

Artistic Touch

**Gording
Braid &
Special
Machines**

by
Ruth E. Franklin

CORDING, BRAID & SPECIAL MACHINES
INDEX

INDEX	3-a-b-c-d-e-f-g-h
Forward	4
Mis-Information Disclaimer	4

The Invention of the Universal Movement Machine

The CORNELY COMPANY.....	6
Five Groups of Machines	6
Group One Machines	7
Treadle & Stop-Motion	7
How the Group One Machines work.....	8
Machines added to Group One.....	8
Group Two Machines.....	8
Group Three Machines	9
Group Four Machines	9
Group Five Machines.....	9
Other Company's Copied the Universal Movement Machine	9
Very Few Changes.....	9
Setting the Stitch Length on the Singer Cording Machine.....	10
Mystery Solved.....	10
Post War Companies	10
Columbia Machines	11
CORNELY Out of Business RUMORS.....	11

Cornely Group One Machines

Machine "A"	12
Reproduction, Cornely "A" Machine	12
ORIGINAL OPERATING INSTRUCTIONS.....	13
Say What ? ? ?	13
"A" Machine Also Does Straight Stitching.....	14

DI AGRAM Machine "A".....	14
SAMPLE - Using front & back stitch	15
CORNELY "AB" Machine	15
CORNELY "AH" Machine	16
SAMPLE - Single Line Vermicelli.....	16
SAMPLE - Regular Chenille	16
CORNELY "A2" Machine.....	17
CORNELY "AH2" Machine	17
CORNELY "B" Machine.....	17
SAMPLE - Braid Stitched in the Center	18
SAMPLE - Braid Stitched on the Edge	18
CORNELY "C" Machine	18
THE CORNELY HIGH POST MACHINES	
MACHINE "E".....	19
MACHI NE II LE".....	19
MACHINE "LEG"	19
SAMPLE of Gimp Stitch.....	20
SAMPLE showing how Gimp Stitch is produced.....	20
MACHINE "LEGB".....	20
MACHINE "BCH".....	20
MACHINE "RE"	20
MACHJNE "K"	21
MACHINE "KB"	21
Time to do some mind changing!.....	21
The CORNELY CORDING MACHINES (3 thread).....	23
CORDING SAMPLES	23
Feather Stitch Sample	24
Picture of the "L" Machine.....	24
MACHINE "LB"	24
MACHINE "LG"	25
MACHINE "LGB"	25
SAMPLE - Imitation Two Needle Cording	25
MACHINE "LT"	25
Double needle Machine SAMPLES.....	26
PICTURE - Original "LTG" MACHINE.....	26
MACHINE "N"	27
MACHINE "X".....	27
End of GROUP ONE MACHINES	

CORNELY GROUP TWO MACHINES	
UNIVERSAL FEED LOCK STITCH	28
MACHINE "FB".....	28
MACHINE "FBN" Original.....	28
PICTURE - 11 FBN" MACHI NE	29
MACHINE "FD"	29
PICTURE - Original "FD" MACHINE	30
CORNELY GROUP THREE MACHINES	
LOCK STITCH MACHINES	31
MACHINE "F"	31
MACHINE "FA"	32
HEMSTITCHING MACHINES	32
LADDER BAR HEMSTITCHING	32
MACHINES 15 & 16	32
MACHINE 10	32
MACHINE 12	32
MACHINE 61	33
MACHINE 62	33
MACHI NE 64	33
MACHINE 70	33
MACHINE 151	33
CORNELY GROUP FOUR MACHINES	
UNUSUAL MACHINES.....	34
MACHINE 30	34
MACHINE 41	35
MACHINE 51	36
CORNELY GROUP FIVE MACHINES	
POST-WAR RESTYLED MACHINES	36
MACHINE 121 (123)	36
PICTURE - CORNELY 121 MACHINE (Original)	37
SAMPLE - Applique Done on the 121.....	38
APPLIQUE SAMPLES	39
Tackle-Twill LETTERING	40

FLAGS & BANNERS	40
TACKLE-TWILL LETTERING SAMPLES	41
MACHINE 123	42
HEMSTITCH SAMPLES.....	42
MACHINE 148	43
PICTURE MACHINE 148 Original.....	43
1950, Big Changes Start Happening In The Embroidery Industry!	44
PANTO-GRAM MACHINES.....	44
Reasons behind the Panto-Gram Invention.....	44
Does Computerized Machines really replace the Hand-Operated Machines?..	47
Attempts being made to Computerize some of the Cornely Machines	49
NEW CORNELY MACHINES AVAILABLE	50
CHAIN STITCH & CHENILLE MACHINES	
MACHINE "A3"	50
MACHINE "A5"	50
MACHINE "A2"	50
MACHINE "AH2"	50
MACHINE "N"	50
CORDING & BRAID MACHINES	
MACHINE "L3"	51
MACHINE "L5"	51
MACHINE "LG5"	51
MACHINE "LTG"	51
UNIVERSAL FEED LOCK STITCH MACHINES	
MACHINE 121	51
MACHINE "FBN"	51
HEMSTITCHING MACHINES	
MACHINE 15	52
MACHINE 12	52
MACHINE 10	52
MACHINE 151	52
MACHINE 41	53
LIST OF NEW CORNELY MACHINES SHOWING THE OLDER MACHINES THEY HAVE REPLACED.....	
OLDER MACHINES NOT REPLACED	53
New Stitch Styles Needed?	54

TRICKS to Operating "BONNAZ" Machines	55
Chain Stitch & Chenille	55
Braiding.....	56
EXAMPLE - Braiding Spool & Carrier.....	57
The FIVE PARTS to the BRAIDING NIPPLE.....	57
FLAT BRAIDING NIPPLE, example	58
Special EDGE BRAIDING GUIDE, example	58
Guide for ATTACHING CORDS, example	58
CENTER RIBBON GUIDE	58
EDGE RIBBON GUIDE	58
Thread for attaching Braid	59
Winding Braid & Bobbing for Cording.....	59
Placing the Braid Nipple onto the Machtne	60
"L" Machine BRAIDING	61
"L" Machine Braid Nipple Holder, Example	61
Replacing needles in the Hollow Tube Needle Bars.....	61
Correctly inserted Needle, example	61
Three-Thread Cording	62
BOBBIN CARRIER THREAD PATH, Example.....	62
THREE-THREAD MACHINE DIAGRAMS	63
Adjusting the Bobbin Tension.....	64
Joining Bobbin threads when the Bobbin runs out	64
Special things to watch for	65
FINGERS (also known as THREAD CARRIER).....	65
NIPPLES	66
USING THE RETARD ACTION	66
SPIRAL BRAIDING SAMPLE	67
FEATHER STITCH	68
DRESS EMBROIDERY HINTS	
Magic Stamping Paste & Powder.....	68
Making Patterns for use with powder.....	68
Stamping Piece Goods of different sizes	69
IMPORTANCE OF BEING CAREFUL	69
Backings for Dress Embroidery.....	71
Recipe for Burn-Off Crinoline.....	71

Nipple & Foot Adjustments on the "ANTIQUE" Machines.....	72
Nipple & Foot Adjustments on the NEWER MACHINES	73
STITCH LENGTH ADJUSTMENTS	
CORNELY & SINGER MACHINES	74
SINGER 114 W 120 & 121	
FEED LEVER BRACKET & COLLAR	75
SINGER 114 W 110 & CORNELY FEED CONE.....	75
POTPOURRI	
THINGS I MAY HAVE FORGOTTEN TO TELL YOU!.....	76
How do you wash Chenille, Braid & Cording Work?	78
How do you Embroider on TEE SHIRTS?.....	78
Where Can You Find Braid & Special Threads for Cording?.....	79
DROP STITCHES.....	79
GENERAL INSTRUCTIONS FOR OPERATING CORNELY UNIVERSAL FEED LOCK STITCH MACHINES	
CORNELY TYPE 121 MACHINE.....	83
NEEDLES.....	83
INSERTING A NEW NEEDLE	83
THREADING THE MACHINE	83
THREADING THE TOP THREAD.....	83
THREADING THE BOBBIN.....	84
WINDING THE BOBBIN.....	84
THREADING & MACHINE DIAGRAM -121	85
ADJUSTING THE OSCILLATION.....	86
ADJUSTING THE ECCENTRIC STUD.....	86
ADJUSTING THE FEED CONE	86
FEEDING AT EVERY OTHER STITCH	86
FOOT PRESSURE ADJUSTMENT	87
WORKING WITH FILLERS.....	87
TOP FILLING.....	87
FILLER THREAD GUIDES.....	88
BOTTOM FILLING	88

WORK APPLICATIONS FOR THE 121 & 123	88
SAMPLES	89
SAMPLES	90
CORNELY FBN MACHINE	
OPERATING INSTRUCTIONS	91
DIAGRAM	92
DIAGRAM	93
DIAGRAM	94
DIAGRAM	95
NEEDLES.....	96
THREADING	96
Threading the SHUTTLE	97
Threading the VISIBLE SEAM Tape & Braid	97
Tensions	97
Adjusting the GUIDES	97
Stitching with Elastic Threads	97
Invisible Seam Braid.....	98
Threading the Invisible Seam Braid.....	98
Adjusting the Invisible Seam Braid Guide	98
Two Needle Tucking	98
Changing the Needle Holder	99
Threading	100
Tensions	100
Two Thread Braid	100
Attaching Strung Sequins	100
DIAGRAM-Sewing Regular Cords & Braids.....	101
DIAGRAM-Sewing Invisible Braid	101
DIAGRAM-Sewing Small Invisible Braid	102
DIAGRAM-Sewing Standing Braid	102
DIAGRAM-Sewing Sequins.....	103
DIAGRAM-Sewing Round Braids.....	103
DIAGRAM-Sewing Standing Ribbon	104
DIAGRAM-Sewing Braid in the Center	104
DIAGRAM-Sewing Braid on the Edge	105
DIAGRAM-Sewing Tucking 3.5 mm & 4.5 mm	105
DIAGRAM-Sewing Tucking 2.5 mm.....	106
DIAGRAM-Sewing Tucking 6 mm & 7.5 mm	106

CORNELY "LTG" MACHINE - FOUR THREAD CORDING

Four Thread Work.....	107
Parts for doing four thread work	108
Threading the "LTG" Machine	109
Lower Threads	109
Filler Thread.....	109
Bobbin Thread	110
Different Widths for Four Thread Work	110
Changing the NIPPLE	110
Changing the LOOPER.....	111
Two Needle Picot (Feather Stitch).....	111
Single Needle Work	112
Using the Hollow Tube Needle Bar	112
Braiding Work.....	112
LTG MACHINE DIAGRAM	113
PARTS DIAGRAMS.....	114
NIPPLES, NEEDLE PLATES & LOOPERS	115
THREE NEEDLE WORK.....	116
CONCLUSION.....	116

ARTISTIC TOUCH
BOOK NUMBER FOUR
CORDING, BRAID & SPECIAL MACHINES
F O R E W O R D

This is the fourth Book in the series of seven (to date) Artistic Touch Books about The Embroidery Industry.

This particular Book has been written and re-written about a dozen times. Every time I think I have it almost done, I get a phone call from someone I knew way back in the forty's & fifty's and something is brought to mind that I had forgotten about.

Or...someone will ask a question about something I had forgotten to include, or I get a letter from the owner of The Cornely Company with some new information that I didn't even know! Every time this happens, I end up starting over. Thank God for my word processor, at least I can shuffle things around & do re-writes without too much difficulty.

I hope I have gotten everything in the Book so you can understand it. During the time I have been working on this Book, I have acquired a real understanding of why these machines are hardly in use any longer. There are so many things about them that you just can't figure out by yourself. I know many of these machines are setting around gathering dust simply because people don't have the slightest idea of what the machine might do!

M I S - I N F O R M A T I O N D I S C L A I M E R

Many of the things I will tell you in this book MAY NOT EXACTLY BE GOSPEL TRUTH! A lot of it was told to me when I was in my teens by two elderly men who had learned to operate the machines in France. Both of them claimed to have been taught by the inventor, Mr. Bonnaz.

Since the UNIVERSAL MOVEMENT MACHINE was invented about 1866, & Barney Zonas & Joe Gutman were in their Seventy's when I knew then in the forty's...it is possible!

Some of this possible mis-information is...

I asked what the letters stood for on the Cornely Machines. I really don't care if Barney just made up the answer or if he was right! His answer has always helped me to keep it straight in my mind, as to what the machines do.

BARNEYS ANSWER TO MY QUESTION:

"A" MACHINE: Derived from French meaning "needle" the French word is "aiguille" Thus the "A."

"B" MACHINE: Machine was invented to sew on Braid. Braid is the same in English and in French.

"L" MACHINE: Machine was invented to sew on Cording. why isn't this called the "C" Machine? Bonnaz called the work it did "LATTICE WORK." Thus the "L."

"LG" MACHINE: This machine is the same as the "L" machine except it has the RETARD ACTION. This machine can be set so it wraps the bobbin thread around the filler thread on every stitch or on every second, third, fourth or fifth stitch. when the machine is used WITHOUT the filler thread, Bonnaz called this "GIMP STITCH." Thus the "LG" for LATTICE & GIMP.

I did not pursue this any farther & I don't know if it is right or not, but...IT WORKS FOR ME!

I promise to be a little more factual in the rest of the Book. I am setting here looking at a stack of papers I have gathered over the past forty years. The stack is about twelve inches high. I hope to be able to condense it into something understandable & useful in the next hundred or so pages.

THE INVENTION OF THE UNIVERSAL MOVEMENT MACHINE

The, first Universal Movement Machine was invented by Mr. Bonnaz, in France, about 1866. The first machines were called "UNIVERSAL EMBROIDERY MACHINE" in English and "COUSO-BRODEUR UNIVERSEL" in French.

The CORNELY COMPANY

Mr. Bonnaz needed financial assistance to manufacture and distribute his invention. Mr. Cornely was a Businessman. Cornely & Bonnaz formed a partnership very soon after the machine was invented.

I have been told there were a few machines that had the name "BONNAZ" stamped into the casting in the beginning.

When the machines were exhibited at the Expositions Universelles held in Paris in 1889 & 1900, the machines had the name "CORNELY" stamped into the casting. Most of the machines won prizes at this Fair.

The Cornely Company soon became the leading manufacturer of the "Universal Movement Machines" and still is to this day! Cornely still manufactures the full line of the machines & they sell very well all over the world, EXCEPT in the U.S.A. Perhaps because people don't know what the machines do! I hope to change that with this Book.

FIVE GROUPS OF MACHINES

Many different types of Cornely machines were invented from 1866 clear up to 1950. The Cornely machines fall into five categories.

At first the machines were called after LETTERS of the alphabet. The later machines are identified by NUMBERS.

GROUP ONE MACHINES: These machines all have the Universal Movement or feed. This means, the machine will sew in any direction. The movement is guided by a rotating handle under the machine. The operator turns the handle in the direction they want to sew and the machine stitches in that direction.

TREADLE & STOP - MOTION

This sounds like NO PROBLEM...ANYONE CAN DO THAT! I forgot to mention, ELECTRICITY was not invented yet! While the operator guided the machine to sew in any direction with their right hand, they also had to pump on the treadle of the machine to make it sew!

Since treadle machines usually made about six stitches after the operator stopped pumping, Bonnaz added a STOP-MOTION to the machine so it would stop instantly!

To operate the machine, the operator had to pull down on the handle to make the machine GO, and when they released the handle, the machine would STOP.

Now let's get this straight...pump your feet, pull down on the handle and guide the machine with your right hand and hold the material straight with your left hand.

We think we are so smart in this day and age...the FIRST people who learned to operate these Machines, were the GREAT-GRANDPARENTS, of people getting into the business today! If you think the older generations were a bunch of primitive dummies, try operating one of these machines on a TREADLE STAND!

I personally, think the Stop Motion is un-necessary since we now have ELECTRIC MOTORS. The need for it has PASSED. I believe you have much more control over the machine without it. I will ADD...The CORNELY COMPANY disagrees with me on this particular thing.

HOW THE GROUP ONE MACHINES WORK

All of the Group One Machines have a hooked needle like a crochet hook, and they make a Chain Stitch with a circle spool of thread. They all have a round presser foot with a round rubber shoe.

The machine makes the Chain Stitch by the needle (hook) going down through a nipple & through the material where a part called the looper wraps the thread around the hook. The nipple holds the material as the needle goes through it.

The needle pulls the thread back to the top of the material, the nipple raises & releases the material, the foot moves the material back, the nipple pushes the chain down onto the material & the process is repeated.

M A C H I N E S A D D E D T O G R O U P O N E

Next Bonnaz started adding things to the machine so it would produce different types of stitches.

The Machines in Group One are the "A", "AB" "A2" "AH2" "B" "C" "E" "LE" "LEG" "LEGB" "BCH" "ACH" "LCH" "LGCH" "RF" "K" "KB" "L" "LB" "LG" "LGB" "LT" "LTG" "N" & "X"

I have been to Ld (& shown a picture) of a "J" Machine. I can not find any information or record of this machine. I do have a suspicion about it that I will tell you about later on.

I will tell you what each of them do and how the ideas for most of them came about, later on in the Book.

G R O U P T W O M A C H I N E S

The Group Two machines had the Universal Feed (guided by the handle) BUT . . . they have a needle with an eye & an oscillating hook & a bobbin. They make a straight stitch or a zig zag lock-stitch.

Machines in this Group are: "F", "FD", "FA", & "FBN."

G R O U P T H R E E M A C H I N E S

These Cornely Machines were called by NUMBERS instead of LETTERS.

They have a regular feed & foot & they are guided the same as a straight sewing machine. They Make a lock stitch & are used for hemstitching & other decorative purposes. One machine in this group was to do Satin Stitch. I will tell you more about it later on.

G R O U P F O U R M A C H I N E S

These Machines are SPECIAL MACHINES that do VERY UNUSUAL THINGS.

G R O U P F I V E M A C H I N E S

These machines were invented or re-styled after the war. The new machines were assigned numbers instead of letters. The two new machines are Type 121 & Type 148.

O T H E R C O M P A N I E S C O P I E D T H E U N I V E R S A L M O V E M E N T M A C H I N E

Several other Companies copied the machine invented by Bonnaz. Lintz-Eckhardt and Sherman-Blatz in Germany, and Singer Company in the U.S.A. Singer received a U.S. Patent only five years after the machine was invented.

V E R Y F E W C H A N G E S

Singer (I think) changed the "Scissor-Loop-Springs" that makes the movement between the nipple & foot work, to a spring on a plunger enclosed in a tube with adjustment screws. The later Cornely Machines also are made this way, since the war.

Singer also copied the "L" & "LG" machines. These are the Singer 114 w 120 & 121 Machines. They also Copied the Cornely Sequin Machine. This is the Singer 114 W 110 Machine.

S E T T I N G T H E S T I T C H L E N G T H O N T H E S I N G E R C O R D I N G M A C H I N E

I can't tell you how many times I've had calls from people with these "SPECIAL" Singer Machines.

All of the calls are for the same reason! It seems Singer didn't put on the screw that adjust the length of the stitch!

At least it looks that way! The adjustment is there... you have to know where to look for it.

M Y S T E R Y S O L V E D

On the "FACE" of the machine, right where the "NOSE" is, you will find a NARROW COLLAR around the shaft. This collar has a screw in the back.

Loosen the screw & TURN THE COLLAR one way to shorten the stitch & the other way to lengthen the stitch.

On some of the other machines, you will notice the part where the rocker for the nose fits...has several grooves. Turn the wheel so the rocker can be held out, then turn the bracket so the rocker will fit into another of the grooves. This is how the length is adjusted.

The Singer Company only makes the 114 K 103 & 104 Chain Stitch Machines now.

P O S T W A R C O M P A N I E S

The WAR, I keep referring to is World War I. Other Companies that make Chain Stitch Machines are Consew, Brothers, Juki & Treasure. Most of these machines are made in Japan.

I may get sued over this, but...I consider these machines to be the Fords & Chevys of the Embroidery Business.

The Cornely is the Cadillac & the Singer is the Lincoln. The other machines are O.K. but, I PREFER TO GO IN STYLE!

Sorry fellahs! Only voicing my own opinion!

So far as I know, Sherman-Blatz was located in East Berlin & I have not seen any new machines from them since about 1950, perhaps even longer. Lintz & Echardt Machines were also made in Berlin. I don't think they are still in Business.

C O L U M B I A M A C H I N E S

Many people call me & insist that they have a COLUMBIA MACHINE . . . I even have a couple of them myself! The strange thing is, there has never been a COLUMBIA Chain Stitch Embroidery Machine manufactured!

Columbia Sewing Machine Company in New York, was the distributor for several of the European Machine Manufacturers, including Cornely.

This Company had Name Plates cast, then they removed the real manufacturers name from the casting and put their Name Plate in it's place.

If you will remove the four small screws holding the plate in place, you will find out what Company really manufactured your machine.

CORNELY OUT OF BUSINESS RUMORS

For many years, I was told the Cornely Company was no longer in business.

Many other people were told the same thing.

After I wrote Book Number One, I received a letter from Christine Dechamp, the owner of the Cornely Company in Malakoff, France.

The Cornely Company is still VERY MUCH IN BUSINESS & they still manufacture the FULL LINE OF MACHINES.

I will tell you a lot more about the Singer Machines later on, but for now, I want to get back to the Cornely Machines & what they do.

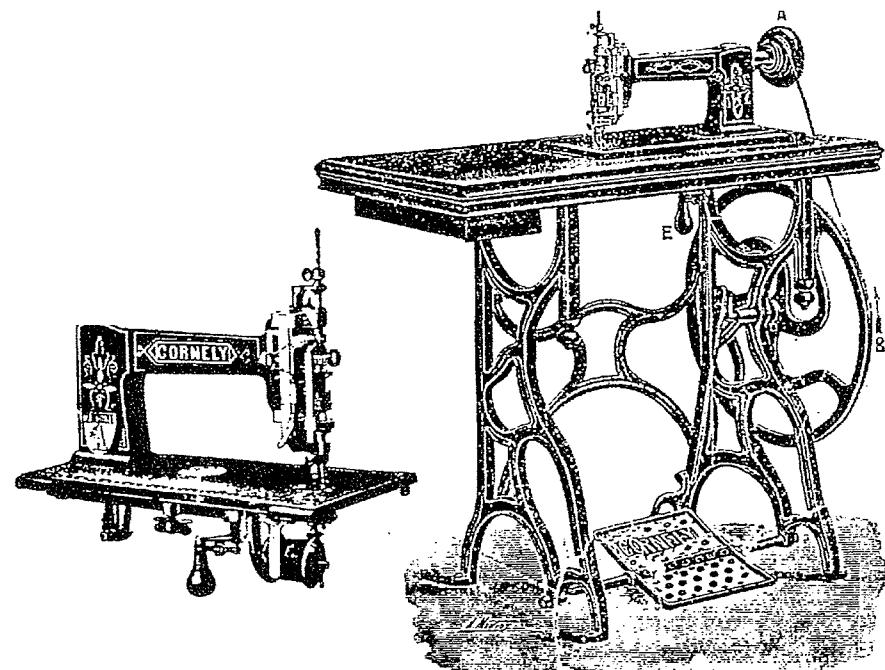
"C O R N E L Y G R O U P O N E M A C H I N E S"

M A C H I N E "A"

This was the first machine inverted. This was a beautiful machine that had "Mother-of-Pearl" inlays imbedded into the base and arm of the machine.

The machine had a beautiful ornate cast iron table with the large wheel & the pump treadle with the "CORNEL Y" name in the treadle casting.

