

White Sewing Machines.



- No. 1. Plain Table.
- No. 2. Plain Table, with Cover, Lock and Key.
- No. 3. Fancy Cover, Drop Leaf, 2 Drawers each end of Table.
- No. 5. Fancy Cover, Full Cabinet Case.
- No. 6. Fancy Cover and Drop Leaf.
- No. 61. Fancy Cover, Drop Leaf, 1 Nest of 2 Drawers.
- No. 9. Skeleton Cabinet and Nest of Drawers on one side, and Shelves on the other.
- No. 10. Artistically finished Cover, Drop Leaf, 3 Drawers each end of Table, with Drop Knobs on Drawers.
- No. 11. Fancy Cover, Drop Leaf, 3 Drawers each end of Table.
- No 12. Tailoring Machine, Plain Table.
- Styles Nos. 3, 6, 62, 10 and 11 are trimmed with Plated Wheels.
- Style No. 5 is inlaid with Pearl on Bed-plate, and has Plated Wheel.
- Style No. 9 is supplied with Plated Fly-wheels and Face-plate.
- Style No. 1 has Plain Black Japanned Wheel.
- Styles Nos. 2 and 12 are highly ornamented with Nickel Wheels.
- Style No. 2 has Plain Box Cover.

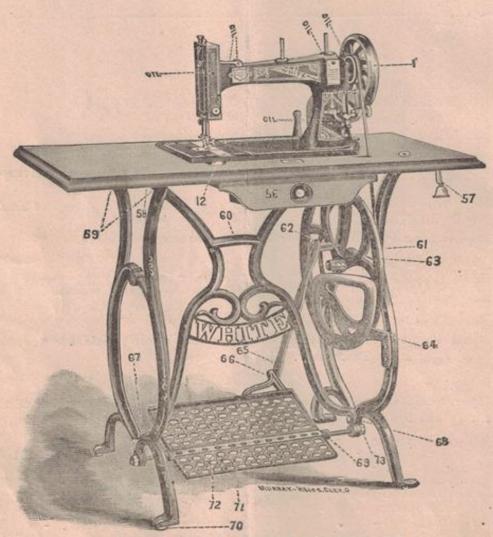
ACCESSORIES.

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

Tucker, 81 50 Short Presser-foot for	Glove-	
Ruffler, 1 50 makers' use,	- \$1 00	i
Corner, 1 00 Extra Quiller,	- 40	
Adjustable Binder, - 1 00 Extra Bobbins, per doz.	- 50	
Set Hemmers and Binder, 1 00 Needles, Cloth or Leath Darning attachment, 1 00 doz,	er, per	
	- 40	
	er, - 75	
One sided Presser-foot for Tail- Spool Cotton, per doz. spool	- 1 00	
ors' use, 1 00 Oil, per bottle,	pools, 65 - 10	

WE CAN NOT SEND OIL BY MAIL. FREE WITH EACH MACHINE.

One Hemmer (which is also a Feller), Braider, Quilter, Castors, Oil-can filled with Oil, Oil-can holder, Screw-driver, Gauge and Screw, six Bobbins, tweive Needles, and threaded ready for use. Directions in English, German, Spanish and French.



FOR DESCRIPTION OF NUMBERS, SEE NEXT PAGE.

No.

- 1 Fly Wheel of Machine.
- 2 Bobbin-Winder Spool Standard.
- 3 Spool Standard.
- 4 Needle Bar.
- 5 Presser Bar and Nut.
- 6 Take-up.
- 7 Thread Guide.
- 8 Tension Check-Spring.
- 9 Tension and Nut.
- 10 Presser Bar Lifter.
- 11 Inside Slide, to steady Presser Bar.
- 12 Stitch Regulator.
- 13 Heart on Needle Bar.
- 14 Disc for driving Heart.
- 15 Shuttle.
- 16 Needle Hole in 41.
- 17 Shuttle Lever.
- 18 Shuttle Lever Stud.
- 19 Screw to secure Cone on 18.
- 20 Lug on end of Feed Arbor.
- 21 Screw to secure Feed Lever to Link on Lug 20.
- 22 Lever Arm and Ball to give motion to 17.
- 23 Screw to take up wear on 17.
- 24 and 25 Screws to take up wear on 43.
- 26 Hardened Centers upon which the Elbow Lever or Bill Crank oscillates.
- 27 Vibrator.
- 28 Automatic Bobbin Winder.
- 29 Main Shaft.
- 30 Large Crank connection.
- \$1 Screw to take wear on same.
- 32 Feed Lever.
- 33 Bed of Machine.
- 34 Arm of Machine.
- 35 Screw to secure Fly Wheel to Main Shaft.

