White Sewing Machine Factory, Cleveland, O.

General Offices, 124 & 126 Euclid Ave.

BOOK 6.

DIRECTIONS

FOR . . . . .
USING THE

WHITE SEWING MACHINE

And
Its Attachments.

Manufactured by the

WHITE SEWING MACHINE CO.,
CLEVELAND, O., U. S. A.

DESCRIPTIVE LIST

OF

WHITE SEWING MACHINES.

No. 1. Plain table.

No. 2. Plain table, cover, lock and key and centre drawer.

No. 2½. Plain table with cover, lock and key, center and two other drawers.

No. 3. Fancy cover, drop leaf, centre and two drawers at each end of table.

No. 3 Drop. A finely finished drop head machine with two drawers on each end of table, and large centre drawer.

No. 4. An elegantly finished drop head full cabinet.

No. 6. Fancy cover and drop leaf.

No. 6½. Fancy cover, drop leaf and a nest of two drawers.

No. 7. Is the same as No. 6½ except that it has one drawer on each end of table.

No. 10. Artistically finished cover, drop leaf, centre and three drawers on each end of table.

Rotary B. Tailoring machine with end and large rear sliding leaf, and one drawer at right hand end of table.

Rotary B. 3. Dressmaking machine with cover, end and large rear sliding leaf, large centre drawer and two drawers at each end of table.

ACCESSORIES.

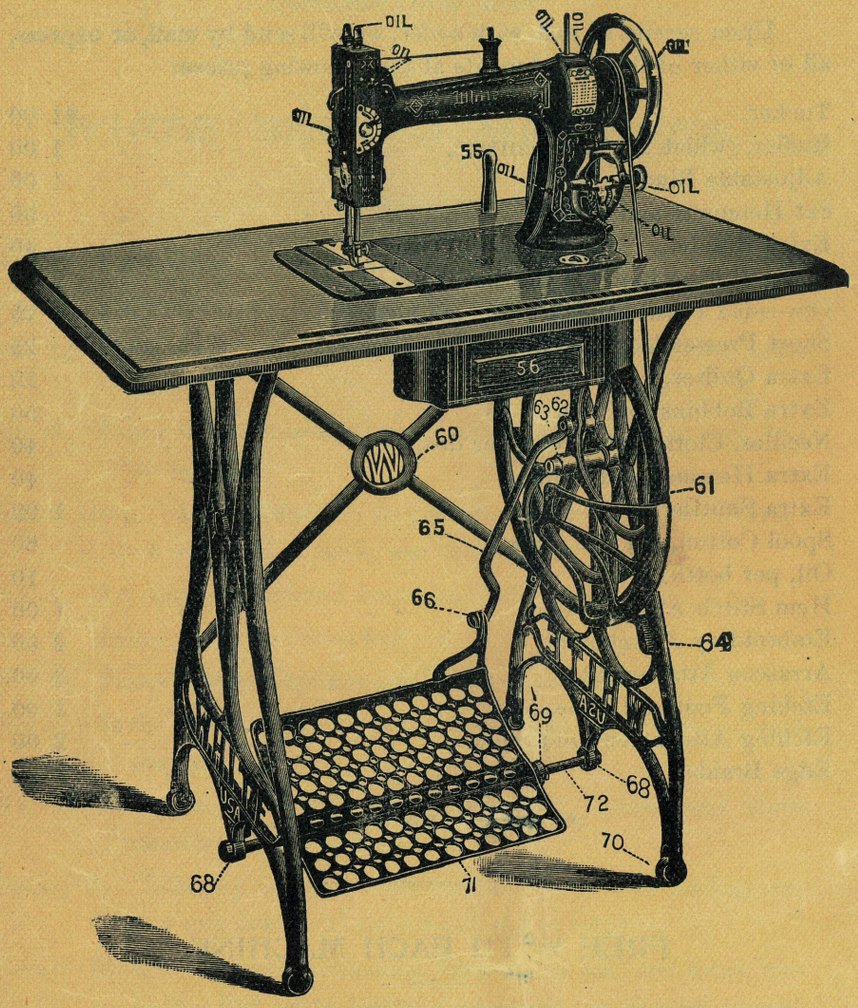
Upon receipt of cash with order, we will send by **mail, or express**, all or either of the Attachments at the following prices:

Tucker,	$1 00
Ruffler, (which is also a Shirrer),	1 00
Adjustable Binder,	1 00
Set Hemmers and Binder,	50
Extra Braider,	40
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
Etching Attachment and Slide,	2 00
Edge Braider,	1 00

WE CAN NOT SEND OIL BY MAIL.

FREE WITH EACH MACHINE.

Tucker, Ruffler and Set of Hemmers, One Hemmer (which is also a Feller), Braider, Quilter, Oil-can filled with Oil, one Screw-driver , Gauge and Screw, six Bobbins and twelve Needles. Directions in English, German, Spanish, Portuguese, French, Bohemian, Swedish, and Norwegian.



☛Do not order parts from this page, but from list on page 13.

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 and cones 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 extraordinarily 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, Ohio, 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.

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 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; loosen the thumb screw and press it to the left to permit the shank of the *needle* to pass up between the clamp and needle bar *as far as it will go*—flat side to the *right*—the *needle* being flattened on one side so it will set itself perfectly, then fasten securely by tightening thumb-screw.

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 for 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.

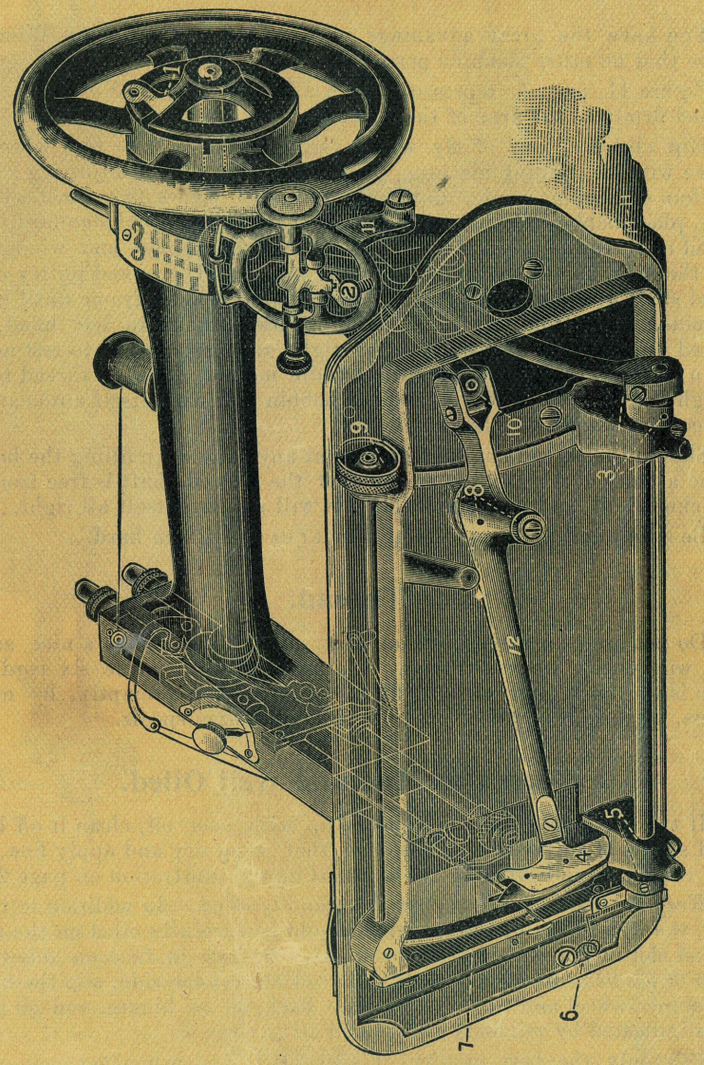
The following index will show the size of needle, thread and silk to be used.

