

S INDEX. S

						-
To Oil the Machine	•				2	
To the Learner					3	
General Remarks	•				4	
To Set the Needle			. 4		5	
To Wind the Bobbin		•			5	
To Thread the Shuttle	•			•	6	
To Place the Shuttle	•				7	
Lower Thread Breaking	ng			•	7	
Threading Machine		•		•	7	
To Regulate the Tensi	ons				8	
Upper Thread Breaking	ıg				9	
To Drav Up Shuttle	l'hread	1			9	
Missing Stitches	• **	•		•	9	alas.
Ready for Sewing	• •	•	•	•	10	
Length of Stitch	•		•	•	10	
To Remove Work	•		•	• 54	10	ac.
To Adjust Presser Foo	t	•			11	
Gauge	·	•			11	
To Hemstitch				. +	11	
To Remove the Foot		•		~	11	BRABBRAS
To Select Needles and	Threa	ıd	•	. 1	-12	11 11
Outfit					12	888
Foot Henmer and Fel	ller			• 14	13	
Felling		•			14	2222
To Hem and Sew on I	Lace			•	14	0. F 160
Quilting .			•		15	000
*						No are



OIL

Poor oil is dearer than good oil, because it ruins the parts of the machine and does not last as long. It makes the machine run hard : corrodes and eats into the bearings, making them rough and hard to operate. It clogs and fills up the oil holes, so that, unless the operator carefully and laboriously picks out the holes, the oil cannot penetrate to the bearings and soon the machine begins to run hard. Be sure you get the best.





If the machine runs hard after standing idle for some time, use a little kerosene oil in the usual way and run rapidly, then wipe clean, and oil with the best prepared oil. Oil the bobbin-winder in places where there is any friction.

TO THE LEARNER.

A little time given to the study of the instructions, before commencing to use the Machine, will be found of great advantage. Any-one can learn to use this Sewing Machine. It is simple in construction, and requires so little change for any kind of work, that its operation can be easily understood.

Attention to the instructions here given, and a little practice, will soon enable the learner to successfully operate the Machine.

Do not attempt to use the Attachments until you can manage the Machine with ease on plain sewing.

The cause of a machine not working properly will be found, ninety-nine times out of a hundred, in the improper setting of the needle, the use of poor thread, or a size too large for the needle, or in the wrong adjustment of the tensions.

If at any time the Machine fails to perform its work properly refer to the instruction book to ascertain the cause. This will help you out of the trouble if you carefully follow the directions.

For example, if your machine misses stitches, you turn to the index: (inside front cover), "Missing Stitches." On page 9 you read, "Should there at any time be skipped or long stitches at intervals, it is owing to the needle being set too low, or its having become bent away from the shuttle, or its being too small for the thread in use, etc., etc." You will therefore be able to easily remedy the trouble. We advise a careful perusal of "General Remarks."

Do not allow lint or dust to accumulate in the shuttle or under the shuttle tension spring, as any foreign substance inside the shuttle (particularly in the inner end) will prevent the proper action of the bobbin, and under the tension spring will render the shuttle tension inoperative.

TO SET THE NEEDLE.

First loosen the screw that clamps the needle and push to the left sufficient to allow the shank to enter; allow the needle bar to rest at its highest point; then take the needle (with the flat side of shank towards the needle bar) between the thumb and finger of the left hand, and insert the needle into the groove (as far up as it will go) under the clamp, and screw fast. Observe that the needle passes through the hole in the Throat Plate without touching either side. If it touches, take hold of it near its point, and press it gently in the opposite direction, until it is free.

TO WIND THE BOBBIN.



Unlock the balance wheel with thumb and forefinger of the right hand by drawing the key (12) out, turning it part round (this will prevent the machine from wearing, and save the trouble and annoyance of unthreading it, and removing the work while the bobbin is being filled). Then swing the bobbin winder until it is in position and presses firmly against the wheel. Place the spool of thread to be wound from on the spindle (80) and put the bobbin in the bobbin winder. Pass

GENERAL REMARKS.

The presser foot must never be let down on the feed, unless when you are sewing and have cloth under it. When the shuttle is in, the machine must not be run with either of the shuttle slides out or partly open, as the shuttle is liable to get out of position and break some portion of the machinery.

We caution purchasers to see that the manufacturers' plate number of the machine is plain and in good condition. If defaced or obliterated, it is sure evidence of fraud, and we will not warrant, or in any way be responsible for such machines. To avoid imposition buy only of us, or authorized dealers.

Do not run the machine backward or with both threads in, without sewing.

Do not use a dull or bent needle, or draw the work faster than the feed will naturally carry it, as needles are frequently broken by failing to observe the latter caution.

When ordering parts always give the plate number of machine

whold changing the shuttle tension, as a change of upper tension will generally give the result desired.

Remove the shuttle from the carrier with the fingers only. Never use the scissors, as they may blunt the shuttle point or bend the shuttle spring.

In setting the attachments be sure to lift the presser foot from the right, and do not let the attachments drag over the feed or strike the feed.

Recollect, that every part where there is the least friction should be carefully oiled. Only a very small quantity of oil should be used at a time.

Never wind a knot on to the bobbin, and see that no knot gets into the eye of the needle, always use good thread.

Ð

the thread from the spool, once around the tension screw (104) as shown in cut, thence down between the bobbin winder frame and wire guide at (A), then through slot (B) at bottom of thread guide, then into V shaped slot of thread guide at (C). To secure the end of thread preparatory to winding, place it between the head of the bobbin and its socket at the right hand. Proceed as in sewing. When the bobbin has been filled, swing the winder from wheel and turn back the key (12) until it enters the hole and locks the balance wheel.

