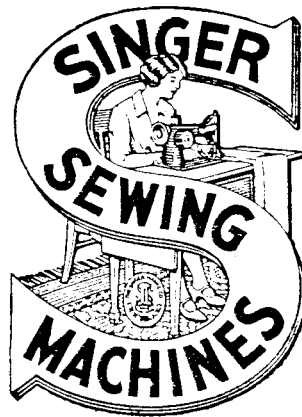


**SINGER**  
**99W86,W88**

Form 2160w  
May, 1931  
PRINTED IN U. S. A.

# LIST OF PARTS



## MACHINES

Nos. 99w86 and 99w88

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THE SINGER MANUFACTURING COMPANY

## INDEX

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# Instructions for Ordering

In ordering from this list, use **ONLY** the **PART** number in the **FIRST** column.

The number stamped on a Sewing Machine Part is the number of the Single Part only, except when the part includes Set Screws, Clamping Screws, Studs and Rollers Spun on, Small Wires riveted, or Parts soldered together, etc., which it is necessary to furnish in combination.

Every combination of parts sent out has its specific number which, although not stamped on Parts (except in above cases) must be used when ordering the combination.

Each number always indicates the **SAME PART** in whatever list it appears, or for whatever Machine.

The letters after some of the numbers indicate the style of finish only, as follows:

- A. Hardened, Polished and Plated.
- B. Polished and Plated.
- C. Hardened only.
- D. Polished only.
- E. Soft, not polished.
- F. Hardened and Polished.
- H. Blued.

These letters **MUST BE USED** when they appear in the list and **AFTER** the number, as in the list.

In this series

- 1 to 1500 and 200001 to 201500 are Screw Numbers.
- 1501 to 1800 and 201501 to 201800 are Nut Numbers.
- 1801 to 2000 and 201801 to 202000 are Roller Numbers.
- 2001 to 50000, 202001 and upwards are Numbers of Machine Parts.

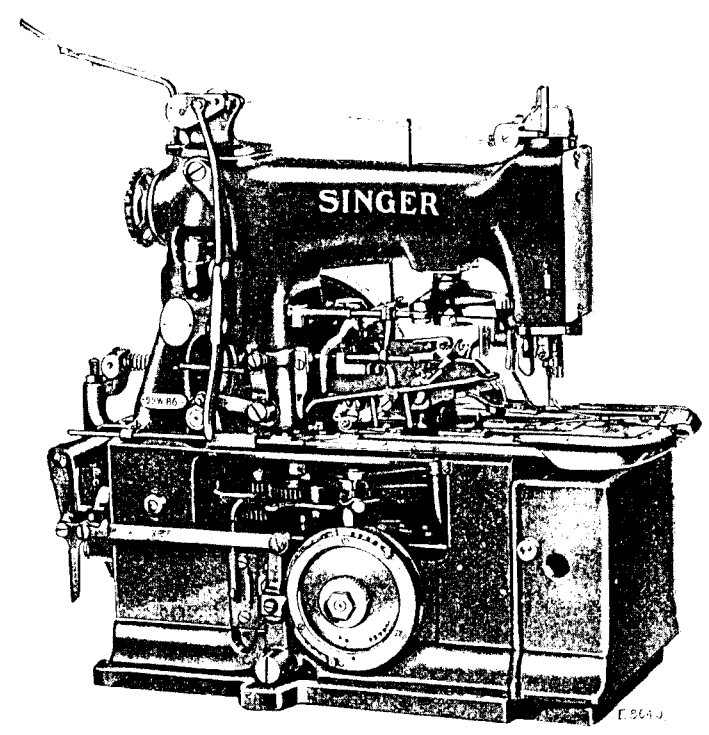
The figures in the second column refer only to the plate in which the illustration of the part is shown and are **NOT TO BE USED** in ordering.

Two or more numbers over a cut indicate that the difference between such parts is not visible in an illustration.

Parts marked with an asterisk (\*) are furnished only when repairs are made at the factory.

## LIST OF PARTS COMPLETE

FOR



## MACHINE No. 99w86

CUTS AFTER STITCHING

Automatic Eyelet End Buttonhole Machine, for  $\frac{5}{8}$  in buttonholes in pant flies, etc. or  $\frac{3}{4}$  in. buttonholes in overalls, etc.

No.	Plate	Name
*250001	---	Arm .....
204235	13811	" Position Pin (2) .....
200020E	13811	" Screw (4) .....
232488	13858	" Shaft .....

No.	Plate	Name
232489	13956	Arm Shaft Bevel Gear (order Position Screw or Set Screw as required) .....
232244	13811	Arm Shaft Bevel Gear Position Pin
350223E	13956	" " " " " Screw
453C	13849	" " " " Set Screw ..
232002	13812	" " Bushing (back) with 202260 .....
232490	13812	Arm Shaft Bushing (front) with 202260 .....
202260	---	Arm Shaft Bushing Oil Packing (wick) .....
200100E	13811	Arm Shaft Bushing Screw (4) ....
232003	13858	" " Hand Wheel with two 200341c .....
200341c	13858	Arm Shaft Hand Wheel Set Screw
150D	13858	" " Screw .....
250002	13812	" Side Cover .....
200110D	13811	" " " Screw (2) .....
*253602	---	Bed with 250078, 253683, 255509, 255511, 255512, two each 127D, 40025 and eight 1094e .....
250009	---	Bed End Cover .....
232025	13811	" " " Catch (2) .....
232026	13811	" " " " Position Pin (2) .....
250010	13811	Bed End Cover Catch Releaser (2)
204264	13811	" " " " " Stop Pin (2) .....
200047D	13811	Bed End Cover Catch Screw (2) ..
201531E	13956	" " " " " Nut (2)
250011	13811	" " " Support (left) .....
250012	13811	" " " " (right) .....
457c	13811	" " " " Set Screw (2)
250013	---	" Extension .....
250397	13811	" " Position Pin (2) .....
134D	13811	" " Screw (4) .....
250014	13858	" Shaft .....
255521	13932	" " Bevel Gear with two 453c
232719	13858	" " " " Position Pin (2) .....
453c	13849	Bed Shaft Bevel Gear Set Screw ..
232030	13812	" " Bushing (back) with 202260 .....
202260	---	Bed Shaft Bushing (back) Oil Packing (wick) .....
232821	13811	Bed Shaft Bushing (back) Oil Tube (brass) .....
230795	13811	Bed Shaft Bushing (back) Oil Tube Pin .....

No.	Plate	Name
200100E	13811	Bed Shaft Bushing (back) Screw (2) .....
250015	13812	Bed Shaft Bushing (front) .....
255527	13932	" " " " Oil Tube (brass) .....
250451	13956	Bed Shaft Bushing (front) Oil Tube Bracket .....
330D	13956	Bed Shaft Bushing (front) Oil Tube Bracket Screw .....
232244	13811	Bed Shaft Bushing (front) Position Pin .....
200100E	13811	Bed Shaft Bushing (front) Screw (2) .....
250017	13858	Bed Shaft Collar with two 1258E (2)
1258E	13858	" " " Set Screw .....
232725	13811	Belt Guard .....
9D	13811	" " Screw .....
253697	13956	Buttonhole Cutting Block (steel), 5/8 in. (taper bar) .....
350411c	13883	Buttonhole Cutting Block Pinch Screw .....
250468	13883	Buttonhole Cutting Block Pinch Screw Washer .....
1281E	13883	Buttonhole Cutting Block Stop Screw .....
250020	13818	Buttonhole Cutting Carrier Cam with 200364c .....
40025	13834	Buttonhole Cutting Carrier Cam Position Pin .....
200364c	13883	Buttonhole Cutting Carrier Cam Set Screw .....
250021	13818	Buttonhole Cutting Carrier Lever with 990D, 201366c, 201524E and 201892 .....
50031c	13883	Buttonhole Cutting Carrier Lever Adjusting Screw Stud .....
201711c	13956	Buttonhole Cutting Carrier Lever Adjusting Screw Stud Nut .....
39541	13864	Buttonhole Cutting Carrier Lever Adjusting Screw Stud Nut Washer
250022	13883	Buttonhole Cutting Carrier Lever Adjusting Screw Stud Sleeve ...
201892	13883	Buttonhole Cutting Carrier Lever Roller .....
990D	13883	Buttonhole Cutting Carrier Lever Roller Cap Screw .....
201366c	13883	Buttonhole Cutting Carrier Lever Roller Screw Stud .....
201524E	13883	Buttonhole Cutting Carrier Lever Roller Screw Stud Nut .....

No.	Plate	Name
232038	13883	Buttonhole Cutting Carrier Lever Slide Block .....
250023	13956	Buttonhole Cutting Disengaging Lever .....
350233c	13956	Buttonhole Cutting Disengaging Lever Hinge Screw .....
203213	13936	Buttonhole Cutting Disengaging Lever Spring .....
250592	13956	Buttonhole Cutting Disengaging Push Rod .....
2273	13956	Buttonhole Cutting Disengaging Push Rod Pin .....
250290	13818	Buttonhole Cutting Driving Wheel with 446E .....
232043	13883	Buttonhole Cutting Driving Wheel Lock .....
232044	13883	Buttonhole Cutting Driving Wheel Lock Spring .....
200051E	13883	Buttonhole Cutting Driving Wheel Lock Spring Screw .....
228026	13883	Buttonhole Cutting Driving Wheel Lock Spring Screw Washer .....
232724	13883	Buttonhole Cutting Driving Wheel Lock Stop Plate .....
1094E	13883	Buttonhole Cutting Driving Wheel Lock Stop Plate Screw .....
232150	13883	Buttonhole Cutting Driving Wheel Position Pin .....
446E	13883	Buttonhole Cutting Driving Wheel Set Screw .....
253516	—	Buttonhole Cutting Knife (100 x .157 eye) .....
250027	13883	Buttonhole Cutting Knife Adjusting Block .....
1100E	13883	Buttonhole Cutting Knife Adjusting Block Screw .....
250474	13883	Buttonhole Cutting Knife Base Plate .....
201474E	13883	Buttonhole Cutting Knife Base Plate Adjusting Screw (2) .....
1454E	13883	Buttonhole Cutting Knife Base Plate Screw .....
250475	13883	Buttonhole Cutting Knife Clamping Lever .....
350114c	13883	Buttonhole Cutting Knife Clamping Lever Hinge Screw .....
250030	13885	Buttonhole Cutting Knife Clamping Plate .....

No.	Plate	Name
250031	—	Buttonhole Cutting Lever (lower)
251267	13957	" " " 250031 with 251269 and 251270 .....
250032	13958	Buttonhole Cutting Lever (lower) Cam with 453c .....
40025	13834	Buttonhole Cutting Lever (lower) Cam Position Pin .....
453c	13849	Buttonhole Cutting Lever (lower) Cam Set Screw .....
253608	—	Buttonhole Cutting Lever (upper) with 232482, 250468, 350111c and two 232483 .....
251271	13958	Buttonhole Cutting Lever (upper) Cam with 453c .....
40025	13834	Buttonhole Cutting Lever (upper) Cam Position Pin .....
453c	13849	Buttonhole Cutting Lever (upper) Cam Set Screw .....
250464	13957	Buttonhole Cutting Lever Bracket with 200089d .....
250465	13957	Buttonhole Cutting Lever Bracket Arm .....
50027E	13885	Buttonhole Cutting Lever Bracket Arm Screw .....
250036	13885	Buttonhole Cutting Lever Bracket Gib (left) .....
250037	13885	Buttonhole Cutting Lever Bracket Gib (right) .....
232380	13885	Buttonhole Cutting Lever Bracket Gib Adjusting Plate (2) .....
219E	13856	Buttonhole Cutting Lever Bracket Gib Adjusting Plate Screw (4) ..
206482	13885	Buttonhole Cutting Lever Bracket Gib Adjusting Plate Screw Washer (1) .....
201176E	13901	Buttonhole Cutting Lever Bracket Gib Screw (6) .....
250530	—	Buttonhole Cutting Lever Bracket complete, Nos. 250464, 250465 and two 50027E .....
250038	13885	Buttonhole Cutting Lever Hinge Stud .....
200089d	13885	Buttonhole Cutting Lever Hinge Stud Set Screw .....
251268	13885	Buttonhole Cutting Lever Spring
251269	13885	" " " " Bracket (lower) .....
251270	13885	Buttonhole Cutting Lever Spring Bracket (lower) Pin .....

