

## DIRECTIONS

FOR USING

# WILCOX & GIBBS

# AUTOMATIC

## Silent Sewing Machine.



Fac-simile of Medallion upon each Machine.

**Willcox & Gibbs Sewing Machine Company,**

658 BROADWAY, CORNER OF BOND STREET, NEW YORK.

BRANCHES IN PRINCIPAL CITIES.

See List, inside Back Cover.

## BEST SEWING MACHINE OIL.

*Good Sewing Machine Oil is essential to the proper working and wearing qualities of our machine. You are absolutely sure of getting **THE BEST** if you purchase from us.*

*Most of the sewing machine oil kept on sale at other places is liable to gum up the machine and cause you trouble and unnecessary expense and repairs.*

*We guarantee our Oil to be the best for the purpose in every respect, and can send it by mail or express.*

Price per bottle, 10c. If ordered by mail, add 11c. to cover postage.

## TRADE MARK CAUTION.

*The medallion shown upon the title page is our Registered Trade Mark. We, therefore, caution the public against purchasing any sewing machine purporting to be of the "Willcox & Gibbs system" or manufacture, whether "Automatic" or "Tension," which has not this Medallion upon it.*

## CAUTION ABOUT NEEDLES.



**Buy Needles of us direct or at our Branch Offices,** and you will be sure to get only "**Genuine.**" You are almost certain to get worthless imitations (called Willcox & Gibbs needles) from Sewing Machine agents and dealers, and from fancy goods stores. Needles not bearing both stamps **[W. & G.]** and **[Pat. March 19, 1861]** as shown above, are spurious.

The perfect, or even satisfactory working of our machine, depends upon using **Genuine** Needles.

Needles offered at less than our prices **are not genuine,** are liable to injure the machine, and cause great dissatisfaction and annoyance in use.

Needles, as well as Cotton, Silk, &c., can be forwarded by mail.

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## ATTACHMENTS.

The following attachments are supplied without extra charge with each machine (except with the Styles No. 2, No. 4, No. 4 and Leaf, Hand Machine, and Head without Table, *the Tucker, Ruffler and Linen or Flannel Hemmer are not included*); and when required separately, the prices are as annexed.

The Tucker, Ruffler and Linen or Flannel Hemmer can be had for any of the above excepted styles at Five Dollars (\$5.00) for the Set, if ordered when purchasing the machine.

**TUCKER**, a simple and useful attachment, which measures, marks and CREASES any desired width of tuck, while the previous one is being stitched. See page 33. . . . . \$2.00

**RUFFLER**, made specially for the WILCOX & GIBBS MACHINE, gathers the ruffle or puff, forming a beautiful Ruffle as fast as an ordinary seam is sewed, and at the same time sews it on the band, if desired. See page 34. . . . . 2.00

\* **LINEN OR FLANNEL HEMMER**, (turns a hem much wider than the Narrow Hemmer) and is specially adapted to hemming Alpacas, Woolens, heavy Cottons or Table Linens. See page 23. . . . . 2.00

\* **NARROW HEMMER**, for turning and stitching very narrow hems. See page 22. . . . . 2.00

\* **WIDE HEMMER**, which is also the **FELLER**, for turning in the edge and stitching all wider hems after they have been folded the desired width, and for finishing fells after the first seam has been sewed. See page 24. . . . . 1.50

**HEMMER NUT**, fastening either hemmer. . . . . .20

**BRAIDER**, which is a portion of the presser-foot, and is therefore always attached and ready for use. See page 30. . . . .

**GATHERER** is attached to the presser-foot, when in use. See page 28. . . . . .25

**QUILTER**, for executing any description of quilting in parallel lines, diamonds, checks, &c., *without marking*. Also used as a top guide when stitching 3-ply tucks, and for other similar purposes. See page 27. . . . . .25

**Dozen Needles**, (Less than 1/2 Dozen, 4c. each). . . . . .35

**Needle Wrench**, . . . . . .15

**Guide**, . . . . . .20

**Guide Screw**, . . . . . .25

**Bottle of Oil**, . . . . . .10

**Oil Can**, . . . . . (Oil Can filled, 15c.) . . . . . .10

**Belt**, . . . . . .25

**Bodkin**, . . . . . .05

\* Our Hemmers are all attached to the Cloth-plate (not to the presser-foot), and are self-adjusting. The Hem is turned underneath so that the stitching is done as it should be, on the right side of the fabric.

See Caution about Needles and Oil inside front Cover.

## EXTRA ATTACHMENTS.

The following Attachments will be found very useful for special kinds of work:

<b>CORDER</b> , used for laying cord in collars, shirt bosoms, &c., laying and stitching the cord in one operation. Where much of this work is done it is indispensable.....	<b>\$2.00</b>
<b>MEDIUM HEMMER</b> , turns a hem a trifle wider than the Narrow Hemmer.....	<b>2.00</b>
<b>BINDER</b> , for folding or stitching Binding, whether braid or bias cut, to the edge of the work.....	<b>1.50</b>
<b>CORDER FOOT</b> . (See page 32).....	<b>.75</b>
<b>FRINGING NEEDLES</b> ..... Each,	<b>.15</b>

## Use Best Sewing Machine Oil.

See inside Front Cover.

## IMPORTANT!

TO OWNERS OF

### Willcox & Gibbs Automatic Sewing Machines.

Do not allow anyone, claiming to have been sent by us to even examine, or repair your Automatic Sewing Machine, as we do not employ travelling agents or repairers for this purpose.

If you want your Automatic Sewing Machine to render the very best, and most satisfactory service, you must avoid the use of **Bogus Needles, Cheap Oil or Counterfeit Parts**. Machines are often injured through disregard of these simple warnings.

Should your sewing machine from any cause fail to work properly, time and money will be saved by communicating directly with us, giving full explanation of the difficulty. Or better still, send the machine head at once to us, or to one of our Branch stores, where only what is needed will be done; only **Genuine** parts will be applied, and by workmen who understand their business and have the proper tools for making repairs. Never trust a machine to a general sewing machine repairer, who uses **Bogus** parts, and who has neither the proper tools nor the experience necessary to do the work as it should be done.

We always prefer, when delay is allowable, to estimate the cost of repairs (after receipt of the machine) and send to the owner for instructions before repairing the machine.

Any supplies needed can be sent by mail, on receipt of letter enclosing postage stamps, or money order, covering proper amount.

**Cotton**—5 cents a spool, or 55 cents per dozen—subject to change without notice. Add 5 cents a dozen for postage.

**Colored Cotton**, and **Spool Silk**, we always carry in stock.

**Oil**—10 cents per bottle. By mail, add 11 cents to cover postage.

**Machines Rented, Repaired and Exchanged.**

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# I.—DIRECTIONS FOR USING THE MACHINE.

## Description of Stand.

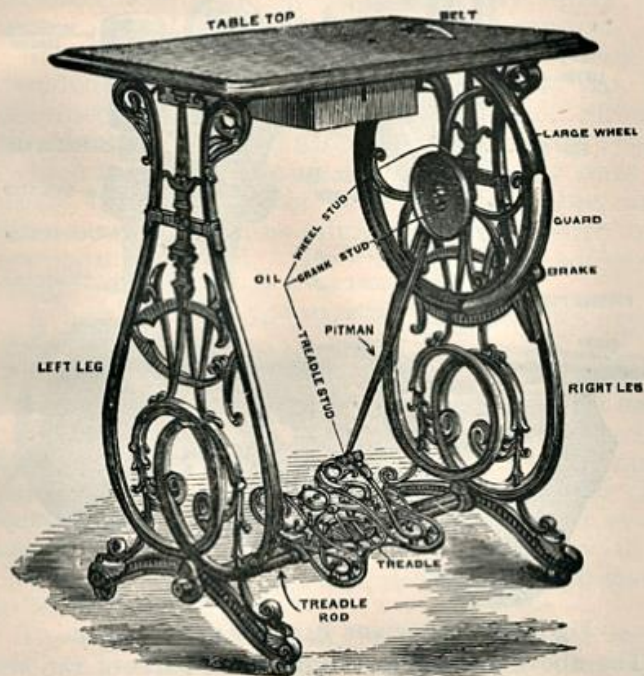


Fig. 1.—NAMES OF THE PARTS OF THE STAND.

The Stand, as shown in the above cut, consists essentially of the **Table Top**; **Right Leg**; **Left Leg**; **Treadle Rod**; **Large Wheel**, turning upon the **Wheel Stud**; **Pitman**, connected at its upper end with crank of **Large Wheel** by the **Crank Stud**; and **Treadle**, connected with the lower end of **Pitman** by the **Treadle Stud**.

