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INSTRUCTIONS

FOR USING

SINGER SEWING MACHINES Nos. 17-22 and 17-23

RIGHT HAND, SMALL CYLINDER, ONE NEEDLE, CENTRAL BOBBIN SHUTTLE



THE SINGER MANUFACTURING CO.

PRINTED IN U. S. A.

THE IMPORTANCE OF USING SINGER OIL FOR SEWING MACHINES

"The Best is the Cheapest"

Knowing from many years' experience the great importance of using GOOD OIL, we put up an extra quality machine oil, especially prepared for sewing machines.

THE IMPORTANCE OF USING SINGER NEEDLES FOR SEWING MACHINES

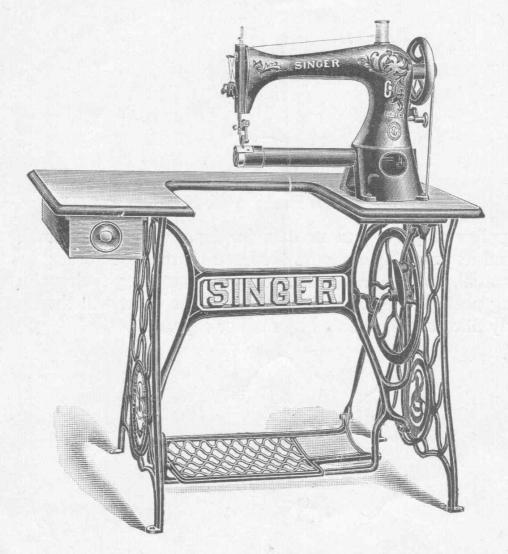
The best stitching results will be obtained in using the needles furnished by the Singer Sewing Machine Company.

Singer Needles can be purchased from any Singer Shop or Singer Salesman.

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Purchasing of Parts and Needles

Supplies of parts and needles for Singer machines can be purchased at any Singer shop or ordered by mail. If orders are sent by mail, money or a post office order covering their value, including postage, should be enclosed and the order will then be promptly filled and forwarded by mail or express.

MACHINES OF CLASS 17

DESCRIPTION

The machines of Class 17 have a cylinder bed 1% inches in diameter and are used in stitching tubular or cylindrical articles in leather; the balance wheel is at the right hand; these machines are furnished with knee or foot lifter, a flat work plate, and may be driven by foot power upon stand, or upon the power table. The different varieties and their specific uses are described in the Machine Catalogue.

· 17-22 ·

The specific designation of each Singer Sewing Machine consists of two numbers, separated by a hyphen or letter and stamped upon a number plate, which is attached to the machine, usually upon the arm.

The number before the hyphen or letter designates the *Class* to which the machine belongs, and the number after, the *Variety* of the machine in its Class.

When supplies for a machine are to be ordered and there is any uncertainty as to the correct numbers of needles or parts, the Class and Variety numbers of the machine (as shown on the number plate) should be given to ensure a correct understanding of the order.

SPEED

The maximum speed recommended for Machines Nos. 17-22 and 17-23, when used on the power table, is 1200 stitches per minute.

TO OIL THE MACHINE

All surfaces of metal which are in movable contact with each other must be kept lubricated; it interferes seriously with the results to be obtained and causes expense for repairs if the machine is not regularly and properly oiled.

There are oil holes in the arm as follows: Seven in the upper surface, three of them near the arm head, three near the spool pin and one near the balance wheel, one in back of arm head for oiling the take-up hinge and its cam and roller. There is a hole in the face plate through which the ends of the needle bar link can be oiled, but it is advisable to take off the face plate occasionally and to clean out the space inside and oil the parts with fresh oil; the round cover on the back of the arm should be turned up and parts inside lubricated.

There is an oil hole near the left hand end of the cylinder bed for oiling the bearings of the oscillating shuttle shaft and three large openings in the base through which to oil the bearings of the parts located inside; a drop of oil must occasionally be placed in the shuttle race. Be very careful that every movable joint and bearing in the machine has a drop of oil.

NEEDLES

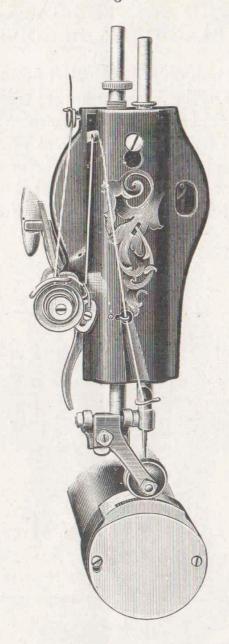
Sizes. The sizes of needles made for Machines Nos. 17-22 and 17-23 are Nos. 7,8,9,10,11,13,14,16,17,18,19,21,22,23,24 and 25. The selection of the size to be used should be determined by the size of the thread, which must pass freely through the eye. If rough or uneven thread is used, or if it passes with difficulty through the eye of the needle the successful use of the machine will be seriously interfered with.

