

BOOK 1

ILLUSTRATIONS

AND

DIRECTIONS

FOR USING THE

“WHITE”

Sewing Machine

AND ITS ATTACHMENTS

این کتاب برای سبک و آسان

THE BEST IN THE WORLD

این کتاب برای سبک و آسان

Manufactured by the

White Sewing Machine Company

Cleveland, Ohio, U. S. A.

ACCESSORIES.

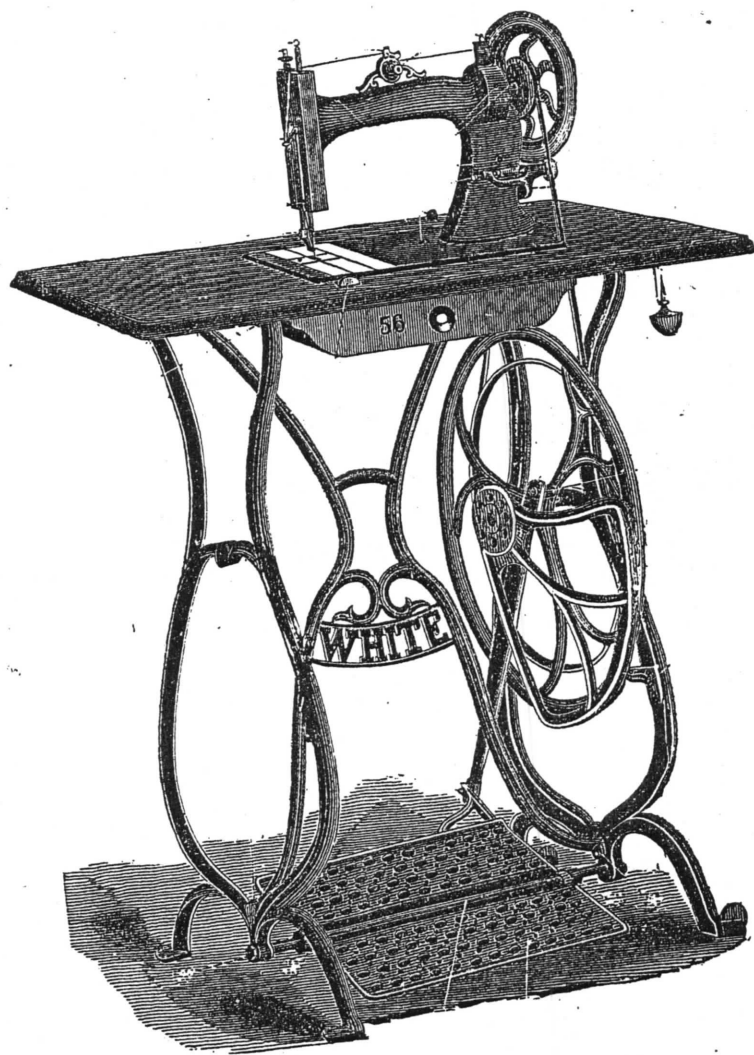
Upon receipt of cash with order, we will send by mail, all or either of the Attachments at the following prices :

Tucker,	\$1 00
Ruffler, (which is also a Shirrer),	1 00
Corder,	50
Adjustable Binder,	1 00
Set Hemmers and Binder,	50
Darning Attachment,	50
Extra Braider,	30
Roller Presser-foot for Leather,	2 00
One-sided Presser-foot for Tailor's use,	25
Short Presser-foot for Glovemakers' use,	25
Extra Quilter,	10
Extra Bobbins, per doz.,	50
Needles, Cloth or Leather, per doz.,	40
Extra Hemmer and Feller,	40
Extra Shuttle,	1 00
Spool Cotton, per doz. Spools,	60
Oil, per bottle,	10
Hem Stitch Attachment,	1 00
Embroidery Attachment,	2 00
Arrasene Attachment,	2 00
Etching Foot and Slide,	1 00
Edge Braider,	1 00

WE CANNOT SEND OIL BY MAIL.

FREE WITH EACH MACHINE.

Tucker, Ruffler and Set of Hemmers, One Hemmer (which is also a Feller), Braider, Quilter, Castors, Oil-can filled with Oil, two Screw-drivers, Gauge and Screw, six Bobbins, twelve Needles, and threaded ready for use, Belt Shifter Directions in English, German, Spanish, French and Bohemian.



TO THE JOBBER AND EXPORT TRADE.

For large jobbers, or for the export trade where orders are for one hundred or more machines at a time, we ship securely and compactly boxed, so that in transportation charges a large saving is obtained. In this manner of shipping, as before stated, all the work is carefully inspected; the heads of the machines have each been tested in sewing, and are boxed by themselves, whilst the stands are taken apart and shipped in as small and compact shape as possible. Consequently, for the information of this class of trade, we submit and call attention to our first illustration—THE STAND—and explanation as how to set it up properly.

In the first place, remove the nuts 68-68 and cones 69-69 from the treadle rod 72 and slide the treadle 71 on the rod with a cone on each side of the treadle.

The stud and cones upon which the balance wheel revolves are firmly secured to the right hand leg. Remove the end cone by loosening the small set screw and unscrew the outside cone. Place the balance wheel in position as shown in illustration, page 2, then replace the end cone and turn it up until the balance wheel revolves easily and steadily. Tighten the set screw to keep it in place, (be careful not to get too tight or too loose); next attach pitman No. 65 to balance-wheel, then the dress-guard to right hand leg No. 64.

Having thus put together these disconnected parts, it is an easy matter for a beginner to determine their relative positions by reference to the cut. 60 represents the brace. The left hand and the right hand legs are connected to the brace by screws as shown in cut.

55 represents a wooden pin in table for machine to rest on when turned back for oiling; this pin is taken out of the table and packed with the stand when it is shipped in boxes.

To have the machine run extraordinary light the greatest care must be exercised in setting up the stand work. Everything must be *true and in line*.

Be sure that you have the wood work placed upon the stand so that the belt does not rub against it, and also so that it does not rub against the balance-wheel of the machine.

If the stand rests upon the floor in an uneven manner, and the floor is level, it is evident that the stand is not properly set up; in which case loosen the screws and nuts and place the stand in its proper position, and gradually tighten its connections.

Place the Rubber Head Tacks in marked places in front of the table before you connect the machine head, by its hinges, to the table.

To prevent noise, no part of the machine should touch the wood work, but the machine head should rest entirely upon the Rubber Head Tacks.

INSTRUCTIONS
FOR USING THE
WHITE SEWING MACHINE,
THE BEST IN THE WORLD.
MANUFACTURED BY THE
WHITE SEWING MACHINE COMPANY,
CLEVELAND, O., U. S. A.

At a very large expense, we have had the White Sewing Machine explicitly illustrated, and within the following pages we submit these illustrations with such explanations as will enable anyone, with little or no experience, to readily understand, and satisfactorily work the machine. *All we ask is that you will carefully read and follow these directions, and you can confidently rest assured that you will find yourself the possessor of the best Sewing Machine in the World.*

Before the machine leaves our factory, it has undergone a minute inspection, and every mechanical defect corrected; it has been thoroughly tested as to its perfect sewing qualities, and found satisfactory in every respect.

It is a matter of fact, that any and all machinery will become worn sooner or later by constant use, and while the wear in the "WHITE" will be imperceptible for *many years*, we have so constructed our machine, that any "lost motion" can be taken up in a few moments, and the parts kept in their proper position for an indefinite length of time.

Operators are cautioned not to attempt to adjust the machine, unless its sewing qualities are impaired, and not then unless they are *perfectly familiar with its principles and mechanism.*

Any unskilled person attempting to adjust or repair any machine will often do greater injury than years of ordinary wear could produce.

THE TREADLE MOVEMENT.

WE CLAIM AN IMPORTANT IMPROVEMENT IN TREADLES, BY ALLOWING "ROOMY" SPACE FOR THE FEET SO THAT THE OPERATOR IS NOT "CRAMPED UP" BY THE USE OF BOTH FEET. Physicians will acknowledge the advantages of this improvement, and tell you that nearly all the diseases contracted by seamstresses and working girls in the use of the sewing machine arise from the cramped position in which they have been compelled heretofore to sit and place their feet upon so little space, and from the fact that the majority of sewing machines run too heavy.

These Objections are Removed in the White Sewing Machine.

The treadle movement should be thoroughly learned, so that the operator can readily revolve the balance-wheel by means of the treadle with either foot.

Remove the belt from the balance wheel and place your feet on the treadle directly over the treadle rod, then take hold of the balance wheel and turn it toward you, allowing the feet to move freely with the motion thus commenced, and continue this motion by an alternate pressure of the heel and toe until a regular and easy motion is obtained.

Do not attempt to learn anything else until you are proficient in the use of the treadle, so that you can start it and stop it without ever turning it in the wrong direction.

TO OPERATE THE MACHINE.

Having become perfectly familiar with the treadle movement, now replace the belt and connect the fly-wheel of the machine with the balance wheel of the stand; raise the presser foot with the lever, remove the slide over the shuttle and take out the shuttle; then start the fly wheel of the machine towards you and continue the motion thus imparted, with the feet, as per instructions given above.