- No.
- 36 Feed Bar.
- 37 Space in which Slides cover Shuttle.
- 38 Presser Bar Spiral Spring.
- 39 Shuttle Carrier.
- 40 Feed Spring.
- 41 Throat Plate.
- 42 Feed Arbor.
- 43 Take-up Cam.
- 44 Feed Cam.
- 45 Feed Cam Screw.
- 51 Bushing on Top of Face Plate.
- 52 Bushing on Bottom of Face Plate.
- 55 Wooden Pin in Table for Machine to rest on when turned back for oiling.
- 56 Drawer in Table.
- 57 Oil Can Holder.
- 58 Screw to secure Brace to upper part of left Leg.
- 59 Screws to secure Leg to Table.
- 60 Brace.
- 61 Balance Wheel.
- 62 Screw to secure Pitman to Balance Wheel.
- 63. Stud and Collar to secure Balance
 Wheel to right hand Leg.
- 64 Screw to secure Shield over Balance Wheel.
- 65 Pitman.
- 66 Screws to secure Pitman to Treadle.
- 67 and 72 Screws to secure Brace to Legs.
- 68 and 68 Nuts on end of Treadle Rod.
- 69 and 69 Cones to secure Treadle on 72.
- 70 Casters on right hand Leg.
- 71 Treadle.
- 72 Treadle Rod.
- 73 Tension Nut.



WHITE * SEWING * MACHINE

THE BEST IN THE WORLD.

MANUFACTURED BY THE

WHITE SEWING MACHINE COMPANY, CLEVELAND, OHIO, U.S. A.

T 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.

TO THE JOBBER AND EXPORT TRADE.

OR 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.

In the second place, attach the stud 63 by screwing it securely to the right hand leg, then slide upon the stud the balance-wheel, and then screw the washer or collar on the stud, so it will hold the balance-wheel in position: THIS WASHER OR COLLAR SHOULD NOT BE "SET UP" TOO TIGHT, NOR TOO LOOSE, BUT SO AS TO PERMIT THE WHEEL TO REVOLVE TRUE AND WITH BUT LITTLE FRICTION. The balance-wheel has a slotted hub by which any lost motion or wear can be readily taken up, and thereby relieve it from irregular motion and unnecessary noise. Next, attach the pitman 65 to the balance-wheel, then the shield to the right hand leg at 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 con-

nected 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

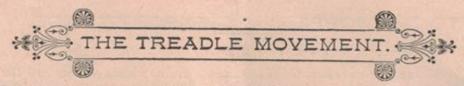
in line.

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 the front part 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 and Hinge Rubbers.



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 arises 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.

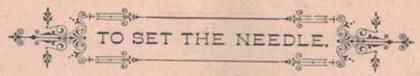
Having become perfectly familiar with the treadle movement, now replace the belt and connect the fly wheel of the machine with the balance wheel of the stand; raise the presser foot with the lever, remove the slides over the shuttle and take out the shuttle; then start the fly wheel of the machine towards 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.



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 extraordinarily 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.



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.

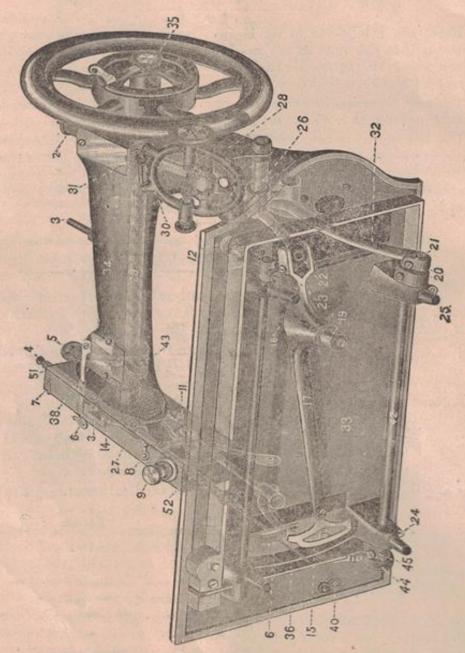
A No. 1 needle may be used for all kinds of ordinary family sewing, where thread from numbers 50 to 80 is used; there is seldom a necessity of using a coarser cotton than No. 30, because every stitch made by a sewing machine is just double as strong as one made by hand. In general sewing use the same 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 90 to 150	000)	00
70 to 90 50 to 70	0 A & B	0
30 to 50	C	2
20 to 30 8 to 20	E & F	3

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.
FOR DESCRIPTION, SEE PAGE 5.

TO FILL THE BOBBIN WITH THREAD.

NEVER USE GLAZED THREAD ON THE BOBBIN.

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

Figure 28 represents the Automatic Bobbin Winder, which is fastened

firmly to the arm of the machine.

Place the spool of thread on spool standard No. 1 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 turn the bobbin winder, adjusting screw until the bobbin winder pulley (rubber) shall come against the fly-wheel. Wind the thread a few turns around the bobbin; then pass the thread up and over the small pulley on the curved shaft at top of winder; then down and through the slot at the bottom of bobbin winder frame; steady the thread with the hand, 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.

THREAD.

Do not use poor thread. You must not expect to make a nice, smooth stitch with cheap, uneven thread. Clark'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 4.