R E P R O D U C T I O N O F T H E O R I G I N A L C O R N E L Y "A" M A C H I N E



INSTRUCTIONS FOR THE USE
OF THE
UNIVERSAL EMBROIDERY MACHINE
COUSO - BRODEUR UNIVERSAL

I am going to copy a few paragraphs from the original instruction book that was translated from French, this was supplied with the "A" machine when they were sold in the U.S.A.

I am copying these paragraphs so you can see for yourself, why I decided to write The Artistic Touch Books ...

FROM THE ORIGINAL INSTRUCTIONS.

"The operation heretofore known for producing embroidery work by means of machines consist in feeding the material to be embroidered under an operating needle in conformity with the lines traced theron for producing a certain design."

"Aside from the embroidery to be produced, i.e. from the manner of producing a stitch of a certain nature, it is the feed motion which is principally to be considered on a machine by means of which intricate designs are to be produced, and on the facility of feeding the material to the needle without turning the material depends the success of the machine."

SAY WHAT???

I think it said, Producing embroidery work on the machine consist of feeding the material under the needle & following a certain design.

I think the second paragraph said, it takes practice to learn to feed the material & guiding the handle so the material does not need to be turned.

What do you think? Are Instruction Books needed?

I won't subject you to any more of this, but to those who are interested, copies of this old instruction manual are available. Call me!

Now, to get back to information about the, "A" Machine.

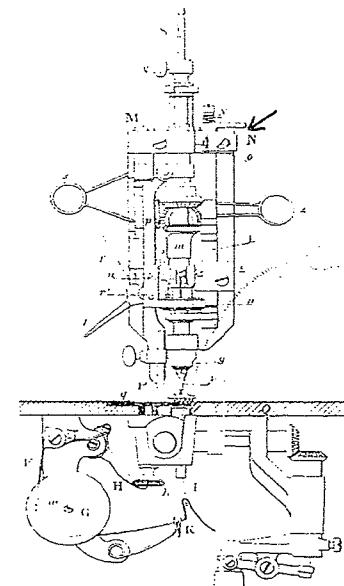
The machine will do Chain Stitch, & Chenille, in the original Book, this is called Moss Stitch."

A MACHINE ALSO
DOES STRAIGHT STITCHING

Very few people who have these original "A" Machines know the machine can be set to do straight sewing.

At the top of the face plate, where the Right Screw is, that holds the face to the casting, there is a small slide bar held in place by the screw.

EXAMPLE



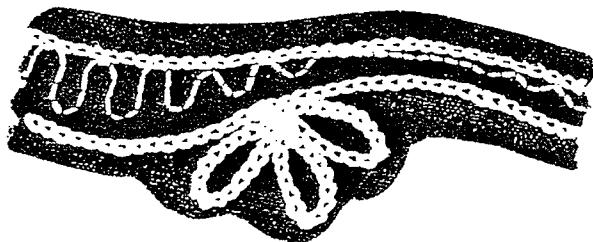
Turn the handle toward you. Loosen the screw. Push the slide bar back until it drops into the notch in the needle bar shaft. Tighten the screw & the machine will only sew straight toward you until you slide the pin forward again.

Not all of the old Cornely Machines have this feature.

In dress embroidery, the straight, single line stitching that normally appears on the back of the work, is often used for decoration instead of the Chain Stitch.

Combinations of both sides can also be used.

S A M P L E U S I N G F R O N T & B A C K S T I T C H



C O R N E L Y "A B" M A C H I N E

This machine was especially built to produce very fine stitching. By using #1 needles & nipples, this machine will do very intricate designs with very fine thread. Monograms, $\frac{1}{4}$ " high can be done on this machine. Plus, you can put intricate designs around them, (if you can see them!) It takes patience to work on this machine with the small stitch, because you feel like the machine is not moving. A much smaller foot is used.

This machine can be used for regular work. It is very soft to handle & very precise.

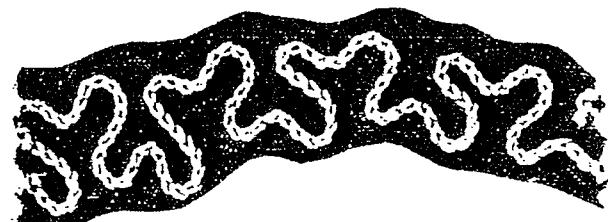
C O R N E L Y "AH" M A C H I N E

This machine was specially made to produce a giant Chain Stitch. When I worked for Barney, we made hundreds of full circle skirts with large vermicelli all over them. The stitch was almost $\frac{3}{16}$ of an inch long. We used number 16 needles and thread that looked like rope. It took about two minutes to completely cover a skirt with vermicelli, using that giant stitch.

S A M P L E

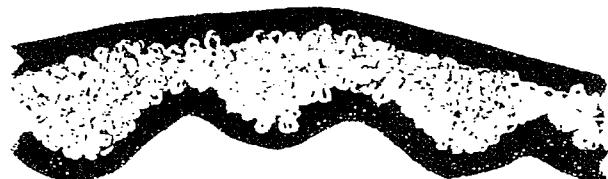
S I N G L E L I N E V E R M I C E L L I

Done on the "giant stitch machine," you would only have room to fit about two Vermicelli on this page.



The "AH" machine will also do Chenille using big needles & heavy thread. I have always thought I would make my own carpeting, if I ever got one of these machines in the shop.

S A M P L E R E G U L A R C H E N I L L E



The "AH" machine can also be adjusted to do normal work. But I am not sure they have the control for detail like the other machines.

CORNEL Y "A 2" M A C H I N E

This Machine is the same as the "A" machine, EXCEPT it has a much longer "ARM." The Arm is almost twenty inches, where the "A" Machine is only about twelve inches.

The Machine itself is heavier-duty & is reinforced. The Stand is larger also.

This Machine is especially helpful when working on heavy jackets, doing quilting or any other work where the extra space between the "FACE" & the Arm Base is needed.

CORNEL Y "AH2" M A C H I N E

This Machine is the same as the "AH" Machine, in that it makes the larger stitch. It also has the LONG ARM. In addition, the Arm Base of this Machine is MUCH HIGHER. Not like the "Post Machine," the casting on this machine is just longer & higher.

This machine is used for all of the same things as the regular machines, but it can also be used to REPAIR CARPETS!

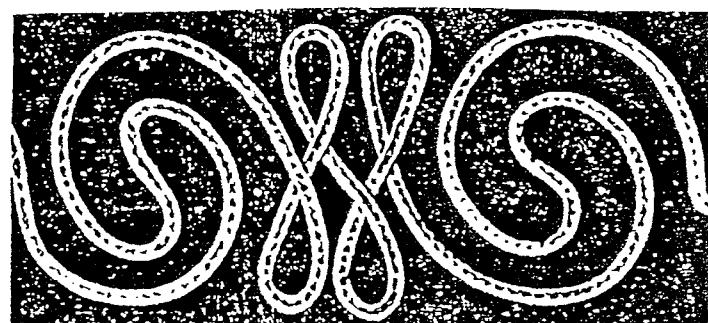
CORNEL Y "B" M A C H I N E

This Machine sews on Braids. The "B" machine is called a "Top Braider." The Braid, when sewn on by this Machine is on the top side of the work. Different kinds of Braids & Cords are wound onto a large reel that is affixed to the top of the machine. The Braid is fed down through a hollow tube, (used as the needle bar) then fed under the needle of the machine with a special nipple attachment. The Braid or Cord & even ribbon, is sewn to the fabric with a Chain Stitch. The Braid, Cord or ribbon can be adjusted so they are stitched down the center so they will lie flat, or along either edge to make them raised.

This Machine can also be used for doing Chain Stitch or Chenille work.

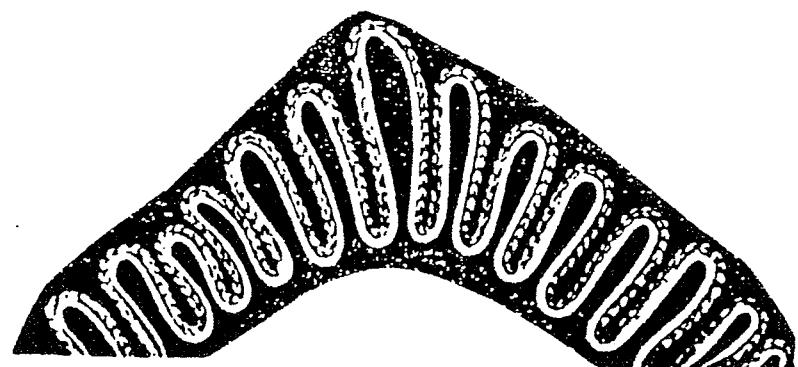
S A M P L E

B R A I D S T I T C H E D I N T H E C E N T E R



S A M P L E

B R A I D S T I T C H E D O N T H E E D G E



CORNEL Y "C" M A C H I N E

This Machine also sews on braiding, EXCEPT...the braid is fed from below the machine so it appears on the underside of the material & is sewn on with a single thread of stitches. The chain Stitch appears on the reverse side of the fabric, which is the side presented to the operator as they work. This Machine can also be used to attach strung pearls & looped edgings to laces.

THE CORNELY HIGH-POST MACHINES

These machines are constructed with a special arm or post, that looks like a small dome. This post stands up from the base of the machine directly under the needle. The dome enables the operator to embroider on tubular goods, as well as stockings, socks, hats & ready made garments. Emblems can be sewn onto the pockets of shirts, without sewing the pocket shut.

Names can be written ON THE POCKETS of bowling shirts, rather than above the pocket, names & emblems can be placed on shirts & jackets without un-buttoning the garment. Any shop that does a lot of embroidery work, needs at least one of these machines. They sit & gather a lot of dust, BUT...when you need them for a special job, they will pay for themselves in a very short time.

The only problem is finding them.

Later...I think the original Post Machines were assigned new "Letters." The descriptions are the same as the original Post Machines. In the descriptions listed here, the original machine is listed first, then followed by the newer machine that replaced it.

MACHINE "E"—Later replaced by "ACH" MACHINE.

This "Post Machine" does Chain Stitch & Chenille.

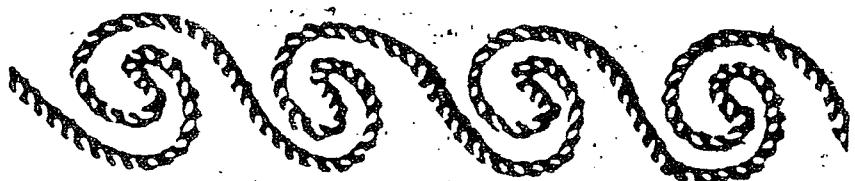
MACHINE "LE"—Later replaced by "LCH" MACHINE

This "Post Machine" does Three-thread Cording & Two-thread Cording & Chain Stitch & Chenille.

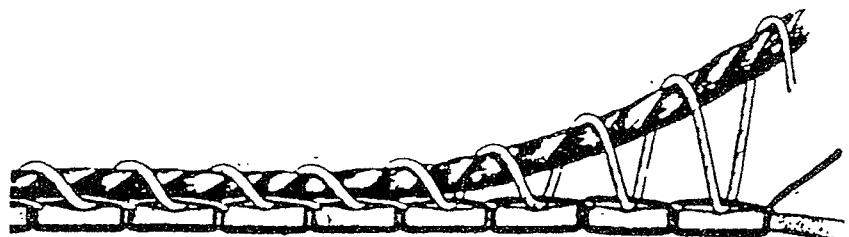
MACHINE "LEG"—Was not replaced.

This "Post Machine" does the same as the "LE" except it also has a RETARD ATTACHMENT. This allows the bobbin to spin on every stitch or on every second, third, fourth or fifth stitch. This work is called "GIMP STITCH."

SAMPLE OF GIMP STITCH



SAMPLE
SHOWING HOW GIMP STITCH
IS PRODUCED



MACHINE "LEGB"—Later replaced by "LGCH" MACHINE.

This "Post Machine" does all of the things the other machines will do, EXCEPT...it also was equipped to do Top Braiding.

MACHINE "BCH"—Is one of the later Post Machines. It does Chain Stitch & Chenille and it also does Top Braiding.

MACHINE "RE"—This machine was also fitted with a special arm similar to the post machines. This one works with two needles & produces a "cross-stitch" on the back. Can produce alternate color stitching in single or double rows.

All of these Machines could be fitted with a small flat working surface that fit around the dome so they could also be used for regular work.

THE CORNELY "K" MACHINES

MACHINE "K"

This is a two-thread cording machine that also produces Chain Stitch & Moss Stitch. The two-thread cording is sewn to the material from the top. The machine has a bobbin like the "L" Machines, but is not fitted to use the filler thread coming down from the top. These machines were used in Linen Factories to do raised monogramming on terry cloth towels.

Monogramming done this way was called Gimp-Stitch, but it really isn't. Real Gimp, is done by using a heavier filler thread & allowing the filler to show through between the cording twist.

MACHINE "KB"

Did the same as the "K" Machine, except, it also had a Top Braiding Attachment. This machine can do Chain Stitch, Chenille, two-thread Cording, Top Braiding and you can do the two-thread cording OVER BRAID, so the machine makes a wide cord that looks like two-needle cording.

TIME TO DO SOME "MIND CHANGING"

I can hear those wheels spinning in your mind. Many of you are thinking...I will just purchase one machine that will do everything! If this was really a good idea, I am sure Mr. Bonnaz & Mr. Cornely would have made just that one machine. This would have saved a fortune in tooling at the factory.

Even though I tell you certain machines will do several different things, the thing the machine does best, is the thing it was intended for.

The Braid & Cording Machines will do Chain Stitch & Chenille, but not as well as the Chain Stitch machine. You are able to make sharper corners & do finer detail with the Chain Stitch.

By using the Braid or Cording Machine when you only do Chain stitch work you are losing a little bit of speed & a little bit of detail.

The Cornely Machines that do other things will still do a good job on Chain Stitch & Chenille. The Singer Cording Machine will really make a believer out of you if you try to do Chain Stitch & Chenille on it!

The Singer Cording Machine will turn the handle by itself and sew in counter-clockwise circles when you press on the treadle.

Operators who learn on this machine ALWAYS TURN THE HANDLE COUNTER-CLOCKWISE when doing scrolling. It takes too much strength to turn the handle clockwise!

The Cornely & Singer sequin machines are both heavy-operating machines. If you worked on one of them all day doing Chain Stitch lettering, you would feel like you had driven a diesel truck cross-country!

Get the right machine for the work that you do the most of. Other machines, even used, can be added to your shop as you really need them or as you are given an opportunity to purchase one. Most of the fifty machines in my shop found me! I did not go out looking for them.

Some I bought because I did not have one, others I bought because I didn't know what they did. Others I found gathering dust under shelves at Sewing Machine Dealers Stores & I bought them because I felt sorry for them sitting there all by themselves with nobody to love them!

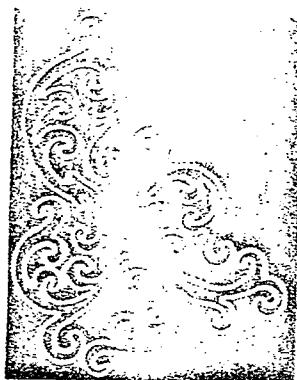
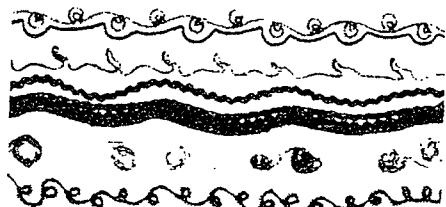
I think you have probably figured out by now, I do love these machines!

THE CORNELY
CORDING MACHINES
(THREE - THREAD)

The Cording machines work by having a reel of thread attached above the machine that is fed down through the needle tube and under the needle by means of a special nipple. This is called the filler thread. This is the second of the three threads. The Chain Stitch is the first thread.

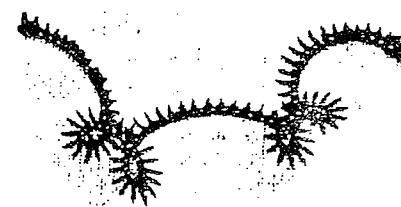
The third thread, comes from a large bobbin positioned just above the nipple & foot. The Bobbin spins around the nipple as the machine sews and wraps the strands of the bobbin thread around the nipple attachment & the Chain Stitch sews the cord it forms onto the material.

CORDING SAMPLE



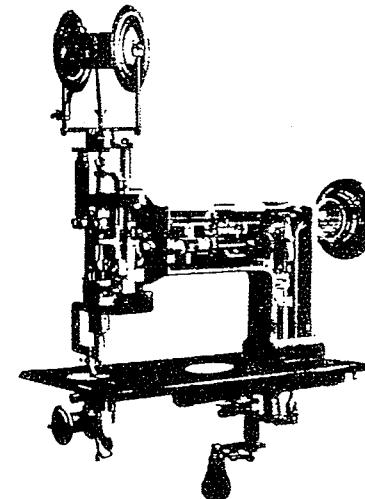
By tightening the tension on the filler thread & loosening the tension on the bottom thread, a new stitch called "feather stitch" is created. This stitch will have the cording showing lines or rays out around it as you turn the handle to make circles for single line embellishments.

FEATHER STITCH SAMPLE



MACHINE "L"—Does cording, chain stitch & chenille.

PICTURE OF THE
CORNELY "L" MACHINE

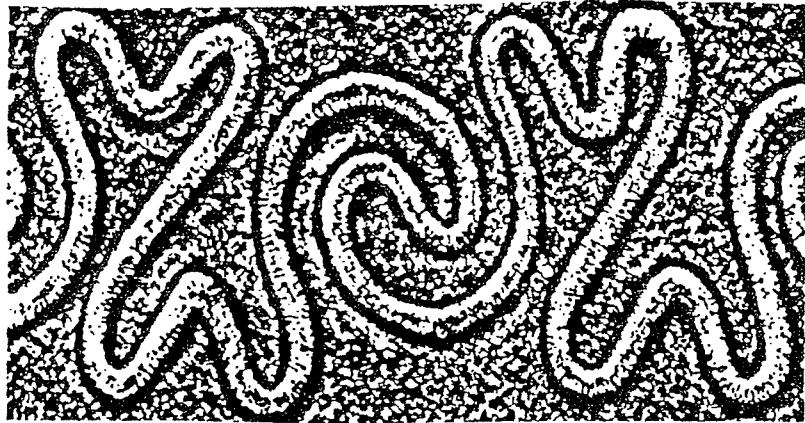


MACHINE "LB"—Does cording, chain stitch, chenille & also sews on braid.

MACHINE "LG"—This machine does all of the things the "LB" does plus it has a RETARD ACTION. Instead of the bobbin wrapping itself on every stitch, it can be set to wrap every other stitch or every third, fourth or fifth. This results in the bobbin thread making a long slanting wrapped stitch over the Chain Stitch instead of the tight close cord. This allows the Chain Stitch to also be seen.

MACHINE "LGB"—Does everything the "LG" machine does and also sews on Top Braid. This machine can do imitation two-needle cording by covering the braid with cording.

S A M P L E
IMITATION TWO NEEDLE CORDING

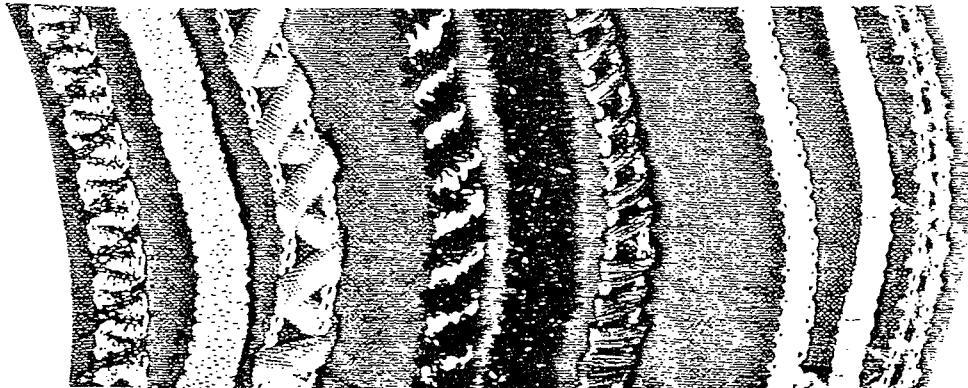


MACHINE "LT"—This machine has two needles & two underthreads. It makes two parallel rows of chain stitch, and it also does the REAL two-needle cording. This can be done with the needles spaced close together or wide apart.

This machine can even be fitted with a special attachment to make THREE PARALLEL ROWS of chain stitches.

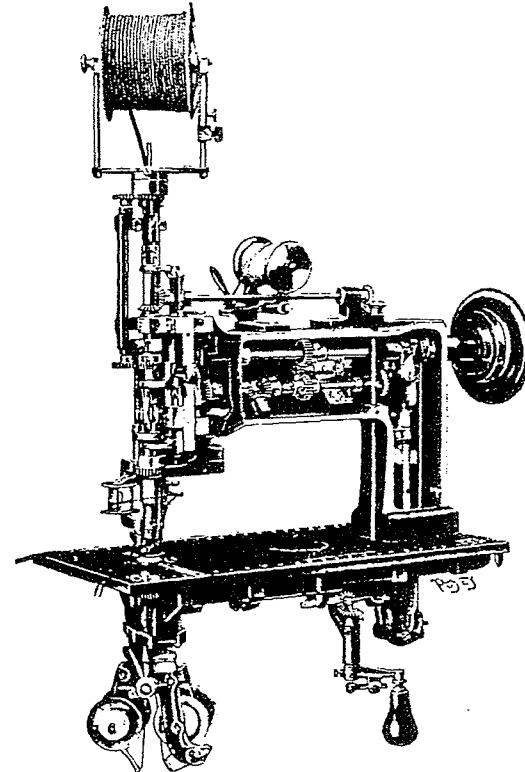
When used with a heavy bobbin thread, the stitch produced can look almost one half inch wide and be raised off the material nearly one fourth inch. This machine is also known as the FOUR-THREAD MACHINE.

D O U B L E N E E D L E M A C H I N E S A M P L E S



MACHINE "L TG"—Is the same machine, but fitted with the RETARD ACTION to do Gimp Stitch

T H E C O R N E L Y "L T G" M A C H I N E



MACHINE "N"—This machine has three needles...but it sews with a single thread. It can be set to make one, two or three rows of parallel chain stitch. This machine also has a braiding attachment. Ribbon & braid can be attached using one, two or all three needles. Machine "N" is used mostly for decorative edges on curtains & blinds & other items.

MACHINE "X"—This machine sews on braid...but FROM UNDER THE MACHINE. It is called The Under-braiding Machine. It will attach cords, braids & beads & pearls to the fabric from below the machine by a single Chain Stitch that winds itself around the braid or cord. The regular Chain Stitch appears on the reverse side of the material, which is the side presented to the operator as they follow the design.

END OF GROUP ONE MACHINES. The common thing that ties all of the group one machines together is...BASICALLY, all of these machines produce CHAIN STITCH as the primary stitch. Other things are added with the use of special attachments, but they are all attached to the material with the CHAIN STITCH.

"C O R N E L Y G R O U P T W O M A C H I N E S" U N I V E R S A L F E E D L O C K S T I T C H

There are really only three original machines in group two. The "FB", "FBN" & "FD." People have a tendency to group all of the "F" machines together, but...

The Universal Feed, implies the machine is guided by the handle under the machine. The "F", & "FA" Machines do not have the handle. Therefore, they are actually Group Three Machines.

MACHINE "FB"—This machine does about the same as the "FBN" machine, in that it sews on braiding with a lock stitch & is guided with a universal movement handle. The "FB" is only fitted with one needle.