THE CLASS.—Needles for this machine are of Class and Variety 16 x 74. Orders for needles must specify the *quantity* required, the *size*, *class* and *variety*. The following are details of an intelligible order:

"100 No. 14, 16 x 74 Needles."

TO SET THE NEEDLE

Turn the balance wheel until the needle bar is at its highest point; loosen the needle clamp screw and set the needle up into the clamp as far as it will go, the *long groove* in the needle at the left and the eye in line with the cylinder bed, then tighten the screw.



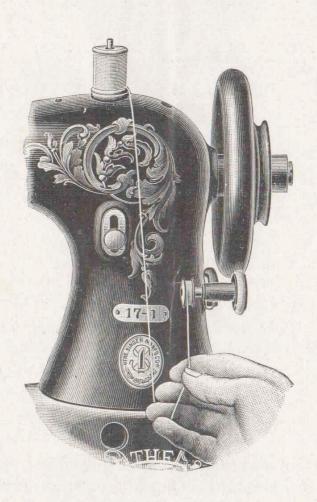
TO THREAD THE NEEDLE

Place the spool of thread upon the spool pin in the highest part of the arm, or if a thread unwinder is used pass the thread first through the hole near the upper end of the spool pin, then into the thread retainer at the back of the upper part of the arm head, down and from back toward you under and between the tension discs and over the thread guard wire, into the thread take-up spring, up and from the back through the eye in the take-up lever, down and into the eyelet in the face plate, into the thread guide just above the needle clamp and from left to right through the eye of the needle; two inches or more of thread should be left with which to commence stitching.

TO TAKE OUT THE BOBBIN

The shuttle and bobbin are in the left hand end of the cylinder bed and enclosed by a flat, hinged cover; raise slightly the back part of the cover so that it can be drawn over the screw head and let it drop down and hang by the hinge screw.

Lift the left hand end of the latch lever on the front of the bobbin case and draw out the bobbin case; then turn its open end down, release the latch and the bobbin will drop out.



TO WIND THE BOBBIN

Place the spool of bobbin thread upon the spool pin and wind a few turns by hand upon the bobbin; place the bobbin upon the spindle of the bobbin winder and push the bobbin winder up until its rubber ring presses against the rim of the balance wheel; run the machine as in sewing, at the same time guiding the thread so that the bobbin will be filled evenly.

TO THREAD THE BOBBIN CASE AND REPLACE IT IN THE SHUTTLE

Turn the open end of the bobbin case upward, raise the latch and drop the bobbin in; draw the thread into the slot in the bobbin case and under the tension spring into the delivery eye at the end of the tension spring.

After threading, place the bobbin case on the centre pin of the shuttle body with the position finger opposite the notch in the top of the shuttle race and press it back until it enters the notch and the bobbin case is latched.

TO COMMENCE SEWING

Hold the end of the needle thread, leaving it slack, and turn the balance wheel over toward you until the needle descends and rises again; draw up the thread and the under thread will come up with it through the needle hole in the throat plate; lay both threads back, place the work under the needle, let down the presser bar and commence to sew by turning the balance wheel over toward you.

THE TENSIONS

The tension on the upper thread is regulated by the thumb nut outside the tension discs at the back edge of the face plate; turn the nut over toward you to make the tension tighter, or from you to make it looser. The tension on the under thread is regulated by the screw in the bobbin case spring near the delivery eye. The under tension rarely requires any change, as a perfect stitch can usually be obtained by regulating the upper tension only; if there are loops or a straight thread on the under side of the work the upper tension should be made tighter, but if the thread lies straight on the upper surface it should be made looser and so adjusted that the two threads will be locked in the centre of the work.

TO REGULATE THE LENGTH OF STITCH

Loosen the thumb screw in front of the slot on the arm and push it down to lengthen or up to shorten the stitch; fasten the thumb screw firmly when desired length of stitch is obtained.

TO REMOVE THE WORK

The take-up lever must be at its highest point; raise the presser bar by the lifter and draw the work backward; cut the threads close to the goods, leaving two or three inches of thread with which to re-commence sewing.