No.	Plate	Name
232482	13885	Buttonhole Cutting Lever Spring Bracket (upper) .....
232483	13885	Buttonhole Cutting Lever Spring Bracket (upper) Pin .....
250039	13816	Buttonhole Cutting Pressure Wedge with 232056 .....
*201155D	—	Buttonhole Cutting Pressure Wedge Adjusting Screw .....
250538	—	Buttonhole Cutting Pressure Wedge Adjusting Screw 201155D with 2273, 201672E, 232054 and 232055
232054	13816	Buttonhole Cutting Pressure Wedge Adjusting Screw Collar .....
232055	13816	Buttonhole Cutting Pressure Wedge Adjusting Screw Collar Position Pin .....
232466	13816	Buttonhole Cutting Pressure Wedge Adjusting Screw Collar Lock Spring .....
662D	13816	Buttonhole Cutting Pressure Wedge Adjusting Screw Lock Spring Screw .....
201672E	13816	Buttonhole Cutting Pressure Wedge Adjusting Screw Nut .....
2273	13956	Buttonhole Cutting Pressure Wedge Adjusting Screw Nut Pin .....
232056	13816	Buttonhole Cutting Pressure Wedge Boss .....
232057	13816	Buttonhole Cutting Pressure Wedge Post with 662D and 232466 .....
200122H	13816	Buttonhole Cutting Pressure Wedge Post Screw .....
250040	13957	Buttonhole Cutting Shaft .....
232383	13957	" " " Hand Crank with 201484C .....
201468H	13816	Buttonhole Cutting Shaft Hand Crank Cap Screw .....
201484C	13816	Buttonhole Cutting Shaft Hand Crank Position Screw .....
203172	13956	Buttonhole Cutting Shaft Hand Crank Washer .....
255019	—	Buttonhole Cutting Shaft Pulley (loose) with 255021, two each 172D, 210750 and eight 232817 ..
232513	13816	Buttonhole Cutting Shaft Pulley Bushing .....
232817	13816	Buttonhole Cutting Shaft Pulley Stud .....

No.	Plate	Name
255020	13933	Buttonhole Cutting Shaft Pulley complete, Nos. 255019, two each 255022, 255023 and 350198F .....
250042	13957	Buttonhole Cutting Starting Lever with 201085C .....
232718	13958	Buttonhole Cutting Starting Lever Hinge Stud .....
200530C	13816	Buttonhole Cutting Starting Lever Hinge Stud Set Screw .....
232064	13816	Buttonhole Cutting Starting Lever Latch .....
350148D	13956	Buttonhole Cutting Starting Lever Latch Hinge Screw .....
201531E	13956	Buttonhole Cutting Starting Lever Latch Hinge Screw Nut .....
232065	13816	Buttonhole Cutting Starting Lever Latch Spring .....
201218E	13816	Buttonhole Cutting Starting Lever Latch Spring Screw Stud (2) ..
200E	13816	Buttonhole Cutting Starting Lever Latch Stop Screw .....
250043	13817	Buttonhole Cutting Starting Lever Plate .....
200577H	13864	Buttonhole Cutting Starting Lever Plate Screw (2) .....
201085C	13817	Buttonhole Cutting Starting Lever Restoring Screw Stud .....
250456	13817	Buttonhole Cutting Starting Lever Safety Plate .....
208E	13851	Buttonhole Cutting Starting Lever Safety Plate Screw (2) .....
250044	13817	Buttonhole Cutting Starting Lever Spring .....
350105E	13816	Buttonhole Cutting Starting Lever Spring Screw Stud .....
250045	13817	Buttonhole Cutting Trip Lever with 460C .....
250046	13817	Buttonhole Cutting Trip Lever Bracket .....
232154	13817	Buttonhole Cutting Trip Lever Bracket Position Pin (2) .....
161D	13817	Buttonhole Cutting Trip Lever Bracket Screw (2) .....
2049	13817	Buttonhole Cutting Trip Lever Position Pin .....
250047	13817	Buttonhole Cutting Trip Lever Safety Lever with 237E .....
232343	13847	Buttonhole Cutting Trip Lever Safety Lever Position Pin .....

No.	Plate	Name
237F	13860	Buttonhole Cutting Trip Lever Safety Lever Set Screw .....
460C	13817	Buttonhole Cutting Trip Lever Set Screw .....
253684	13956	Buttonhole Cutting Trip Lever Shaft .....
253685	13956	Buttonhole Cutting Trip Lever Spring .....
201432C	13817	Buttonhole Cutting Trip Screw Stud
1521E	13817	" " " " " Nut .....
255062	13959	Buttonhole Cutting Trip Screw Stud Shim (.010 in. thick) .....
255063	13959	Buttonhole Cutting Trip Screw Stud Shim (.025 in. thick) .....
253701	13959	Cord Leader .....
253535	13932	" " Collar with 237F .....
237F	13860	" " " Set Screw .....
253609	13959	" Nipper .....
253610	13959	" " Arm with 201984 .....
205592	13959	" " " Position Pin .....
203E	13849	" " " Screw .....
253611	13959	" " Bracket .....
232310	13959	" " " Position Pin .....
190D	13900	" " " Screw (2) .....
350212E	13959	" " Hinge Screw .....
201883	----	" " Roller .....
201984	----	" " " 201883 with 201235C
201235C	13959	" " " Screw Stud .....
253612	13959	" " Spring .....
665D	13959	" " " Screw .....
253729	13959	" Tension Spring .....
253614	13959	" " " Bracket .....
203E	13849	" " " Screw ..
590E	13959	" " " Screw (2) .....
250050	13834	Driving Wheel (loose) .....
232110	13834	" " with 200395C and two 232113 .....
232112	13834	Driving Wheel Friction Gib .....
232113	13834	" " " " Position Pin .....
8873	13959	Driving Wheel Position Pin .....
200395C	13959	" " Set Screw .....
251024	13932	" " Stop Cam .....
251025	13932	" " " " Position Collar with 1036C .....
1036C	13959	Driving Wheel Stop Cam Position Collar Set Screw .....

No.	Plate	Name
250417	13864	Driving Wheel Stop Cam Spring
200096D	13864	" " " " " Position Screw .....
232520	13812	Face Plate .....
641D	13811	" " Screw (2) .....
232521	13898	Feed Adjusting Gear .....
250052	13898	" " " Bracket .....
250053	13898	" " " " Clamp- ing Post .....
690D	13862	Feed Adjusting Gear Bracket Clamping Post Screw (2) .....
350113C	13959	Feed Adjusting Gear Bracket Clamping Screw .....
250473	13859	Feed Adjusting Gear Bracket Clamping Screw Washer .....
201428C	13959	Feed Adjusting Gear Screw Stud ..
1518J	13899	" " " " " Nut
250704	13958	" Driving Gear (intermediate) with 457C .....
232721	13899	Feed Driving Gear (intermediate) Position Pin .....
457C	13811	Feed Driving Gear (intermediate) Set Screw .....
250055	13899	Feed Driving Gear (intermediate) Shaft .....
252601	13957	Feed Wheel with three 232382 ....
250057	13825	" " Driving Pawl (3) ....
201385C	13825	" " " " Hinge Screw (3) .....
250058	13825	Feed Wheel Driving Pawl Spring (3) .....
232382	13825	Feed Wheel Driving Pawl Spring Pin .....
1449D	13825	Feed Wheel Driving Pawl Spring Screw (3) .....
350071E	13825	Feed Wheel Friction Ring Adjust- ing Screw .....
201522E	13825	Feed Wheel Friction Ring Adjust- ing Screw Lock Nut .....
232131	13825	Feed Wheel Friction Ring Adjust- ing Screw Washer (2) .....
250059	13958	Feed Wheel Friction Ring Bracket
200070C	13825	" " " " " Screw (2) .....
250060	13893	Feed Wheel Friction Ring Section (long) .....
250061	13893	Feed Wheel Friction Ring Section (short) .....



No.	Plate	Name
232135	13825	Feed Wheel Friction Ring Spring..
232532	13957	" " Ring .....
250062	13825	" " " " Gib (3) .....
209F	13825	" " " " Screw (6) ..
201362C	13825	" " Screw Stud .....
250418	13909	Finger Starting Lever with 250435 and 250436 .....
250419	13909	Finger Starting Lever Hinge Block
350080D	13909	" " " " " "
		Hinge Screw .....
250420	13909	Finger Starting Lever (intermedi- ate) .....
255080	13959	Finger Starting Lever (intermedi- ate) Bracket with 208E and 991E
208E	13851	Finger Starting Lever (intermedi- ate) Bracket Pinch Screw .....
158E	13909	Finger Starting Lever (intermedi- ate) Bracket Screw .....
72D	13856	Finger Starting Lever (intermedi- ate) Hinge Screw .....
646F	13909	Finger Starting Lever (intermedi- ate) Operating Stud .....
251292	13959	Finger Starting Lever (intermedi- ate) Operating Stud Collar with 646F .....
2273	13956	Finger Starting Lever (intermedi- ate) Operating Stud Collar Posi- tion Pin .....
200097C	13909	Finger Starting Lever Screw .....
228026	13883	" " " " Washer
251518	13959	" " " Spring .....
250435	13909	" " " Stud (back)..
250436	13909	" " " " (front)..
232539	13899	Intermittent Feed Driving Wheel with two 465C .....
*250395	---	Intermittent Feed Driving Wheel Bracket .....
232244	13811	Intermittent Feed Driving Wheel Bracket Position Pin (2) .....
129E	13899	Intermittent Feed Driving Wheel Bracket Screw (4) .....
250589	13961	Intermittent Feed Driving Wheel Driving Stud .....
204648	13899	Intermittent Feed Driving Wheel Driving Stud Position Pin .....
232541	13899	Intermittent Feed Driving Wheel Position Pin .....
465C	13899	Intermittent Feed Driving Wheel Set Screw .....

No.	Plate	Name
232542	13899	Intermittent Feed Driving Wheel Shaft .....
250705	13961	Intermittent Feed Driving Wheel Shaft Gear with 465C .....
232721	13899	Intermittent Feed Driving Wheel Shaft Gear Position Pin .....
465C	13899	Intermittent Feed Driving Wheel Shaft Gear Set Screw .....
253615	13961	Loop Retainer (left) .....
250065	13900	" " " Carrier .....
251153	13900	" " (right) .....
250067	13900	" " " Carrier .....
250068	13900	" " Adjusting Block (2)..
255055	13958	" " Cam with 350223E ..
40025	13834	" " " Position Pin ...
350223E	13956	" " " Set Screw .....
250070	13900	" " Carrier Link (2) .....
201431C	13900	" " " " Screw (4)
250071	13900	" " " Shaft .....
735E	13862	" " " " Set Screw
250073	13900	" " Driving Bar .....
250410	13900	" " " Collar with 200130F .....
200130F	13961	Loop Retainer Driving Bar Collar Pinch Screw .....
185H	13900	Loop Retainer Screw (2) .....
250491	13961	" " " Washer (2) ..
250074	13900	" " Shim (.005 in. thick)..
250449	13900	" " " (.010 in. thick)..
250450	13900	" " " (.020 in. thick)..
250537	13900	" " " (.030 in. thick)..
250075	13958	" " Slide with 201943 ...
250076	13900	" " " Gib (lower) (2)..
250077	13900	" " " " (upper) (2)..
190D	13900	" " " " Screw (6) ..
*250078	---	" " " Guide Extension
40025	13834	" " " " " "
		Position Pin .....
127D	13900	Loop Retainer Slide Guide Exten- sion Screw .....
201896	13900	Loop Retainer Slide Roller .....
201943	---	" " " " 201896 with 250429 .....
250429	13900	Loop Retainer Slide Roller Stud ..
253472	13961	Looper (non threaded) .....
250080	13901	" (threaded) .....
253617	13958	" Bracket with 735E .....
201658C	13901	" " Adjusting Nut .....
201659C	13901	" " " " Lock- ing Nut .....

