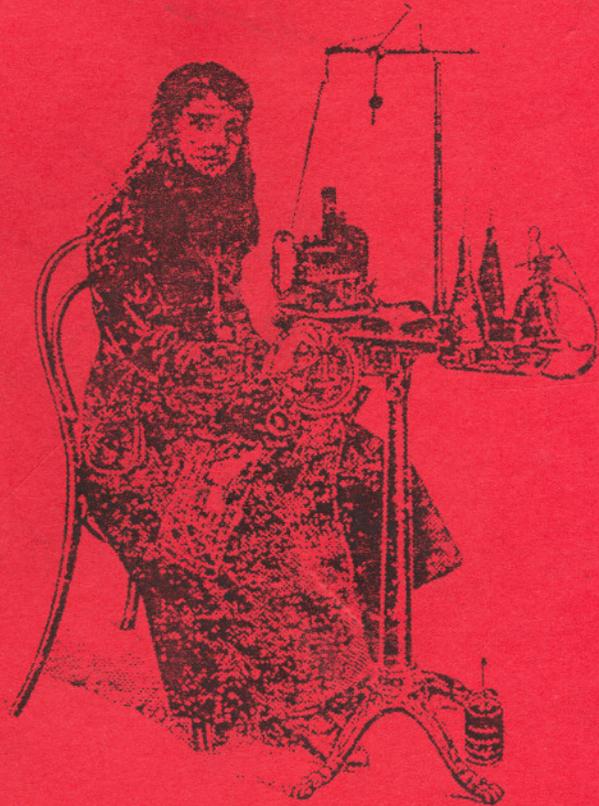


Instruction Book
FOR
THE VICTORIA AUTOMATIC
IMPROVED KNITTING MACHINE.

PART I.

For Instructions for Garment Knitting and Fancy Work, see Part II.



MANUFACTURED BY
W. & J. FOSTER, Market Street Works, PRESTON.

Price: **FIVE SHILLINGS.**

IMPORTANT.

WHEN ORDERING NEEDLES—

Please send a sample needle, or state:

1. The number of the machine.
2. The diameter of the cylinder (measured from back to back of two opposite needles).
3. The number of grooves in the cylinder or dial for which the needles are required.

WHEN ORDERING OTHER PARTS—

State always:

1. The number of the machine.
2. The number of part required (or send the worn part).

HOSIERY SHAPES.

For to give the hosiery a uniform shape and size and a better appearance it is advisable to use Hosiery Blocks or Shapes. The Stocking is drawn on to the Shape for that size, a damp cloth is laid upon it, and the stocking is pressed with a hot iron. Afterwards the stocking should be allowed to remain on the Shape a few minutes.

	£	s.	d.
Price per Shape up to size 6's	0	2	6 each.
Women's and Men's Shapes, 9 inch upwards	0	3	6 „
For full Set of 11 Hose Shapes and 2 Half-Hose Shapes	2	0	6

The wood from which these Shapes are made is specially prepared and dried.

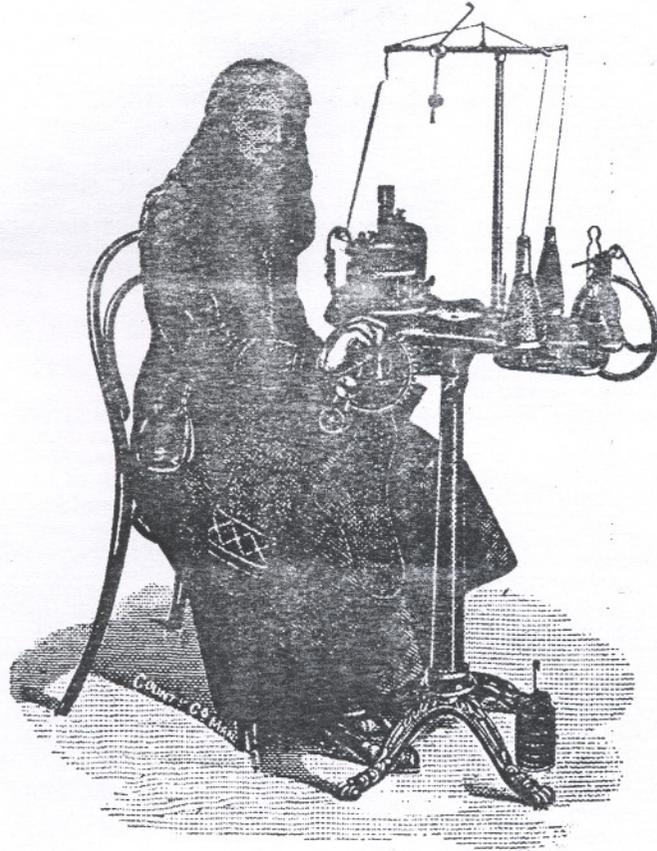
STANDS.