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.

For colored thread use needles one size larger than given in index above.

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 use these numbers to order extra parts from. See page 13 for order list.

No. 4 represents shuttle carrier, No. 6 feed spring, No. 7 feed bar, No. 12 shuttle lever.

To Fill the Bobbin with Thread.

You have the great advantage of our Automatic Bobbin Winder, a feature that no other machine possesses.

Figure 11, page 7, represents the Automatic Bobbin Winder, which is fastened firmly to the arm of the machine.

Slip clutch 1 out of fly wheel (see cut page 7) so that wheel will revolve without running machine, then turn bobbin winder adjusting screw 2 at bottom of bobbin winder until rubber pulley comes in contact with fly wheel, place bobbin in winder, and spool of thread on spool standard, pinch the end of thread between the right hand end of bobbin and winder, and with the left hand pass thread up and over small grooved pulley on the curved shaft at top of winder, then down behind winder frame until it slips into notch at bottom of frame, holding thread taut in left hand, slide grooved pulley on curved shaft to the right, raise spring pad to rest against bobbin; now proceed to wind with treadle motion, allowing thread to pass through the hand to steady it, and the bobbin will wind itself automatically as smooth as a spool of silk.

Should the thread change direction at any time when filling the bobbin, pay no attention to it, except to see that the curved shaft is free from dirt or thickened oil, and in the next layer it will regulate itself all right.

Be sure to oil both spindles of winder or it will run hard.

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.

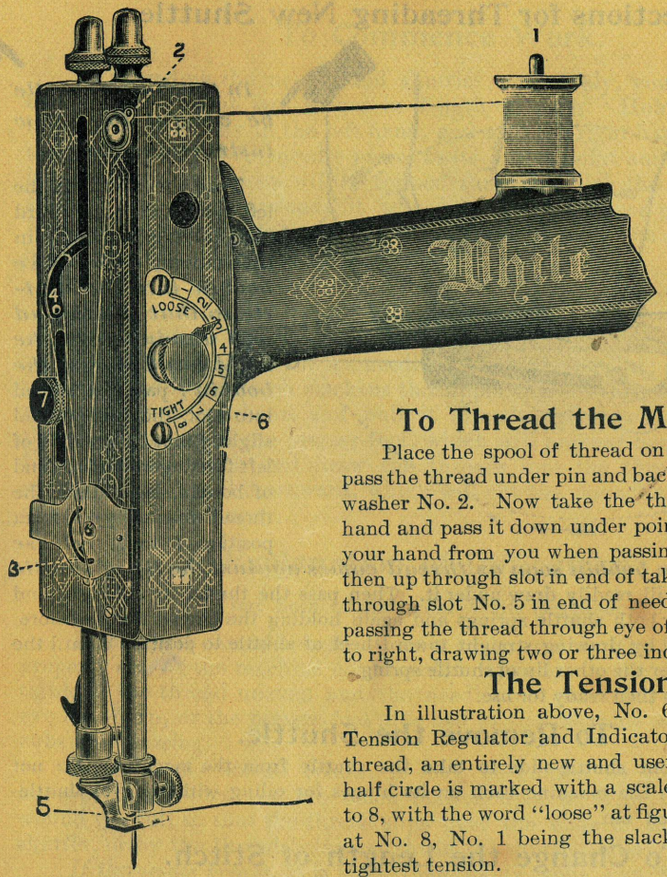
If the machine is dirty or *gummed* up with poor oil, clean it off by the use of spirits of turpentine or kerosene, then wipe dry and apply fine sperm oil in the places indicated by the word *oil* in the illustration on page 2.

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 highest point*. 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 numbers 3, 5, 8 and 10 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).



To Thread the Machine.

Place the spool of thread on standard No. 1; pass the thread under pin and back of check spring washer No. 2. Now take the thread in your left hand and pass it down under point No. 3, moving your hand from you when passing under point 3; then up through slot in end of take-up No. 4; then through slot No. 5 in end of needle bar to needle. passing the thread through eye of needle from left to right, drawing two or three inches through.

The Tension.

In illustration above, No. 6 represents the Tension Regulator and Indicator for the upper thread, an entirely new and useful device. The half circle is marked with a scale running from 1 to 8, with the word "loose" at figure 1 and "tight" at No. 8, No. 1 being the slack and No. 8 the tightest tension.

To Regulate the Tension.

To loosen the tension, turn the thumbscrew on dial No. 6 to the left, which will move the pointer towards figure 1. To tighten it, turn to the right, moving the pointer towards No. 8. By this means the same tension can always be duplicated, thus obviating the necessity of experimental trials, as is the case with other machines. If a tight tension is desired, both upper and under threads must necessarily be tight. If the upper thread is tight and the lower thread loose, the upper thread will be drawn to the top, thus:  If the lower thread is too tight, it will be drawn straight on the bottom of goods, thus:  When you desire the goods to look alike on both sides, and be elastic, balance the tension, thus: 

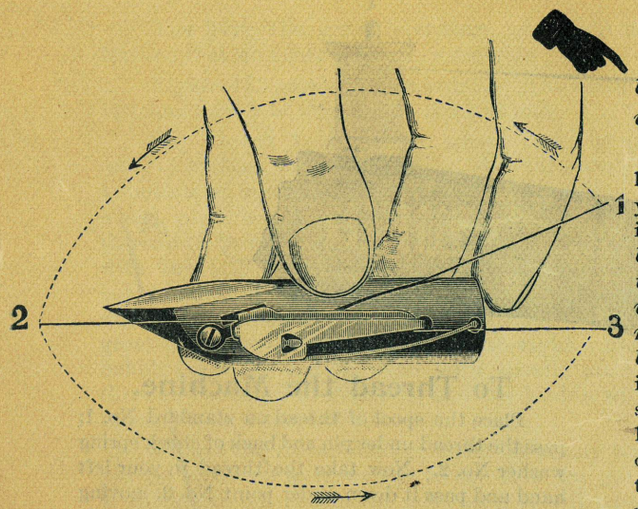
The Tension Releaser.

The tension releaser is operated by the presser bar lifter. By means of it, all tension is taken off the upper thread when the presser foot is raised, and the work can be taken out without pulling the thread down by hand.

PARTICULAR NOTICE.

The tension cannot be regulated when the presser foot is up, because the Releaser is operated by the presser bar lifter.

Directions for Threading New Shuttle.



In threading shuttle be careful to follow instructions closely.

Take the shuttle in the left hand, the point toward you, holding it as shown in illustration; ***drop the bobbin into the shuttle so that the thread will unwind from the right hand side of the bobbin;*** pass the thread into slot, holding thread slightly taut by pressure of left forefinger upon the end of bobbin, now draw the thread toward you from position 1 to 2, ***release the pressure on bobbin soon as thread comes against the lip of shuttle spring*** and it will readily draw under it. Then pass the thread to the right and down, back under both shuttle springs and again holding the thread taut as before, tighten the thread by drawing straight toward heel of shuttle to position 3 until the thread passes under the other lip of shuttle spring.