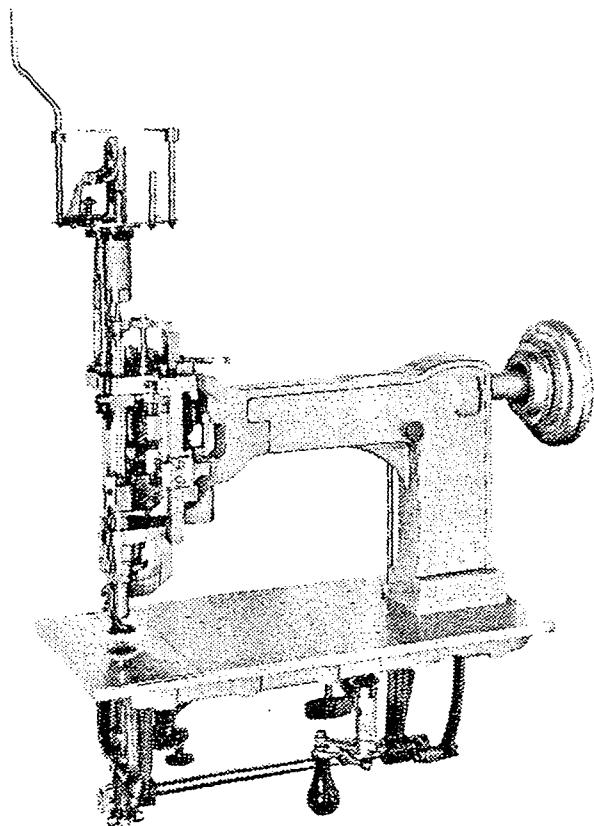
MACHINE "FBN"—This machine operates with the Universal Movement Handle. The machine has a bobbin & a needle with an eye, that is threaded with a top thread coming from above the machine. The machine makes single line stitching going in any direction. When fitted with two needles, the machine makes two rows of parallel lock stitches. This machine DOES NOT DO ZIG ZAG STITCHING.

The machine can be fitted with a Top Braiding Attachment. The Braid is sewn to the fabric, with parallel lines of stitching along both edges of the braid, instead of down the center like single needle braiding.

The machine can also be used to produce a raised cord effect between the rows of stitching. This can be done either with or without a cord filler coming up from under the machine. The width between the rows of parallel stitching can be set to various widths.

This machine also sews on sequins with a lock-stitch so they will not all fall off if a thread on the "Chain Stitch" is broken or pulled.

THE CORNELY "FBN" MACHINE

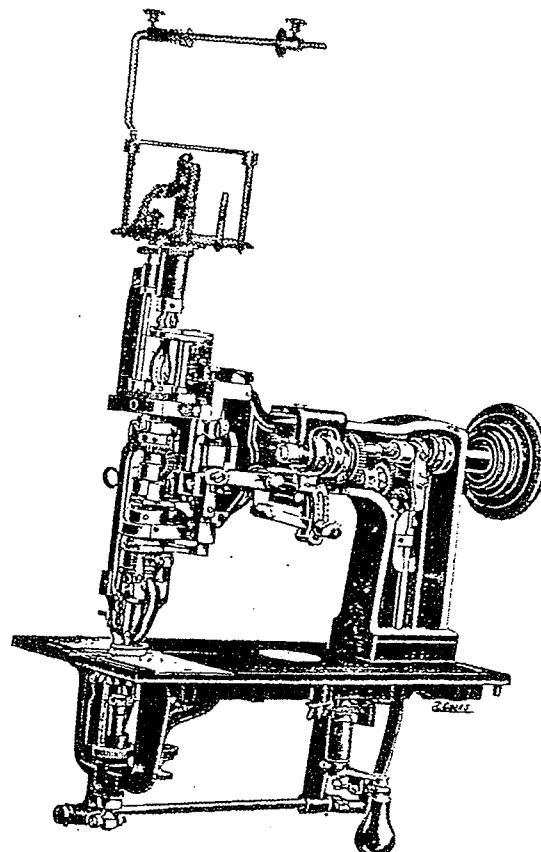


This machine can also be used to do LOCK-STITCH QUILTING, though it may not be as fast as the "A" Machines for this.

MACHINE "FD"—This machine will do everything the "FBN" machine will do PLUS...it DOES DO ZIG ZAG. Many special effects can be accomplished with this machine. Strung beads can be sewn to fabric, and SATIN STITCHING can be done in either variable or fixed widths, and with one or two needles. This is about the most complicated of the Cornely Machines.

THE CORNELY "FD" MACHINE

Cornely



MACHINE
FD

CORNELY GROUP THREE MACHINES LOCK-STITCH MACHINES

These machines are considered EMBROIDERY MACHINES, because they are used for decorative stitching of various types.

None of the machines in this group are equipped with the Universal Movement Handle. They are a valuable asset to an Embroidery Shop because they do special things.

MACHINE "F"—This Machine is the CORNELY SATIN STITCH MONOGRAMMING MACHINE. The work that can be produced on this machine is very similar to hand-embroidery.

The machine makes a lock stitch & will stitch in any direction. It does not have a foot or feed. The machine DOES NOT MAKE A ZIG ZAG STITCH. The fabric to be embroidered is placed in an embroidery hoop, then the operator moves the hoop in any direction, placing each stitch exactly where the operator wants it.

In order to give the operator more time to move the fabric, the needle only goes down into the fabric once for every three revolutions of the flywheel. The stitching is done the same as if the work was being done by hand with a needle & thread. When doing letters, instead of all of the stitching just going from left to right (horizontal) as on a zig zag monogram machine, the operator can "fan" the stitches on this machine to go in any direction. The work produced is exceptionally beautiful, but the method of working makes the machine rather slow.

The same type work that is done on the Cornely "F" Machine, can be done on the Antique Singer Treadle Machines that have a round bobbin.

MACHINE "FA"—Was a hemstitching machine. It had two needles & a punch. It could sew in a straight line, or the material could be moved in any direction, much like the "F" machine, in that the stitches would be formed when the material was moved forward or back or from side to side.

HEMSTITCHING MACHINES—Hemstitching is formed by the machine punching a hole in the fabric, then the machine, using two needles, zig zags the edge of the hole from both sides at the same time. This is all done in one operation.

LADDER BAR HEMSTITCHING—This is hemstitching done over wide rows of threads that have been previously removed (or drawn) from the material.

MACHINES 15 & 16—These machines are used to draw threads in preparation for hemstitching. Occasionally, the drawing itself is used as a decorative border on linens without the hemstitching. The bands of drawn thread can be up to 1/2 inch on the 15 machine & 1/4 inch on the 16 machine.

By thread drawing, the machine cuts & removes the vertical thread in a two way woven fabric leaving the horizontal threads un-damaged & still in place. This results in the threads remaining, running across the space where they were removed.

MACHINE 10—This is a high speed double needle machine. It does regular hemstitching with the punch & it also does ladder bar hemstitching when the threads have been previously drawn on machine 15 or 16.

MACHINE 12—This machine is also high speed, but it does hemstitching with only one needle & a punch. The hemstitch holes are very fine. This machine is used for hemstitching handkerchiefs, pillow cases & sheets.

Either Machine 10 or 12, is often used to place hemstitching on handkerchiefs, pillow cases, sheets & other items. Then the holes formed are used to place hand crochet lace edgings on them.

MACHINE 61—This is a single needle FANCY hemstitching machine. FIRST, threads are drawn on the 15 machine, then embroidered into ladder bars on machine 10. Then, Machine 61 is used to embroider into the ladder bars, giving an intricate lacy effect.

MACHINE 62—This machine is a double needle FANCY hemstitching machine. It produces DOUBLE TURKISH HEMSTITCHING, or RING HEMSTITCHING in one operation. Threads must be previously drawn on machine 15.

MACHINE 64—This is not really a hemstitch machine, it is a LADDER BAR machine. It works with two needles & makes a ladder about 1/8 inch wide. Threads are not previously drawn. The ladders are made by two extra threads placed on a carriage on top of the machine. These are sewn across the fabric at the same time the punch makes the hole and the ordinary thread & needles join the fabric together with long stitches across the punched gap. These extra threads can be thicker than ordinary thread.

MACHINE 70—This machine is similar to Machine 64, except it does about the same thing but without the extra threads. The threads used for the stitching could be heavier. This machine has two punches, one in front of the needles & one behind.

MACHINE 151—This is a single needle machine used in doing hemstitching. it is very unusual, in that it does a zig zag stitch, BUT instead of the needle zig zagging from side to side it ZIG ZAGS FROM FRONT TO BACK!

The widest throw on this machine is about 1/4 inch. The Machine works without a foot or feed.

The 151 Machine has a KNEE LEVER, so the operator can control the width of the zig zag as she works.

After LADDER HEMSTITCHING is produced on Machine 10, the ladder threads that are normally left plain, can be overcast by this BAR-OVERSEWING MACHINE. This is called "VENICE HEMSTITCHING."

The 151 can also be used to do FREE-HAND-EMBROIDERY by placing the work in an embroidery hoop & doing the work the same as on the "F" Machine. Free-Hand Work can also be done on this machine without using the hoop. A special needle plate that is slightly raised at the point of needle entry can be used instead of the hoop.

You might think, since this machine will do zig zag, & it can do SATIN STITCH, it would work well for doing MONOGRAMMING. It will do it ... but only when the operator moves the material like on the "F" Machine. Don't forget, this Machine zig zags from front to back ... not side to side!

Since the Machine has the KNEE LEVER to control the width, I imagine you could train yourself to work with the monogram laying sideways instead of toward you.

CORNELY was well on the way to producing a good SATIN STITCH MONOGRAMMING MACHINE. I have never understood why they never really did.

If the RETARD ACTION on the "F" Machine was used as an optional feature, with the KNEE LEVER & RAISED PLATE of the 151, & the WIDE ZIG ZAG THROW of the SINGER 107W102 machine was copied (don't forget Singer did this to Cornely) I think Cornely would have a WINNER!

Then, if a UNIVERSAL MOVEMENT HANDLE that would not interfere with the KNEE LEVER could be added...Christine, are you listening?

C O R N E L Y G R O U P F O U R M A C H I N E S U N U S U A L M A C H I N E S

MACHINE 30—This Machine is basically a Chain Stitch Machine. It operates with one hooked needle & makes a single row of Chain Stitches...it falls into the group of "UNUSUAL MACHINES," because...

Machine 30 will make a row of Chain Stitching while using two or three colors of thread! It will sew one stitch with WHITE THREAD, the next stitch with BLUE THREAD and the next stitch with RED THREAD. Then it will repeat the process. Of course any colors can be used.

Not only can different colors be used, different thickness' & textures can also be used. The reverse side of the work is just as interesting as the front. The long lengths of threads that join the alternating colors resembles Hungarian Hand Embroidery.

Since most machines of this type were pre-war Machines that were assigned LETTERS, and this one is a post-war machine with a NUMBER...I think the 30 Machine may be the newer model of the "J" Machine. The one that I can't find any information about.

MACHINE 41—This Machine is the most UNUSUAL MACHINE OF THEM ALL! It is certainly the largest of all the Cornely machines.

I have only seen one of these machines & that was back in 1947. I did not operate the Machine, so my memory may not be exactly 100 percent. If I find I am wrong about anything in this Book, I will furnish an Addendum later on.

This machine was especially designed to sew cords, tinsel braid & other decorations onto lace, net & other fine fabrics.

The ends of the bolt of fabric is wound onto long metal rollers that forms a frame so the fabric is tightly stretched between them.

The rollers are on the front & back of the machine. The Machine has an extra long arm attached at the back-center of the machine aimed toward the operator.

The arm, that does the sewing, is attached to a floating pivot. It will move freely in an area about six to eight inches wide, & up & down the length of the material from side to side.

The movement of the arm also controls the rollers holding the material. If you aim the head to sew back toward the back roller, the material moves forward. If you aim the head to sew forward, the rollers move the material to the back.

This is a high speed machine. Complete rolls of lace material can be high-light embroidered around flower & leaf designs with cording or braids & other stitches.

This is another Machine I believe Cornely could do more with. I think this Machine could be easily adapted to Automatic Computerized Work & I even think "it could be adapted to embroider SATIN STITCH EMBLEMS. I imagine additional heads could be added.

I also think this machine could be adapted as a lock stitch machine to do quilting. It would have the high speed, & if Computerized, it could do a good imitation of "BONNAZ QUILTING."

MACHINE 51—This machine is UNUSUAL because it don't sew! It makes holes & perforations instead.

It was used to perforate leather, felt, paper & cardboard. The machine works with a large variety of punches of various sizes & shapes. Circles, ovals, triangles, lozenges, stars & others. These fit where the NIPPLE would normally be.

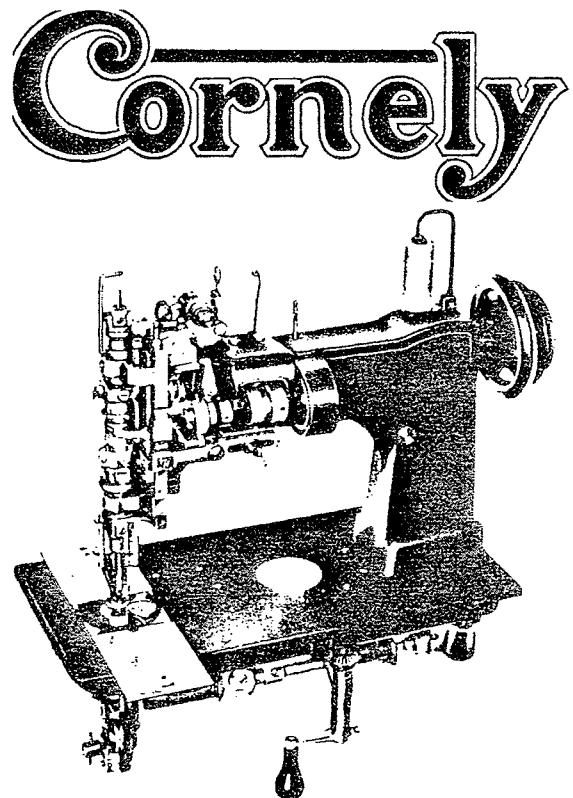
This Machine will do a good imitation of Hand-Tooled Leather work.

Gloves & shoes are decorated with these perforations. The Machine was also used to fringe & festoon the edges of materials.

C O R N E L Y G R O U P F I V E M A C H I N E S P O S T - W A R R E S T Y L E D M A C H I N E S

MACHINE 121—This Machine makes a zig zag lock stitch or single line lock stitch. It has a UNIVERSAL FEED & high speed rotary hook. It is much faster working than the "FD" Machine that has the oscillating hook.

THE CORNELY "121" MACHINE



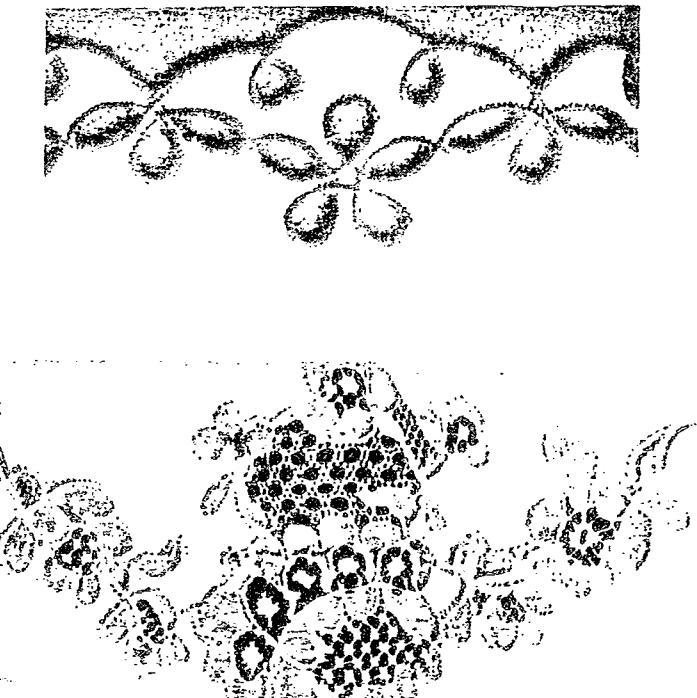
CLASSES 121 et 123

The width of the zig zag can be varied up to about 3/16 inch. The stitching can be placed very close together so the Machine will do SATIN STITCH. Since the Machine is guided with the UNIVERSAL MOVEMENT HANDLE, Monogramming of letters using the same stitch width can be done quite easily.

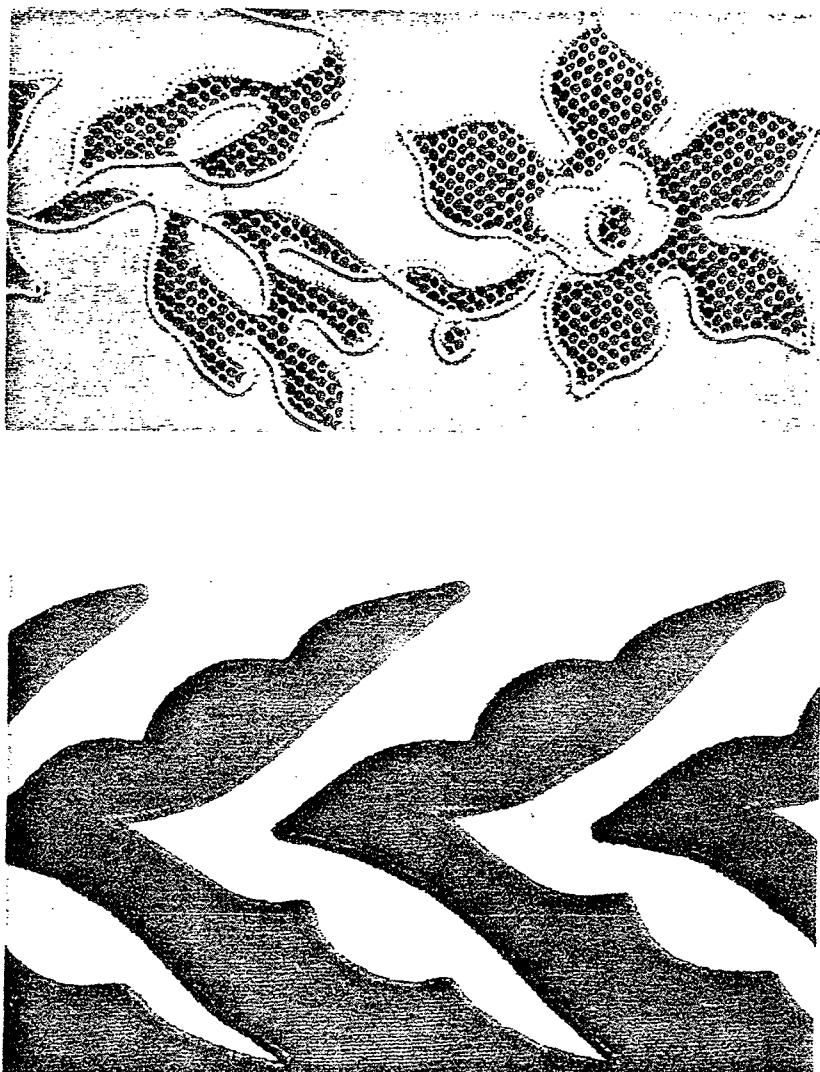
The width CAN NOT be adjusted as the operator works, so lettering with varying widths can not be done.

The 121 Machine is most widely used for "APPLIQUE WORK." This can either be sewing fine laces onto other fabrics. Intricate designs can be sewn then the edges of the materials are cut away with Applique Scissors.

SAMPLES OF APPLIQUE WORK DONE ON THE "121" MACHINE



APPLIQUE SAMPLES



TACKLE-TWILL LETTERING

In recent years, die-cut tackle twill & felt letters have become very popular. The letters have press-on adhesive on the back. They are pressed in place, then they are sewn around the edge of the letter to hold them to the material.

Most of the people doing this kind of work ARE DOING IT THE HARD WAY!

They are using regular zig zag machines. Every time they come to the end on the side of a letter...they have to turn the material.

WHY ARE YOU USING MUSCLE INSTEAD OF BRAINS?

The Cornely 121 Machine will sew felt lettering with a straight stitch or tackle-twill lettering with a zig zag stitch. YOU DON'T HAVE TO TURN ALL OF THAT MATERIAL...learn to guide the handle & LET THE MACHINE DO THE WORK FOR YOU!

FLAGS & BANNERS

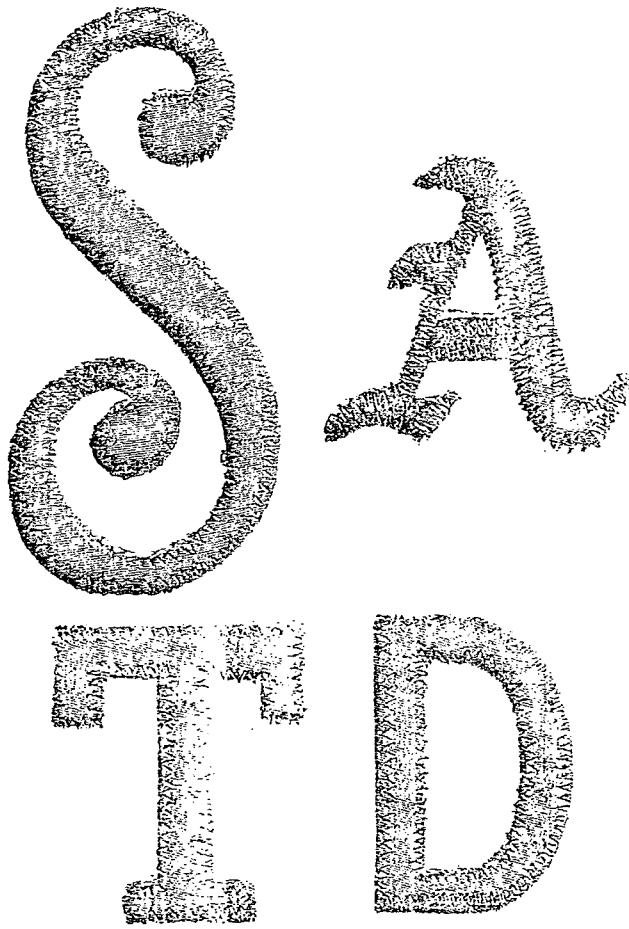
The 121 Machine is especially GREAT when sewing large lettering onto BANNERS, where you are working with a lot of material. A BANNER can be lettered on the 121 Machine in about 1/2 to 1/3 the time it takes on the regular zig zag machine.

The 121 Machine also has a TOP BOBBIN similar to the "L" Machines, except, instead of the bobbin spinning ...it just feeds a FILLER THREAD or CORD that is sewn onto the fabric with the zig zag stitch. Very fine raised work can be done in intricate designs. Names can be written on Handkerchiefs as small as most people can write with a pencil.

A filler thread can also be sewn to the fabric on the reverse by feeding the filler thread from below the machine.