A useful and inexpensive Stand with Tray is supplied for the "Victoria Automatic" Knitter, which takes up little space, is ornamental, and can be readily moved about.

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**For Instructions for Garment Knitting and Fancy Work,
See Part I.**

INSTRUCTIONS.—Part 1.

CAUTION.

Learners should not interfere with any of the screws, nor alter any of the parts of the machine, until they are fully acquainted with the use of the various parts.

Do not try to get on too fast; learn perfectly one thing at a time, and in the order given on the back.

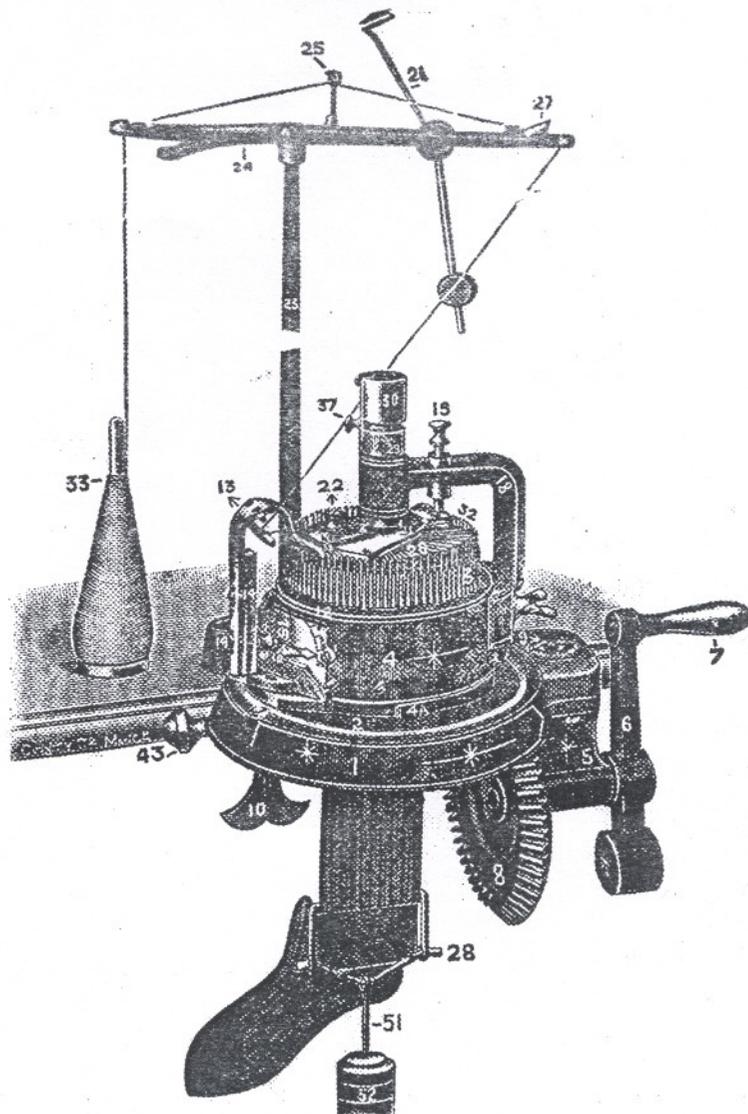
The machine is sent out with a sample in, and the tensions and all parts are accurately set ready for knitting.

LIST OF ACCESSORIES SENT WITH EVERY MACHINE.

Instruction Book.

- 1 Set-up (Umbrella), Fig. 12, No. 50.
- 1 Buckle (used after the set-up is removed), Fig. 1, No. 28.
- 1 Bobbin winder.
- 1 Wool-holder or Swift, Fig. 12, B.
- 3 Bobbins, Fig. 10, E.
- 2 Weight-holders (to be hung on the set-up, or buckle, for drawing down the work), Fig. 1, No. 51.
- 3 Weights for Weight-holder, Fig. 1, No. 52.
- 1 Heel-wire to hold down the corners of the work when knitting heels and toes.
- 6 Cylinder and 6 dial needles extra.
- 1 Oil can.
- 1 Screw driver and spanner (to remove the nut when changing the dial).
- 1 Work-hook (for picking slip stitches on to the needles).