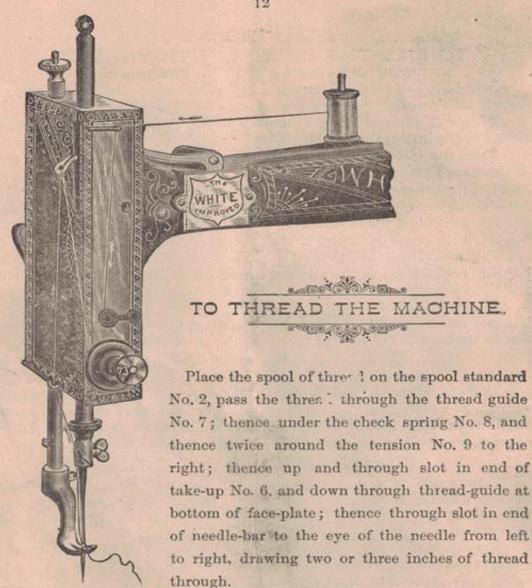
Keep the inside rorking parts thoroughly oiled. In addition to the oil holes, the upper part of the machine should be carefully oiled on the needle-bar; also the bearings of the bobbin winder should be kept constantly oiled. To oil the under side, slip the belt off the balance-wheel and turn the machine back on its hinges, and oil all the places indicated

by the numbers 19, 20, 22, 44, and on lower arbor bearings.

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-rod cones at 69 and upon the balance-wheel wheel stud at 63; and upon the pitman connections at 62-67.



THE TENSION.

The tension on the upper thread is controlled by the tension nut No. 73, shown on face of machine; by turning it to the right tightens the tension on upper thread, by turning it to the left loosens it. 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

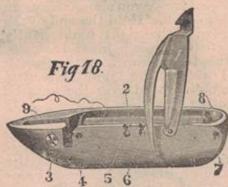
will be drawn to the top, thus, If the lower thread is too

tight, it will be drawn straight on the bottom of goods, thus,

In sewing all cotton and fine linen goods, avoid a tight tension as much as possible, to prevent fullness after having been washed. When you desire the goods to look alike on both sides and be elastic, balance the

tensions, thus

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 11

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 Change the Length of Stitch

No. 12 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 oval dial is marked with a scale running from 0 to 4, representing the limits of the stitch; No. 0 being the shortest, and No. 4 the longest.

To regulate the length of stitch, turn thumb-screw a very little to the left to loosen, and move pointer at left of thumb-screw to place desired, then tighten again. 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 YIBRATOR.

No. 27 represents the Vibrator, which is in the face of machine and is regulated by thumb-screw in front of face plate.

To put Vibrator in gear, loosen thumb-serew and drop it to its lowest point and tighten screw again.

If full vibration of presser 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 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 of 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; slacken the upper thread by drawing about three inches from the top spool, then take hold of your work and pull it directly from you, keeping the top thread in the slot of the pressure-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 pressure-bar nut 5

to the right; to decrease the pressure turn it to the left.

If the machine skips stitches, the needle is either bent or the long

groove is not exactly to the left.

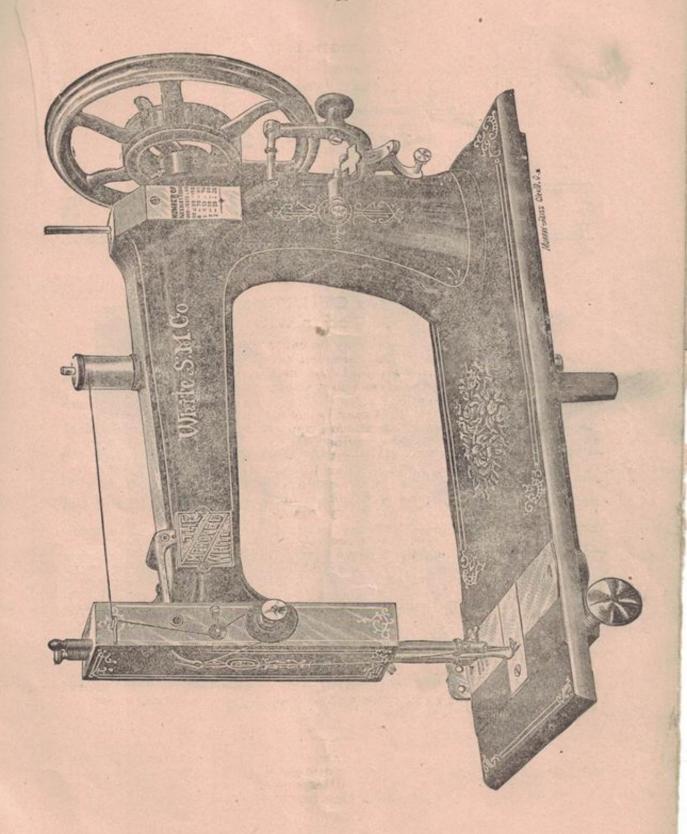
If the stitches are not even, it may be caused by the presser-foot not resting evenly upon the fabric sewed, or by the feed not being high enough, or by the stitch being too short, or by pulling the cloth, or by using too fine a needle with too coarse or uneven thread.

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.

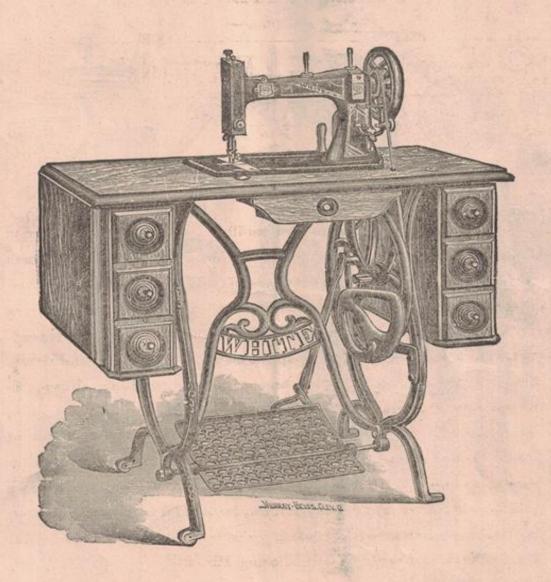
FREE WITH EACH MACHINE.