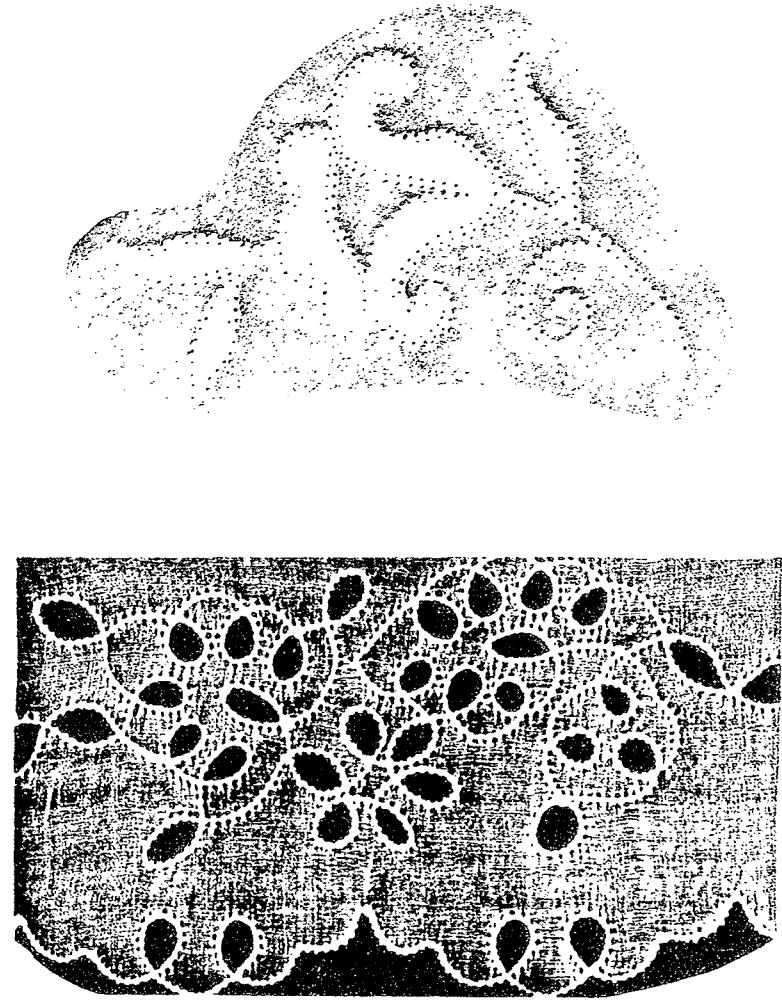
TACKLE - TWILL LETTERING
DONE ON THE 121 MACHINE

The zig zag stitching can be narrow or up to 1/4 inch wide. The stitch can be adjusted to be as close as satin stitch or spaced farther apart.



MACHINE 123—This is the same as the 121 Machine...except it works with two needles & has a punch to do hemstitching work.

H E M S T I T C H S A M P L E S
D O N E O N T H E " 1 2 3 " M A C H I N E



MACHINE 148—This machine has two needles. One is a hooked needle that makes a Chain Stitch & the other is an eye-pointed needle that makes a straight stitch. The machine has The Universal Feed & it works with only one thread. This gives a very good imitation of bar & running stitches that look like they had been done by hand.

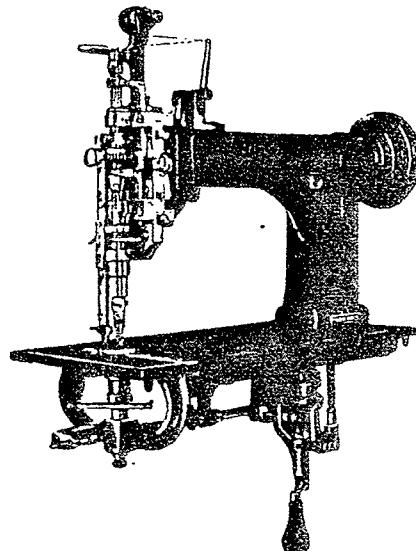
These decorative stitches are on the reverse side of the work. On the front, only the Chain Stitch & straight stitch are seen.

The width can be from 1/8 inch to 1/2 inch wide. The bar stitch is formed by the thread passing from the needle to the hook.

This stitching can be done along either a straight or scalloped edge of the fabric or it can be done in the center of the material as a decorative stitch following designs.

The stitching can be done with the bars either straight out to the side or the machine can be set so they are slanted. The machine can also be set so one needle is in front of the other. This eliminates the bars & results in only a single row of SADDLE STITCHING.

CORNELY "148" MACHINE



1950 - BIG CHANGES START HAPPENING IN THE EMBROIDERY INDUSTRY

Around 1950, The Cornely Company made a lot of changes. Some machines were completely discontinued, many were restyled and made to work much faster than the old models. The 148 machine is one that went by the wayside. Many machines were discontinued, such as the "K" Machines, because other machines could do the same thing, plus other things. Others were discontinued (the "F" Machine) because other manufacturers had developed machines that did the work better & faster.

Around 1960, newer machines started being developed that would replace the enormous SWISS SCHIFFLI MULTI-NEEDLE MACHINES that were used for almost a hundred years to manufacture embroidered emblems. By 1970, the new MULTI-HEAD MACHINES & even single head automatic machines to do SATIN STITCH embroidery & monogramming were on the market.

PANTO - GRAPH MACHINES

Even before the Automatic Computerized Machines...The Meistergram Company, found a need & filled it.

REASONS BEHIND THE PANTO - GRAPH INVENTION

Even though The SINGER COMPANY had invented the SINGER 107W102 SATIN STITCH MONOGRAMMING MACHINE around 1925, and the machine did excellent work, was easy to operate & could do Satin Stitch Embroidery & Monogramming better & faster than ever before...there were still a few draw backs at that time.

Monogramming, especially when done on towel sets & sheets & pillow cases, requires several sizes of the same monogram to be drawn. This was a real problem. Enlargements could be made several ways.

I first learned to make enlargements for towel monogramming by drawing the smallest size to be used for the wash cloth on grid paper with the squares 1/4 inch.

For the hand towels, this was copied onto grid paper with the squares 3/16 inch. Then the original was copied onto grid paper 1/2 inch. This gave me a 2" size, a 3" size & a 4" size.

This art-work took longer to do than the monogramming itself. If finger-tip towels or a bath mat was included in the order, then two additional sizes had to be made.

After I was taught by one of the largest Linen Manufacturers in Los Angeles, that this was the only way of doing this...I started taking Art Classes at Los Angeles Trade Tech. and I learned that a special tool was made for making enlargements & reductions.

This tool is called a PANTO-GRAFH. It is very simple. Only four pieces of wood with ratio numbers marked on them, and a lead marker positioned on the end of one of the "arms" and a stylus positioned on the end of another "arm. The arms are held together at the same ratio points by screws. The pieces of wood form a square. The pantograph is attached to a table at the end of one arm. The original art work is placed under the stylus & the enlargement is made with the lead marker, as the original is followed with the stylus.

The Panto-Graph alone, cut down the art work time considerably. Patterns could be made in almost no time at all, compared to what I had to do before. BUT...still, each of those patterns had to be perforated to be stamped onto the material to be embroidered.

They could also be copied (one for each towel) and the paper could just be placed on the material. You can just embroider over it and tear it away when you are done.

Then...if you used perforated patterns, when you stamped the design onto terry cloth, all we had in the twenty's, thirty's & forty's was blue & white stamping paste. It was impossible to cover the stamping paste with the embroidery.

Meistergram solved both problems! They used the panto-graph & attached it to the machine, so the material was moved by the operator following the design with the stylus on the desk in front of the machine.

Enlargements were not needed, because the panto-graph could be set to do the different sizes. At the time the machine was invented, Meistergram used the SINGER 107W102 Machine in their panto-graph table.

At that time, this was a great invention! I don't know if Singer stopped them from using their machine, or if they just decided to make their own machine, but later, Meistergram started making their Machine also.

As I said, at that time this was a great invention. But, sometime in the fifty's, MAGIC STAMPING PASTE came along. With this stamping paste, you could stamp terry cloth and the operator worked with a BLACK LIGHT on the table. Unless the magic stamping paste is under the black light, IT CAN NOT BE SEEN. So...this solved one problem.

Since the operator followed the design on the desk in FRONT of where the machine was doing the work, some of the QUALITY of the work was sacrificed. Another problem was, you could not turn the material while you were sewing like you can on the Singer Machine.

These machines were very popular because anyone could learn to operate them & do passable work in a short time. Very few "QUICK-STUDY" operators learned to use the knee lever properly, & mostly the machines were used to put stitches into material that slightly resembled monogramming, but very seldom did this work show any "FINESSE" or "ARTISTIC ABILITY!"

Operators who learned to operate the Singer 107W102 machines, never made the switch to the panto-graph machines. They were not willing to sacrifice quality & they did not like being limited to following the templates used on these machines. They also, did not like not being able to see the work as it was being done.

These operators almost always go over a monogram at least twice. This could not be done on the panto-graph. They also like to see what they are doing & they like to be able to turn the hoop when they want to.

In the seventys, copy machines that have the ability to make enlargements & reductions became available at prices anyone could afford...so the other problem for using the panto-graph machines was solved. With a copy machine enlargements can be made in seconds. At this point the panto-graph machines became obsolete!

The Singer 107W102 machine is much faster & an experienced operator can do several monograms on the Singer in the same time an operator is setting up the panto-graph to do one monogram.

By using clear plastic to stamp the design on, then sewing over it, all of the stamping problems are solved. The plastic breaks away when you are done. This also holds the loops of the terry in place while you are working.

The Meistergram Company realized the panto-graph machines had become obsolete & they started making Automatic Computerized Machines.

D O C O M P U T E R I Z E D M A C H I N E S R E A L L Y R E P L A C E T H E H A N D - O P E R A T E D M A C H I N E S

This seems to be a subject that people who have Automatic Machines don't even want to discuss! This I can not understand. Why can't these people use their heads & listen to reason?

NO! The Automatic machines WILL NOT EVER REPLACE THE HAND-OPERATED MACHINES! Both are very much needed in the Embroidery Business.

If any of you think for one minute. that I am stupid enough to try to do an order of 1000 embroidered emblems on my Hand-Operated Machine, you are not paying attention! In fact...I won't even do an order of fifty!

The Automatic machines do so much better a job on this, so much faster & cheaper, ! would be a complete idiot to even think about it!

I would like to know why YOU think EVERYTHING has to be done on Automatic Machines? Are you telling me there is no longer any room for SKILL & ARTISTIC ABILITY in the Embroidery Industry?

Is there no longer to be "CUSTOM WORK?" Does everything HAVE to be done by the hundreds?

If any of you think there is no room for BOTH KINDS OF WORK, would you do a little test for me? For just one month. every time you turn down a customer who wants only one to ten of a special thing done, KEEP A RECORD.

For each of those jobs, some would have only been a \$10.00 job...but others could have ran as high as \$250.00.

Consider that you lost an average of \$50.00 on each of them. Then, when you take into consideration, that will triple, when the word gets around that you DO CUSTOM WORK...Can you really afford to be losing that much business by not offering CUSTOM WORK to your Customers?

I can do a Hand-Machine Embroidered Jacket with several colors in the design in about an hour. I will charge the Customer from \$75.00 to \$250.00 for this one jacket.

That is about what you would have to charge for the tapes alone! Plus you would have a lot more of your time invested. Even if this was an order for ten of these jackets...they will put more profit into your pocket if they are done on the Hand-Operated Machines.

ATTEMPTS ARE BEING MADE
TO COMPUTERIZE SOME OF THE
CORNELY MACHINES

Chain Stitch & Chenille have been done on Computerized Machines for quite a while. But...the same things apply!

Even with several operators working in my shop, if I got a large order for Chenille Emblems, say over 250, I would send them out to be done on the Automatic Machines.

Most orders for chenille emblems are for a dozen or less though. These I will still do at Artistic Touch on the Hand-Machines.

You have to figure each job both ways and see where the profit is. It is possible at times that just 12 emblems with intricate work might cost less to have them done, than to do them. It is also possible that a simple order of 100 or more would cost less to do them on the Hand Machines.

There are a few of the Cornely Machines that could be Computerized, but... all of these machines are HIGH SPEED machines to begin with. It must be taken into consideration, whether it will take longer to set the work up on the Computerized Machine to be done, than it would take for an experienced operator to just do it!

Perhaps at times, we would be better off to follow the old saying that goes, "If it ain't broke...don't fix it!"

I see literature on some Computerized Machines that tells me they will produce 200 to 300 stitches per minute! Don't these people know, The Singer 107W102 Machine will produce 2500 to 3500 stitches per minute. Chain Stitch machines will produce 1500 to 2000 stitches per minute & when working on Chenille, they will produce 2000 to 3000 stitches per minute.

NEW CORNELY MACHINES
NOW AVAILABLE

Many of the old machines can still be found at garage sales, advertised in throw-away newspapers & many dealers have used machines from time to time.

At Artistic Touch, we usually have a supply of used machines as well as New Cornely Machines.

CHAIN STITCH & CHENILLE
MACHINES

MACHINE "A3"—This is the restyled version of the "A" Machine. It will do Chain Stitch & Chenille. (Moss Stitch.) It has The Universal Movement & is guided by the rotating handle under the Machine. The "A3" comes equipped with the Stop Motion.

MACHINE "A5"—Is exactly the same machine except it does not have the Stop Motion.

MACHINE "A2"—This machine will do regular Chain Stitch & Chenille, but it also will make a much larger stitch than the "A3" Machine. It also has a much longer arm, (90 cm.) this is about 35 1/2 inches. This machine is better when working on heavy jackets and especially when doing quilting work on bedspreads, or any time you are working on something where you need the extra space between the arm base & the needle.

MACHINE "AH2"—This Machine is similar to the "A2" Machine, except it can sew through fabrics that are up to 1/4 inch thick. (6 mm.) It can embroider & repair carpeting.

MACHINE "N"—This Machine has three hooked needles and can sew two or three rows of parallel Chain Stitches using only one thread. This is a Universal Feed Machine & is used for high speed embroidery on curtains, wedding veils dress embroidery & many other things.

C O R D I N G & B R A I D M A C H I N E S

MACHINE "L3"—This is a Universal Movement Machine. It is most similar to the old "LB" Machine. It does two & three thread cording, has a top braiding attachment, can do Chain Stitch & Chenille & Feather Stitch. "L3" is equipped with the Stop Motion.

MACHINE "LS"—Exactly the same as the "L3" Machine, but without the Stop Motion.

MACHINE "LG3"—The same as the "L3" Machine, but it has the RETARD ATTACHMENT to do Gimp Stitch. MACHINE LG5 Motion. The same as the LG3, but without the Stop

MACHINE "LTG"—This Machine is equipped with two hooked needles to produce four-thread cording. When used with one needle, it can produce all the work that can be done on the L3 Machine. "LTG" has the RETARD ATTACHMENT and the Stop Motion.

U N I V E R S A L F E E D L O C K - S T I T C H M A C H I N E S

MACHINE "121"—This is a Universal Feed Lock-Stitch Machine that works with one oscillating needle. It makes a single line stitch, a zig zag stitch & a SATIN STITCH. The stitch can have a filler inserted while sewing, either from the top or bottom. Applique work can be done on fabrics & laces. Applique, or TACKLE-TWILL LETIERING can be sewn on with this machine. Very intricate detail work can be done with the top filler on handkerchiefs & other things.

MACHINE "FBN"—This Machine has TWO FIXED NEEDLES that produce two parallel rows of lock-stitching. It can be used with only one needle to produce a single line of stitching. It has the Universal Feed. The Machine can sew on Braid, do double needle cording fill work with the cord attached from under the fabric, producing a raised section in the center with the rows of parallel stitching on either side. This Machine also SEWS ON SEQUINS.

H E M S T I T C H I N G M A C H I N E S

MACHINE "15"—This is a high speed thread-drawing Machine. It can make a band of drawn threads up to 1/2 inch wide (12 mm). This Machine prepares the fabric for LADDER-HEMSTITCHING that will be done on machine 10.

The drawn threads can be used by themselves to create effect on table cloths & napkins without any sewing.

MACHINE "12"—This is the SINGLE NEEDLE hemstitching Machine. It is used to do "delicate" hemstitching on handkerchiefs, pillow cases, etc.

MACHINE "10"—This is the DOUBLE NEEDLE hemstitching Machine. Actually, two versions of this Machine are available.

STANDARD TYPE—Makes a narrow row of hemstitching.

LARGE TYPE—Makes a wide row of hemstitching up to 1/3 inch wide.
(9 mm)

These Machines are used to do hemstitching on sheets, pillow cases, table cloths, towels & clothing.

After threads are drawn with Machine "15", this Machine is used to prepare the fabric along the sides of the drawn threads, for LADDER-STITCHING to be done on Machine "151".

MACHINE "151"—This is a high speed FREE-HAND zig zag Machine that produces a zig zag stitch up to 1/2 inch wide (12 mm). This Machine zig zags from the FRONT to BACK, instead of from SIDE to SIDE, like conventional zig zag Machines. This is a lock-stitch Machine that works WITHOUT a FEED or FOOT.

This Machine was especially designed to sew over the LADDER-BARS created by Machines "15" & "10", to create VENICE HEMSTITCHING. Machine "151" will also do free-hand SATIN STITCH EMBROIDERY. The width of the zig zag can be varied by using a knee lever while sewing. But...don't forget, this machine zig zags VERTICALLY instead of HORIZONTALLY!

MACHINE "41"—This lock-stitch Machine was specially made to embroider on large rolls of fabric up to 39 1/2 inches wide. (1 m) The full bolt of material can be wound onto the rollers on the front & back of the Machine.

It is used to re-embroider the existing designs on laces, adding cords, gold & silver metallic threads, etc.

I personally do not know enough about this Machine. I think it could be used to do many other things like quilting, etc. I have requested more information from The Cornely Company. This information will be added to this Book when I receive it.

LIST OF NEW CORNELY MACHINES
SHOWING THE OLDER MACHINES
THEY HAVE REPLACED

NEW MACHINE.....OLD MACHINES IT REPLACES

CORNELY "A3" "A" & "AB"

CORNELY "A2" "A2"

CORNELY "AH2" "AH" & "AH2"

CORNELY "L3" "L", "K", "KB" & "LB"

CORNELY "LG3" "LG" & "LGB"

CORNELY "LTG" "LT" & "LTG"

CORNELY "N" "N"

CORNELY "FBN" "FB", "FBN", "C" & "X"

CORNELY "FD" "FD"

OL D E R C O R N E L Y M A C H I N E S
N O T R E P L A C E D

"B" MACHINES—Not replaced because the work done on this machine can be done on the "L3" machine.

MACHINES, "E", "ACH", "LE", "LCH", "LEG", "LEG" "LGCH", "BCH" & "RE."—None of these Machines were replaced. They are all the high-post Machines. I wish The Cornely Company would at least replace the "LGCH" Machine. I have more calls from people wanting high post machines than any other.

MACHINE "F"—Not replaced because other machines are faster & easier to operate.

MACHINE "30"—I guess there was not any real demand for the work done on this machine, EXCEPT...the work produced on the back looked like HUNGARIAN HAND EMBROIDERY.

MACHINE "5"—This Machine was not replaced, I guess the demand was too small.

MACHINE "48"—I don't know why this machine was not replaced. The stitching it does can not be done. on any other machine.

N E W S T I T C H S T Y L E S N E E D E D

Here in the U.S.A. I keep reading articles written by people in the Embroidery Business that only use Computerized Machines. These articles keep saying new stitching styles are needed in the industry.

Machines that do a wide variety of different stitching styles are available...all you have to do in order to use them is LEARN HOW TO OPERATE THEM.

Dress Embroidery orders for thousands of pieces have been done for many years on these machines. It does take a little more talent than pushing buttons though...

TRICKS TO OPERATING "BONNAZ" OR CORNELY MACHINES

I am not going into teaching how to operate the Machines in this Book. That is all covered in Book Number One, "CHAIN STITCH (BONNAZ) EMBROIDERY." If you learn to operate the Chain Stitch machine, you will be able to operate any of the other Cornely "BONNAZ" Machines.

There are SPECIAL things about these other machines though. Without SPECIAL INSTRUCTIONS, a person could go out of their mind trying to figure out some of them.

The rest of this Book will try to explain all of those little "IDIOSYNCRASIES" of these SPECIAL MACHINES.

CHAIN STITCH & CHENILLE (POINT DE CHAINETTE & POINT MOUSSE)

When doing Chain Stitch, the opening in the hook MUST be aimed toward the operator when the "NOSE" & HANDLE are turned to the front. The LOOPER MUST be set at 1:00 o'clock when the nipple is at the highest point & the "NOSE" is aimed to the front.

For CHENILLE, the opening in the hook must be turned around so it is AIMED AWAY from the operator when handle is aimed forward. The looper MUST be set at 6:00 o'clock.

When the looper gets old & worn, it should be replaced, but... you may need to set the looper to either 5:00 o'clock or 7:00 o'clock to get the Chenille loops to stand right.

Most problems when doing Chenille are caused by the thread not peeling off the cone of thread without any obstruction.

It is of the utmost importance that the thread flow from the cone to the looper without hanging up on the edges of the cone, or the eyelets under the machine or any thing else. If the thread don't flow smoothly, you will have varing heights in the Chenille Pile. This results in sloppy Chenille. Every stitch should be standing like a row of croquet pegs, one after the other.

When doing Rayon Chenille, use the regular needles. Each stitch should stand individually so you can see the shine to the bud. (The Chenille Loops are called buds.)

When doing Wool or Orlon Chenille, use the Chenille Hooks specially made for this. The Chenille should look like a bunch of little worms. (Gross, but the only description that fits!)

Chenille takes a tension that is very light...loosen the tension until the machine stops picking up the thread...then tighten it just slightly.

Puckering can be prevented by raising the nipple to the highest point with the adjustment behind the face of the machine. Your foot pressure should be low enough to move the material, yet light enough not to hinder the movement in any way. Run the machine at FULL SPEED. Loosen the foot pressure until the machine starts "stuttering" & trying to sew backwards...then tighten it slightly.

BRAIDING (MACHINE A SOUTACHER)

Flat or round braids & ribbons can be used, providing they will fit into the special nipple attachments supplied with the machines. The Roll of Braid is fed from the top of the machine, where it is placed in the holder.

The Roll of Braid is inserted into the hole in front of the needle bar on the "B" Machine that is shown. When doing Braid on the "L" machines, the Braid is fed down the opening in the hollow tube that is used for the needle bar.

BRAIDING SPOOL & CARRIER

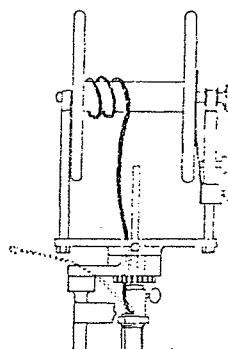
Special threader wires are available to feed the Braid down the tube. They are made of fine wire & they have a turned hook on each end.

If you do not have this special threader wire, a piece of thread can be tied to the Braid. Stiffen the thread with bee's wax & feed this thread down first...then pull the Braid through.

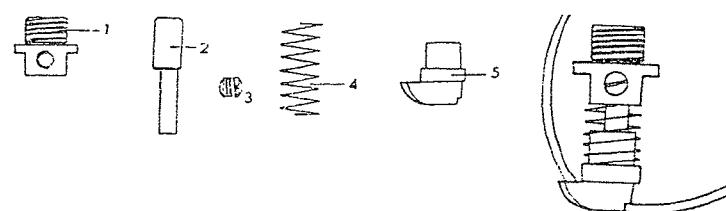
Tension on the Braid is adjusted by using the adjustment on the right side of the Braid Carrier, as shown in the diagram above.

There are five parts to the Braid Nipple.

1. The Nipple Base, which is screwed into the nipple holder on the Machine.
2. The Nipple Stem. This tubular piece is placed into the Nipple Base & fastened with the Set Screw.
3. The Set Screw.
4. The Spring, which gives a steady pressure on the fabric.
5. The Braid Guide or Shoe. These come in a variety of shapes & sizes.



THE FIVE PARTS TO THE BRAID NIPPLE



Braiding Nipples that are used for ribbons are only composed of three parts. (1) The Nipple Base. (2) The COMBINED Nipple Stem & ribbon guide. (3) The Set Screw.

When Braid is sewn in the center, this is called FLAT BRAIDING. All of the components of the Braid Nipple are lined up straight.