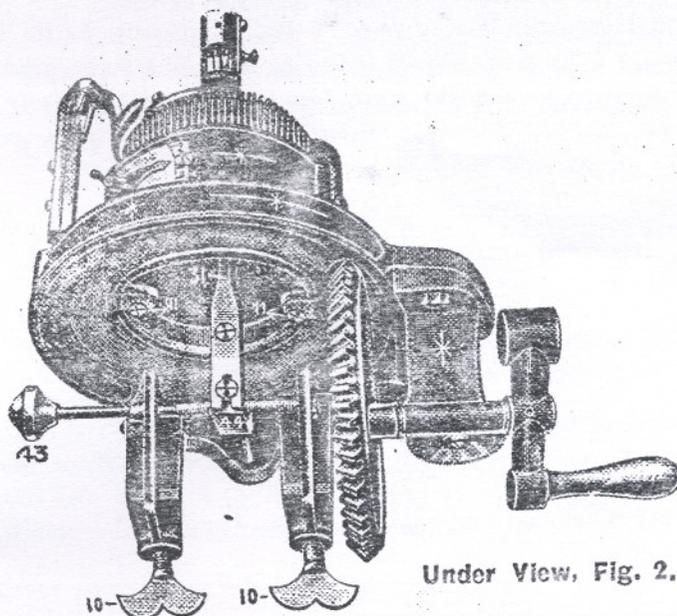
4
ILLUSTRATION OF
THE "VICTORIA AUTOMATIC" KNITTER,
Secured to a bench and ready for work, showing a ribbed sock
commenced at the top.



Top View, Fig. 1.

The machine is now fitted with an improved yarn guide described on page 9, and with an improved yarn cross and other details slightly differing from the illustration, which, however, will not affect the usefulness of the illustration and reference numbers.

ILLUSTRATION OF
THE "VICTORIA AUTOMATIC" KNITTER,
Showing the dial adjusting lever.



Under View, Fig. 2.

NAMES OF PARTS OF MACHINE IN FIGS. 1 and 2.

- | | |
|--|---------------------------------------|
| 1. Foundation or base. | 19. Ribber driving pin. |
| 2. Cog ring. | 20. Dial. |
| 3. Cylinder. | 21. Ribber cam plate. |
| 4. Cam shell. | 22. Tension indicator rib stitch |
| 5. Driving wheel bracket. | 23. Pillar. |
| 6. Crank. | 24. Yarn bracket. |
| 7. Driving handle. | 25. Yarn eyelet. |
| 8. Driving wheel. | 26. Yarn take-up. |
| 9. Counter. | 27. Yarn grip. |
| 10. Thumb-screw of clamp. | 28. Buckle. |
| 11. Cylinder screws | 29. Dial raising collar. |
| 12. Belt. | 30. Bolt. |
| 13. Latch opener and yarn
guide (see Illustration Fig
7 for improved guide). | 31. Dial adjusting post. |
| 14. Yarn guide adjusting
screws. | 32. Cylinder or plain needles. |
| 15. Tension indicator plain
stitch. | 33. Bobbin of yarn. |
| 16. Tension pointer and wing
nut. | 37. Dial height regulating
spring. |
| 17. Wing nut for securing
ribber arm. | 38. Welting cam lever. |
| 18. Ribber arm. | 43. Turn-screw for dial
adjuster. |
| | 44. Ribber post bracket. |
| | 51. Weight stand. |
| | 52. Weight. |

NOTICE.

This instruction book contains all that is necessary for the learner to know, and if carefully followed it will be found simple to understand. Do not expect to make perfect work from the first; this will only come by practice and by following carefully the instructions given, and by thoroughly grasping each one point before proceeding to the next.

- (1) Get acquainted with the names and positions of all the parts, and read the instructions for fixing the machine (page 6) and the learner's first lesson (page 8).
- (2) Wind yarn (page 11), cast on (page 12), make a welt (page 14), and knit a plain sock.
- (3) Knit a plain sock with ribbed top (page 23).
- (4) Knit a ribbed sock complete (page 24).
- (5) A lady's ribbed and plain stocking (page 25).

 TO UNPACK AND FIX THE MACHINE.

CAUTION.—Read Clause 1, page 3, and for illustration and names of the parts see page 4 and 5.

After removing the lid, take out all the loose parts as swift, pillar, winder, &c. Now take out all the side screws from the box, and the machine can be lifted out with the board. Loose the thumb-screws (No. 10) below the base, and the machine will be free from the board. Slip the machine close on to a firm table and secure with the fingers and thumb the thumb-screws (10).

FIXING MACHINE.—Refer to illustration Fig. 1. Screw pillar (23) in the hole on the base at back of machine. Place the yarn-bracket (24) on the pillar as shown in illustration (Fig. 1) with the one arm immediately over the machine, secure it with the side screw, and the machine is ready for use.

LEARNER'S FIRST LESSON.

