

**FIRST  
EDITION**



*Union Special*<sup>®</sup>  
INDUSTRIAL SEWING EQUIPMENT

**CATALOG NO. 77L**

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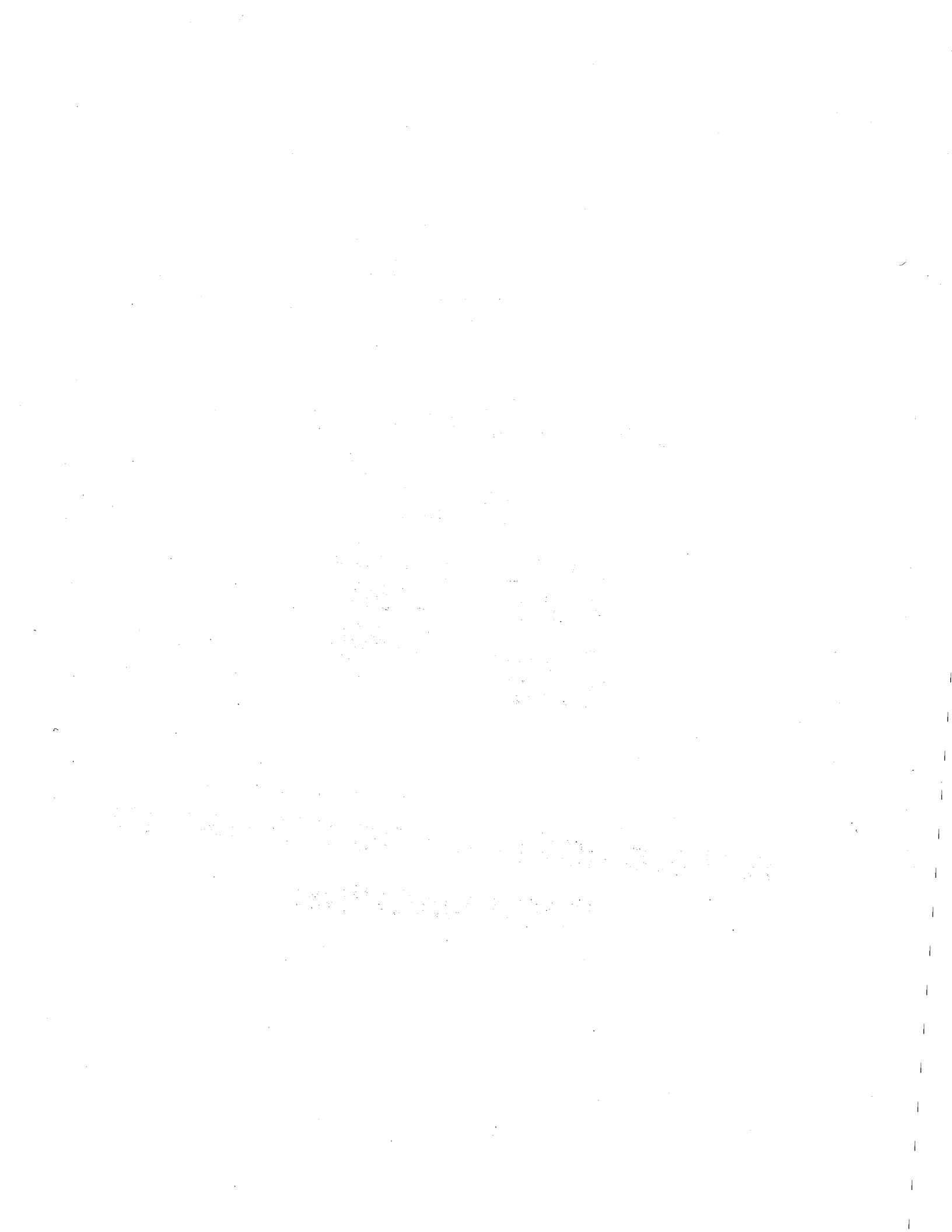
**STYLES**

<b>51200</b>	<b>51300</b>
<b>51400</b>	<b>51500</b>
<b>51700</b>	<b>51900</b>
<b>54100</b>	

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**FLAT BED LIGHT DUTY DOUBLE LOCKED  
STITCH MACHINES**



Catalog No. 77 L

LIST OF PARTS

STYLES IN CLASSES

51200	51300	51400
51500	51700	51900
		54100

THE FIFTY THOUSAND SERIES

The parts listed in this catalog are  
furnished at list prices for repairs only.

First Edition

Price \$2.00

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### \*MAIN OFFICES

## FOREWORD

The one dominating idea back of "Union Special" is to build the best industrial sewing machines in the world. Our new line of Enclosed Type Flat Bed Machines, known as the "Fifty-Thousand Series" marks an epoch in sewing machine design and construction.

All parts are made to gauges with exceedingly close limits. Oil Cups are provided for all important bearings, and a convenient oil drain catches the surplus. Repairs can be made with facility as all parts are readily accessible, and are 100% interchangeable.

It is our constant aim to furnish carefully prepared information that will enable the customer to secure all possible economies and advantages from the use of Union Specials. On the pages which follow will be found illustrations and descriptions of the parts for styles in Classes 51200, 51300, 51400, 51500, 51700, 51900 and 54100.

Additional catalogs, containing information relative to these machines, and which will be furnished on request, are listed below.

Catalog No. 29	List of Transmitter Parts
Catalog No. 32	List of Pulling Machine Parts
Catalog No. 45	List and Description of Needles
Catalog No. 45 A	Price List of Needles
Form 357	Engineering Department Adjusting Instructions. Specify the Style number of the machine for which the Adjusting Instructions are required

In all manufacturing centers will be found Union Special representatives, who will co-operate with those who desire in planning and estimating their requirements.

UNION SPECIAL MACHINE COMPANY

Engineering Department

## IDENTIFICATION OF MACHINES

Each Union Special carries a style number which is stamped in the name plate on the machine. Style numbers are classified as standard and special. Those which are standard have one or more letters suffixed, but never contain the letter "Z". Example: 51400 A. Style numbers containing the letter "Z" are special. When only minor changes are made in a standard machine a "Z" is merely suffixed to the respective standard style number. Example: 51400 AZ.

Styles of machines similar in construction are grouped under a class number which differs from the style numbers in that it contains no letters. Example: 51400.

The distance between the rows of stitches is represented by a gauge number measured in 64ths of an inch, viz: 12 gauge represents a distance of  $12/64$  or  $3/16$  inch, 64 gauge represents a distance of  $64/64$  inch or 1 inch. The gauge number of machines, making three independent equally spaced rows of stitches, like styles in Class 51900, represents the space between adjoining rows or one-half the overall measurement, viz: No. 6 gauge represents  $6/64$  inch or  $3/32$  inch, No. 9 gauge represents  $9/64$  inch. The figure directly following the dash in the Style Number symbols covering the multiple needle styles in Class 54100 indicates the number of needles with which the machine is fitted. The figures enclosed in parenthesis in the list of parts denote the gauge or needle spacing, reading from left to right. Example(16-64-16) denotes a needle spacing of  $1/4$  inch, 1 inch, and  $1/4$  inch

## APPLICATION OF CATALOG

This catalog applies only to the standard styles of machines as listed herein. It can also be applied with discretion to the special machines covered by these classes.

## STYLES OF MACHINES IN CLASS 51200

Enclosed Type Flat Bed One Needle Light Duty Machines,  
Double Locked Stitch Type 401, Lateral Looper Travel

51200 A (Succeeds Styles 6400 I and 15900 D) For binding aprons, dresses and similar garments, internal presser spring, parallel take-up, Type 106 needles, uses cut edge strip, standard widths  $3/4$ ,  $7/8$ , 1,  $1\ 1/8$  and  $1\ 1/4$  inches.

STYLES OF MACHINES IN CLASS 51200 (Cont'd)

- 51200 B (Succeeds Style 6400 M) For seaming mattress ticks, bound seam, external presser spring, shielded disc take-up uses selvage edge strip, standard widths  $5/8$ ,  $3/4$  and  $7/8$  inch, English binder, Type 126 needle.
- 51200 C (Succeeds Style 6400 W) For seaming mattress ticks; plain seam, external presser spring, shielded disc take-up Type 126 needle.
- 51200 G (Succeeds Style 6400 N) For joining shoulders of shirts, one operation, internal presser spring, parallel take-up, Type 106 needle.
- 51200 H (Succeeds Style 6000 A) For miscellaneous operations on knitted drawer bands and knitted shirt fronts, internal presser spring, parallel take-up, Type 101 needle.
- 51200 J (Succeeds Style 15900 F) For attaching one-piece extension button stays to front and sleeves of woven shirts, also facing sleeves, external presser spring, shielded disc take-up, strips used in either garment lengths or long lengths, Type 106 needle, standard finished widths  $1/2$ ,  $3/4$ ,  $7/8$  and 1 inch.
- 51200 Z A special style similar to the standard styles in Class 51200, but differing in one or more of its component parts.

STYLES OF MACHINES IN CLASS 51300

- Enclosed Type Flat Bed One Needle Heavy Duty Machines, Double Locked Stitch Type 401, Lateral Looper Travel, External Presser Spring, Shielded Disc Take-up
- 51300 A (Succeeds Styles 6500 B, 15900 A) For seaming trousers, coats and similar garments, Type 128 needle.
- 51300 B (Succeeds Style 6600 E) For seaming couch covers, with and without rope welt, welt guided to left of needle, Type 143 needle.
- 51300 C (Succeeds Style 6500 C). For seaming trousers, coats, and similar garments, cord seam, throw-out folder, Type 128 needle.

STYLES OF MACHINES IN CLASS 51300 (Cont'd)

- 51300 D (Succeeds Style 6600 D) For miscellaneous operations on tents, awnings, tarpaulins, covers and similar articles, includes PULLER, Type 143 G needle.
- 51300 Z A special style similar to the standard styles in Class 51300, but differing in one or more of its component parts.

STYLES OF MACHINES IN CLASS 51400

Enclosed Type Flat Bed Independent Row Two Needle Light Duty Machines, Left Needle In Front, Double Locked Stitch Type 401, Lateral Looper Travel

- 51400 A (Succeeds Styles 7400 A, 7400 B) For piecing sleeves, joining shoulders and setting sleeves of ordinary quality shirts and similar garments made of medium and light weight materials; double stitch felled seam,  $5/32$  inch space between needles in line with feed, feed surface between needles of No. 16 and wider gauges, Type 106 needles, external presser spring, shielded disc take-up, standard gauges Nos. 6, 8, 10, 12, 16 and 18.
- 51400 B (Succeeds Style 7400 X) For folding and attaching extension center plait, interlining strip and facing strip to fronts of shirts and similar garments, one operation, plaits used in garment lengths and extend  $1/4$  inch beyond the rows of stitches, facing and interlining strips used in long lengths, starts operation at neck,  $5/32$  inch space between needles in line with feed, "Tru-Front" folder, Type 106 needles, external presser spring, shielded disc take-up, standard gauge No. 48.
- 51400 C (Succeeds Style 7400 AH) For folding and attaching set-on center plait and interlining strip; otherwise same as 51400 B.
- 51400 D (Succeeds Style 7400 AL) For folding and attaching inside button facing to shirts and similar garments, one operation, with  $1/16$  inch margins, facing strip used in long lengths and guided next to feed dog, starts operation at neck,  $5/32$  inch space between needles in line with feed, Type 106 needles, external presser spring, shielded disc take-up, standard gauges Nos. 32 and 48.



STYLES OF MACHINES IN CLASS 51400 (Cont'd)

51400 E For piecing sleeves, joining shoulders and setting sleeves of extra fine quality shirts and similar garments made of medium and light weight materials, double stitch felled seam,  $5/32$  inch space between needles in line with feed, feed surface between needles for all gauges, Type 106 needles, external presser spring, shielded disc take-up, standard gauges Nos. 8, 10, 12 and 16.

Note: The maximum size ball eye needle that can be used in Style 51400 E is .032 in the No. 8 gauge and .036 in the wider gauges. The maximum stitch length for all gauges is 14 per inch.

51400 F For "cut-on" button stay operation on shirts, turn down hem; starts operation at neck,  $5/32$  inch space between needles in line with feed, Type 106 needles, standard width of hem  $5/8$  inch, standard hemmer has  $1/32$  inch capacity, external presser spring, shielded disc take-up, standard gauge No. 32.

51400 G (Succeeds Style 7400 AG) For hemming bloomers and similar garments made from knitted fabrics, and simultaneously inserting an elastic band within the hem,  $3/16$  inch space between needles in line with feed, built-in puller, Type 101 needles, internal presser spring, parallel take-up, standard gauges Nos. 16, 18 and 24, standard widths of heading  $1/8$ ,  $3/16$  and  $1/4$  inch for Nos. 16 and 18 gauge machines, standard width of heading  $1/8$  inch for No. 24 gauge machine.

Note: By using a knee press No. 21691 A, the operator can shift the elastic into the left row of stitches at the start and termination of the hem.

51400 H (Succeeds Style 7000 A) For uniting the lower edge of French drawer bands to the body fabric;  $3/16$  inch space between needles in line with feed, external presser spring, shielded disc take-up, Type 101 needles, standard gauges Nos. 16 and 18

51400 J (Succeeds Style 7400 B) For setting sleeves of extra fine quality shirts and similar garments made from medium and light weight materials; double stitch felled seam,  $3/16$  inch space between needles in line with feed, feed surface between needles, Type 106 needles, external presser spring, shielded disc take-up, standard gauge No. 26.

STYLES OF MACHINES IN CLASS 51400 (Cont'd)

- 51400 K For quilting collar bands of shirts and similar garments,  $5/32$  inch space between needles in line with feed, Type 106 needles, external presser spring, shielded disc take-up, standard gauges Nos. 24 and 26.
- 51400 L For folding and attaching set-on button stay to fronts of work shirts and similar garments,  $1/32$  inch margins, stays used in garment lengths and guided next to presser foot, starts operation at neck,  $5/32$  inch space between needles in line with feed, folder presser foot, Type 106 needles, external presser spring, shielded disc take-up, standard gauge No. 32.
- 51400 M (Succeeds Style 7400 AK) For folding and attaching single piece facings to sleeves of shirts and similar garments, one operation, facing used in garment lengths, folder has  $1/32$  inch capacity, Type 106 needles, external presser spring, shielded disc take-up, standard gauge No. 48.
- 51400 N For "cut-on" button stay operation on shirts, turn up hem, starts operation at neck,  $5/32$  inch space between needles in line with feed, Type 106 needles, standard width of hem  $7/8$  inch, standard hemmer has  $3/64$  inch capacity, external presser spring, shielded disc take-up, standard gauge No. 48.
- 51400 Z A special style similar to the standard styles in Class 51400, but differing in one or more of its component parts.

STYLES OF MACHINES IN CLASS 51500

Enclosed Type Flat Bed Independent Row Two Needle Heavy Duty Machines, Double Locked Stitch Type 401, Lateral Looper Travel, External Presser Spring, Shielded Disc Take-up

- 51500 A (Succeeds Style 7500 B) For double stitch felling overalls, coats, combination suits and similar garments; left needle in front,  $3/16$  inch space between needles in line with feed, Type 128 needles, standard gauges Nos. 16 and 18.

STYLES OF MACHINES IN CLASS 51500 (Cont'd)

- 51500 C For seaming trousers and similar garments; right needle in front,  $1/4$  inch space between needles in line with feed, which locates each stitch one-half a stitch length in advance of the adjoining stitch when the stitch length is set at ten per inch and gives the equivalent of twenty stitches per inch; yet the fabric is moved forward  $1/10$  inch in each cycle, Type 130 needles, standard gauge No. 1.
- 51500 D For seaming tents, awnings, tarpaulins, covers and similar articles; double stitch lap seam, includes PULLER, Type 143 G needles standard gauge No. 26.
- 51500 G For seaming trousers and similar garments, right needle in front,  $7/32$  inch space between needles in line with feed, which locates each stitch one-half a stitch length in advance of the adjoining stitch when the stitch length is set at seven per inch and gives the equivalent of fourteen stitches per inch, yet the fabric is moved forward  $1/7$  inch in each cycle. Type 130 needles, standard gauge No. 1.
- 51500 Z A special style similar to the standard styles in Class 51500, but differing in one or more of its component parts.

STYLES OF MACHINES IN CLASS 51700

Enclosed Type Flat Bed Independent Row Two Needle Machines, Needles Abreast, Double Locked Stitch Type 401, Lateral Looper Travel, External Presser Spring, Parallel Take-up

- 51700 C (Succeeds Styles 16200 N, 16200 Q) For folding and attaching set-on center plait and interlining strip to fronts of shirts and similar garments, one operation, plaits used in garment lengths and extend  $1/4$  inch beyond the rows of stitches, starts operation at neck, "Tru-Front" folder, Type 106 needles, standard gauges Nos. 56 and 64.
- 51700 D (Succeeds Styles 16200 D, 16200 P) For folding and attaching extension center plait, interlining strip and facing strip, standard gauge No. 64; otherwise same as 51700 C.

STYLES OF MACHINES IN CLASS 51700 (Cont'd)

- 51700 E For folding and attaching buttonhole facings to knitted undergarments; one operation, self-finish front, cut edge facing strip used in long lengths and guided next to feed dog, strip controlled differential top feed, Type 121 needles, standard gauges Nos. 64, 72 and 80.
- 51700 F For attaching garment length single piece extension bands to overalls and similar garments, heavy duty work, one operation, collapsible horn type folder with operating knee press, 1/16 inch seam margins, Type 128 F needles, stitch range 13 to 7 per inch, standard gauge No. 88, includes PULLER.
- 51700 G For folding and attaching cuffs to pajamas and similar garments made from silk and broadcloth, and inserting a corded piping on left side of cuff, one operation, piping made from a 5/8 inch bias strip folded around a 3/32 inch cord. Standard folder has 1/32 inch capacity and delivers a 2 1/8 inch finished strip, Type 106 needles, standard gauge No. 128, includes PULLER.
- 51700 H Equipped with 3/64 inch capacity cuff folder for flannelette fabrics and puller is omitted, otherwise same as 51700 G.
- 51700 Z A special style similar to the standard styles in Class 51700, but differing in one or more of its component parts.

STYLES OF MACHINES IN CLASS 51900

Enclosed Type Flat Bed Independent Row Three Needle Machines, Left Needle In Front, 5/32 Inch Space Between Needles In Line With Feed, Double Locked Stitch Type 401, Lateral Looper Travel

- 51900 A (Succeeds Style 17100 B) For piecing sleeves, joining shoulders, and setting sleeves of shirts and similar garments made of medium and light weight materials; triple stitch felled seam, plain feed, needles Type 106, external presser spring, shielded disc take-up, standard gauges Nos. 5, 6 and 7.

STYLES OF MACHINES IN CLASS 51900 (Cont'd)

- 51900 B (Succeeds Style 17100 C) For seaming overalls, coats, combination suits, and similar garments; triple stitch felled seam, plain feed, needles Type 128, internal presser spring, parallel take-up, standard gauges Nos. 7, 8 and 9.
- 51900 C For seaming wind breakers, mackinaws, lumber jacks and similar garments; double and triple stitch semi felled seam, tractor feed, needles Type 128 F, internal presser spring, parallel take-up, standard triple stitch gauge No. 9.
- 51900 Z A special style similar to the standard styles in Class 51900, but differing in one or more of its component parts.

STYLES OF MACHINES IN CLASS 54100

Enclosed Type Flat Bed Multiple Needle Machines,  
Needles Abreast, Chain Stitch Type 101, Loopers Travel  
In Line With Feed, External Presser Spring

- 54100 B-4 (Succeeds Style 16100 K) For attaching garment length, single piece extension center plaits to shirts; one operation, finishes operation at neck, four needles, folder is horn type and makes 1/16 inch seam margins, Type 106 needles, standard gauges Nos. (12-64-12) and (16-64-16), includes PULLER.
- 54100 C-4 For "cut-on" center plait operation on shirts; finishes operation at neck, four needles, hemmer has 3/64 inch capacity and makes 1/16 inch stitching margins, Type 106 needles, standard gauges Nos. (12-64-12) and (16-64-16), includes PULLER.
- 54100 D-4 Without pulling machine; otherwise same as 54100 B-4.
- 54100 E-4 Without pulling machine; otherwise same as 54100 C-4.
- 54100 Z A special style similar to the standard styles in Class 54100, but differing in one or more of its component parts.

## NEEDLES

### TYPE NUMBERS AND SIZES

Each needle has a type number and size number. The former denotes the kind of shank, point, length, groove, finish, and other details. The latter denotes the largest diameter of the blade, measured in thousandths of an inch midway between the shank and eye, and is stamped in the needle shank. Collectively the type number and size number is the complete symbol.

To have orders promptly and accurately filled, the empty package, a sample needle, or the type and size numbers should be given. See marks on packages. An intelligent order would read as follows: "1000 Needles Type 106 Size .036". The type numbers of the needles available for use in the styles of machines covered by this catalog are listed below. Set opposite each type number is the description of the needle and the sizes available.

Type No.	Description
101	Round shank, round point, extra short, double groove, nickel plated- sizes 019, 022, 025, 027, 029, 032, 034, 036, 038, 040, 042, 044, 046, 049, 054.
101 G	Round shank, round point, extra short, double groove, chromium plated- sizes 032, 036, 040.
106	Round shank, round point, extra short, double groove, ball eye, standard length blade, nickel plated- sizes 027, 029, 032, 036, 038, 040, 042, 044, 049.
106 A	Same as Type 106, except blades are 1/16 inch shorter and shanks are 1/16 inch longer- sizes 032, 036.
106 G	Round shank, round point, extra short, double groove, ball eye, chromium plated- sizes 032, 036, 040, 044.
108	Round shank, round point, extra short, double groove, ball eye, spotted, nickel plated- sizes 032, 036, 038, 040, 042, 044, 049, 054.
108 G	Round shank, round point, extra short, double groove, ball eye, spotted, chromium plated- sizes 040, 044, 049, 054.

NEEDLES (Cont'd)

Type No.	Description
109	Round shank, round point, extra short, double groove, ball eye, government, nickel plated- sizes 027, 032, 036, 040, 044.
109 B	Round shank, round point, extra short, double groove, government, nickel plated- sizes 027, 032, 036, 040, 044, 049.
110	Round shank, round point, extra short, double groove, ball eye, government, spotted, nickel plated- sizes 036, 040, 044.
110 G	Round shank, round point, extra short, double groove, ball eye, spotted, government, chromium plated- size 040.
121	Round shank, round point, short, double groove, nickel plated- sizes 019, 022, 025, 027, 029, 032, 036, 038, 040, 042, 044, 049, 054.
121 G	Round shank, round point, short, double groove, chromium plated- sizes 032, 036, 040, 049.
124	Round shank, round point, short, double groove, spotted, nickel plated- sizes 040, 044, 049, 060, 067, 080, 090.
126	Round shank, round point, short, double groove, ball eye, nickel plated- sizes 027, 032, 036, 040, 042, 044, 049, 054.
128	Round shank, round point, short, double groove, ball eye, spotted, nickel plated, standard width of eye and grooves- sizes 032, 036, 040, 044, 049, 054, 060, 067, 080.
128 F	Round shank, round point, short, double groove, ball eye, spotted, nickel plated, under-size eye and grooves, one step reduction- sizes 044, 049, 054.
128 G	Round shank, round point, short, double groove, ball eye, spotted, chromium plated, under-size eye and grooves, one step reduction- sizes 044, 049, 054.