FLAT BRAIDING NIPPLE



When Braid is sewn on the edge this is called EDGE BRAIDING. A special guide with a slanted cut out part is used for this work.

SPECIAL EDGE BRAIDING GUIDE.



Cords are always attached to the fabric by the EDGE. A special guide with a half-circle cut-out is used for this.

SPECIAL GUIDE FOR ATTACHING CORDS



Another special guide is used for attaching ribbons. One is for center & the other is for side attachment. You can see from the diagram below how they work.

CENTER RIBBON GUIDE



EDGE RIBBON GUIDE



THREAD FOR ATTACHING BRAID

Size 50 mercerized thread is generally used in the same color as the braid. But... other colors, and even rayon or metallic threads can be used if extra decoration is desired.

WINDING BRAID & BOBBINS FOR CORDING

Most Braids, Ribbons & Cords come already wound onto the large spools.

But...if you want to use something that is not on the spools, you can wind it onto the spool yourself.

There is an attachment that fits onto the wheel of the machine especially for doing this. They are about four inches long with a screw in one end. You remove the screw in the end of the wheel and insert this attachment instead. Braids, wool thread from skeins and BOBBINS FOR THE CORDING MACHINES can be wound on this attachment.

Set the thread or braid to be wound on the floor in front of the machine. Place the spool or bobbin to be wound onto the attachment. Wrap the end around the spool or bobbin several times by hand, then hold a steady, but loose tension on the thread as you step on the treadle. Try to wind the spool or bobbin as smoothly as possible.

It helps to wear a glove while doing this to avoid burning your fingers with the thread. When the bobbin or spool is wound, place a straight pin in the side & wrap the thread around it to keep it from unwinding.

This method can also be used for winding thread off of cones onto spools to be used for Chain Stitch work & other things.

Remember, all thread used for Chain Stitching on these Machines SHOULD be left twist. Re-winding the thread changes it to right twist.

PLACING THE BRAID NIPPLE ONTO THE MACHINE

The needle bar, presser foot & NEEDLE PLATE must be removed from the machine.

The parts of the BRAID NIPPLE must be assembled ON THE MACHINE. First, screw the NIPPLE BASE into the NIPPLE HOLDER on the Machine. (Have the handle aimed forward while you do this.)

Place the NIPPLE STEM into the NIPPLE BASE or stem holder. The flat side of the NIPPLE STEM must face forward, in line with the screw-hole in the NIPPLE BASE. Hold it in place & insert the SET SCREW & tighten it.

Place the SPRING over the NIPPLE STEM. Then place the BRAID GUIDE you have chosen onto the NIPPLE STEM.

Nothing holds the BRAID GUIDE onto the NIPPLE STEM. It floats freely.

Replace the NEEDLE PLATE & line it up properly. The BRAID GUIDE will now stay in place. You must hold the BRAID GUIDE & SPRING up with your finger as you replace the NEEDLE PLATE.

Replace the presser foot. This is not easy to do. The foot must be turned to the side & the BRAID GUIDE must be held up with your finger.

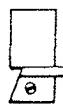
It is difficult to set the height of the needle because the Braid Guide is in the way. Since you are already an experienced operator...you have to adjust the needle by guess. Sew a little on a scrap to see if the height is right.

When doing Braiding on the "L" Machines, another part must be added. This is called the NIPPLE HOLDER. If the machine is used for doing Cording, the NIPPLE HOLDER will already be on the Machine.

"L" MACHINE BRAIDING

When doing Braiding on the "L" Machine, only parts 2, 3, 4 & 5 of the braiding Nipple are used. They are inserted into the NIPPLE HOLDER shown below.

"L" MACHINE NIPPLE HOLDER:



This NIPPLE HOLDER has a cut-away section because instead of the Braid running down in front of the needle bar as on the "B" Machine...the Braid is inserted into the hollow tube that is used for the needle bar.

REPLACING NEEDLES IN THE HOLLOW TUBE NEEDLE BARS

Needles must be replaced in the Cording Machine hollow needle bars very carefully. The screw threads in the needle bar are TOOLED WITH PRECISION so the opening in the hook will face forward with the flat part & open section facing forward.

This is done so the filler thread or Braid will be fed in front of the needle.

Don't ever use force to over tighten the needle. Line it up correctly, & you will find the needle is as tight as it is supposed to be. The threads in the needles exactly fit the threads in the needle bar.

CORRECTLY INSERTED NEEDLE

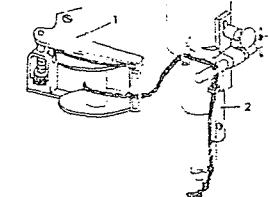


THREE THREAD CORDING

(COUSO-BRODEUR A TROIS FILS)

The first thread is the Chain Stitch that attaches the cord to the fabric. The second thread is the filler thread that is fed down through the needle bar. The third thread is the bobbin thread that wraps around & covers the filler thread.

BOBBIN CARRIER SHOWING THREAD PATH FROM THE BOBBIN TO THE FINGER TO THE NIPPLE.



The filler thread is wound onto a large spool which is placed on the spool carrier at the very top of the machine.
(see diagram page 63)

The filler can either be threaded into the needle bar with a long threader wire with a hook on both ends, or the filler thread itself can be stiffened with bee's wax and fed through.

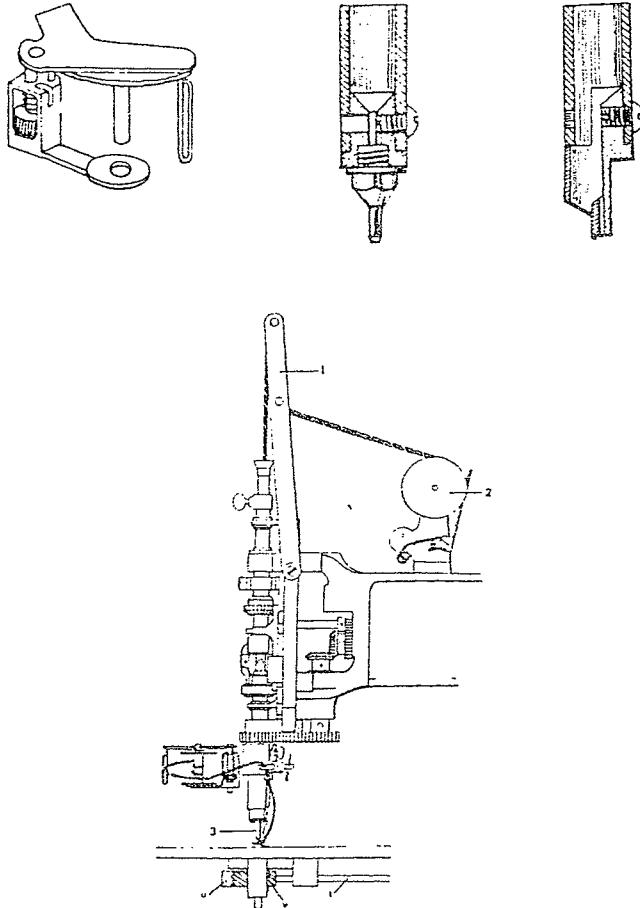
A tension adjustment is provided on the side of the filler spool carrier.

See instructions on page 59 for winding the bobbins.

The bobbin is placed into the bobbin carrier by pushing down on the bottom of the carrier & swinging the bottom portion out. Place the bobbin on the spindle, swing the bottom part of the carrier back into place until it locks.

Run the bobbin thread into the bracket on the carrier then to the top eye on the finger then down to the bottom eye. From here, the bobbin thread is just placed under the foot.

THREE THREAD MACHINE DIAGRAMS



A D J U S T I N G T H E B O B B I N T E N S I O N

Ths is something I get calls about all of the time. The callers tell me, they get the tension set just right, then they start sewing & the tension keeps getting tighter!

THAT'S HOW IT IS SUPPOSED TO WORK! The tension is placed on the bobbin by a flat spring that rests on top of the bobbin. As the thread is wound off of this small spool, there is no way to keep a steady pre-set tension.

After you get the tension set correctly, the operator must loosen the tension about one turn for every two or three feet of sewing you do. After a while this becomes an automatic action. A good operator can keep the same bobbin tension from one end of a fifty foot banner to the other end. Practice makes perfect.

Don't complain about this...this is the one thing that will keep the Cording Machine from being Computerized for many years!

J O I N I N G B O B B I N T H R E A D S W H E N T H E B O B B I N R U N S O U T

The operator must watch the bobbin and when it is just about empty, replace it with another bobbin. This can be done when you are in the middle of a piece of work.

Depending on the work you are doing, the bobbin will be made up of one, two, three, four or even five strands of thread. You will have to tie each strand of the used bobbin to each strand of the new bobbin. If you "stagger" the knots, they will not be seen in the work. The ties must each be cut down to just knots, not long strand's sticking out.

Another way of doing this is to break off, then start over right where you broke off. Pull both strand's through to the back of the fabric & tie them together.

S P E C I A L T H I N G S T O W A T C H F O R

Be sure your Cording Bobbins are not old & damaged. If either the top or bottom phlange is loose or damaged, you will not be able to keep a proper tension on the Bobbin thread.

Be sure the nipple does not have any rough spots or the cording thread will get caught on it.

Tweezers will help a lot when trying to thread the filler thread into the small holes in the cording nipples.

The horizontal pin at the top of the finger is another adjustment. It should be adjusted so the thread passes through it freely, but...it can be turned slightly to remove any unwanted slack in the bobbin thread.

The Bobbin tension screw is turned counter clockwise to tighten the thread and clockwise to loosen it.

The length of the Chain Stitch should be fairly short. If the cording thread persist in wrapping around the needle & nipple...the stitch must be lengthened.

Short point needles work better for Cording work than the long points used for Chain Stitch.

Some of the Cornely Cording Machines have the bracket for the filler thread mounted on the ARM of the machine as shown in the diagram on page 63. Most of the Cornely "L" Series Machines are fitted with a top braiding attachment. This way, the filler thread can travel straight down the needle bar tube with no extra pull like you sometimes get on the ARM mounted bracket.

F I N G E R S

(ALSO KNOWN AS THREAD CARRIER)

The FINGER can be moved up or down where it is attached by the wing nut. Normally, it should be set so the upper edge of the bottom eye is in line with the lower end of the nipple when the nipple is at the highest point. This adjustment will need to be changed when you are working with different types of cords.

When working with Chenille Cord, a fuzzy cord that looks like a pipe cleaner, you always need to raise the FINGER. The Chenille will hang up as it passes through the eye if you don't. FINGERS, aka THREAD CARRIERS, aka "A" BARS, are available in a variety of sizes and with different size & shapes of eyes to accommodate different widths & thicknesses of thread.

N I P P L E S

I have already shown you the special nipples that must be used when doing braiding work. Other special nipples must be used for two thread & three thread cording.

The first nipple shown on page 63 is a regular type nipple that is used when you are doing two thread cording.

The second nipple is the CORDING NIPPLE that is used for three thread cording. This nipple has a hole in front of where the needle goes through. The filler thread is fed through this hole to keep it lined up properly as you sew.

Generally, Cording Nipples are made to use with number 90 (size 3) needles. Other sizes can be special ordered. The holes for the filler thread also comes in different sizes. This is gauged according to the size of the filler thread you are using. The filler thread must feed through the opening easily.

The filler thread hole must always be positioned so it is directly in front of the needle.

U S I N G T H E R E T A R D A C T I O N

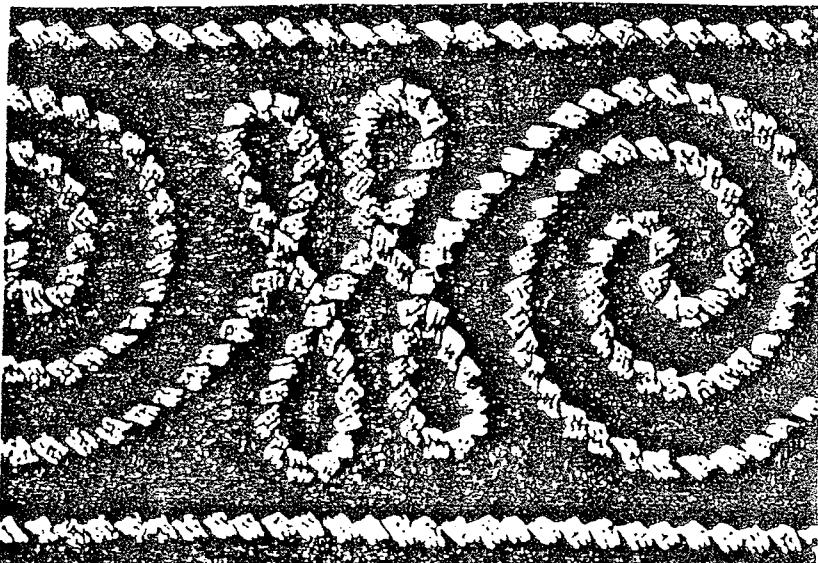
This feature can be used when doing either two thread or three thread cording.

By pulling out the position lever on the ARM of the machine, each position down represents the number of stitches the machine will produce between revolutions of the Bobbin. Older Machines can be set to spin in every stitch, or every second, third, fourth or fifth. The newer machines go up to six.

When doing two thread cording...the Chain Stitch & the Bobbin Thread. The Chain Stitch will show between the cording wraps. Look at the samples on page 26. These show work done on the two needle machine using the retard attachment. Very interesting effects can also be accomplished on the single needle cording machine using the retard attachment.

A stitch called SPIRAL BRAIDING can be produced by using the retard attachment set on every third stitch. A flat braid about 3/16 inch wide is used. The braid must be wound onto the bobbins, not placed on the braid carrier.

SPIRAL BRAIDING SAMPLE



When using the retard attachment for doing three thread cording, the filler thread should be a heavier thread so it will show between the spirals of the bobbin thread. Many interesting effects can be accomplished by using different sizes & textures of thread. USE YOUR IMAGINATION!

F E A T H E R S T I T C H

Feather stitch is accomplished by doing three thread cording, but...the filler thread is tightened and the Chain Stitch thread is loosened so the cording stitch will have "RAYS" fanned out around the circles you make as you sew. Counter clockwise circles will have the rays to the outside of the circle, clockwise circles will have the rays to the inside of the circle.

D R E S S E M B R O I D E R Y H I N T S

M A G I C S T A M P I N G

P A S T E & P O W D E R

It is advisable to always use "MAGIC STAMPING PASTE" or "MAGIC STAMPING POWDER" when working on dress embroidery. If you don't follow the stamping exactly...it really don't matter, the stamping won't be seen except under the black light.

I don't intend to make a "SLOPERATOR" out of you by telling you this. It is very important to follow the stamping exactly when doing work that will appear symmetrically on a garment. Even on this, it is easier to cover magic stamping paste or powder on a white garment embroidered with white thread than it is to cover blue stamping...white could be used, but how are you going to see it?

MAKING PATTERNS FOR USE WITH STAMPING POWDER

Patterns to be used with stamping powder should always be perforated on the reverse side. Instead of sanding the perforation holes off, as you do for patterns used with paste, leave them raised.

This will allow the raised holes to capture the powder from the dauber as it passes over them, making for a cleaner looking stamping job.

STAMPING PIECE GOODS OF DIFFERENT SIZES

When doing embroidery on garments prior to them being sewn together, you will receive bundles of the pieces in different sizes. Very seldom will you use different sizes of patterns for the embroidery, unless there are childrens sizes, adult sizes & extra large sizes.

Sometimes on ladies garments you will need one pattern for the petite sizes, another for the regular sizes and another for the large sizes.

For each group of sizes to be stamped, make the pattern to fit the smallest size. Mark the shape of the largest size on the stamping table, with the smaller sizes drawn inside it. This will be where you place the piece to be stamped.

Position the pattern correctly for the smallest size. Tape the top of the pattern to the table so it can be lifted as each piece is stamped.

IMPORTANCE OF BEING CAREFUL

Be sure you don't mix up the sizes as you work...Embroidery Shop Owners & clothing manufacturers get more than just upset over things like this! In my shop, I have very little tolerance for operators or employees who are not careful about the work they are assigned to do.

At this point, since most of you already own your own shops or plan to...I want to warn you of some of the tricks I have had pulled on me over the years.

I have had operators working for me that would have me make a sample for them to look at as they worked. I do not make a habit of standing & looking over someone's shoulder as they work.

I would walk away, then walk past their machine & look at the last piece on top of the pile of finished work. I would think the operator was doing great! Every piece I looked at looked as good as I would do myself! I would be very pleased & let the operator alone...until I happened to glance at the piece they were working on! This piece did not resemble the piece on top of the pile in any way! At this point, I would stop and start looking at the pieces UNDER THE FIRST PIECE.

All of these would look like the one on the machine! The operator had been placing my sample on top of the work they did each time they finished a piece! Now I never look at the TOP PIECE...I look at the second or third piece down from the top!

Make sure a person COMPLETELY UNDERSTANDS what you tell them. Many times I have been told when mistakes are made, "That is the way you told me to do it!" sometimes they even add..."I thought it was wrong, but you are the BOSS!" I can understand someone misunderstanding ... but, the person who goes ahead & does something when they think it might be wrong...! I may have a hard time replacing this person, but...I am going to start doing just that, the instant they make that particular comment to me!

I have had people mess up pieces while stamping them, I have had operators tear holes in garments breaking off, I have had satin jackets scratched with the needle by not having it up into the nipple when they put the jacket on the machine. All of these things, I can tolerate, and find a solution to the problem so long as the person tells me what has happened. When these things happen & the employee tries to hide it from me or worse yet...tries to let it get out of the shop without me knowing about it!...This employee I can live without!

BACKINGS FOR DRESS EMBROIDERY

Most of the time when you are doing dress embroidery, you will need some kind of backing material to keep the material laying smoothly to do the embroidery or to keep the material from puckering.

For most materials you can use tearlon, a non-woven material that will tear away when you are done.

If the work can be done without backing...don't use any! You are causing yourself extra work if you do.

Sometimes you will be working on a material that must not have any traces of the backing material left when finished. This can be very thin materials that you can see through, very expensive garments or things where both sides of the work will be seen.

For this work, you will have to use BURN OFF CRINOLINE. If you are using pre-starched Crinoline, use this recipe without the starch. If the Crinoline is not pre-starched, use the recipe as is.

RECIPE FOR BURN OFF CRINOLINE

Dissolve one cup of dry lump starch in about a quart of cold water. Add about a gallon of boiling water to make the starch thin. Add 2 ounces of sulphuric acid. Allow the mixture to set overnight. Place the amount of crinoline you will need into the mixture. This recipe will make about 24 yards. Let it stand for about one hour.

Use rubber gloves to remove it from the mixture & hang it to dry. Don't use a clothes dryer...it will vanish!

The prepared crinoline must be used within about two to three days, or it will not burn off.

After the embroidery is done, press over the crinoline with a warm to hot iron & the crinoline will turn brown and fall away. This can be assisted by scraping over it with a large spoon.

NIPPLE & FOOT ADJUSTMENTS ON THE ANTIQUE MACHINES

On the older machines, most of them have the scissor loop springs. These springs come in different weights & strengths so the pressure can be adjusted.

The size of the wire in the spring is not as important as the amount of pressure needed to close the two arms of the spring together.

If you need more or less pressure, change the springs. Or if you do not have other springs...you can bend the arms of the spring IN for less pressure and OUT for more pressure. This must be done very carefully.

The front springs on these old machines have a tendency to break on the lower arm. The machine sometimes keeps working, but it causes problems by not giving a steady pressure. Check the springs every once in a while to see that the holding prong is not broken.

The back springs very seldom break...they do manage to work loose and fly away into strange places where you can't find them. I had one back spring fly out of my Antique Cornely "A" Machine. Of course it was the last one I had. I searched for this spring for days. Finally I gave up. Several months later, I took the draperies down to be cleaned...the spring was balanced on top of the drapery.

In the dress embroidery shops, back in the fortys, we eliminated this problem of lost springs by feeding a piece of heavy twine through the springs loosely and tying them to the ARM of the machine.

The "A" Machines only have one front spring & one back spring. Most of the Braider & Cording Machines have one spring in the front & TWO SPRINGS on the back.

There is no other adjustment on these old machines for the foot or nipple, only the springs. Sometimes, I have found where operators put washers around the nipple to make it lower & many times, operators work with the foot dropped below where it is supposed to be clamped onto the machine. I very strongly disapprove of this practice.

Washers placed on the nipple almost always cause damage to the needle plate. When I see this, I always wonder what happened to the garments this operator worked on...if the nipple hits low enough to damage the plate, it would have to cut into the material!

I have been known to file off the tip of a nipple for uses like monogramming on bath mats, but that nipple is only used for that particular purpose from then on. Dropping the foot or failing to get the clamp placed as high as it will go will result in the shaft of the foot being bent. Eventually, the machine will start making short stitches in one direction & long stitches in another.

FOOT & NIPPLE ADJUSTMENTS ON NEWER MACHINES

These are all covered in Artistic Touch Book Number One, "Chain Stitch (Bonnaz) Embroidery." To anyone who does not already know how to operate these machines, you are "PUTTING the CART BEFORE the HORSE!" By trying to learn from this Book prior to learning 11th Book Number One & Video Training Tape Number One.

This Book is for experienced operators, not beginners! I'm sorry to inform you, there are no short cuts...to learn "Bonnaz Embroidery" the right way, you have to start at SQUARE ONE! The reason I have included this is because I've had many people who have old machines, but, don't know how to operate them, only order Book Number Four. This is like a five year old child starting school at college...it just won't work!

Experienced operators who don't already know **EVERYTHING** about the foot & nipple adjustments on the newer machines should start back at **SQUARE ONE ALSO!** You are only trying to fool yourself if you think you can just operate these machines by "GUESS WORK!"

STITCH LENGTH ADJUSTMENTS CORNELY & SINGER

All of the Cornely Machines have the screw & locking lever at the top of the ARM.

The Singer 114W120 & 121 machines drive operators crazy trying to figure out how to adjust the length of the stitch. The screw & locking lever are not there!

Instead of the screw & locking lever, they have what is called "The Eccentric Stitch Adjusting Collar!" (see diagram, page 75). To shorten the stitch, loosen the set screw and turn the COLLAR to the left, toward the word "short" stamped on the feed lever bracket.

To lengthen the stitch, turn the COLLAR to the left toward the word "long" stamped on the feed lever bracket.

Never move the "set screw" beyond the words "short" or "long."

The Singer 114W120 is the Singer Cording Machine. The Singer 114W121 is the Cording Machine with the Retard Action.

The Singer 114W110 Machine sews on sequins. This Machine not only does not have the screw & locking lever...it don't have the COLLAR either!

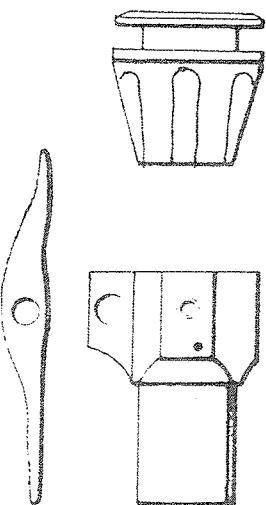
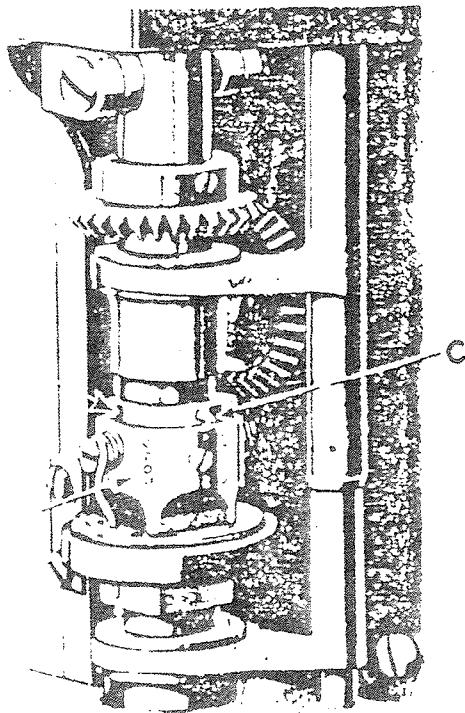
D I A G R A M S

SINGER 114W120 & 121

FEED LEVER BRACKET & COLLAR

SINGER 114W110 &

CORNELY TYPE FEED CONE



This machine feeds the sequins so the holes in the strung sequins will line up correctly so the needle goes through the holes instead of the sequins.