Giving a description of the principal parts of the plain machine.

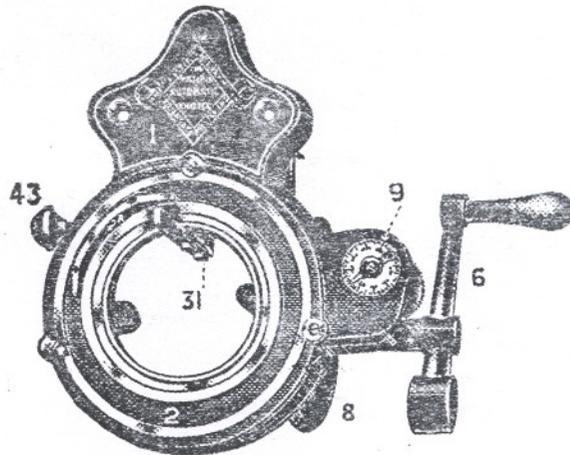


Fig. 3.

Fig. 3 shows the base of the "V. A." knitting machine with the cog ring (2) and dial adjusting post (31) in position.

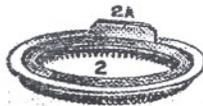


Fig. 4.

The cog ring (Fig. 4) works in the base, having on its underside cogs which fit in the cogs of the driving wheel (8). The projecting part (2a) to which the yarn-guide is secured drives the cam shell.

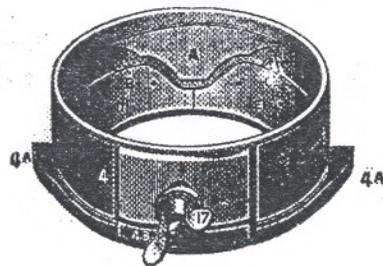


Fig. 5.

The cam shell (Fig. 5) contains the steel cams, A, B, C., which raise and lower the cylinder or plain needles; it rests upon the base and is kept in position by the cylinder round which it revolves. The stitch cam (A) is adjustable by means of the wing nut (16) on the outside of the cam shell. Between this wing nut and the shell is a pointer (16) which indicates upon the finger plate (15) the position of the stitch cam (A). The lowest point (15) makes the longest stitch or loosest tension, and the highest point (1) makes the shortest stitch or highest tension. The large wing nut (17) is for securing the ribber

arm (18) to the cam shell. The two lugs (4a) on opposite sides are for driving the cam shell; the one on the left drives forward, and the one on the right drives backward. Round the inside of the cam shell is a ledge on which the feet of the needles rest, when not being raised or lowered by the cams A, B, or C. Cams B. and C. raise the needle, cam A. depresses the needle, and the cover plates (D. and E.) of cams B. and C. raise the needles on to the ledge again after cam A. has depressed them.

Particular notice should here be taken of the way in which the needles are operated by these cams. Supposing that the cam shell is travelling in a forward direction round the cylinder which has one needle in it, the needle foot is resting at its normal height upon the ledge, the first cam which comes in contact is cam B (upthrow cam). This raises it slightly, and the needle next comes in contact with cam A., which depresses it below the normal level of the required length of stitch. Cover plate E. raises it again on to the ledge where the needle rests until the cams have passed once round the cylinder. In this forward movement upthrow cam C. is not brought into use, being sunk behind and below the cover plate E., but in the backward movement upthrow cam C. acts instead of B., which in this movement sinks below cover plate D. These cams B. and C. are raised above the cover plates D. and E. by the projecting piece (2a, Fig. 4) of the cog ring, which operates them by two pins which pass through to the outside of the cam shell.

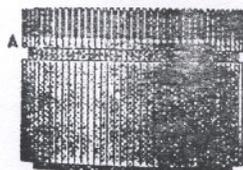


Fig. 6.

The cylinder (Fig. 6) which fits inside the cam shell and is secured to the base by two screws (11), has grooves cut in it all the way round, in which the needles work; they are held in position by a belt (12) which fits in the groove (A) running round the cylinder.

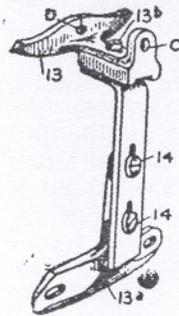


Fig. 7.

Fig. 7, the combination yarn-guide and latch opener (13), is secured to a bracket (13a) by two screws (14), the screw holes are slotted so that the yarn-guide can be raised or lowered to the required position to suit the needles. The bracket is screwed to the cog ring at (2a, Fig. 4). Screw (13b) is to adjust the yarn-guide towards or away from the needles. The yarn is threaded from the back, first through hole (c) then through hole (d).