The **Large Wheel** is covered in front by a **Guard** to protect the dress of the operator, and in a recess in this guard is a small **Rubber Ball**, which, acting as a **Brake**, prevents the wheel turning the wrong way.

## Description of Machine.

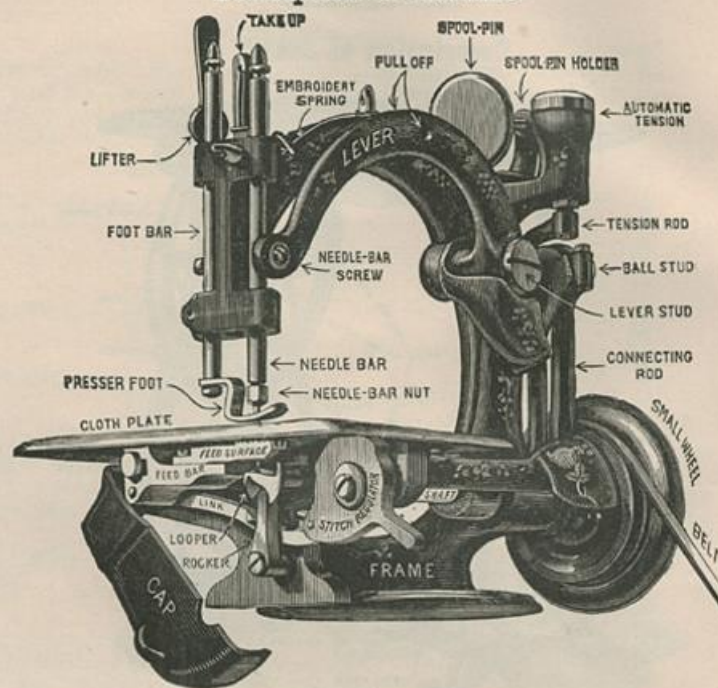


Fig. 2.—NAMES OF THE PARTS OF THE MACHINE.

The above cut shows the principal parts of the Machine, to which reference is made in the course of these directions, and a careful study of which will be found exceedingly helpful to the learner.

### Treadle Practice.

Before commencing to sew, practise running the Machine, with one foot, without any thread in the needle, and with the **Presser Foot** raised from the **Cloth Plate**, until you can with ease produce a regular motion.

The **Cap** which covers the **Looper** must be kept closed while practising or sewing.

We advise the use of *one foot only* in running the Machine, as it runs so very lightly.

### Notes and Cautions about Oiling.

A little care bestowed in *properly oiling* and *cleaning* the Machine will abundantly repay the owner in ease of running and general comfort.

Use the oil put up expressly by us, which is decidedly the best for the purpose, and can be obtained at any of our Branch Stores. Should the Machine run hard after standing for some time (which it may do if any other oil except ours is used), oil with a little kerosene or benzine, and after running it a few minutes oil again with our sewing machine oil. (See "Important," notice on inside of front cover.)

A bottle of oil and an oiler accompanies every Machine sent out by us.

The Machine should be cleaned and oiled two or three times a week, or every day if in constant use.

Keep the outer rim of **Large Wheel**, underneath **Table**, free from oil. This will prevent its turning backward in consequence of the oil reaching the **Rubber Ball**. Should it do so, wipe outer rim of **Large Wheel** and **Rubber Ball** thoroughly with a cloth, then apply powdered chalk or pumice stone to **Rubber Ball**.

If oil get on your work, rub the spots with soap and cold water before putting the garment in the suds.

### Oiling the Stand.

The Stand requires oiling in only three places, at each of which will be found oil holes, namely—Centre Hub of **Large Wheel**, Crank Hub of **Large Wheel** (both to right of Pitman), and **Treadle** at its connection with Pitman. (See cut of Stand on page 5.)

In oiling the Stand, bring the toe of the **Treadle** down to its lowest point. This places the Crank Hub below the Centre Hub of **Large Wheel** and the oil holes in both on the upper side—the only position in which they can be reached.

### Oiling the Machine.

It is not necessary to use a screw driver to get at any of the parts requiring oiling or cleaning.

All our later improved Automatic Machines have "oil holes" in **Cloth Plate**, and all the parts underneath the **Cloth Plate** are oiled by simply applying a drop of oil in each "oil hole," and need **not** be removed from table as shown in Figure 3.

Occasionally the machine should be removed from the table and **cleaned** underneath.

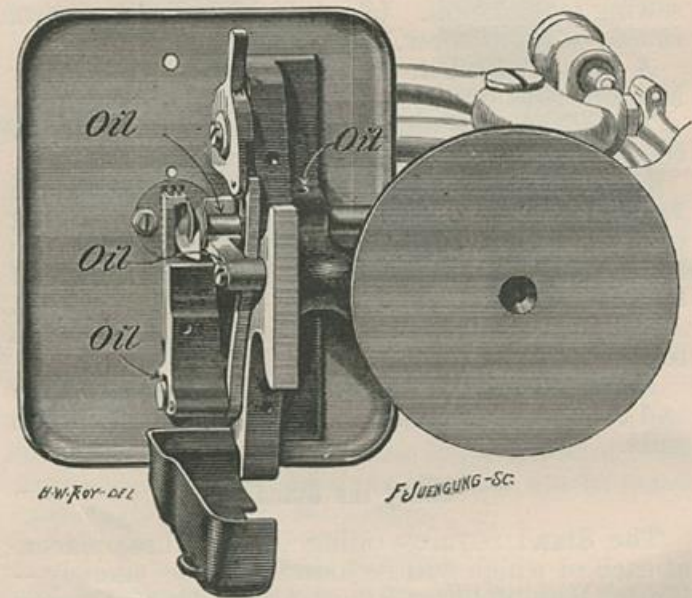


Fig. 3.—SHOWING PLACES TO BE OILED UNDERNEATH CLOTH PLATE IN OUR OLDER AUTOMATIC MACHINES, NOT HAVING "OIL HOLES" IN CLOTH PLATE.

Remove the Machine, by means of the **Thumb Screw**, from the **Table**; lay it down in the position shown in above cut (Fig. 3); pull down the **Cap**, and apply a drop of oil to the places underneath the **Cloth Plate** indicated by arrows (Fig. 3).

### Caution about Sewing Machine Oil.

Use only oil put up by us, and you will avoid unnecessary expense in frequently having your machine cleaned and repaired. See inside Front Cover.

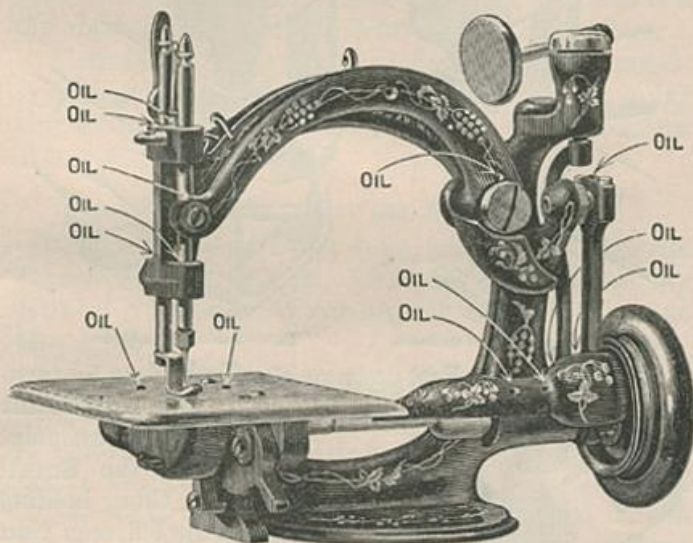


Fig. 4.

*Oil all places on Machine as indicated above in Fig. 4.*

Run the Machine rapidly for a few moments to work the oil into the bearings, taking care to raise the **Presser Foot**. Carefully wipe the superfluous oil from every part you can reach without removing the Machine from the **Table**.

### Setting the Needle.

This operation, so important and difficult in other Machines, is rendered easy and certain by the patented improvement, applied exclusively to this Machine.

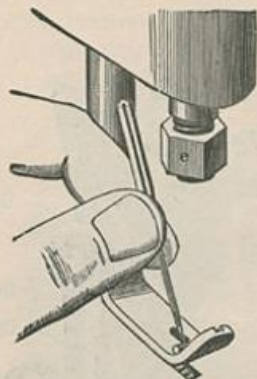


Fig. 5.—Inserting, or Taking out the Needle.

