# DIRECTIONS

FOR USING

# WILLCOX & GIBBS

# AUTOMATIC

Noiseless Sewing Machine



Fac-simile of Gilt Medallion upon base of each Machine

Willcox & Gibbs Sewing Machine Company

Chief Office:

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.

Via mail including box and postage, 25 cents per bottle. Via express—3 bottles for 25 cents.

#### 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.

#### W. & G. NEEDLES—CAUTION



Needles not bearing both stamps W. & G. and PAT. MARCH 10, 1861 as shown above, are spurious.

Buy Needles of us direct or at our Branch Offices, and you will be sure to get only "Genuine." almost certain to get worthless imitations (called Willcox and Gibbs Needles) from Sewing Machine agents and dealers, and from fancy goods stores.

The perfect or even satisfactory working of our ma-

chine 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.

#### WILLCOX & GIBBS

# AUTOMATIC

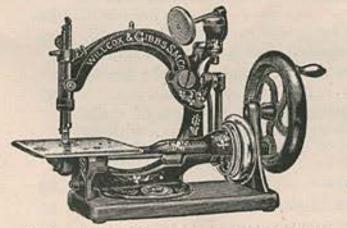
HIGHEST STANDARD OF EXCELLENCE.

All Working Parts Thoroughly Hardened.

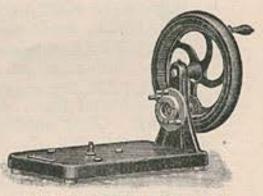


NO. 6.- DROP CASE.

This style is in Quartered Oak or in Black Walnut, having 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.



Automatic Machine with Hand Attachment, ready for use.



Hand Attachment Only, \$5.00

Any of our Automatic machines when removed from the Table can be easily fastened to the Hand Attachment by a Thumb Screw (furnished with each Attachment), and the Machine can then be used by hand on any table.

Ladies spending a few weeks at the seaside or in the country, or when traveling, will find this compact Hand Machine a great convenience. When packed in the trank it occupies little space.

#### TRAVELING CASE.

For the traveler we recommend the use of our Black Walnut or Oak Case to enclose the Hand Machine and protect it from dust and damage. . . . \$5.00

WILLCOX & GIBBS S. M. CO.

#### Attachments.

The following Attachments are supplied without extra charge with each Machine (except that with 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). When required separately, the prices are as follows:

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 35	\$2.00
RUFFLER, made especially for the Willcox & Gibbs	
Automatic Machine. It gathers, forming a beautiful	
Ruffle as fast as an ordinary seam is sewed, and if de-	
sired, sews on the band at the same time.	
See page 34	2.00
*LINEN OR FLANNEL HEMMER (turns a hem	
much wider than the Narrow Hemmer), and is spe-	
cially adapted to hemming Alpacas, Woolens, heavy	
Cottons or Table Linens. See page 24	2.00
*NARROW HEMMER, for turning and stitching	
very narrow nems. See page 23	2.00
WIDE HEMMER, which is also the FELLED	
for turning in the edge and stitching all wider hame	
after they have been folded the desired width, and for	
ministing tens after the first seam has been sewed	
See pages 25 and 27	1.50
HEMMER NUT, to fasten either hemmer	.20
BRAIDER, made to order. See page 31	
GATHERER, when in use, is attached to the Press-	
er-foot. See page 30	.25
QUILTER, for executing any description of quilt-	
ing in parallel lines, diamonds, checks, &c without	
marking. Also used as a top quide when stitching	
3-ply tucks, and for other similar purposes. See	
page 29	.25
Dozen Needles (20 cents 1/2 dozen-4c each)	-35
Needle Wrench	.15
duide	.20
Guide Screw	.25
Bottle of Oil	.10
On Can(Oil Can filled, 15c.)	.IO
Belt	.25
Bodkin	.05
*Our Hemmers are all attached to the Cloth-plate (not to the Pres foot), and are self adjusting. The Hem is turned underneath so the stitching is done, as it should be, on the right side of the fabric	A Trans

See Caution about Needles and Oil inside front Cover.

#### IMPORTANT

# To Owners of the Willcox & Gibbs Noiseless AUTOMATIC Sewing Machine.

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

If you want your Automatic Sewing Machine to give the very best, and most satisfactory service, you must avoid use of Imitation Needles, Cheap Oil or Counterfeit Parts. Machines are often injured through disregard of these sim-

ple 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 Offices (see List, inside back cover), where only what is needed will be done; Genuine parts only will be applied, and by workmen who understand their business and have the proper tools for making repairs.

Do not trust your Machine to a general sewing machine repairer, to risk his use of imitation parts, and who has neither the proper tools nor experience necessary to do

the work as it should be done.

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

Machines rented, repaired and exchanged.

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 dozensubject 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. If ordered by mail, add 15 cents to cover mailing box and postage.

Via Express 3 bottles for 25c.

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## I.—DIRECTIONS FOR USING THE WILLCOX & GIBBS NOISELESS AUTOMATIC SEWING MACHINE.

#### Description of Stand.

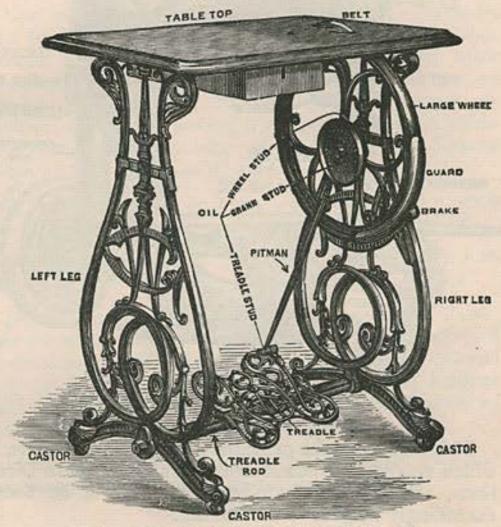


Fig. 1-Names of the Parts of the Stand.