NEEDLES (Cont'd)

Type No.	Description
128 GA	Round shank, round point, short, double groove, ball eye, spotted, chromium plated, standard width of eye and grooves- sizes 040, 044, 049, 054.
129	Round shank, round point, short, double groove, government, nickel plated- sizes 027, 029, 032, 036, 040, 044, 049.
130	Round shank, round point, short, double groove, ball eye, government, spotted, nickel plated- sizes 036, 040, 044, 049, 054, 060.
130 G	Round shank, round point, short, double groove, ball eye, government, spotted, chromium plated- sizes 044, 049, 054.
140	Round shank, round point, long, double groove, nickel plated- sizes 027, 032, 036, 040, 044, 049, 054, 060.
143	Round shank, round point, No. 2 bag, double groove, nickel plated- sizes 054, 060, 067, 080, 090, 100, 120, 140.
143 G	Round shank, round point, No. 2 bag, double groove, chromium plated- sizes 067, 090.
144	Round shank, round point, No. 2 bag, double groove, short point, nickel plated- sizes 067, 080, 090.
147 G	Round shank, round point, long, double groove, ball eye, spotted, chromium plated, under-size eye and grooves, one step reduction- sizes 049, 054.
302	Round shank, stay point, extra short, double groove, nickel plated- sizes 032, 036, 040, 042, 044, 049.
907	Round shank, spear point, extra short, double groove, ball eye, nickel plated- sizes 027, 032, 034, 036, 040, 042, 044, 049, 054.



NEEDLES (Cont'd)

Type No.	Description
929	Round shank, spear point, short, double groove, ball eye, spotted, nickel plated- sizes 044, 049, 054, 060, 067, 080.
943	Round shank, spear point, No. 2 bag, double groove, plain finish- sizes 067, 073, 080.
943 G	Round shank, spear point, No. 2 bag, double groove, chromium plated- sizes 073, 080.

APPLICATION OF TYPE NUMBERS TO MACHINES

The standard type of needle applicable to each style is listed in the description of each style. The styles of machines covered by this catalog are listed below. Set opposite each style number is the type numbers of the needles that can be used. Type numbers are arranged numerically, as the variety of the materials sewed on each machine makes it impractical to show a preference.

Machine Style	Type of Needles
51200 A	106, 106 G, 108, 108 G, 109, 110, 110 G, 302, 907
51200 B	126, 128, 128 F, 128 G, 128 GA, 130, 130 G, 929
51200 C	126, 128, 128 F, 128 G, 128 GA, 130, 130 G, 929
51200 G	106, 106 A, 106 G, 108, 109, 110, 110 G, 302, 907
51200 H	101, 106, 106 G, 109 B
51200 J	106, 106 G, 108, 108 G, 109, 110, 110 G, 302, 907
51300 A	126, 128, 128 F, 128 G, 128 GA, 130, 130 G, 929
51300 B	140, 143, 143 G, 144, 147 G, 943, 943 G
51300 C	126, 128, 128 F, 128 G, 128 GA, 130, 130 G, 929
51300 D	140, 143, 143 G, 144, 147 G, 943, 943 G
51400 A	106, 106 A, 106 G, 108, 108 G, 109, 110, 110 G, 302, 907
51400 B	106, 106 A, 106 G, 108, 108 G, 109, 110, 110 G, 302, 907
51400 C	106, 106 A, 106 G, 108, 108 G, 109, 110, 110 G, 302, 907
51400 D	106, 106 A, 106 G, 108, 108 G, 109, 110, 110 G, 302, 907

NEEDLES (Cont'd)

APPLICATION OF TYPE NUMBERS TO MACHINES (Cont'd)

Machine Style	Type of Needles
51400 E	106, 106 A, 106 G, 108, 108 G, 109, 110, 110 G, 302, 907
51400 F	106, 106 G, 108, 108 G, 109, 110, 110 G, 302, 907
51400 G	101, 101 G, 109 B
51400 H	101, 106, 106 G, 109 B
51400 J	106, 106 A, 106 G, 108, 108 G, 109, 110, 110 G, 302, 907
51400 K	106, 106 A, 106 G, 108, 108 G, 109, 110, 110 G, 302, 907
51400 L	106, 106 G, 108, 108 G, 109, 110, 110 G, 302, 907
51400 M	106, 106 G, 108, 108 G, 109, 110, 110 G, 302, 907
51400 N	106, 106 G, 108, 108 G, 109, 110, 110 G, 302, 907
51500 A	126, 128, 128 F, 128 G, 128 GA, 130, 130 G, 929
51500 C	126, 128, 128 F, 128 G, 128 GA, 130, 130 G, 929
51500 D	140, 143, 143 G, 144, 147 G, 943, 943 G
51500 G	126, 128, 128 F, 128 G, 128 GA, 130, 130 G, 929
51700 C	106, 106 A, 106 G, 108, 109, 110, 110 G, 302, 907
51700 D	106, 106 A, 106 G, 108, 109, 110, 110 G, 302, 907
51700 E	121, 121 G, 124, 129
51700 F	126, 128, 128 F, 128 G, 128 GA, 130, 130 G, 929
51700 G	106, 106 G, 108, 109, 110, 110 G, 302, 907
51700 H	106, 106 G, 108, 109, 110, 110 G, 302, 907
51900 A	106, 106 G, 108, 108 G, 109, 110, 110 G, 302, 907
51900 B	126, 128, 128 F, 128 G, 128 GA, 130, 130 G, 929
51900 C	126, 128, 128 F, 128 G, 128 GA, 130, 130 G, 929
54100 B-4	106, 106 G, 108, 108 G
54100 C-4	106, 106 G, 108, 108 G
54100 D-4	106, 106 G, 108, 108 G
54100 E-4	106, 106 G, 108, 108 G

## ORDERING REPAIR PARTS

### PLATES

Grouped, according to scale, will be found illustrations of parts similar in appearance, and, to some extent, component parts that go in the same subdivision of the mechanism.

When a given design of part is made in two or more sizes, only one illustration is usually shown. In ordering these pieces, it is necessary that the additional information be furnished as requested under these illustrations.

### LIST OF PARTS

Turning from the plates to the list of parts, the description of each part and its principal uses will be found. Always check the symbol against its description before ordering. It is not necessary to furnish the plate number.

When a part is used, or can be used, in all machines covered by this catalog, no specific use is mentioned in the description.

For convenience in ordering, minor parts such as screws, nuts and similar articles are repeated after each major part.

(-) A dash in the "plate number" column of the list of parts indicates the absence of an illustration.

(‡) A double dagger in the "symbol to order by" column indicates that the component parts cannot be furnished separately. Due to the high speed of these machines and other factors it is impossible for these associated parts to be fitted a second time and make a serviceable job.

### IDENTIFYING PARTS

Where the construction permits, each part is stamped with its part number. Some of the smaller parts are stamped with an identification letter to distinguish them from parts similar in appearance.

All part numbers represent the same part, regardless of the catalog in which they appear.

### SUPPLIES

All supplies, including taps, reamers, belting, belt hooks, belt fasteners, screw drivers, wrenches and powdered oil stone will be promptly furnished.

## ORDERING REPAIR PARTS (Cont'd)

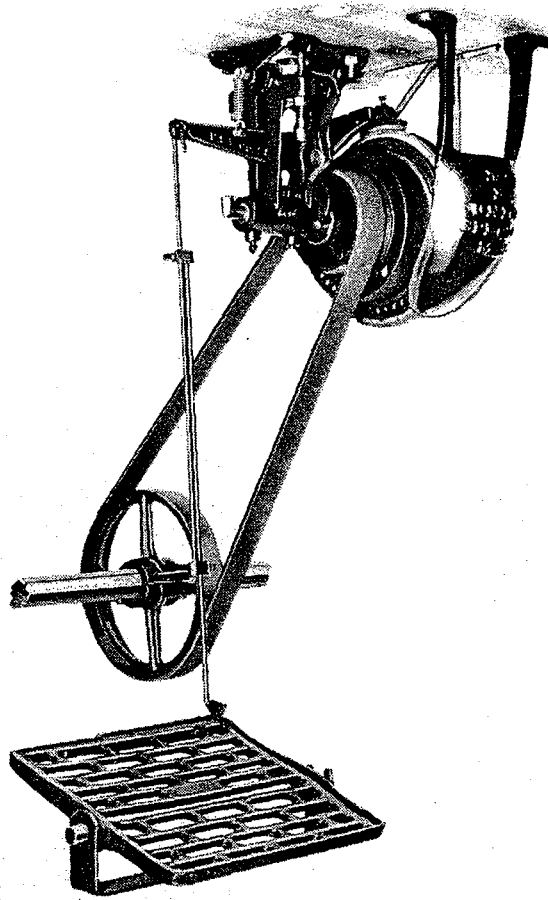
### USE GENUINE NEEDLES AND REPAIR PARTS

Success in the operation of these machines can be secured only by the use of genuine Union Special Needles and Repair Parts as furnished by the Union Special Machine Company, its subsidiaries and authorized distributors. Obviously, it is to our interest to maintain the reputation of Union Specials by furnishing the very best goods obtainable. They are designed according to the most approved scientific principles, and are made with the utmost precision. The maximum efficiency and durability are assured.

Genuine needles are put up in packages marked at the top "Trade 'UNION SPECIAL' mark". Genuine repair parts are stamped with a reproduction of the well known two padlocks with a link connecting the shackles. Both trade marks are symbolic of superlative excellence. All other needles and parts are bogus.

### TERMS

Prices are strictly "net cash" and subject to change without notice. All shipments are forwarded at the buyer's risk f.o.b. shipping point. Parcel post shipments are insured unless otherwise directed. A charge is made to cover the postage and insurance.



Transmitter  
No. 28636 AA.

Line shaft, line  
shaft pulley, and  
belting are shown  
only for clarity,  
and are not covered  
by the symbol  
"No. 28636 AA".

Close-up of  
transmitter  
head.

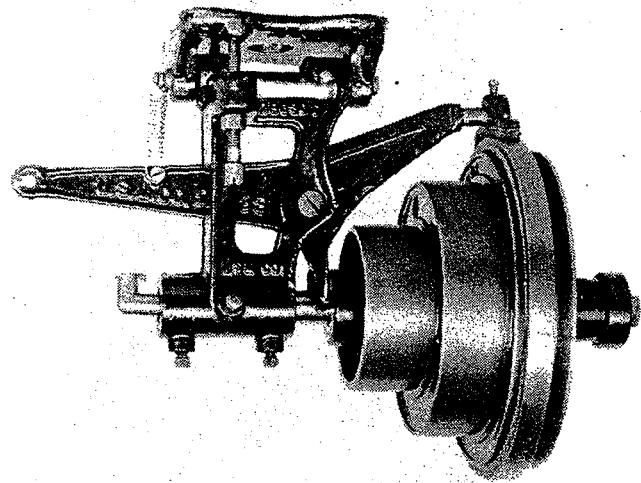
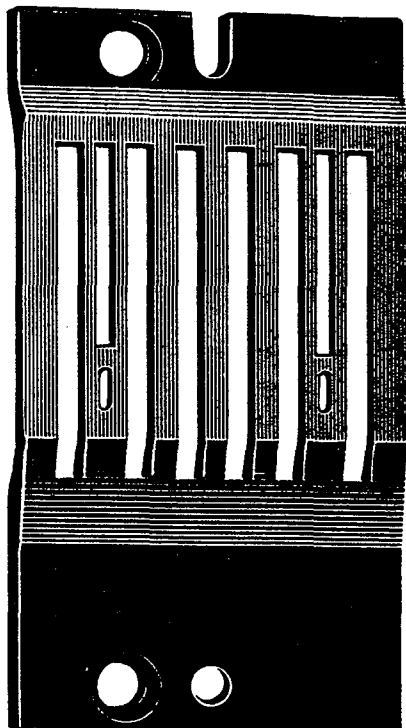
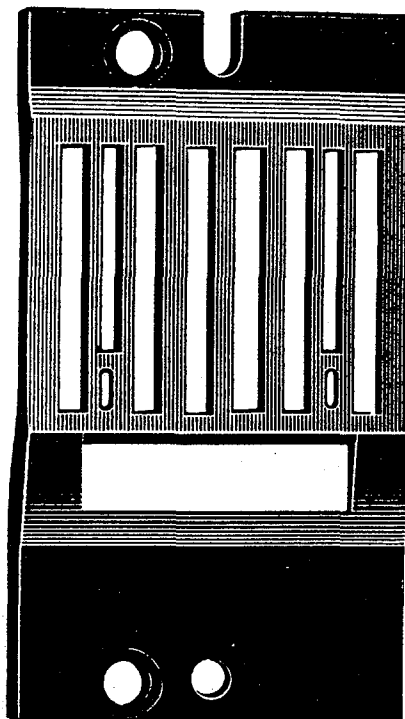


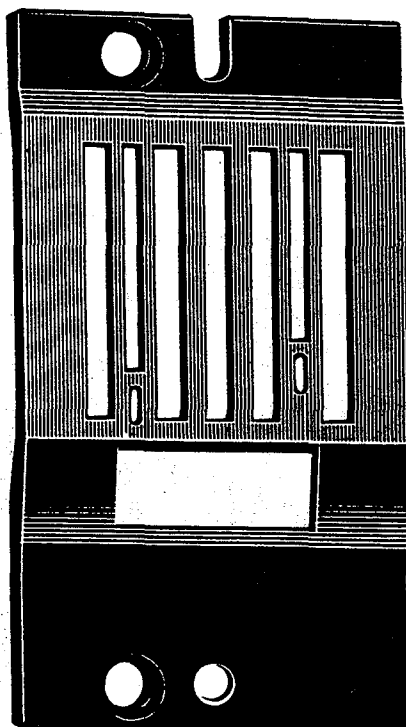
Plate 1 - Full Size



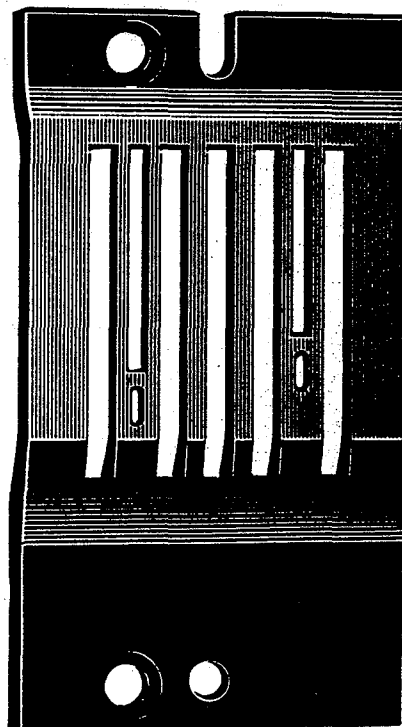
51724  
Specify  
Gauge



51724D  
Specify  
Gauge

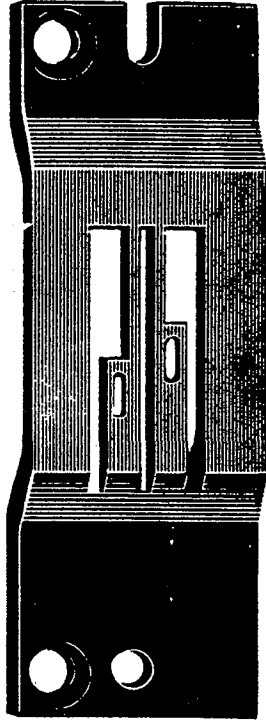


51424B  
Specify  
Gauge

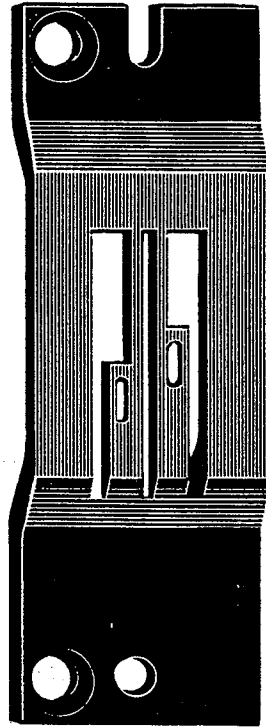


51424C-48

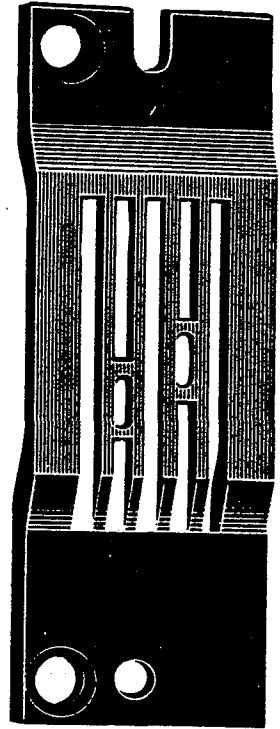
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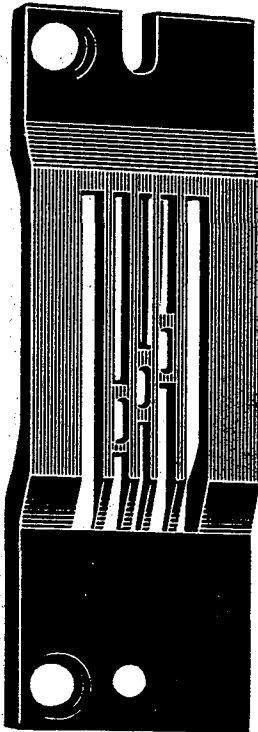
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Gauge



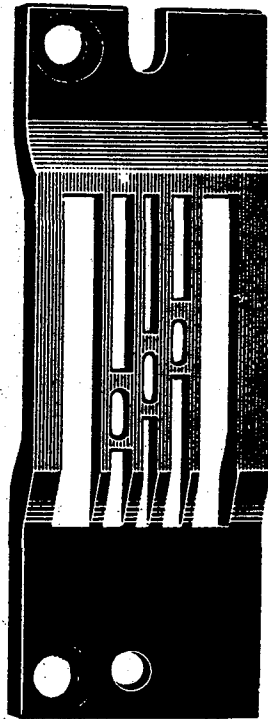
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Gauge



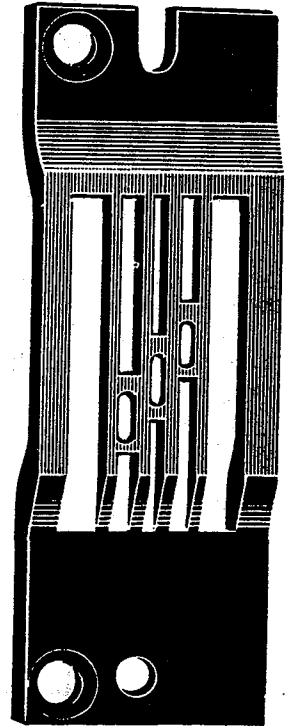
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51924  
Specify  
Gauge

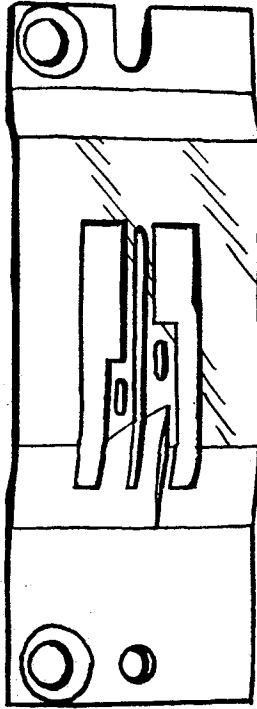


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Gauge

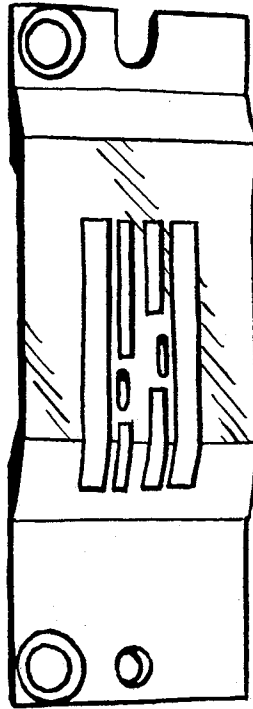


51924B  
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Gauge

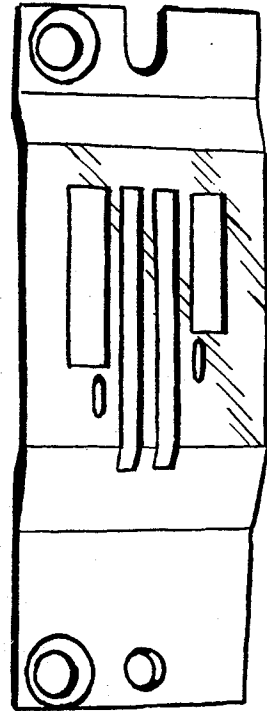
Plate 3- Full Size



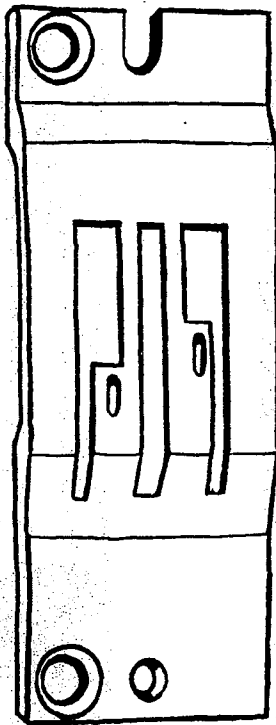
51424E  
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Gauge



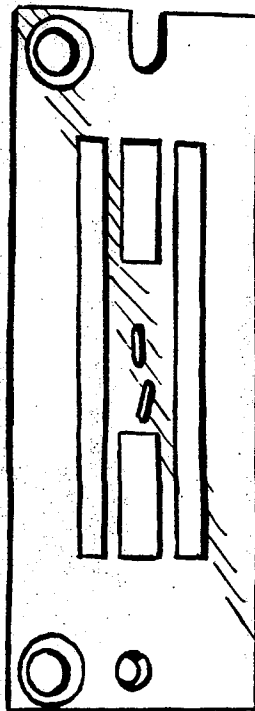
51424A  
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Gauge