The shuttle is then ready for use.

To Remove the Shuttle.

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

To Change the Length of Stitch.

No. 9, page 7, represents the STITCH REGULATOR, which will be appreciated at sight, as the most simple and complete device of the kind ever placed upon a sewing machine.

The regulator is located at the right end of machine in front of arm. The round dial is marked with a scale running from 0 to 9, representing the limits of the stitch; No. 0 being the shortest and No. 9 the longest.

To regulate the length of stitch, place your finger on the rough surface of the regulator and move it to the number desired, from you to lengthen, and towards you to shorten the stitch. By this means, the *same length of stitch* can always be duplicated, thus obviating the necessity of experimental trials, as is the case with other machines. The length of stitch should be governed by the size of the thread; the coarser the thread the longer the stitch.

The Vibrator.

No. 7, page 9, represents the Vibrator thumb-screw, which regulates the Vibrator in face plate. To put Vibrator in gear, loosen thumb-screw and drop it to its lowest point *with presser foot down*, and tighten screw again.

If full vibration of presser foot is desired, let the point of needle down *to* goods and put "vibrator in gear," as above directed.

If only a partial vibration of presser foot is desired, let point of needle go down *through* goods and put "vibrator in gear," as above directed.

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 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. Now raise the work and draw the threads into the thread cutter on the presser-bar and pull downward, which will cut the threads the proper length to commence 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.

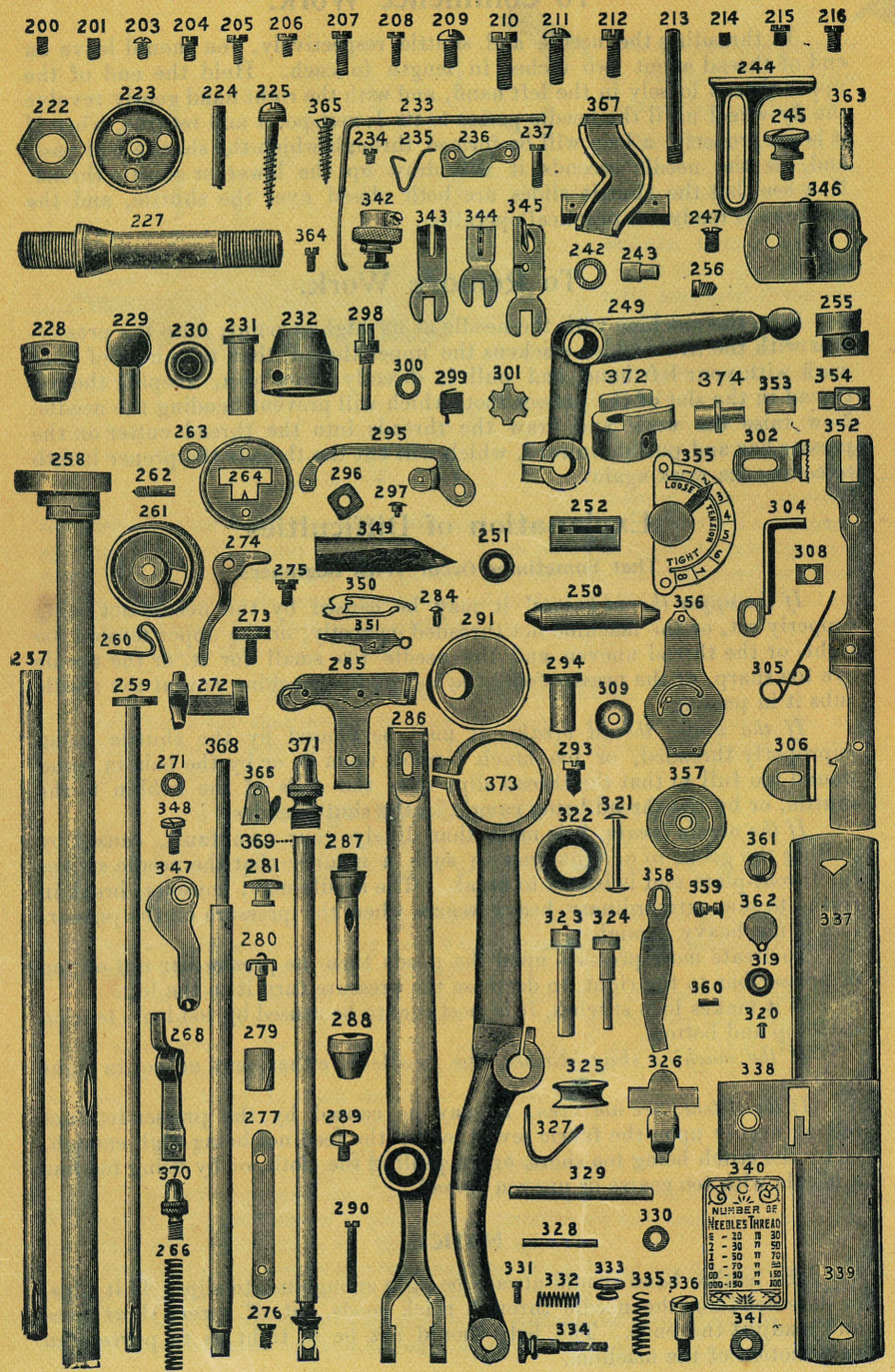
If it makes loop stitches, it is most sure to be caused by too loose tension both top and bottom.

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.



—28—

No.		
200	Take-up screw for needle bar bushing	02
201	Screw to adjust upper end of face plate	02
203	Screw to fasten the following pieces: heart cam to needle bar, 301 to arm, 264 to bed, 340 to arm and 355 to face plate	02
204	Screw to fasten attachment holder on presser bar	02
205	Screw to fasten gib on inside of face	02
206	Screw to fasten feed spring to bed and feed hook to feed bar and feed bracket to bed and shuttle carrier to lever	02
207	Take-up screw on bearing to feed arbor and to middle bearing of eccentric connection and to fasten 294 in elbow lever and to take up bearing on lower end of pitman	03
208	Take-up screw for upper end of 373	02
209	Screw to fasten centre to elbow lever and to fasten stud in treadle and to fasten cone on treadle rod, and to fasten 230 in treadle balance wheel	02
210	Screw to fasten face plate to arm	03
211	Screw to fasten arm to bed plate, and to fasten dress guard and brace to leg of table	02
212	Screw to fasten socket in arm	03
213	Spool standard	05
214	Set screw to shuttle lever cone and to 268	02
215	Screw to needle plate and to fasten feed and 354 to feed bar	02
216	Screw to fasten clutch to upper arbor and to fasten ball in upper end of pitman	02
222	Treadle rod nut	03
223	Stand castor	05
224	Pin in 223	02
225	Screw to fasten swing drawer to table	02
227	Balance wheel stud, with back cone	15
228	Front cone for 227	05
229	Ball in treadle balance wheel	12
230	Socket for 229	10
231	Stud in treadle	06
232	Treadle cone	05
233	Quilter	10
234	Screw to fasten quilter	02
235	Clutch spring	02
236	Clutch latch	02
237	Clutch latch screw	02
242	Heart roller for lower end of 373	05
243	Heart roller stud	10
244	Gauge	05
245	Gauge screw	05
247	Screw to fasten hinge to bed	2
249	Elbow lever	30
250	Centre for 249	10
251	Washer on ball of 249	03
252	Socket for 250	10
255	Feed cam	20
256	Screw to fasten 255 and 372 on lower arbor	02
257	Lower arbor	12
258	Upper arbor	50
259	Stitch regulator shaft	20
260	Friction spring for 259	05
261	Stitch indicator wheel	15
262	Screw to fasten 261 to 259	02
263	Washer to go on 259 before 261	01
264	Stitch indicator washer	05
266	Presser spring	03
268	Presser bar guide	12
271	Presser bar lifter washer	02
272	Vibrator block	10
273	Vibrator thumb screw	05
274	Vibrator lever	06
275	Screw to fasten 274 to end of arm	02
276	Take-up screw in 268	03
277	Gib on inside of face	03
279	Needle bar bushing	06
280	Needle screw and clamp	10
281	Needle screw nut	05
284	Shuttle tension screw	02
285	Shuttle carrier	20