No.	Plate	Name
253618	13966	Looper Bracket Chip Guard .....
401D	13901	" " " " Screw
		(3) .....
23421	---	Looper Bracket Dogging Hole Plug (leather) .....
232555	13862	Looper Bracket Rotating Gear with 906E .....
250084	13862	Looper Bracket Rotating Gear Posi- tion Pin .....
906E	13862	Looper Bracket Rotating Gear Set Screw .....
250085	13901	Looper Carrier .....
250086	13901	" " Link .....
201099c	13901	" " " Hinge Screw (2)
250087	13901	" Driving Bar .....
250088	13901	" " Connection with 1120c, 250471 and two 233D .....
250471	13901	Looper Driving Connection Plate
233D	13901	" " " " "
		Screw .....
1120c	13901	Looper Driving Connection Set Screw .....
250089	13901	Looper Driving Connection Slide Rod .....
250090	13901	Looper Driving Connection Slide Rod Bushing (lower) .....
250091	13901	Looper Driving Connection Slide Rod Bushing (upper) .....
250092	13901	Looper Driving Crank .....
250446	13901	" " " Bushing ....
201176E	13901	" " " " Screw (2) .....
250094	13901	Looper Driving Crank Gear with 735E .....
250095	13901	Looper Driving Crank Gear Posi- tion Pin .....
735E	13862	Looper Driving Crank Gear Set Screw .....
250096	13901	Looper Driving Crank Link ....
199c	13901	" " " " Cap Screw .....
350278c	13961	Looper Driving Crank Link Hinge Screw .....
250097	13839	Looper Driving Disc .....
255035	---	" " " 250097 with 201435c and 201704E .....

No.	Plate	Name
201435c	13839	Looper Driving Disc Screw Stud ...
201704E	13839	" " " " " Nut
250098	13839	" " Gear .....
176D	13839	" " " Screw (3) ....
201898	13839	" " Roller .....
201953	---	" " " 201898 with 201144E and 250099 (2) .....
201144E	13825	Looper Driving Roller Cap Screw...
250099	13839	" " " Stud .....
*253619	---	" Frame .....
250462	13840	" " Chip Guard .....
232866	13840	" " Position Pin (2) ....
201082E	13840	" " Screw (3) .....
190E	13900	" Screw (2) .....
250101	13840	" " Washer (2) .....
232270	13840	" Thread and Cord Clamping Spring (long) .....
232271	13840	Looper Thread and Cord Clamping Spring (short) .....
200186B	13840	Looper Thread and Cord Clamping Spring Screw .....
232272	13840	Looper Thread and Cord Cutter....
200186B	13840	" " " " " Screw
250425	13840	" " Controlling Cam ....
236D	13840	" " " " Screw (2) .....
250426	13840	Looper Thread Controlling Lever with 201979 .....
250427	13840	Looper Thread Controlling Lever Bracket .....
183E	13840	Looper Thread Controlling Lever Bracket Screw (2) .....
50061c	13840	Looper Thread Controlling Lever Hinge Screw .....
201979	13961	Looper Thread Controlling Lever Roller and Stud .....
250428	13840	Looper Thread Controlling Lever Spring .....
1120c	13901	Looper Thread Controlling Lever Spring Screw .....
18859	13840	Looper Thread Guide .....
250102	13840	" " Leader .....
1423F	13840	" " " Screw .....
253620	13961	" " Pull-off .....
253621	13958	" " " Cam Plate and Cord Guide .....
202E	13934	Looper Thread Pull-off Cam Plate and Cord Guide Screw (2) .....

No.	Plate	Name
1550j	13891	Looper Thread Pull-off Cam Plate and Cord Guide Screw Nut (2) ..
68D	13961	Looper Thread Pull-off Hinge Screw
253622	13961	" " " Pawl .....
1449H	13825	" " " " Hinge Screw .....
253623	13961	Looper Thread Pull-off Pawl Spring
253624	13961	" " " Spring .....
253625	13961	" " " Stop .....
203E	13849	" " " " Screw ..
32012	13902	" " Tension Disc (2) ...
253530	13961	" " " Releaser ....
253531	13932	" " " " Lever
350224D	13934	" " " " " Hinge Screw .....
253532	13933	Looper Thread Tension Releaser Lever Rod .....
253535	13932	Looper Thread Tension Releaser Lever Rod Collar with 237F (2)
237F	13860	Looper Thread Tension Releaser Lever Rod Collar Set Screw ....
251170	13856	Looper Thread Tension Releaser Lever Spring .....
1550J	13891	Looper Thread Tension Releaser Nut .....
7071	13856	Looper Thread Tension Releaser Nut Washer .....
253534	13932	Looper Thread Tension Releaser Operating Cam Block with 219F ..
219F	13856	Looper Thread Tension Releaser Operating Cam Block Set Screw
253533	13932	Looper Thread Tension Releaser Operating Lever with 237F .....
237F	13860	Looper Thread Tension Releaser Operating Lever Set Screw .....
232515	13902	Looper Thread Tension Spring ...
1043C	13902	" " " Stud .....
171D	13902	" " " " Set Screw
1560C	13902	" " " Thumb Nut.
232516	13902	" " Tube (brass) .....
232517	13902	" " " Bracket (2) ...
190D	13900	" " " " Screw (2)
32012	13902	Lower Cord Tension Disc (2) .....
232515	13902	" " " Spring .....
637C	13934	" " " Stud .....
1560C	13902	" " " Thumb Nut ...

No.	Plate	Name
232516	13902	Lower Cord Tube .....
250451	13956	" " " Bracket (2) .....
250105	13903	Needle Bar Driving Crank with 200394c and two 200382c .....
40025	13834	Needle Bar Driving Crank Position Pin .....
200394c	13903	Needle Bar Driving Crank Set Screw .....
250106	13903	Needle Driving Bar .....
232177	13903	" " " Bushing .....
232176	13903	" " " Collar with 200083E .....
200083E	13847	Needle Driving Bar Collar Pinch Screw .....
232178	13903	Needle Driving Bar Link .....
232709	13903	" " " " Hinge Stud with 222598 .....
222598	---	Needle Driving Bar Link Hinge Stud Oil Packing (wick) .....
200382c	13903	Needle Driving Bar Link Hinge Stud Set Screw .....
250108	13903	Needle Driving Bar Swivel with 210933 .....
210933	---	Needle Driving Bar Swivel Oil Packing (wick) .....
255072	13934	Needle Guard .....
255073	13934	" " Support .....
230E	13934	" " Screw .....
233D	13901	" " " (support end) ..
251214	13903	" Holder with 904F .....
250111	13961	" " Gauge Plate .....
201482D	13903	" " " " Adjusting Screw .....
250112	13903	Needle Holder Gauge Plate Block
201670C	13903	" " " " " Adjusting Nut .....
201670C	13903	Needle Holder Gauge Plate Block Adjusting Nut Lock Nut .....
200124H	13903	Needle Holder Gauge Plate Screw (2) .....
208E	13851	Needle Holder Screw .....
255074	13961	" " Slide .....
250114	13903	" " " Lever with 255056
201434C	13903	" " " " Hinge Screw
255056	13934	" " " " Pin .....
250115	13903	" " " " Stud .....
208E	13851	" " " " " Screw
250116	13903	" " " " " Washer .....

No.	Plate	Name
251155	13903	Needle Holder Slide Spring .....
201225c	13903	" " " Stud .....
253627	13961	" " " Thread Tension
253628	13961	" " " " " "
		Guard .....
233E	13901	Needle Holder Slide Thread Ten- sion Screw .....
250117	13862	Needle Rotating Gear with 735E ..
250118	13862	" " " Key .....
735E	13862	" " " Set Screw ..
904F	13903	" Set Screw .....
253629	13934	" Thread Controller .....
1520J	13856	" " " Nut .....
255004	13934	" " " Spring .....
255005	—	" " " " Bracket with 171E .....
255067	13934	Needle Thread Controller Spring Bracket 255005 with 231c, 252081, 255004, 255006 and 255007 .....
18587	13934	Needle Thread Controller Spring Bracket Position Pin .....
202F	13934	Needle Thread Controller Spring Bracket Screw .....
255006	13934	Needle Thread Controller Spring Stop .....
231c	13893	Needle Thread Controller Spring Stop Adjusting Screw .....
252081	13934	Needle Thread Controller Spring Stud .....
171E	13902	Needle Thread Controller Spring Stud Set Screw .....
255007	13934	Needle Thread Controller Spring Thread Guide .....
253694	13962	Needle Thread End Removing Fin- ger .....
253695	13962	Needle Thread End Removing Fin- ger Bracket .....
253696	—	Needle Thread End Removing Fin- ger Bracket 253695 with 253634 and 253694 .....
219D	13856	Needle Thread End Removing Fin- ger Bracket Screw .....
253632	13962	Needle Thread End Removing Fin- ger Cam Plate (adjustable) ....
190D	13900	Needle Thread End Removing Fin- ger Cam Plate (adjustable) Screw (2) .....
7071	13856	Needle Thread End Removing Fin- ger Cam Plate (adjustable) Screw Washer (2) .....

No.	Plate	Name
253633	13962	Needle Thread End Removing Fin- ger Cam Plate (stationary) ....
164D	13962	Needle Thread End Removing Fin- ger Cam Plate (stationary) Screw (2) .....
253634	13962	Needle Thread End Removing Fin- ger Hinge Pin .....
253635	13962	Needle Thread End Removing Fin- ger Opening Lever .....
253636	13962	Needle Thread End Removing Fin- ger Opening Lever Crank with 735c .....
2273	13956	Needle Thread End Removing Fin- ger Opening Lever Crank Posi- tion Pin .....
735c	13862	Needle Thread End Removing Fin- ger Opening Lever Crank Set Screw .....
253637	13962	Needle Thread End Removing Fin- ger Opening Lever Spring .....
232348	13962	Needle Thread End Removing Fin- ger Opening Lever Stop Pin ....
253638	13962	Needle Thread End Removing Fin- ger Spring .....
10145	13934	Needle Thread Guide .....
250119	13934	" " " .....
232792	13932	" " Leader .....
1664J	13934	" " " Nut .....
253639	13962	" " Pull-off Bell Crank
350222c	13961	" " " " " " Hinge Screw .....
1520J	13856	Needle Thread Pull-off Bell Crank Hinge Screw Nut .....
201896	13900	Needle Thread Pull-off Bell Crank Roller .....
201978	13961	Needle Thread Pull-off Bell Crank Roller 201896 with 201429c ....
201429c	13961	Needle Thread Pull-off Bell Crank Roller Screw Stud .....
253640	13961	Needle Thread Pull-off Bell Crank Spring .....
253702	13961	Needle Thread Pull-off Bell Crank Stop Pin .....
253641	13958	Needle Thread Pull-off Bracket with 253702 and two 453c .....
453c	13849	Needle Thread Pull-off Bracket Set Screw .....

No.	Plate	Name
253642	13961	Needle Thread Pull-off Finger ....
227F	13961	" " " " Screw
10106	13934	" " Retainer Disc .....
39713	13934	" " " Spring .....
996E	13934	" " " " Screw Stud .....
252082	13934	Needle Thread Retainer Tension Disc .....
252083	13932	Needle Thread Tension Bracket
159D	13934	" " " " Screw (2) .....
32012	13902	Needle Thread Tension Disc (2) ..
154E	13936	" " " Releasing Adjusting Screw .....
1550J	13891	Needle Thread Tension Releasing Adjusting Screw Nut .....
255329	13962	Needle Thread Tension Releasing Block with 200E .....
200E	13816	Needle Thread Tension Releasing Block Set Screw .....
240D	13936	Needle Thread Tension Releasing Block Stop Screw .....
32572	---	Needle Thread Tension Releasing Disc .....
255009	13933	Needle Thread Tension Releasing Lever .....
255010	13933	Needle Thread Tension Releasing Lever Bracket .....
200346C	13936	Needle Thread Tension Releasing Lever Bracket Adjusting Screw ..
145E	13849	Needle Thread Tension Releasing Lever Bracket Screw (lower) ..
200062H	13936	Needle Thread Tension Releasing Lever Bracket Screw (upper) ..
35D	13956	Needle Thread Tension Releasing Lever Hinge Screw .....
255011	13936	Needle Thread Tension Releasing Lever Spring .....
39635	13936	Needle Thread Tension Releasing Pin .....
255013	13935	Needle Thread Tension Releasing Rod .....
255014	13936	Needle Thread Tension Releasing Rod Bracket .....
190D	13900	Needle Thread Tension Releasing Rod Bracket Screw (2) .....
255015	13936	Needle Thread Tension Releasing Rod Plate .....
792E	13936	Needle Thread Tension Releasing Rod Plate Screw (2) .....