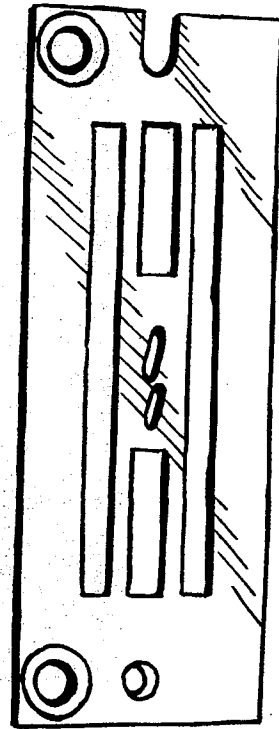
51424F  
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Gauge



51424K  
Specify  
Gauge



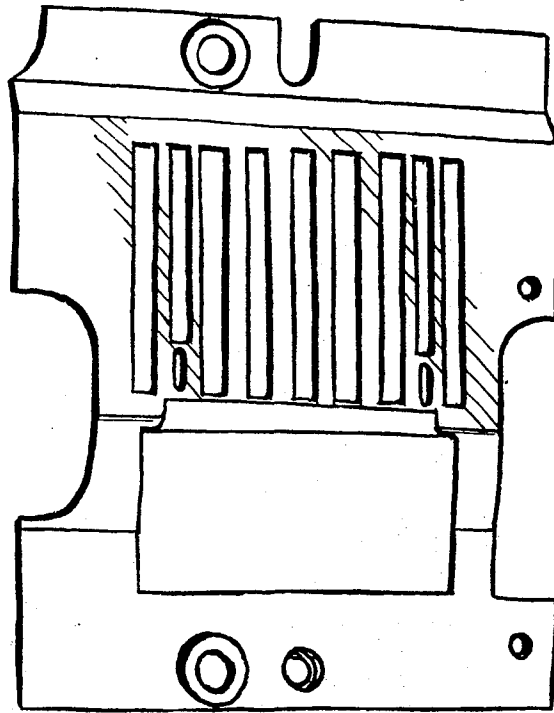
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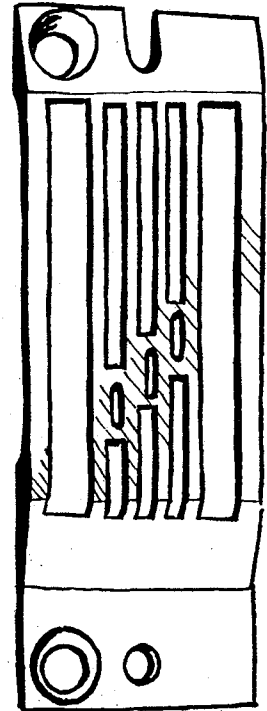
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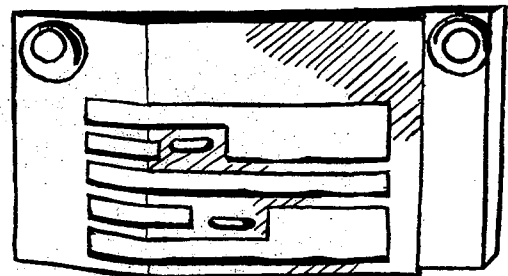
Plate 4- Full Size



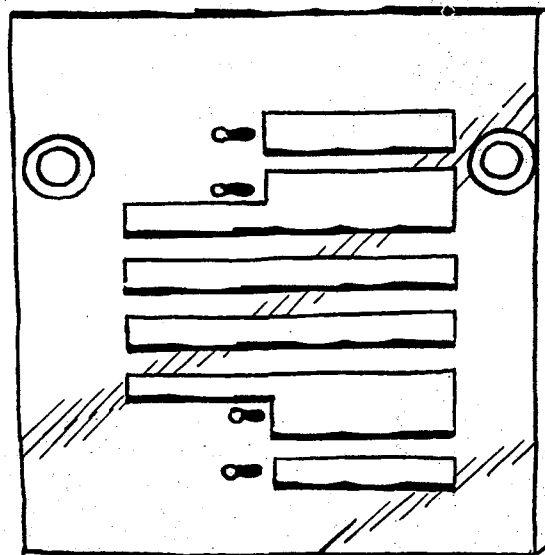
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Gauge



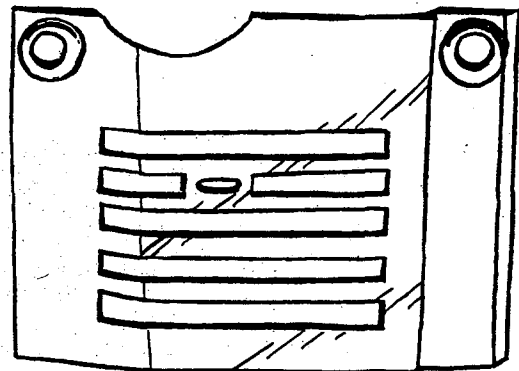
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Gauge



7424AF  
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Gauge

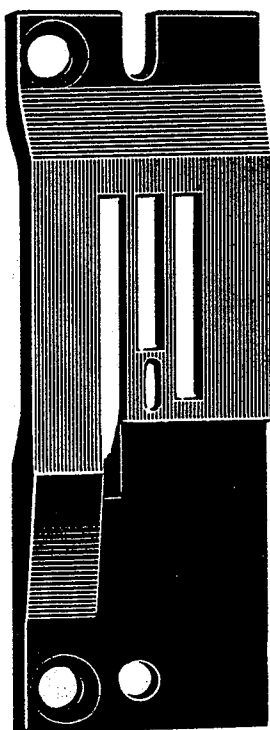


541240  
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Gauge

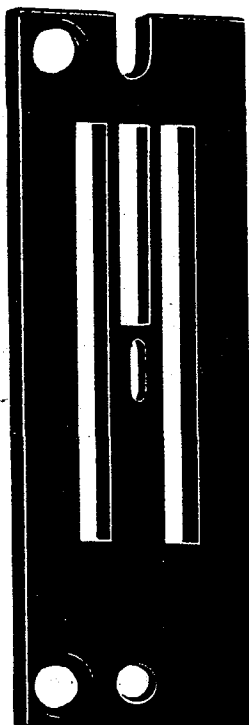


6428L

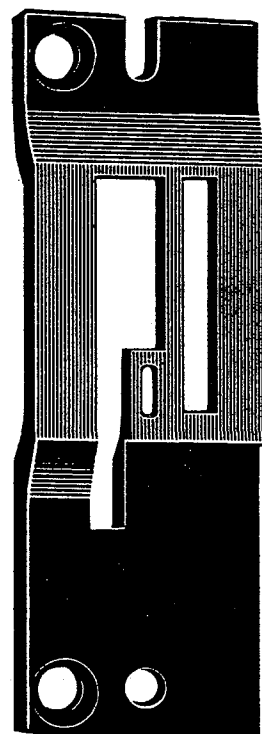
Plate 5- Full Size



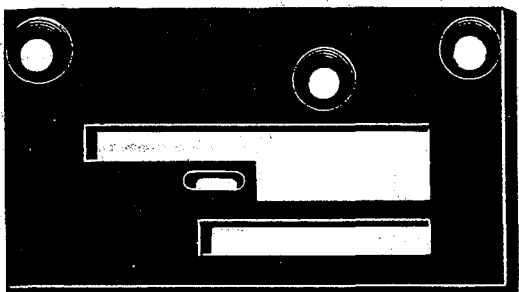
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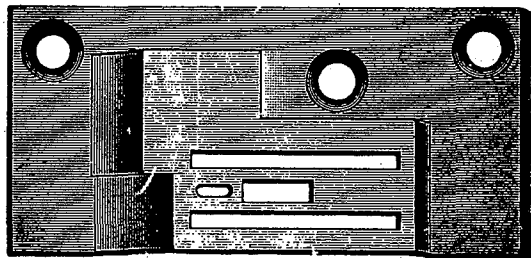
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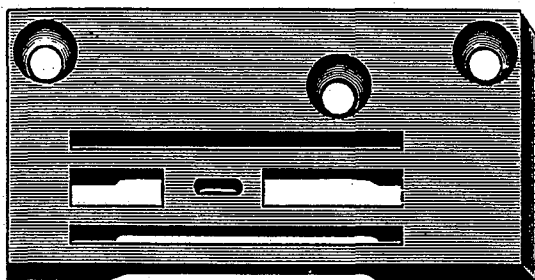
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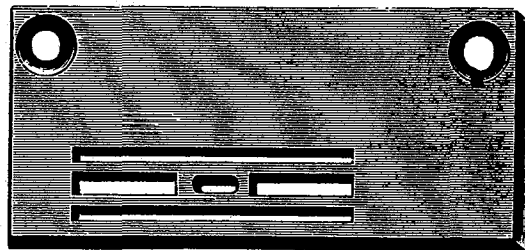
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9724

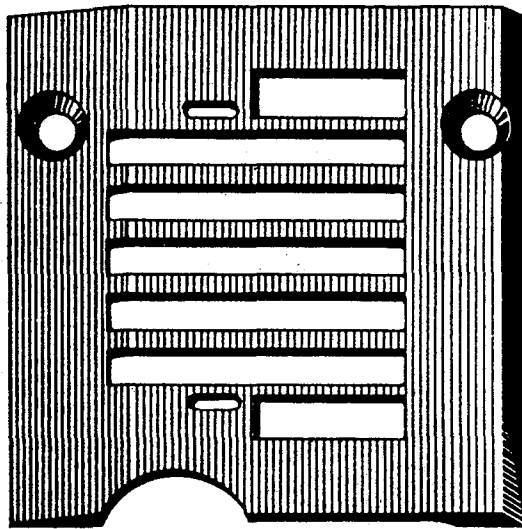


9224E

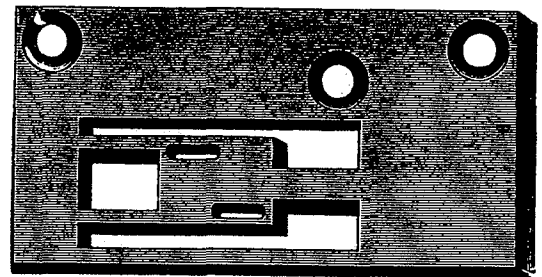


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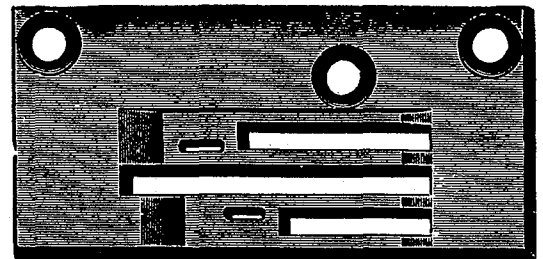
Plate 6- Full Size



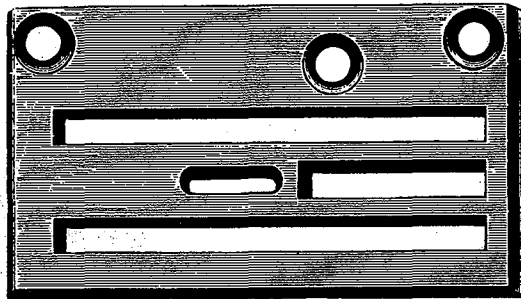
16524B  
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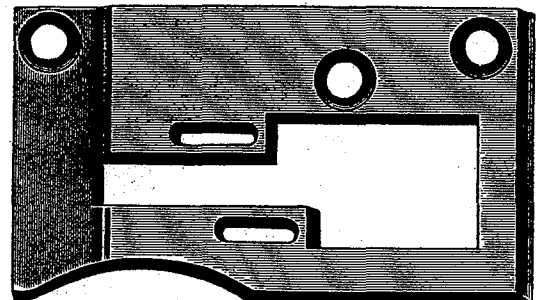
7024C  
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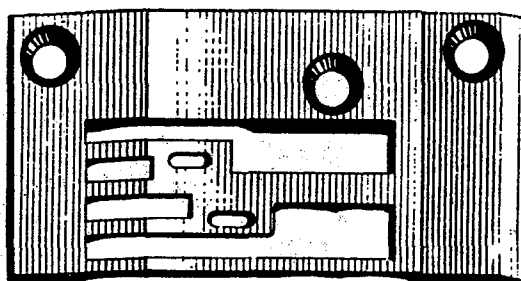
7424B  
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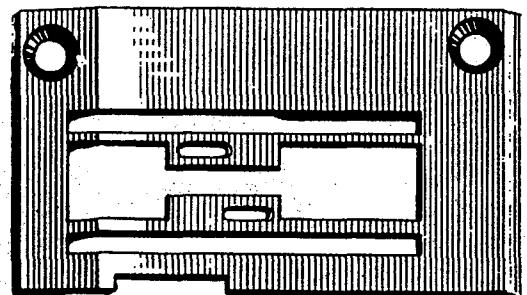
195X



195Y  
Specify Gauge

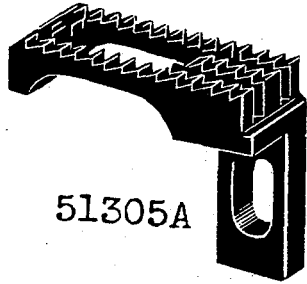


7528H-4 1/2

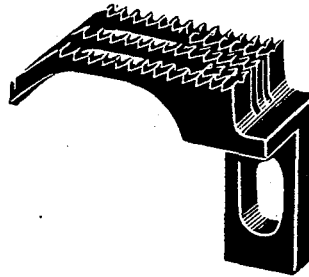


7424AG-5

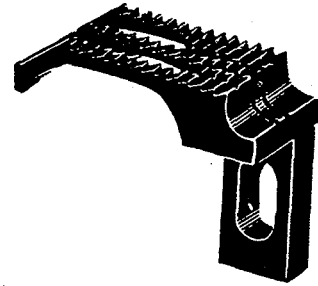
Plate 7- Full Size



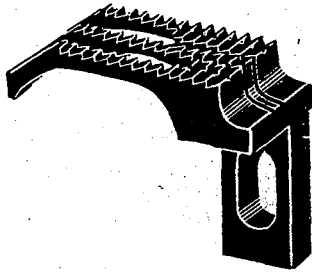
51305A



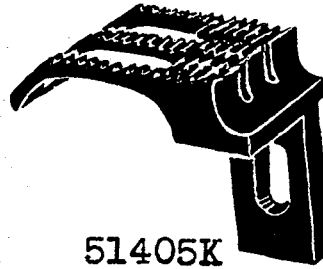
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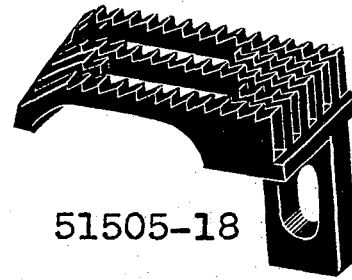
51405E  
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Gauge



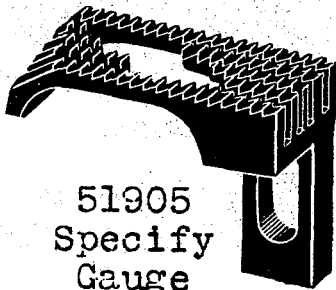
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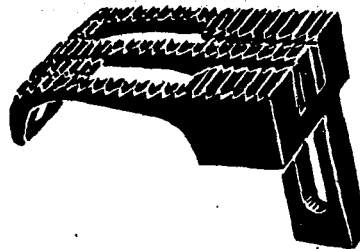
51405K  
Specify  
Gauge



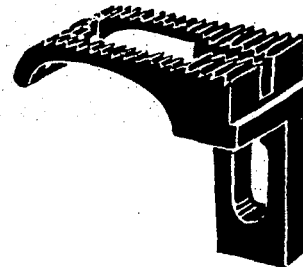
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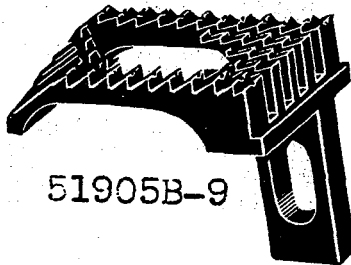
51905  
Specify  
Gauge



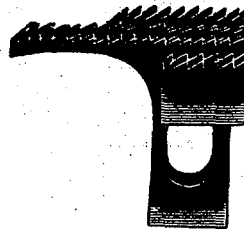
7405AF-5 1/2



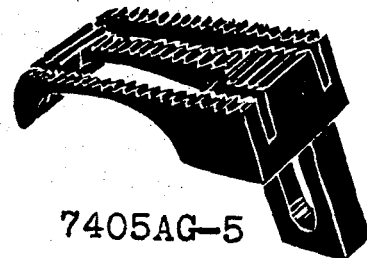
7405U-4 1/2



51905B-9

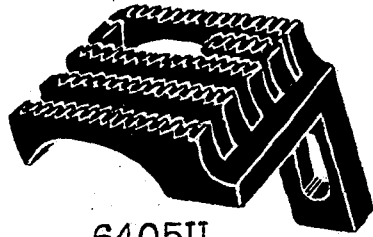


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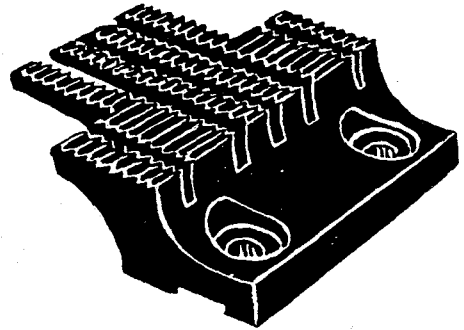


7405AG-5

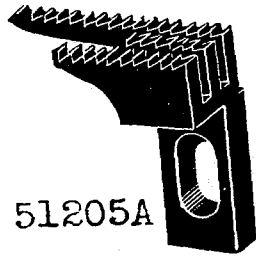
Plate 8- Full Size



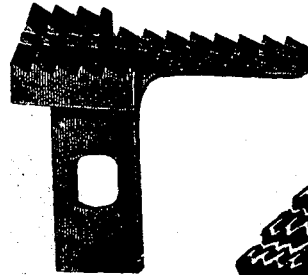
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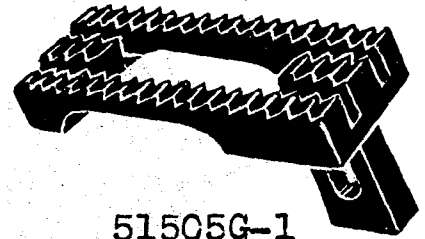
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Specify  
Gauge



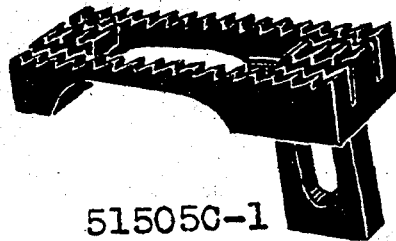
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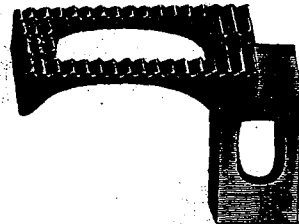
197Y



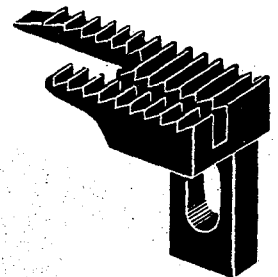
51505G-1



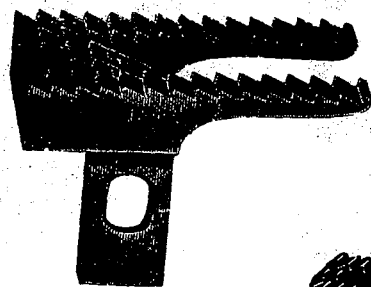
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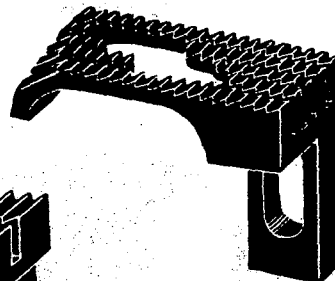
7005A  
Specify  
Gauge



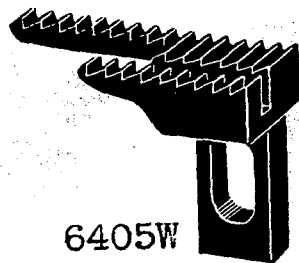
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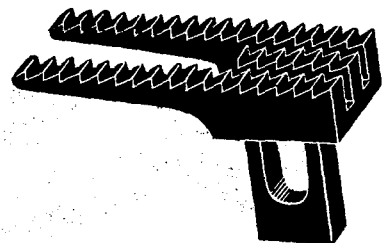
197X



51905A  
Specify  
Gauge

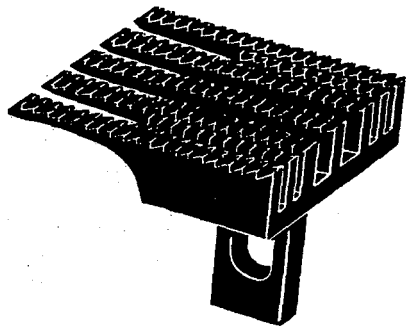


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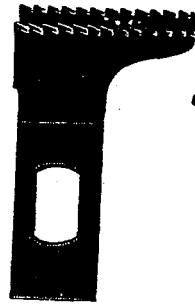


51305B

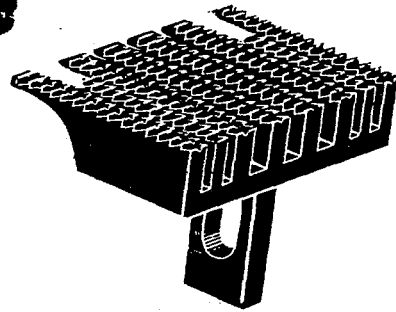
Plate 9- Full Size



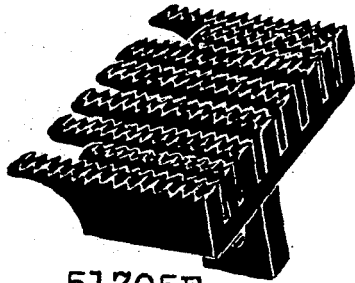
51405C-48



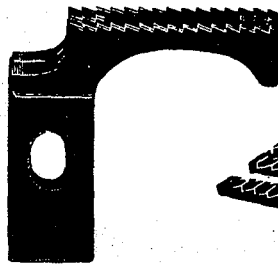
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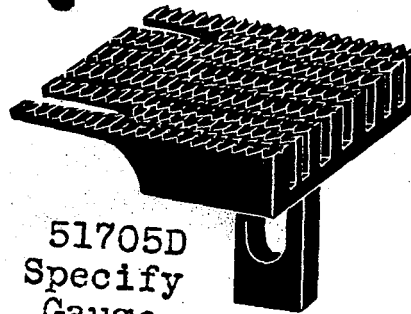
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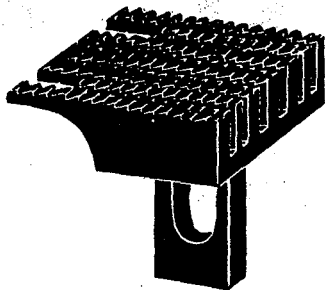
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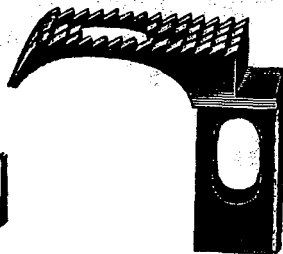
22 I