The Stand, as shown above, 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.

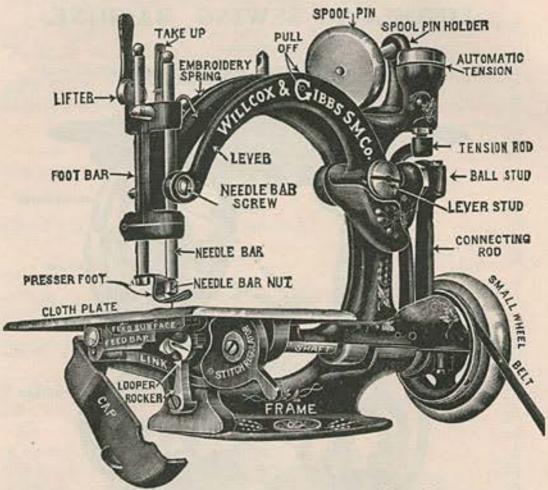


Fig. 2-Names of the Parts of the Machine.

This illustrates 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, practice running Machine, with one foot, without thread in the Needle, and with Presser Foot raised from Cloth Plate, until you can with ease produce a regular motion.

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

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

## Oiling.-Notes and Cautions.

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

Use oil put up expressly by us, which is decidedly best for the purpose, and can be obtained at any of our Branch Offices. Should Machine run hard after standing for some time (which it may do if any 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 "Best Sewing Machine Oil" on inside of front cover.)

A bottle of oil and an oiler accompany each 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 outer rim of Large Wheel, underneath Table, free from oil. This will prevent its turning backward in consequence of oil reaching 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 gets on your work, rub the spots with soap and cold water before putting 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—Wheel Stud, Crank Stud (both to right of Pitman), and Treadle at its connection with Pitman. (See Fig. 1, on page 5.)

To oil them move toe of Treadle to its *lowest* point. This will raise both Stud oil holes to the top—the only position in which they can be reached for oiling.

#### 8

#### 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 Sewing Machines have "Oil Holes" in Cloth Plate, and all Parts underneath Cloth Plate are oiled by simply applying a drop of oil in each "Oil Hole," (Fig. 3) and need not be removed from table as shown in Fig. 4.

Occasionally Machine should be removed from Table and cleaned underneath.

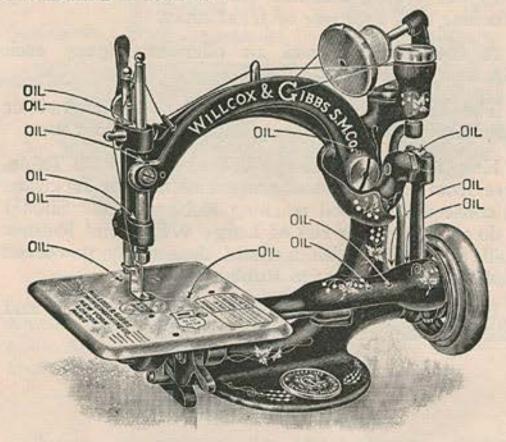


Fig. 3.

Oil all places on Machine as here indicated. Do not oil the Automatic Tension.

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

# Sewing Machine Oil.-Caution.

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.

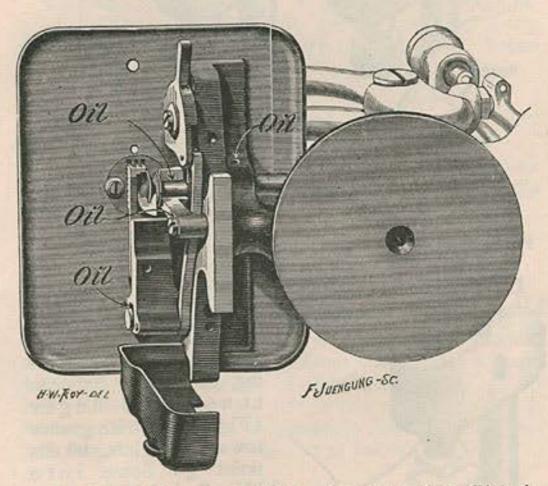


Fig. 4—Shows Places to be Oiled underneath Cloth Plate in our Earlier Automatic and B Sewing Machines, which do not have "Oil Holes" in Cloth Plate.

Remove the Automatic B-Machine from Table by means of Thumb Screw; lay it down in position shown in Fig. 4; pull down the Cap and apply a drop of oil to the places underneath Cloth Plate indicated by arrows.

#### Setting the Needle.

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

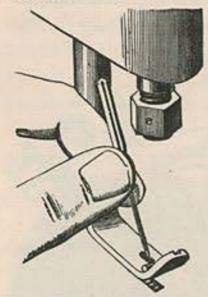


Fig. 5—Inserting, or Taking out the Needle.

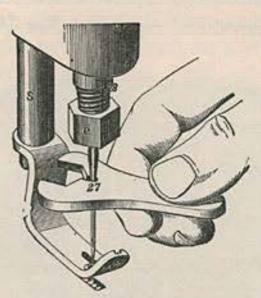


Fig. 6—Pushing up the Needle.