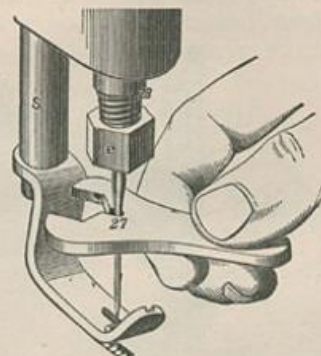


Fig. 6.—Pushing up the Needle.

Let the **Presser Foot** down on the **Cloth Plate** by turning the **Lifter** to the right or left; raise the **Needle Bar** to its highest point by turning the **Small Wheel**; then, holding the needle between your thumb and finger (fig. 5), with the groove toward the left, let the point go down into the "needle-hole" in the plate until you are able to bring the shank of the needle directly under the end of the **Needle Bar**. If it does not readily enter, roll it between the thumb and finger while pressing it up, and it will soon find its proper position and enter easily. Then

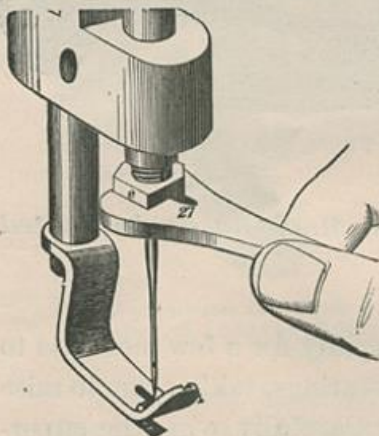


Fig. 7.—Fastening the Needle.

push the needle up as far as you can with the fingers; then apply the slot in the wrench (27 fig. 6) below the taper on the needle, and push it up as high as it will go; before taking the wrench off, hold the needle again firmly between the thumb and finger, to prevent its slipping down; then place the wrench on the "nut" (e fig. 7), and turn it to the right until the needle is firmly held in its place.

*Keep the needle sharp.* A dull needle cannot do good work, and is liable to become bent in going through the cloth. Sharpen on a fine oil-stone. *Never use a bent needle.*

#### To Take Out the Needle.

Let the **Presser Foot** down, and raise the **Needle Bar** to its highest point. Unscrew the **Needle Bar Nut** with **Needle Wrench**, taking a half turn to the left.

#### To Apply the Belt.

First unscrew the Belt and pass one end between the Pitman and Large Wheel, then pass both ends up through slot in the Table. Hold the end of Belt having the ferrule on, in the left hand; take the other end of Belt between the thumb and finger of the right hand, and turn it towards you six full turns—this will put a twist, or "kink" in the Belt. Then push the end of the Belt hard into the ferrule, screwing it in as far as you can by turning it from you—which will take the twist out of the Belt and leave it straight..

#### To Tighten the Belt.

Should the belt become loose after use, and you wish to **tighten** it, unscrew one end of the Belt from the Brass ferrule, and shorten it by cutting off from one-quarter to one-half of an inch; then place the end of belt on bare floor, or on any smooth hard surface where you can roll it under your foot, so as to compress the end for entering the ferrule, and screw together as above.



Fig. 8.—The Wrench.

#### To Thread up the Machine.

Machines are always sent out from our offices properly threaded; therefore, observe the machine carefully when you receive it. The direction of the thread is shown in the following cut:

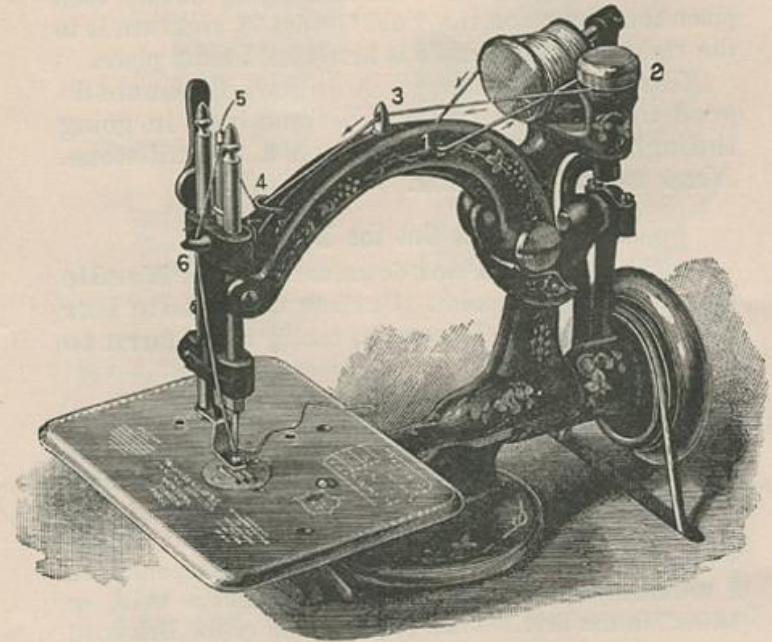


Fig. 9.—SHOWING THE MANNER OF THREADING UP THE MACHINE.

In threading up, first pull out the **Spool Pin**, and place the spool upon it, noticing that the spool revolves freely round the pin. Replace **Spool Pin**. Raise the **Needle Bar** to highest point by turning **Small Wheel**, and then proceed as follows:

\*1. Thread from the back toward you, through the two staples and hole in arm known as **Pull-off** (1 fig. 9). Pull through about six inches of thread.

\***Tip** By doubling and twisting the end of the Thread it can be more readily passed through the **pull-off** and following places, in threading.

2. Carry thread between spool and **Automatic Tension**, drawing the thread into the slot under the cap of tension, (2 fig. 9).

3. Thread from right to left through the **Thread Pin** on top of frame (3 fig. 9).

4. From right to left through **Wire Staple** (4 fig. 9)

**NOTE**—Do not thread through the loop of spring under this staple, unless embroidering.

\*5. Take the thread between thumb and finger of both hands, passing it between the **Needle Bar** and **Take-up**, press it from you into the opening at the top of **Take-up** (5 fig. 9).

6. Downwards through the **Thread Pin** (6 fig. 9).

7. Through needle eye from left to right (fig. 9).

To Regulate Length of Stitch to Size of Thread or Silk Used.

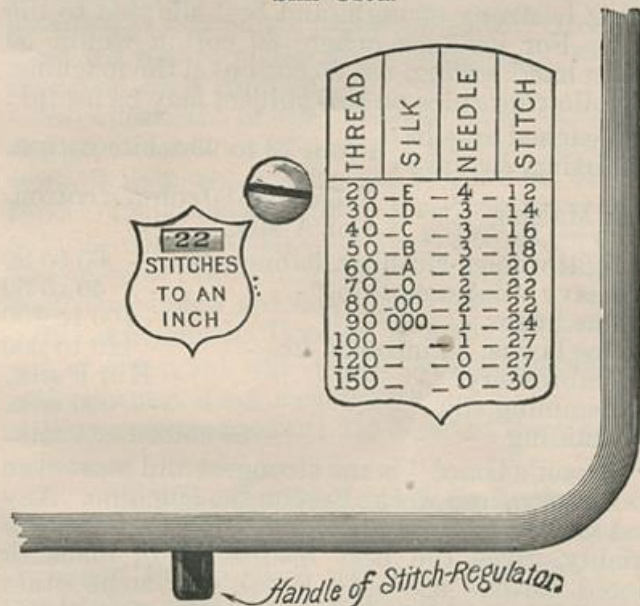


Fig. 10.—TABLE STAMPED ON CLOTH PLATE.

By the above cut it will be seen that there is stamped upon the **Cloth Plate** of this Machine a "table" showing the proper size of needle and length of stitch

\*In threading the older Automatic, thread from right to left, through two staples at upper end of **Needle Bar**, known as **Take-up**.

for each size of cotton or silk. (For example: For 80 thread or 0 silk, use a No. 2 needle, and 22 stitches to the inch.) To the left of this "table" is a slot, surrounded by a shield inscribed "Stitches to an inch." To make length of stitch required, move handle of **Stitch Regulator** until the proper number appears through the slot. The length of stitch indicated by the "table" should always be used, as the proper elasticity will then be secured in bias seams. A strict adherence to the "table" will always ensure good and durable work.

### Selecting Thread or Silk.

In selecting thread or silk for machine sewing, the operator should bear in mind that generally three or four sizes finer than that used in hand sewing is strong enough, and best adapted to the work. For instance, where 60 cotton would be used in hand sewing, use 80 cotton on the machine. The following rules on this subject may be useful:

For bleached muslin } From 70 to 90 white cotton.  
for shirting, &c., use }  
Dress Making - - } From 60 to 80 colored cotton.  
- - - - - } 0 or A silk.