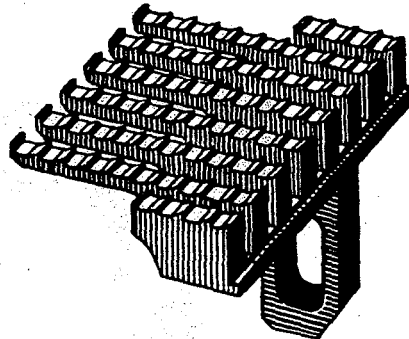
51705D  
Specify  
Gauge



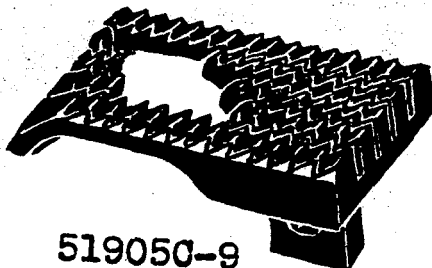
51405B-48



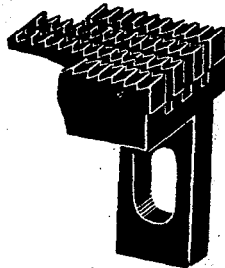
51405A  
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Gauge



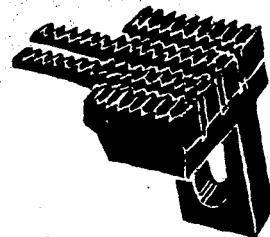
16505  
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Gauge



519050-9



51405B-32

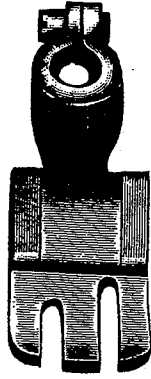


51405F-32

Plate 10- Full Size



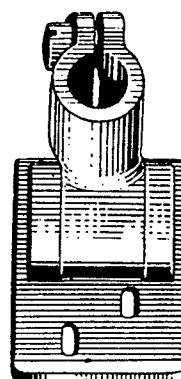
51320C



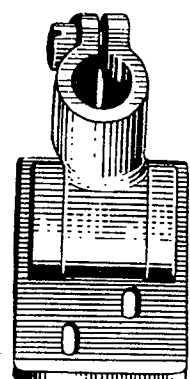
7020B  
Specify  
Gauge



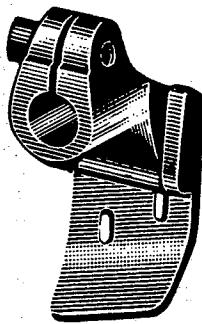
198B  
Specify  
Gauge



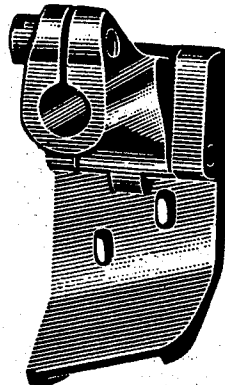
51420K  
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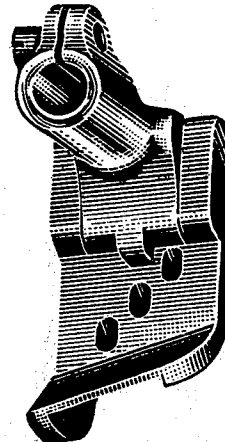
7420AG  
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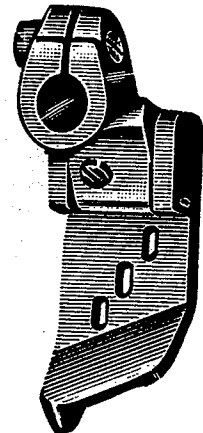
51420  
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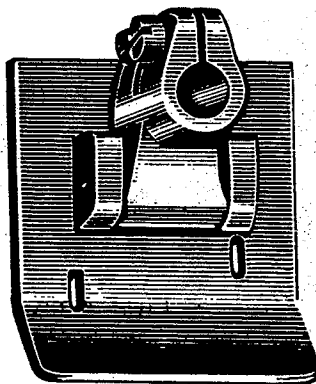
51520  
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Gauge



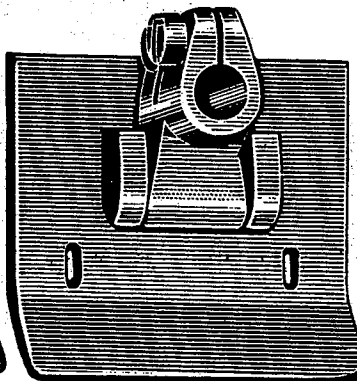
35820P  
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Gauge



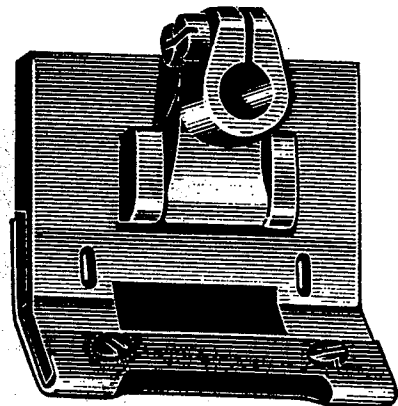
51920  
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Gauge



51420C  
Specify  
Gauge

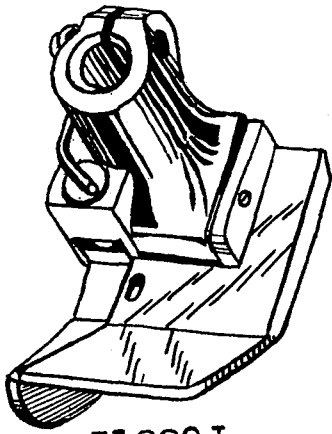


51720D  
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Gauge

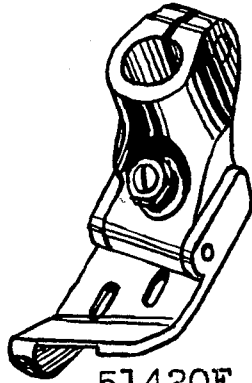


51720  
Specify  
Gauge

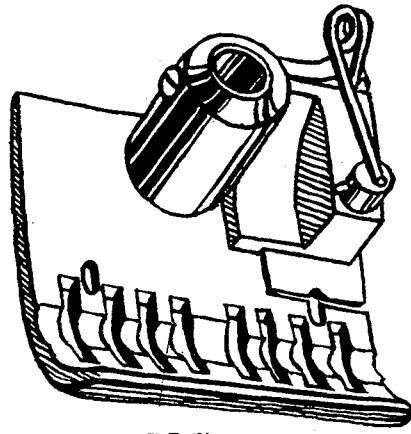
Plate 11- Full Size



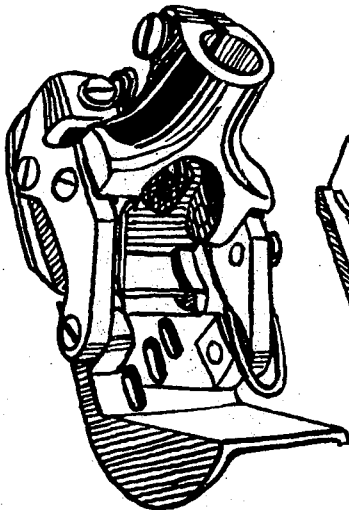
51220J



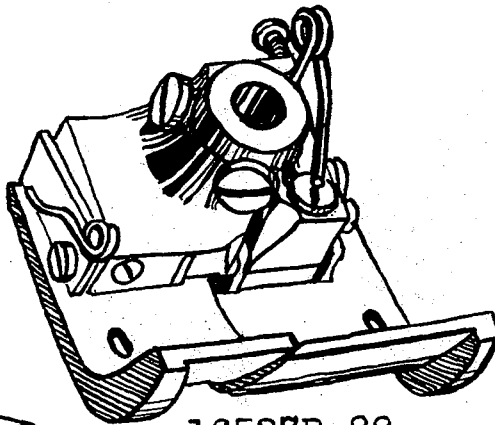
51420E  
Specify  
Gauge



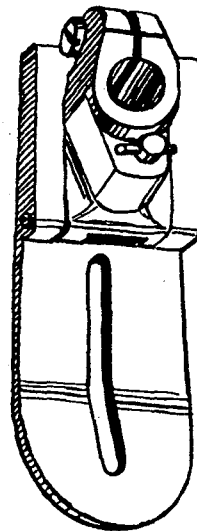
51720E  
Specify  
Gauge



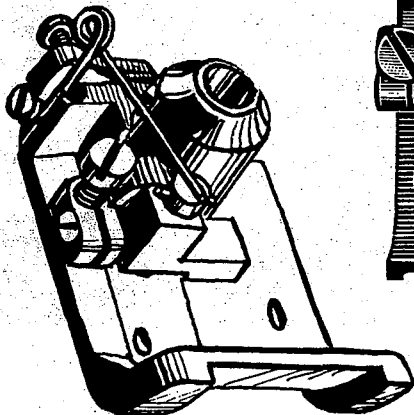
35820R-9



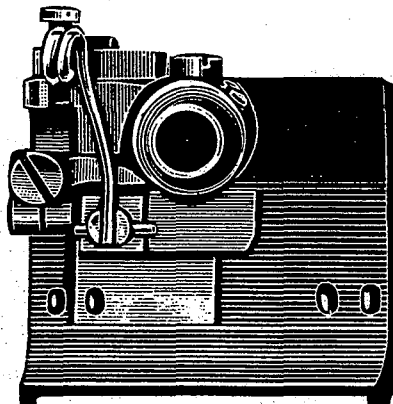
16527B-88



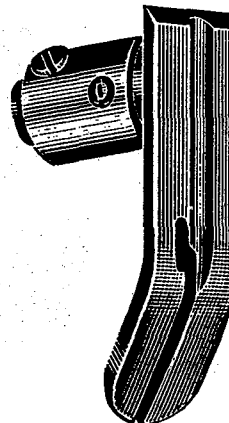
51520C-1



51420M-48



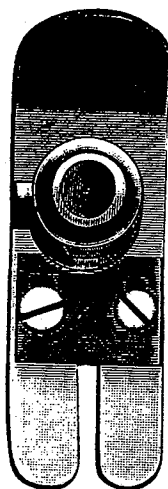
16134K  
Specify  
Gauge



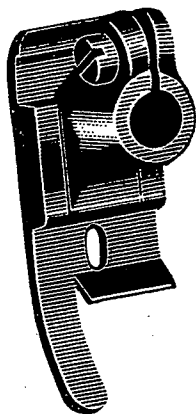
51320B



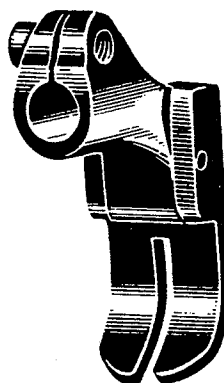
Plate 12- Full Size



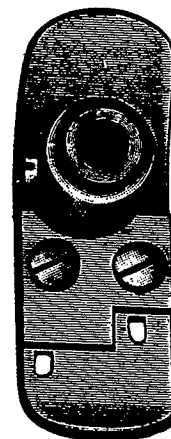
198X



6420W



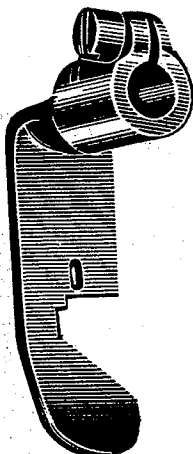
43220 F



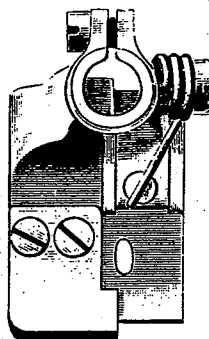
7827A  
Specify  
Gauge



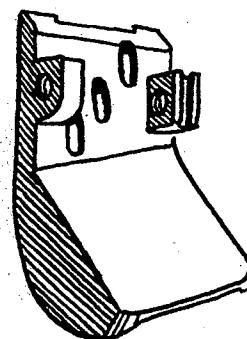
65A



51220A



9720



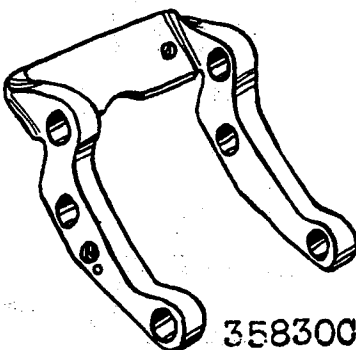
35830R-9



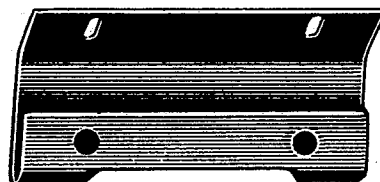
35830F



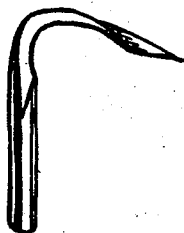
16194B



35830C



51730A  
Specify  
Gauge



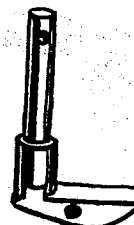
54108A



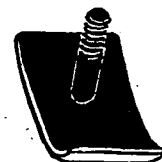
9735



9634A

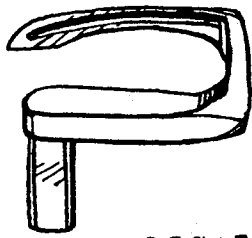


51530F

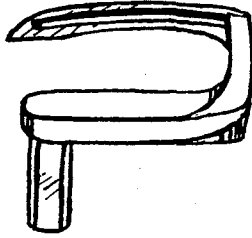


35830E

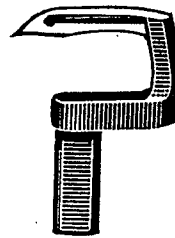
Plate 13- Full Size



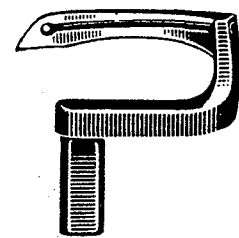
51508C-1



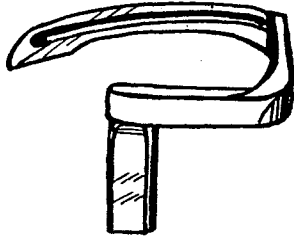
51508G-1



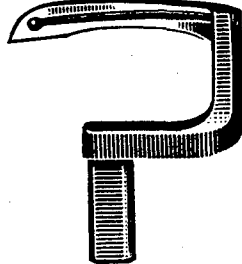
51708



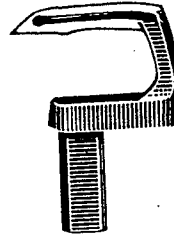
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Specify  
Gauge



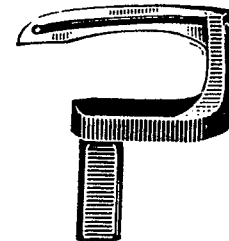
38208G-26



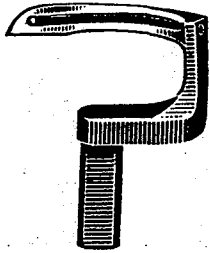
51909B



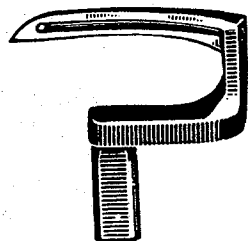
51709



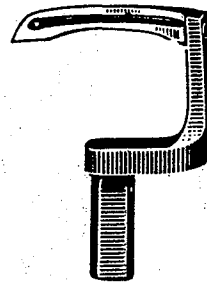
51408  
Specify  
Gauge



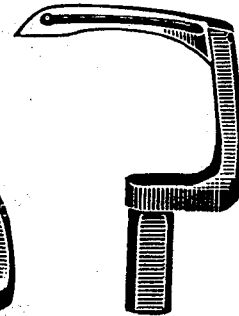
51208D



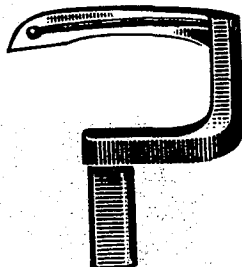
51208



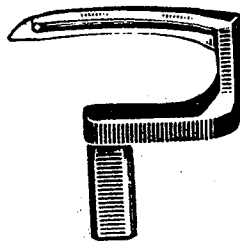
51409



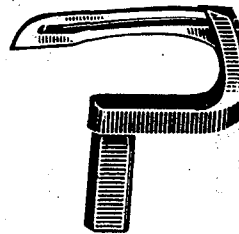
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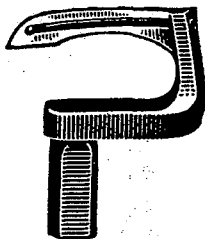
38209A



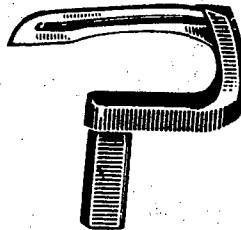
51509C



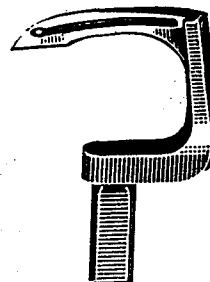
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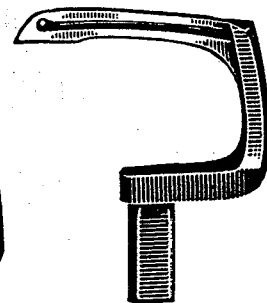
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Specify  
Gauge



51408A  
Specify  
Gauge

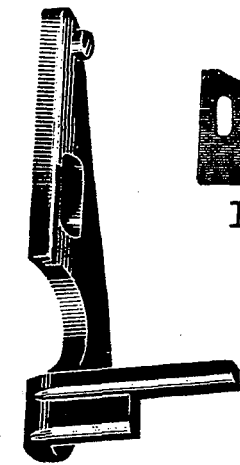


51409B

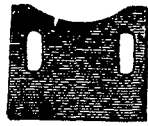


51909A  
Specify  
Gauge

Plate 14- Full Size



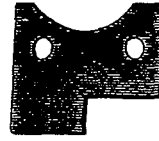
51525



199



51725A



199A



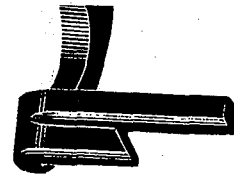
51525G



51225



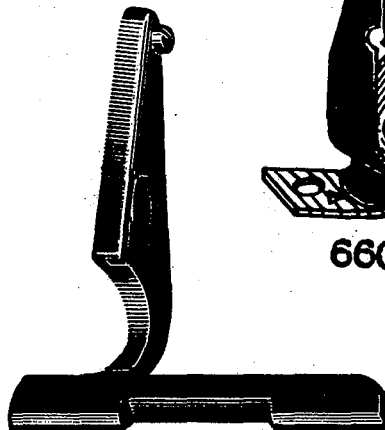
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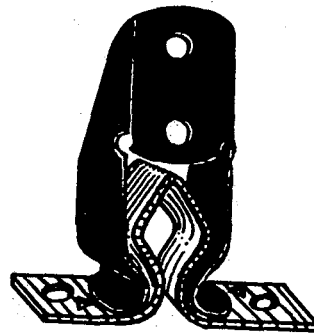
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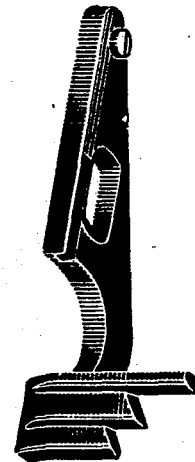
51525C



51725

















660-112








51925

Plate 15- Full Size

 28 B   
  28C   
  1096B   
  22799 N   
  22716A   
  22743   
  91 A








 73 A   
  22716   
  226   
  22565 C   
  22801   
  22547A   
  604








 605   
  605 A   
  89   
  78   
  22560   
  88   
  88 B

 23B   
  28   
  87B   
  87   
  87 A   
  22561   
  187 A

 138

 96   
  22586 B   
  95   
  22752   
  22752A   
  22580   
  98

 87 U   
  98 A   
  73   
  22524   
  22525   
  22764 A   
  187B

 25CC   
  22560 B   
  22726A   
  88A   
  22813   
  96 A   
  91

 166   
  22824A   
  91D   
  22513   
  22797   
  22585   
  531




 90   
  12935A   
  22863   
  538   
  22570   
  22593   
  94

Plate 16- Full Size



93A



35768 A



22834



22560A



81



97



79



22849



22752B



22597 A



719



57WD



402



22519



22829



22711



22730



T22



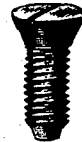
250



134



22515



80



22521



22542



25 B



22726



22866



22735



22594



86 X



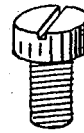
22632 F-24



93



21725



HA61D



86



97 A



22597



12986B



22747



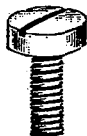
22799B



22799E



22799C



22528



15438D



22840 A



22799L



22769



22839

Plate 17- Full Size



Plate 18- Full Size



51462A



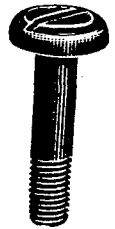
22559 B



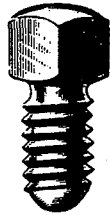
22794B



22587



22835



22509



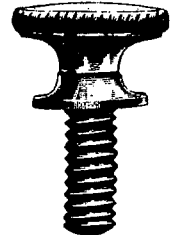
69 FD



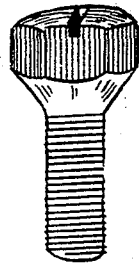
22874



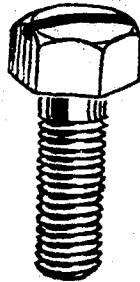
201C



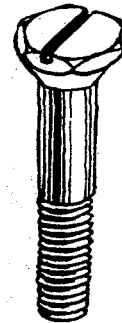
25



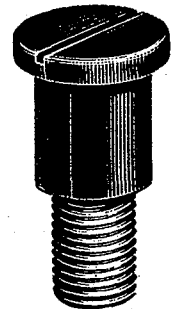
22823A



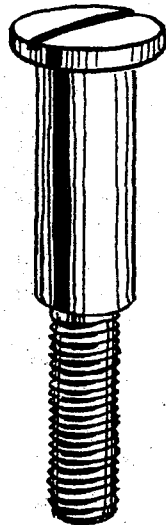
22788



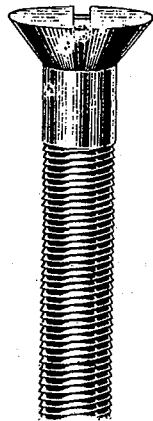
22823B



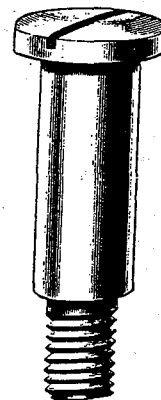
22566A



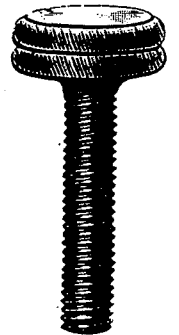
420C



22637D



420



64 A

Plate 19- Full Size

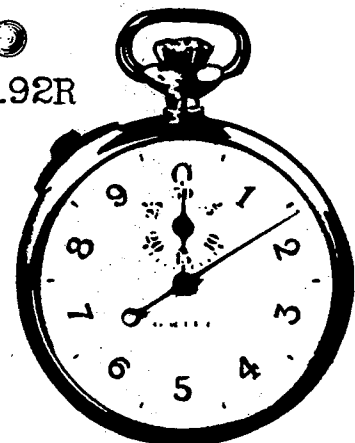
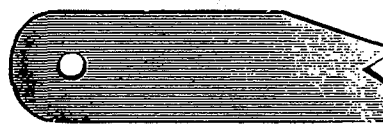
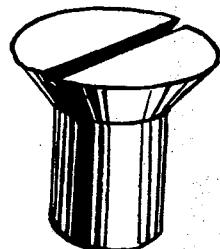
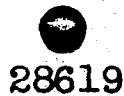
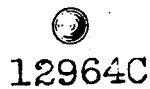
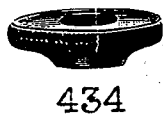
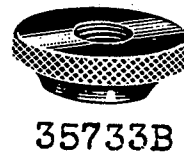
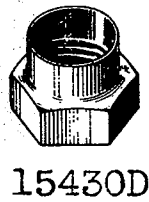
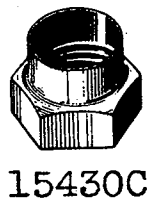
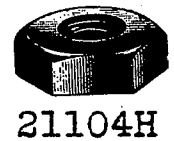
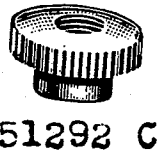
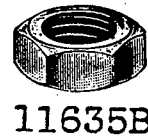
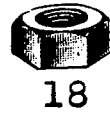
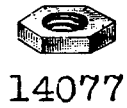