No.	Plate	Name
208E	13851	Needle Thread Tension Releasing Rod Screw .....
13710	13962	Needle Thread Tension Spring ....
1388C	13962	" " " Stud .....
1560C	13902	" " " Thumb Nut .....
250140	13848	" Vibrating Adjusting Link
741C	13847	" " " " Hinge Screw .....
350076C	13847	Needle Vibrating Adjusting Stud
1671C	13847	" " " " Nut .....
39532	13847	Needle Vibrating Adjusting Stud Sleeve .....
250141	13848	Needle Vibrating Bell Crank .....
250142	13848	" " " " Connection .....
*38444	---	Needle Vibrating Bell Crank Connection End Bearing (back) ....
38146	13847	Needle Vibrating Bell Crank Connection End Bearing 38444 with 42524, 50016C and two 175E ....
50016C	13847	Needle Vibrating Bell Crank Connection End Bearing (back) Ball Screw Stud .....
1636E	13847	Needle Vibrating Bell Crank Connection End Bearing (back) Ball Screw Stud Nut .....
*42524	---	Needle Vibrating Bell Crank Connection End Bearing (back) Cap
175E	13849	Needle Vibrating Bell Crank Connection End Bearing (back) Cap Screw .....
1698C	13847	Needle Vibrating Bell Crank Connection End Bearing (back) Check Nut .....
*38443	---	Needle Vibrating Bell Crank Connection End Bearing (front) ...
250143	13847	Needle Vibrating Bell Crank Connection End Bearing 38443 with 42525, 201449C and two 175E ....
201449C	13847	Needle Vibrating Bell Crank Connection End Bearing (front) Ball Screw .....
*42525	---	Needle Vibrating Bell Crank Connection End Bearing (front) Cap
175E	13849	Needle Vibrating Bell Crank Connection End Bearing (front) Cap Screw .....

No.	Plate	Name
1697c	13847	Needle Vibrating Bell Crank Connection End Bearing (front) Check Nut .....
45c	13847	Needle Vibrating Bell Crank Hinge Screw .....
250144	13848	Needle Vibrating Lever .....
255034	13936	" " " Hinge Stud
443c	13936	" " " " " Set Screw .....
232420	13848	Needle Vibrating Ring with 462c ..
232421	13847	" " " Guide Stud
200083E	13847	" " " " " Set Screw .....
232343	13847	Needle Vibrating Ring Position Pin
462c	13847	" " " Set Screw ..
250145	13848	" " Rod .....
250146	13848	" " " Guide with 1230c
232343	13847	" " " " Position Pin
1230E	13851	" " " " Set Screw
250147	13847	" " Switch .....
200308c	13847	" " " Hinge Screw.
253731	—	Pattern Wheel, for $\frac{5}{8}$ in. Taper Bar (medium eye) Buttonhole, bar adjustable from $\frac{1}{4}$ to $\frac{3}{8}$ inch .....
201668E	13849	Pattern Wheel Clamping Nut ....
250148	13849	" " Position Stud .....
250372	13849	" " Rapid Feed Trip Point .....
203E	13849	Pattern Wheel Rapid Feed Trip Point Screw .....
250617	13963	Pattern Wheel Ring .....
253692	—	" " " 250617 with 252663, 253690, two each 211E and 250444 .....
253690	13964	Pattern Wheel Ring Adjusting Segment (curved rise) .....
252663	13964	Pattern Wheel Ring Adjusting Segment (straight drop) .....
211E	13849	Pattern Wheel Ring Adjusting Segment Screw .....
250444	13849	Pattern Wheel Ring Adjusting Segment Screw Washer .....
391D	13849	Pattern Wheel Ring Screw .....
253732	—	Pattern Wheel, for $\frac{5}{8}$ in. Taper Bar (medium eye) Buttonhole, bar adjustable from $\frac{1}{4}$ to $\frac{3}{8}$ in., complete. Nos. 253692, 253731, two each 203E, 250372 and three 391D ....

No.	Plate	Name
250149	13963	Pattern Wheel Shaft with 250148 ..
253645	13963	" " " Bevel Gear with 168D, 253656, 253657, three 253658 and four 1454E .....
40025	13834	Pattern Wheel Shaft Bevel Gear Position Pin .....
168D	13849	Pattern Wheel Shaft Bevel Gear Set Screw .....
250151	13963	Pattern Wheel Shaft Bushing (left)
145E	13849	" " " " " Screw (2) .....
250152	13963	Pattern Wheel Shaft Bushing (right) .....
647E	13849	Pattern Wheel Shaft Bushing (right) Screw (2) .....
232600	13849	Pattern Wheel Shaft Collar with two 453c .....
453c	13849	Pattern Wheel Shaft Collar Set Screw .....
250154	13851	Rapid Feed Clutch Disengaging Lever (3) .....
253481	13935	Rapid Feed Clutch Disengaging Sleeve .....
250156	13851	Rapid Feed Clutch Driving Disc
1230c	13851	" " " " " Screw (4) .....
201897	13851	Rapid Feed Clutch Roller (3) ....
255095	13932	" " " " " Carrier with 624E .....
40025	13834	Rapid Feed Clutch Roller Carrier Position Pin .....
624E	13851	Rapid Feed Clutch Roller Carrier Set Screw .....
250153	13851	Rapid Feed Clutch Roller Retainer (3) .....
208E	13851	Rapid Feed Clutch Roller Retainer Screw (3) .....
255096	13936	Rapid Feed Clutch Roller Spring (3) .....
255097	13936	Rapid Feed Clutch Roller Spring Guide Pin (3) .....
250158	13851	Rapid Feed Crank Shaft .....
250159	13851	" " " " " Bushing (back) .....
250160	13851	Rapid Feed Crank Shaft Bushing (back) Oil Tube (lower) (brass)
250495	13851	Rapid Feed Crank Shaft Bushing (back) Oil Tube (upper) (brass)
250161	13851	Rapid Feed Crank Shaft Bushing (front) .....

No.	Plate	Name
436c	13851	Rapid Feed Crank Shaft Bushing Set Screw (2) .....
232600	13849	Rapid Feed Crank Shaft Collar with two 453c .....
453c	13849	Rapid Feed Crank Shaft Collar Set Screw .....
250452	13852	Rapid Feed Crank Shaft Gear with 458c .....
232719	13858	Rapid Feed Crank Shaft Gear Position Pin .....
458c	13962	Rapid Feed Crank Shaft Gear Set Screw .....
202244	—	Rapid Feed Crank Shaft Oil Packing (wick) (2) .....
250163	13852	Rapid Feed Driving Gear .....
250398	13854	" " " " Key .....
250164	13852	" " Gear Guard .....
641D	13811	" " " " Screw (2) .....
250534	13852	" " Intermediate Gear (bronze) .....
201447c	13962	Rapid Feed Intermediate Gear Screw Stud .....
1510E	13962	Rapid Feed Intermediate Gear Screw Stud Nut .....
250167	13852	Rapid Feed Intermediate Gear Screw Stud Nut Washer .....
250405	13964	Rapid Feed Intermediate Gear Screw Stud Washer .....
253536	13935	Rapid Feed Pawl Bell Crank with 202299 .....
11c	13864	Rapid Feed Pawl Bell Crank Hinge Screw .....
202299	—	Rapid Feed Pawl Bell Crank Oil Packing (wick) .....
250171	13964	Rapid Feed Pawl Bell Crank Slide Block Section (2) .....
250172	13964	Rapid Feed Pawl Guide .....
181D	13964	" " " " Screw (2) .....
350260c	13936	" " " " Hinge Screw .....
1655E	13936	" " " " Nut .....
252266	13935	" " Slide Bar .....
250174	13852	" " " " Bushing (left) .....
145E	13849	" " " " " " Screw (2) .....
250175	13852	Rapid Feed Slide Bar Bushing (right) .....
647E	13849	Rapid Feed Slide Bar Bushing (right) Screw (2) .....
252269	13936	Rapid Feed Slide Bar Collar with 448c .....

No.	Plate	Name
40025	13834	Rapid Feed Slide Bar Collar Position Pin .....
448c	13874	Rapid Feed Slide Bar Collar Set Screw .....
252267	13935	Rapid Feed Slide Bar Fork Connection with 889c .....
253538	13936	Rapid Feed Slide Bar Fork Connection Extension Plate .....
176D	13839	Rapid Feed Slide Bar Fork Connection Extension Plate Screw .....
200603E	13964	Rapid Feed Slide Bar Fork Connection Position Screw .....
201448c	13854	Rapid Feed Slide Bar Fork Connection Screw Stud .....
889c	13964	Rapid Feed Slide Bar Fork Connection Set Screw .....
252306	13935	Rapid Feed Slide Bar Lock .....
252271	13936	" " " " " " Block .....
232055	13816	" " " " " " Position Pin .....
704E	13964	Rapid Feed Slide Bar Lock Block Screw .....
350262E	13936	Rapid Feed Slide Bar Lock Hinge Screw .....
250409	13854	Rapid Feed Slide Bar Lock Spring .....
1241E	13891	" " " " " " Screw Eye .....
250194	13856	Rapid Feed Slide Bar Lock Trip .....
56c	13825	" " " " " " Hinge Screw .....
252273	13936	Rapid Feed Slide Bar Spring .....
350293E	13936	" " " " " " Cap Screw .....
252274	13936	Rapid Feed Slide Bar Spring Washer .....
250180	13854	Rapid Feed Starting Latch .....
199c	13901	" " " " " " Cap Screw .....
201446c	13856	" " " " " " Hinge Screw Stud .....
250181	13854	Rapid Feed Starting Lever with 1454E .....
255053	13935	Rapid Feed Starting Lever (operated by stop motion) with 704c, 1454E, 203213 and 255054 .....
255064	—	Rapid Feed Starting Lever Latch .....
350256c	13964	" " " " " " Hinge Screw .....
255092	13964	Rapid Feed Starting Lever Latch Spring .....

No.	Plate	Name
253512	13964	Rapid Feed Starting Lever Latch Stop Washer .....
193D	13862	Rapid Feed Starting Lever Latch Stop Washer Screw .....
1330c	13854	Rapid Feed Starting Lever Operat- ing Screw Stud .....
201445E	13854	Rapid Feed Starting Lever Posi- tion Screw .....
1454E	13883	Rapid Feed Starting Lever Set Screw .....
250185	13960	Rapid Feed Starting Lever Shaft
250186	13854	" " " " "
		Collar (left) with 200113F .....
204197	13854	Rapid Feed Starting Lever Shaft Collar (right) with 200113F .....
200113F	13854	Rapid Feed Starting Lever Shaft Collar Set Screw .....
250409	13854	Rapid Feed Starting Lever Spring
217E	13864	" " " " "
		Screw .....
1241E	13891	Rapid Feed Starting Lever Spring Screw Eye .....
255054	13936	Rapid Feed Starting Lever Stud ..
704c	13964	" " " " " Set Screw .....
203213	13936	Rapid Feed Starting Lever Stud Spring .....
253537	13935	Rapid Feed Starting Pawl .....
250188	13854	" " " " Spring
201454E	13854	" " " " "
		Screw Eye .....
250189	13960	Rapid Feed Starting Trip Lever with 1454E .....
201445E	13854	Rapid Feed Starting Trip Lever Position Screw .....
201437c	13854	Rapid Feed Starting Trip Lever Screw Stud .....
1454E	13883	Rapid Feed Starting Trip Lever Set Screw .....
251611	---	Rapid Feed Stop Mechanism com- plete, Nos. 704E, 1241E, 1655E, 40025, 232055, 250409, 252266, 252269, 252271, 252273, 252274, 252306, 253481, 253536 to 253538, 350260c, 350262E, 350293E and two 176D .....
251168	13856	Rapid Feed Tripping Pawl .....
350109c	13856	" " " " Hinge Screw .....

No.	Plate	Name
251169	13856	Rapid Feed Tripping Pawl Lever
250432	13856	" " " " "
		Bracket .....
232154	13817	Rapid Feed Tripping Pawl Lever Bracket Position Pin (2) .....
350110c	13856	Rapid Feed Tripping Pawl Lever Bracket Screw .....
14017	13891	Rapid Feed Tripping Pawl Lever Bracket Screw Washer .....
72c	13856	Rapid Feed Tripping Pawl Lever Hinge Screw .....
232083	13937	Rapid Feed Tripping Pawl Spring
1241E	13891	" " " " "
		Screw Eye .....
1242E	13964	Rapid Feed Tripping Pawl Spring Screw Stud .....
250195	13960	Rapid Feed Worm with 453c .....
25362	---	" " " Ball .....
250196	13964	" " " " Bearing Cup
225007	13856	" " " " Retainer with eight 25362 .....
232244	13811	Rapid Feed Worm Position Pin ..
453c	13849	" " " Set Screw .....
250197	13960	" " " Wheel .....
250198	---	" " " " Collar with two 453c .....
453c	13849	Rapid Feed Worm Wheel Collar Set Screw .....
202244	---	Rapid Feed Worm Wheel Oil Pack- ing (wick) .....
250199	13860	Starting Bell Crank .....
3c	13860	" " " Hinge Screw ..
250200	13860	" Latch .....
648D	13860	" " Hinge Screw .....
250201	13860	" " Spring .....
203E	13849	" " " Screw .....
250202	13860	" Rod .....
250203	13860	" " Block with 203E .....
2273	13956	" " " Position Pin .....
203E	13849	" " " Set Screw .....
40043	13860	" " Collar with 209E (2) ..
209E	13825	" " " Set Screw .....
250204	13860	" " Lock .....
946D	13860	" " " Hinge Screw .....
250205	13860	" " " Spring .....
213D	13860	" " " " Screw .....
250206	13860	" " " " Washer
250423	13964	" " Spring
201160E	13860	" " " Screw Eye .....
250207	13857	" " Safety Lock .....