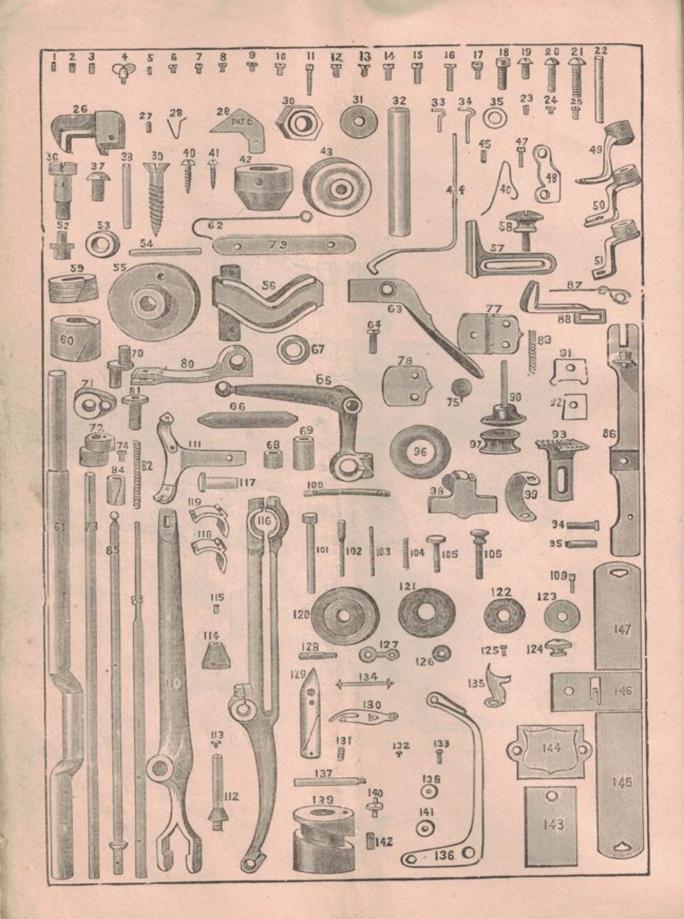
One hemmer, (which is also the feller), one braider, one quilter, one oil can filled with oil, one screw driver, one gauge and screw, one shuttle in the machine, six bobbins, twelve needles, one shuttle tension screw driver, and one spool of thread on machine ready for use, and one copy of directions.



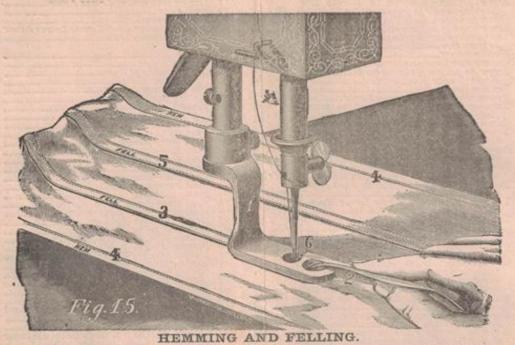


On the preceding page we give an illustration of the No. 12 White or Tailoring Machine, which is designed to meet the wants of purchasers who desire a larger machine than the Family White. In mechanical construction and finish, it embodies the same principles that have given the White Family Machine its wide-spread popularity. It is the acme of perfection, combining in its make-up the elements of a model tailoring and perfect family machine—the attachments for the one being alike applicable for the other; and the favor with which it is received by the tailoring trade, the manufacturers of all kinds of fabrics, and by that class of people who are compelled by circumstances to make work-shops of their homes, surpasses our fondest expectations. Its light-running and noiseless qualities are keenly appreciated, and the demand for our No. 12 or Tailoring Machine is constantly increasing. The instructions for threading the Pamily White will apply to our Tailoring Machine.