After becoming expertly proficient in this motion and without the shuttle in or the machine threaded, place a piece of cloth between the feed and the presser foot; let the presser foot down upon it and operate the machine in this way until you are accustomed to guiding the material in whatever direction you might desire.

NOTE.—Do not run the machine with the presser foot down on the feed and no cloth between the two.

Do not pull the cloth to or from you in such a manner as to bend the needle.

Do not undertake to do practical sewing, but practice upon strips of cloth until you can produce a regular motion of the machine and guide the work as you wish.

To Set the Needle.

Raise the needle-bar to its highest point and pass the shank of the needle up into the hole in the needle-bar as far as you can push it, with the **long groove** of the needle turned precisely toward the left; then fasten securely with the needle screw.

To sew extraordinary heavy goods, it may be necessary to lower the needle a very little.

The needle, when descending, should pass **central** in the needle hole from **front to rear**, but a **little nearer to the right** than to the left of the hole, as it prevents the needle from glancing into the race and being caught by the shuttle; if properly set, the point of the shuttle should enter the largest part of the loop formed with the thread.

NEEDLES AND THREAD TO BE USED.

The *most important* consideration is to buy and use perfect needles—not bent, nor blunt points. WE PARTICULARLY REQUEST OUR DEALERS AND THEIR CUSTOMERS TO BUY THEIR NEEDLES AND OIL FROM US.

The size of the needle should conform to the size of the thread, and both be suitable to the material sewed. Use as fine a needle as will permit the thread to pass freely through the eye.

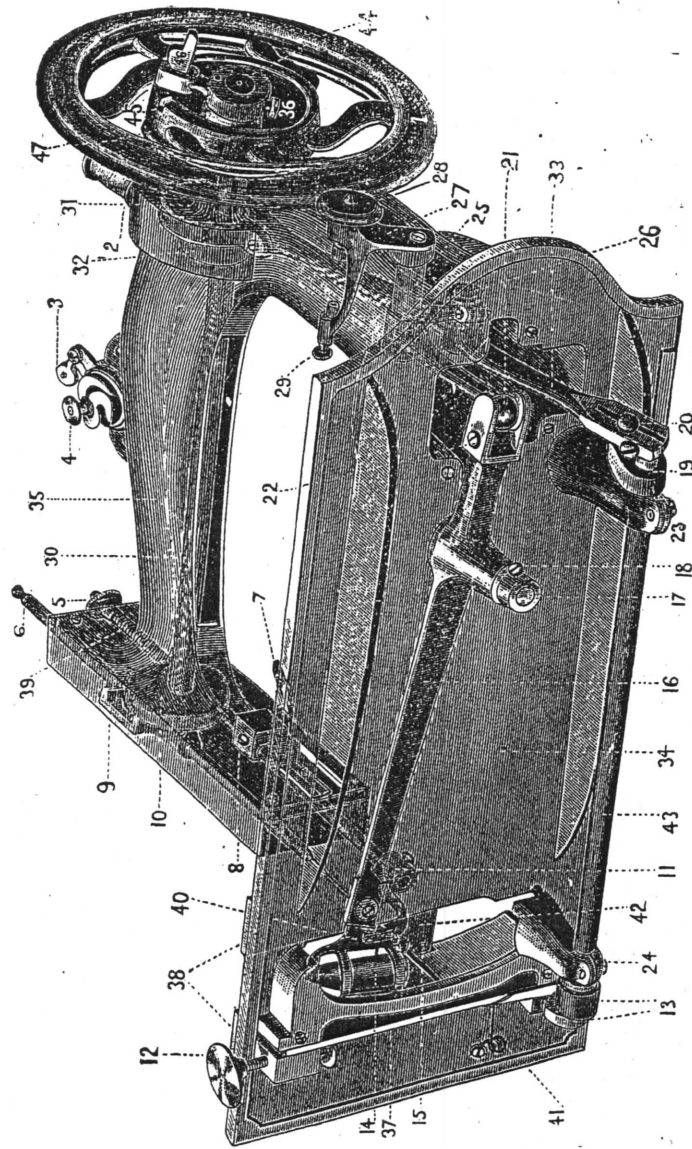
A No. 1 needle may be used for all kinds of ordinary family sewing, where thread from numbers 50 to 60 is used; there is seldom a necessity of using a coarser cotton than No. 30, because every stitch made by a sewing machine is just double as strong as one made by hand. In general sewing use the same size of thread above and below.

The following index will show the size of needle, thread and silk to be used.

COTTON.	TWIST.	NEEDLE.
150 to 300	000 }	00
90 to 150	00 }	
70 to 90	0	0
50 to 70	A & B	1
30 to 50	C	2
20 to 30	D	3
8 to 20	E & F	

For Leather, use a twist pointed needle.

SKIPPING STITCHES AND BREAKING THREAD is an *unheard* complaint when the *genuine* "WHITE" needle is used. The market is full of needles of an inferior quality—*made to sell cheap*—and as an inducement for every owner of a WHITE to use it satisfactorily, (which can only be done by the use of a good needle) we will mail one dozen needles, with postage prepaid, on receipt of 40 cents.



Transparent View of Machine Head.

Do not order by these numbers.

To Fill the Bobbins with Thread.

NEVER USE GLAZED THREAD ON THE BOBBIN.

27 represents the Bobbin Winder, which is fastened firmly to the arm of the machine. Place the spool of thread on spool standard 2, and fasten the end of the thread between the end of the bobbin and the bobbin winder shaft, and put the other end of the bobbin in the bobbin winder, then place the leather band **behind** the small wheel on the bobbin winder and in its groove, then turn clutch 46 out from notch 45 on fly-wheel, and proceed to work the machine as in sewing, guiding the thread evenly with the left hand until the bobbin is nearly or quite full. By this device the operator can wind bobbins without running the entire machine, or without removing the attachments or disturbing the garment sewed.

THREAD.

Do not use poor thread. You must not expect to make a nice, smooth stitch with cheap, uneven thread. Clarke's or Willimantic six cord spool cotton is the best, and we will fill all orders for it promptly, by mail or express, on receipt of price, viz: 60 cents per dozen spools.

KEEP THE MACHINE WELL OILED.

If the machine is dirty or *gummed* up with poor oil, clean it off by the use of spirits of turpentine or kerosene, then wipe dry and apply fine sperm oil in the places indicated by the word *oil* in the illustration on page 2.

Keep the inside working parts thoroughly oiled. In addition to the oil holes, the upper part of the machine should be carefully oiled on the needle bar and slot in face on side from you; also in hole in face on side toward you *with needle at its lowest point*; also the bearings of the bobbin winder should be kept constantly oiled. To oil the under side, slip the belt off the balance-wheel and turn the machine back on its hinges, and oil all the places indicated by the numbers 19, 20, 22, 44, on page 7.

Use only the best quality of sperm oil, and whenever you oil the machine, work it a little to distribute the oil, and then, after standing a few moments, take a soft cloth and clean the superfluous oil from the japanned parts of the machine, also from the needle bar. The shuttle race is provided with a cup filled with waste. Keep this waste slightly moistened with oil, which will keep the shuttle and its race lubricated all that is necessary.

THE IRON STAND.

Oil should be distributed frequently upon the treadle cones at 69 and upon the balance-wheel cones on ends of stud No. 63; and upon the pitman connections at 62 and 66. (See page 2).

THE TENSION.

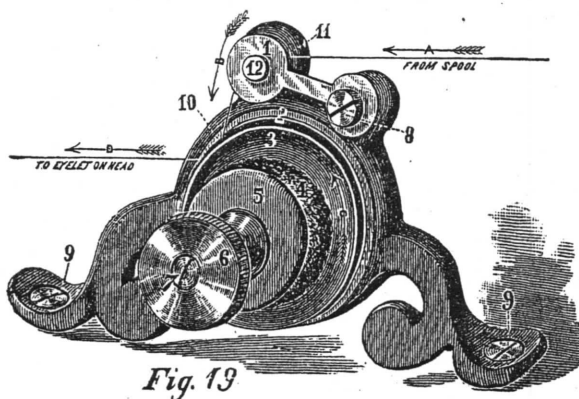


Fig. 19 represents an enlarged view of the upper tension. The arrows A-B-C-D indicate the direction of the thread as it passes from the spool to the needle. Fig. 6 represents the tension nut. By turning it to the right tightens the tension on the upper thread;

by turning to the left loosens the tension. When the stitching shows the under thread drawn through on top of the fabric, the tension on the shuttle thread is too loose, or the tension on the upper thread is too tight; if it shows the upper thread drawn through on the under side of the fabric, it indicates that the tension is too tight on the shuttle thread, or too loose on the upper thread.

TO CHANGE THE LENGTH OF STITCH.

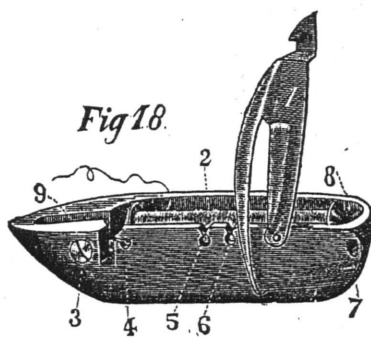
12 represents the Feed Screw. By turning it to the right you shorten the stitch; by turning it to the left you lengthen the stitch.