No.	Plate	Name
38D	13857	Starting Rod Safety Lock Hinge Screw .....
226467	13857	Starting Rod Safety Lock Hinge Screw Washer .....
250210	---	Stitch Regulating Gear, 22 teeth ..
250211	---	" " " 26 teeth ..
250212	13899	" " " 28 teeth ..
250598	---	" " " 30 teeth ..
250213	13899	" " " 33 teeth ..
		Note. No. 250213 is furnished with this machine unless another Stitch Regulating Gear is specified on order.
250214	13899	Stitch Regulating Gear, 34 teeth ..
250415	---	" " " 38 teeth ..
250478	---	" " " 42 teeth ..
201660c	13899	" " " Lock Nut..
250215	13861	" Rotating Lever (lower) with 458c .....
201442E	13862	Stitch Rotating Lever (lower) Position Screw .....
201871	13862	Stitch Rotating Lever (lower) Roller .....
350066c	13862	Stitch Rotating Lever (lower) Roller Screw Stud .....
201666E	13862	Stitch Rotating Lever (lower) Roller Screw Stud Nut .....
458c	13962	Stitch Rotating Lever (lower) Set Screw .....
232591	13861	Stitch Rotating Lever (upper) with 448c .....
40025	13834	Stitch Rotating Lever (upper) Position Pin .....
448c	13874	Stitch Rotating Lever (upper) Set Screw .....
232807	13862	Stitch Rotating Lever Connection (front section) (lower) .....
232593	13862	Stitch Rotating Lever Connection (front section) (upper) .....
232808	13862	Stitch Rotating Lever Connection (rear section) (lower) .....
232592	13862	Stitch Rotating Lever Connection (rear section) (upper) .....
58F	13862	Stitch Rotating Lever Connection Hinge Screw (4) .....
172D	13862	Stitch Rotating Lever Connection Screw (lower) .....
193D	13862	Stitch Rotating Lever Connection Screw (upper) .....
39504	13862	Stitch Rotating Lever Connection Screw Washer (lower) .....

No.	Plate	Name
232717	13862	Stitch Rotating Lever Connection Screw Washer (upper) .....
232764	---	Stitch Rotating Lever Connection (lower) complete, Nos. 232807, 232808, two each 172D and 39504
250400	---	Stitch Rotating Lever Connection (upper) complete, Nos. 232592, 232593, 232717 and two 193D .....
250394	13861	Stitch Rotating Lever Rock Shaft..
250216	13861	" " " Sector (lower) .....
232597	13861	" " " " Bracket
690D	13862	" " " " " Screw .....
226163	13862	Stitch Rotating Sector (lower) Bracket Screw Washer .....
350087c	13862	Stitch Rotating Sector (lower) Hinge Screw .....
253646	13960	Stitch Rotating Sector (upper)
232599	13861	" " " " Bracket .....
201395D	13862	Stitch Rotating Sector (upper) Bracket Screw (2) .....
251026	13933	Stop Lever with 200352c .....
232262	13863	" " " Bracket .....
350263E	13937	" " " Screw .....
250218	13863	" " " Crank with 453c .....
40025	13834	" " " Position Pin .....
453c	13849	" " " Set Screw .....
232263	13864	" " " Friction Pad (rawhide)
200110D	13811	" " " " Screw (2)
255523	13964	" " " Interlocking Slide .....
201084c	13864	" " " " Adjusting Screw .....
201628E	13864	Stop Lever Interlocking Slide Adjusting Screw Nut .....
1178D	13864	Stop Lever Interlocking Slide Screw
232265	13864	" " " " " Washer .....
250416	13864	Stop Lever Interlocking Slide Spring .....
250219	13863	Stop Lever Link .....
250220	13863	" " " " Connection .....
250221	13864	" " " " " Locking Pin .....
250222	13864	Stop Lever Link Connection Locking Pin Spring .....
217D	13864	Stop Lever Link Connection Locking Pin Spring Screw (2) .....
350225D	13937	Stop Lever Link Connection Screw (back) .....

No.	Plate	Name
807D	13864	Stop Lever Link Connection Screw (front) .....
64c	13901	Stop Lever Link Hinge Screw ....
250223	13863	" " Operating Lever .....
11c	13864	" " " " Hinge Screw .....
250224	13864	Stop Lever Operating Plate .....
157E	13864	" " " " Screw .....
39541	13864	" " " " " " Washer .....
40025	13834	Stop Lever Position Pin .....
200352c	13864	" " Set Screw .....
250225	13863	" " Shaft .....
250404	13864	" " Spring .....
201110D	13864	" " " Screw .....
253647	13965	Thread and Cord Cutting Blade (movable) .....
253648	13965	Thread and Cord Cutting Blade (stationary) .....
175E	13849	Thread and Cord Cutting Blade (stationary) Screw .....
250444	13849	Thread and Cord Cutting Blade (stationary) Screw Washer .....
253649	13965	Thread and Cord Cutting Blade Bracket with 232348 .....
253693	13965	Thread and Cord Cutting Blade Bracket Adjusting Plate .....
232310	13959	Thread and Cord Cutting Blade Bracket Adjusting Plate Position Pin .....
190D	13900	Thread and Cord Cutting Blade Bracket Adjusting Plate Screw..
7071	13856	Thread and Cord Cutting Blade Bracket Adjusting Plate Screw Washer .....
350267E	—	Thread and Cord Cutting Blade Bracket Screw .....
208636	13965	Thread and Cord Cutting Blade Bracket Screw Washer .....
253650	13965	Thread and Cord Cutting Blade Cam Plate .....
253651	13965	Thread and Cord Cutting Blade Cam Plate Bracket .....
161D	13817	Thread and Cord Cutting Blade Cam Plate Bracket Screw .....
203E	13849	Thread and Cord Cutting Blade Cam Plate Screw (2) .....
253652	13965	Thread and Cord Cutting Blade Guard .....

No.	Plate	Name
200177D	13965	Thread and Cord Cutting Blade Guard Screw .....
350214E	13965	Thread and Cord Cutting Blade Hinge Screw .....
253653	13965	Thread and Cord Cutting Blade Spring .....
253654	13963	Thread and Cord Cutting Driving Lever with 362E and 1960 .....
253655	13963	Thread and Cord Cutting Driving Lever Bracket .....
135D	13965	Thread and Cord Cutting Driving Lever Bracket Screw (2) .....
*253656	—	Thread and Cord Cutting Driving Lever Cam Groove Protector (inside) .....
*253657	—	Thread and Cord Cutting Driving Lever Cam Groove Protector (outside) .....
253658	13965	Thread and Cord Cutting Driving Lever Cam Groove Protector Position Pin .....
1454E	13883	Thread and Cord Cutting Driving Lever Cam Groove Protector Screw .....
253659	13965	Thread and Cord Cutting Driving Lever Hinge Stud .....
1960	13965	Thread and Cord Cutting Driving Lever Roller and Stud with 1520J
1520J	13856	Thread and Cord Cutting Driving Lever Roller and Stud Nut ....
362E	13965	Thread and Cord Cutting Driving Lever Set Screw .....
253660	13960	Thread and Cord Cutting Lever with 190D, 7071 and 253693 .....
253661	13965	Thread and Cord Cutting Lever Connection .....
*38444	—	Thread and Cord Cutting Lever Connection End Bearing (lower)
38446	13847	Thread and Cord Cutting Lever Connection End Bearing 38444 with 42524, 50016c and two 175E
50016c	13847	Thread and Cord Cutting Lever Connection End Bearing (lower) Ball Screw Stud .....
1636E	13847	Thread and Cord Cutting Lever Connection End Bearing (lower) Ball Screw Stud Nut .....
*42524	—	Thread and Cord Cutting Lever Connection End Bearing (lower) Cap .....

No.	Plate	Name
175E	13849	Thread and Cord Cutting Lever Connection End Bearing (lower) Cap Screw .....
1698C	13847	Thread and Cord Cutting Lever Connection End Bearing (lower) Check Nut .....
*38443	---	Thread and Cord Cutting Lever Connection End Bearing (upper)
253662	13967	Thread and Cord Cutting Lever Connection End Bearing 38443 with 777c, 42525 and two 175E ..
777C	13965	Thread and Cord Cutting Lever Connection End Bearing (upper) Ball Screw .....
1636E	13847	Thread and Cord Cutting Lever Connection End Bearing (upper) Ball Screw Nut .....
*42525	----	Thread and Cord Cutting Lever Connection End Bearing (upper) Cap .....
175E	13849	Thread and Cord Cutting Lever Connection End Bearing (upper) Cap Screw .....
1697C	13847	Thread and Cord Cutting Lever Connection End Bearing (upper) Check Nut .....
50029C	13965	Thread and Cord Cutting Lever Hinge Screw .....
253663	13967	Throat Plate .....
250447	13902	" " Adjusting Block ....
176D	13839	" " Screw .....
250560	13937	" " " Washer .....
250590	13963	Vertical Shaft with two each 204648 and 250589 .....
255522	13935	Vertical Shaft Bevel Gear (lower) with two 453c .....
232719	13858	Vertical Shaft Bevel Gear (lower) Position Pin .....
250227	13858	Vertical Shaft Bevel Gear (upper) (order Position Screws or Set Screws as required) .....
40025	13834	Vertical Shaft Bevel Gear Position Pin .....
350223E	13956	Vertical Shaft Bevel Gear Position Screw .....
453C	13849	Vertical Shaft Bevel Gear Set Screw
250396	13812	" " Bushing (lower) ....
200100E	13811	" " " " Screw (2) .....

No.	Plate	Name
232710	13812	Vertical Shaft Bushing (upper) ..
575C	13811	" " " " Set Screw .....
253916	13963	Work Clamp Arm (left) .....
253917	13963	" " " (right) .....
250525	13963	" " " Bracket (left)
255057	---	" " " " " " 250525 with 250268, 250551, 250552, 253666 and three 2269 .....
250526	13963	Work Clamp Arm Bracket (right)
255058	----	" " " " " " 250526 with 250266, 250528, 250529, 253666 and three 2269 .....
201129D	13937	Work Clamp Arm Bracket Screw (back) .....
253666	13937	Work Clamp Arm Cam with 209F ..
2269	13895	" " " " Position Pin
209F	13825	" " " " Set Screw.
250552	13937	" " " " Shaft (left)
250528	13937	" " " " " (right)
201237F	13937	" " " " Stop Screw
201537H	13937	" " " " " " Nut .....
252184	13937	Work Clamp Arm Hinge Block
350123E	13937	" " " " " " Hinge Screw .....
200051E	13883	Work Clamp Arm Screw .....
13218	13937	" " " Spring .....
350136E	13937	" " " " Screw ....
253928	13966	" " Base (left) with 232304
253703	----	" " " 253928 with 194c, 127c, 662D, 792D, 991E, 1443E, 1550r, 7071, 10249, 13218, 200051E, 200097c, 200177D, 201237E, 201537H, 228026, 250236, 250241, 250418, 250419, 251518, 251519, 252184, 252202, 253652, 253670, 253675, 253677, 253678, 253916, 255003, 255016, 255057, 350080D, 350136E, two each 207E, 201129D, 350123E and nine 934H .....
250236	13966	Work Clamp Base (left) Guard
934H	13967	" " " " " " Screw .....
253929	13966	Work Clamp Base (right) with 232304 .....