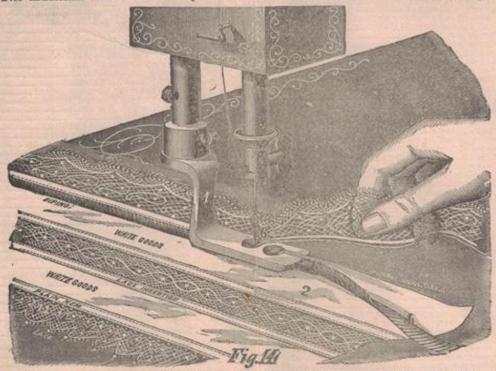




No.	
1 Screw, Take-up Screw in Needle Bar Bushing, and Set Screw in No. 71	No.
Screw to adjust Face Plate on inside. 03	71 Lug on rear end of Lower Arbor 20 72 Feed Cam 36
S Screw to adjust lower and on inside 03	72 Feed Cam 20 15 See 20 20 20 20 20 20 20 20 20 20 20 20 20
er from the Shattle Hearer to, or meth-	74 Screw to fasten Feed Cam to Lower Arbor 63
er from the Shuttle	76 TOTAL MODELLA LACE
6 Screw to fasten Take Take Spring Screw. 02	77 Hinge 78 Hinge Rubber 10
Heart Cam to Needlan to No. 13/ and	79 Gib on inside of Processing Ob
8 Presser Foot and II	80 Presser Bar Guide 10 81 Presser Screw 20
9 Take-up Screw on No. 80, and to fasten Name and Thread Plates to Arm	82 Presser Spring 20
10 Screw to fasten Gib on inside of face	83 Presser Bar, 05 84 Needle Bar Bushing 25
11 Take-up Sergur on miside of face 03	80 Needle Rar
12 Screw to fasten Food Service to D. J. O.	86 Feed Bar. 50 87 Feed Bar Spring 50
13 Screw to fasten Historica to Feed Bar	88 Feed Hook 05
No. 31 to Releases Who Bed, and Washer	89 Feed Screw Spring 25 90 Feed Screw 05
14 Take-up Screw on bearings to Feed Arbor No. 73	1 Pl Feed Rar France Cl. 12 Planter 20
15 Take up Scrows on Fibour 7 03	92 Feed Bar—Rear Guide Plate
16 Take un Samuel francisco I 10 II 10 III III III III III III III	94 Feed Rar Front W. L. 40
16 Take up Serew for upper end of Crank Con- nection No. 116	96 Bobbin Window D. L. Britan B. 18
nection No. 116	1 9/ Bobbin Windan D 11
18 Screw to factor Day VI	100 Bobbin Window D. 1 C. American M.
Take-un Sessur on Dutard to Inble Leg,	1 100 Bobbin Window D. C. Pring.
to hold Contract Distance Wheel, and	101 Bobbin Winder Main Centre 10 102 Bobbin Winder Spring Centre 10
21 Scrow to faster Dim to Bed Plate 03	1 103 Bobbin Window Dianas Centre
22 Spool Standard 05 23 Serew to Main Shaft Bushing, Nos. 59 and 60	100 Screw to faston Date 1
60 Shaft Bushing, Nos. 59 and	1 107 Nut on and -2 st winder to Wheel 10
24 Screw to Needle Plate to fasten Presser Guide No. 80 to Presser Bar No. 71 to Lower Arbor, and to fasten Presser Bar	108 Roller on Radius Raw 05
Lower Arbor, and to fasten Presser Bar Pins Nos Of and Of fasten Presser Bar	109 Screw to fasten No. 100 to Bobbin Winder
Pins Nos Of and Or and on Liesser Dar	110 Shuttle Lavor
and Shuttle Carolina to Feed Dar	111 Shuttle Carrier. 50 112 Shuttle Lever Stud 30
26 Castings for Belt Shifter 03 27 Pin in No. 25 12 28 Spring in No. 26 02	113 Sorous in and 2 3
27 Pin in No. 25. 12 28 Spring in No. 25. 02 29 Latch for No. 26. 02 30 Nut on Treadle Rod. 00	LIO COL-Service to Mr. 144
30 Nut on Treadle Ped 10	110 Connection to Main A-L
OL Whilippon and of D. I	118 I programme to at the state of the state
33 Unner Thread C. 11	119 Lower Rev in Vi. 110
34 Lower Thread Guide	121 Laron Washen on the Commission of the
35 Small Washer	122 Felt Washer on Tension Wheel
36 Pitman Screw 10 37 Screw to fasten Cones to Treadle Rod 03 38 Pin to Porcelain Roller 02 39 Screw to fasten Swing Drawer to Table 02 03 03 04 05 05 05 05 05 05 05	124 Tension Next Wildeliness C
59 Screw to fasten Swing Drawer to Table 02	125 Tension Cheek Spring Pin 126 Tension Cheek Spring Pin 02
41 Take up Serous to table to Table	127 Tension Chaole Santa Casher
42 Cones on Treadle Rod	129 Shuttle
44 Onilter 05	130 Shuttle Tension Cont.
45 Serew to fasten Clutch to Upper Arbor 03	132 Shuttle Spring Diagram 192
47 Screw to Latch of Clintol	133 Shuttle Tension Screw. 02 134 Bobbin. 03
49 Presser Foot	150 Brass Cup 02
50 Hemmer and Follor 40	137 Take up Stad
52 Heart Poller Ct. 3	138 Take-up Stud Washer
52 Heart Roller Stud. 50 53 Heart Roller . 20 54 Pip to factor Div. 10	140 Take up Dallan Co. A Transcription 46
55 Disk on front of Upper Arbor 02	141 Take-up Roller 10
00 Heart Cam 20	142 Screw to fasten Take-up Cam to Arbor 03 143 Thread Number Plate
58 Gunge Serow 19	144 Name Plate
59 Front Bushing for Upper Arbor	110 Needle Plate 15
61 Upper Arbor 20	141 Front Shuttle Slide 30
62 Oil Can Hoider	Stand Parts, not Illustrated
64 Presser Ray Liferay Samuel 20	Table brace. 1.75
65 Elbow Lever 03 66 Centre for No. 65 50	Treadle
67 Washer on Ball of No. 65	Balance wheel
99 Rear Control of No. 66	Belt with hook 1.50 Drip pan 25
10 Crank in No. 71	Drip pan 25 Pitman to Treadle 25 Treadle Rod 20 60 50
SPECIAL NOTICEAlways order parts by these n	50
manda order harrs ph russe if	umpers and send cash with orders for nexts



The HEMMER AND FELLER is jurnished with each machine without extra charge.