Plate 20- Full Size

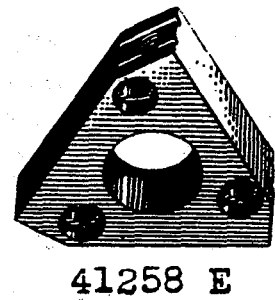
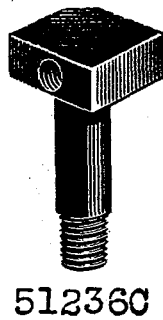
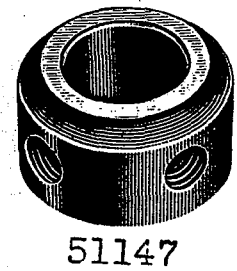
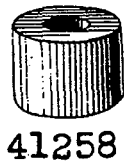
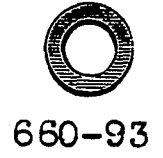
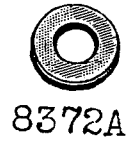


Plate 21- Full Size

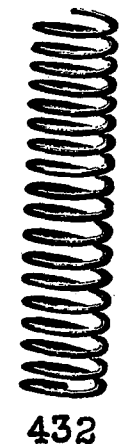
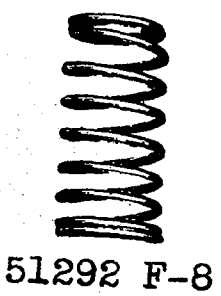
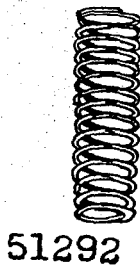
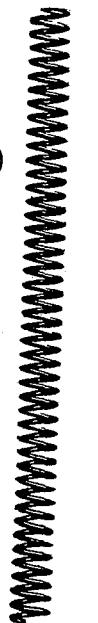
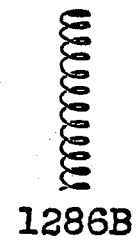
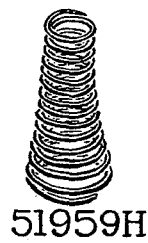
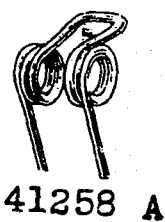
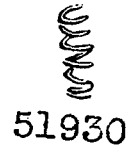
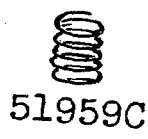
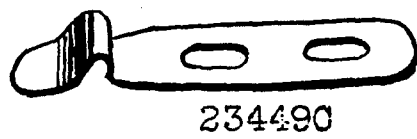
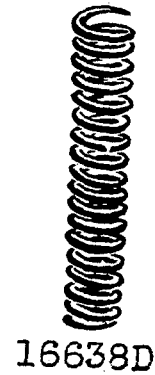
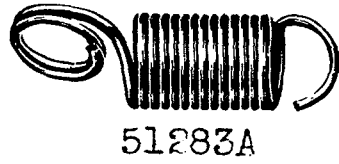
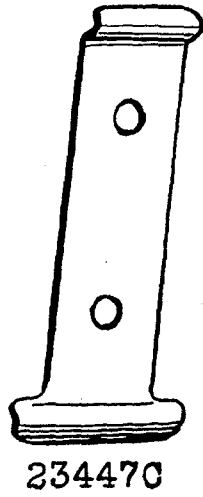
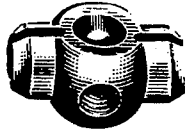
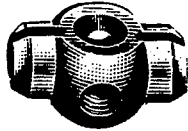


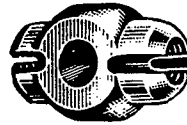
Plate 22- Full Size



51418K  
Specify  
Gauge



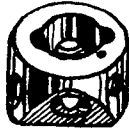
35818N  
Specify  
Gauge



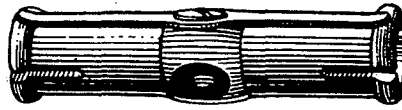
51918  
Specify  
Gauge



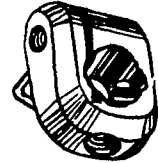
7018E  
Specify  
Gauge



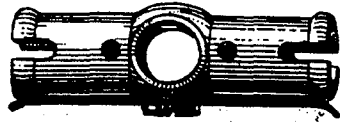
52818-8



16152  
Specify  
Gauge



51518G-1



8118-64



51418B  
Specify  
Gauge



7933  
Specify  
Gauge



7040  
Specify Gauge



51418-16



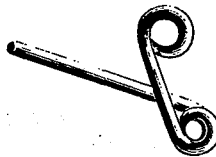
50J-16



50J-26



9634



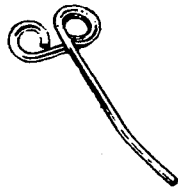
8040



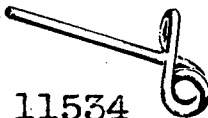
43297



16194



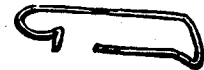
16241



11534



16241A



35830K



35830H



51774T



35830D

Plate 23- Full Size

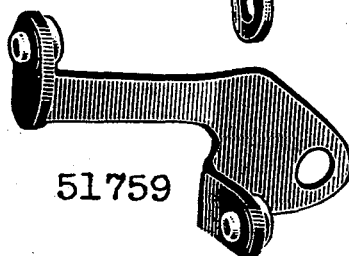
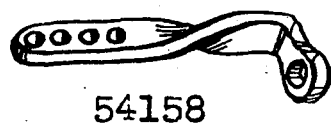
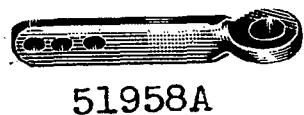
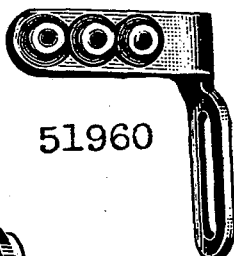
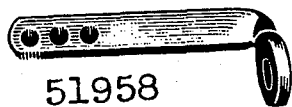
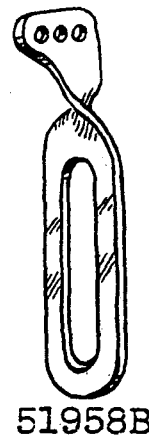
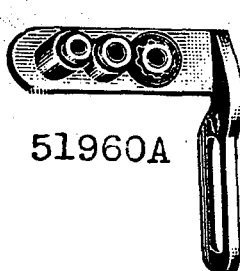
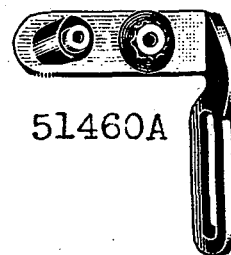
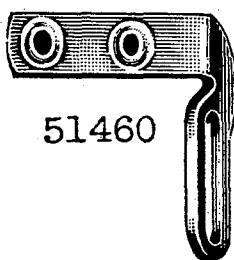
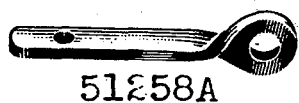
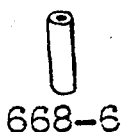
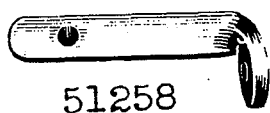
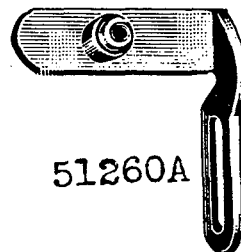
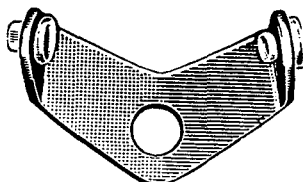
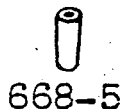
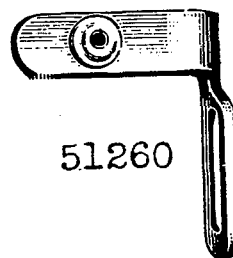
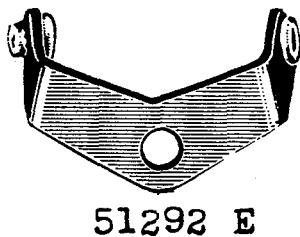
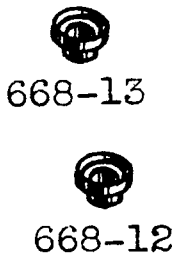
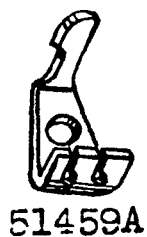
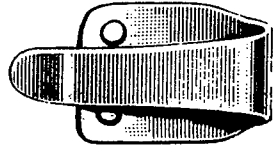
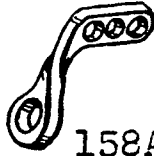


Plate 24- Full Size



35831A



158A



52842G



52 A



137



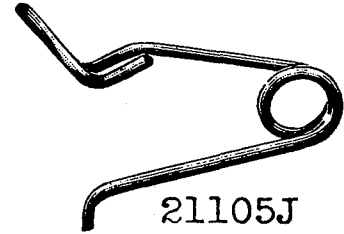
51461B



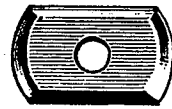
16197-2-16



158B



21105J



51959B



51959E



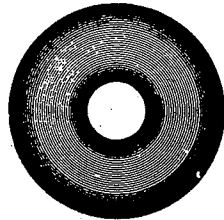
107



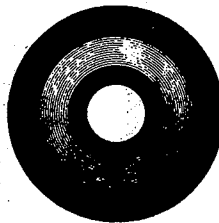
16164



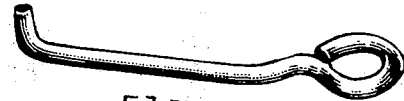
51292A



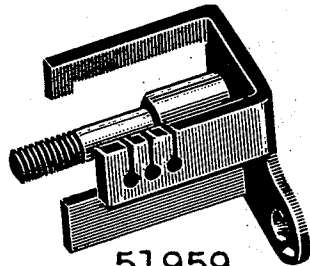
109 B



109



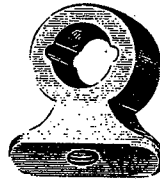
51758A



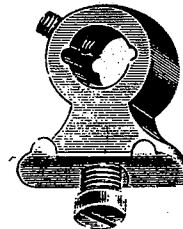
51959



57 WB



1288



1287



51492



21113 B



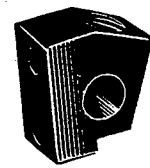
51170C



1346



51292



51462B

Plate 25- Full Size

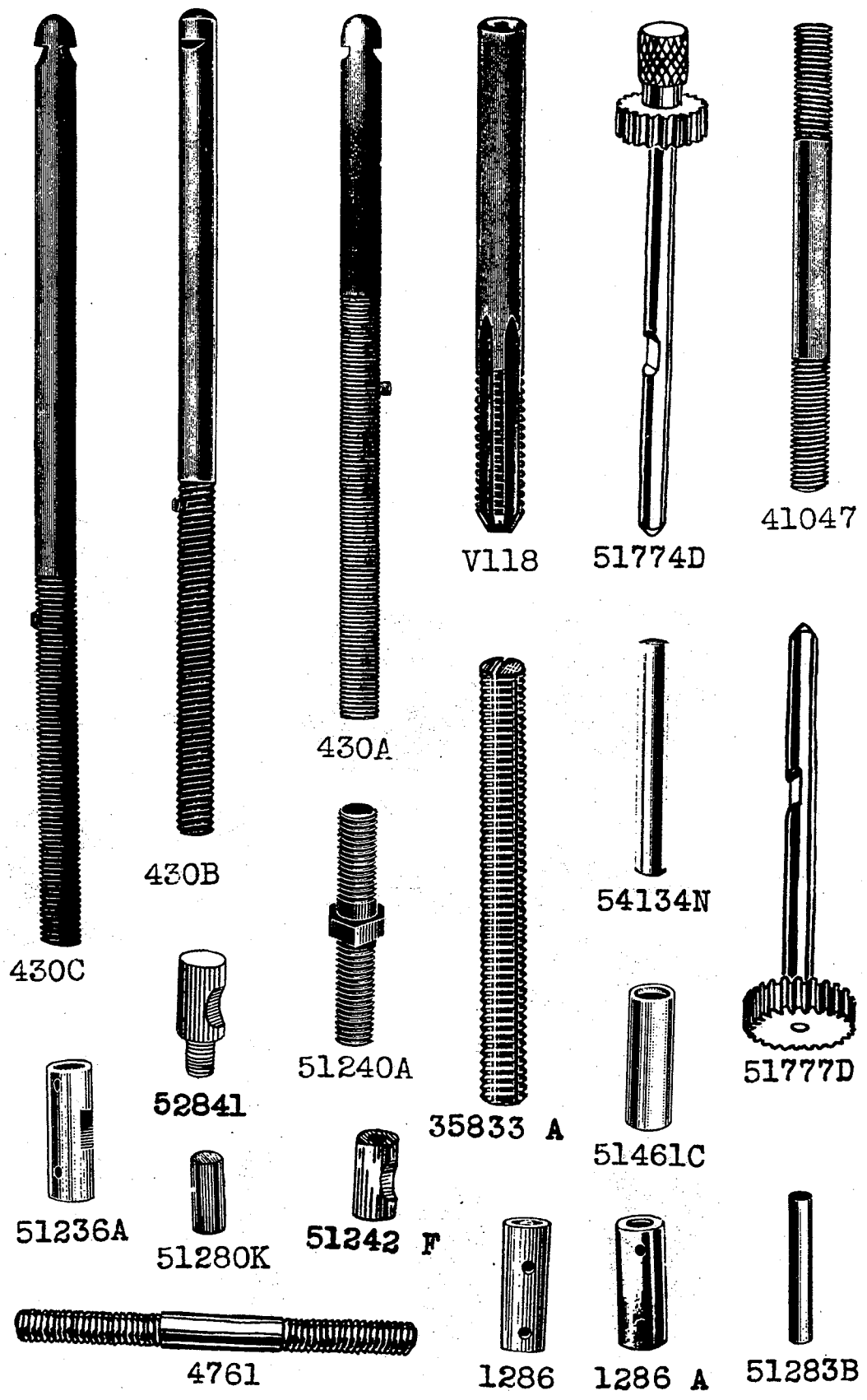
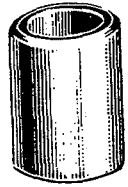
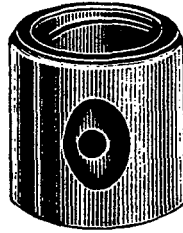