Let Presser Foot down on Cloth Plate by turning Lifter to right or left; raise Needle Bar to its high-

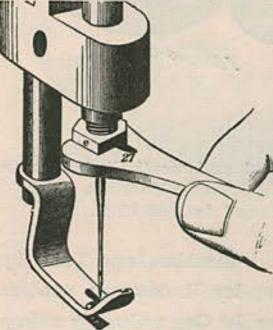


Fig. 7-Fastening the Needle.

est point by turning Small Wheel: then holding Needle between thumb and finger (Fig. 5), and with groove toward the left, let its point go down into 'Needle-hole" in Plate until you are able to bring shank of Needle directly under end of Needle Bar. If it does not readily enter, roll it between thumb and finger while pressing it up, and it will soon find its proper position and en-

ter easily. Then push Needle up as far as you can

with the fingers; then apply slot in Wrench (27, Fig. 6) below the taper on the Needle, and push it up as high



as it will go. Before taking Wrench off, hold Needle again firmly between thumb and finger, to prevent its slipping down; then

place Wrench on Nut (e Fig. 7), and turn it to right

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

#### To Tighten the Belt.

Should Belt become loose after use, and you wish to tighten it, unscrew one end of Belt from brass ferrule, and shorten it by cutting off from one-quarter to onehalf inch; then place end of Belt on bare floor, or on any smooth hard surface where you can gently roll it under your foot, so as to compress the end which enters ferrule, and screw together as below.

#### To Apply the Belt.

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

#### To Thread the Machine.

Machines are always sent from our offices properly threaded; therefore, observe Machine carefully when you receive it. The direction of thread is shown by the darts in Fig. 9.

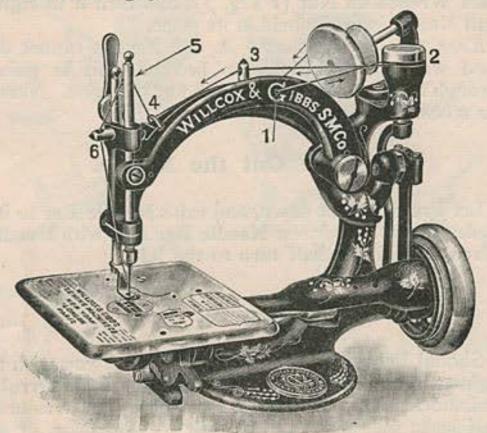


Fig. 9-Shows the Manner of Threading the Machine.

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

- \*I Thread from back toward you, through the two staples and hole in Arm known as Pull-off (I, Fig. 9).
- 2. Then carry thread between spool and Automatic Tension, being careful to draw thread between the washers under cap of Automatic Tension (2, Fig. 9).

<sup>\*</sup>Per By doubling and twisting end of thread it can be more readily passed through Pull-off and following places, when threading.

3. Thread from right to left through Thread Pin on top of Frame (3, Fig. 9).

From right to left through Wire Staple (4,

Fig. 9).

Note.—Do not thread through loop of Spring under this Staple, unless embroidering.

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

6. Downwards through Thread Pin (6, Fig. 9). Through Needle Eye from left to right (Fig. 9). 7.

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

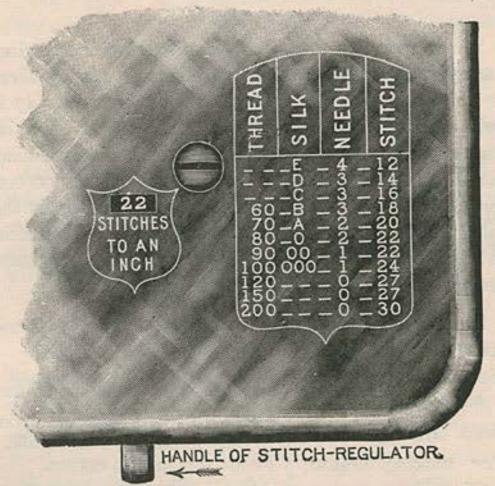


Fig. 10-"Table" Stamped on Cloth Plate.

From Fig. 10 it will be seen that there is stamped upon Cloth Plate of the Machine a "Table" showing proper size of Needle and length of stitch for each size of cotton or silk. For example: For 80 thread or 0 silk, use a No. 2 Needle, and 22 stitches to an inch.

To left of this "Table" is a slot, surrounded by a shield inscribed "Stitches to an inch." To obtain length of stitch required, move handle of Stitch Regulator until proper number appears through slot. The length of stitch indicated by the "Table" should always be used, as the proper elasticity will then be secured in all seams. A strict adherence to the "Table" will always ensure good and durable work.

#### Selecting Thread or Silk.

When 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. By using 80 or 90 cotton on muslin you will have a seam as strong as the fabric, and a chain so small on under side of garment as to make it almost impossible to detect it after laundering. This rule also applies to finer materials.

The following rules on this subject will be found useful:

For bleached muslin, shirting, &c., use	{ From 80 to 100 white cotton.
	From 70 to 100 black cotton. 70 only in colors, 0 or A silk.
For tucking cotton or silk	from 100 to 200 cotton.
For light woolen cloth	hing, flannels, &c70 to 90
For fine linens	othing
For fine lawns, Nains	ooks, &c120 to 200

"Glacé" is the strongest and most even spool cotton, and while any good cotton can be used, "Glacé" invariably gives the best results.

When colored cottons are required, use only Brook's, and in the case of black select one number coarser than called for in above rules. Colored cotton can be had only in number 70.

#### Size Needle to be Used.

The "Table" stamped upon Cloth Plate (Fig. 10) shows by number the proper size of Needle to be used with each size thread or silk.

The number is stamped on shank of each Needle.



CAUTION.—Every Needle made by us is stamped on shank, w. & G. and pat. MAR. 10, 1001. All others are worthless imitations and invariably give trouble, as well as injure the Machine. Imitations or bent needles will cause loose stitches and breaking of thread.