HEAD OF THE HEM-ALL IN ONE OPERATION.

The HEMMER AND FELLER WITH HEAD TRIMMER COMBINED is an extra attackment. RETAIL PRICE, \$1.00.

HEMMING.

AISE 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 \(\frac{1}{3} \) 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.

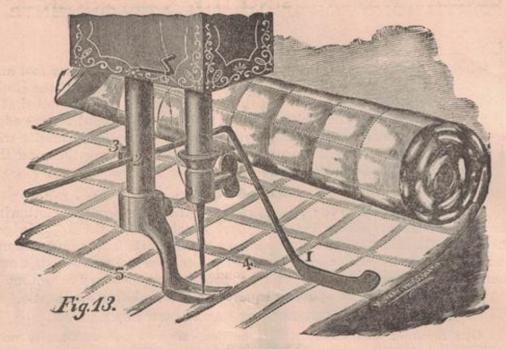
Cut a narrow piece of bias trimming out of colored goods (see 4 in Fig. 14.) Pass the bias trimming into the tube near the mouth of the hemmer; then place the edge of the lace in slot 6; then place the fabric to be hemmed into the mouth of the hemmer as for ordinary hemming, and then proceed to sew, 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, we have no doubt it will 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.

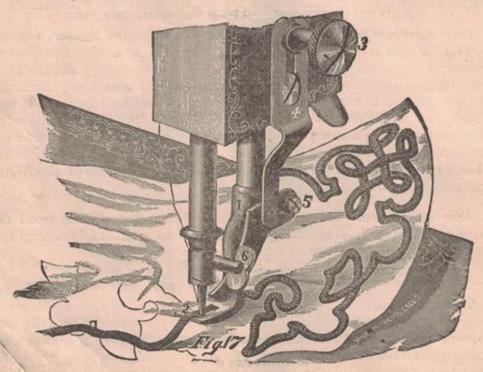
"GOODRICH" SETS OF HEMMERS, SIX PIECES. RETAIL PRICE, \$1.00 PER SET.

To successfully do various widths of hemming upon all classes of goods, we recommend the Goodrich. Lace can be sewed in with these hemmers as follows: Place the goods to be hemmed in the hemmer, and then pass the edge of the lace into the hemmer and sew it in when hemming; then turn or fold the hem back, which will carry the lace with it, and then stitch the edge of the hem down.



QUILTING.

The QUILTER is furnished with each machine without extra charge.



BRAIDING.

The BRAIDER is furnished with each machine without extra charge.

QUILTING.

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.

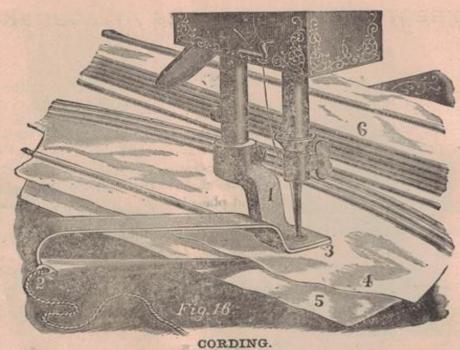
BRAIDING.

Remove the presser foot and attach the braider to the presser bar; then attach the VIBRATOR 4 to the face plate by using the guage screw 3, so that the *slot* end of the the lever will work on the screw 5 and the other end of the same lever will work *under* the needle screw 6.

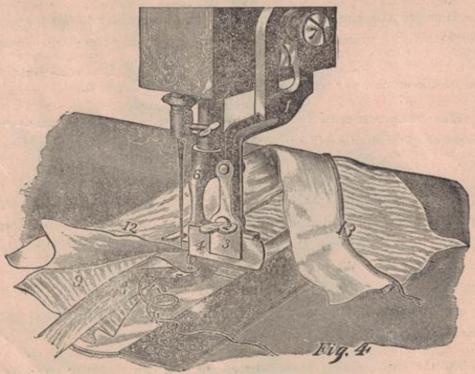
The VIBRATOR must be attached at such a height that every downward movement of the needle will cause the braider foot to raise just enough to allow the goods to pass freely under it.

The pattern to be braided should first be stamped or drawn on writing paper, then basted to the cloth. To put the braid into the braider, first raise the foot, then pass the end of the braid down through the hole 2 in the front of the foot 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.



The Corder is an extra attachment. Retail. Price, \$1.00.



WELT-CORDING.

The Welt-Corder is an extra attachment, and belongs to our new set, called the "White" attachments, which consist of a Binder, a Dress-Trimmer, a Welt-Corder, and a Fold-Maker. Retail Price of Set, \$1.00.

CORDING.

Remove the presser foot and attach the corder to the 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 corded 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.

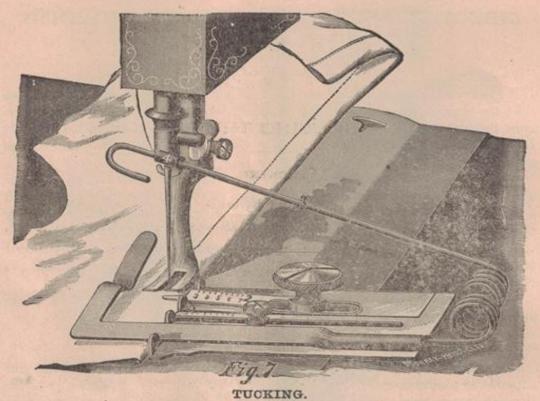
The corder has a groove at 3 in which the last seam or cord made should pass.