TO THREAD THE MACHINE.

SEE CUT ON PAGE 2.

Place the spool of thread on the spool standard 2, pass the thread as at 11 (in above cut) behind check spring 1, thence around the tension wheel 3, then through thread guide 51 on top of face plate, then through the eyelets respectively at top and bottom of take-up 52, then through threaded guide 53, and thence through the eye of the needle.

TO THREAD THE SHUTTLE.



The Shuttle of the White Sewing Machine is acknowledged to be the least complicated of any in the market.

Having raised latch 1 and holding the bobbin so the thread will draw off from the under side, place one end of bobbin into the center of the heel of shuttle and drop the other end of bobbin into the slotted hole in point of the shuttle; then pass the thread through slot 6; thence *in* through slot 5; thence *out* through slot 4; then press latch 1 down into position and the shuttle is threaded ready for use.

In all cases the thread must pass out under latch 1!

Figure 3 is the shuttle tension screw. To obtain a tight tension on shuttle thread turn this screw to the right; for a light tension turn screw to the left.

We claim a decided advantage over many other machines in the control of our shuttle tension, as it is so arranged we can increase or decrease it without removing the shuttle from the machine or disarranging the work.

To open the latch, press slightly against it and open.

To Remove the Shuttle.

Open the front shuttle slide to take the shuttle from the machine. Do not undertake to turn the machine back for oiling with the rear shuttle slide partly pulled out.

TO COMMENCE WORK.

In threading the needle and shuttle respectively, you should leave an end of thread about two inches in length to each. Hold the end of the upper thread loosely in the left hand, and with the right hand gently revolve the fly-wheel until the needle passes to its lowest point and returns, when if it is set properly, a loop will be formed through which the shuttle will pass, and, as the needle ascends, it will draw up the lower or shuttle thread. Now see that the shuttle slides are both closed over the shuttle, and the machine is ready for practical operation.

TO REMOVE THE WORK.

Stop the machine with the needle at its highest point; raise the presser-foot with the lifter which slackens the upper thread; then take hold of your work with your left hand and pull it directly from you, keeping the top thread in the slot of the presser-foot, which will prevent bending the needle. Cut the threads close to the cloth, which will leave the ends projecting from needle and shuttle preparatory to commencing work again.

EXPLANATION OF DIFFICULTIES

That Sometimes Occur with Beginners.

If the upper thread breaks, it may be caused by the needle not being properly set, or the machine not threaded correctly, or the upper tension too tight, or the thread uneven and the needle too small for it, or the needle eye too sharp, or the presser-foot attached to the machine so that the needle rubs it in passing.

If the under thread breaks, it may be caused by the shuttle being improperly threaded, or too much tension upon it, or by the bobbin being wound too full so that the thread slips over the ends of the bobbin in the shuttle, or by the thread being caught in the shuttle slides.

If the needle breaks, it is more than likely your own fault, caused by pulling the goods to or from you in such a manner that the needle strikes the throat-plate and is bound to break. The needle may, however, break in trying to sew extraordinary heavy seams when the pressure on the presser-foot is not heavy enough.

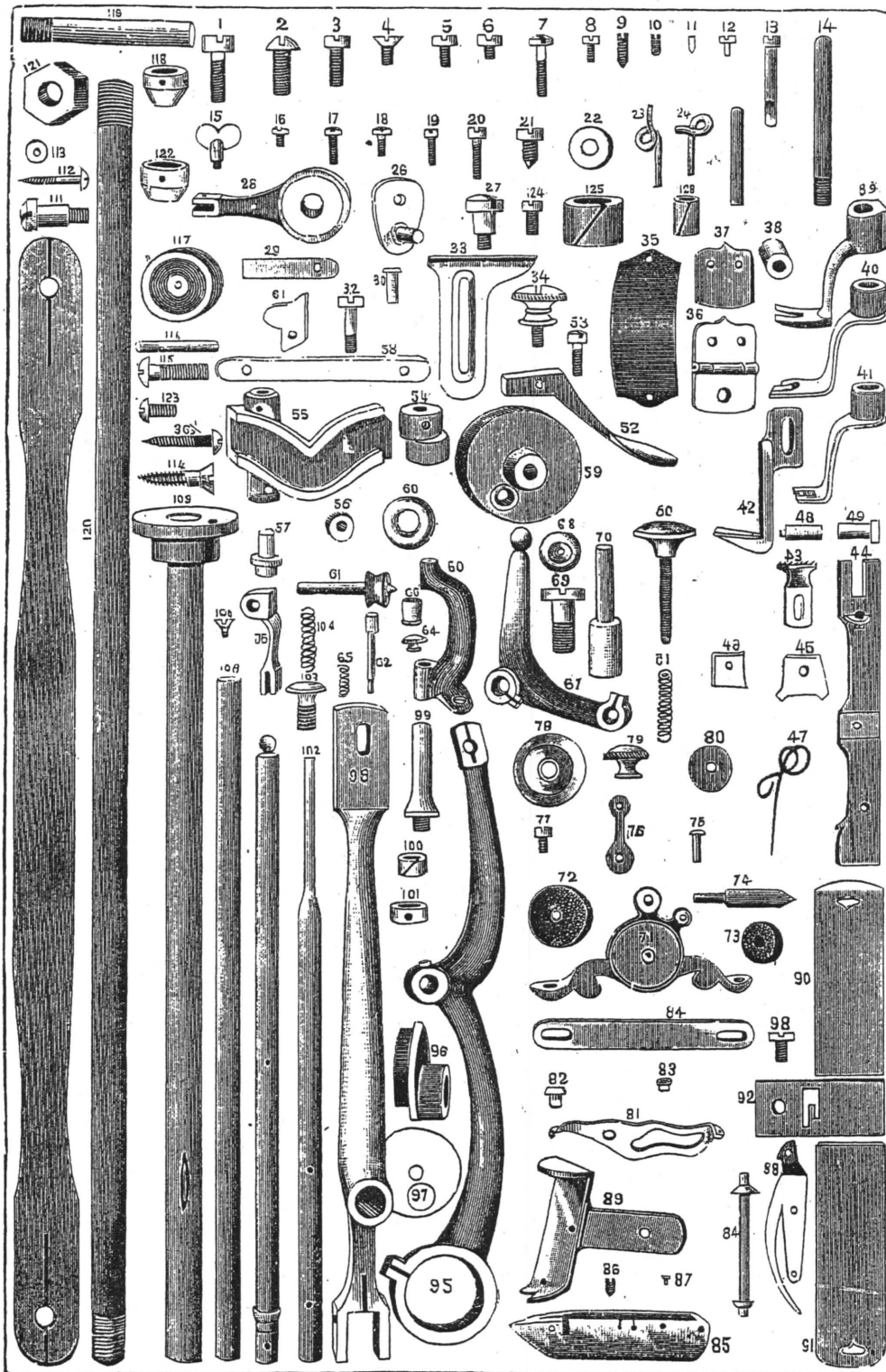
To create more pressure upon the goods turn the presser-bar nut on top of presser-bar to the right; to decrease the pressure turn it to the left.

If the machine skips stitches, the needle is either bent or not in right position.

If the stitches are not even, it may be caused by the presser-foot not resting evenly upon the fabric sewed, or by the feed not being high enough, or by the stitch being too short, or by pulling the cloth, or by using too fine a needle with too coarse or uneven thread.

NOTICE.

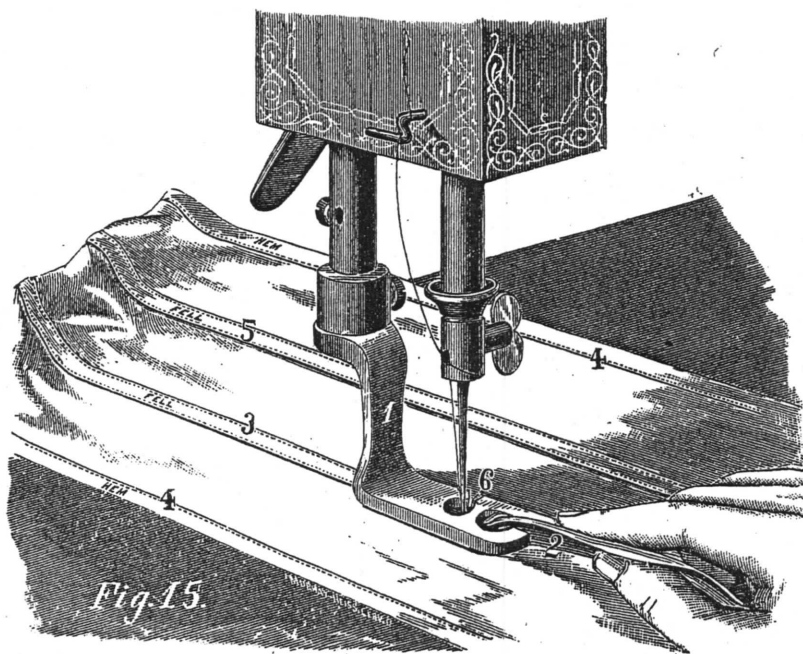
The leather band should always be tight enough not to slip. If it slips, or does not force the needle through thick goods, cut off a very short piece and readjust the ends. The belt should not be so tight as to prevent an easy motion of the machine.