No.	Plate	Name
250251	13825	Work Clamp Carrier Side Throw Lever Lock Pin Spring .....
191c	13825	Work Clamp Carrier Side Throw Lever Lock Pin Spring Screw (2)
201873	13825	Work Clamp Carrier Side Throw Lever Roller .....
201937	13825	Work Clamp Carrier Side Throw Lever Roller 201873 with 201144e and 232686 .....
201144E	13825	Work Clamp Carrier Side Throw Lever Roller Cap Screw .....
232686	13893	Work Clamp Carrier Side Throw Lever Roller Stud .....
201374E	13893	Work Clamp Carrier Side Throw Lever Roller Stud Cap Screw ..
232321	13893	Work Clamp Carrier Side Throw Lever Slide Block .....
253674	13967	Work Clamp Carrier Side Throw Lever Slide Block Guide .....
231c	13893	Work Clamp Carrier Side Throw Lever Slide Block Guide Screw (2) .....
201097c	13893	Work Clamp Carrier Side Throw Lever Slide Block Screw Stud ..
201530E	13893	Work Clamp Carrier Side Throw Lever Slide Block Screw Stud Nut .....
250253	13966	Work Clamp Carrier Slide (left) with 200119b .....
250254	13966	Work Clamp Carrier Slide (right) with 200119b .....
255082	13938	Work Clamp Carrier Slide Adjusting Bracket with 255061 and two 208b .....
236D	13840	Work Clamp Carrier Slide Adjusting Bracket Screw (2) .....
208D	13851	Work Clamp Carrier Slide Adjusting Screw .....
255061	13938	Work Clamp Carrier Slide Adjusting Screw Locking Plate .....
255509	13938	Work Clamp Carrier Slide Gib (left, back) .....
253683	13968	Work Clamp Carrier Slide Gib (left, front) .....
255511	13938	Work Clamp Carrier Slide Gib (right, back) .....
255512	13938	Work Clamp Carrier Slide Gib (right, front) .....
1094E	13883	Work Clamp Carrier Slide Gib Screw .....

No.	Plate	Name
250255	13966	Work Clamp Carrier Slide Stay Plate .....
250597	13938	Work Clamp Carrier Slide Stay Plate Position Pin (2) .....
231c	13893	Work Clamp Carrier Slide Stay Plate Screw (5) .....
253675	13967	Work Clamp Check (left) .....
253676	13967	" " " (right) .....
253677	13967	" " " Hinge Pin .....
253678	13967	" " " Spring .....
662D	13816	" " " " Screw ...
252194	13823	" " Closing Lever .....
250266	13968	" " " " (hand) with 209F .....
2269	13895	Work Clamp Closing Lever (hand) Position Pin .....
209F	13825	Work Clamp Closing Lever (hand) Set Screw .....
252196	13823	Work Clamp Closing Lever Adjusting Arm with 201531n, 201948 and 228026 .....
1178E	13864	Work Clamp Closing Lever Adjusting Arm Screw .....
14017	13891	Work Clamp Closing Lever Adjusting Arm Screw Washer .....
255021	13935	Work Clamp Closing Lever Cam Groove Protector .....
210750	13968	Work Clamp Closing Lever Cam Groove Protector Position Pin ..
172D	13862	Work Clamp Closing Lever Cam Groove Protector Screw .....
255022	13938	Work Clamp Closing Lever Cam Safety Latch .....
350198F	13938	Work Clamp Closing Lever Cam Safety Latch Hinge Screw .....
255023	13938	Work Clamp Closing Lever Cam Safety Latch Spring .....
250261	13891	Work Clamp Closing Lever Disengaging Block .....
183c	13840	Work Clamp Closing Lever Disengaging Block Screw .....
250406	13891	Work Clamp Closing Lever Disengaging Block Shim (.005 in. thick)
250407	13891	Work Clamp Closing Lever Disengaging Block Shim (.010 in. thick)
255127	-----	Work Clamp Closing Lever Engaging Stud .....
250263	13823	Work Clamp Closing Lever Engaging Stud Latch .....



No.	Plate	Name
250277	13969	Work Clamp Spreader (right) ....
201463D	13969	" " " " Screw
991E	13891	" " " Adjusting Screw .....
252202	13969	Work Clamp Spreader Adjusting Screw Bracket .....
207F	13895	Work Clamp Spreader Adjusting Screw Bracket Screw .....
1550J	13891	Work Clamp Spreader Adjusting Screw Nut .....
250279	13966	Work Clamp Spreader Base Plate
50058D	13969	" " " " " Screw (2) .....
250280	13969	Work Clamp Spreader Connection
201453C	13969	" " " " " Hinge Screw .....
250281	13969	Work Clamp Spreader Connection Link (left) .....
250282	13969	Work Clamp Spreader Connection Link (right) .....
201452E	13969	Work Clamp Spreader Connection Link Hinge Screw (2) .....
250283	13969	Work Clamp Spreader Operating Fork Lever .....
212D	13825	Work Clamp Spreader Operating Fork Lever Cap Screw .....
350138E	13969	Work Clamp Spreader Operating Fork Lever Hinge Screw .....
255081	13969	Work Clamp Spreader Operating Fork Lever Stop Plate .....
203E	13849	Work Clamp Spreader Operating Fork Lever Stop Plate Screw ..
250285	13969	Work Clamp Spreader Operating Pawl .....
252512	13969	Work Clamp Spreader Operating Pawl Adjusting Block .....
176D	13839	Work Clamp Spreader Operating Pawl Adjusting Block Screw ....
7071	13856	Work Clamp Spreader Operating Pawl Adjusting Block Screw Washer .....
132E	13969	Work Clamp Spreader Operating Pawl Adjusting Screw .....
201669E	13969	Work Clamp Spreader Operating Pawl Adjusting Screw Nut .....
741C	13847	Work Clamp Spreader Operating Pawl Hinge Screw .....
250286	13969	Work Clamp Spreader Operating Pawl Spring .....

No.	Plate	Name
201314C	13969	Work Clamp Spreader Operating Pawl Stop Screw .....
252513	-----	Work Clamp Spreader Operating Pawl complete, Nos. 176D, 7071, 250285 and 252512 .....
201314C	13969	Work Clamp Spreader Screw Stud (2) .....
250287		Work Clamp Spreader Releaser
203C	13849	" " " " " Screw .....
253525	13969	Work Clamp Spreader Retaining Stop Plate .....
237F	13860	Work Clamp Spreader Stop Plate Screw .....
255003	13969	Work Clamp Spring .....
255016	13969	" " " Wear Plate ...
792D	13936	" " " " " Screw

## MACHINE No. 99w88

### CUTS AFTER STITCHING

Automatic Eyelet End Buttonhole Machine, for  $\frac{1}{4}$  or  $\frac{3}{8}$   
in. buttonholes in overalls, raincoats, etc.

Same as Machine No. 99w86 with the following  
exceptions:

No.	Plate	Name
254002	13956	Buttonhole Cutting Block (steel), $\frac{3}{8}$ in. (taper bar), in place of 253697 .....
254004	13956	Buttonhole Cutting Knife (.126 x .180 eye), in place of 253699 ...
254005	13957	Feed Wheel with three 232382, in place of 252601 .....
254006	13958	Needle Thread Pull-off Bracket with 253702 and two 453c, in place of 253641 .....
254027	13962	Needle Thread Tension Releasing Block with 200E, in place of 255329
254025	—	Pattern Wheel, for $\frac{3}{8}$ in. Taper Bar (large eye) Buttonhole, bar ad- justable from $\frac{1}{4}$ to $\frac{1}{2}$ in., in place of 253731 .....
255307	—	Pattern Wheel Ring 250617 with 252662, 252663, two each 211E and 250444, in place of 253692 .....
252662	13964	Pattern Wheel Ring Adjusting Seg- ment (curved rise), in place of 253690 .....
254026	—	Pattern Wheel, for $\frac{3}{8}$ in. Taper Bar (large eye) Buttonhole, bar ad- justable from $\frac{1}{4}$ to $\frac{1}{2}$ in., complete, Nos. 254025, 255307, two each 203E, 250372 and three 391D, in place of 253732 .....

No.	Plate	Name
254015	—	Work Clamp Base 253928 with 194c, 217E, 662D, 792D, 991E, 1443E, 1550J, 7071, 10249, 13218, 200051E, 200097c, 200177D, 201237E, 201537H, 228026, 250236, 250241, 250418, 250419, 251518, 251519, 252184, 252202, 253652, 253677, 253678, 253916, 254017, 254020, 255003, 255016, 255057, 350080D, 350136E, two each 207F, 201129D, 350123E and nine 934H, in place of 253703
254016	—	Work Clamp Base 253929 with 662D, 792D, 991E, 1443E, 1550J, 13218, 200051E, 201237E, 201537H, 232270 to 232272, 250238, 250242, 250275, 252184, 252202, 253677, 253678, 253917, 254018, 254021, 255003, 255016, 255058, 350136E, two each 200186H, 201129D, 350123E, four 207F and nine 934H, in place of 253704 .....
254017	13966	Work Clamp Base Clamping Plate (left), in place of 253670 .....
254018	13966	Work Clamp Base Clamping Plate (right), in place of 253671 .....
254020	13967	Work Clamp Check (left), in place of 253675 .....
254021	13967	Work Clamp Check (right), in place of 253676 .....



## ACCESSORIES

FOR MACHINE No. 99w86

No.	Plate	Name
253697	13956	Buttonhole Cutting Block (steel), 5/8 in. taper bar .....
253516	---	Buttonhole Cutting Knife (100 x .157 eye) .....
232486	13865	Threader Wire (large) .....
250412	13865	" " (small) .....
255513	13866	Tweezers .....
142 x 5	---	Needles, six, size 18 .....
250004	13865	Bed Cushion (leather) (back) ....
250006	13865	" " " (front) .....
250007	13865	" " " (rawhide) (inside) ....
250008	13865	" " " (outside) .....
158E	13909	" " Screw .....
250018	13865	" Support (left) with 250004, 250006, 250008, two 250007 and six 158E .....
250019	13865	Bed Support (right) with 250004, 250006, 250008, two 250007 and six 158E .....
250288	---	Drip Pan .....
250408	13865	Machine Rest (high) with 232982 and two wood screws 1 in., No. 13
232982	---	Machine Rest Cushion (leather) ..
120346	13865	Oiler (copper plated) with 120347 ..
120347	13865	" Spout (9 in. long) .....
11831	13866	Screw Driver, 5 in. blade (machine, large) .....
*225484	---	Screw Driver Blade .....
*250521	---	" " " .....
*225483	---	" " Handle .....
*225485	---	" " " .....
225498	13866	Screw Driver complete (7 1/2 in. long), Nos. 225484 and 225485 ..
250522	13866	Screw Driver complete (for needle set screw), Nos. 225483 and 250521
253710	13971	Work Position Gauge (left) .....
253711	13971	" " " (right) .....
1239D	13971	" " " Screw (2) .....
250289	13866	Wrench, for 350111 .....
250402	13865	" " 201442 and 201445 .....
232935	13866	" " 201658, 201659 and 201670 .....

No.	Plate	Name
8909	13866	Wrench, for 201628 and 201660 .....
10875	13866	" " 201524 .....
23535	13866	" " 1697 and 1698 .....
25200	13866	" " 1528 and 201643 .....
42850	13866	" " 1550 .....
232900	13866	" " 201362 and 201668 .....
250212	13899	Stitch Regulating Gear, 28 teeth ..
250543	13970	" " " Holder .....
		Wood Screws 1 1/2 in., No. 12 (1) ..

### THREAD UNWINDER

232417	13970	Spool Pin .....
225375	13970	" " (wood) .....
232895	13970	" " Arm with 759E .....
232896	13970	" " " Bracket with two 448c .....
448c	13874	Spool Pin Arm Bracket Set Screw
448c	13874	" " " Set Screw .....
250424	13970	" " Cap .....
200159f	13971	" " " Screw .....
759f	13971	" " Thumb Set Screw .....
225389	13944	" Rest (for one spool) with 201018c .....
225395	13944	Spool Rest (for two spools) with 201018c .....
232987	13944	Spool Rest Cushion (felt) .....
250453	13944	" " Rod (lower) .....
225388	13944	" " " (upper) .....
250454	13970	" " " Coupling with two 456c .....
456c	13971	Spool Rest Rod Coupling Set Screw
200383c	13871	" " " Set Screw .....
201018c	13971	" " Set Screw .....
202490	13944	" Stand with 200383c .....
225390	13970	Thread Cone Holder .....
250472	13970	" Cop Holder .....
225391	13970	" Guide .....
201696j	13971	" " Lock Nut .....
350192j	13970	" " Screw Stud .....
225393	---	" " " Washer ..
200164h	13971	" " Stud Set Screw .....
225376		Thread Unwinder complete, Nos. 200164h, 201696j, 202490, 225388, 225389, 225393, 225395, 250453, 250454, 250472, 350192j, three each 200159f, 225375, 225390, 232417, 232895, 232896, 232987, 250424, four 225391 and three wood screws 3/4 in., No. 12 .....