#### The Automatic Tension.

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

No adjustment of the Automatic Tension being re-

<sup>\*</sup>When threading for embroidery, thread through Embroidery Spring, (See "Embroidering," page 32.)

quired for any size thread or silk, or any kind or thickness of work, it only remains for operator to select thread or silk, and to regulate the stitch, by following the directions on page 14 and the "Table" stamped on Cloth Plate (Fig. 10). The operator can then be certain that 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 Automatic Tension.

#### To Place the Work and Begin Sewing.

Raise Needle to its highest point, also Presser Foot. Place work under point of Needle. Have two or three inches of thread drawn through the eye of Needle.\* Pass thread under Presser Foot, towards the left. Let down Presser Foot, the thread being held fast between Presser Foot and cloth.

The thread may be held lightly under the finger, instead of being passed under Presser Foot, in which case, hold it until two stitches are made. If held too tightly, the thread will break at the first stitch.

#### Crossing Seams.

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

<sup>\*</sup>Unless the Needle Bar is at its highest point, the thread is held by the Automatic Tension, and cannot be drawn through.

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

To Fasten End of Seam.—Sew off end of seam two stitches; more than this may leave seam unlocked. Stop with Needle at its highest point. With left hand, catch thread between Needle and Thread Pin (6, Fig. 9), and pull some slack through the Automatic Tension.\* With right hand, draw the slack through the eye of Needle, and, grasping thread firmly, cut the thread close to the goods. Lift Presser Foot and then pull the goods from you, and end of thread will be drawn through the loop. Next, pull 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 Seam in the Goods.—Stop the Needle in the goods, place the fingers on the goods close to Presser Foot to prevent goods from moving, raise Presser Foot, and take one more stitch in last hole made. Then break off thread, take out goods and fasten off as directed in preceding paragraph.

To Fasten Seam to be Trimmed or Cut.—Seams that you wish to trim from the *finishing end* should be fastened by sewing back in the same row of stitching, a 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 loop on the under side of goods, pulling end of thread through and drawing it backward upon the seam.

<sup>\*</sup>Unless the Needle Bar is at its highest point, the thread is held by the Automatic Tension, and cannot be drawn through.

#### To Take Out Seam.

It is one of the decided advantages of the Automatic Sewing Machine, that, if required, its work can be taken to pieces, without injuring the goods, 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 Needle raised to its highest point; raise Presser Foot and turn the work. As the thread acts as a pivot 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 proper distance from last stitch, let Presser Foot down, and proceed.

# Difficulties of Beginners.

As in all things "Practice makes perfect," so in the operation of the Willcox & Gibbs Automatic Sewing Machine, all the varied kinds of work which can be done on it will be accomplished with ease and in perfection as you daily grow more accustomed to its use while closely following this book of instructions. When in trouble arising from inexperience or failure to observe these directions, the following important features should be specially observed:

"It will not feed."—STITCH REGULATOR not set according to "Table" on CLOTH PLATE (see p. 13). Thread wound on LOOPER. Needle bent. Threads or ravelings caught on PRESSER FOOT. Cloth caught in HEMMER or other attachment. Very heavy seams will not pass under PRESSER

FOOT without a little assistance. (See "Crossing Seams" page 16).

"It ravels when I take the work out."—Stop Machine with Needle at its highest point and before it runs off the cloth more than two stitches. Never turn Machine backward to raise Needle. This precaution will leave last stitch always locked. (See page 17).

"It drops stitches."—Needle is bent, or not right size for thread according to "Table" (See page 13); or you are using soft finished cotton (See page 15).

"The thread breaks."—Machine is not threaded up right (See page 12). You did not start according to instructions (See page 16). You are sewing goods too hard for Needle to penetrate without soaping, or you are using wrong sized Needle for the thread (See page 15); black or colored soft finished cotton (See page 15); or the thread is caught on spool or wound around SPOOL PIN; or Automatic Tension does not hold the thread (See "Tension does not work," page 20).

"The Looper winds up."—Caused either by not holding on to end of thread in starting, or by not putting thread under PRESSER FOOT. (See page 16); or leaving PRESSER FOOT up; or stitch not right by "Table" (See page 13). When this difficulty occurs pull down the Cap and clear thread from LOOPER, being careful not to scratch LOOPER.

"It runs hard."—Machine or Stand needs 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—this can occur *only* with our *earlier* AUTOMATIC and B-Machines. All our *latest* AUTOMATIC Sewing Machines have been so improved that this difficulty is entirely removed.

"Wheel turns backward."—There is oil on rim of LARGE WHEEL. (See directions for preventing Wheel turning backward, page 7.)

"Belt slips."-See directions to Tighten the Belt,

page II.

"Sewing is much too loose."—You have a shorter stitch than required by "Table" (See page 13) or you have threaded through EMBROIDERY SPRING. (See Note near top of page 13.) Or you have not drawn thread between the Tension Washers. (See 2, page 12.)

Imitation or bent Needles will cause loose

stitches and breaking of thread.

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

#### Accident to Machine.

In case of accident, unscrew Machine from Table, pack tightly in a small box, so that it will not be shaken about in transit, and send by Express to us, or any of our Branches for repair. First tie a tag or card with your name and full address to the Machine before nailing up the box, and give the office to which you send it full particulars, stating also number of Machine. Do not send the Thumb Screw or Attachments.

Address,

# WILLCOX & GIBBS S. M. CO., 658 Broadway, New York.

For list of Branches see inside back cover.

# II.—DIRECTIONS FOR USING THE ATTACHMENTS.

The Guide.