DESCRIPTION AND PRICES OF PARTS.

No.	Price.	No.	Price.		
1	Screw to fasten face-plate to arm.....	03	62	Bobbin winder piston.....	15
2	Screw to fasten shield to leg; is also used to fasten connection knee-stud to inside of arm; also to fasten bobbin winder to arm....	03	63	Bobbin winder socket.....	05
3	Screw to fasten brake to main shaft; also treadle-cone set screw.....	03	64	Bobbin winder nut.....	10
4	Screw to fasten hinge to bed-plate.....	03	65	Bobbin winder spring.....	05
5	Screw to fasten feed hook to feed bar; also feed cam set screw; also set screw to shuttle lever stud collar; also set screw to connection knee screw.....	03	66	Bobbin winder rubber.....	05
6	Screw to fasten feed to feed bar; feed spring to bed; cap on the eccentric; shuttle carrier to shuttle lever.....	03	67	Shuttle connection kn.....	50
7	Take up screws for lower arbor.....	03	68	Washers for bottom knee.....	05
8	Screw to fasten connecting disc to lower arbor; also set screw for shuttle lever bushing.....	03	69	Shuttle connection knee screw.....	20
9	Take up screws for bushing.....	03	70	Shuttle connection knee stud.....	25
10	Screw to adjust face plate on inside; also to fasten feed take-up pins.....	03	71	Tension frame.....	20
11	Needle bar bushing set screw.....	03	72	Tension cloth washer, large.....	03
12	Hammer and braider screw.....	03	73	Tension cloth washer, small.....	03
13	Take up screw on back end of shuttle lever.....	05	74	Tension stud.....	15
14	Spool standard.....	05	75	Tension rivet.....	02
15	Needle thumb screw.....	10	76	Tension check spring.....	05
16	Screw to fasten cap to back of arm; also heart cam to needle bar; and take up to faceplate.....	03	77	Tension check spring screw.....	02
17	Screw to fasten tension to arm.....	03	78	Tension wheel.....	20
18	Screw to fasten gib to inside of face plate.....	03	79	Tension nut.....	10
19	Take up screw on upper end of eccentric connection; also on shuttle connection knee.....	03	80	Tension steel washer.....	05
20	Take-up screw on lower end of eccentric connection.....	03	81	Take up.....	20
21	Eccentric set screw.....	05	82	Take up rivet.....	03
22	Washers on feed bar and shuttle carrier screws.....	03	83	Take up roller.....	10
23	Upper thread guide on face plate.....	05	25	Take up pin.....	05
24	Lower thread guide on face plate.....	05	84	Take up plate.....	10
26	Link and stud on connection disk.....	30	85	Shuttle complete.....	1 00
27	Link and stud screw.....	10	86	Shuttle tension screw.....	03
28	Main place for clutch.....	30	87	Shuttle rivet.....	02
29	Spring for clutch.....	05	88	Shuttle spring.....	10
30	Rivet for clutch.....	02	89	Shuttle carrier.....	30
31	Catch for clutch.....	10	90	Shuttle slide, rear.....	15
32	Screw for clutch.....	03	91	Shuttle slide, front.....	15
33	Gauge.....	10	92	Needle plate.....	30
34	Gauge screw.....	10	93	Needle plate screw, also set screw for presser bar guide.....	03
35	Cap on back of arm.....	10	94	Bobbin.....	03
36	Hinge—each.....	10	95	Eccentric connection.....	50
36 1/2	Screw to fasten hinge to table.....	03	96	Eccentric.....	50
37	Hinge rubber, each.....	05	97	Eccentric cap.....	10
38	Round rubber for table, each.....	03	98	Shuttle lever.....	50
39	Presser foot.....	50	99	Shuttle lever stud.....	30
40	Hammer and feller.....	75	100	Shuttle lever bushing.....	20
41	Braider.....	50	101	Shuttle lever stud collar.....	20
42	Feed hook.....	25	102	Presser bar.....	25
43	Feed.....	40	103	Presser bar thumb screw.....	20
44	Feed bar.....	50	104	Presser bar spring.....	05
45	Feed bar front guide plate.....	05	105	Presser bar guide.....	25
46	Feed bar rear guide plate.....	05	106	Presser bar guide screw.....	03
47	Feed spring.....	05	107	Needle bar.....	50
48	Feed bar rear take up pin.....	10	108	Low arbor.....	50
49	Feed bar front take up pin.....	10	109	Upper arbor.....	1 00
50	Feed screw.....	25	125	Main shaft bushing.....	20
51	Feed screw spring.....	05	126	Needle bar bushing.....	10
52	Presser bar lifter.....	30	Not illustrated. Face plate.....	2 00	
53	Presser bar lifter screw.....	05	Not illustrated. Plated fly-wheel (Japanned 50c less).....	2 00	
54	Feed cam.....	30			
55	Heart cam.....	50			
56	Heart roller.....	10			
57	Heart roller stud.....	20			
58	Gib to heart cam.....	10			
59	Connection disc.....	50			
60	Bobbin winder frame.....	30			
61	Bobbin winder pulley and shaft.....	10			
				STAND PARTS.	
		110	Pitman to treadle.....	20	
		111	Pitman screw.....	20	
		112	Pitman take up screw.....	03	
		113	Pitman take up screw washer.....	02	
		114	Screw to fasten table to legs.....	03	
		115	Screw to fasten brace to legs.....	03	
		116	Pin to fasten caster to legs.....	03	
		117	Caster wheel.....	05	
		118	Balance wheel cone.....	10	
		119	Balance wheel stud.....	30	
		120	Treadle rod.....	50	
		121	Treadle rod nut.....	05	
		122	Treadle rod cone.....	10	
		123	Treadle rod cone screw.....	03	
		Not illustrated.	Table legs, each.....	1 75	
		Not illustrated.	Table brace.....	1 00	
		Not illustrated.	Treadle.....	75	
		Not illustrated.	Balance wheel.....	1 50	
		Not illustrated.	Belt with hook.....	25	
		Not illustrated.	Drip pan.....	25	

Special Notice: Always order parts by these numbers and send cash with order for parts.



DIRECTIONS FOR USING THE ATTACHMENTS

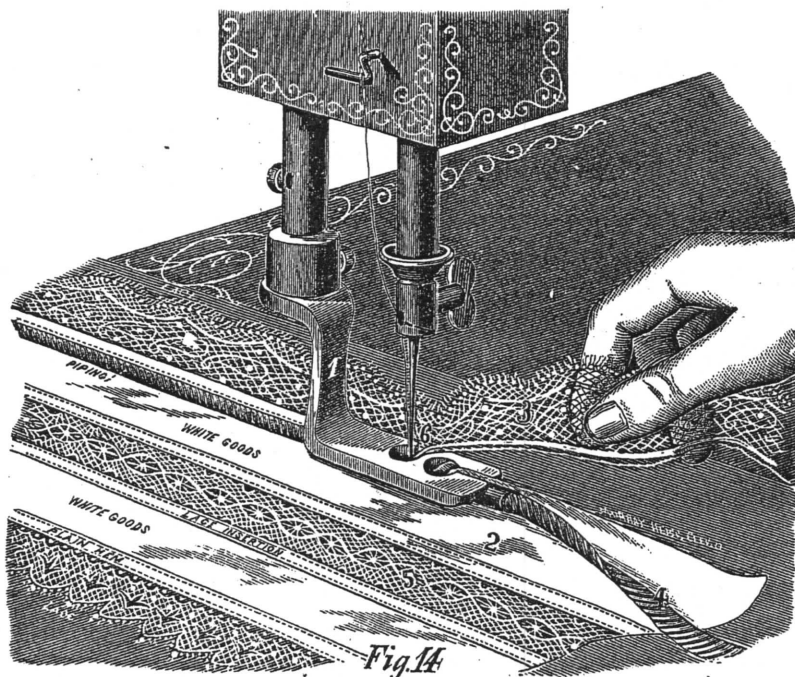
HEMMING.

Raise the needle to its highest point, remove the presser foot and in its place attach the hemmer. Insert the edge of the cloth, folded up, into the mouth of the hemmer as represented at 2 in fig. 15, then with a pin or thread in the fold draw the edge of the cloth far enough through the hemmer so that the needle will enter the cloth at its extreme edge, then proceed to sew, keeping the edge turned as it feeds through.

FELLING.

The hemmer is also the feller. Sew together two pieces of cloth with the under edge projecting between $\frac{1}{8}$ and $\frac{1}{4}$ inch beyond the upper edge; then trim the edges if necessary and open the work flat, wrong side up, and fold down the wider edge, toward the left, over the narrow edge, and then pass the folded edge into the feller the same as ordinary hemming.

Fig. 15 represents an operator in the act of completing a fell.



HEMMING AND SEWING ON LACE—ONE OPERATION.