No.		
286	Shuttle lever	30
287	Shuttle lever stud	20
288	Shuttle lever cone	06
289	Screw in end of 287	02
290	Take-up screw for shuttle lever	03
291	Eccentric	40
293	Eccentric screw	02
294	Bearing in middle of 373	10
295	Take-up	12
296	Take-up block	03
297	Take-up rivet	02
298	Take-up stud	10
299	Take-up spring	05
300	Washer on 298	01
301	Washer to adjust take-up spring	02
302	Feed	25
304	Feed hook	15
305	Feed spring	03
306	Feed bracket	10
308	Feed bar block	05
309	Rubber headed tack	02
319	Check spring washer	02
320	Check spring pin	01
321	Bobbin	04
322	Bobbin winder rubber	05
323	Bobin winder main centre	10
324	Bobbin winder spring centre	10
325	Bobbin winder pulley	08
326	Bobbin winder presser pad	08
327	Bobbin winder spring	04
328	Bobbin winder pad pin	01
329	Bobbin winder radius bar	06
330	Radius bar roller	03
331	Radius bar screw	02
332	Spring on 324	02
333	Head on 324	05
334	Screw to adjust bobbin winder to wheel	05
335	Spring on 334	03
336	Screw to fasten bobbin winder to arm	03
337	Rear shuttle slide	10
338	Needle plate	20
339	Front shuttle slide	10
340	Thread number plate	10
341	Washer for all places not mentioned	01
342	Attachment holder complete	40
343	Presser foot	25
344	Braider	40
345	Hemmer and feller	40
346	Hinge	06
347	Presser bar lifter and tension releaser cam	10
348	Presser bar lifter screw	02
349	Shuttle, complete	1 00
350	Under shuttle tension spring	05
351	Upper shuttle tension spring	05
352	Feed bar	25
353	Feed bar felt	01
354	Feed bar felt clamp	02
355	Tension indicator complete	50
356	Tension plate	30
357	Tension disk	03
358	Tension spring on inside of face	05
359	Screw and nut to connect 356 and 358	06
360	Guide pin in slot of tension plate	01
361	Check spring	02
362	Check spring plate	02
363	Screw to adjust lower end of face plate	02
364	Set screw to 228	02
365	Screw to fasten hinge to table	02
366	Thread cutter	02
367	Heart cam	25
368	Presser bar	12
369	Needle bar	25
370	Presser screw	10
371	Needle bar cap	10
372	Crank on rear end of feed arbor	15
373	Eccentric connection	40
374	Roller stud for lower end of eccentric connection	10

SPECIAL NOTICE.—Always order Parts by these Numbers, and send Cash with orders for Parts. In ordering Parts or Needles, BE SURE TO MENTION PLATE NUMBER OF MACHINE.

—13—

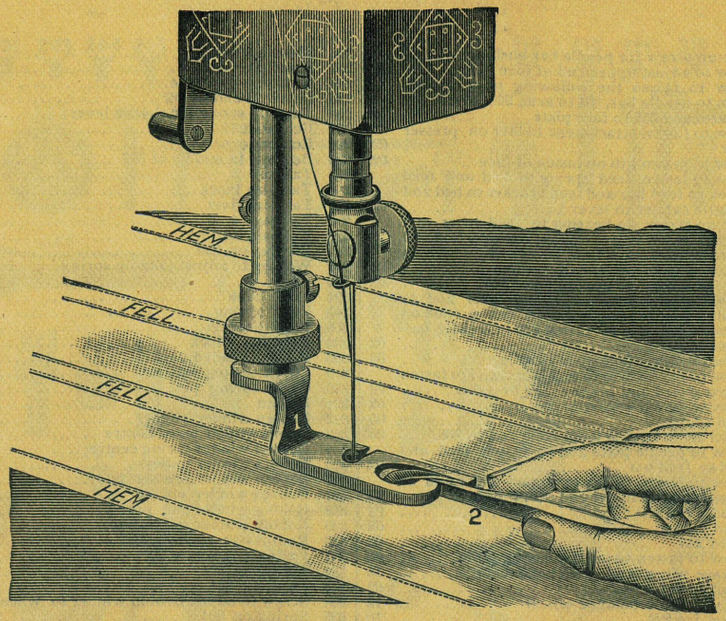


Fig. 15.

DIRECTIONS FOR USING THE ATTACHMENTS.

Hemming.

Raise the needle to its highest point, remove the presser foot and in its place attach the hemmer. Trim the edge of cloth on a curve and insert in hemmer far enough to permit the needle to enter the cloth at its extreme edge, (See fig. 2 above), 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 in ordinary hemming.

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

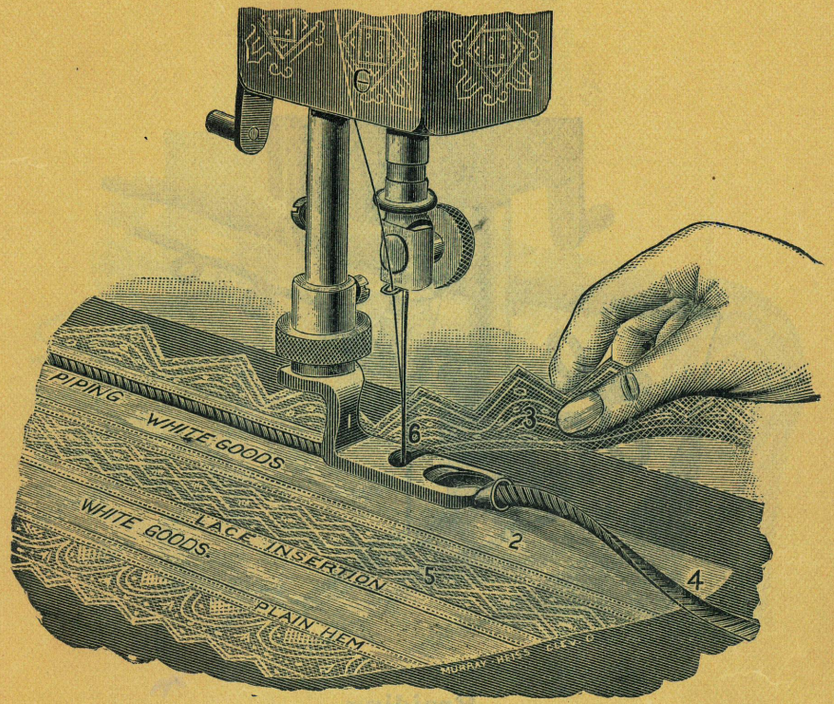


Fig. 14.