For light woolen clothing, flannels, &c. - 60 to 80  
For heavy woolen clothing - - - - - 40 to 60  
For fine linens - - - - - 100 to 150  
For fine lawns, Nainsooks, &c. - - - - 120 to 200  
For embroidery\* - - - - - E or F silk.  
For hemming silk - - - - - 000 silk.  
For braiding - - - - - 80 cotton or 0 silk.

"Brook's Glacé" is the strongest and most even spool cotton, and works best on the Machine. Any good cotton can be used, but Brook's Glacé invariably gives the best results. For black or colored cottons use only Brook's or some other glacé finished. Soft finished black and colored cottons will often break or work unsatisfactorily. Use glacé cotton in place of linen thread.

\*In threading up for embroidery, thread through the embroidery spring. (See "To Embroider, Page 31.")



### Size Needle to be Used.

The "table" stamped upon the **Cloth Plate** shows the proper size of needle to be used with each size thread or silk.

The number is stamped on the shank of the needle.

CAUTION:—Every needle made by us is also stamped on the shank, "Pat. Mar. 19, 1861." All others are worthless imitations and invariably *give* trouble, and injure the Machine.

### The Automatic Tension.

This important feature of the Willcox & Gibbs **Automatic Sewing Machine** calls for very few words of explanation, as it is entirely self-acting, requiring no attention or skill on the part of the operator, no matter what the nature of the fabric may be, or what size thread or silk is required.

No adjustment of this Tension being required for any size thread or silk, or any kind or thickness of work, it only remains for the operator to select the thread or silk, and to regulate the stitch, in accordance with the "table" stamped on the **Cloth Plate** (fig. 10). The operator can then be certain that the machine will start immediately and do perfect work.

The **Automatic Tension** is not at all liable to get out of order, but will remain perfectly adjusted and self-adjusting, if not meddled with.

We repeat the caution: **Do Not Oil the Tension.**

### To Place the Work and Begin Sewing.

Raise the needle to its highest point, also the **Presser Foot**. Place the work under the point of the needle. Have two or three inches of thread drawn through the eye of the needle.\* Pass the thread under the **Presser Foot**, towards the left. Let down the

\* Unless the needle bar is at its highest point, the thread is held by the **Automatic Tension**, and cannot be drawn through.

**Presser Foot**, the thread being held fast between the **Presser Foot** and cloth.

The thread may be held under the finger lightly, instead of being passed under the presser foot. In this case, hold it until *two stitches* are made. If held too tightly, the thread will break at the first stitch.

### Crossing Seams.

This Machine will give no trouble in passing over any ordinary seam. Very heavy seams may need a little assistance.

### To Fasten off Seam and Take the Work Out.

*To Fasten off at End of Work.*—Sew off end of seam *two stitches*. More than this may leave the seam unlocked. Stop with the needle up at its highest point. With the left hand catch the thread between the needle and thread pin (6 fig. 9), and pull some slack through the tension.\* With the right draw the slack through the eye of the needle, and, grasping the thread firmly, pull it upward from the work till it breaks in the goods. Lift the **Presser Foot**. Pull the work *from you*, and the end of the thread will be drawn through the loop. Pull the end of thread, which will tighten the knot and fasten off the seam. If you cannot pull any slack thread from the spool, it is because the **Needle Bar** is not at its highest point.

*To Fasten off in the Work.*—Stop the needle in the work, place the fingers on the work close to the **Presser Foot** to prevent work from moving, raise **Presser Foot**, and take one more stitch *in the last hole made*. Then break off the thread, take out the work, and fasten off as directed in preceding paragraph.

*To Fasten Seam to be Trimmed or Out.*—Seams that you wish to trim from the *finishing end* should be fastened by sewing back in the same row of stitching, a

\* Unless the needle bar is at its highest point, the thread is held by the **Automatic Tension**, and cannot be drawn through.

little beyond the point of trimming. If it is necessary to trim the finishing end of a seam that has not been fastened as above, immediately after cutting lock the seam by inserting a pin through the loop on the underside of the goods, pulling the end of the thread through, and drawing it backward upon the seam.

#### To Take Out Seam.

It is one of the decided advantages of this Machine, that the work can be taken to pieces, if required, without injuring the material, by simply unlocking the seam at any point, and drawing out the thread.

The seam can be only taken out in one direction, viz.: towards the point of starting. It is therefore a good plan to begin all seams from the end most exposed.

#### To Turn a Corner.

Stop with the needle raised to its highest point; raise the **Presser Foot** and turn the work. But as you have only the thread acting as a pivot upon which to turn it, the work will become displaced from the position where the needle was withdrawn; therefore, readjust the work so that the needle will enter it at the proper distance from the last stitch, let the **Presser Foot** down, and proceed.

#### Difficulties of Beginners.

Persons who attend to the foregoing directions will meet with no difficulty after they have practised a little upon the machine. Inexperienced or careless sewers may occasionally find themselves "in a corner," and the following suggestions are intended for their benefit:

"*It will not feed.*"—**Stitch Regulator** not set right by "**Table**" on **Cloth Plate**. Thread wound on **Looper**. Needle bent. Threads or ravelings caught on **Presser Foot**. Cloth caught in **Hemmer** or

B

other attachment. Very heavy seams will not pass under **Presser Foot** without a little assistance. (See "**Crossing Seams.**")

"*It ravel when I take the work out.*"—Stop the machine before it runs off the cloth more than two stitches, and never force the machine backward to raise the needle. This precaution will leave the last stitch always locked.

"*It drops stitches.*"—Needle is bent, or not right size for the thread according to "**table**;" or you are using soft finished fine cotton (see page 14).

"*The thread breaks.*"—Machine is not threaded up right (see page 12). You did not start according to instructions (see page 15). You are sewing goods too hard for the needle to penetrate without soaping, or you are using the wrong needle for the thread, or using black or colored soft finished cotton (see page 14); or the thread is caught on spool or wound round the **Spool Pin**; or the **Tension** does not hold the thread (see "**Tension does not work**").

"*The Looper winds up.*"—Caused either by not holding on to the end of thread in starting or by not putting the thread under **Presser Foot**. (See page 15); or leaving the **Presser Foot** up; or stitch not right by table. When this difficulty occurs pull down the **Cap** and clear the thread from the **Looper**, being careful not to scratch the **Looper**.


"*It runs hard.*"—Machine or stand wants oiling, or you have been using poor oil that gums. (See pages 7 and 8). Thread or ravelings are wound in between **Small Wheel** and **Connection Rod**, which can occur only with our older Auto-

matic Machines. All our latest Automatic Machines have been so improved that this difficulty is entirely removed.

"*Wheel turns backwards.*"—There is oil on rim of **Large Wheel**. (See directions for preventing wheel turning backwards, page 7).

"*Belt slips.*"—See directions to shorten belt, page 11.

"*Sewing is much too loose.*"—You have a shorter stitch than required by "table," or you have threaded through **Embroidery Spring**. (See page 13, NOTE).

 **Bogus** or **bent** needles will cause loose stitches.

"*Tension does not work.*"—A knot on the thread may have broken off in the Tension. Raise Needle Bar to highest point, and draw a piece of folded writing paper between the Washers, both front and back of Tension.

#### Accidents to Machine.

In case of accidents to the machine, unscrew machine from Table, pack it tightly in a small box, so that it will not get shaken about in transit, and send to us, or any of our agencies for repair, tie a card with name and full address to the machine before nailing up the box, and advise the office or agency to which you send as to particulars, giving the number of the machine. *Do not send the thumb screw or attachments.*

Address,

**WILLCOX & GIBBS S. M. CO.,**  
658 Broadway, New York, N. Y.

## II.—DIRECTIONS FOR USING THE ATTACHMENTS.

### The Guide.

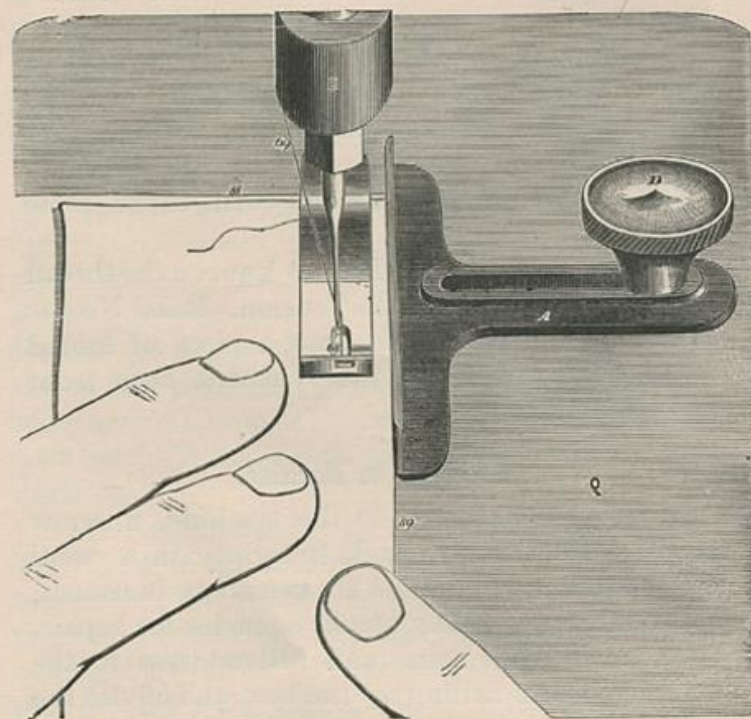



Fig. 13.—SHOWING USE OF GUIDE.