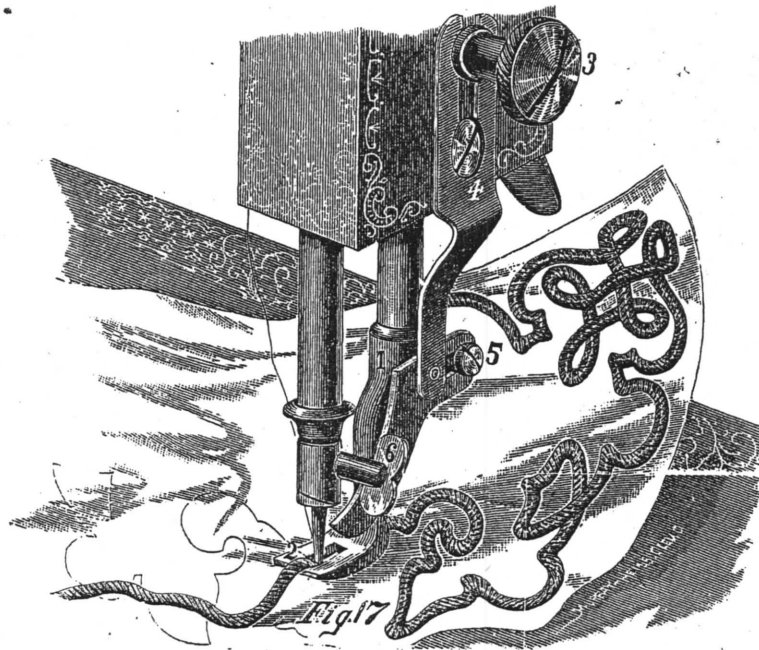
Our hemmer and feller which accompanies each machine, is now made with a slot—6. (See Figs. 14 and 15). In this slot place the edge of the lace and sew it on at the same time as in ordinary hemming.

HEMMING, SEWING ON LACE AND INSERTING BIAS TRIMMING AT HEAD OF THE HEM—ALL IN ONE OPERATION.

Cut a narrow piece of bias trimming out of colored goods (see 4 in Fig. 14). Pass the bias trimming into the tube near the mouth of hemmer; then place the edge of the lace in slot 6, then place the fabric to be hemmed into the mouth of the hemmer as for ordinary hemming, and then proceed to sew, keeping the edge of the fabric turned as it feeds through, and at the same time holding the lace in its proper position. It will require a little patience and experience for an operator to become proficient in this work, but as it makes a most desirable style of trimming, it has come into general use by owners of the WHITE machines.

WIDE HEMMING.

Any width hem can be made with the hemmer and feller upon thin fabrics by simply folding the goods the desired width of hem, and then passing the edge through as in narrow hemming



BRAIDING.

Remove the presser foot and attach the braider to the presser bar.

The VIBRATOR must be adjusted (see page 10), at such a height that every downward movement of the needle will cause the braider foot to raise just enough to allow the goods to pass freely under it.

The pattern to be braided should first be stamped or drawn on the cloth. To put the braid into the braider, first raise the foot, then pass the end of the braid through the slot on braider so that the braid will pass through the hole 2 in front of the pin and draw it under the foot and back of the needle; then place the stamped pattern under the foot and proceed to sew, guiding the cloth with the right hand and holding the braid with the left hand to keep it from twisting.

By the assistance of the vibrator a novice can do better braiding, and more of it, on the White, than an expert can do on any other machine without such an attachment.

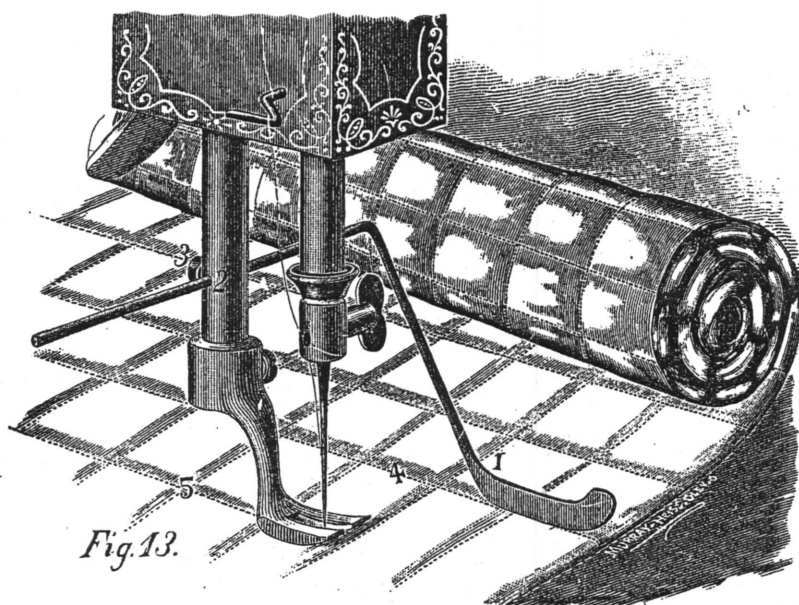


Fig. 13.

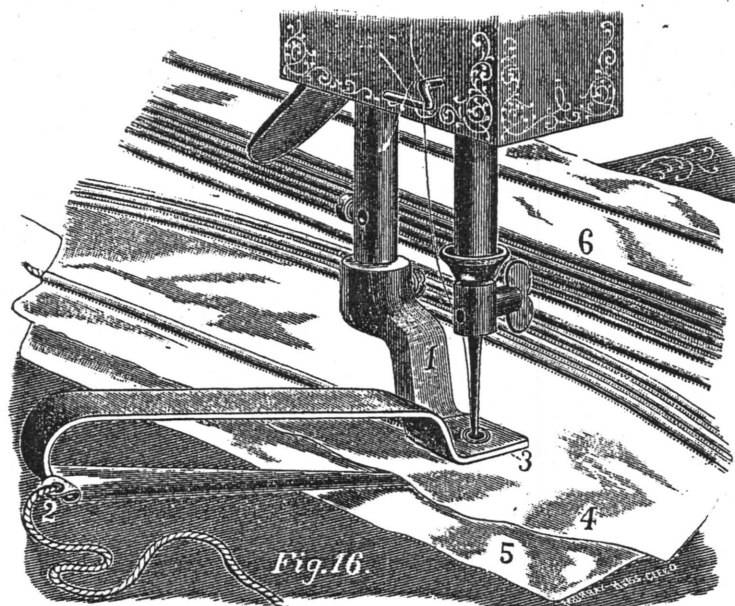
QUILTING.

The QUILTER is furnished with each machine without extra charge.

Pass the quilter through hole 2 in presser bar, adjust the quilter guide to the right of the needle according to the desired space between seams, and high enough to allow the goods to pass freely under it, and then fasten the quilter securely by screw 3.

IN STARTING to quilt use the outer edge of the cloth for the first guide, or else crease the cloth on the right and let the quilter guide 1 follow the crease; quilt the remainder by keeping the guide in a line and over the seam last stitched.

NOTICE.—Large quilts should be made in squares or sections and then sewed together. In quilting squares or diamonds the seams should be on an equal bias.



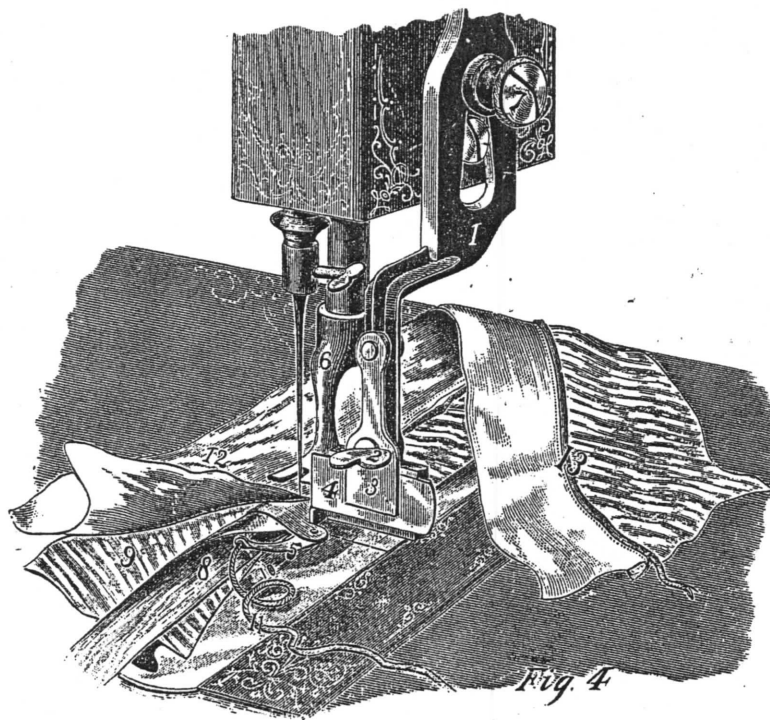
CORDING.

The CORDER is an extra attachment. RETAIL PRICE \$1.00.

Remove the presser foot and attach the corder to presser bar so that the needle will pass through the centre of the needle hole. Pass the cord through hole 2 into the tube of the corder, which is slotted so that the cord can be easily *pulled* into the tube; always draw the end of the cord back of the needle before commencing to sew.