Each groove in the FEED CONE, is pre-adjusted to fit a sequin size. This is synchronized with the automatic feeder at the top of the needle shaft.

Turn the wheel so the "nose" is at the lowest point. Push in on the bottom of the nose. Turn the FEED CONE until the nose drops into another of the grooves.

Some of the Cornely Machines, although they also have the screw & locking lever, also have the FEED CONE. The Cornely 121 Machine has this double set up.

This feature can be used the same as on the Singer Machine & for the same purpose, but...it can also be used for other things.

The machine can be easily switched to a longer pre-set stitch while working on a particular design. Many strange effects can be accomplished with this. If you have a Cornely 121 Machine, spend a few hours just playing with it to see what you might come up with! I have found stars of different sizes can be created by making circles by turning the handle in a clockwise direction.

Stars of different sizes are created by starting with the smallest stitch on the FEED CONE ...then switch to the next size for the next circle (star). The 121 FEED CONE has four grooves so this will give you a progression of four sizes of stars.

Many other interesting effects can be created. I will go into this more in the section on The Universal Movement Lock-Stitch Machines.

P O T P O U R R I O F T H I S & T H A T T H I N G S I M A Y H A V E O T H E R W I S E F O R G O T T E N T O T E L L Y O U !

You say the foot lifting lever is missing on your "special SINGER machine?"

Look to the right of the "face" under the arm. How about that...it also looks like it was put on backwards, but you will find this is the way it is supposed to be.

When working on heavy jackets & large bedspreads & especially when doing quilting, you will find your threader wire will hang up on the material if you keep it tied to the ARM HEAD SCREW like we all normally do.

Drill a small hole in the machine table beside the belt to keep the wire in. This way you won't loose it & it will be out of the way.

Some of you have Cornely "L" Machines that have a LEVER on the back of the Machine. Some of the "Ls" have this, others don't. This lever disengages the Bobbin Carriage from spinning when doing Chain Stitch & Chenille.

Many people have called me wanting the "FACE COVERS" for different machines. Most of these covers are available, but...most operators don't like working with them on the machines.

Most experienced operators like to be able to see the "nose" & other parts as they work. Most people want these covers because they think they will prevent the machine from getting oil on things. WRONG!...Oil splatters against them then runs down and drops onto the material.

If you have a problem with getting too much oil on the machine, or you just want to be certain the machine won't drip on some expensive garment, PUT A DIAPER ON IT!

This can be tissue paper wrapped around the face then taped or tied to the ARM, or a plastic bag can be used. Cut a hole for the nipple & foot in one corner of the bag. Slip it over them. Then punch a hole for the foot lifting lever. Tie or tape the plastic to the ARM HEAD.

Be sure you don't impede the movement of the springs or anything else. When doing Cording or Braiding, unless the design allows you to run off the edge of the material so the end will be sewn into a seam, **the ends where you break off must be pulled through to the back of the work & tied**. This is done with a LARGE "pull-through needle" also called latch-hook needles.

Be sure the Chain Stitch thread is locked down and pulled through with the other, or the work will rip out when cleaned.

HOW DO YOU WASH CHENILLE, BRAID & CORDING WORK? Are you kidding? Why would anyone be dumb enough to pay high prices to have "CUSTOM EMBROIDERY" work done...then be too cheap to have it dry cleaned?

My stock answer to people who come back to my shop to tell me the Chenille all came out of the Embroidered Sweat Shirt they paid me \$75.00 to \$250.00 to make for them, is ...You WASHED a \$250.00 Sweat Shirt?

In my opinion, anyone who tries to wash expensive embroidery work, deserves exactly what they get! These garments should be taken to a Dry Cleaner who knows how to clean embroidery work, especially Chenille. Cleaners who don't know what they are doing should be warned, if the embroidery is damaged, they will be expected to replace it!

Embroidery will last twenty-five years easily and fifty years or more if cared for properly. This brings me to another of my pet peeves! HOW DO YOU EMBROIDER ON TEE SHIRTS! Of course, you can embroider on tee shirts...use organdy & tearlon behind it, but WHY are you bothering to do this in the first place? O.K. a name in Chain Stitch or perhaps a small design, but I have heard about people doing Automatic Computerized Machine Embroidery, putting \$80.00 worth of embroidery on tee shirts!

What happened to scruples? Even the best tee shirt who sales for about \$2.50...why put \$80.00 worth of embroidery on this cheap garment? Even with the best of care, the garment will only last about a year! What's next?...
MONOGRAMMED KLEENEX?

Maybe am too "persnickety," as my Mom used to call me! But, even when people come in with CHEAP towels to be monogrammed, I point out to them, the monogramming will last at least twenty-five years, I ask them if they are sure they don't want to invest in a little better quality towels so they will last as long as the embroidery.

WHERE CAN YOU FIND BRAID & SPECIAL THREADS FOR CORDING? All of the Thread Companies used to carry all kinds of special trimmings. When dress embroidery started fading out in the "hippie generation sixtys," most of them stopped carrying it.

If we get this type of work revived, and we will, Troy Thread Company & all of the others will start carrying it for us. In the mean time, many trims can be purchased from yard goods stores & some places that still carry these trimmings advertise in magazines like SEW NEWS, THREADS, SEW BUSINESS, S.T.I.T.C.H.E.S, & IMPRESSIONS.

I am sure I don't need to tell any of you this, but your machines work better when they are kept clean. The looper & needle shaft on the special machines need to be cleaned even more often than the Chain Stitch machines. Metallic specks & fuzz from the tinsels are picked up by the needle & deposited into them.

DROP STITCHES. Dropped stitches are an absolute NO! NO! Check your work to make sure the Chain Stitch holding the braid or cording to the material is not dropping stitches or breaking stitches. Any time this starts happening, readjust the bottom thread & check everything until you find & eliminate the problem.

Needles with too "closed" of an opening in the hook will sometimes be the problem. Choose another needle. Don't forget, short point needles work better for braid & cording than long points.

Too tight of a tension on the braid can cause drop stitches & broken stitches. Also, too tight of a tension on either the filler thread or the bobbin thread.

If the needle is placed a bit to either side, instead of straight in line with the nose, this can cause drop stitches. Then, sometimes the only way to prevent then is to turn the needle to one side or the other! Usually, when this is the case, the looper is not lined up right or it is worn out.

Another cause for drop stitches can be too large of a nipple or too large of hole in the needle plate.

The only thing I can tell you that is for certain, is the last thing you fixed was what was causing the problem!

Just keep trying different things until the problem goes away!

These machines are TOUCHY! Some problems can be caused by simple things like a worn out rubber shoe on the foot. If the machine starts acting up just after you broke & replaced a needle, be sure the needle is O.K. and in the needle holder straight.

If everything else is O.K. start looking for needle parts. If you did not find the broken point in the work, it has probably crawled under the small collar that holds the looper in place. If this is the case, you will have to remove the looper assembly to remove it! You will probably find several others down there when you do.

If all else fails, take the machine apart & clean the needle shaft & looper & nipple. Give it some oil, talk sweetly to it and put it back together. This usually solves most problems.

"L" Machines that don't have the disengage lever, as mentioned on page 77, can also be used for doing Chain Stitch & Chenille. Remove the gear that operates the Bobbin Carriage. It is located just below the ARM behind the "FACE."

Chenille can be locked into a garment somewhat by spraying the back of the garment with "Thread-lock" when you are done.

Be careful about what backing materials you use on things. A Customer brought a jacket into the shop that he had embroidered at another shop. He said he could not wear the jacket because it scratched his back even through his shirt.

I looked at the back of the embroidery. They had used a double thickness of Crinoline, then trimmed it away leaving sharp points of the Crinoline all around it.

I took the jacket into the back room & used my "DOG CLIPPERS" with a #40 blade on them to shave away the excess Crinoline. The Customer was happy! & he became a steady Customer at Artistic Touch.

When you do either Chain Stitch or Chenille & you have a lot of different colors of threads on the back, any kind of electric clippers with a blade where the teeth are close together can be used to "shave" the back of the work instead of trimming the threads. Make sure it does not cut into the stitches.

Another time when I worked at Nudie's, I had a well known Movie Star dancing in double time because I had used burn-off Crinoline on his suit & did not remove all of the residue from it. After you have burned off the Crinoline, put the garment into a clothes dryer set on just cold air for about five minutes.

This reminds me of something else...when we monogram sweaters at Artistic Touch, the embroidery hoops always leave a circle around the monogram, especially when we hoop fifty or more sweaters at a time.

If you lightly spray the circle with warm water, then place the sweater in the dryer on the warm setting for about five minutes, the ring is gone & the sweater is pressed!

Sometimes when you are working with Magic Stamping Paste or Powder, there will be too much light in the room to see the stamping under the Black Light.

It is easy to build a frame around the machine where it is being used, by using four 1" X 2" boards nailed to each corner of the machine table, about three feet high. Then use brown or black plastic trash bags to cover both sides, the back & over the top.

Black lights work best when you use the 18" long florescent tubes, but...regular light bulbs are also available. Be careful with these...you can get a third degree burn from them.

When you start having problems with your Black Light Paste not stamping good...scrape the wax off the top of it with a razor blade. You have to take off about 1/4 inch. It will work as good as new.

When making enlargements for dress embroidery on your copy machine, and sizes are needed larger than the paper...it can be done in sections. Just be sure to enlarge each section the same number of times. I make enlargements from copy sometimes only one inch high, that has to enlarged to fit a 3 foot by 5 foot banner, to the copy machine. Probably takes about 50¢ to 75¢ worth of paper to do this!

Sometimes you may have to re-straighten the art work when you are about half of the way to the size you want, but it is still faster!

GENERAL INSTRUCTIONS
FOR OPERATING
UNIVERSAL FEED LOCK STITCH
MACHINES
CORNELY TYPE 121 MACHINE

NEEDLES—Use Cornely Sharp-Point eye needles Number 816.

INSERTING A NEW NEEDLE—When replacing a needle, be sure to have the handle facing forward. Loosen the set screw & insert the needle into the needle bar, making sure it goes all the way to the stop. Make sure the long groove in the needle faces forward. Tighten the set screw.

THREADING THE MACHINE—See DIAGRAMS on page 85.

THREADING THE TOP THREAD.—Cones or spools of thread can be used on this machine. Cones are placed on a thread stand. Spools are placed on the spool holder on the Arm near the wheel.

Run the thread from the cone or spool into the BOTTOM HOLE of Guide 28508, then into the TOP HOLE. Then through the EYELET Number 5257.

Pull the thread through the TENSION DISK Number 7211 & through the HOOK of the TAKE-UP SPRING Number 5253.

Pass the thread into the small LOWER HOLE of the FLAT THREAD GUIDE Number 5256 and then into the THREAD TAKE-UP LEVER Number 5188. From here to the UPPER LARGE HOLE of FLAT THREAD GUIDE 5256. Then over to the THREAD GUIDE Number 5190 at the TOP OF THE FACE COLUMN.

From here, the threading must be completed by either using the THREADER WIRE Number 3348 (available from Cornely or Artistic Touch) or you can pull the thread through Bee's Wax. Pass the THREADER WIRE down through the THREAD GUIDE Number 5190 until it comes out the HOLE JUST ABOVE THE NEEDLE. Thread the NEEDLE from front to back. Draw enough thread through so it can be placed under the FOOT leaving about six inches.
(Be sure the thread enters the needle on the LONG GROOVED SIDE.)

THREADING THE BOBBIN—Open the sliding needle plates (one slides forward & the other slides back) remove the BOBBIN CASE by lifting the LATCH. BOBBIN CASE IS Number 5265.

Lift the LATCH with your left hand & place the BOBBIN on the center spindle of the BOBBIN CASE. The thread should lead from the right to the left, coming under the BOBBIN & leading to the left to the tensions.

Draw the thread through the slanted SLOT on the side of the BOBBIN CASE & pass it UNDER the TENSION SPRING Number 5270. Place the BOBBIN CASE into the BOBBIN CASE HOLDER (HOOK) & close the back NEEDLE PLATE. Close the FRONT NEEDLE PLATE & pull the thread into the slit in the BACK PLATE. Turn the wheel by hand while holding both the bobbin thread & the top thread, until the needle goes down & picks up the bobbin thread. At this point, the bobbin thread should be coming out of the long slot in the NEEDLE PLATE Number 5242. Place both threads so they are coming out the left side under the foot.

You may need to turn the wheel a second time by hand to get the needle to pick up the bobbin thread.

WINDING THE BOBBIN—Use the bobbin winder supplied with the Machine. Run the thread from the thread holder to the eye behind the tension disk, then under the tension disk to the bobbin, which has been placed on the WINDING SPINDLE. Move the thumb lever forward until the WINDER WHEEL rests against the BELT. Step on the treadle until the bobbin is wound.

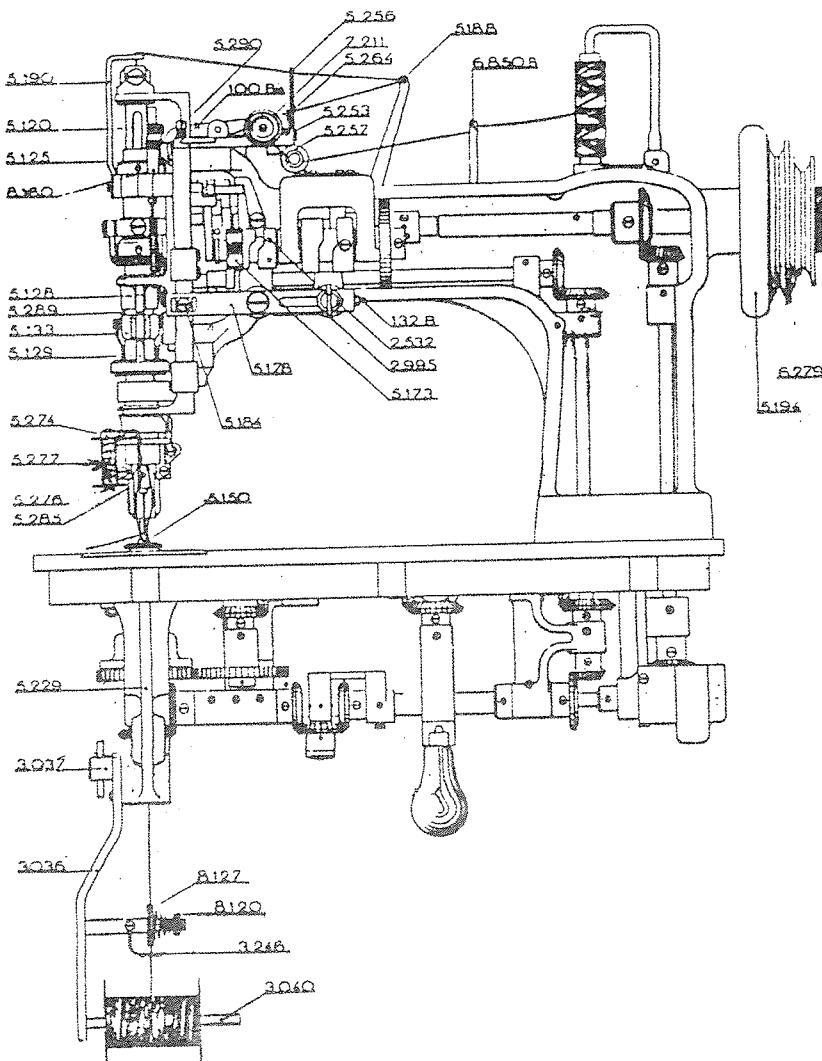
The needle should not be threaded while winding a bobbin. After you have the first bobbin wound, place another on the spindle & let the machine wind it as you work.

THREADING DIAGRAMS

CORNELY 121 MACHINE

(ALSO SHOWS PARTS NUMBERS)

(Additional parts Numbers & Diagrams for this Machine are shown in The Artistic Touch "Mechanic's Manual." Book Number Five.)



ADJUSTING THE OSCILLATION (zig zag)

Loosen NUT Number 2992 & move it along the REGULATING LEVER Number 5178. The zig zag is made wider as the NUT is moved to the left. When the NUT is all the way to the right, the machine will just sew single line stitching.

ADJUSTING THE ECCENTRIC STUD (5184)

When the OSCILLATOR is placed all the way to the right, the needle should be exactly in the center of the slot in the NEEDLE PLATE. If this is not the case ... There is a screw on the left of the OSCILLATING SLIDE. (Number 2534, not visible on the sketch.) Loosen the screw & turn the ECCENTRIC STUD Number 5184 either to the left or right until the needle is in the correct position. Tighten the screw.

ADJUSTING THE FEED CONE

There are four slots on the feed CONE. Turn the wheel by hand until the FEED CONE raises to the highest point. Push in on the bottom of the FEED LEVER (NOSE). While holding the NOSE in with your left thumb, turn the FEED CONE until the NOSE drops into the next GROOVE. Each progression will lengthen the stitch about 1/2 again as long as the last groove.

The regular stitch regulator (screw & locking lever) may be used to also adjust the length of the stitch on any of the FEED CONE settings.

IN ADDITION, the stitch may be adjusted so the Machine will FEED AT EVERY OTHER STITCH.

FEEDING AT EVERY OTHER STITCH

This can be used at any time, with a short stitch or a long stitch. While doing zig zag or while doing straight stitch. You are actually sewing two stitches in the same place before the FEED MECHANISM moves the material. This can eliminate the necessity of going over SATIN STITCH the second time.

Loosen screw Number 2532 on the CAM just above the OSCILLATOR.

For feeding at every stitch, CAM Number 5173 should be all the way to the right. For feeding at every other stitch, the CAM should be all the way to the left. Move the CAM by hand until it is in the correct position. Tighten screw Number 2532. DO NOT LOOSEN the second screw, on the CAM.

See Diagram on page 85 for parts mentioned in previous chapters.

FOOT PRESSURE ADJUSTMENT

This Machine does not have a Nipple adjustment on the back like the Chain Stitch Machine because it does not have a nipple. It does have the same type FOOT PRESSURE ADJUSTMENT on the front of the ARM HEAD.

You will also notice the SPRING under it is exposed. I have found on MY 121 MACHINE, I need to replace this spring about once a year to keep the Machine stitching evenly. (#5123)

WORKING WITH FILLERS

This machine is able to sew cording (bourdon) with the filler either on the top of the material or on the bottom.

Fillers can be any kind of material that will feed through the machine. This can be just a thin thread, heavier cords or even strung beads & small strung pearls.

The FILLER is sewn to the material with the zig zag stitch.

TOP FILLING

Wind the filling thread or material onto the LONG BOBBIN supplied with the machine. (The bobbin winder can be used to wind these bobbins also.) Lift the latch Number 5276 & place the BOBBIN (5277) on the spindle. Pass the filler through as many of the holes on THREAD GUIDE Number 5285 as needed to make the bobbin feed the filler smoothly. Feed the filler into the THREAD GUIDE Number 5150 then under the foot.

FILLER THREAD GUIDES

are available in sizes .70 mm, (1/32") 1 mm (1/16") 1.25 mm (3/32") 1.50 mm (1/4") & 1.75 mm (5/32") These measurements are approximate.

BOTTOM FILLING

A special bobbin holder (#3036) should be attached to the machine under the needle plate (see diagram.) It is held in place with a large screw Number 3037. You can work from a cone of filler sitting on the floor or from spools placed on the spindle Number 3040.

Feed the filler between the TENSION DISK Number 8127, then into the THREAD CHECK CONTROLLER Number 3246. Then use the THREADEER WIRE to pull the filler up through the hole behind the slot for the needle. Pass the filler under the foot so you have about six inches to start.

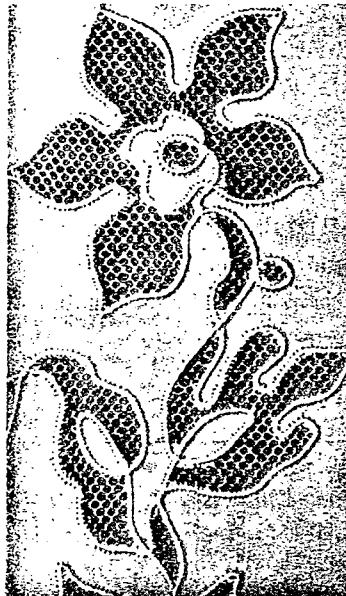
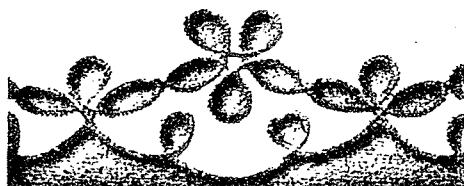
The zig zag can be adjusted to sew through the filler or so the needle hits on both sides.

WORK APPLICATIONS FOR THE CORNELY 121-123 MACHINES

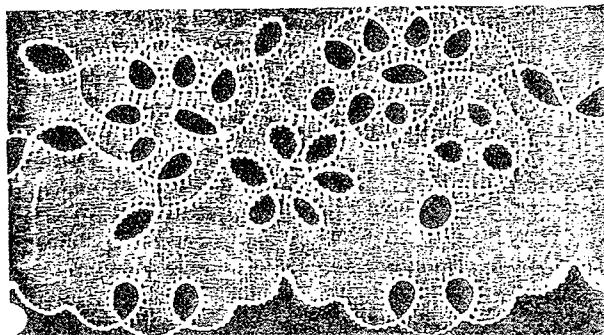
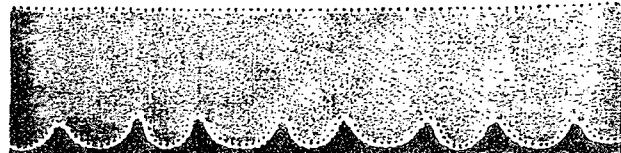
(See samples shown on the following two pages.

1. BOURDON STITCH. Short throw zig zag (Broderie anglaise (English) with cord filling.
2. BOURDON STITCH. Short throw zig zag or cross stitch showing tulle sewn onto taffetas with core fill
3. BOURDON STITCH. Short throw zig zag. Application of two materials of the same quality but in different colors, with cording fill.
4. BOURDON STITCH. Short throw zig zag. Application of lace & no cord filling.
5. PARIS STITCH. Scalloping with cord filling & plain stitch.
6. PARIS STITCH. Application of material with retard feed motion & no cord filling.
7. PARIS STITCH. Scalloping & retard feed motion. Broderie anglaise (English) with cord filling.

CLASSE 121
S A M P L E S
O F W O R K D O N E O N
CORNELY 121 & 123 MACHINES
(see descriptions page 88)



CLASSE 123
S A M P L E S
O F W O R K D O N E O N
CORNELY 121 & 123 MACHINES
(see descriptions page 88)



CORNELY FBN MACHINE

This machine is equipped with the Universal Feed, operated by the handle under the machine. Machine FBN makes a lock stitch with one or two needles.