No.	Plate	Name
228598	—	Counter Shaft Hanger complete, for Singer Safety Power Table, Nos. 50294e, 200002e, 240833, 228565 to 228567, 228590 to 228593, 228597, 228601, 228602, 228632, two 51046e and three 41125 .....
228573	13870	Driving Attachment Belt Guard with 228607 .....
228607	13926	Driving Attachment Belt Guard Drain Valve .....
50075j	13871	Driving Attachment Belt Guard Thumb Screw .....
228574	13870	Driving Attachment Bracket with 11119, 228575 and four 350028c ..
228575	13871	Driving Attachment Bracket Oil Cup .....
11119	13871	Driving Attachment Bracket Oil Tube with 52045 .....
52045	—	Driving Attachment Bracket Oil Tube Packing (cotton) .....
51046e	13971	Driving Attachment Bracket Screw
41125	13871	" " " " Washer .....
228624	13926	Driving Pulley, 6 in. diam., with 200374e and 200396c .....
200396c	13971	Driving Pulley Position Screw ....
200374e	13816	" " Set Screw .....
228625	13926	" " Shaft .....
228571	13869	" " " Bushing with 202260 .....
350028c	13871	Driving Pulley Shaft Bushing Set Screw .....
228626	13926	Driving Pulley Shaft Collar with two 200378c .....
200378c	13971	Driving Pulley Shaft Collar Set Screw .....
202260	—	Driving Pulley Shaft Bushing Oil Packing (wick) .....
228627	—	Driving Attachment complete, Nos. 50075j, 228573, 228574, 228579, 228580, 228618 to 228626, two each 2117, 228571, three each 41125, 51046e, 200050c and 214179 to 214181 .....
228578	—	Driving Attachment and Idler complete, Nos. 228587 and 228627 ...
234342	—	Front Plank Extension (back) with two wood screws 1½ in., No. 10 (for flat table) .....

No.	Plate	Name
234343	—	Front Plank Extension (back) with three wood screws 1½ in., No. 10 and six 1½ in. wire nails, for Singer Safety Power Table (trough) .....
234344	—	Front Plank Extension (front) with two wood screws 2¼ in., No. 12 and three wood screws 1¼ in., No. 12 .....
234349	—	Front Plank Extension (back) with four wood screws 1½ in., No. 10, for Singer Universal Safety Power Table (flat) .....
234350	—	Front Plank Extension (back) with six wood screws 1½ in., No. 10, for Singer Universal Safety Power Table (trough) .....
228581	13870	Idler Pulley .....
228643	13870	" " Belt Guard with 200526c
200526c	13871	" " " " Set Screw ..
228644	13870	" " Bracket with 200526c ..
200019e	13871	" " " Screw .....
228584	13869	" " Shaft with 228586 ....
228602	13871	" " " Oil Cup .....
228585	—	" " " " Wick .....
228586	13869	" " " " " Wire with 228585 .....
200526c	13871	Idler Pulley Shaft Set Screw ....
228587	—	Idler complete, Nos. 228584, 228602, 228644, two each 228581, 228643 and three 200019e .....
228621	13926	Machine Driving Pulley (loose), 3½ in. diameter .....
228622	13926	Machine Driving Pulley Clutch ....
214179	13971	" " " " Roller
214181	13971	" " " " " " Spring .....
214180	13971	Machine Driving Pulley Clutch Roller Spring Plunger .....
200050c	13971	Machine Driving Pulley Clutch Screw .....
228623	13926	Machine Driving Pulley Collar with two 200364c .....
200364c	13883	Machine Driving Pulley Collar Set Screw .....
228604	—	Motor Base with four each 41125 and 50294e .....

No.	Plate	Name
50294E	13871	Motor Base Screw .....
41125	13871	" " " Washer .....
27068	---	Shaft Pulley (sectional, grooved), 8 in. diam., $1\frac{3}{8}$ in. bore, with two 597c .....
41228	---	Shaft Pulley (sectional, grooved), $5\frac{1}{2}$ in. diam., $1\frac{1}{8}$ in. bore, with two 50399c .....
597c	13971	Shaft Pulley Clamping Screw ....
50399E	13971	Shaft Pulley Screw .....
126865	15413	Table Belt Guide Bracket with 795c
50285R	15413	" " " " Bolt .....
126841	15413	" " " " " Clamp- ing Plate .....
126846	15413	Table Belt Guide Bracket Bolt Washer .....
126750	15413	Table Belt Guide Pulley with 126752
126868	15413	" " " " Shaft .....
126752	15413	" " " " " Bushing
126869	15413	" " " " " Collar with 1448c .....
1448c	15413	Table Belt Guide Pulley Shaft Col- lar Set Screw .....
795c	15413	Table Belt Guide Pulley Shaft Set Screw .....
126866	15413	Table Belt Guide Pulley Shaft Sup- port Bracket with three wood screws $\frac{3}{4}$ in., No. 9, R.H.O. and A.
126870	---	Table Belt Guide complete, Nos. 50285R, 126841, 126846, 126865, 126866, 126868, two each 126750 and 126869 .....
126715	---	Transmitter Pulley (sectional, grooved), sheet metal, $5\frac{1}{2}$ in. diameter .....
228599	---	Driving Equipment complete, for Old Style Power Table (flat) and Singer Universal Power Table (flat), Nos. 27068, 228578, 228596, 228628, 228631, 234342, 234344 and blue print template .....
228600	---	Driving Equipment complete, for Singer Safety Power Table (flat), Nos. 41228, 228578, 228598, 228628, 228630, 234342, 234344 and blue print template .....

No.	Plate	Name
228605	---	Driving Equipment complete, for Individual Motor Table, Nos. 228627 to 228629 .....
228606	---	Driving Equipment complete, for Singer Safety Power Table (trough), Nos. 41228, 228578, 228598, 228628, 228630, 234343, 234344 and blue print template..
228609	---	Driving Equipment complete, for Bridgeport Old Style Power Table (trough) and Singer Universal Power Table (trough), Nos. 27068, 228578, 228596, 228608, 228628, 228631, 234344 and blue print template .....
228611	---	Driving Equipment complete, for E'port Old Style Power Table (trough), Nos. 27068, 228578, 228596, 228610, 228628, 228631, 234344 and blue print template..
228612	---	Driving Equipment complete, for use in connection with Electric Transmitter Motor on Power Table (flat), Nos. 228627 to 228629, 234344 and blue print template .....
228613	---	Driving Equipment complete, for use in connection with Electric Transmitter Motor on Power Table (E'port trough), Nos. 228610, 228627 to 228629, 234344 and blue print template .....
228645	---	Driving Equipment complete, for Singer Universal Safety Power Table (flat), Nos. 126715, 126870, 228627, 228628, 228630, 234349 and blue print template .....
228646	---	Driving Equipment complete, for Singer Universal Safety Power Table (trough), Nos. 126715, 126870, 228627, 228628, 228630, 234350 and blue print template ..

## FOR MACHINE No. 99w88

Same as for No. 99w86 with the following exceptions:

No.	Plate	Name
254002	13956	Buttonhole Cutting Block (steel), 3/4 in. (taper bar), in place of 253697 .....
254004		Buttonhole Cutting Knife (.126 x .180 eye), in place of 253516 .....
		(253710, 253711 Gauges and 12390 Gauge Screw, not used)

## BUTTONHOLE CUTTING BLOCKS

## FOR MACHINE No. 99w86

No.	Plate	Name
253697	13956	Buttonhole Cutting Block (steel), 3/4 in. (taper bar) .....
253698	13956	Buttonhole Cutting Block (steel), 7/8 in. (taper bar) .....

## FOR MACHINE No. 99w88

254001		Buttonhole Cutting Block (steel), 3/4 in. (taper bar) .....
254002	13956	Buttonhole Cutting Block (steel), 3/4 in. (taper bar) .....

## BUTTONHOLE CUTTING KNIVES

## FOR MACHINE No. 99w86

253516		Buttonhole Cutting Knife (.100 x .157 eye) .....
253699	13956	Buttonhole Cutting Knife (.126 x .180 eye) .....

## FOR MACHINE No. 99w88

254004	13956	Buttonhole Cutting Knife (.126 x .180 eye) .....
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## PATTERN WHEELS

FOR MACHINE No. 99w86

For Making EYELET END Buttonholes with  
MEDIUM EYE and TAPER BAR,  
without cutting space

No.	Plate	Name
253732	—	Pattern Wheel, $\frac{5}{8}$ in., complete, bar adjustable from $\frac{1}{4}$ to $\frac{3}{4}$ in., Nos. 253692, 253731, two each 203E, 250372 and three 391D .....

For Making EYELET END Buttonholes with  
LARGE EYE and TAPER BAR,  
without cutting space

253644	—	Pattern Wheel, $\frac{5}{8}$ in., complete, bar adjustable from $\frac{1}{4}$ to $\frac{3}{4}$ in., Nos. 253444, 253643, 253692, two each 175E, 203E, 250372 and three 391D .....
253687	—	Pattern Wheel, $\frac{3}{4}$ in., complete, bar adjustable from $\frac{1}{4}$ to $\frac{1}{2}$ in., Nos. 253444, 253686, 253692, two each 175E, 203E, 250372 and three 391D .....

For Making EYELET END Buttonholes with  
LARGE EYE and TAPER BAR,  
with .025 in. cutting space

253707	—	Pattern Wheel, $\frac{5}{8}$ in., complete, bar adjustable from $\frac{1}{4}$ to $\frac{3}{4}$ in., Nos. 253692, 253706, two each 203E, 250372 and three 391D .....
253709	—	Pattern Wheel, $\frac{3}{4}$ in., complete, bar adjustable from $\frac{1}{4}$ to $\frac{1}{2}$ in., Nos. 253692, 253708, two each 203E, 250372 and three 391D .....
253731	—	Pattern Wheel, for $\frac{5}{8}$ in. Taper Bar (medium eye) Buttonhole, bar adjustable from $\frac{1}{4}$ to $\frac{3}{4}$ in., for 253732 .....

No.	Plate	Name
253643	—	Pattern Wheel, for $\frac{5}{8}$ in. Taper Bar (large eye) Buttonhole, bar adjustable from $\frac{1}{4}$ to $\frac{3}{4}$ in., for 253644
253686	—	Pattern Wheel, for $\frac{3}{4}$ in. Taper Bar (large eye) Buttonhole, bar adjustable from $\frac{1}{4}$ to $\frac{1}{2}$ in., for 253687
253706	13963	Pattern Wheel, for $\frac{5}{8}$ in. Taper Bar (large eye) Buttonhole, bar adjustable from $\frac{1}{4}$ to $\frac{3}{4}$ in., for 253707
253708	—	Pattern Wheel, for $\frac{3}{4}$ in. Taper Bar (large eye) Buttonhole, bar adjustable from $\frac{1}{4}$ to $\frac{1}{2}$ in., for 253709
253444	13963	Pattern Wheel Cam Block .....
	175E 13849	" " " " Screw
250372	13849	" " Rapid Feed Trip Point .....
	203E 13849	Pattern Wheel Rapid Feed Trip Point Screw .....
250617	13963	Pattern Wheel Ring .....
253692	—	" " " " 250617 with 252663, 253690, two each 211E and 250444 .....
253690	13964	Pattern Wheel Ring Adjusting Segment (curved rise) .....
252663	13964	Pattern Wheel Ring Adjusting Segment (straight drop) .....
	211E 13849	Pattern Wheel Ring Adjusting Segment Screw .....
250444	13849	Pattern Wheel Ring Adjusting Segment Screw Washer .....
	391D 13849	Pattern Wheel Ring Screw .....

FOR MACHINE No. 99w88

For Making EYELET END Buttonholes with  
LARGE EYE and TAPER BAR,  
without cutting space

254008	—	Pattern Wheel, $\frac{3}{4}$ in., complete, bar adjustable from $\frac{1}{4}$ to $\frac{3}{4}$ in., Nos. 253444, 254007, 255307, two each 175E, 203E, 250372 and three 391D .....
254010	—	Pattern Wheel, $\frac{5}{8}$ in., complete, bar adjustable from $\frac{1}{4}$ to $\frac{1}{2}$ in., Nos. 253444, 254009, 255307, two each 175E, 203E, 250372 and three 391D .....