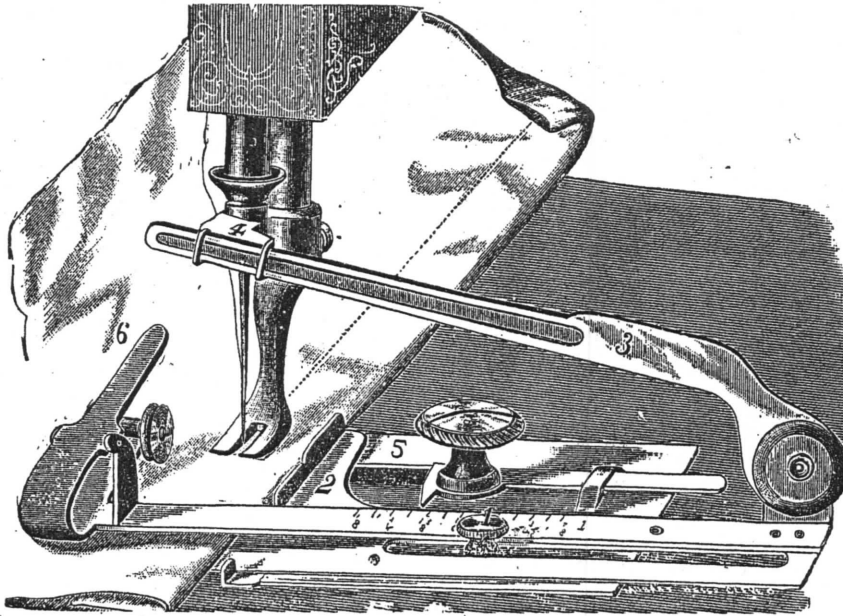
TO COMMENCE CORDING:—A seam should first be made in the cloth, or else fold the piece to be corderd and place it so that the under piece 5 will come *under* the foot of the corder, and the other piece 4 will come *over* the tube of the corder; then draw the cloth close up to the end of the tube and let down the foot without disarranging the work; then proceed to sew holding the work slightly to the left and keeping it smooth in front of the needle, so as to lay the cord firmly against the fold.

The corder has a groove at 3 in which the *last* seam or cord made should pass.



WELT-CORDING.

Remove the regular presser foot that accompanies each machine and attach the corder foot that accompanies the set of "White" attachments; fasten the ATTACHMENT HOLDER 4 to the face plate by the gauge screw and then place the welt corder 3 in the holder by sliding it behind and securing it firmly with screw 2; then take ordinary dress cord and pass the end of it through the hole 5 in CORDER CARRIER and back through the folder; then cut a *narrow* piece of bias trimming, as represented by 7, and pass it into the folder so as to surround and cover the cord; then take the two pieces of cloth between which the welt cord is to be stitched, as shown in cut by 6 and 8, allowing the piece 6 to pass under the attachment and to be next to the feed of the machine, whilst the piece 8 must pass over the welt corder and be *next* to and *under* the presser foot; lower the presser foot and then proceed to sew, guiding the edges of 6 and 8 pieces together and the result will be as shown at 9. By using the pieces 6, 7 and 8 out of different colors, it makes a very handsome piece of trimming.



TUCKING.

Attach the tucker to the machine by means of the gauge screw. Set the guide 2 (see fig. 8) as far from the needle as you want the tuck in width, and then fasten the tucker firmly to the machine by turning gauge screw to the right; then loosen little screw or nut 1 (see fig. 8) and move the creaser 6 exactly twice as far from the needle to the left as the guide 2 is to the right; then fasten little screw 1.

This adjustment will make tucks *without any space* between them.

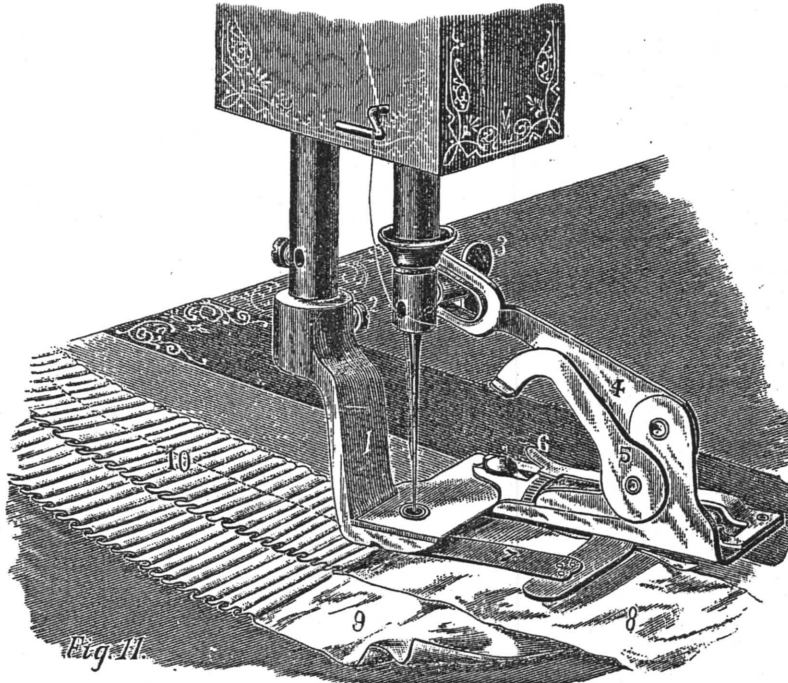
If space between tucks is desired, move the creaser 6 as much further from the needle to the left as the space desired.

Connect the tucker arm or wire 3 to the needle by hook 4.

To COMMENCE TUCKING:—Fold the cloth for the first tuck and place it under the creaser bar and presser foot with the folded edge against the guide 2, lower the presser foot and sew as usual, keeping the edge of the goods close against the guide 2.

The creaser 6 marks the cloth as it passes over the creasing blade; after the first tuck is completed, fold the cloth by the mark made by the creaser and place again as before. Continue this operation until the garment has the required number of tucks.

THE ABOVE DIRECTIONS HAVE REFERENCE TO THE JOHNSON TUCKER, WHICH, HOWEVER, ARE SUBSTANTIALLY THE SAME FOR THE "GOODRICH."



RUFFLING OR GATHERING.

The JOHNSON RUFFLER is an extra attachment. RETAIL PRICE, \$1.

RUFFLING.

Remove the presser foot and attach the ruffler in its place with screw 2, first connecting lever arm 4 on the needle screw 3. Adjust so that the needle will pass down through needle hole in its center.

Fig. 10 represents common or plain ruffling; 8 is a strip of material (cotton or muslin most generally used) which is placed under feeder 7 and far enough back under the presser foot so the feed of the machine will catch the goods; now lower the foot and proceed to operate the machine as in ordinary sewing.

To make the ruffle or gather fuller, move lever 6 to the right. To make ruffle or gather not so full, move lever 6 to the left.

RUFFLING BETWEEN TWO BANDS.

Insert the edge of the piece to be gathered or ruffled under and next to feeder 7; place one band *next to* and over the feed of the machine, or, in other words, under the *piece to be gathered*; then place the edge of the other band over and above feeder 7. Let down the foot and sew as usual, being careful to hold the bands straight and smooth, with the ruffles in their proper positions.

RUFFLING AND SEWING ON.

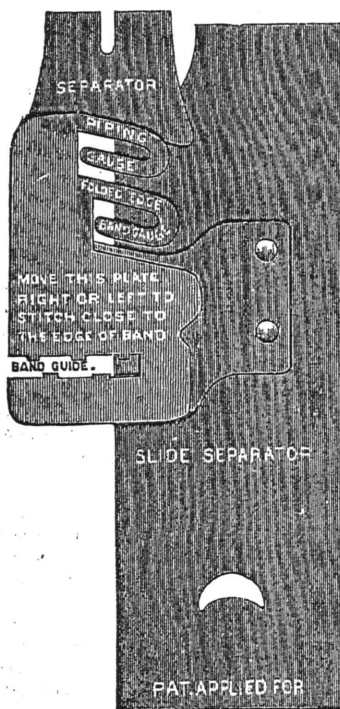
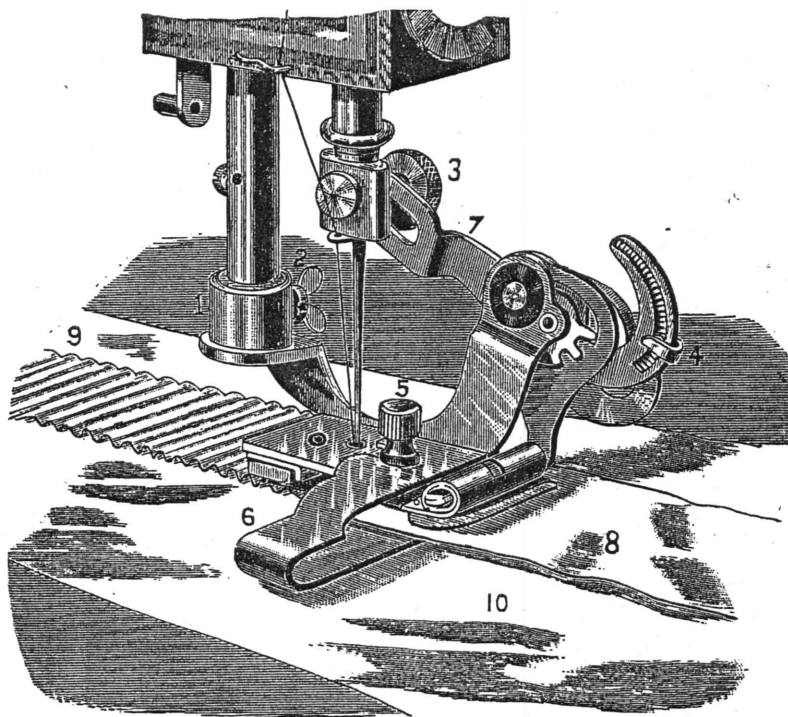
Place the piece *to be gathered or ruffled* under the feeder 7, and the piece or garment to which the gather or ruffle is to be stitched must be placed *next to the feed of the machine, or under the piece to be gathered*. Then sew as in plain ruffling, holding the lower piece slightly, so it will not be puckered.