The Machine does elastic thread stitching, raised cord effects, visible & invisible stitching with one or two needles in various forms such as flat, raised, centered or edge stitching when sewing ribbons or braiding of all kinds. This Machine is also used to attach strung sequins.

Will sew on heavy leathers or the finest laces. An indispensable accessory to the clothing & luxury trades such as home furnishings, curtains, millinery, dressmaking, lingerie, hosiery, etc.

OPERATING INSTRUCTIONS FOR CORNELY FBN MACHINE

(See Machine diagrams on page 92, 93, 94 & 95 to understand the following instructions.)

The FBN Machine is shipped from the factory, with the shuttle support "T" (fig. 19) adjusted according to Fig. #10 when the handle is aimed to the right. (Machine is out of gear.)

For all single needle stitching or visible seam braid & tape work, the shuttle may be in either position. (Fig #10 or #11)

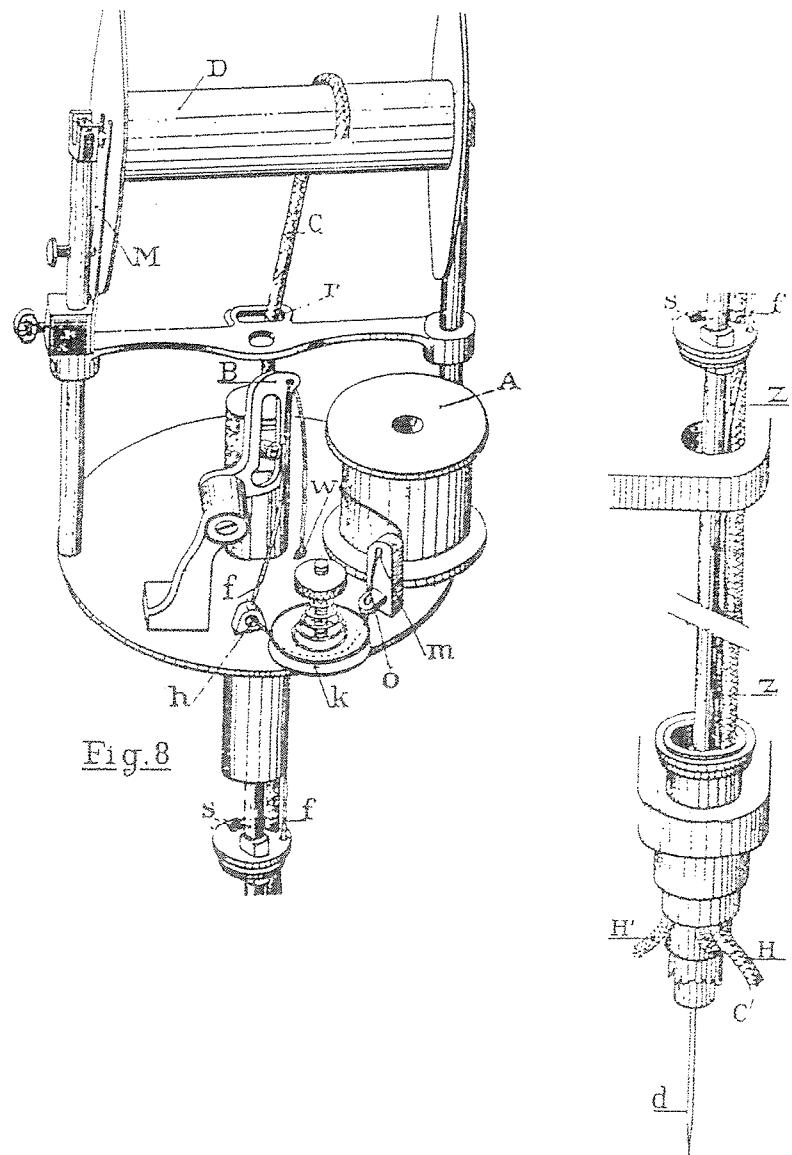
For invisible seam braid work, it is preferable to place the shuttle in the position shown in Fig. #11.

For two needle work, the shuttle support should be in the position shown in Fig. #10.

ADJUSTING THE SHUTTLE—The shuttle adjustment is done by loosening screw "S" & turning the support shuttle "T" until it is in the desired position.

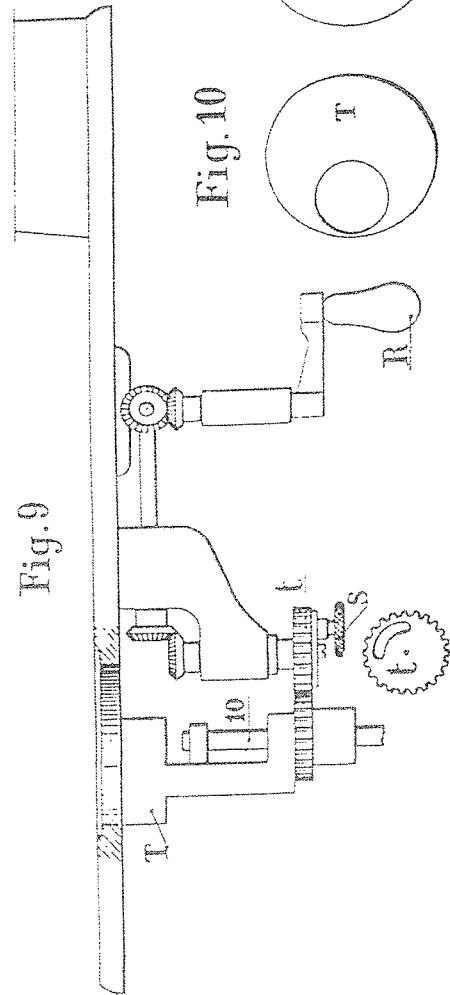
This happens automatically. As the circular groove of the gear passes the screw, it stops in the proper position. Tighten the screw.

DIAGRAM FIGURE #8



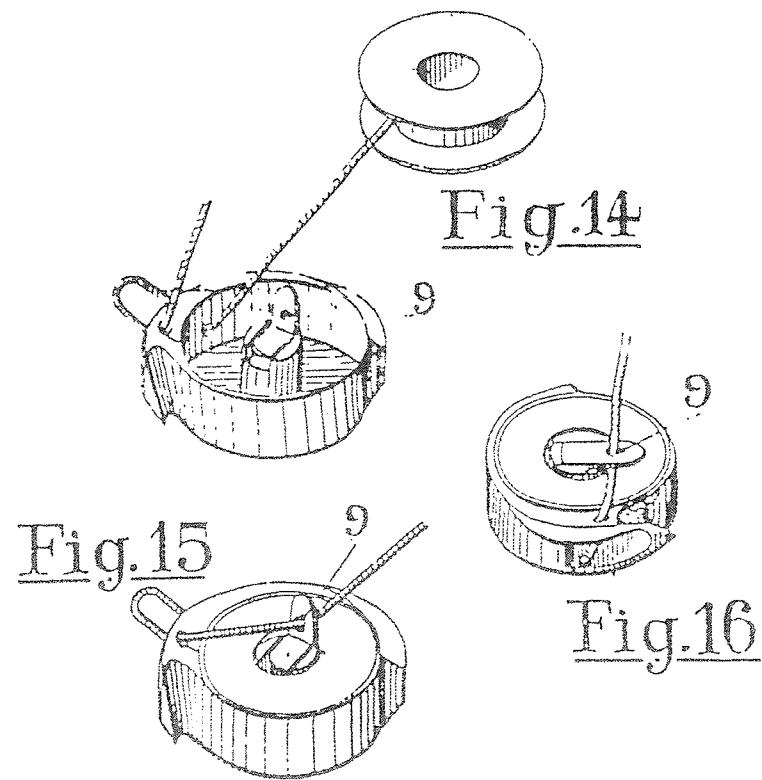
DIAGRAMS

FIGURES NUMBERS 9, 10 & 11



DIAGRAMS

FIGURES NUMBERS 14, 15 & 16



D I A G R A M S
FIG URES N U M B E R S 12, 13, 17 & 18

Fig. 13

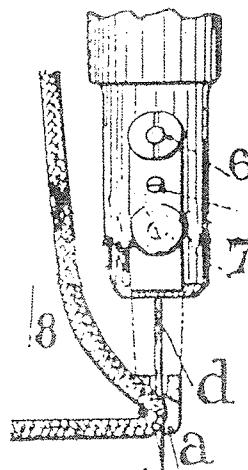


Fig. 12

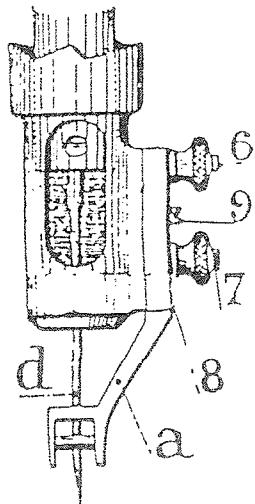


Fig. 17

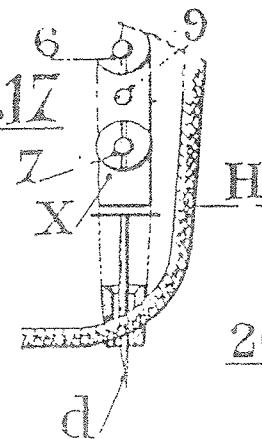
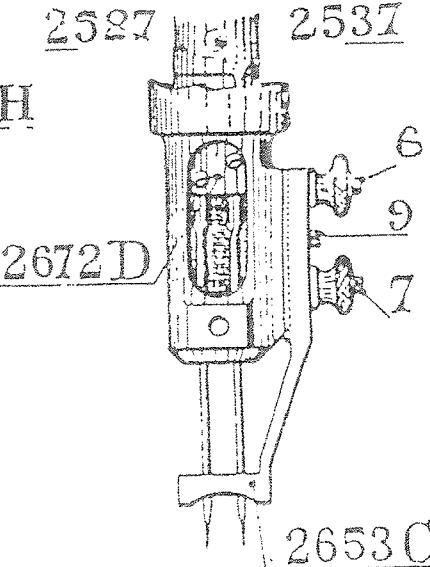


Fig. 18



NEEDLES—When the shuttle support is in position 10, use Cornely Number 1836 needles.

When the shuttle support is in position 11, use Cornely Number 230 needles.

WORKING WITH ONE NEEDLE—Plain stitching, lastex stitching, visible seam tape & braid.

THREADING—The revolving spool holder (at the top of the Machine) has (A) The spool, (B) The take-up lever. (K) The tension. And thread eyelets O, M, H & W. (See Fig. # 8)

For the sake of eliminating confusion, each of these elements is shown only once on the diagram, even though the revolving spool holder has one of each on opposite sides.

When working with only one needle, of course you will only use one spool. Place your spool on the right side when the handle is aimed forward. When working with two needles you will use both.

From the spool, follow the course shown in Fig. #8. Use threader wire Number 3348 to feed the thread down through hole "W" & through hole "F" & into the thread guide tube "Z".

When the thread comes out at the bottom of the thread guide tube, (Fig. #8) it goes directly into the eye of the needle.

When working with Number 1836 needles (one needle) the eye faces forward when the handle is aimed forward. The needle is threaded from the front to the back.

When working with Number 230 Needles (two needles) the eyes are lined up with the eyes facing right when the handle is aimed forward. They are threaded from the right to the left.

THREADING THE SHUTTLE—(bobbin) A picture is worth a thousand words here...follow the diagrams in Fig. #14, #15 & #16. The thread DOES pass through the hole in the top of latch that holds the bobbin in place.

THREADING THE VISIBLE SEAM TAPE & BRAIDS—The braid or tape (C) is wound onto the large spool (D). It passes through the opening (R) then along the central tube through opening (S). Down & out at opening (H) and then into the guide as shown in Fig. #17.

TENSIONS—The tensions on the upper threads is adjusted by the tensions (K) on the revolving spool holder.

The tension on the bobbin (shuttle) is regulated by turning the small screw on the lower face of the shuttle.

The tension of the braid is adjusted by turning the screw against spring "M".

ADJUSTING THE GUIDES—It is necessary for the needle to go down exactly in the center of the guide. This can be adjusted by tightening nuts 6 & 7 on Fig. #17. The guide is supposed to pivot around the axis of screw 9.

For visible seam, round cord & upright braid, sewn on the edge. The same nuts are used. Adjust the guide so the stitching is on the edge.

STITCHING WITH ELASTIC THREAD.—The elastic thread should be put in the shuttle (bobbin). When you wind the bobbin, hold a slight tension on the elastic thread. When sewing, your tension on the shuttle should be fairly tight.

It is generally necessary to work with burn-off crinoline to keep the elastic from puckering the material while you work. After it is burned off, the elastic will have the proper elasticity to the work.

INVISIBLE SEAM BRAID—Place the shuttle support in the position shown in Fig. #11. Use Number 230 needles. This needle will thread from the right to the left when the handle is aimed forward.

THREADING THE INVISIBLE SEAM BRAID—The Braid "C", comes from the large spool "D". It passes through, opening "R" & down along the central tube through opening "S" and enters the braiding guide "H" through the REAR OPENING, with the handle forward.

The braid is threaded into the guide in the manner shown in Fig. #13. When the braid has entered the guide, the BRAID IS FOLDED BACK so it COMES OUT at the SAME SIDE AS IT ENTERED, AFTER HAVING TURNED AROUND THE BRIDGE in this guide, and finally reaches the fabric.

ADJUSTING THE INVISIBLE SEAM BRAID GUIDE (Fig. #12 & #13)

The guide should be very carefully adjusted in relation to the needle. It is important that the needle should PRICK INTO THE THICK PART OF THE BRAID WITHOUT PASSING THROUGH IT. The distance from the needle to the guide is adjusted by slightly loosening the nuts 6 & 7, then slightly tilting the guide around 9. Tighten the nuts when it is adjusted properly.

In addition, the needle MUST prick into the CENTER OF THE BRAID. This adjustment is accomplished by changing the OSCILLATION GUIDE SCREW Number 9. This is also effected by balancing the nuts 6 & 7.

TWO NEEDLE TUCKING—Set the shuttle support "T" as shown in Fig. #10. To do this, the handle should be held (or the stop motion placed out of gear) aimed to the right.

This work is accomplished by feeding the tucking material from the bottom. The spool containing the tucking material is placed onto the bottom spool holder & held in place with the wing nut. You can also feed the tucking material from a cone.

The finished work will be raised in the center (by the tucking material) with a single line of stitching on either side. The reverse side of the material will have a zig zag stitch holding the tucking material in place.

Since you are working with two needles, the needle holder must be changed.

CHANGING THE NEEDLE HOLDER—Turn the handle to the back. You will see two small set screws on needle holder Number 2527 (Fig. #18) Remove the upper screw Number 2357 and pull the needle holder downward, removing it from the machine.

Prepare needle holder 2672D by placing the two needles into it.

Use Number 816 needles for tucking material size 2mm. With these needles, the eye faces forward, and the support shuttle should be in the position shown in Fig. #10.

Use 1836 needles when working with tucking material sizes 2.5mm, 3.5mm, 4.5mm, 6mm & 7.5mm. These needles also face front and the support shuttle remains in the position shown in Fig. #10.

When you replace the needle holder into the machine, be sure that set screw 2537 is tightened on the FLAT PART OF THE NEEDLE HOLDER.

When using tucking material 2mm & 2.5mm, use the needle plate & guide marked 2.50.

When using tucking material 3.5mm & 4.5mm use the needle plate & guide marked 4.50.

When using 6mm & 7.5mm use the needle plate & guide marked B.

The guides and needle plates for various uses are shown on pages 101 to 106.

THREADING— Thread the machine as usual, but...be sure the thread from the right thread guide tube is threaded into the right needle & the thread from the left thread guide tube is threaded into the left needle.

Insert the threader wire into the round hole behind the slit for the needles in the needle plate and pull the filling material up through the tube marked "10" (Fig. #9) The machine is ready for operation.

TENSIONS—Fairly tight tensions should be used on both the top threads & the bobbin so the tucking will be raised in the center properly.

TWO NEEDLE BRAID—Braid can be sewn on with two needles instead of only one. The same needle plate & guide are used as when doing VISIBLE BRAID. The needles are adjusted to sew along the edges of the braid.

ATTACHING STRUNG SEQUINS—Special attachments are provided to feed the sequins. Use the single needle & adjust the stitch length so the needle enters into the center hole of each sequin. Don't try to work too fast when sewing sequins, give them time to feed properly. Sharp turns will usually cause broken sequins or broken needles. Try to design your sequin work with gentle curves & turns, or stop the machine with the needle down to make a sharp turn.

In each of the DIAGRAMS on the following pages, the proper GUIDE for the braid or ribbon or sequins is shown along with the correct NEEDLE PLATE & NEEDLE HOLDER.

The first DIAGRAM on this page is for sewing regular cords & braids.

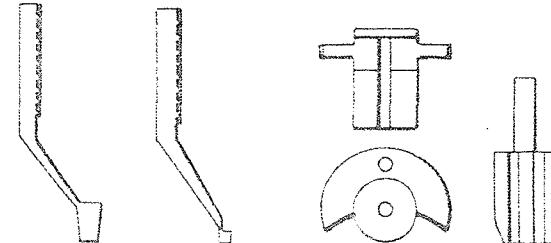
TRANSLATION: COUTURE SIMPLE = "fashion simple."

The second DIAGRAM on this page is for sewing invisible Soutache Braid.

TRANSLATION: SOUTACHE PLATE POINT INVISIBLE = "Braid plate stitch invisible."

Couture simple

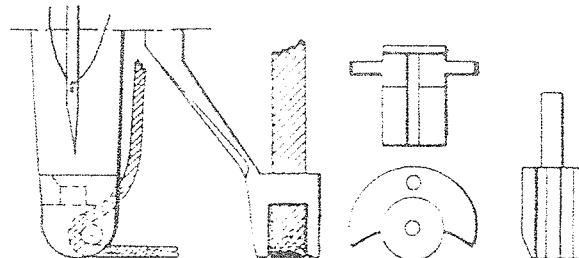
2653 2653B 3020 2672 C



Soutache plate point invisible

2650 3020 2672C

$n^{\circ} 1.25 \text{ à } 8$



The first DIAGRAM is for invisible sewing of Soutache Braid.

TRANSLATION: SOUTACHE PRINCESSE POINT INVISIBLE = "Braid Princess stitch invisible."

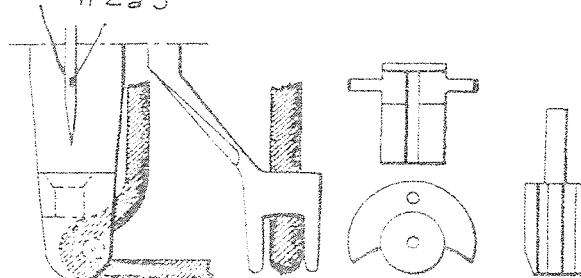
The second DIAGRAM is for sewing standing Soutache Braid.

TRANSLATION: SOUTACHE DEBOUT = "Braid standing."

Soutache princesse point invisible

2649 3020 2672C

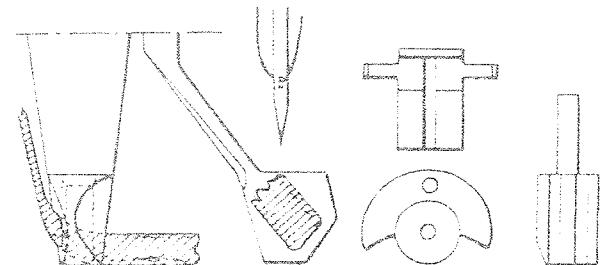
$n^{\circ} 2 \text{ à } 5$



Soutache debout

2651 3020 2672C

$n^{\circ} 1.25 \text{ à } 6$



The first DIAGRAM on this page is for sewing sequins.

TRANSLATION: PAILLETTES = "Sequins."

The second DIAGRAM on this page is for sewing round Braid.

TRANSLATION: SOUTACHE RONDE= Braid round (or plump).

The first DIAGRAM on this page is for sewing standing ribbon.

TRANSLATION: RUBAN DEBOUT = "Ribbon standing."

The second DIAGRAM on this page is for sewing Braid sewn in the center.

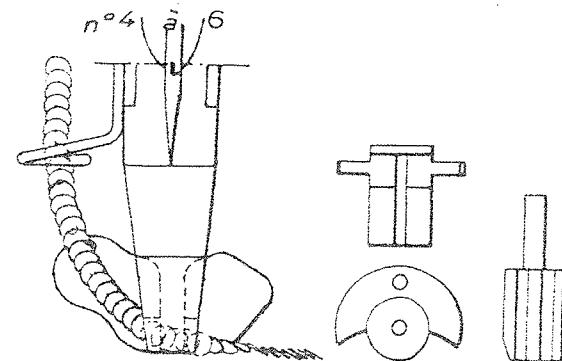
TRANSLATION: SOUTACHE PLATE PIQUE CENTREE = "Braid plate (prick, sewn or punctured) center."

Paillettes

2650B

3020

2672C



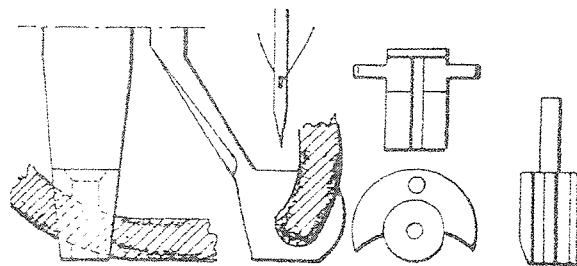
Soutache ronde

2652

3020

2672C

n° 0.7 à 5



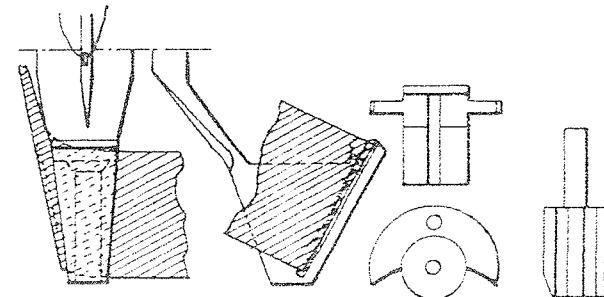
Ruban debout

2651B

3020

2672C

n° 4 à 12



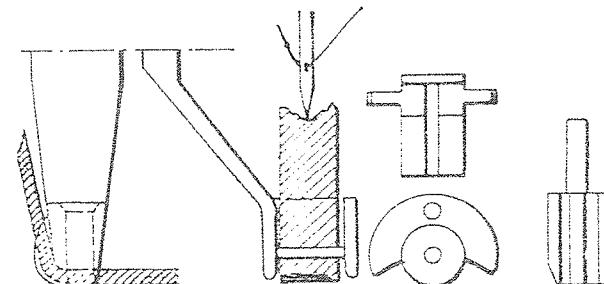
Soutache plate .piqué centré

2654 centré

3020

2672C

n° 1 à 10



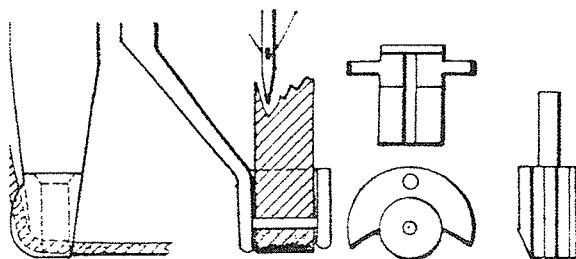
The first DIAGRAM on this page is for sewing Braid sewn on the edge.

TRANSLATION: SOUTACHE PLATE PIQURE EXCENTREE = "Braid plate sewn on edge."

The second DIAGRAM on this page is for sewing tucking materials 3.5mm & 4.5mm. TRANSLATION: NERVURE = "Rib". This refers to the contour of the bottom of the guide.