Hemming and Sewing on Lace—One Operation.

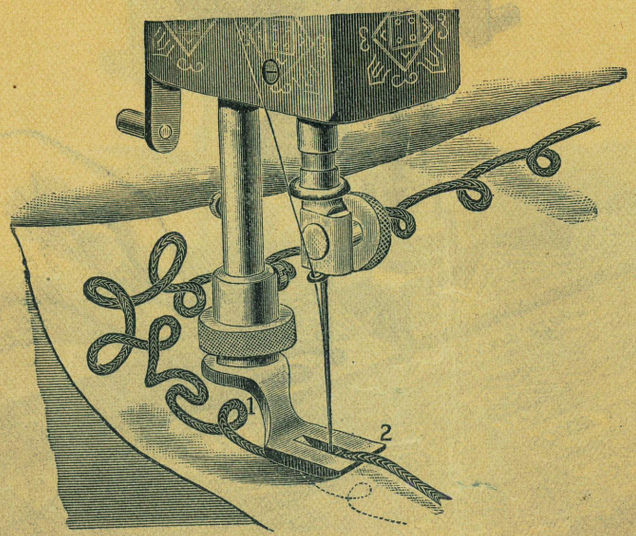
Our hemmer and feller which accompanies each machine, is now made with a slot—6. (See illustration above.) In this slot, place the edge of the lace and sew it on at the same time as in ordinary hemming.

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 loosely 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 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.



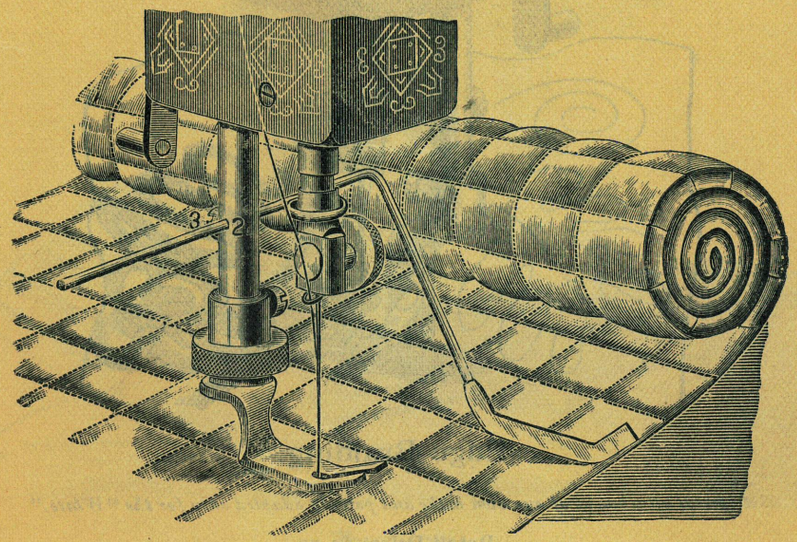
Braiding.

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, following the design.

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.



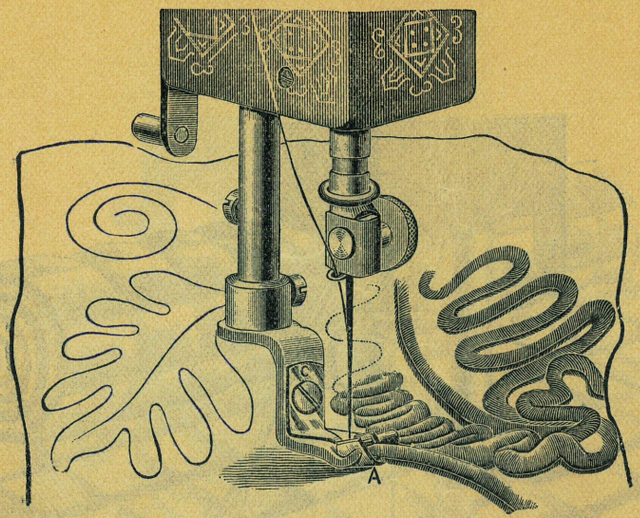
Quilting.

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 follow the crease; quilt the remainder by keeping the guide in a line and over the last seam 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.



Edge Braiding.

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

Retail Price, $1.00.

To adjust the braider for the size braid to be used, loosen the screw holding the adjustable piece C, pass the braid through hole A, then drop piece C and fasten with the screw, so that the braid will just pass through freely.

This can be done best before attaching to the presser bar.

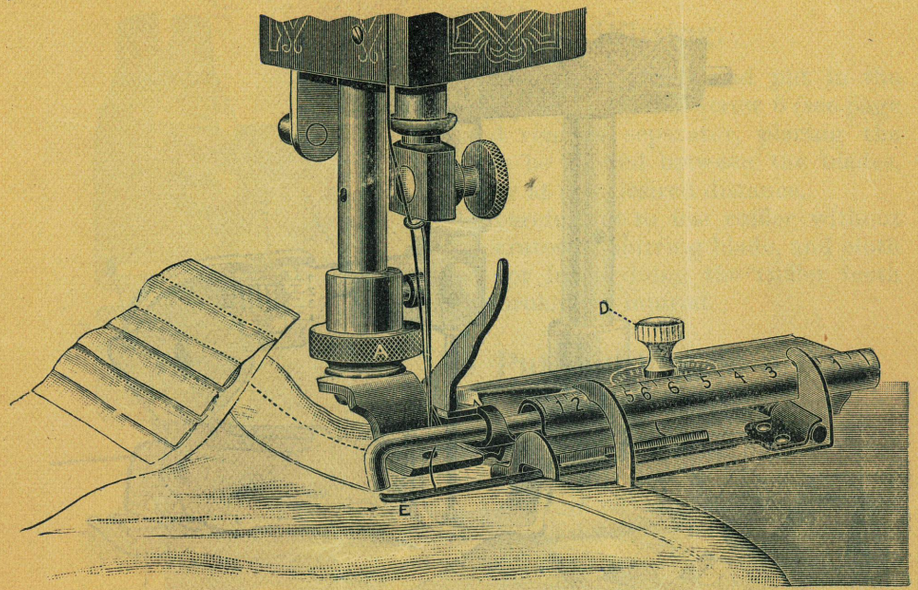
Now remove the presser foot and attach the braider to the presser bar.

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.*

To put the braid into the braider, first raise the foot, then pass the end of braid through the hole A on the braider and draw it under the foot and back of the needle; then place the stamped pattern under the braider and proceed to sew, following the design.

Should the braid lay flat, loosen the screw that holds the braider on the presser bar, and move the braider a little to the left, the sewing will then come nearer the edge of braid, and bring it up edge wise on the pattern.

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.



Tucking.

Loosen thumb-screw A and remove presser foot, adjusting the tucker on holder, after which tighten A.

To regulate the size of tuck, loosen screw D and place gauge for any desired width, moving to the right for wide and to the left for narrow tuck.