RUFFLING IN SCALLOPS.

Attach the ruffler the same as for gathering, as before explained. Push ratchet lever 6 to the right to make a *very full gather*. Have stitch a little shorter than ordinary. Use Lonsdale cambric if the trimming is being made for white garments that are to be washed. It can be made of other materials and in colors, and in this manner, either straight or scalloped, forms a beautiful trimming for children's dresses, ladies' underwear, &c., &c.

Cut the Lonsdale cambric or other material in strips about *an inch wide*, and *across the goods*; fold the strip in the center and press the folded edge down smooth: Pass the folded material, with folded edge to the left, *under* the feed 7, and proceed to sew. While sewing, move the goods to the right and left alternately, far enough to make the scallops as deep as desired. The scallops can be made uniform in *length* by counting the same number of stitches between each alternate movement to the right and left.

This pleated trimming can be made either straight or in scallops and sewed on to the goods or garments desired to be trimmed in one operation, by placing the goods the same as in gathering and sewing on.



Never attach the Ruffler to the machine until the slide separator is in position over the feed, or the other separator is attached to the ruffler. In any case it is a good plan to place a card or piece of cloth over the feed before you attach the ruffler, otherwise there is danger of injuring the points of the crimper. You must see that the points of the crimper are kept very sharp, especially in ruffling calico.

In any kind of goods to be ruffled increased pressure or presser-bar is necessary, turn the presser-bar screw all the way down. Oil the ruffler where you see any bearings, that is, at all the moving points.

To place a ruffle on a garment: remove the slide separator and attach the other separator to the left of the needle by screw 5. This is the proper place for this separator, and not to the right as has commonly been done. By its being to the left, your ruffle is at the right under the arm of the machine and the garment to the left on the table.

In all ruffling, (except putting a ruffle on at some distance from the edge,) use the slide separator. It is most convenient. It has all the guides for use in all sorts of ruffling. On all soft goods any degree of fullness can be had by a very short movement of the crimper, and then make long or short stitches for degrees of fullness.

You must not run the cloth entirely out of the ruffler, and run the crimper teeth onto the steel separator, it will destroy the fine points of the teeth, which you must preserve in order to do good work. The slide separator is provided with a piping gauge which is adjustable right and left, so that you can stitch as close to the edge as you please. (See cut.)

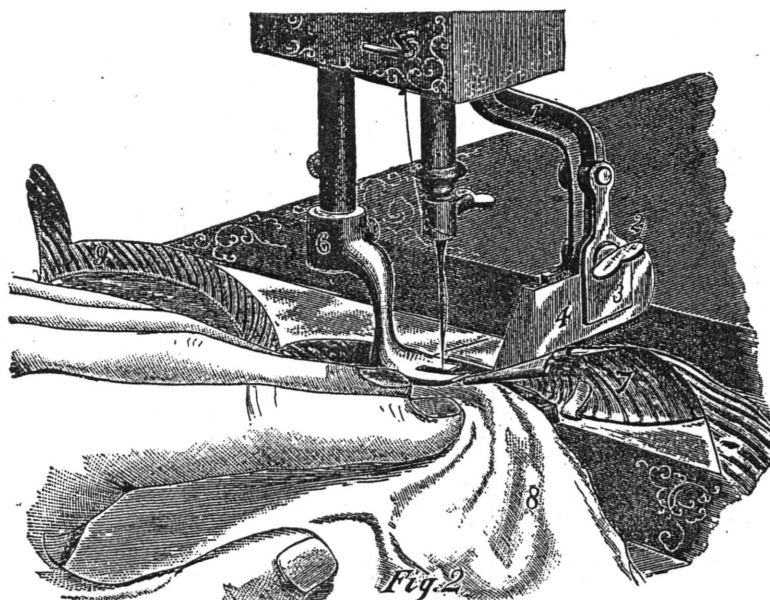
The gauge nearest the needle is the piping gauge. The second one is for a folded edged band. Both these gauges have tongues. These tongues go into the fold, and so will guide the piping or band without any special aid of the operator. The open gauge on the left is for a raw edged band that goes under the separator. To place piping or folded edge band, draw the slide separator back a little for convenience, and when piping and band are placed, push the separator back to place again. Place the ruffle into guide and proceed to sew.

Don't forget to remove the separator from the ruffler, and use only the slide separator, for all work except as above stated. You can place the work easier. Do not make one move of the crimper on the steel separator unless there is cloth or a card between them. More rufflers are destroyed by this carelessness than by all other causes combined. If you expect to do good work, keep your

tools in order. No expert ever did good work when his tools were out of order.

4—Ratchet lever for fullness. Move it up for full ruffles and down for scant ruffles.

5—Separator screw. It fastens the detachable separator.



BINDING SCALLOPS.

This BINDER is an extra attachment, and belongs to our new set, called the "White" attachments, which consists of a Welt-Corder, Binder, Dress-Trimmed, and a Fold-Maker.

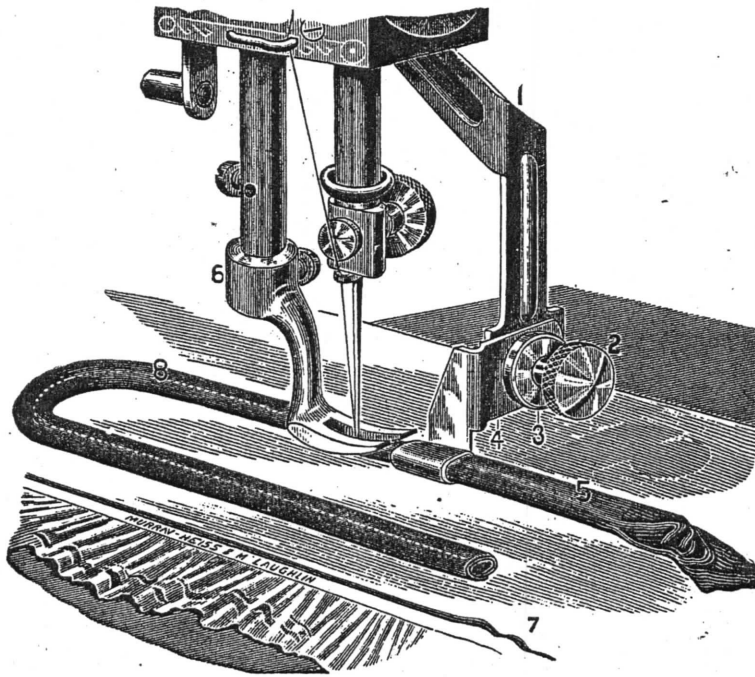
RETAIL PRICE OF SET, \$1.00.

BINDING.

Attach the *irregular-sided* presser foot to the machine. Fasten the attachment holder 6 to the face plate with gauge screw and then place the binder 2 in the holder, securing it firmly with screw 3; then pass the binding material into the mouth of the binder with the edges of the binding under the lips, and carry the binding far enough back so the needle will catch it; then place the garment or goods to be bound, in the binder, between the binding material; then let down the presser foot and proceed to sew, holding the goods as in fig. 2 close up to the needle and binder.

BINDING SCALLOPS.

In binding scallops, after binding around the curve of the scallop, stop the machine with the needle in the goods and then fold the elbow or the angle of the following scallop so as to form as nearly as possible a straight line, and then continue the binding, being particular to hold the goods being bound a little firmer than the binding, which will prevent its being drawn.