Fasten Guide A to **Cloth Plate** by Guide screw D, as far from the needle as you wish the sewing from the edge of the work.

 Beware of Bogus Needles and Poor Oil.

## The Hemmers.



FIG. 14.—Narrow Hemmer.



FIG. 15.—Wide Hemmer and Feller.



FIG. 16.—Hemmer Nut.

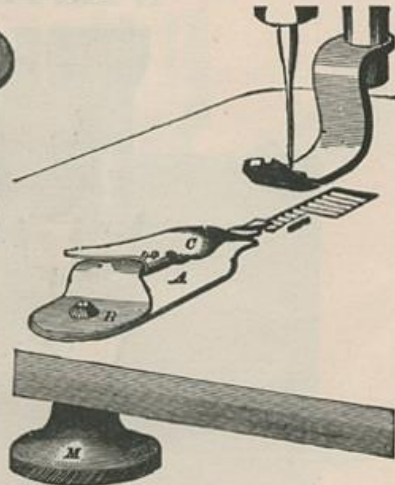


FIG. 17.—Hemmer, attached ready for use.

The above cuts show the Hemmers and the mode of attaching them to the **Cloth Plate**.

The **Narrow Hemmer** (fig. 14) which turns only one width of hem, a very narrow one; and the **Wide Hemmer** (fig. 15), which makes hems of any greater width desired, and which is also the **Feller**. The Hemmer Nut (fig. 16) is used for attaching either Hemmer to the Cloth Plate, as shown in fig. 17.

If it is necessary to take the cloth out of the hemmer before finishing, without letting it feed through, raise the presser foot and pull the cloth *from you*; not backwards nor sideways, or you will spoil the hemmer.

In hemming use the next larger stitch to that indicated by the "table" on the Cloth Plate, thus, for 70 cotton use 18 or 20 stitches to the inch instead of 22; as the feeding is retarded somewhat by the hemmer.

## To Make a Narrow Hem.

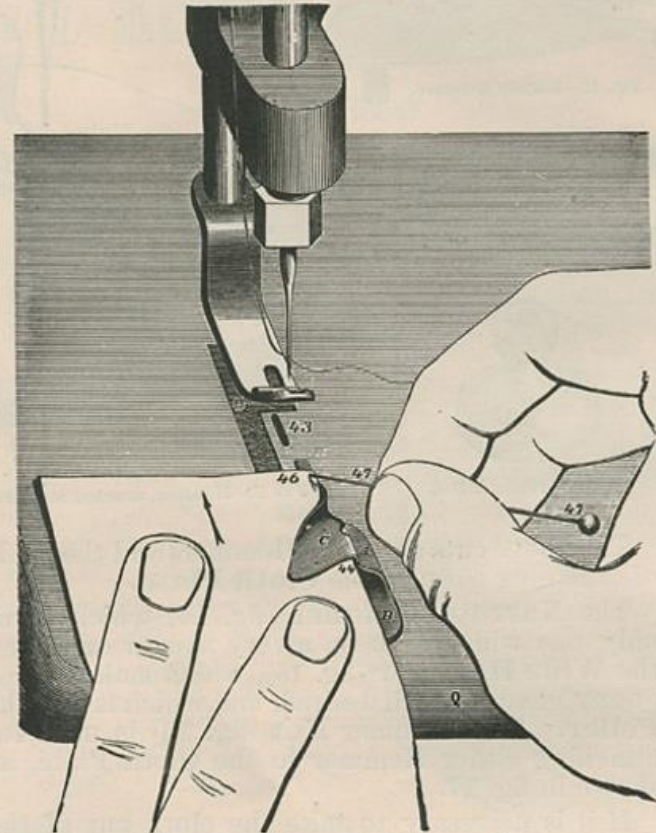


FIG. 18.—ENTERING THE GOODS TO MAKE A NARROW HEM.

The **Narrow Hemmer** having been set and the **Presser Foot** raised, the fabric is passed, without any previous folding of the edge to be hemmed, into the opening between the blades B and C. It is then pushed forward, the right hand aiding with a pin inserted in the forward right hand corner of the goods until the front edge 46 is under the needle. The foot is

now let down and the machine started, the edge of the goods being kept up against the turn in the

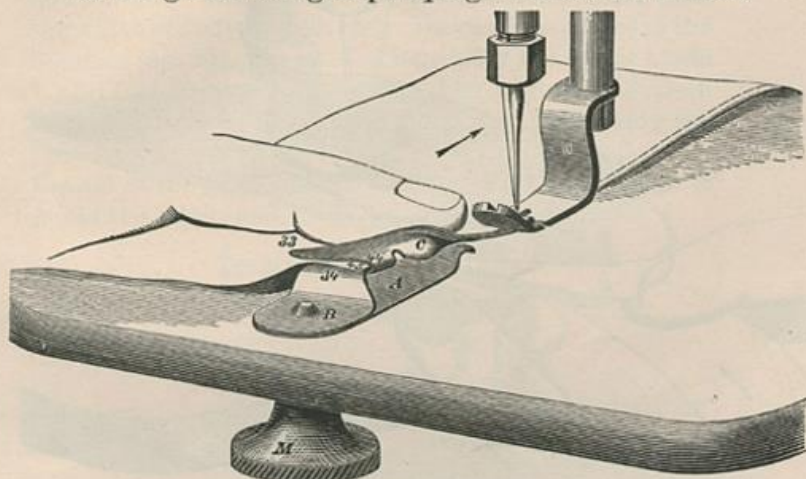


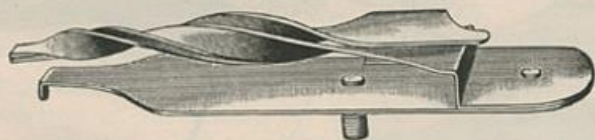
Fig. 19.—FINISHING A NARROW HEM.

hemmer 44 while passing through. As the fabric passes out of the hemmer, the finger placed against it, as shown in fig 19, makes it run out *straight* to the end of the seam.

**To make Narrow Hem and Sew on Trimming at Same Time.**

Place edge of trimming between hem and feed surface, guiding it with finger, so as to stitch edge fast beneath hem.

**Linen or Flannel Hemmer.**



The Linen or Flannel Hemmer is used in the same manner as the Narrow Hemmer, and turns a much wider hem, and is especially adapted to hemming Alpacas, Woolens, heavy Cottons or Table Linens.

**To Make a Wide Hem.**

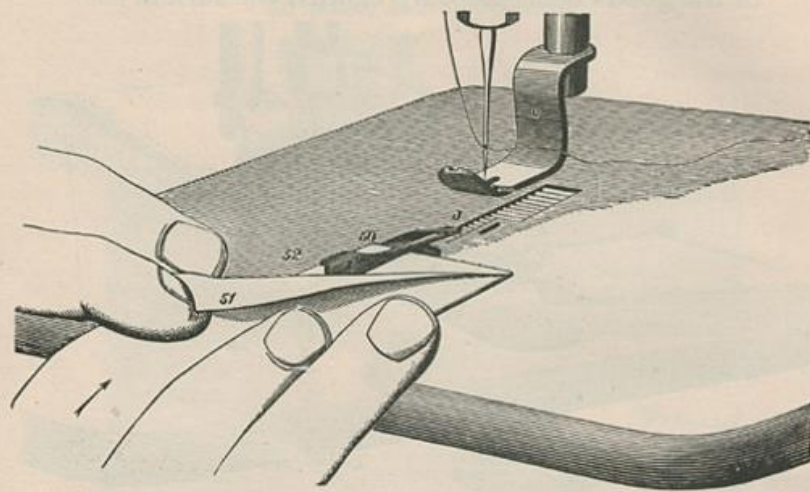


Fig. 20.—COMMENCING A WIDE HEM.