To regulate the space between tucks, loosen screw D and move the marker to the left for wide space and to the right for narrow.

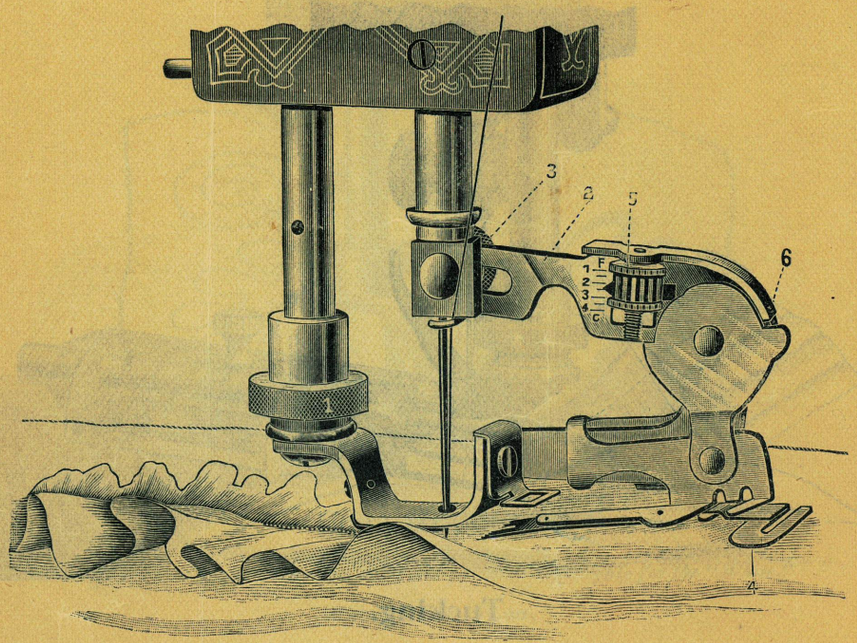
The figures on the left of cap show the width of tuck, and those on the right the width of space.

By adjusting gauge and marker so that the indicators will point to the same figures, the tucks will meet.

TO COMMENCE TUCKING, fold the cloth for the first tuck and place it beneath the creaser and lip E, with folded edge against the guide; drop the presser foot and sew as usual.

The edge of the last tuck made should always pass under the spur placed immediately in front of the marking blade. This will prevent the finished tuck from passing over the marker and will greatly assist in guiding the work.

To tuck without marking, throw the lever up.



Ruffling.

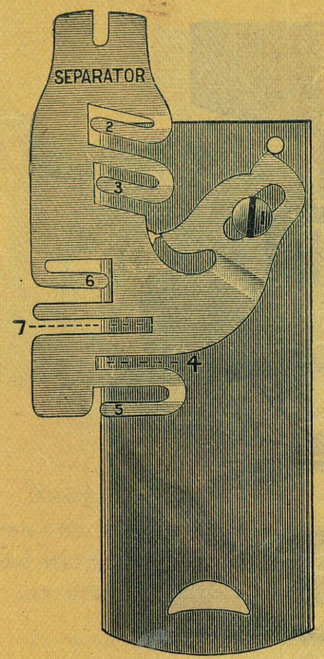
Loosen thumb-screw 1, remove presser foot and place the ruffler in holder, at the same time setting the ruffler-arm-fork 2 on needle clamp screw 3; then tighten screw 1.

The goods to be ruffled should be placed between the springs and then in gauge 4. Gauge 4 should be adjusted to the right or left to get the desired distance from the edge. The goods will guide itself.

To make a fine ruffle, shorten stitch of machine and move adjusting nut 5 upwards.

For pleating, make a longer stitch, and move nut 5 downward. If a band is required, place it below both springs.

If two bands are wanted, place the second band above both springs, drawing cloth back under the needle.



Shirring.

Remove shuttle slide and put in the shirring plate. Loosen screw 6 (see page 20) and remove separator, placing the goods to be shirred between the blades, and shirr at any desired distance.

Be careful not to use ruffler without the separator or shirring blade, and cloth above, for in so doing the ruffler teeth will be broken or injured.

To Put Ruffling on a Band with Piping.

Take striped calico or plain colored goods cut on the bias in strips one-half inch wide; fold in the center, pressing the folded edges down. Place lip 2 between the bias fold, then take the band and turn down one edge a quarter of an inch, placing lip 3 between the folded edge, having both ends under separator and on feed of machine. Then place piping and band in slot 4, bringing the piping up and over lip 5, with the ruffling on left and between the springs in the same manner as plain ruffling; then proceed to sew.

The ruffling band and piping will guide properly without the aid of the operator.

To get the stitching the same distance from the edge of band, move separator right or left.

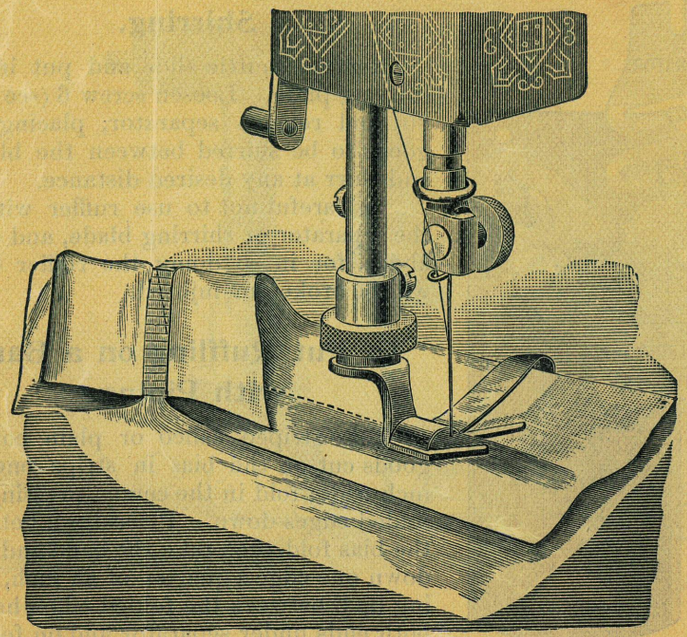
To Make Heavy Pleating.

Cut Lonsdale cambric in strips one inch wide lengthwise of the goods, fold in the center and press the folded edge down smooth. Adjust the goods with folded edge to the left and between the springs or ruffler. Then in gauge 4 (see page 20) set as long a stitch as can be made; turn adjusting nut 5 to No. 4 on gauge, placing the band on shirring blade lip 3 in the same manner as when using piping.

This will make a very large sized pleat and be stitched on the band.

To Make Scallop Ruffling.

Place the goods in ruffler just the same as for making large pleats, except to remove gauge 4 from ruffler and shorten the stitch of machine. While sewing, move the goods to the right and left alternately and far enough to make the scallops of desired depth. Scallops can be made of uniform length by counting the same number of stitches between each alternate movement to the right or left.



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 foo , 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 1½ 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, turning the work over and far enough to the left so that the edge of the foot will pass over the last line of stitching. This will give you the proper width of band.

Coat Binding.