WELT-CORDING.

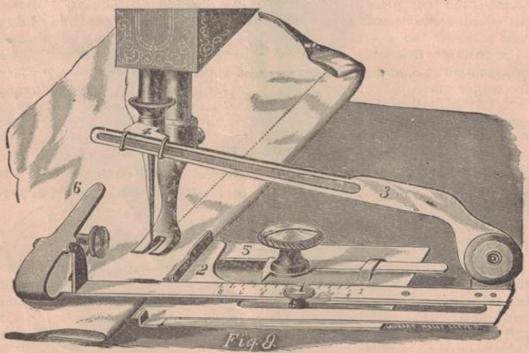
Remove the regular presser foot that accompanies each machine and attach the plated presser foot that accompanies the set of "White" attachments; fasten the ATTACHMENT HOLDER 1 to the face plate by the gaugescrew 7, and then place the welt corder 4 in the holder by sliding it behind the clamp 3 and securing it firmly with screw 2; then take ordinary dress cord and pass the end of it through the hole 10 in corder Carrier and back through the folder; then cut a narrow piece of bias trimming, as represented by 8, and pass it into the folder so as to surround and cover the corder; then take the two pieces of cloth between which the welt cord is to be stitched, as shown in cut by 9 and 12, allowing the piece 9 to pass under the attachment and to be next to the feed of the machine, whilst the piece 12 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 9 and 12 pieces together, and the result will be as shown at 13. By using the pieces 8, 9 and 12 out of different colors, it makes a very handsome piece of trimming.

SHIRRING.

Shirring is another new popular style of trimming, and can be done successfully with the White machine by using the same presser foot that is used with the welt corder, as follows: see cut fig. 19, and turn tension nut 6 to the right, making the tension on the upper thread as tight as it will sew without breaking; then make the stitch a little longer than in ordinary sewing, and pass the goods to be shirred under the presser foot and preceed to sew.



The GOODRICH TUCKER is an extra attachment. RETAIL PRICE, \$1.



TUCKING.

The Johnston Tucker is an extra attachment. Retail Price, \$1.

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.

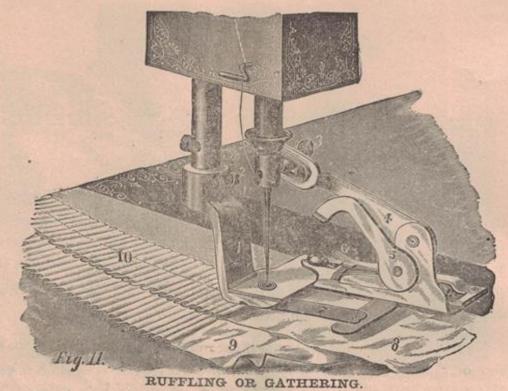
If space between tucks is desired, move the creaser 6 as much further from the needle to the left as the space desired.

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

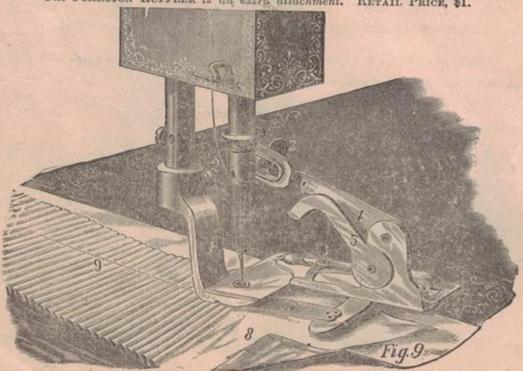
To Commence Tucking:—Fold the cloth for the first tuck and place it under the creaser bar and presser foot with the folded edge against the guide 2, lower the presser foot and sew as usual, keeping the edge of the goods close against the guide 2.

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 JOHNSTON TUCKER, WHICH, HOWEVER, ARE SUBSTANTIALLY THE SAME FOR THE "GOODRICH."



The Johnston Ruffler is an extra attachment. Retail Price, \$1.



RUFFLING AND SEWING ON.

The Johnston Ruffler is an extra attachment. Retail Price, \$1.

RUFFLING.

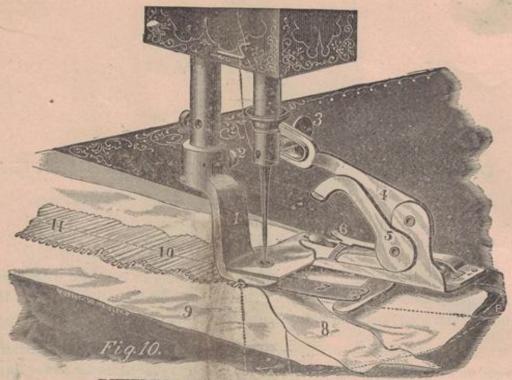
Remove the presser foot and attach the ruffler in its place with screw 2, first connecting lever arm 4 on the needle screw 3. Adjust so that the needle will pass down through needle hole in its centre.