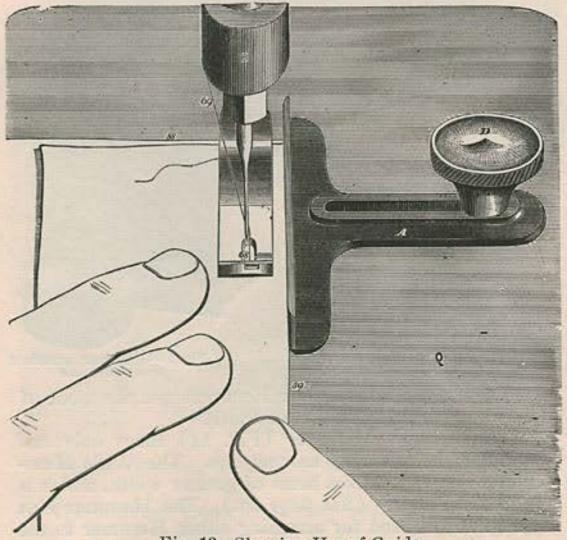


Fig. 13-Showing Use of Guide.

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

Beware of Imitation Needles and poor Oil.

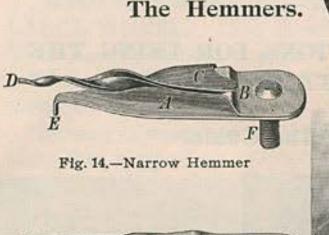




Fig. 15-Wide Hemmer and Feller



Fig. 16-Hemmer Nut

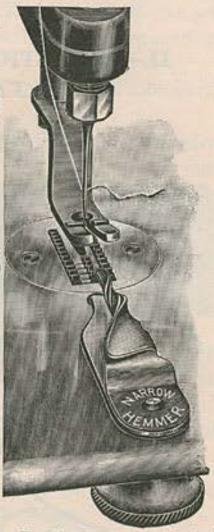


Fig. 17-Hemmer, attached ready for use

The above illustrates our Hemmers and the mode of attaching them to the Cloth Plate.

The Narrow Hemmer (Fig. 14), turns only one width of hem, a very narrow one. The Wide Hemmer (Fig. 15), makes hems of greater width, and it is also the Feller. (See page 27.) The Hemmer Nut (Fig. 16) is used for attaching either Hemmer to the Cloth Plate, as shown in Fig. 17.

If necessary to take cloth out of Hemmer before finishing, without letting it feed through, raise Presser Foot and pull cloth from you-not backwards nor sideways, or you will bend the Hemmer.

No. 90 cotton is recommended for hemming.

As the feeding is somewhat retarded by the Hemmer, use the next longer stitch to that indicated in "Table" on Cloth Plate (see page 13), thus: For 90 cotton use 18 or 20 stitches to the inch instead of 22.

## To Make a Narrow Hem.

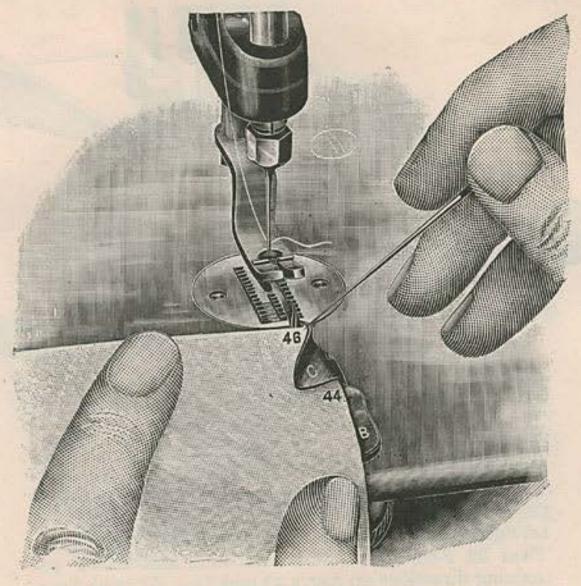
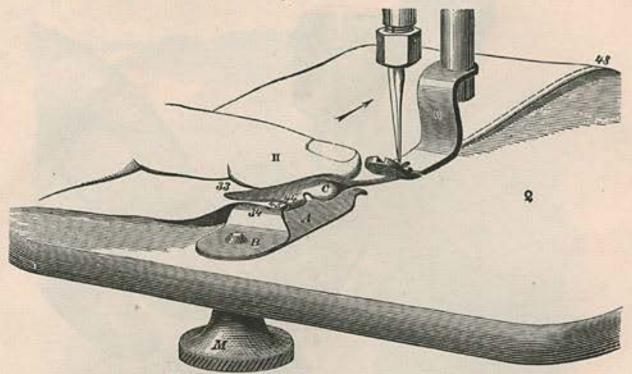


Fig. 18-Entering the Goods to Make a Narrow Hem.

The Narrow Hemmer having been set and Presser Foot raised, pass the edge of goods which is to be hemmed, into the opening between the blades B and C. Then push goods forward, the right hand aiding with a pin inserted in the forward right hand corner, until the front edge 46 is under Needle. The Foot is now let down and Machine started, the edge of the goods being kept up against the turn 44 of the Hemmer while passing through. When passing out of Hemmer the end of goods will have a tendency to move to the left. This should be restrained by placing finger of

left hand against it, as shown in Fig. 19, which will cause it to run out straight to end of seam.



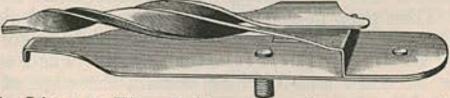
Fig, 19.—Finishing a Narrow Hem

To Make Narrow Hem and to Sew on

Trimming at Same Time.