THE PRESSURE ON THE MATERIAL

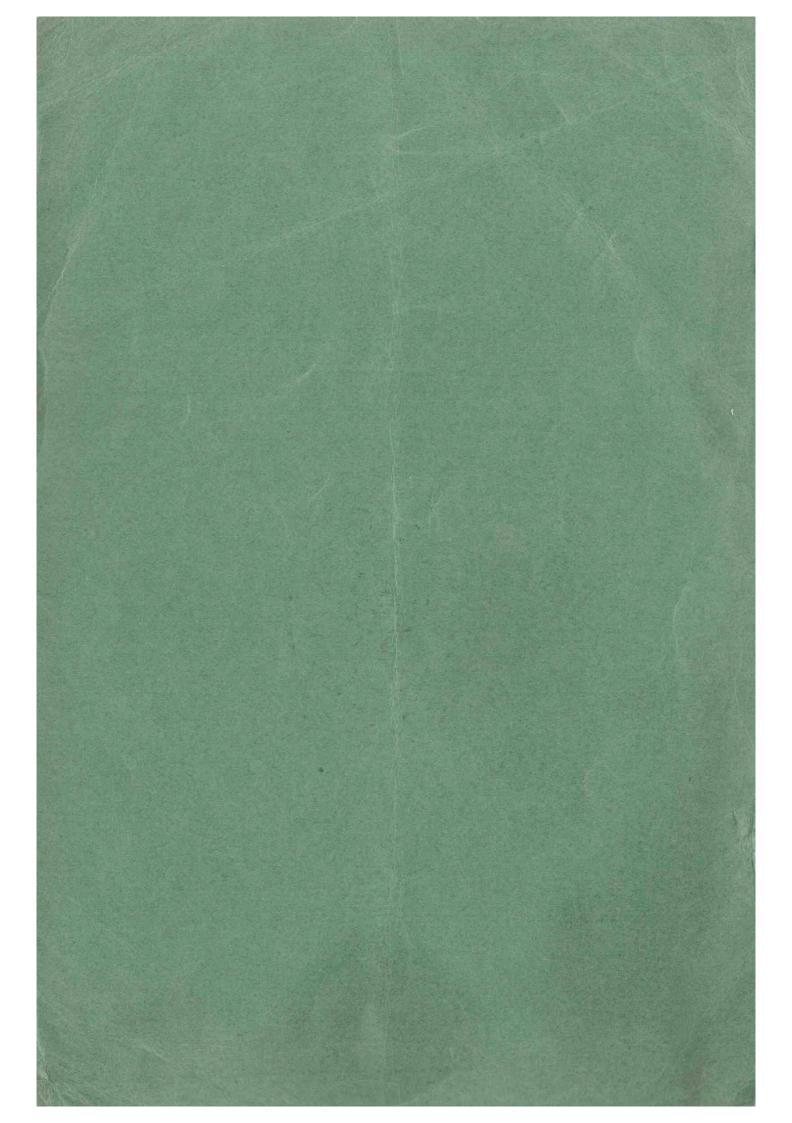
The pressure of the foot or of the roller presser should be only heavy enough to prevent the work from rising with the needle, and to secure an even feed; if too heavy it will make the machine run harder and be of no benefit; the pressure is regulated by turning the screw at the top of the arm head through which the presser bar passes.

THREAD AND NEEDLES

Thread which is *twisted to the left*, or the same as regular silk thread, works best in machines of Class 17, and should always be used, although no difficulty should be experienced with any *good hard twisted* thread of right hand twist. The quality and finish of the needle is very important to success in using sewing machines, and as our interest is to maintain the reputation of the machine, we always make and supply the best.

RELATIVE SIZES OF NEEDLES AND THREAD

ROUND POINT NEEDLES, FOR CLOTH	WEDGE AND TWIST POINTS FOR LEATHER WORK
7, 8, 9 \{ 80, 100 Cotton OO, O Silk	7, 8, 9 000, O Silk
$10, 11, 13$ $\left\{ egin{array}{l} 60, 80 ext{ Cotton} \\ A ext{ Silk} \end{array} \right.$	10, 11, 13 A, B Silk
14, 16 $\left\{ \begin{array}{l} 40, \ 60 \ \mathrm{Cotton} \\ \mathrm{B, C \ Silk} \end{array} \right.$	14, 16 C, D Silk
17, 18, 19 $\left\{ \begin{array}{l} 24, 40 \text{Cotton} \\ \text{D, E Silk} \end{array} \right.$	17, 18, 19
$\{21, 22, \dots, \{60, 80 \text{ Linen } \{20, 24 \text{ Cotton } \}\}$	21, 22
23, 24	23 35, 40 Linen
25 24, 40 Linen	24 24, 35 Linen





This Trade Mark Embossed in Brass
Is on the Arm of Every
Singer Sewing Machine