Fig. 11 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.

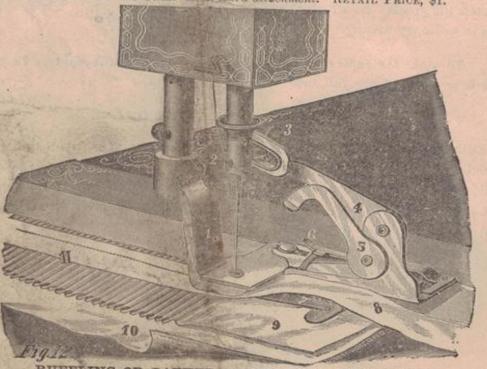
RUFFLING AND SEWING ON

Is illustrated in figure 9. 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 OR GATHERING IN SCALLOPS.

The Johnston Ruffler is an extra attachment. Retail Price, \$1.



RUFFLING OR GATHERIN BETWEEN TWO BANDS.

The Johnston Ruffles is an extra attachment. Retail Price, \$1

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 scarlops 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 of sewed on to the goods or garments desired to be true by placing the goods the same as in gathering and

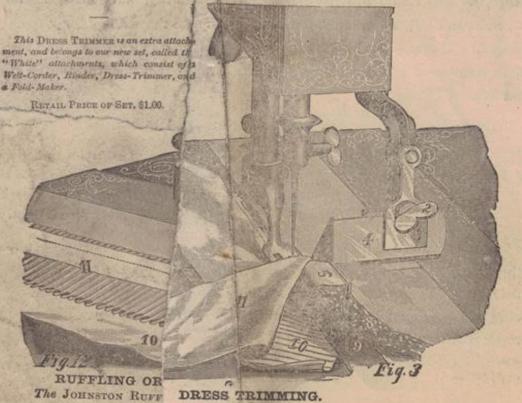
RUFFLING BETWEEN TWO B

Insert the edge of the piece to be gathered of to feeder 7; place one band next to and over the fee other words, under the piece to be gathered; then other band over and above feeder 7. Let down the being careful to hold the bands straight and sme proper position.



BINITING SCALLOPS.

This Binden is an extra attachment, and belongs to our new set, called the "White" attachments, which consist of a Wolf-Gorder, Binder, Dress-Trimmer, and a Fold-Maker Retail Price of Set, \$1.00.



BINDING.

Attach the irregular-sided presser foot to the machine. Fasten the attachment holder 1 to the face plate with guage screw, and then place the binder 4 in the holder by sliding it behind the clamp 3 and securing it firmly with screw 2; 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.

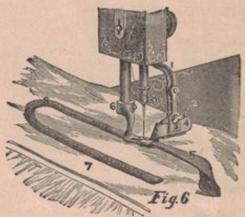
DRESS TRIMMING.

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 at one operation, as represented in fig. 3.

FOLD MAKING.

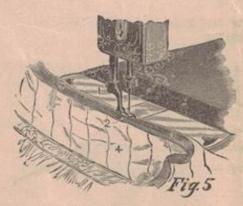


Attach the fold maker 4 behind clamp 3 with screw 2. Cut a piece of bias trimming about three-fourths of an inch in width and pass it into the mouth of the folder so the needle will catch it; then place the dress or garment to be trimmed under the folder and presser foot, and then proceed to sew. The folder can be moved to the

right or left so that the stich will appear in the centre of the fold, or upon either side of the centre, 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.

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.

FOLDS OF A DIFFERENT VARIETY CAN BE MADE.

Cut the binding of one color; cut a piece out of another color and fold it through the center so that when folded it will be about same width as the binding; put the binding into the binder, between its lips, and then insert the fold into the binder with the folded edge to the left, and with the article or garment required to be boun

ANOTHER STYLE OF TRIMMING can be made by putting the garment next to the feed of the machine and binding the edge of the fold, being careful to keep about the same width as the binding.

This makes the Milliner's fold of two colors.

TO BIND A GARMENT WITHOUT SHOWING STITCHES.

Attach face plate binder (see cut fig. 2, page 32) 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.

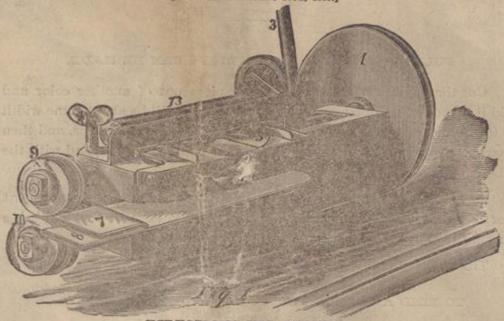
TO PUT ON DRESS-BRAID AND SEW ON FACING WITHOUT SHOWING STITCHES.

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 the lace on the edge. This is a very nice way of puriting on narrow bias pieces without basting either edge.

Rotary Jutter and Self-Folding Attachment. [P. CENTED FEDERARY 1778, 1880.]



DIRECTIONS FOR CUTTING.

Turn the machine head back on its hinges and fasten the attachment to the bed of the machine by a screw through the hole in the bed, so that the belt will pass between the wasels 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; these plates are nade to pinch more or less tightly upon the fabric 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 the belt may be tightened or loosened upon wheel 1.

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 replaces ent, 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.