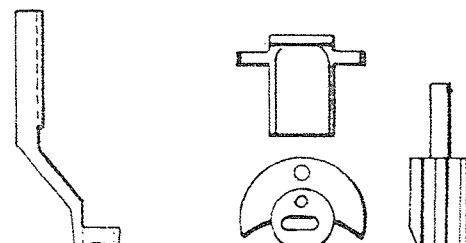
Soutache plate . pique excentrée

2654 excentré 3020 2672 C
n° 2.50 à 8



Nervure n° 3.50 à 4.50

2653 D 3078 2672 D
n° 4.50 n° 4.50 n° 3.50 - 4.50



The first DIAGRAM is for sewing tucking material 2.5mm.

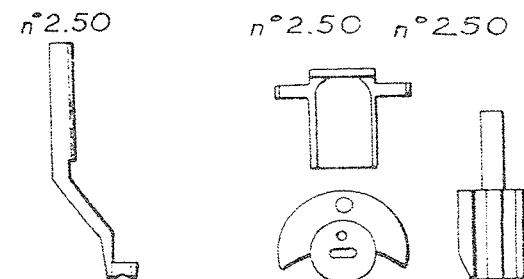
The second DIAGRAM is for sewing tucking material 6mm & 7.5mm.

TRANSLATION: NERVURE = "Rib". This refers to the contour of the bottom of the guide.

The proper needle holders MUST be used for different applications. The needles are placed farther apart, as you can see on the diagrams. for different sizes of tucking material & braids.

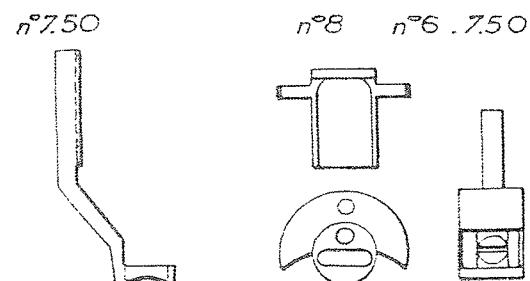
Nervure n° 2.50

2653 D 3078 2672 D



Nervure n° 6 à 7.50

2653 D 3078 2672 D



Complete parts list for the FBN MACHINE can be found in The Artistic Touch Mechanic's Manual. (Book Number Four)

C O R N E L Y L T G M A C H I N E

FOUR THREAD EMBROIDERY MACHINE

Even though this Machine is a Group one Machine, I have saved it until the end of the Book because it is so different & does so many things. I have also found that many people seem to think the Cornely LTG Machine is a "DO IT ALL MACHINE!" This is true to a certain extent, but even though the LTG will do Chain Stitch & Chenille, the "A3" Machine will do these much faster. The LTG was designed to do special types of Fashion Embroidery and should be used for that purpose.

The LTG Machine can be operated with either one or two needles. Both needles are hooked & produce Chain Stitch.

When using TWO NEEDLES, the spacing between the needles can be set for four different widths & two needle picot work (feather stitch) can be done. This depends on the accessories used.

When working with ONE NEEDLE, the LTG produces all of the different kinds of work that can be done on the Cornely "A", "B", "K" & "L" Machines. Chain Stitch, Chenille (Moss Stitch) Flat or Raised Braiding, Two-Thread & Three-Thread Cording, Gimp Stitch, Single Needle Picot (feather stitch) & various other kinds of fancy stitching.

You will find DIAGRAMS on pages 113 to 115 that will help you to understand the instructions for operating the LTG Machine.

FOUR THREAD WORK—Four Thread Flat Embroidery is accomplished by using almost any kind of thread, cord or braid that can be wound onto the large "Spinning" BOBBINS.

Two of the Four Threads are the Parallel Chain Stitches produced by the needles with the thread coming from beneath the Machine. The third thread is the filler that comes from the spool at the top of the Machine above the needle bar or attached to the Arm head. (see Fig. #1)

This can be almost anything that can be wound onto the large spool. The fourth thread is the Bobbin thread that is wound onto the large bobbins that are placed into the spinning bobbin holder. (see Fig. #7) Very often you will not work with the filler thread.

When doing four-thread work, the following parts are used.

1. The SPOOL HOLDER "S" (Fig 1)
2. The THREAD CARRIER "A" which is screwed to pinion "Z" in the spot marked "A".
3. The NIPPLE "R" which is attached by screw "G" see Figures 1 & 3. When the handle is aimed forward, the hole in the nipple that the filler passes through MUST also be in the front.
4. The NEEDLE BAR CLAMP "V" (figs. 1 & 4) which is fixed in the tube of the Machine by screw "V." The clamp should be placed so screw "V" is facing its flat surface.
5. The TWO NEEDLE BARS "P" (Fig. 4) These should be placed with both needles at the same height & the heads facing forward.
6. The CORD GUIDE "N" (Fig. 1) if a filler is used.

IMPORTANT: When doing four thread work, it is necessary to adjust part "Q" (the nose) (Fig. #1) to its lowest position. This is done by loosening screw "B". Move the part into the correct position and tighten the screw.

You must be careful when doing this. Don't allow the "NOSE" to turn. This would change the position of the needles in relation to the feed.

When working with only one needle & the hollow tube needle bar shown in Figure 8, the "NOSE" should always be placed in the highest position.

T H R E A D I N G T H E L T G M A C H I N E

To change the NEEDLE PLATE DISK "M" (Fig. #5) Push back the two slides "0" & "0" The slides hold the Needle Plate Disk in position. Then remove the Plate. Replace it with the one needed for the particular work you are doing. There are several of these plates.

LOWER THREADS (Chain Stitch)—Place the threader wire into TUBE 4, (on the right) Fig. 6. There are two "THREAD CHECK CONTROLLER SPRINGS" under this machine. ("K" on Figure 2) If you are working with spools, ("L" on Fig. 2) be sure the thread on the right spool is drawn up through the right Thread Check Controller Spring then into the needle plate hole on the right. When you bring up the thread on the left, be sure it goes into the left Thread Check Controller Spring & into the left hole in the needle plate.

The Chain Stitch threads will pick-up without going through the process necessary to get the thread into the LOOPER on the Chain Stitch & other Machines.

FILLER THREAD—The filler comes from the large spool "X" (Fig. 1) It passes over bar "Q" and then into the hollow tube. Then down & through the nipple "R".

Three methods can be used to pass the filler down to the nipple.

1. The filler can be stiffened by pulling it through a piece of Bee's Wax. For heavy fillers, tie a piece of thread to the filler & pull the thread through the Bee's Wax
2. A small metal chain is supplied with the machine. insert the filler into the loop at the end, then drop the chain through the tube.
3. The long double hook threader wire can be used.

BOBBIN THREAD (also known as wrapping thread.)

This thread is wound onto the large bobbins supplied with the machine. Thread, ribbon, chenille cord & many other things can be used on the bobbins & for the filler to create different effects. Even several strands of the same thing can be used.

From the bobbin the thread passes through thread guides "E" & 3 & 4 and finally through thread guide 5 of the thread carrier "A" (Fig. 1) Also see Fig. 7.

DIFFERENT WIDTHS FOR FOUR THREAD WORK.—Four Thread work can be done in four different widths.

For work approximately 1/4 inch wide, use nipple 2736, needle plate 2738 & looper 2741. See parts list page 115.

For work approximately 5/32 inch wide, use nipple 2737, needle plate 2720 & looper 1623. See parts list page 115.

For work approximately 1/8 inch wide, use nipple 2742, needle plate 2721 & looper 1623. See parts list page 115.

For work approximately 1/10 inch wide, use nipple 2743, needle plate 2722 & looper 1624 or 1625.

The difference between these loopers is, 1625 is made with needle parts with eyes that the threads pass through, Looper 1624 is provided with tubes like the other loopers. Both give equally satisfactory results but, some operators prefer one & some the other.

CHANGING THE NIPPLE Loosen screw "G" replace the nipple with the one you plan to use & tighten the screw. (Fig. 3)

CHANGING THE LOOPER—First remove the plates. (Fig. 5 M & M)

Loosen screw "D" (Fig. 6) Push part "I" as far as possible to the right. Remove the looper & replace it with the looper corresponding to the nipple selected. Push part "I" back into position & tighten screw "D".

TWO NEEDLE PICOT WORK—(Similar to feather stitching.)

To obtain this effect, an ordinary four-thread nipple is used, but the Winding Attachment must be changed.

Loosen the screw holding Spool Holder "S" & Thread Carrier "A" to pinion "Z". Remove Nipple "R" (Fig. 1 & 3) Turn the handle toward the operator. Place Spring "S" & Cylinder "W" (Fig. 7) on the tube "F". While holding Cylinder "W" with your left hand, place Nipple "R" in the tube. Tighten screw "G" which holds the Nipple under the line engraved on the cylinder.

Attach Spool Holder "T" onto Pinion "Z" and part "G" to the place marked w th the letter "G". Place the Thread Carrier "B" on Cylinder "W" in the position marked "B".

The thread runs from the spool "I", (Fig. 7) passes the standing post "E", over guide "H", through slot "K" and thread guide holes 6, 7 & 8. The height of Guide "B" must be carefully adjusted so it's thread will always PASS UNDER THE POINTS OF THE NEEDLES. The two needles must be placed very high in order to produce loose loops. These loops will be tightened by the wrapping of the bobbin thread.

The Chain Stitch threads require a very loose tension. You will find silk (rayon) thread works best for the Chain Stitch. Almost any thread can be used in the bobbin ("I")

The bobbin tension must be tight enough to pull the two parallel Chains together.

By placing one needle very high & the other very low, a Picot Stitch is produced on one side only. This is produced even when sewing in straight lines, as opposed to sewing Feather Stitch with only one needle, which only places the "rays" out to the side when making curves or circles.

When doing this type of work, it is necessary to raise the "NOSE", part "Q" to the highest position. Loosen screw "B" and move the NOSE to the desired position & tighten the screw.

You will find Picot Work, or Feather Stitching works best when you use size 3 long point needles.

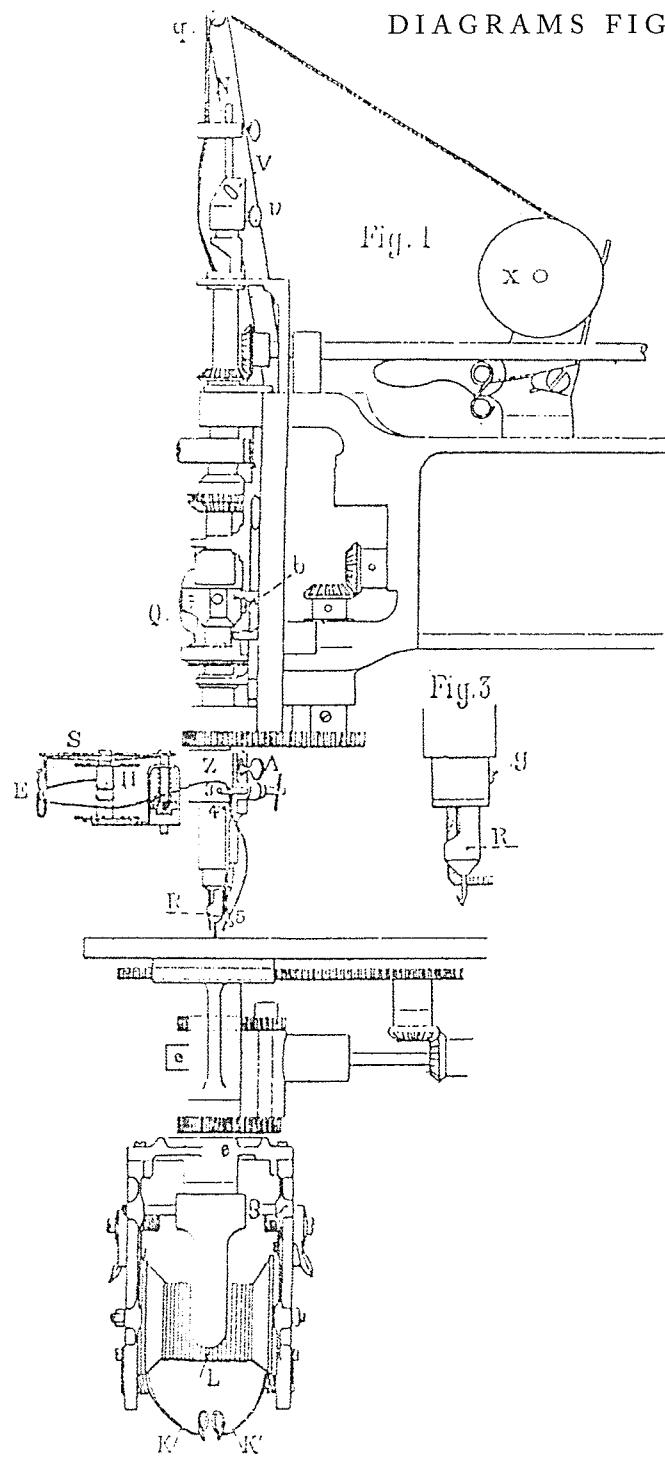
Other effects can be obtained by using different thread thicknesses, different tensions & different needle heights.

SINGLE NEEDLE WORK—When working with only one needle, the loopers with the two tubes must be replaced with the single tube looper Number 1633, Needle Plate 2739 and Nipple 1127. You must also replace the double needle bars with the special hollow tube needle bar shown in Figure 8. The NOSE "Q", should be adjusted to the highest position. When working with only one needle, the LTG Machine works the same as the regular "L" Machine.

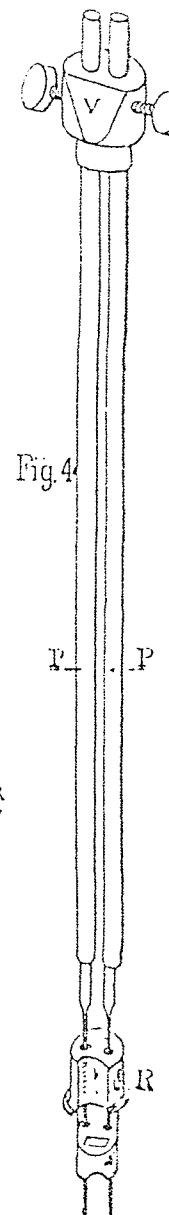
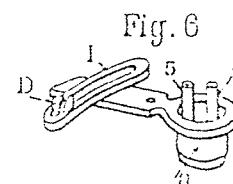
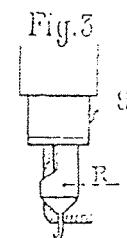
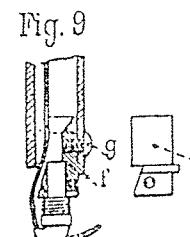
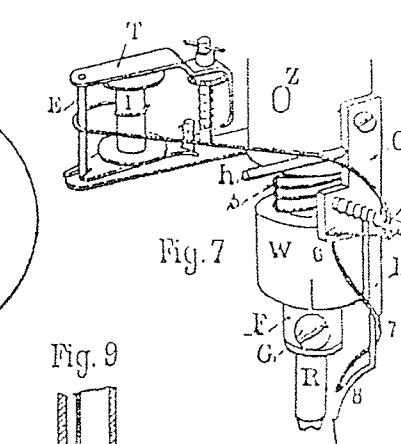
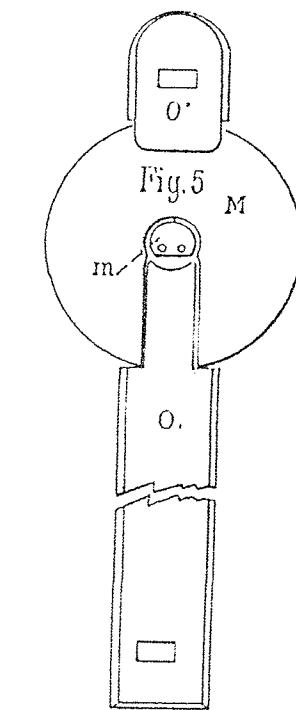
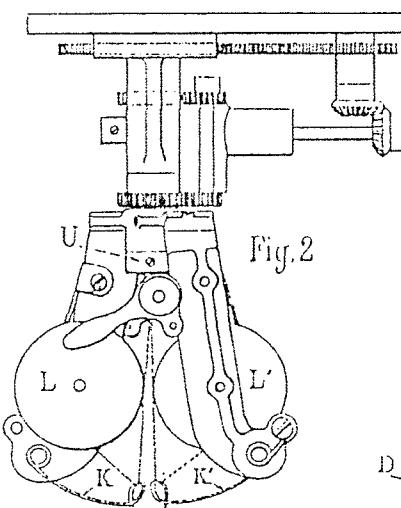
USING THE HOLLOW TUBE NEEDLE BAR (FIGURE 8)—When using this needle bar, be sure the opening in the hook of the needle faces forward from the flat front part of the needle bar. This is especially important when doing Braiding.

BRAIDING WORK—When doing Braiding, the Braid nipple holder "F" (Fig. 9) should be used. The LTG works the same as the "B" or "L" Machine for doing Braiding work. The Braid will feed from the large spool holder "X" down through the hollow tube needle bar. I don't think I have mentioned this before... it is important to feed the braid without any twist from the spool to the nipple.

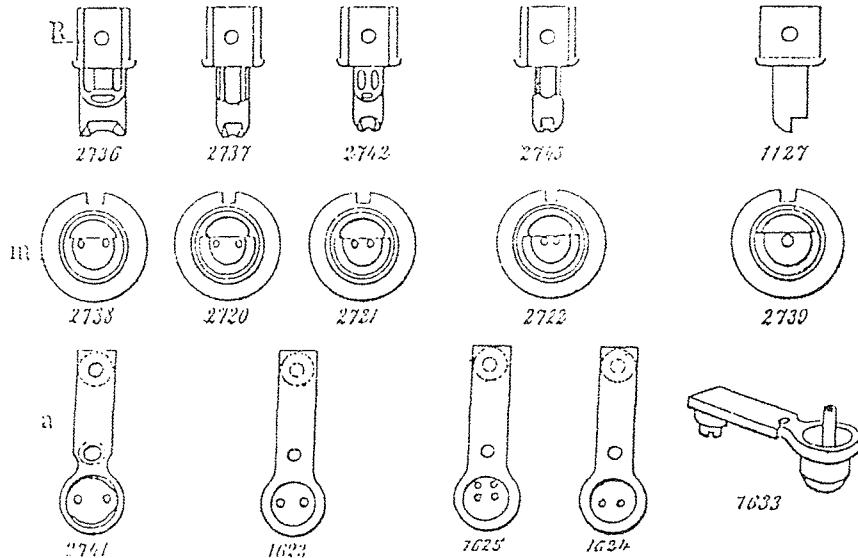
DIAGRAMS FIGURE 1



DIAGRAMS
FIGURES 1,2,3,4,5,6,7,8 & 9



NIPPLES, NEEDLE PLATES
& LOOPERS



THREE NEEDLE WORK—The LTG Machine can be adjusted to sew THREE parallel lines of Chain Stitching.

The additional accessories necessary to do this are not standard equipment with the Machine. They must be ordered separately.

Instead of two spools on the holder (Fig. 2) a special spool holder equipped for holding three spools is available. A three tube looper, a three hole needle plate, a special three hole nipple & of course the needle bar clamp that holds three needle bars.

Threading is the same as for two thread, just be sure the thread coming from each spool under the Machine is fed into the corresponding Thread Check Controller & Needle plate.

Don't try using the three spool holder when doing two thread work. The tendency is to just not place one of the spools on the holder. It will work, but not as well as using the proper parts.

CONCLUSION—Well, it looks like I may have finally come to the end of this Book, it has taken about ten times as long as I had thought it would & much to my surprise...I think I have become "MY OWN BEST STUDENT!" Sure, I learned to operate all of these Machines many years ago, but by writing about them and trying to be sure all of my statements were as accurate as possible, and doing one heck of a lot of research...I learned a lot of things about the Machines that I didn't know before.

I hope you have acquired an appreciation for these marvelous pieces of equipment, have always marveled at the fact that most of these Machines were invented over one-hundred years ago. I think Bonnaz & Cornely were men that were far advanced for the time that they lived. I thank them for inventing & manufacturing these wonderful Machines. I hope The Artistic Touch Books will insure that beautiful embroidery work will be done on these Machines long after all of us are gone!

Maybe someday a hundred years from now, someone will be saying, "Thank God, Ruth Franklin wrote those Books!"

-THE END-

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BY
RUTH E. FRANKLIN

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RUTH E FRANKLIN

CHAIN STITCH EMBROIDERY

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H A N D - M A C H I N E E M B R O I D E R Y

VIDEO TRAINING TAPE NUMBER TWO

Teaches you to operate the Singer 107W102 Satin Stitch Monogramming Machine & similar machines made by other Companies, Meistergram, Panto-Gram, Juki, Brothers. Can also be used for Domestic Machines. Shows you how to do lettering, monograms, & designs. Includes understanding the Machine. Shows you how to make all necessary adjustments. With this Video & Book Number Two, you will learn everything about the machine & the business.

C H E N I L L E E M B R O I D E R Y

VIDEO TRAINING TAPE NUMBER THREE

Teaches you to do Chenille Embroidery on The Chain Stitch Machine. You are shown how to make Chenille Award letters, Multi-Color Chenille Emblems & how to do direct Chenille on jackets & other garments. With this tape & Book Number Three, you will learn everything about this lucrative phase of The Embroidery Business.

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This Book is about the other "SPECIAL" Embroidery Machines equipped to do special types of stitching. Some do "CORDING," others sew on "BRAIDS," others sew on "SEQUINS & PEARLS", & other embellishments. Most of these machines are used in "Dress Embroidery," but some of them also do Chain Stitch & Chenille. This Book includes instructions for using the machines, how to thread them, making patterns, stamping, setting rhinestones & pearls & many other things about the Dress Embroidery Business. Also has information about the lock-stitch zig zag Bonnaz Machines, and how to embroider "Western Wear" & do Applique lettering & designs. This is the Book for the "EMBROIDERY CONNOISSEUR!"

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Gives you instructions for doing major repairs & parts replacements on all of the Hand-Operated Embroidery Machines. (Bonnaz & Satin Stitch) Includes parts list for many of the machines shown. Includes motor maintenance & adjustments. Even if you don't choose to do your own repairs, this Book will save you from "Guess Work Mechanics!" THIS IS ANOTHER PART OF THE BUSINESS WHERE QUALIFIED PEOPLE ARE NEEDED!

BOOK NUMBER SIX—The ARTISTIC TOUCH LETTERING BOOK

This Book is printed on 8½" X 11" paper & it is in a three ring binder for easy page removal. Two-hundred & thirty-six pages showing the FIFTY-ONE MOST POPULAR LETTERING STYLES, in two-inch out-lined letters. Pages are easy to remove for tracing & making enlargements & reductions. It has charts that tell you how long it takes to embroider each lettering style on the Chain Stitch & Satin Stitch Machines. The best thing about it is, "It was DESIGNED by an EMBROIDERY ARTIST!" This Book takes the guess work out of setting your prices. Includes many designs of animals, flowers, company logos, mascots & other things.

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VIDEO TRAINING TAPE NUMBER FIVE

Many people live "out-in-the-boon-docks." They do work on the Chain Stitch Machines, but they can not find mechanics who know anything about the machines. This Video shows you how to completely take the machine apart, then put it back together. You are shown how to check parts & make replacements, plus, how to make adjustments operators who have operated the machines for years don't even know about. With Book Number Five & this Video, you will be an expert mechanic on the embroidery machines. This is another phase of The Embroidery Business where well trained, QUALIFIED PEOPLE ARE NEEDED.

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