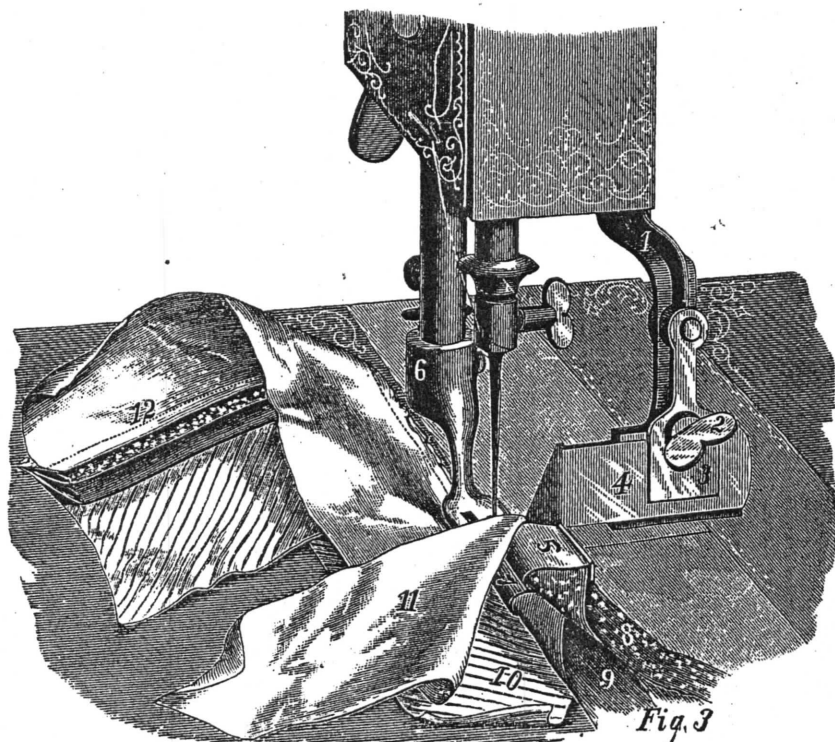


FOLD MAKING.

Attach the fold maker 4 behind clamp 3 with screw 2. Cut a piece of bias trimming about three-fourths of an inch in width and pass it into the mouth of the folder so the needle will catch it; then place the dress or garment to be trimmed under the folder and presser foot and then proceed to sew. The folder can be moved to the right or left so that the stitch will appear in the center of the fold, or upon either side of the center, or edge, as may be desired. With this attachment the FRENCH fold can easily be made.

The FOLD-MAKER is an extra attachment and belongs to the "White" set of attachments, which consists of a Binder, Fold-Maker, Dress Trimmer, and Welt Corder.

RETAIL PRICE OF SET. \$1.00.



This DRESS TRIMMER is an extra attachment, and belongs to our new set, called the "White" attachments, which consists of a Welt-Corder, Binder, Dress Trimmer and a Fold-Maker.

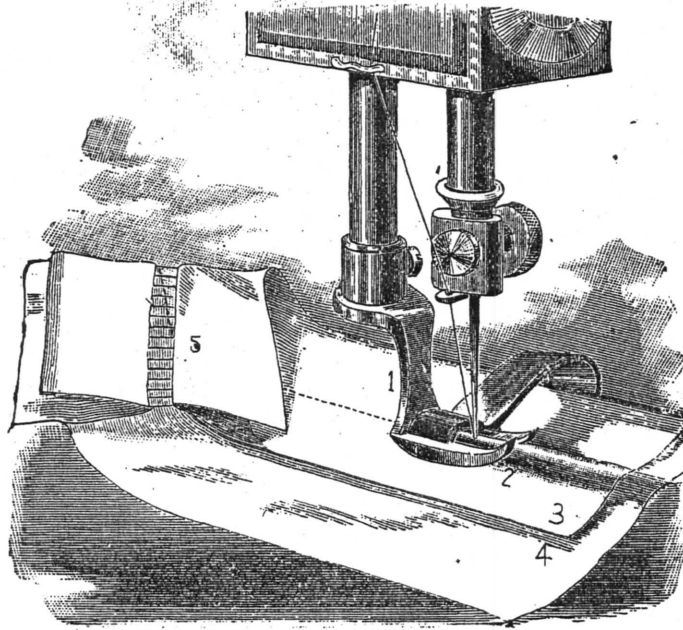
RETAIL PRICE OF SET \$1.00.

DRESS TRIMMING.

Fasten the dress trimmer into the holder in the same manner as the binder. For bias binding or dress trimming, goods of any description can be used. Cut the binding about three-quarters of an inch in width.

To make a "showy" trimming, use two pieces of different colors, as represented by 8 and 9 in fig. 3. Pass these bias strips through the folders 5 and 7; then place the goods or garment to be trimmed *under* the dress trimmer and next to the feed of the machine, and proceed to sew.

With this attachment, a single fold can be attached as trimming to one piece of goods; or a single fold can be inserted between two pieces of goods; or two folds of different colors, can be inserted between two pieces of goods of different colors, all in one operation, as represented in fig. 3.



HEM STITCHER.

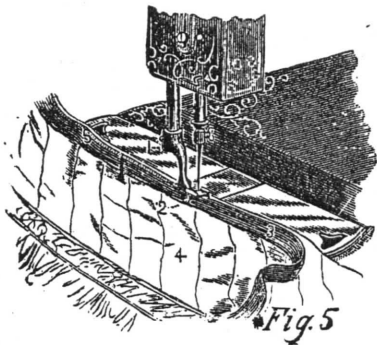
A special attachment of our own make and patent; adapted only for the "White."

RETAIL PRICE, \$1.00.

First remove the presser foot of the machine and place the hem stitcher on presser bar same as presser foot, so needle will enter hole in center of lower bar of attachment. Use strips of linen, lawn or muslin lengthwise of the goods of about $1\frac{1}{2}$ inches in width, creased in center, for guide in stitching. Place one piece of cloth between the feed and lower bar of attachment, the other over the lower bar and beneath the foot of attachment; the ordinary tension is used for a medium space in the hem stitch; to increase the space, loosen tension; to diminish space, tighten tension.

To make two or more rows, add the same size strip to feed and the lower one-half of the hemstitching already made, and continue in same manner if more rows are desired.

COAT BINDING.



This BINDER is an extra attachment. RETAIL PRICE, 50 CENTS.

Remove the presser foot and attach the binder in its place. Insert the binding as shown in cut fig. 5, so that the stitching will show on the extreme right edge; then place the edge of the coat or vest to be bound under the binder and *even* with the binding and proceed to sew.

Nearly all tailors bind fine clothing by hand; that is, they seam down one edge and fold the binding over the edge, and then blind stitch it. WITH THIS ATTACHMENT THE BINDING CAN BE SEWED ON ANY DISTANCE FROM THE EDGE OF THE GARMENT WITHOUT BASTING.

IT WILL MORE THAN PAY FOR ITSELF IN BINDING ONE COAT BY THE TIME SAVED.

TO BIND A GARMENT WITHOUT SHOWING STITCHES.

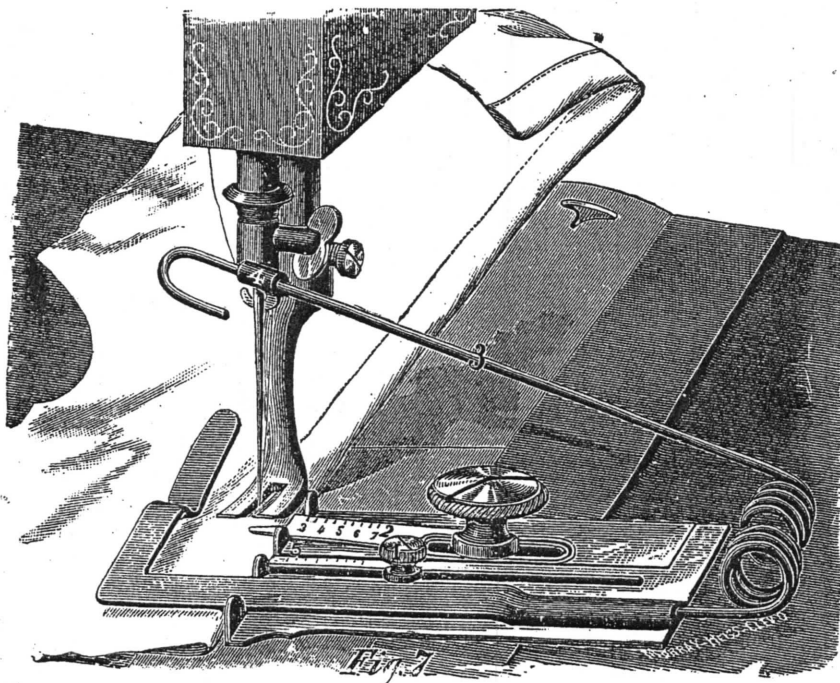
Attach face plate binder (see cut page 23) high enough to let the goods pass under freely. Insert the binding as usual, and then place the garment *next to the feed* of the machine with the edge required to be bound *to the left*; proceed to sew, and then fold back the edge, which will cover the stitches.

TO PUT ON DRESS-BRAID AND SEW ON FACING WITHOUT SHOWING STITCHES.

Insert the braid in binder the same as for ordinary binding; then place the edge of the skirt *next to the feed* of the machine, with the edge to be bound *to the left*; then pass the edge of the facing into the binder so that it will be stitched *over* the skirt, being careful to keep the facing *in the binder*, and the garment or skirt *far enough under the binder* to make a good strong seam; then fold back the facing and binding as in sewing by hand.

A GARMENT MAY BE BOUND AND LACE SEWED ON AT ONE OPERATION.

Place the edge of the lace in the binder with the garment; after binding as in ordinary work, turn or fold the binding back and edge-stitch the same so as to leave lace on the edge. This is a very nice way of putting on narrow bias pieces without basting either edge.



TUCKING.

• The GOODRICH TUCKER is an extra attachment. Retail Price \$2.00

Directions on page 20.