The edge to be hemmed should be cut instead of torn; if the edge is stretched through being torn, or otherwise, the cloth where the seam is sewed must be

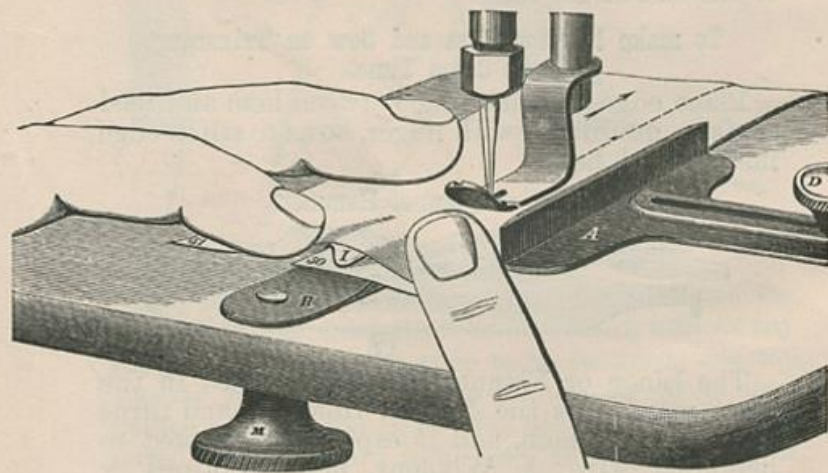


Fig. 21.—FINISHING A WIDE HEM.

stretched to an equal length. The cloth must be folded down evenly, and distinctly creased, a little wider than the width of hem desired. The work is then placed in the hemmer (fig. 20), fold 50 entering under the upper blade I, and fold 51 passing over it. The edge of the cloth is kept up against the turn of the blade at 52 during the process of stitching the hem. This is generally done by the aid of the guide, as shown in fig. 21, which serves to guide the work, and hold the edge in the hemmer.

#### To Make a Felled Seam.



Fig. 22.—INSERTING SEAM TO BE FELLED.

Lay the two edges of the cloth together, the under one projecting about one-eighth of an inch beyond the upper (same as for felling by hand). Sew them together, with the machine, making the seam about one quarter of an inch wide. Turn the work over, open it out, and crease the seam down with the narrow edge inside. Then attach the wide hemmer and insert the folded edge as in fig. 22, holding the seam where it is

joined well up against the side of the blade of the hemmer (I fig. 23), and keeping it in this position as the work passes through the hemmer, by pressing it gently against the blade of the hemmer with the end of the first finger of the right hand, at the same time with the left hand keeping the work smooth and gently guiding it towards the left. If rightly managed a very neat and perfect narrow fell will be produced.

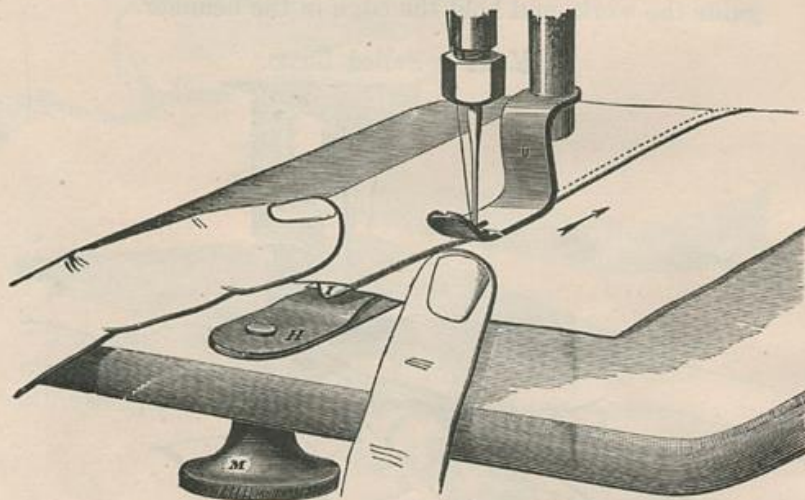


Fig. 23.—FINISHING A FELLED SEAM.

In sewing the first seam, set the stitch according to the "table" on cloth plate. In sewing the second seam (with the hemmer), use the next longer stitch to that indicated, as the hemmer retards the work.

The first seam of a fell on the bias should always be commenced from the narrow end of the work.

If the hemmer does not turn in all the raw edge of the cloth, your seam is too wide and requires trimming.

## Quilting.

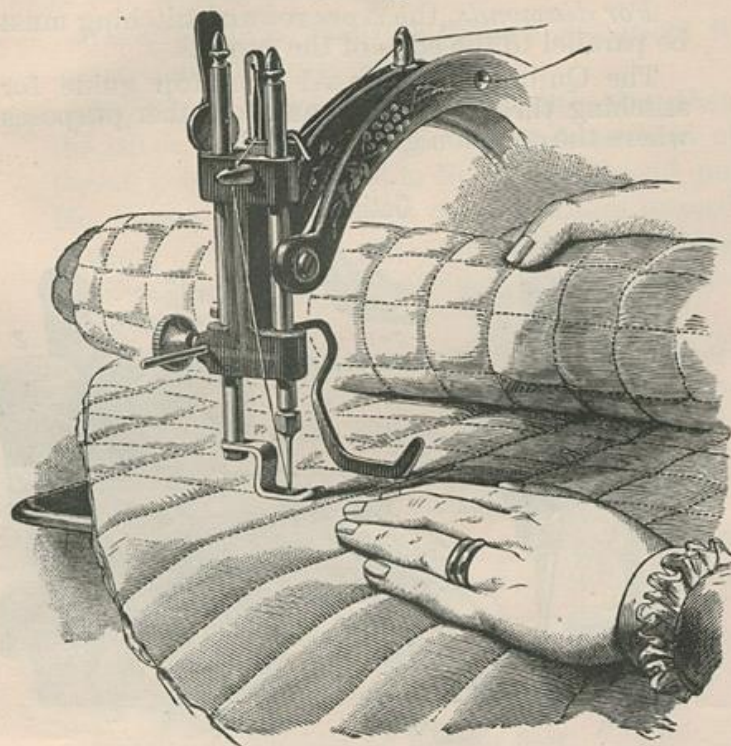


Fig. 24.—SHOWING PROCESS OF QUILTING.

The above cut shows the mode of using this attachment. Attach **Quilter** to frame back of the foot bar by means of the guide screw, and set the blade at the distance from the needle to make the desired space between the rows of stitching, and sufficiently above the **Cloth Plate** to allow the work to pass freely; crease the goods on a true bias through the centre of the work, and sew the first row of stitching on the crease. Then move the work to the right until the line of stitching is under the blade of the Quilter, which serves as a guide for the distance between the rows.

For squares, again crease it through the centre on a true bias and proceed as before.

For diamonds, the cross rows of stitching must be parallel to the edge of the goods.

The Quilter is also used as a top guide for stitching three-ply tucks, and for other purposes where the common guide is used.

## Gathering.

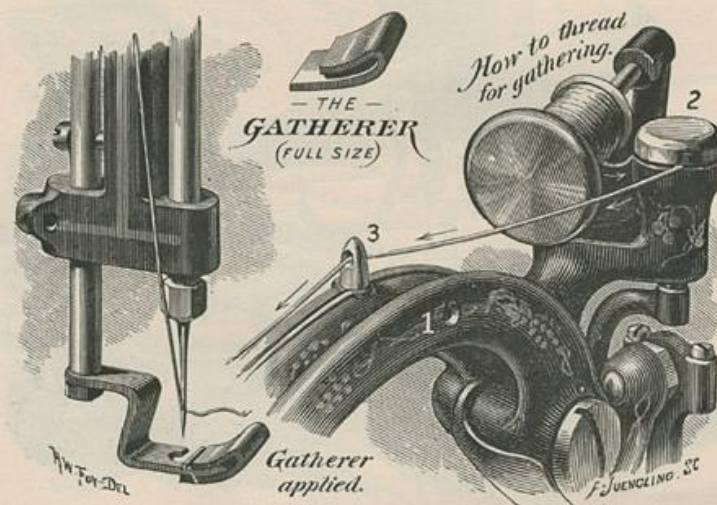


Fig. 25.—SHOWING GATHERER (FULL SIZE), ALSO APPLIED TO PRESSER FOOT, AND HOW TO THREAD FOR GATHERING.