TO THREAD THE SHUTTLE.



Take the shuttle in the left hand, with the point toward you; draw off about two inches of thread from the bobbin, thread running from the upper side, (see Fig. 1); drop the bobbin into the shuttle as far as it will go; then draw the thread into the open slot of shuttle, at the same time putting a little pressure with

TO ADJUST PRESSER FOOT.

At the top of the Machine, back of the needle bar, will be found a screw, which, by turning to the right, increases, and to the left, decreases the pressure of the presser foot. Heavy goods require more pressure than light goods. Too much pressure will pucker fine cloth, while too little pressure on heavy cloth will let presser foot rise as the needle ascends. Care should be taken to adjust the pressure correctly. All machines are properly adjusted for ordinary work, the screw should not be changed except on extra thick or thin goods.

GAUGE.

Every machine has a Gauge. It is attached to the bed plate by means of the thumb screw, and used for enabling the operator to sew at a given distance from the edge of the goods.

TO HEMSTITCH.

Fold blotting paper (or other soft paper) which can be readily torn, until you get. thickness corresponding to the opening desired in the hem-stitching; put one of the pieces of goods under the paper and the other above, then place all under the presser foot and som through them. After being sewed, both pieces will be double. Fold back the cloth first on one side, then on the other, all in the same direction and hold firmly while you tear out the paper. Remove the other half of the paper and open the hem-stitching—one edge of each, or either piece may be cut and passed through the hemmer, or a row of stitching can be passed along, side the hemstitch, and the double edge finished off as you choose.

TO REMOVE THE FOOT.

Raise the needle bar to its highest point, loosen the binding nut which is just above the foot, by turning to the right, then draw the foot out.

TO SELECT NEEDLES AND THREAD.

Size of Needle.	GLASS OF WORK TO SEW.	Size of Gotton, Linen or Silk.	
0	Very Fine Thin Muslins,Cam- brics, Linens, etc.	120 to 300 Cotton.	
в	Very Fine Calicoes, Linens, Linen Shirtings, Fine Silk Goods, etc.	90 to 120 Cotton, 000, & 00 Silk Twist	
1/2	Shirtings, Sheetings, Bleached Calicoes, Muslins, Silks and General Domestic Goods, and all classes of General Work.	60 to 90 Cotton, 0 and 00 Silk Twist.	
1.	All kinds of Heavy Calicoes, Light Woolen Goods, Heavy Silks, Seaming Stitching, etc.	40 to 60 Cotton, A and 0 Silk Twist.	
2	Tickings, Woolen Goods, Trou- sers, Boy's Clothing, Corsets, Cloaks, Mantles, etc.	24 to 40 Cotton. A and 0 Silk Twist.	
3	Heavy Woolens and Tickings, Bags, Heavy Coats, Trousers, and Heavy Clothing generally	10 to 24 Cotton, A and B Twist, and 60 to 80 Linen.	
4	Bags, Coarse Cloths, Heavy Goods of any texture.	40 to 60 Linen, B, C & D Silk Twist, or very Coarse Cotton.	

For Needles 0, B, 1-2 and 1, use throat plate with Small needle hole; for 2, 3, and 4 use throat plate with Large hole.



105, Throat Plate, coarse; 150, Oil Gan, filled; 154 Quilter; 66, Six Bobbins, one of which is filled ready for use in shuttle; 151 Hemmer and Feller, Package of Assorted Needles,

INSTRUCTIONS

FOR USING THE

FOOT HEMMER AND FELLER.



Raise the needle to its highest point and raise the presser foot to its first lift by turning the lifter to the right. Loosen the nut A, take off the presser foot and replace with the Hemmer. Set same to its right place and fasten nut A by turning to the left. Raise the presser bar by turning the presser foot lifter to the right, and pass the edge of the cloth into the hemmer in the manner shown in the illustration, drawing it through the hemmer as far as the needle hole, in order that the feed may at once catch the cloth. Then let the hemmer down upon the feed surface, and operate the machine as usual. Should the goods begin to run out of the hemmer, carry them to the Right; should too much run into the hemmer carry the goods to the Left. About one-fourth of an inch in width is as much of the goods as is usually required to form a perfect hem. If the stitch takes the hem too far from the edge, turn the hemmer a little to the Right. If, on the contrary, the stitch does not catch the edge of the hem, turn the hemmer a little to the left.



Sew the two edges of the cloth together, the under one projecting one-fourth of an inch beyond the upper; then open out the work and crease the seam down, the wide edge over the narrow edge. Draw the widefolded edge into the hemmer, the same as if it were a hem, and drop the foot. Then guide the fold edge, and work the machine the same as in ordinary hemming. A wider fell requires a wider seam, which is turned the same as a wider hem.

TO HEM AND SEW ON LACE.



Put the edge of the fabric into the hemmer. When the hem is well started, raise hemmer foot by means of the presser lifter and also raise the needle. Then pass the lace through slot in the side of hemmer, carrying it back under the hemmer on top of the hem. Proceed as in ordinary hemming, keeping lace well in the side.



Insert the quilter through the small hole in the presser bar, and fasten with the screw in the back of presser bar, moving it to the right or left to the required width of the rows of stitching. Raise or lower the quilter according to the thickness of the goods. Having made the first row the desired distance from the edge place the work so that this row will be under and in line with the lower edge of the quilter, which will form a guide for each row of stitching ; the last row made always passing under and in line with the quilter while stitching the pext.



