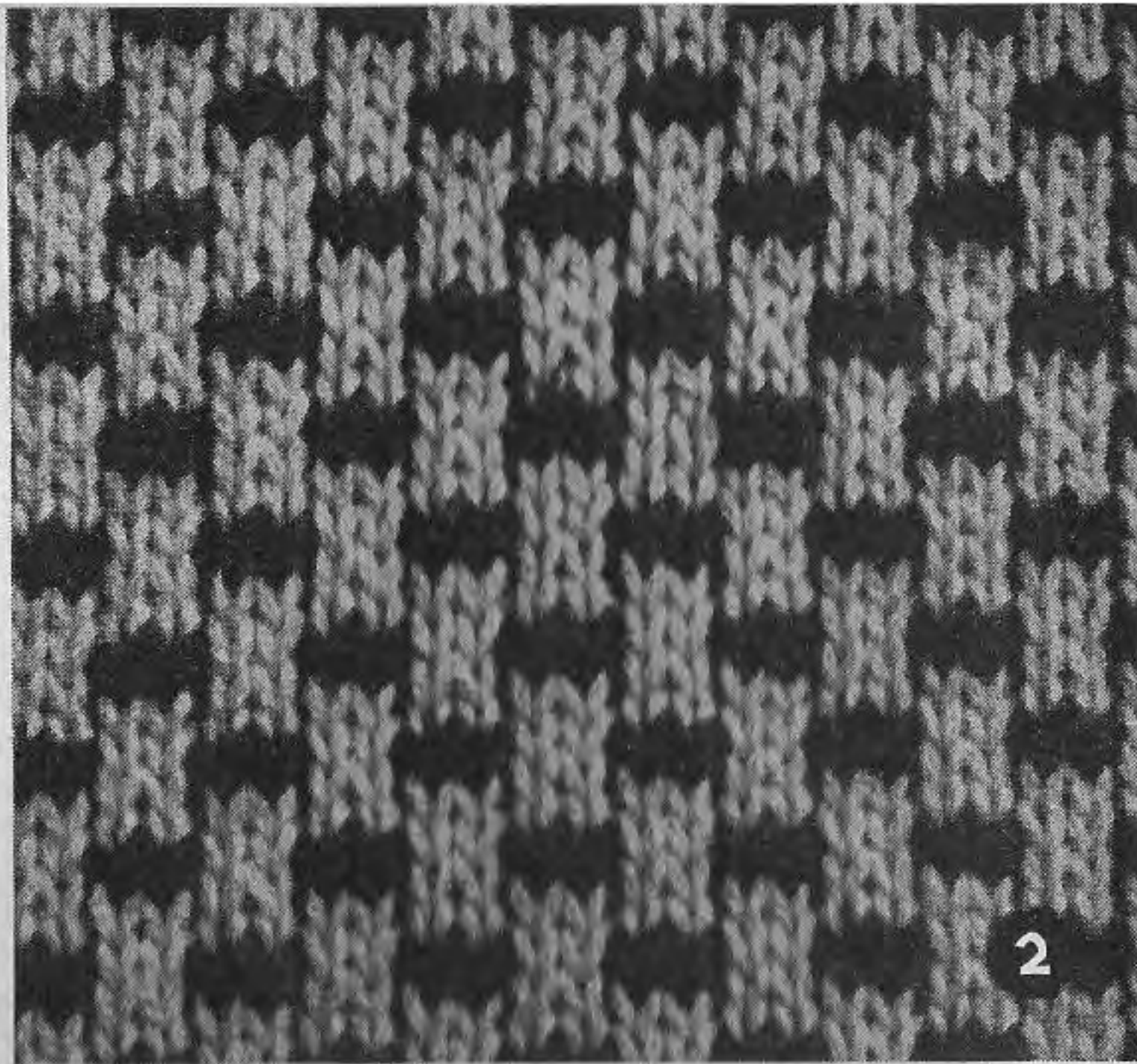
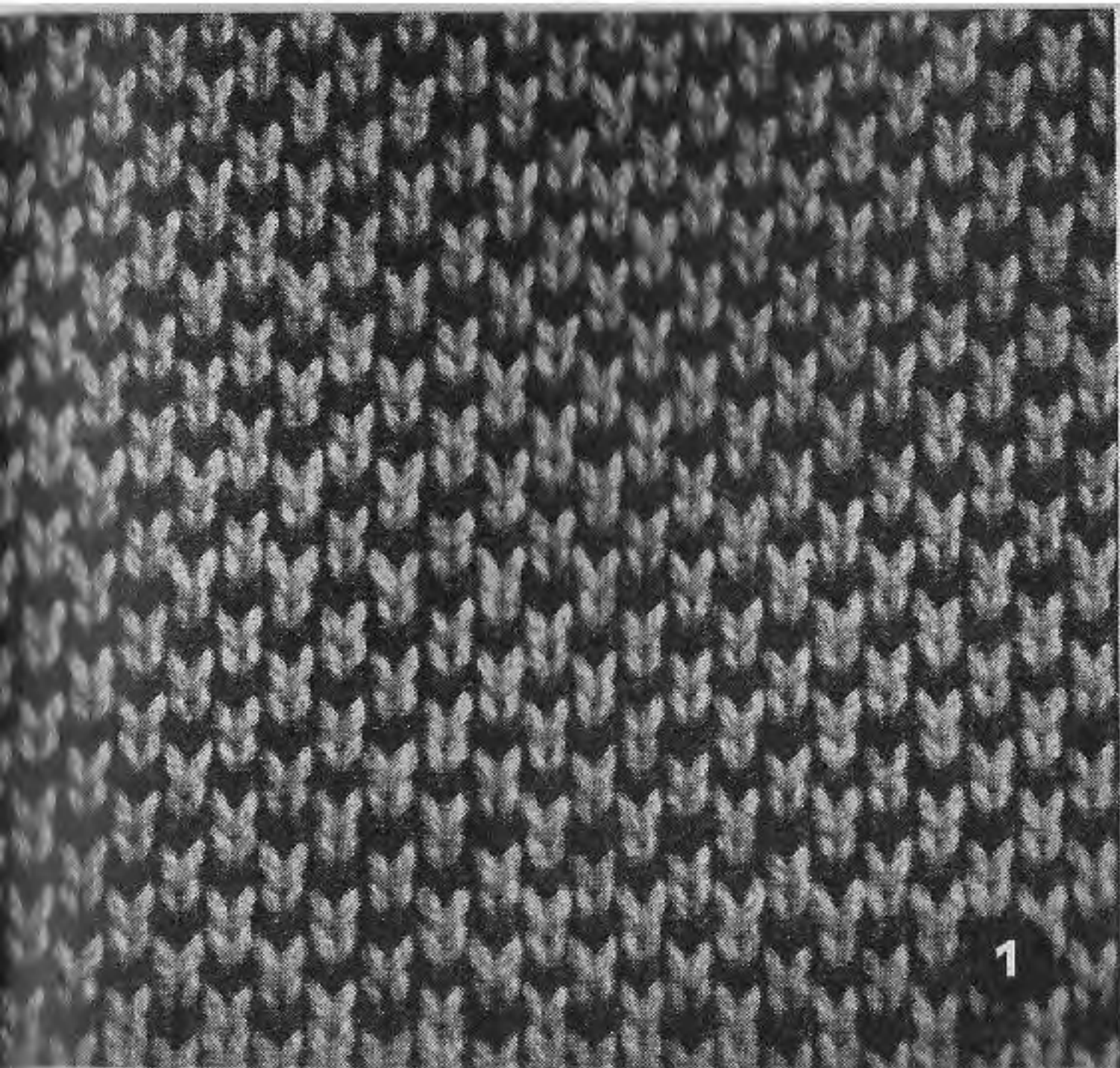
PATTERN 4