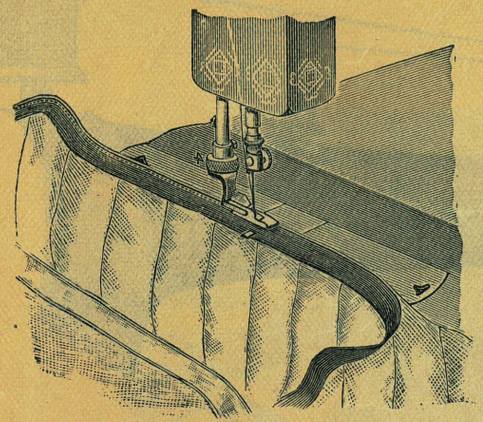


Fig 5.

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 then 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.

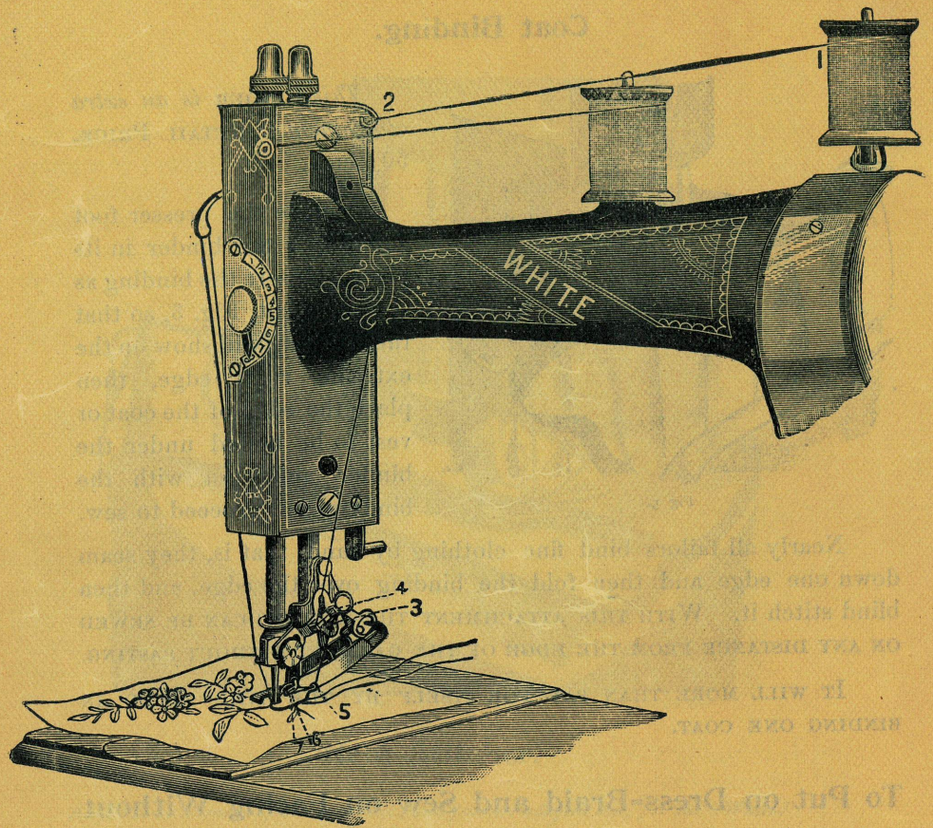
IT WILL MORE THAN PAY FOR ITSELF BY THE TIME SAVED IN BINDING ONE COAT.

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 edgestitch 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.



Directions for Using the White Embroiderer.

First remove the presser-foot of the machine and collar and put the Embroiderer in its place.

Adjust the Embroiderer so that the needle will not touch the looper when the machine is in motion.

Place the wire thread guide, No. 2, on presser-screw, as shown in cut.

Put the tension device, (which is partly shown on lower end of spool, No. 1,) inside the Embroidery spool and put it on the back spool standard.

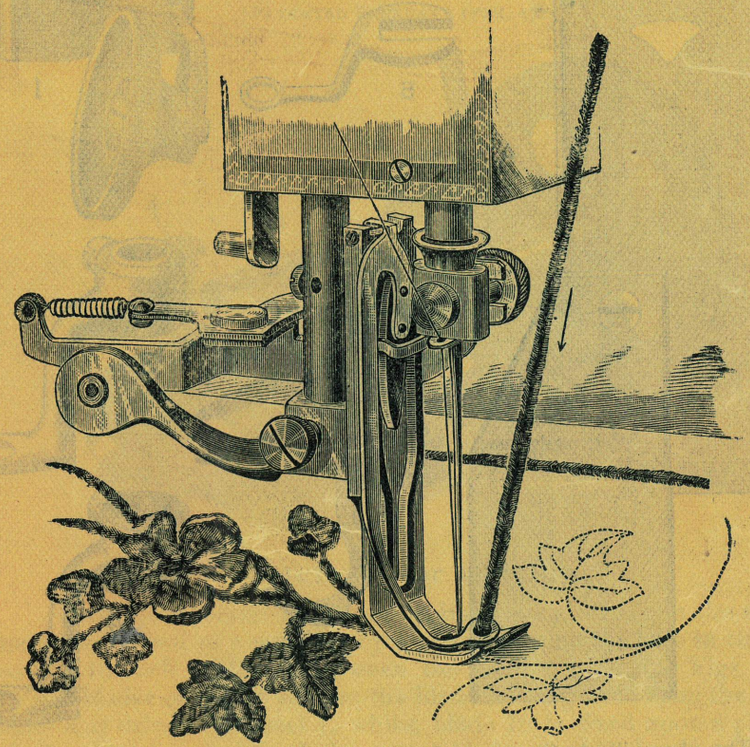
The thread for the machine needle should be put on the middle standard and the machine threaded up in the usual way.

The Embroidery thread is first put through thread guide, No. 2, then down back of the arm, then through hole No. 3 and 4, from front to back, then through hole No. 5 from the back side.

To thread the looper turn the machine slowly until the needle is part way down and until the looper turns about half way over, then thread through small hole No. 6, from right to left, and hole No. 7 from left to right.

The tension of Embroidery thread is regulated by pressing the spool, No. 1, up or down on the tension device and but very little is ever needed.

The Embroiderer should not be allowed to get dry or it will catch and not work ; care shoul ' e taken in oiling, however, not to use too much.



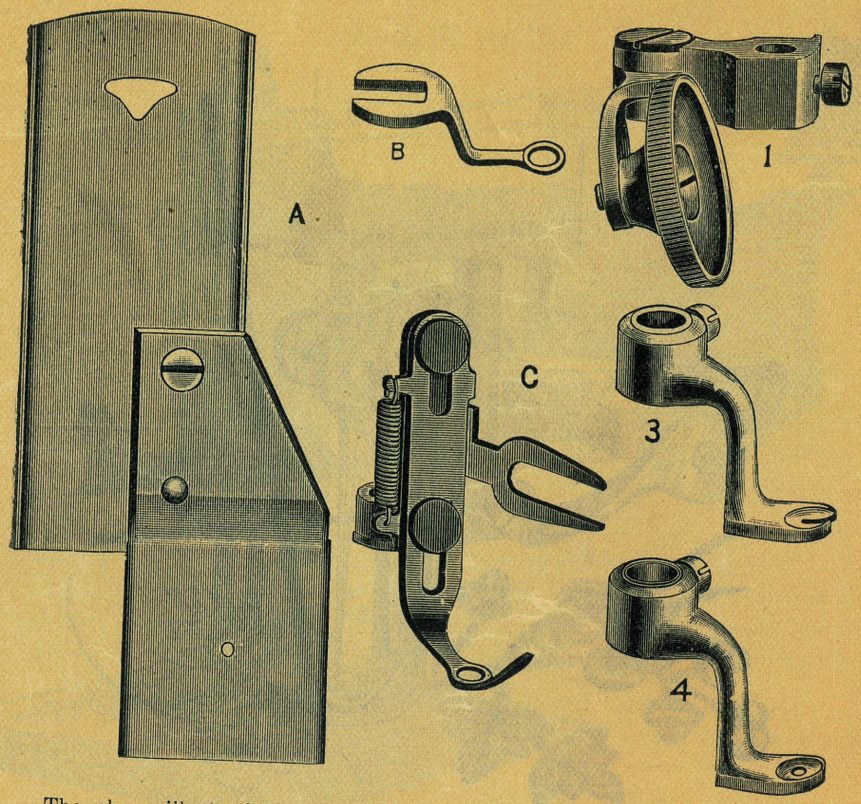
To Adjust and Thread the Arrasene Embroidery Attachment.