First follow directions on page 23 for making a Narrow Hem until "the front edge 46 is under Needle"; then place end of Lace or Trimming under the Hem below the Needle, with edge of Lace resting between Base and Blade of Hemmer (Fig. 19, A. C.). Then let Foot down, start Machine, and follow remaining directions on pages 23 and 24. At same time, with finger of right hand, guide edge of Lace toward the left so as to insure a perfect union of Hem and Lace.

#### Linen or Flannel Hemmer.



The Linen or Flannel Hemmer makes a quarter-inch hem and is used in same manner as the Narrow Hemmer. It is especially adapted to hemming Alpacas, Woolens, heavy Cottons and Table Linens.

#### To Make a Wide Hem.

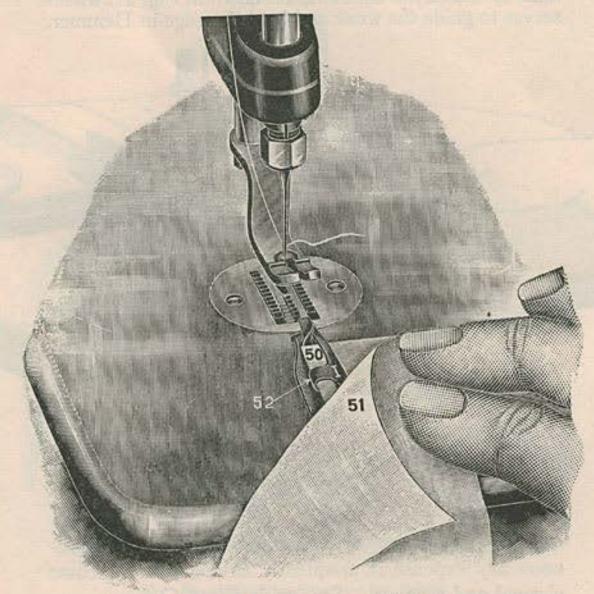


Fig. 20—Commencing a Wide Hem.

The edge to be hemmed should be cut instead of torn. If the edge is stretched, through being torn or otherwise, the cloth where seam is sewed must be stretched to an equal length. The cloth must be folded down evenly, and distinctly creased, a little wider than width of hem desired. The work is then placed in Hemmer, fold 50 (Fig. 20) entering under upper blade I, and fold 51 passing over it. The edge of cloth is kept up against the turn 52 of upper blade dur-

ing process of stitching the hem. This is generally done by aid of the Guide A, as shown in Fig. 21, which serves to guide the work and hold the edge in Hemmer.

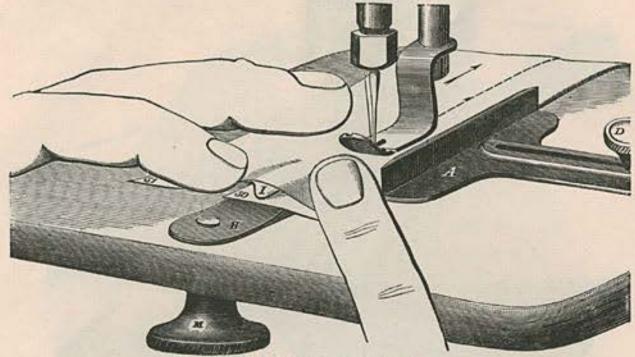


Fig. 21-Finishing a Wide Hem.

#### Warning.

Buy Oil put up by us, and you will avoid unnecessary expense in frequently having your Machine cleaned and repaired. See inside Front Cover.

Buy W. & G. Needles of us direct or at our Branch Offices and you will be sure to get the "Genuine." You are almost certain to get worthless imitations (called Willcox & Gibbs Needles) from Sewing Machine dealers, and from fancy goods stores. See inside Front Cover and page 2.

The use of Poor Oil and Bogus Needles, which are generally sold by Sewing Machine dealers and fancy goods stores, will injure your AUTOMATIC Machine, causing it to run hard, skip stitches, etc.

#### To Make a Felled Seam.

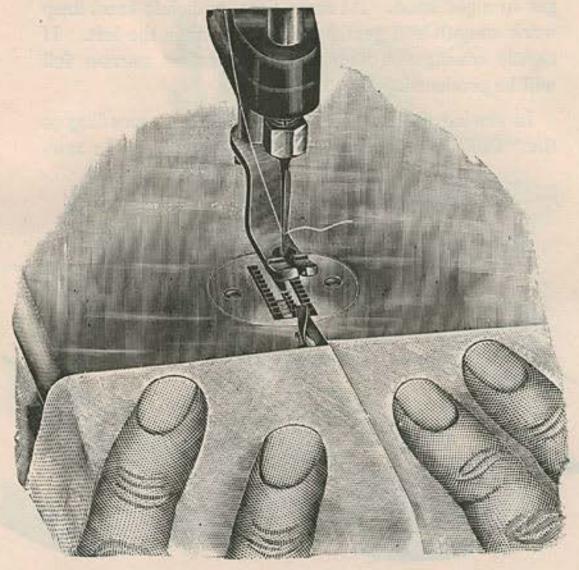


Fig. 22-Inserting Seam to be Felled.

Lay the two edges of 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 Machine, making seam about one-quarter of an inch wide. Turn work over, open it out, and crease seam down with narrow edge inside. Then attach Wide Hemmer and insert folded edge as in Fig. 22, holding seam where it is joined well up against turn of Hemmer (I, Fig. 23), and keeping it in this position

as the work passes through Hemmer, by pressing it gently against blade of Hemmer with end of first finger of right hand. At same time, with left hand keep work smooth and gently guide it towards the left. If rightly managed a very neat and perfect narrow fell will be produced.