"Vertical Key stripes" in two colours.

Pattern division 3×1, place pattern ruler as follows:

For 1st and 2nd rows 1×1 side behind and 2×2 side in front of 1st needle.

For 3rd and 4th rows, 1×1 side behind and 2×2 side in front of 3rd needle.



Knit 1st and 2nd rows with first colour, pattern division (1st needle).

Knit 3rd and 4th rows with second colour, pattern division (3rd needle).

The above four rows form one complete pattern.

PATTERN 5

Vertical "Candy" stripes in two colours, knitted with the 1×1 division.

1st and 2nd rows with first colour, place the pattern ruler with 1×1 division behind 1st needle.

3rd and 4th rows with second colour, place pattern ruler behind the second needle. The same pattern can also be knitted with the 2×2 division.

PATTERN 6

"Small burls" in two colours. The second colour is to be knitted with the 1×1 division.

4 rows with first colour.

2 rows with second colour, pattern ruler with 1×1 division placed behind 1st needle.

4 rows with first colour.

2 rows with second colour, place pattern ruler behind 2nd needle.

The above completes one pattern.

This type of pattern can also be knitted in one colour only, for instance 2 rows plain, 4 rows with 1×1 division and so on, which results in a "burled" surface on the plain side of the knitting.

PATTERN 7

"Broken horizontal stripes" in two colours. Knit alternately two rows with first colour and every stitch, and one row with second colour and every 4th needle in the rest position.

Pattern division 3×1, at every row the pattern is to be moved over one stitch, therefore place pattern ruler as follows:

For 1st pattern row: 1×1 side behind and 2×2 side in front of 1st needle.

For 2nd pattern row: 1×1 side behind and 2×2 side in front of 2nd needle.

For 3rd pattern row: 1×1 side behind and 2×2 side in front of 3rd needle.

For 4th pattern row: 1×1 side behind and 2×2 side in front of 4th needle.

Repeat from 1st pattern row.

Knit as follows: Start with first colour on the right and second colour on the left of knitting.

2 rows of first colour, before 2nd row pull up left freesetter, afterwards freesetter down and slide the lock back to the opposite side.

1st pattern row: pattern division (1st needle) with second colour, then replace needles in working position.

2 rows of first colour knitting all stitches.

2nd pattern row: pull up right freesetter pattern division (2nd needle) with the second colour. Afterwards freesetter down and slide the lock back to the opposite side. Then replace needles in working position.

2 rows of first colour, knitting all stitches but before the 2nd row pull up left freesetter, afterwards freesetter down and slide the lock back to the opposite side.

3rd pattern row: pattern division (3rd needle) with second colour, then replace needles in working position.

2 rows first colour.

4th pattern row: pattern division (4th needle) knit with second colour having pulled up right freesetter then afterwards put freesetter down and slide lock to opposite side. Then replace needles in working position.

The above forms one complete pattern

PATTERN 8

"Shell pattern" (Butterfly pattern). The purl side is the right side. Put every 4th needle in the rest position=pattern division 3×1. The pattern is alternated every three rows therefore place pattern ruler as follows:

1st—3rd rows: 1×1 side behind and 2×2 side in front of 1st needle.

4th—6th rows: 1×1 side behind and 2×2 side in front of 3rd needle.

These 6 rows form one complete pattern.

An attractive variation can be obtained by knitting four rows per pattern division and