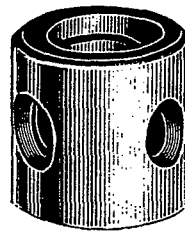
Plate 26- Full Size



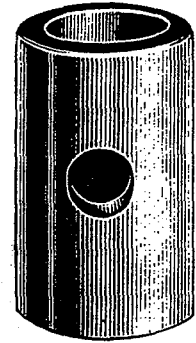
51242C



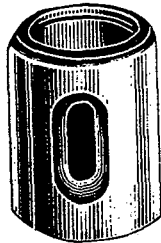
51290



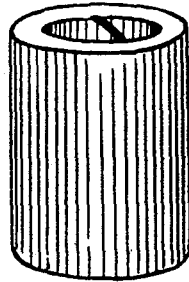
51290D



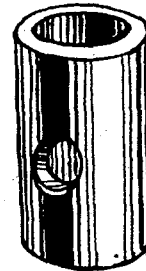
51290A



51244E



51290 E



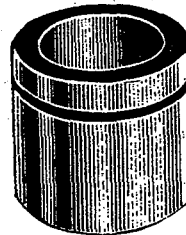
7479P



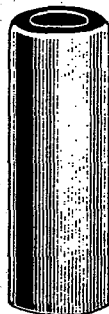
51254



52889



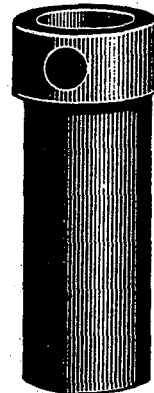
51250B



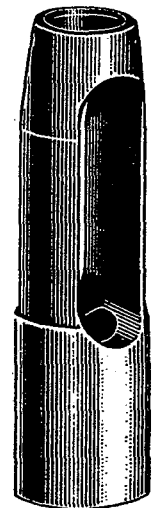
51254A



54142

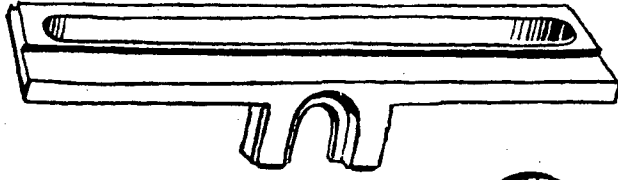


51244C

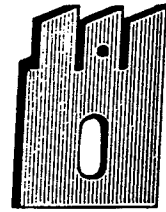


51257A

Plate 27- Full Size



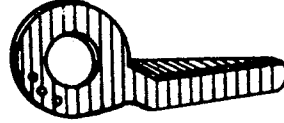
54139



51404



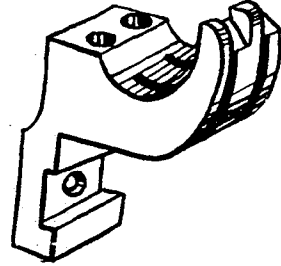
52887 G



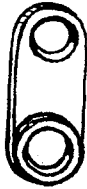
43297 A



1361A



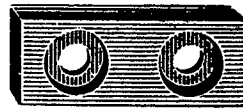
54185  
Specify  
Gauge



51777H



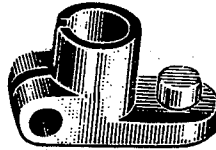
1248



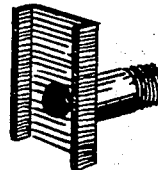
35731A



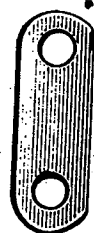
51775



21657B



51134 G



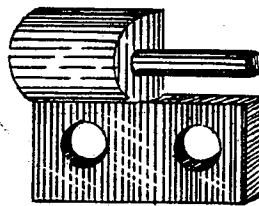
23425T



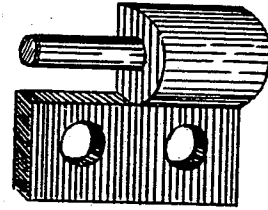
7486PA



51774H



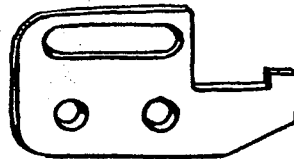
52885 H



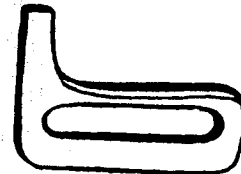
52885 G



23386G



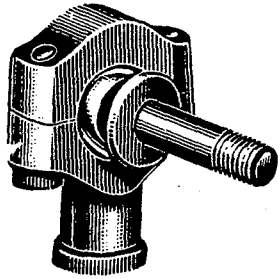
23386H



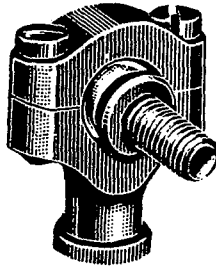
23386J



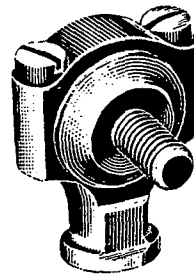
Plate 28- Full Size



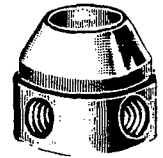
51741



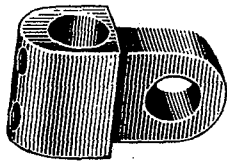
51241D



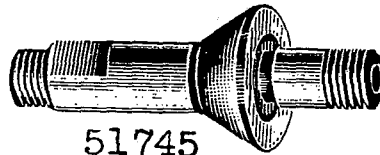
51741B



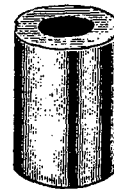
15465F



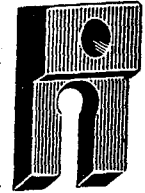
35759



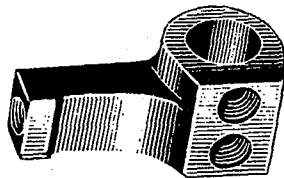
51745



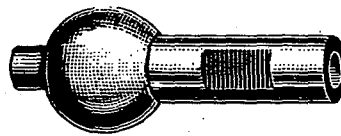
16



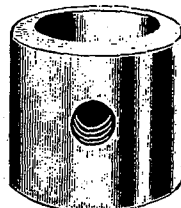
51243C



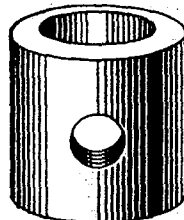
51751



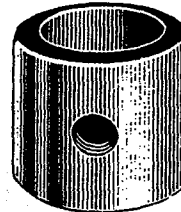
51243B



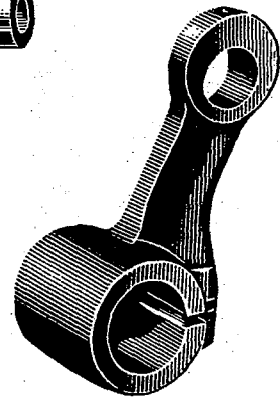
43



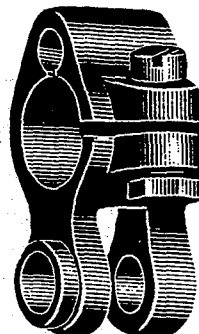
43C



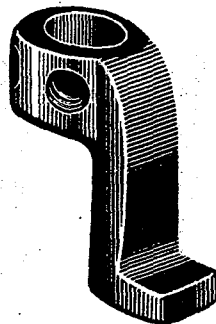
51142



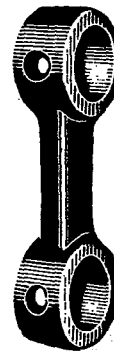
51244B



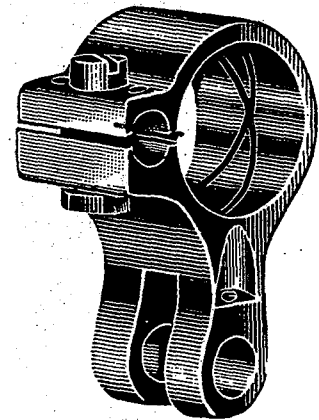
51236



51283C

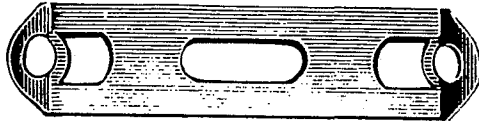


51770  
Specify  
Gauge

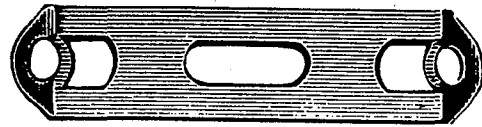


51245

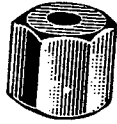
Plate 29- Full Size



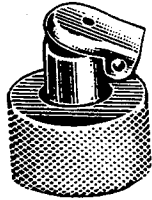
51243E



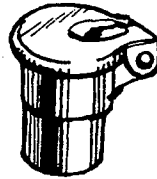
51243R



660-75



660-95



666-50



61294 X



61294 W



666-66



52894 Z



660-107



660-143



666-13



666-49



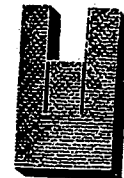
51293B



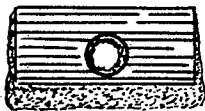
660-74



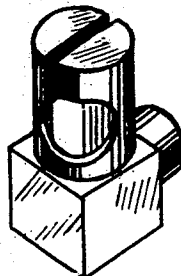
666-19



660-90



51245 A



39193



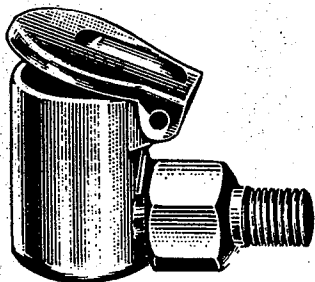
39193 A



21351



21350



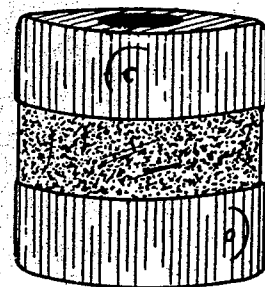
666-28



51296



51296 A



51295

Plate 30- One-half Size

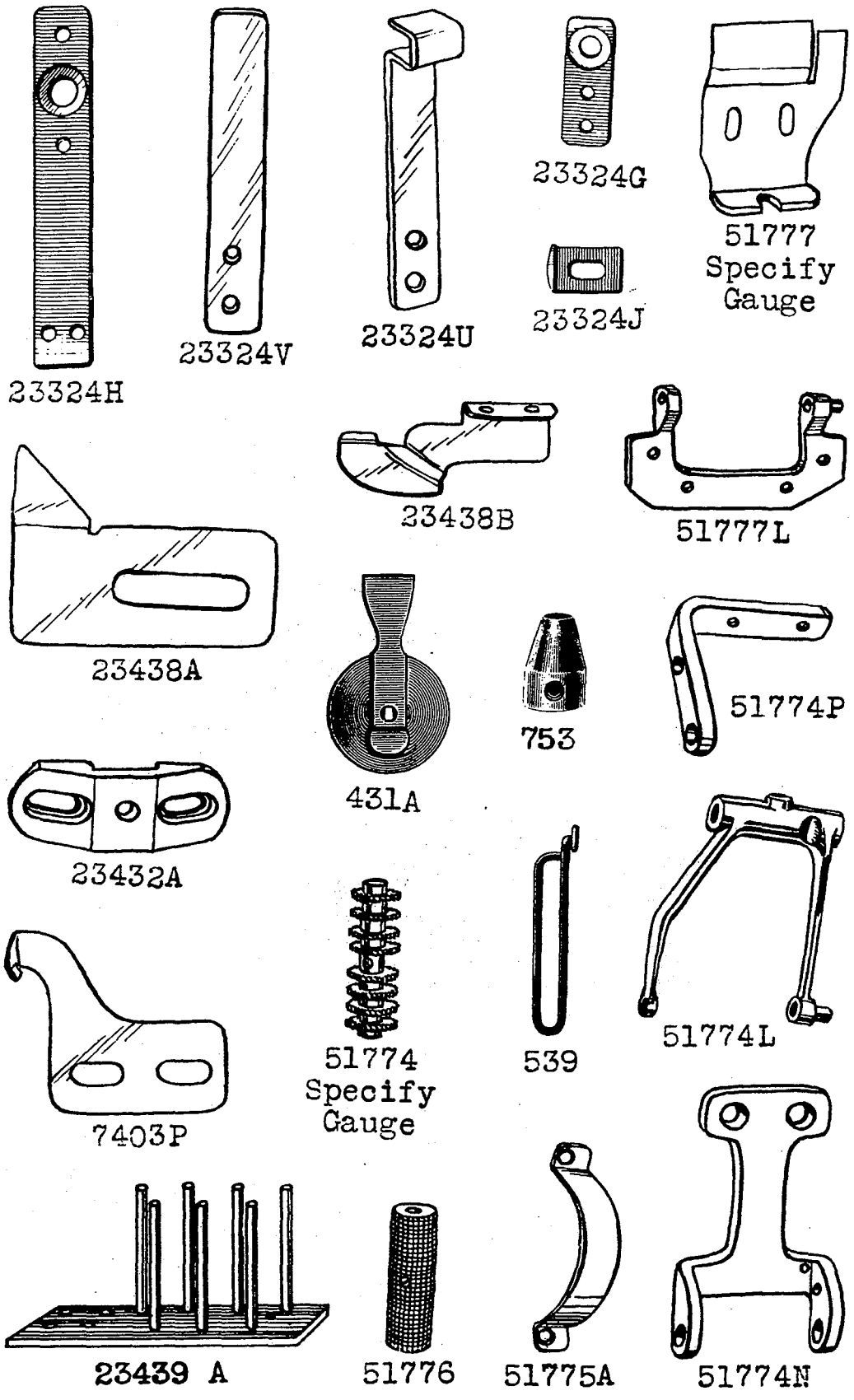
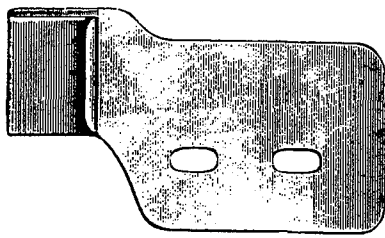
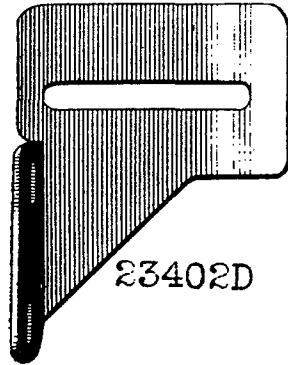


Plate 31- One-half Size



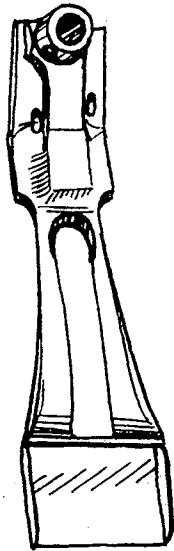
23160



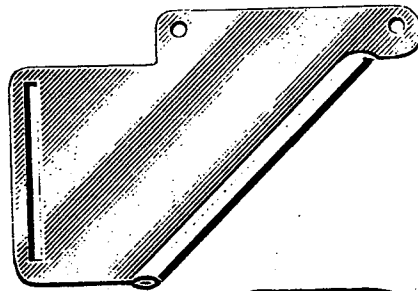
23402D



23447  
Specify  
Gauge



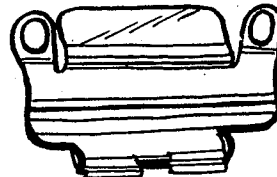
51420L-32



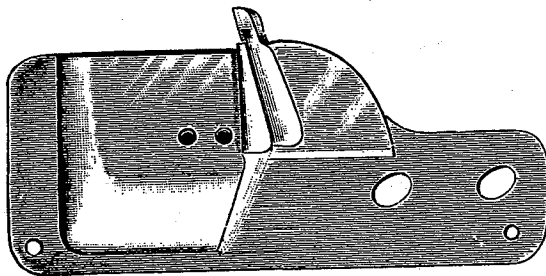
23403  
Specify  
Gauge



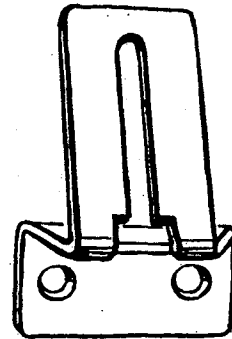
23447A



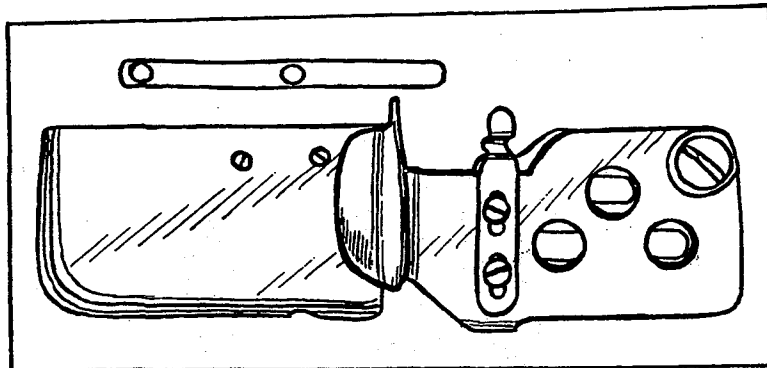
23448  
Specify  
Gauge



23100

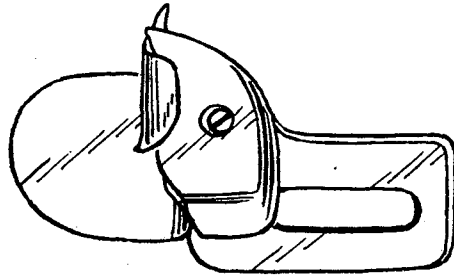


23447B

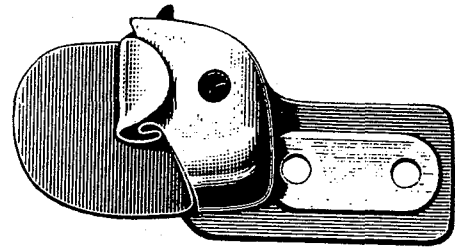


23449

Plate 32- One-half Size



23420V  
Specify Gauge  
and Capacity



23420U  
"See Description"



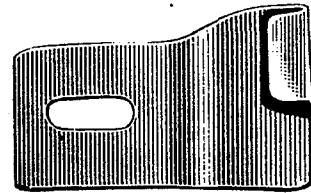
23421U  
Specify Gauge  
and Capacity



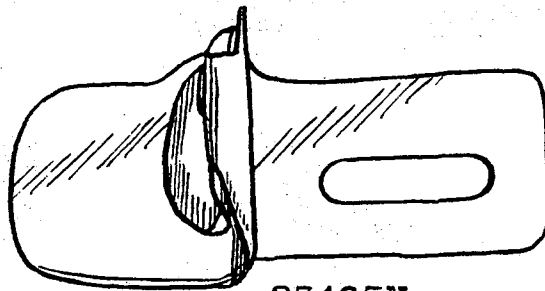
23425U



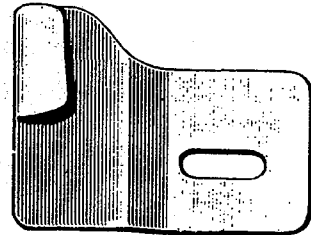
23421V  
Specify Gauge  
and Capacity



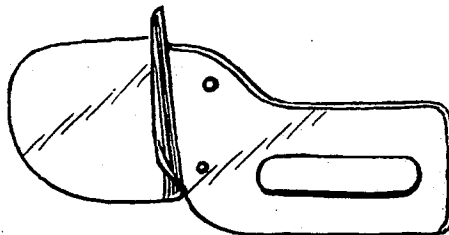
23404B



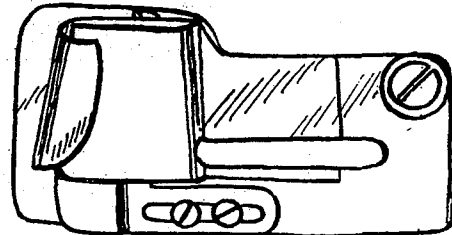
23405N



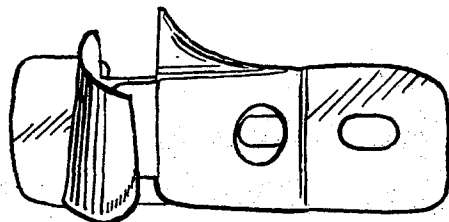
23404E



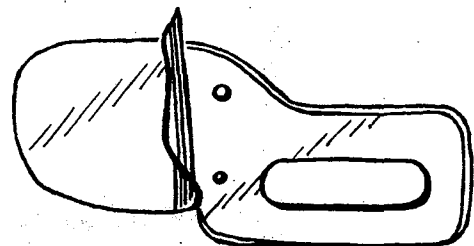
23422V-1/32



23184K

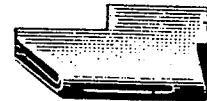
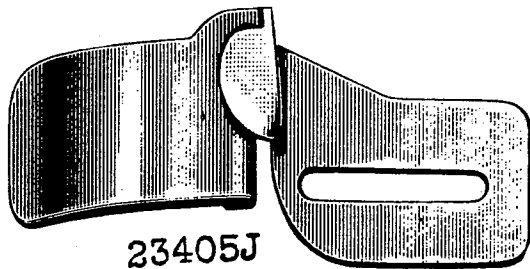


23151A



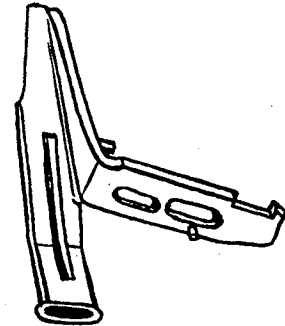
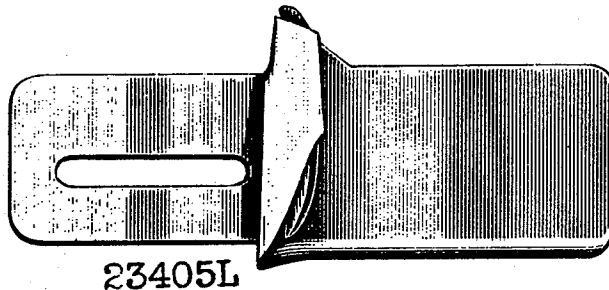
23422U  
Specify Capacity