In sewing the first seam, set the stitch according to the "Table" on Cloth Plate. (See page 13). In sew-

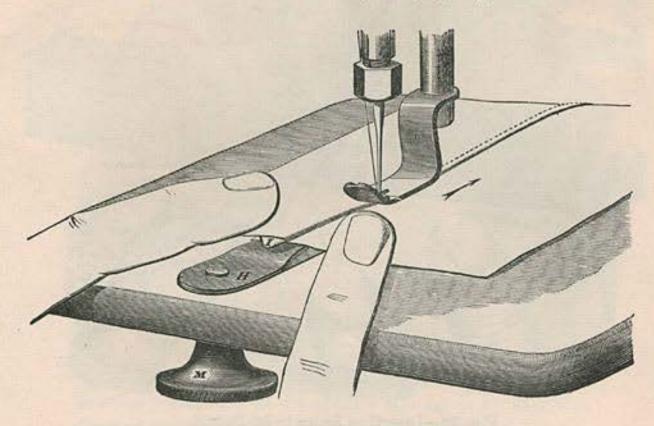


Fig. 23—Finishing a Felled Seam.

ing the second seam (with the Hemmer), use the next longer stitch to that indicated, as the Hemmer retards the work. (See foot of page 22).

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

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

#### Quilting.

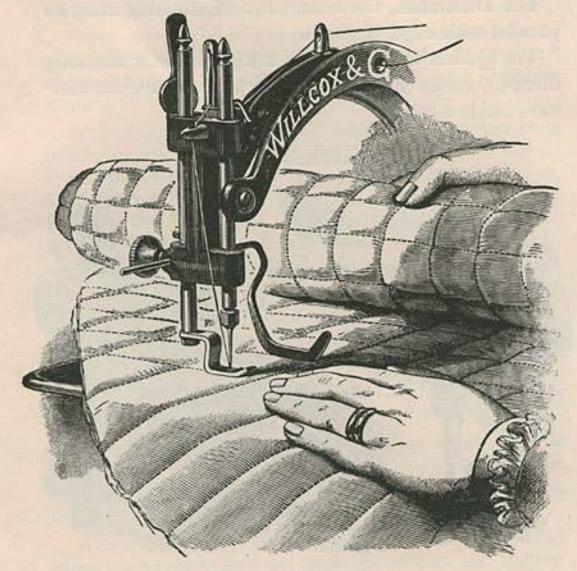


Fig. 24-Shows Process of Quilting.

Attach Quilter to Frame back of Foot Bar by means of Guide Screw. Set blade at distance from Needle to make desired space between rows of stitching, and sufficiently above Cloth Plate to allow work to pass freely. Crease goods on a true bias through the centre of work, and sew first row of stitching on the crease. Then move work to the right until line of stitching is under blade of Quilter, which serves as a guide for distance between the rows.

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

#### Quilting, continued

For Diamonds, the *cross* rows of stitching must be parallel with edge of 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.

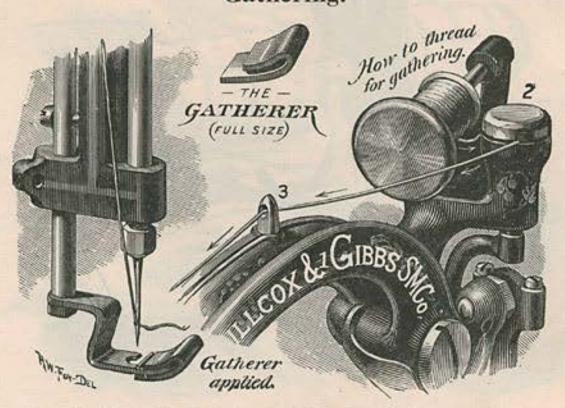


Fig. 25—Shows Foot Gatherer (Full Size), and as Applied to Presser Foot, also How to Thread for Gathering.

The Gatherer can be used for gathering all kinds of soft material, wool, cotton or silk.

Slip Gatherer on Presser Foot, until it touches wire on upper side, as shown above.

Glacé thread must always be used when gathering. (See "Selecting Thread or Silk," page 14.)

When gathering, and only then, thread Machine as shown above, leaving thread out of Pull-off 1, in Lever, and drawing it direct from spool into groove between the Washers of Automatic Tension 2, then to Thread Pin 3, &c., as usual. See that spool turns freely on spool-pin.

Place work under Presser Foot and commence to sew, allowing it to feed freely, using from 12 to 16 stitches to inch, according to material and fullness desired.

If it does not gather full enough, either lengthen stitch, or increase tension, by taking hold of thread between Automatic Tension 2, and Thread Pin 3, and winding it one or more times around in groove between the Washers of Automatic Tension—but not more than three times in all.

If too full, shorten stitch, or unwind thread from Automatic Tension.

The fullness of Gathering depends on softness of goods, length of stitch, and number of times thread is wound around the Automatic Tension.

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

Ruches of ribbon, silk or chiffon, so much used in dress making, can be made with the Foot Gatherer. The degree of fullness should be regulated according to preceding directions.

When Gathering chiffon or net, do not thread Machine as described on page 30, but as for regular sewing, that is, according to directions on page 12. You will, however, take two turns of thread around Automatic Tension, using 80 cotton or O silk and 12 stitches. This will not tear the goods.

If several rows of Gathering or the shirred effect be desired, use the Quilter as a guide. (See page 29, Fig. 24 for distance between rows.)

#### Braiding.

Braiding can be done on the Automatic Machine with a Braider Foot specially made to order for size of Braid to be used. Price \$1.25, net.