Slip **Gatherer** on presser foot, until it touches wire on upper side, as shown above.

*Glacé thread must always be used when gathering.*

Thread up (*only for gathering*) as shown above, leaving thread out of "pull off" No. 1, in "lever," and draw it direct from spool into the groove of automatic tension No. 2, then to thread pin No. 3, &c., as usual. Notice that spool turns freely on spool-pin.

Place work under presser foot and commence to sew, allowing it to feed freely.

Use stitch from 12 to 16 to inch, according to material and fullness desired.

*If it does not gather full enough*, either lengthen the stitch, or increase tension, by taking hold of thread between the tension No. 2, and thread pin No. 3, and, winding it one or more times around in groove of tension—not more than three times in all. *If too full*, shorten stitch, or unwind thread from tension.

The amount of gathering depends on softness of goods, length of stitch, and number of times the thread is around the tension.

For Nainsook, 13 stitches to the inch, No. 80 thread, and two turns of thread around tension.

For shirting, 12 stitches to the inch, No. 60 thread, and three turns around tension, may be required.

#### To Gather and Sew on Band at the Same Time.

Put the **Gatherer** on presser foot.

Thread up as for ordinary sewing, with No. 70 or 80 cotton.

Set stitch at 12 to the inch.

Put the piece to be gathered under the band.

Hold band with right hand and under piece with left.

Hold back on band, so that feed can only make short stitches. This will gather the under piece as it is sewed to the band.

The amount and regularity of gathering depend entirely upon skill of operator in holding band.

#### Braiding.

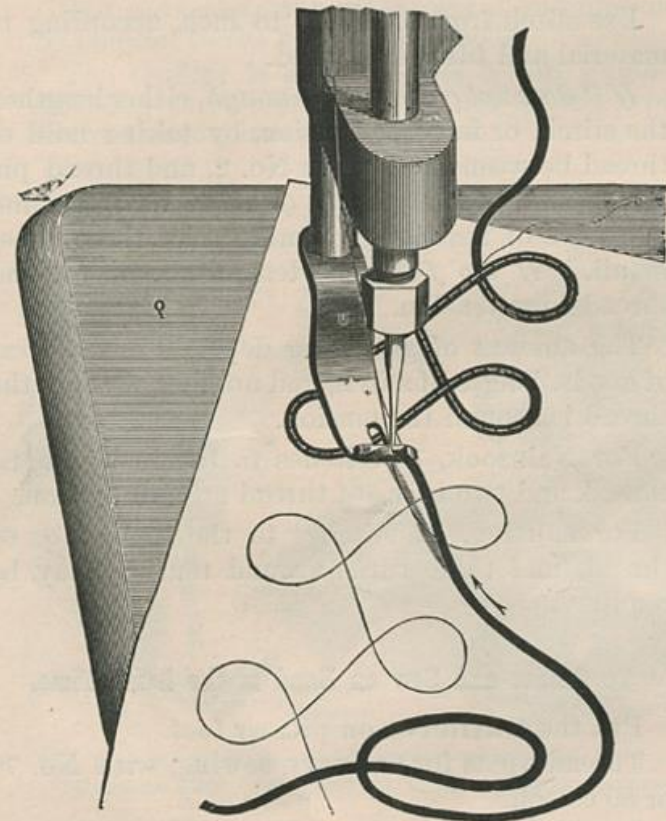


Fig. 11.—BRAIDING.

In the upper side of the **Presser Foot** you will find a groove crossed by a small wire; insert the braid in this groove under the wire, and draw the end from you under the **Presser Foot**. All that is now necessary is to turn the cloth, so as to follow any desired pattern, as shown in the above cut (fig. 11), and the braid will draw through the groove, and be sewed down by the needle and thread. In turning square corners (see direction



"To turn a Corner"), it may be necessary to pull up the slack of the braid by hand, in order to have it lie entirely smooth. In braiding use from 16 to 20 stitches to an inch.

### To Embroider.

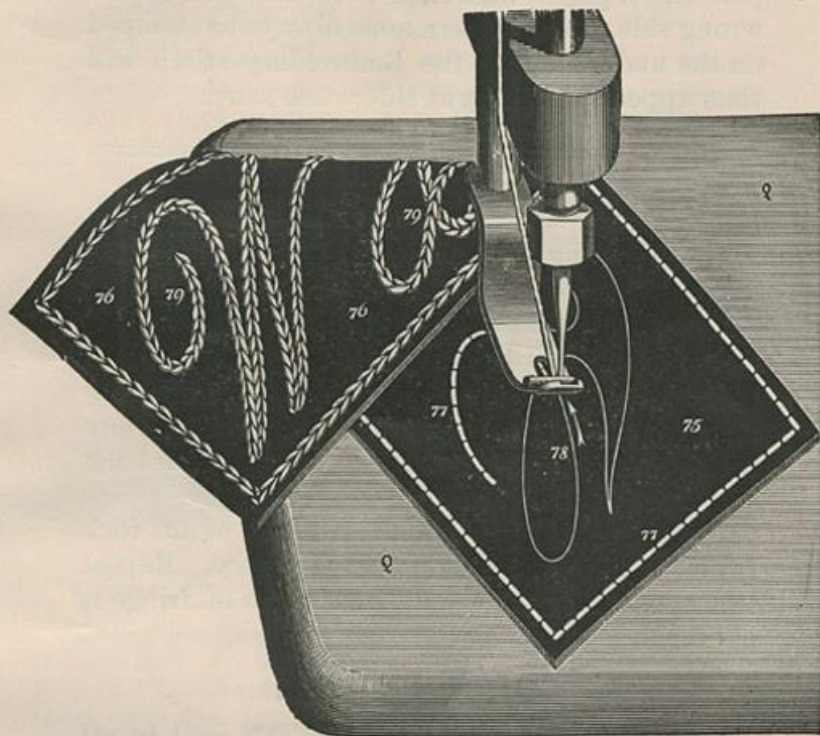


Fig. 12.—EMBROIDERING.

Use a No. 4 needle and E or F silk. Thread machine according to directions (see page 12), passing the thread from back to front through loop of the **Embroidery Spring** after threading through staple (4 fig. 9) and before threading through **Take-up** (5 fig. 9).

If you neglect to thread through the **Embroidery Spring**, the stitch will not be sufficiently loose for ornamental work.

If the stitch for E silk (12 to inch by table) tends to pucker the work, which it may do if the material is very thin, shorten the stitch to 13 or 14. For very thin material it is desirable to stamp the pattern on paper, and baste it to the work on the wrong side. The pattern must always be stamped on the under-side, as the Embroidery stitch will then appear on the right side when sewn.

### Instructions for Use of Fringing Needle.

The Fringing Needle is placed in position, the same as our regular Needle. See page 10.

For fringing use 30 stitches to an inch.

Cut the silk to be fringed on a true bias, and begin with the woof or heavy thread of the silk running towards the operator. Hold silk firmly with thumb and finger of the left hand, both back and front of the Needle.

In commencing to fringe, begin  $\frac{1}{8}$  of an inch from the edge, working across the piece. Repeat this operation until the desired width of fringe is obtained.

### CORDER FOOT.

Used for laying *Featherbone* or soft cord in all kinds of dress goods, Skirts, Shirt Waists, &c., laying and stitching the cord in one operation.

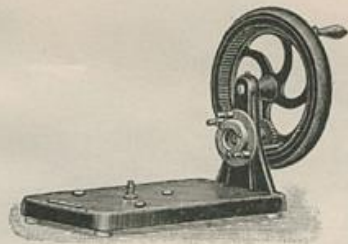
The Corder Foot is made in two sizes, *Small and Large*. Either size sent by mail, on receipt of price, 75 cents. When ordering state which size is required.

## Instructions for Hemstitching on Willcox & Gibbs Automatic Sewing Machine.

Thread machine same as for embroidery—(See page 31)—being sure to thread through Embroidery Spring. Use Glacé Cotton, No. 60, or D Buttonhole Twist; No. 3 Needle, 12 to 14 stitches to the inch.

Cut blotting paper in strips of  $\frac{1}{2}$  inch width. To get the desired thickness, use from 4 to 5 strips. Then place two thicknesses of material on top of blotting paper and start according to instructions on page 15—  
"To Place the Work and Begin Sewing."

### A Want which can Now be Supplied!



Hand Attachment.  
Price, \$5.00.