First remove the presser foot and collar from the presser-bar. When the needle bar is half way down, raise the presser-bar and with the left hand place the attachment in position, at the same time adjusting the fork of the attachment over the needle-screw. Tighten the screw in attachment firmly to presser-bar.

Have the attachment set so the needle will pass directly in center of opening of foot of attachment.

Thread the embroiderer eyelet with any kind of embroidery material, passing the material threaded back and under the foot of attachment so as to allow the stitch of the machine to fasten the material. Use a long stitch in doing this work.

The Vibrator should be used with this attachment. For its adjustment see page 10.



The above illustrations are of special attachments for the WHITE SEWING MACHINE, as follows:

	RETAIL PRICES.
A—Etching plate	$ .60
B—Etching foot	.40
C—Etching attachment	2.00
1—Roller presser for leather work	2.00
3—Special foot for glove work	.50
4—Special foot for glove work	.50

INSTRUCTIONS.

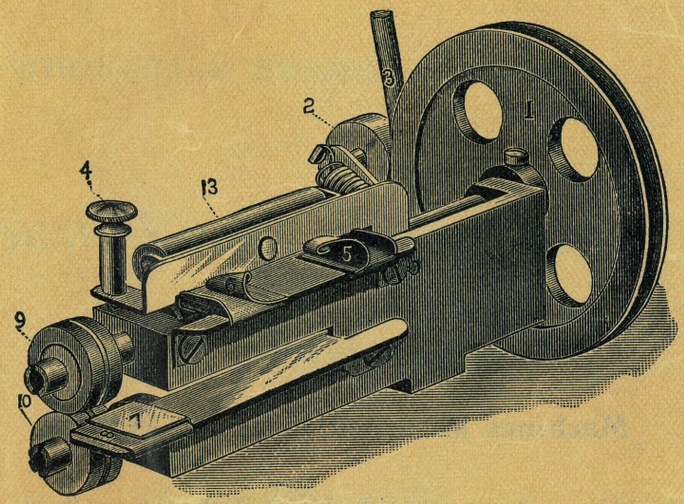
The Etching plate A, is used by removing the front slide of the machine and placing it in its place which, you will observe, will cover the feed, which is essential in etching, so that the operators may move the work in any direction. Etching foot B is used also in doing this kind of work, and should take the place of the regular presser foot. Raise the presser bar so the foot will allow the goods to pass freely under it; then press down and tighten vibrator screw on face plate.

After you have placed the Etching foot and plate in correct positions, the material upon which the etching is to be done should be placed in an embroidery hoop firmly—pattern should be clearly stamped, then proceed to sew, following pattern closely in form and color. Etching is the simplest of all Fancy Machine work, but taste, practice and pattern are needed. Keep your work firmly in the embroidery hoop, work carefully, keeping a uniform stitch, which is regulated solely by the movement of the hands. Machine should be run rapidly so as to admit of moving the goods without drawing needle out of the plate.

Kensington and Roman embroidery, outlining, couching, feather stitching and drawn work are all done in this manner.

ROTARY CUTTER AND SELF-FOLDING ATTACHMENT.

[PATENTED FEBRUARY 17TH, 1880.]



Directions for Cutting.

Turn the machine head back on its hinges and fasten the attachment to the bed of a machine by a screw through the hole in the bed, so that the belt will pass between the wheels 1 and 2. Figs. 9 and 10 are blades of rotary shears; the blade 9 being fixed upon the upper shaft and driven by wheel 1, whilst blade 10 is fixed upon a parallel shaft. Upon each side of the upper blade are placed rubber rollers, which, in revolving, act as feeds to carry the goods to the cutters.

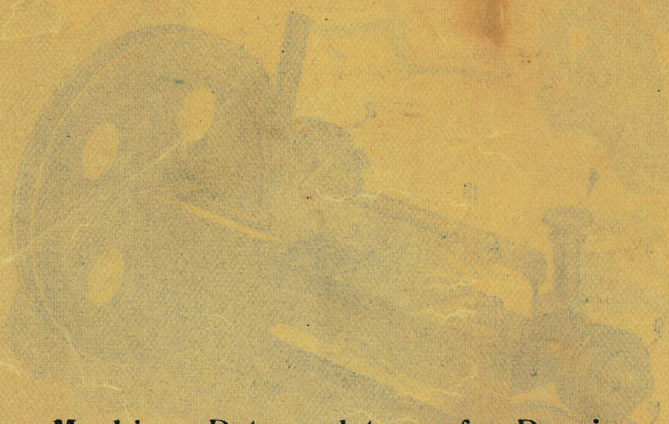
Figs. 7 and 8 represent two plates between which the fabric is passed to the cutters, being a guide for the goods passing between them, and they can be adjusted to the right or left so as to cut any desired width of bias trimming.

Directions for Folding.

Fig. 13 represents a roller; Figs. 5 and 6 are guides, adjustable to the right and left, through which the strips of bias goods are passed into and between the rollers, whereby the edges are turned in upon each other and are pressed and retained in this folded condition; being thus prepared, the fabric is ready to be used as trimming or otherwise. Pulley wheel 2 revolves upon the end of a lever pivoted to the iron frame, which lever may be drawn towards or pushed from the operator so that it will stop or operate the cutter.

By using one of the guides 5 or 6, a narrow fold can be turned; which can be used for *piping*.

To facilitate repairs or replacement, the cutters 9 and 10 with the feeding rollers on each side are removable by taking off the nuts which screw on the ends of the shafts.



Machines Returned to us for Repairs

Should have the name and address of the shipper inside of the box, and the express or freight charges *prepaid.*

In addition to putting the address in the box, we want the shipper to write and mail us a letter *upon the same day* he sends the machine, and inform us how and by what line he ships; also write full particulars as to the trouble with the machine, and give us the *plate number on the shuttle race slide.*

Be sure and give explicit directions how and where to return the machine.

WHOLESALE BRANCH HOUSES:

New York Boston

San Francisco

RETAIL BRANCH HOUSES:

NEW YORK
PHILADELPHIA
BOSTON
BUFFALO
CINCINNATI
ALBANY
CHICAGO
PITTSBURG
KANSAS CITY
MINNEAPOLIS
COLUMBUS
ROCHESTER
DETROIT