Plate 33- One-half Size

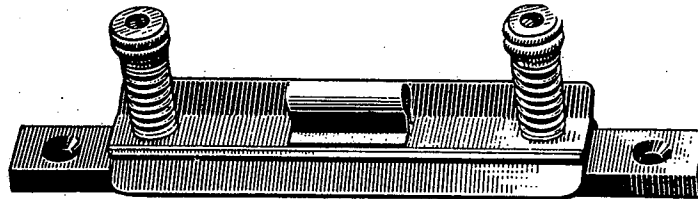


23215BC

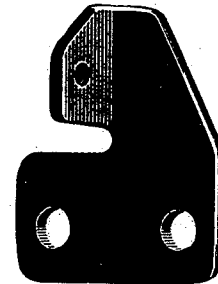
Specify Width of Binding Strip



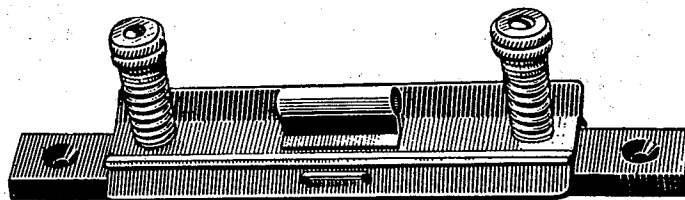
23386F



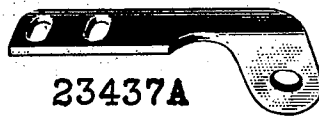
21182N



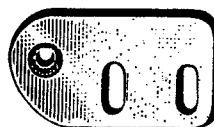
23436



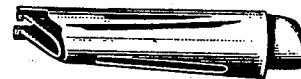
21182T



23437A

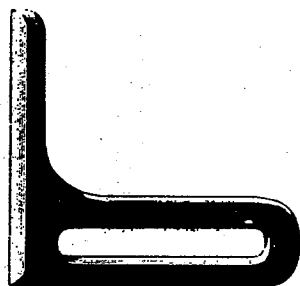


23437B

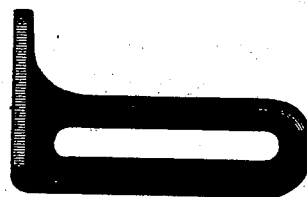


23322AB

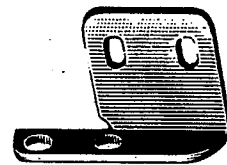
Specify Width of Binding Strip



24

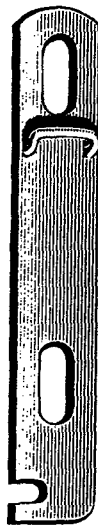


24 X

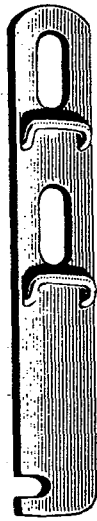


23322AC

Plate 34- One-half Size



21657-1



21657-2



21657-3



21657-4



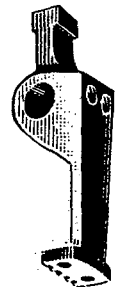
53592



21657D



21657C



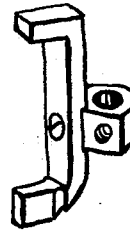
51252



21708B



7489P



52883G



51250



21164



51462C



51257C

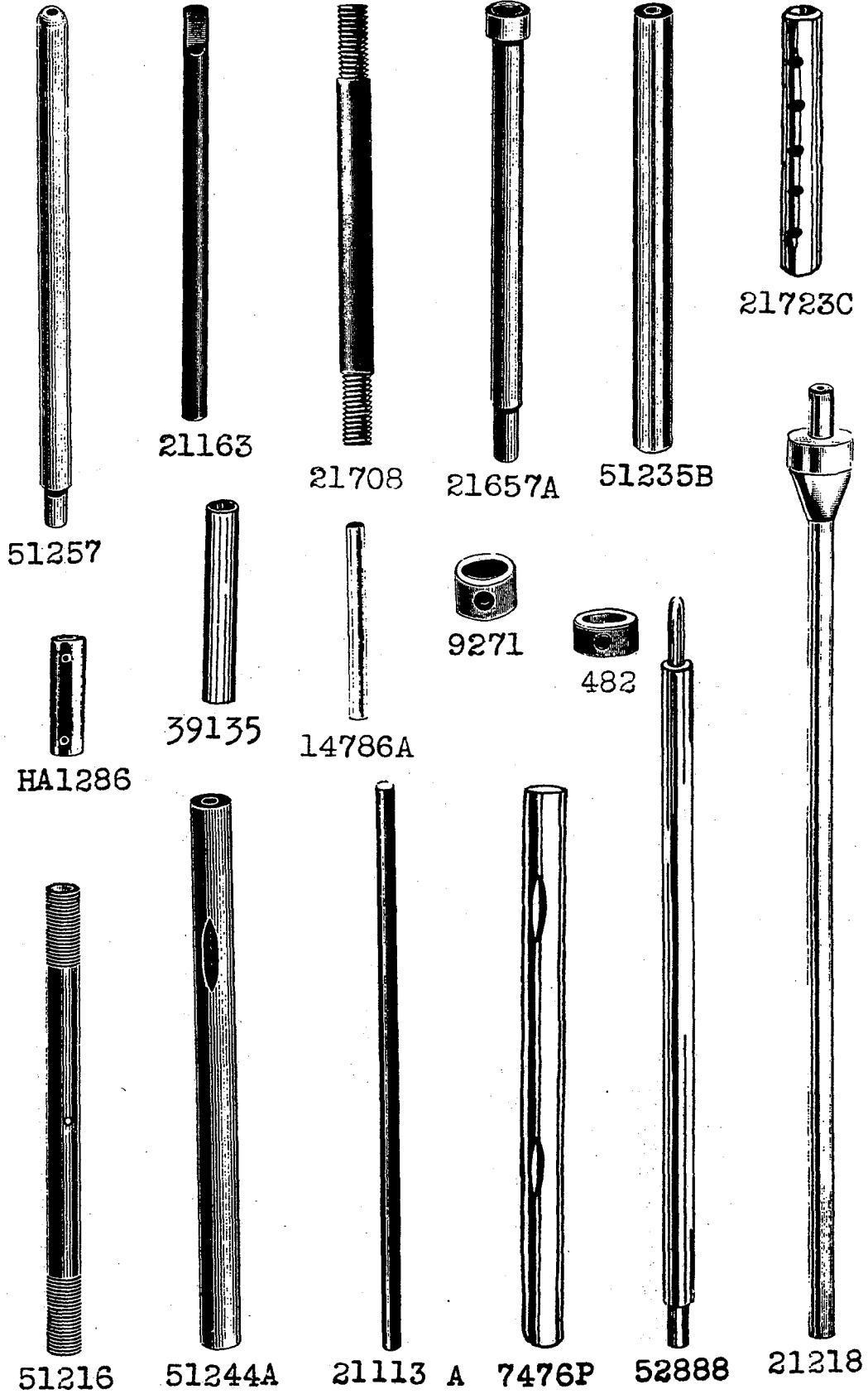


51242A

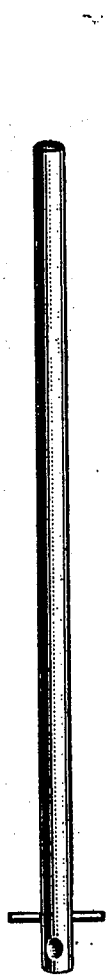


51957

Plate 35- One-half Size



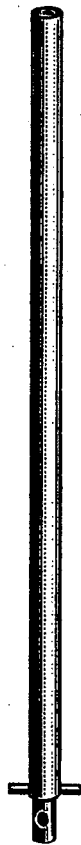




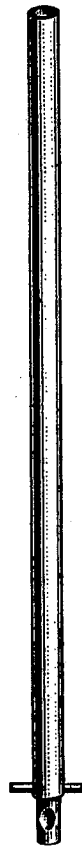
51417B



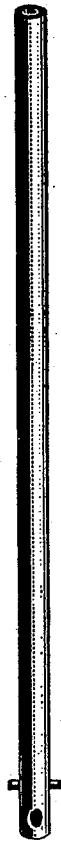
51917-9



51917-5



51517A



51517-16



53517C-16



51517G-1



51417  
Specify  
Gauge



51717



51217

Plate 36- One-half Size

Plate 37- One-half Size



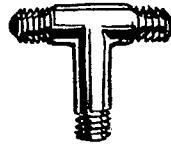
51293A



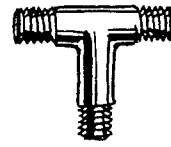
52882 D



35788B



666-74



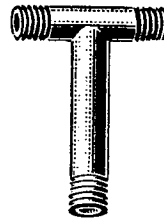
660-152



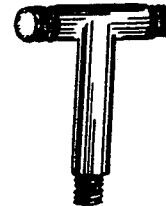
52795



51743G



660-104



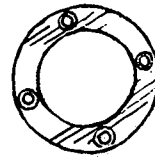
52894 Y



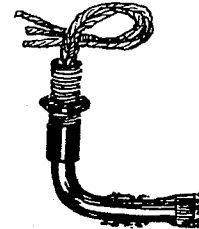
660-94



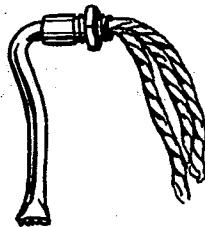
52894 J



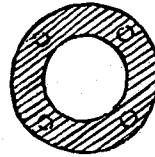
51243N



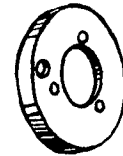
660-136



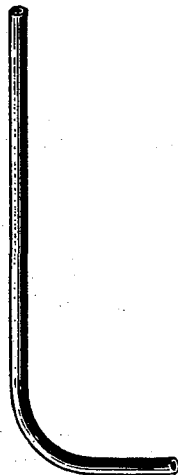
660-138



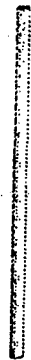
51243L



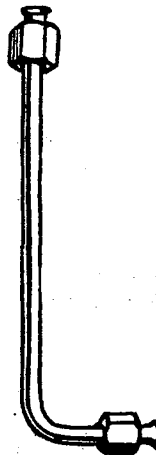
51243K



660-84



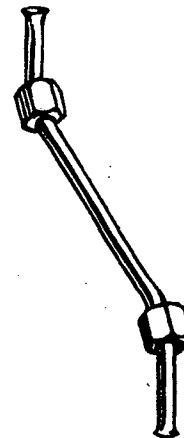
666-29



666-73

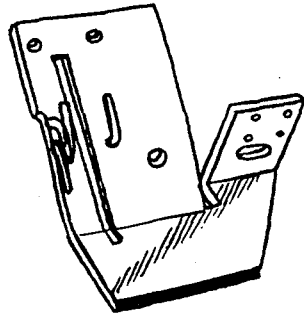


660-85

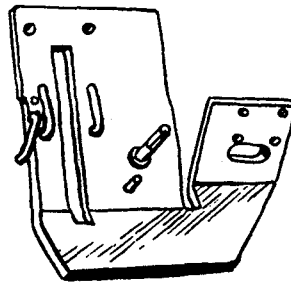


51293L

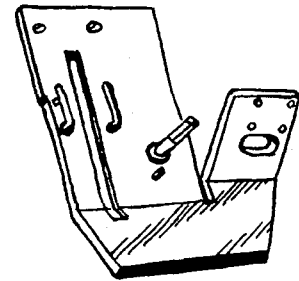
Plate 38- One-half Size



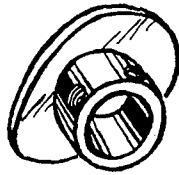
51457



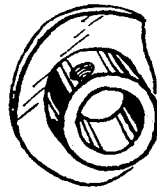
52857



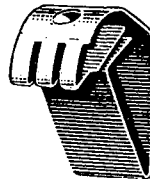
52857A



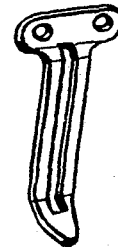
515230



51423B



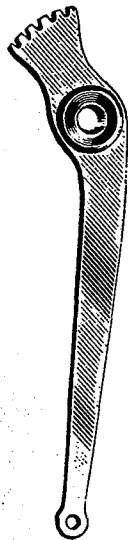
51423



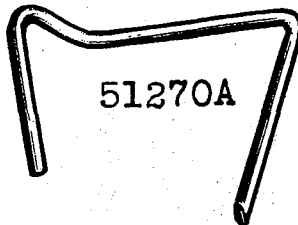
52804A



51491



51251



51270A



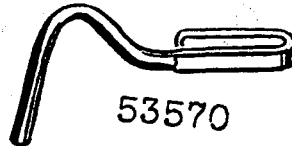
51270B



16182B



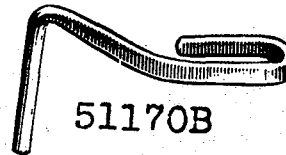
161820



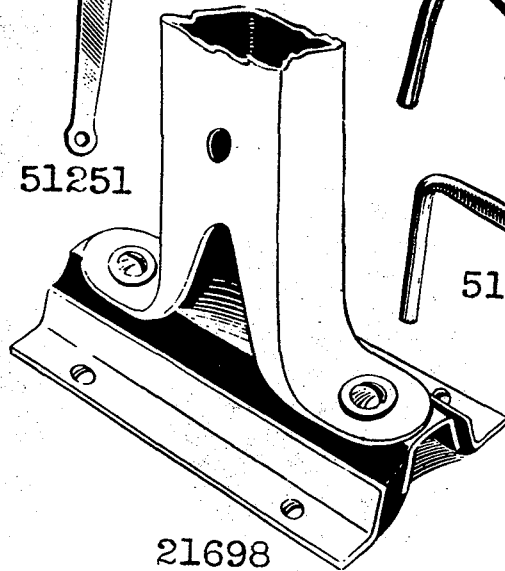
53570



16154  
Specify Gauge



51170B



21698  
Specify Length



51202

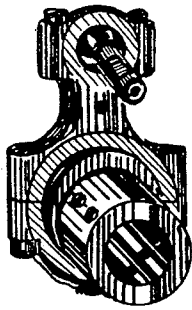


16184A-4  
Specify Gauge

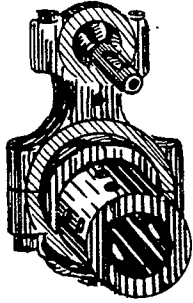


243

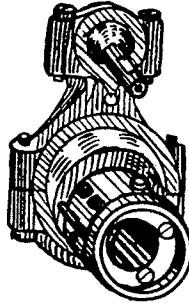
Plate 39- One-half Size



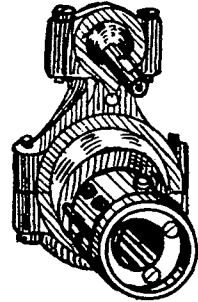
29105 A



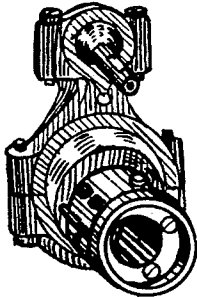
29105 B



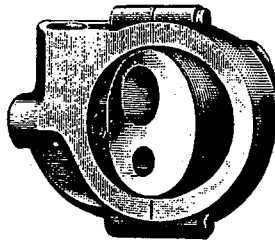
29105L



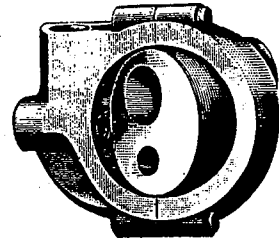
29105M



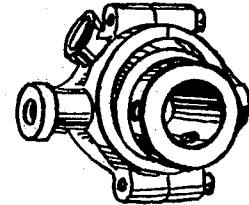
29105N



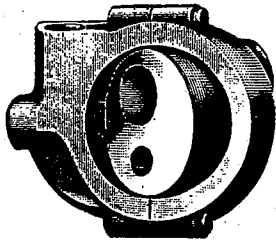
29138 H



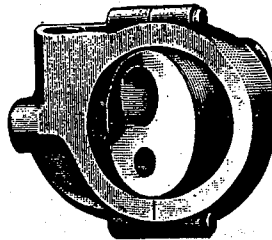
29138 K



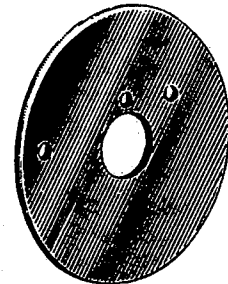
29138M



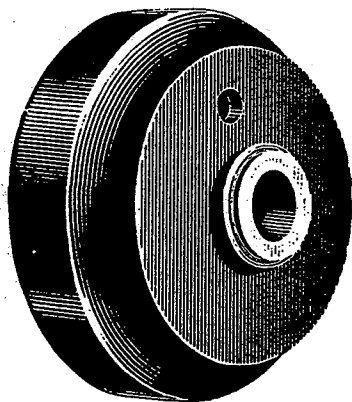
29138 J



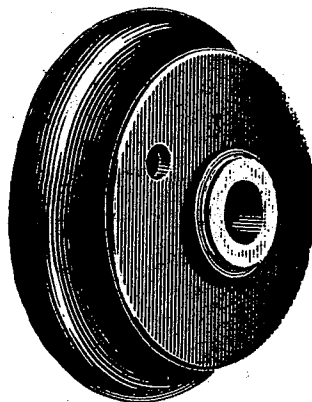
29138 L



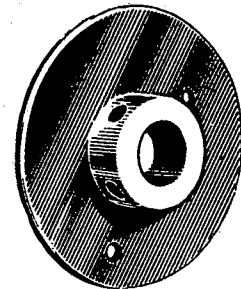
51461



51321A

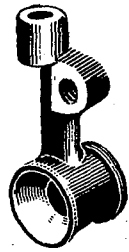


51221



51461A

Plate 40- One-half Size



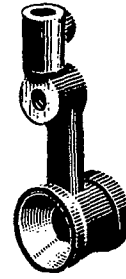
51213



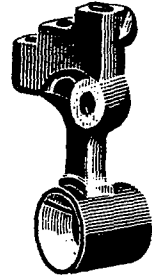
51413



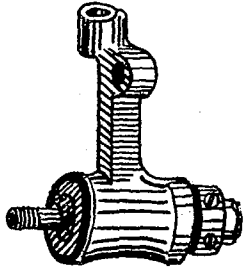
51513



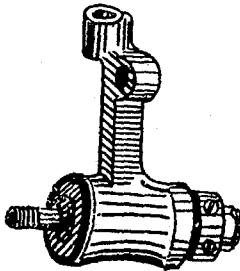
51713



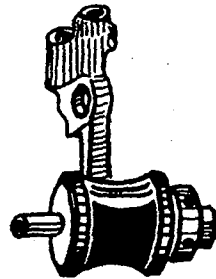
51913



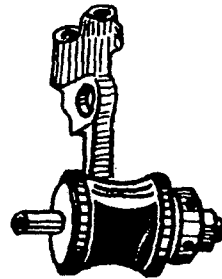
29192



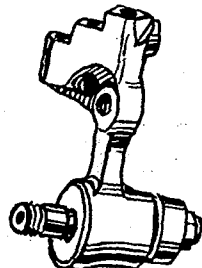
29192 C



29192 A



29192 D



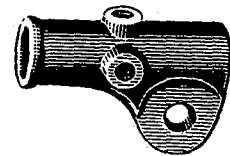
29192B



51772  
Specify  
Gauge



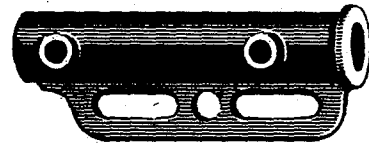
52944G



51244



51241



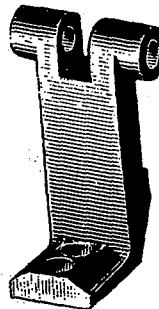
51744



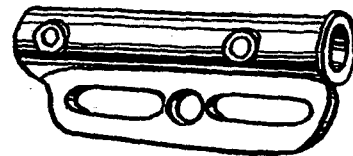
51216A



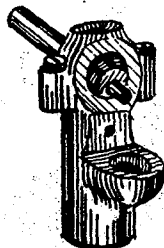
54



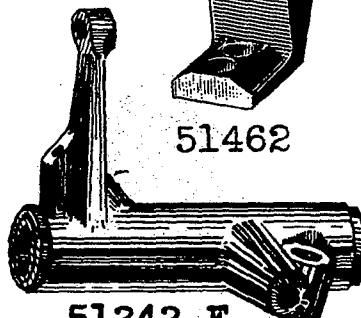
51462



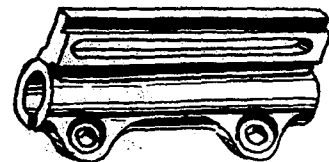
51744A



29066 F

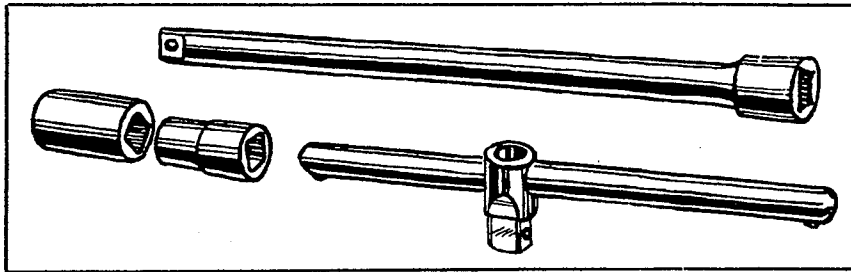


51242 E

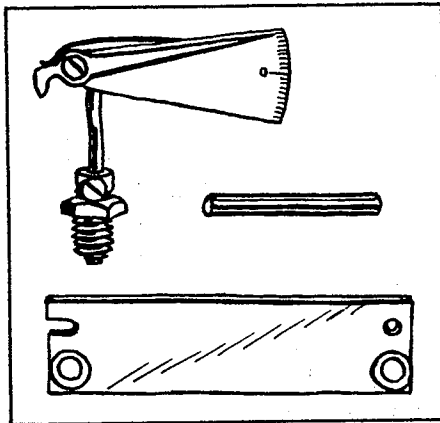


54144

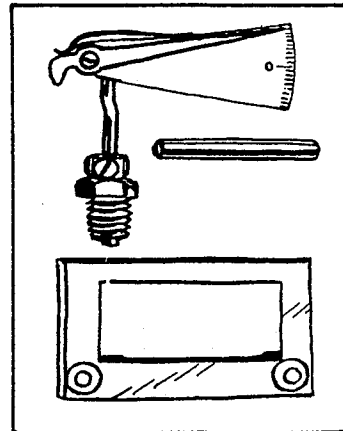