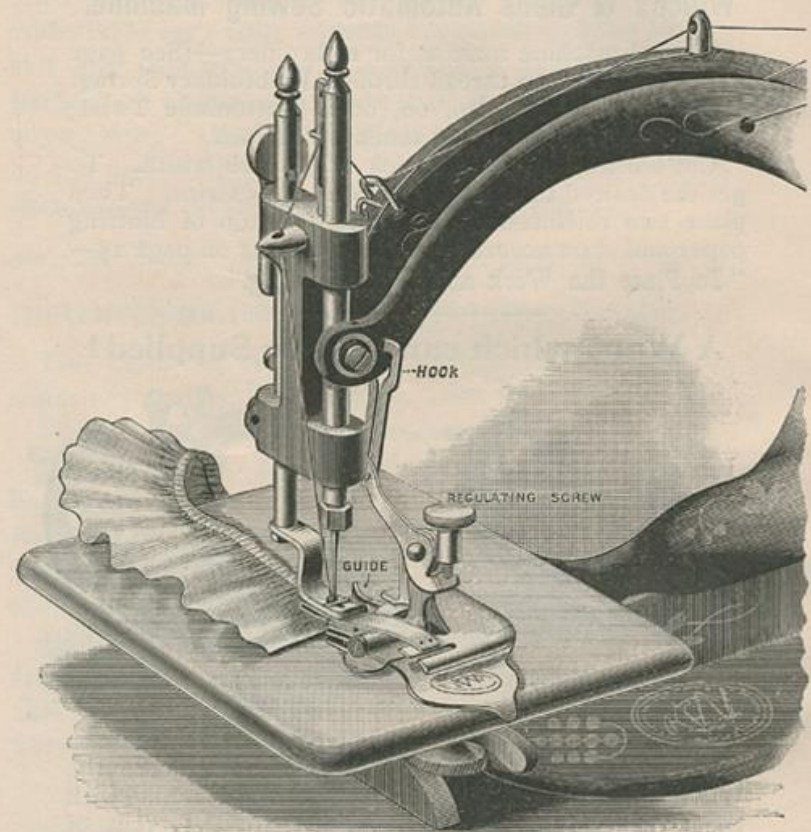
Hand Attachment Applied to Machine.  
Machine and Hand Attachment, \$55.00.

LADIES spending a few weeks at the Sea-side, or in the country, or traveling and wishing to take the Willcox & Gibbs "AUTOMATIC" Sewing Machine with them, will find our **HAND ATTACHMENT**, (cut of which is shown above, also as attached to machine,) of great convenience, as it will occupy but little space when packed in trunk. We will send the Hand Attachment, on receipt of \$5.00, for examination, to any one making request; if not satisfactory, and returned at once, the money will be refunded.

We have a **Black Walnut** case, which is very convenient to keep the **Machine** and **Hand Attachment** in to protect them from damage or dust. Price, \$5.00.

Illustrated List with Prices of all our styles of Machines will be mailed on application.

## WILLCOX & GIBBS NEW RUFFLER.



### DIRECTIONS FOR USE.

Place the Ruffler on the machine, as shown in cut, using Hemmer Nut to fasten it firmly to Plate, same as the Hemmers are fastened.

**HOOK.**—Then place the **HOOK** at the end of the link in the hole in the Arm, by pressing Spring to the right so as to pass behind the Arm and hold the Hook in place.

**GUIDE.**—Set the movable **GUIDE** as far from the Needle as the width of heading desired.

**REGULATING SCREW.**—Regulates the fullness of the ruffle; if more fullness is required, turn to the right; if less is desired, turn to the left.

Place the piece to be gathered between the **Blades**, as shown in cut. In order to have the gathers even and regular, hold the material lightly so that the work can feed through freely.

To gather and sew on band at the same time, place the band under the **Blades**. To gather between bands, place the piece to be gathered between the **Blades** and one band above and the other below the **Blades**.

When gathering, use 30 stitches.

When gathering and sewing between bands, use 27 stitches.

A drop of oil applied occasionally on the rivets or bolts of the **lever**, will prevent wear.

## Willcox & Gibbs Improved Tuckmarker.

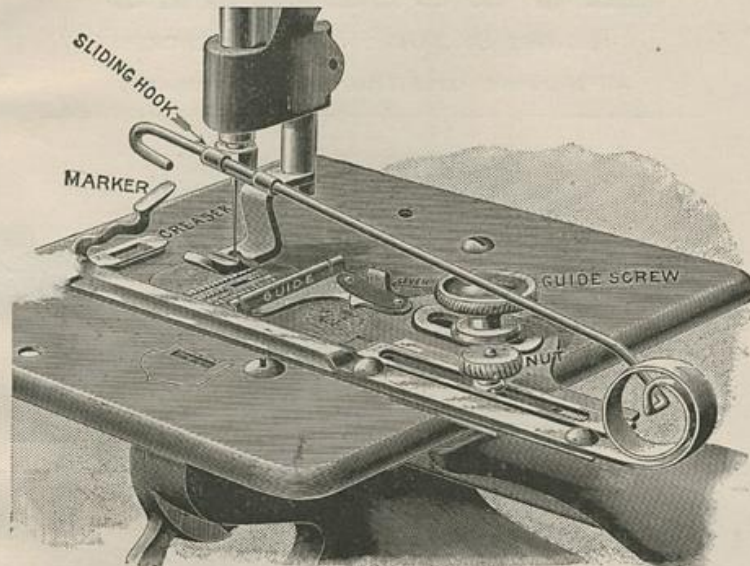


Fig. 1.—Showing Guide adjusted for Wide Tucks. (Patent applied for.)



Fig. 2.—Showing Guide adjusted for Narrow Tucks.

### DIRECTIONS FOR USE.

Place the Tuckmarker on machine as shown in Fig. 1, using Guide Screw of machine to fasten it.

**NARROW TUCKS.**—The Guide on Tucker, in box, is already adjusted for making narrow tucks less than  $\frac{1}{8}$  inch wide. See Fig. 2.

**WIDE TUCKS.**—For wide tucking, close the opening in Guide by swinging the movable part of the Guide to the left, then lock it by pushing the small Lever to the left. See Fig. 1.

**GUIDE.**—Set the Guide as far from Needle as the width of tuck desired; then loosen Nut and move Creaser twice that distance from the Needle for tucks without any space between them. To have space between the tucks, move Creaser as much further from Needle as the space desired and fasten firmly with Nut.

**SLIDING HOOK.**—Place the Hook around the Needle to operate the Marker. Fold the cloth for the first tuck, place it under the Marker and against the Guide, and proceed to sew. After sewing first tuck open the seam by scratching with finger-nail on under side while holding it stretched apart. This will flatten and press down the tuck into proper position; then fold the cloth by the crease just made for the next tuck.

In entering cloth for second and all succeeding tucks, crowd it well against Guide and draw it a little towards you before lowering Presser-foot. This will cause edge of last made tuck to rest on Cloth-plate, passing along under the Creaser.

See that edge of last made tuck is in this position before commencing to sew, for if it rests on top of and passes over Creaser, a good crease will not be made, and the edge of tuck being sewed, will not keep up against Guide, causing variation in width of tucks.

Each Tuckmarker is stamped with the Trade-Mark of the Company.

## WILLCOX & GIBBS AUTOMATIC

HIGHEST STANDARD OF EXCELLENCE.

All Working Parts Thoroughly Hardened.



### No. 6—DROP CASE.

This style is in Quartered Oak or in Black Walnut, with four Drawers with Locks. The Top or Leaf forms an Extended Table when opened for use. Ornamental Iron Stand on Casters. The Treadle works on knife-edge bearings.

The Top or Leaf being hinged, it is only necessary to open the Top from right to left, then raise the machine and it is ready for use.

The Belt remains always in place whether the case is closed or open, and is entirely relieved from any strain or stretch when closed.

A cloth cap fully protects the Machine Head from dust when not in use.

To close the Case, raise the Ring in the Catch, at same time taking hold of the machine, press it down and close over the Top or Leaf.

Nickel Plated Automatic Machine, with Narrow Hemmer, Wide Hemmer or Feller, Hemmer Nut, Gatherer, Quilter, Guide and Screw, 12 Needles, Needle Wrench, Oil Can, Bottle of Oil and Instruction Book, also, Tucker, Ruffler and Linen or Flannel Hemmer..... \$80

Same style in Rich Mahogany, made of selected wood, highly polished and very beautiful, same attachments..... \$85



All Working Parts of the Willcox & Gibbs Automatic Sewing Machine are thoroughly Hardened, giving the longest and best service with the least possible wear, and making it by far the most carefully constructed and durable family machine manufactured.

# WILCOX & GIBBS SEWING MACHINE CO.

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658 Broadway, cor. Bond Street, New York.

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