#### Embroidering.

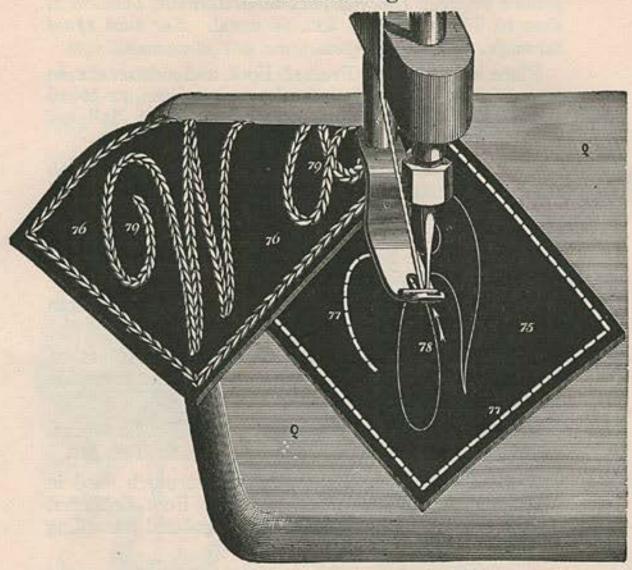


Fig. 12-Embroidering.

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

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

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

#### Fringing Needle.

The Fringing Needle is placed in position in the same way 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 woof or heavy thread of the silk running towards operator. Hold silk firmly with thumb and finger of left hand, both in back and front of Needle.

When commencing to Fringe begin one-eighth of an inch from edge, working across the piece. Repeat this operation until desired width of fringe is obtained.

Sent by mail, on receipt of 15 cents.

#### 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 can be used for any size cord. Sent by mail, on receipt of 75 cents.

#### Hemstitching.

Thread Machine same as for embroidering—(see page 32—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 one-half inch width. To get desired thickness, use from 4 to 5 strips. Then place two thicknesses of material on top of blotting paper and start according to instructions "To Place the Work and Begin Sewing" on page 16.

Willcox & Gibbs Improved Ruffler.



#### Directions for Use.

Place Ruffler on Machine, as illustrated, using Hemmer Nut to fasten it firmly to Plate, same as the Hemmers are fastened.

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

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

desired REGULATING SCREW .- Regulates fullness of ruffle. If more fullness is

required, turn to right; if less, turn to left.

Place goods to be gathered between the Blades, as illustrated. In order to have the Gathers even and regular, hold material lightly so that work can feed through freely.

To gether and saw on head at same time already and the least through freely.

To gather and sew on band at same time, place band under Blades.
To gather between bands, place piece to be gathered between Blades with one band above and the other below the Blade.
When gathering, use 30 stitches to an inch.
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.

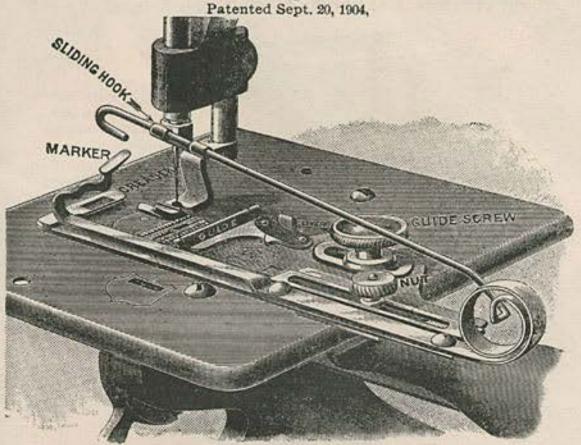
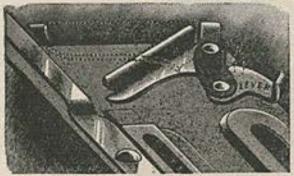


Fig. 1-Shows Guide adjusted for Wide Tucks.



#### 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 tucks less than 1/8 inch wide.

Fig. 2-Shows Guide Adjusted for
Narrow Tucks.

That distance from Needle for tucks without any space between tucks, move Creaser as much further from Needle as space desired and fasten firmly with Nut.

making tucks less than 1/8 inch wide. See Fig. 2.

WIDE TUCKS.—Close opening in Guide by swinging movable part of Guide to left, then lock it by pushing small Lever to left. See Fig. 1.

GUIDE.—Set Guide as far from Needle as width of tuck desired; then loosen Nut and move Creaser twice space between them. To have space between tucks, move Creaser as much further from Needle as space desired and fasten firmly with Nut.

space between tucks, move Creaser as much further from Needle as space desired and fasten firmly with Nut.

SLIDING HOOK.—Place Hook around Needle to operate Marker.

Fold cloth for first tuck, place it under Marker and against Guide, and proceed to sew. After sewing first tuck, open seam by scratching with fingernail on under side while holding it stretched apart. This will flatten and press down tuck into proper position; then fold cloth on the crease just made for 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, and pass along under the Creaser.

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 vari-

ation in width of tucks.

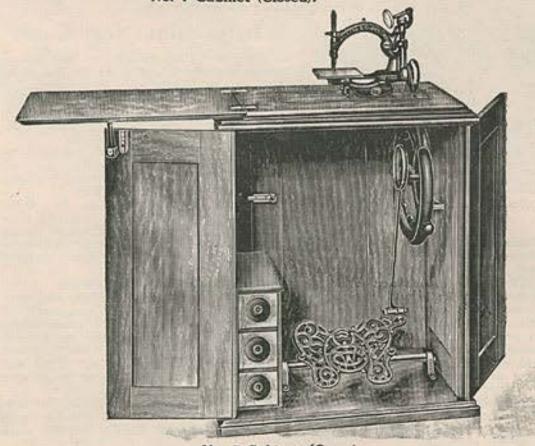
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