Plate 41- One-half Size



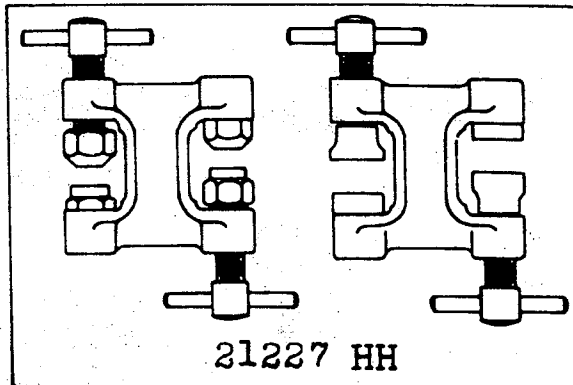
21388AE



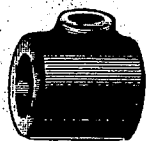
21227AC



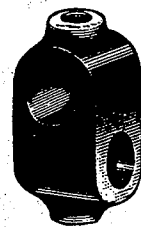
21227R



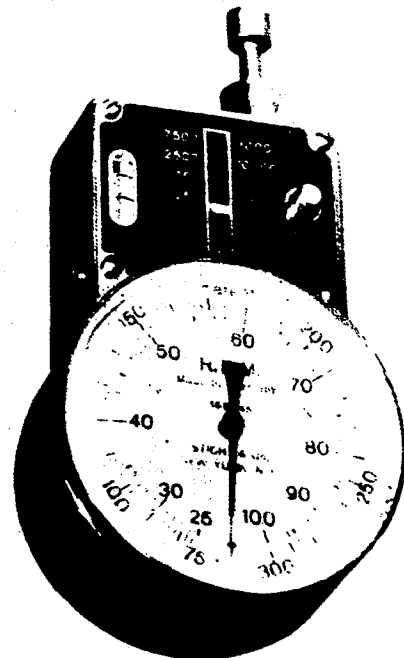
21227 HH



21104 E



21104 C



TA 55

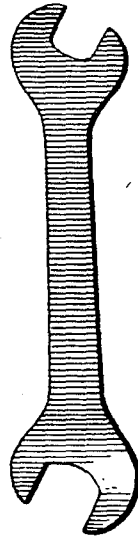
Plate 42- One-half Size



21388



21388 N



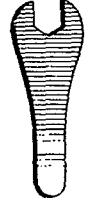
21388 R



118 B



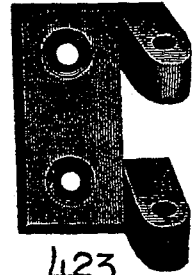
116A



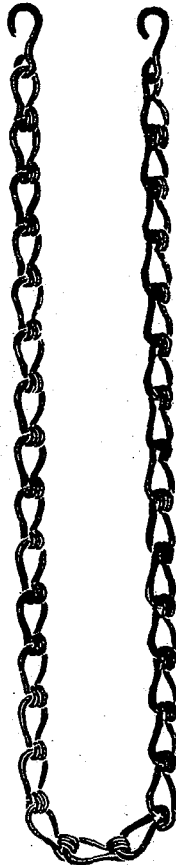
116



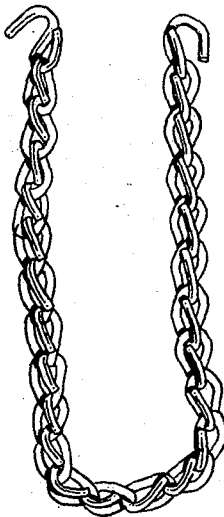
424



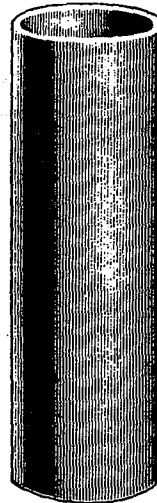
423



421



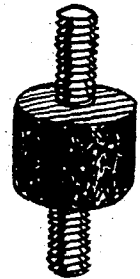
421 C  
SPECIFY  
LENGTH



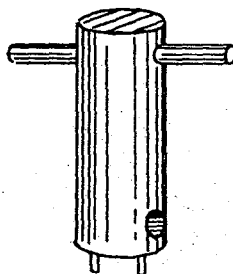
21355



43294D



660-148



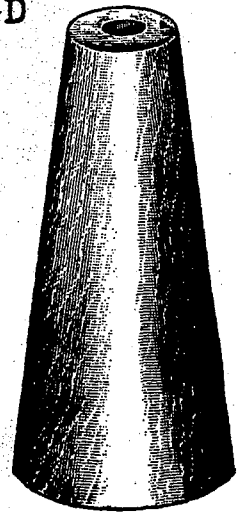
21388 Z



21207

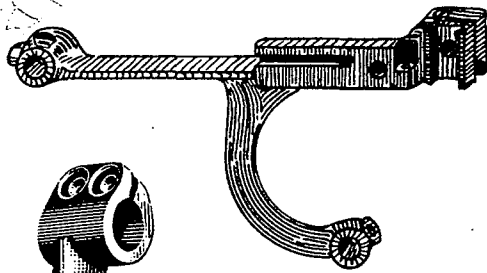


660-81

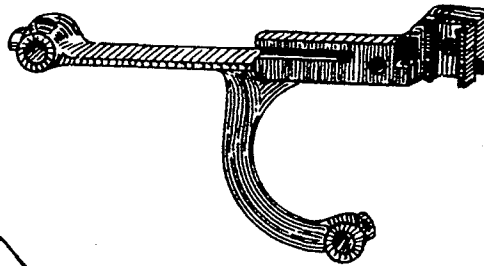


21145

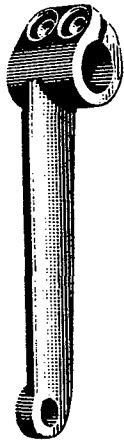
Plate 43-- One-half Size



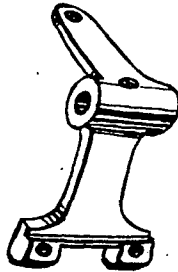
51134



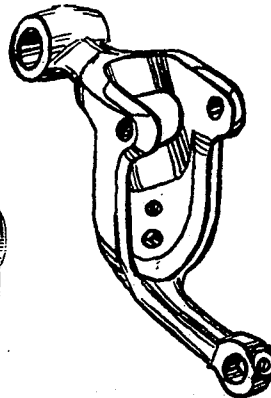
51134A



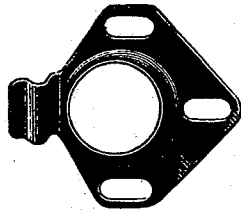
51235A



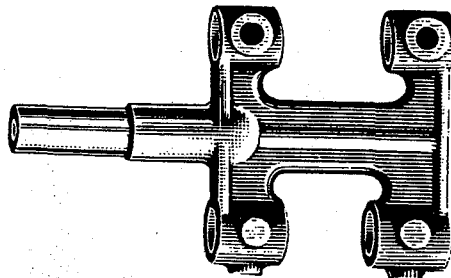
54134G



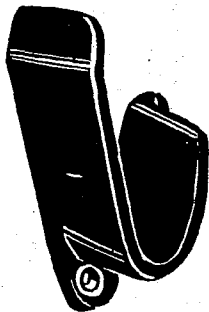
54134



51281F



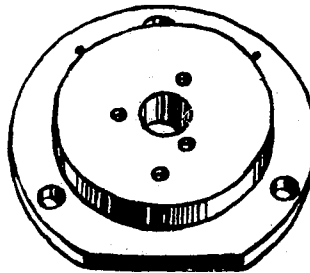
51235



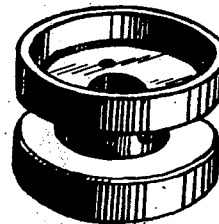
7485P



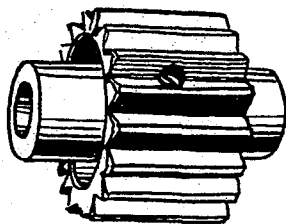
54145



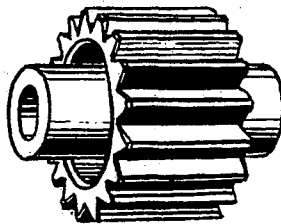
7475Q



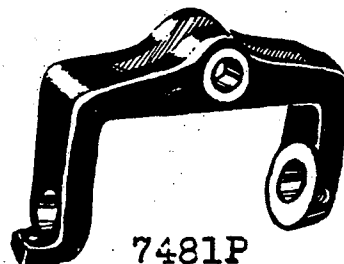
~~41258 D M~~  
41358 M



7490P



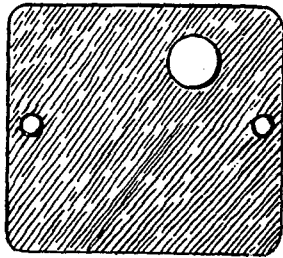
7491P



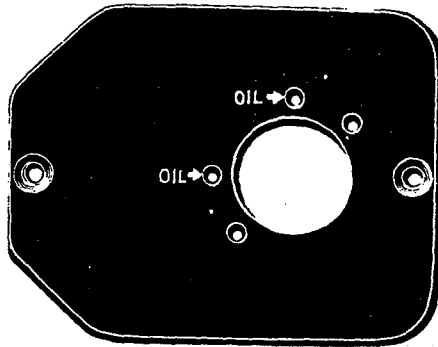
7481P



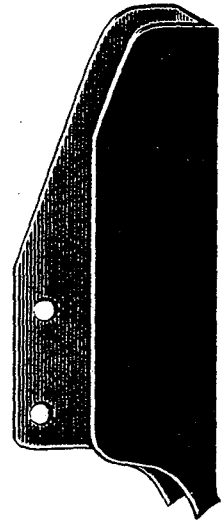
Plate 44- One-half Size



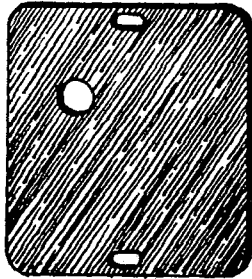
51282 H



512820



51291



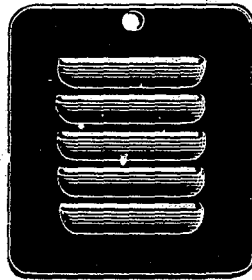
52882 B



51282B



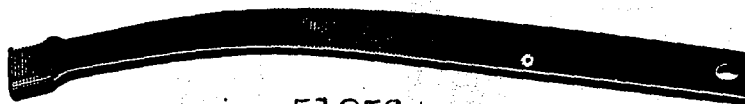
35833 C



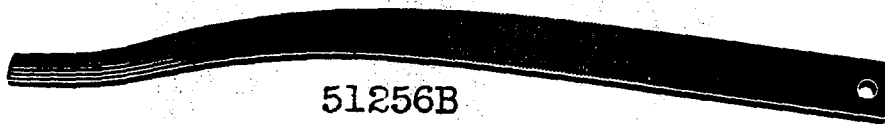
51282



51491A



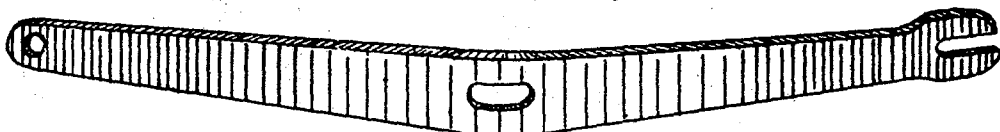
51256A



51256B

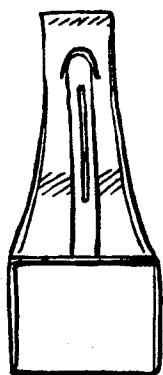


7487Q

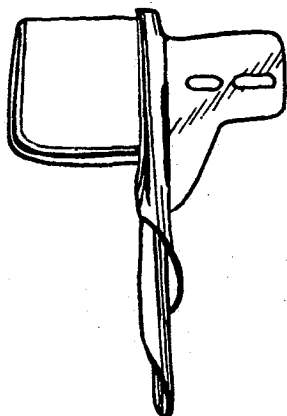


52887

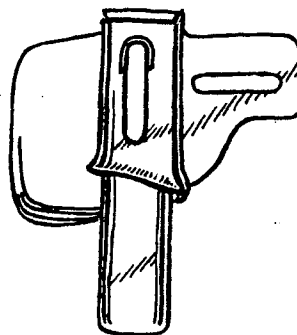
Plate 45- One-fourth Size



23401J-56



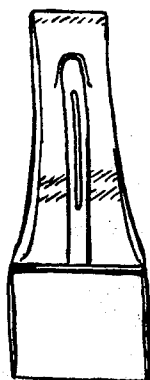
23360F-1/2



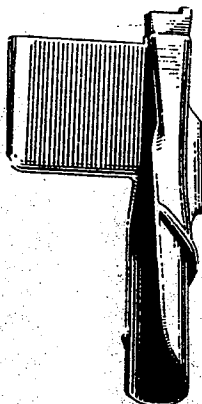
23168N



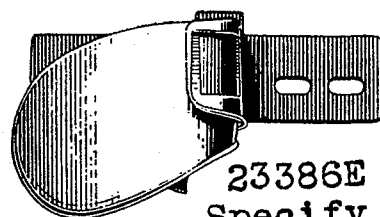
23435  
Specify  
Gauge



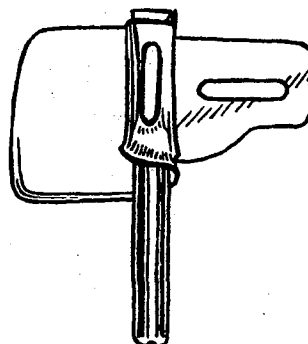
23401K  
Specify  
Gauge



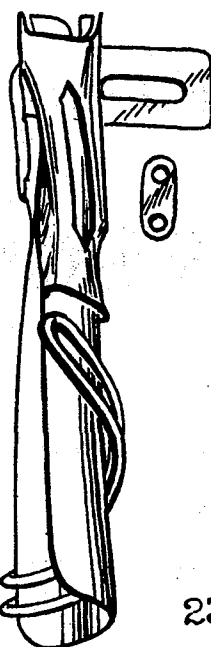
23406B-7/8



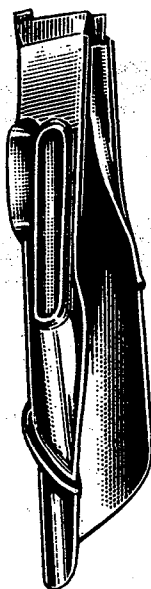
23386E  
Specify  
Width of Hem



23168Q



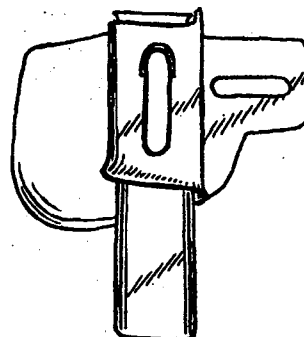
23360C-1 1/2



23406C-1 5/8

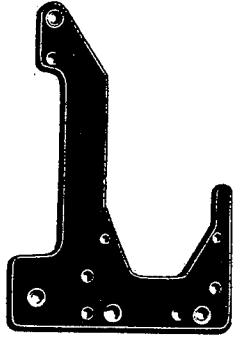


23406D-1 1/2

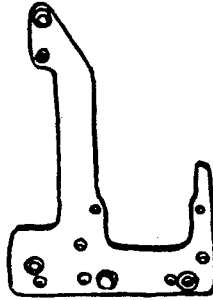


23168P

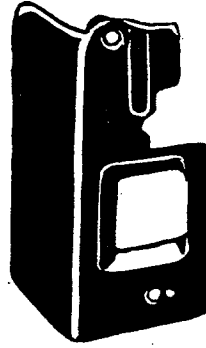
Plate 46- One-fourth Size



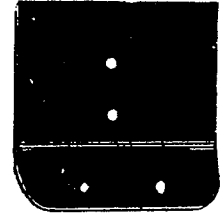
51280A



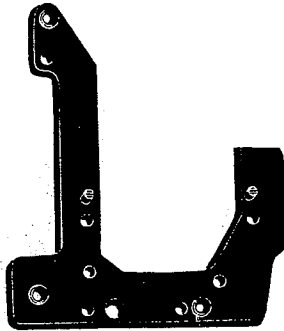
54180



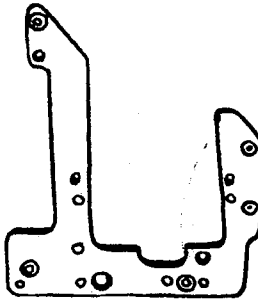
514010



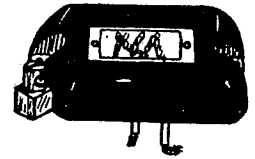
51482 A



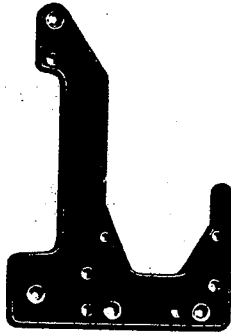
51480



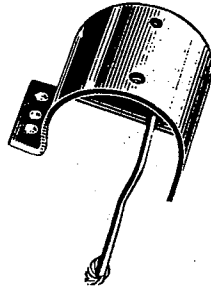
51280B



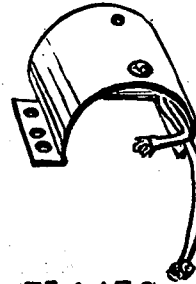
51282 J



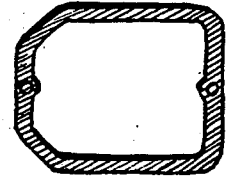
51280G



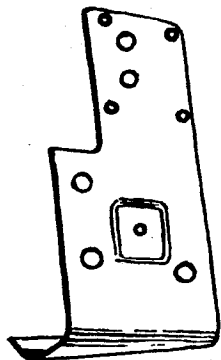
51243J



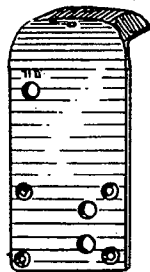
51443G



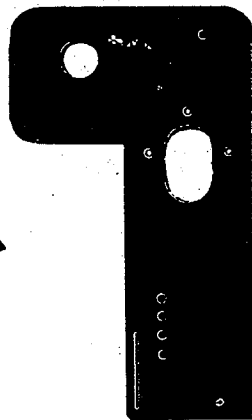
52882E



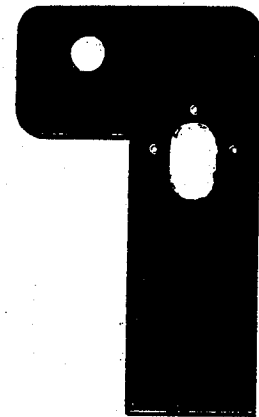
54143D



52894 G



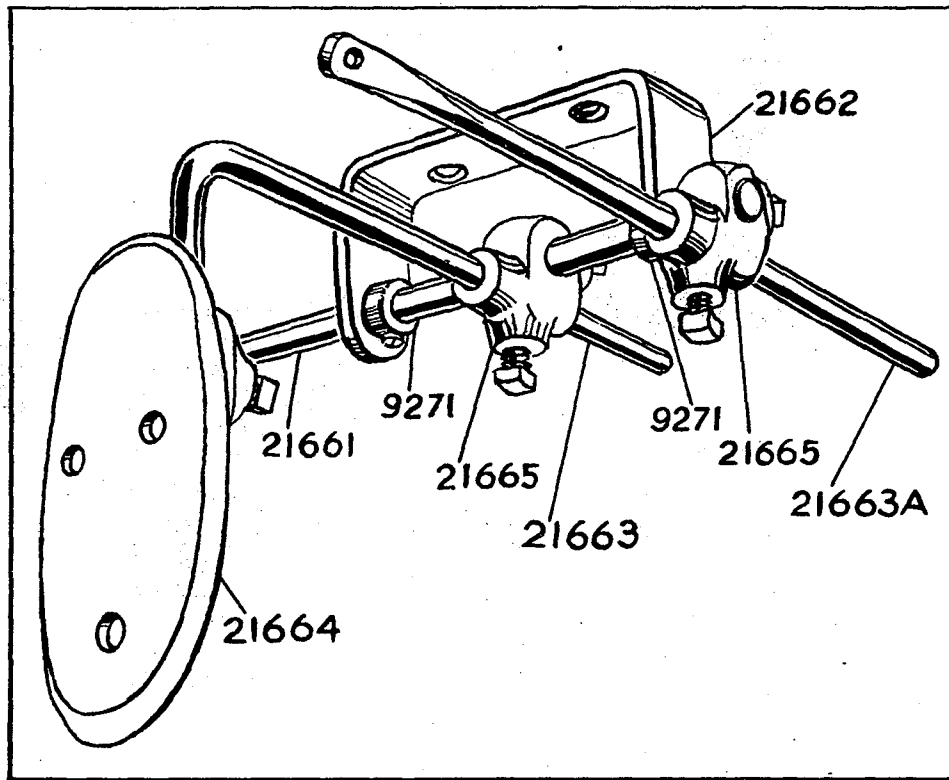
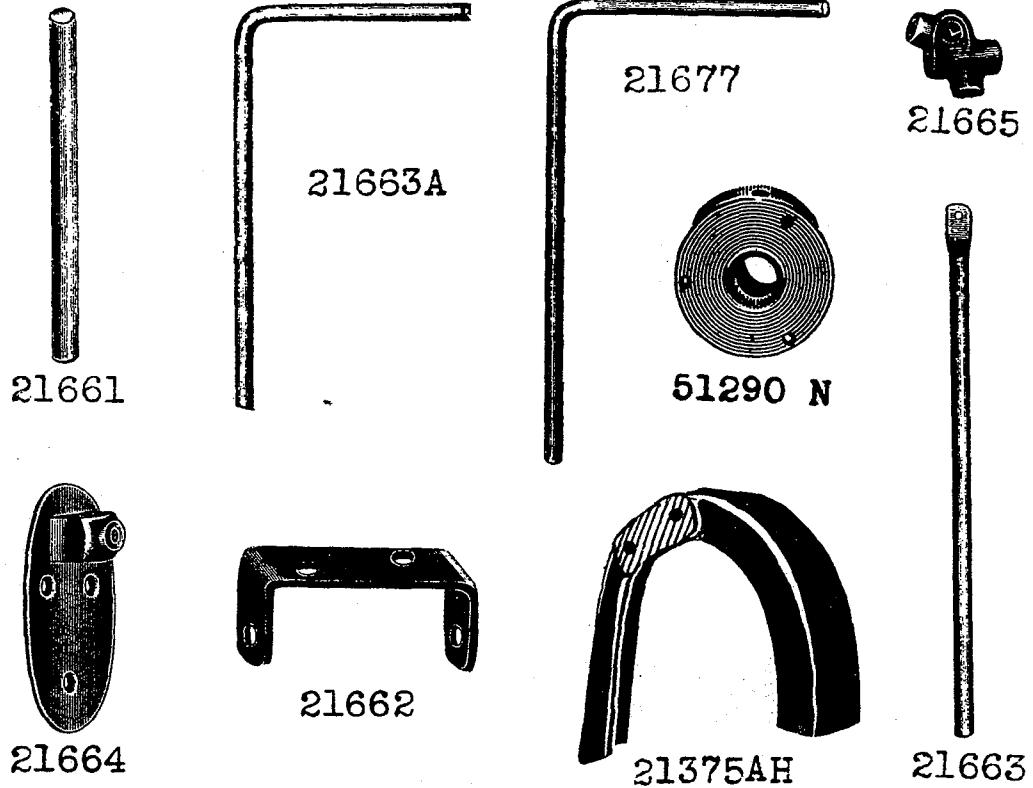
51281C  
Specify  
Length



51281  
Specify  
Length

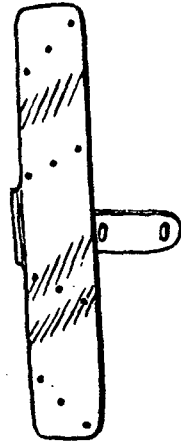
517

Plate 47- One-fourth Size

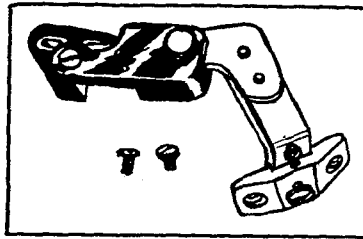


21660A

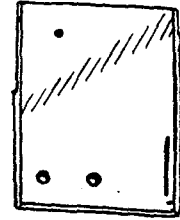
Plate 48- One-fourth Size



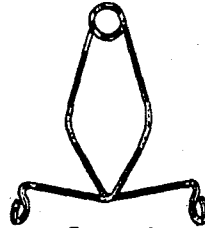
51491B-4



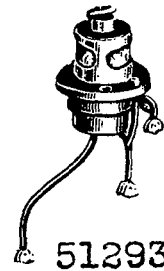
29481C



51402



51294A



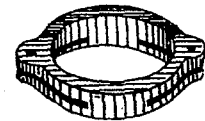
51293



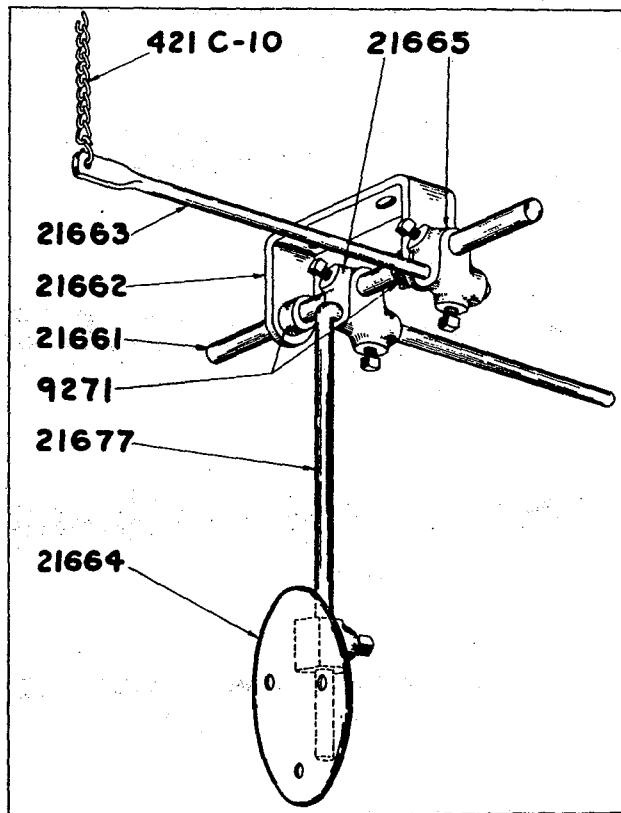
21104 B  
Specify  
Length



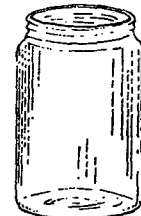
23324R



43294A



21691A



666-16

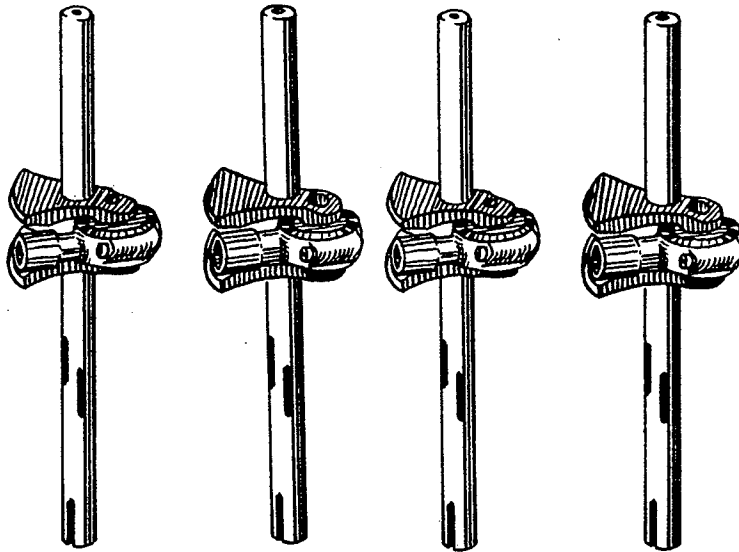


7482P

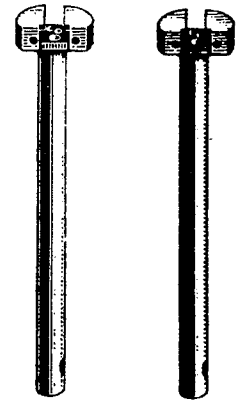


9939F

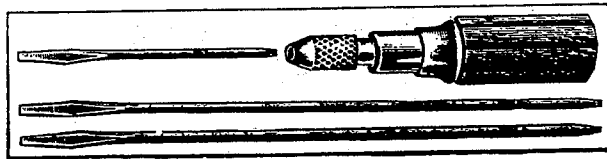
Plate 49- One-fourth Size



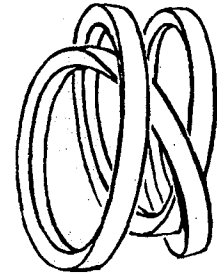
51222B 51322 B 51422 B 54122B



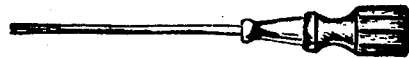
51222 54122



21208



21262G  
Specify Length



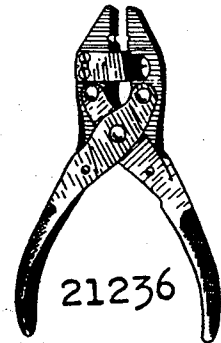
21201



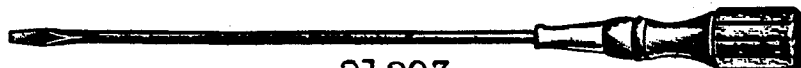
21202



21205 A



21236



21203



21204