No.	Plate	Name
For Making EYELET END Buttonholes with LARGE EYE and TAPER BAR, with .025 in. cutting space		
254024	—	Pattern Wheel, $\frac{3}{4}$ in., complete, bar adjustable from $\frac{1}{4}$ to $\frac{3}{4}$ in., Nos. 254023, 255307, two each 203E, 250372 and three 391D
254026	—	Pattern Wheel, $\frac{3}{4}$ in., complete, bar adjustable from $\frac{1}{4}$ to $\frac{1}{2}$ in., Nos. 254025, 255307, two each 203E, 250372 and three 391D
254007	—	Pattern Wheel, for $\frac{3}{4}$ in. Taper Bar (large eye) Buttonhole, bar adjustable from $\frac{1}{4}$ to $\frac{3}{4}$ in., for 254008
254009	—	Pattern Wheel, for $\frac{3}{4}$ in. Taper Bar (large eye) Buttonhole, bar adjustable from $\frac{1}{4}$ to $\frac{1}{2}$ in., for 254010
254023	—	Pattern Wheel, for $\frac{3}{4}$ in. Taper Bar (large eye) Buttonhole, bar adjustable from $\frac{1}{4}$ to $\frac{3}{4}$ in., for 254024
254025	—	Pattern Wheel, for $\frac{3}{4}$ in. Taper Bar (large eye) Buttonhole, bar adjustable from $\frac{1}{4}$ to $\frac{1}{2}$ in., for 254026
253444	13963	Pattern Wheel Cam Block
175E	13849	" " " " Screw
250372	13849	" " Rapid Feed Trip Point
203E	13849	" " " " " " " " Screw
250617	13963	Pattern Wheel Ring
255307	—	" " " " 250617 with 252662, 252663, two each 211E and 250444
252662	13964	Pattern Wheel Ring Adjusting Segment (curved rise)
252663	13964	Pattern Wheel Ring Adjusting Segment (straight drop)
211E	13849	Pattern Wheel Ring Adjusting Segment Screw
250444	13849	Pattern Wheel Ring Adjusting Segment Screw Washer
391D	13849	Pattern Wheel Ring Screw

## PATTERN WHEEL CABINET

250403	—	Pattern Wheel Cabinet
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## KNIFE TRUEING FIXTURE

No.	Plate	Name
232870	13874	Knife Trueing Fixture Base with 448E
232871	—	Knife Trueing Fixture Base with 590, 232872 and 232876
232875	—	Knife Trueing Fixture Oil Stone Bracket 232874 with 232873 and 232877
232872	13874	Knife Trueing Fixture Knife Clamping Lever
590	13874	Knife Trueing Fixture Knife Clamping Lever Hinge Screw
232873	13874	Knife Trueing Fixture Oil Stone
448E	13874	" " " " " " " " Set Screw
232874	13874	Knife Trueing Fixture Oil Stone Bracket with three 448E
232876	13874	Knife Trueing Fixture Oil Stone Bracket Shaft
448E	13874	Knife Trueing Fixture Oil Stone Bracket Shaft Set Screw
232877	13874	Knife Trueing Fixture Oil Stone Set Screw Friction Gib
232878	—	Singer Knife Trueing Fixture complete, Nos. 232871 and 232875

## THREAD LUBRICATING CUP

No.	Plate	Name
250518	13971	Thread Lubricating Cup with 171E, 250519 and 250520
250519	—	Thread Lubricating Cup Oil Pad (felt)
171E	13902	Thread Lubricating Cup Pinch Screw
250520	—	Thread Lubricating Cup Thread Guide

## SHAFT PULLEYS

### For Singer Safety Power Table

No.	Plate	Name
41219	—	Shaft Pulley (sectional, grooved), 3 in. diam., $\frac{1}{8}$ in. bore (for Table Shaft), with two 50399E .....
41220	—	Shaft Pulley (sectional, grooved), 3 $\frac{1}{4}$ in. diam., $\frac{1}{8}$ in. bore (for Table Shaft), with two 50399E .....
41221	—	Shaft Pulley (sectional, grooved), 3 $\frac{1}{2}$ in. diam., $\frac{1}{8}$ in. bore (for Table Shaft), with two 50399E .....
41222	—	Shaft Pulley (sectional, grooved), 3 $\frac{3}{4}$ in. diam., $\frac{1}{8}$ in. bore for Table Shaft), with two 50399E .....
41223	—	Shaft Pulley (sectional, grooved), 4 in. diam., $\frac{1}{8}$ in. bore (for Table Shaft), with two 50399E .....
41224	—	Shaft Pulley (sectional, grooved), 4 $\frac{1}{4}$ in. diam., $\frac{1}{8}$ in. bore (for Table Shaft), with two 50399E .....
41228	—	Shaft Pulley (sectional, grooved), 5 $\frac{1}{4}$ in. diam., $\frac{1}{8}$ in. bore, with two 50399E .....
50399E	13971	Shaft Pulley Screw .....

### For Low Shaft Table

27271	—	Shaft Pulley (sectional, grooved), 4 in. diam., $1\frac{1}{8}$ in. bore, with two 597c .....
232920	—	Shaft Pulley (sectional, grooved), 4 $\frac{1}{2}$ in. diam., $1\frac{3}{8}$ in. bore, with two 597c .....
27065	—	Shaft Pulley (sectional, grooved), 5 in. diam., $1\frac{3}{8}$ in. bore, with two 597c .....
232879	—	Shaft Pulley (sectional, grooved), 5 $\frac{1}{2}$ in. diam., $1\frac{3}{8}$ in. bore, with two 597c .....

No.	Plate	Name
27066	—	Shaft Pulley (sectional, grooved), 6 in. diam., $1\frac{1}{8}$ in. bore, with two 597c .....
232880	—	Shaft Pulley (sectional, grooved), 6 $\frac{1}{2}$ in. diam., $1\frac{3}{8}$ in. bore, with two 597c .....
27067	—	Shaft Pulley (sectional, grooved), 7 in. diam., $1\frac{3}{8}$ in. bore, with two 597c .....
232881	—	Shaft Pulley (sectional, grooved), 7 $\frac{1}{2}$ in. diam., $1\frac{3}{8}$ in. bore, with two 597c .....
27068	—	Shaft Pulley (sectional, grooved), 8 in. diam., $1\frac{3}{8}$ in. bore, with two 597c .....
232882	—	Shaft Pulley (sectional, grooved), 8 $\frac{1}{2}$ in. diam., $1\frac{3}{8}$ in. bore, with two 597c .....
27069	—	Shaft Pulley (sectional, grooved), 9 in. diam., $1\frac{3}{8}$ in. bore, with two 597c .....
232883	—	Shaft Pulley (sectional, grooved), 9 $\frac{1}{2}$ in. diam., $1\frac{3}{8}$ in. bore, with two 597c .....
27070	—	Shaft Pulley (sectional, grooved), 10 in. diam., $1\frac{3}{8}$ in. bore, with two 597c .....
27072	—	Shaft Pulley (sectional, grooved), 12 in. diam., $1\frac{3}{8}$ in. bore, with two 597c .....
27074	—	Shaft Pulley (sectional, grooved), 14 in. diam., $1\frac{3}{8}$ in. bore, with two 597c .....
27075	—	Shaft Pulley (sectional, grooved), 15 in. diam., $1\frac{3}{8}$ in. bore, with two 597c .....
597c	13971	Shaft Pulley Clamping Screw .....

## TRANSMITTER PULLEYS

For Singer Universal Safety Power Table

No.	Plate	Name
126713	—	Transmitter Pulley (sectional, grooved), sheet metal, $4\frac{1}{4}$ in. diameter .....
126714	15413	Transmitter Pulley (sectional, grooved), sheet metal, 5 in. diameter .....
126715	—	Transmitter Pulley (sectional, grooved), sheet metal, $5\frac{1}{4}$ in. diameter .....
126716	—	Transmitter Pulley (sectional, grooved), sheet metal, $5\frac{1}{2}$ in. diameter .....
126717	—	Transmitter Pulley (sectional, grooved), sheet metal, $5\frac{3}{4}$ in. diameter .....

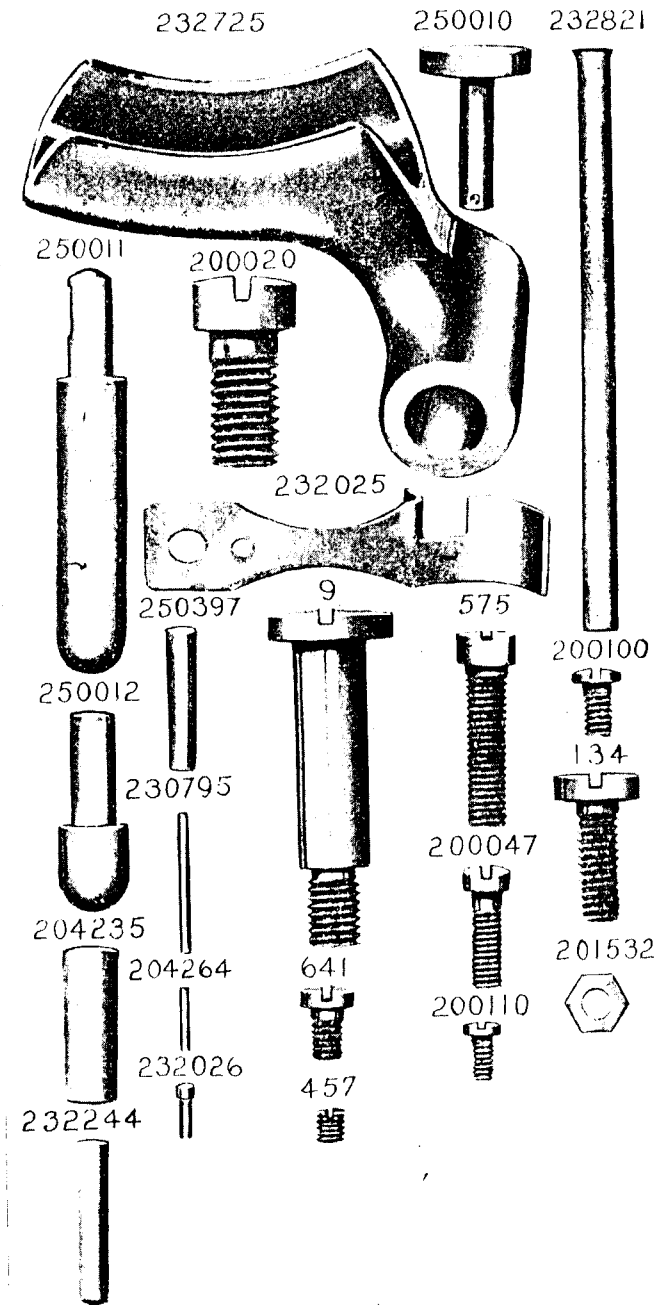
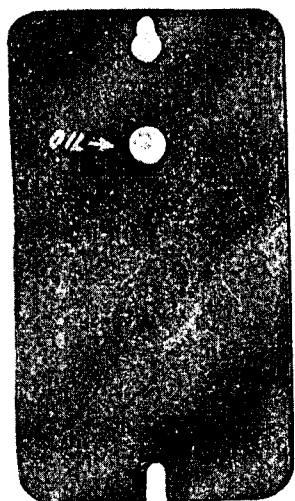


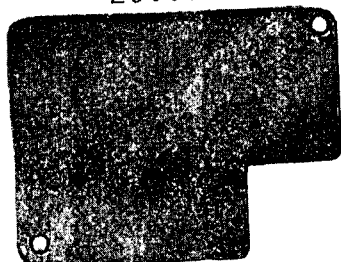


PLATE 13812—ONE-HALF SIZE

232520



250002

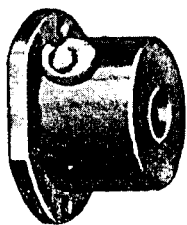


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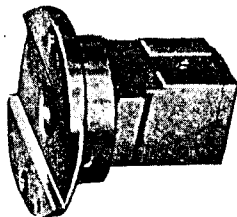


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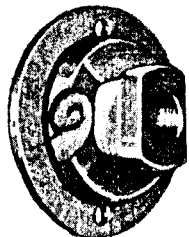
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250015



232002



232490

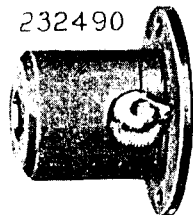


PLATE 13816—FULL SIZE

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662

232057

201672

201155



201468

201484

232513

232056



232055

232054

232466



201468

201484

232513

232056



232055

232054

232466

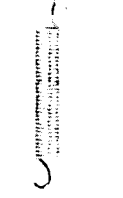


200122

200530

201112

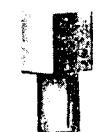
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200

200374

232817



232064



201218

350105



PLATE 13817—FULL SIZE

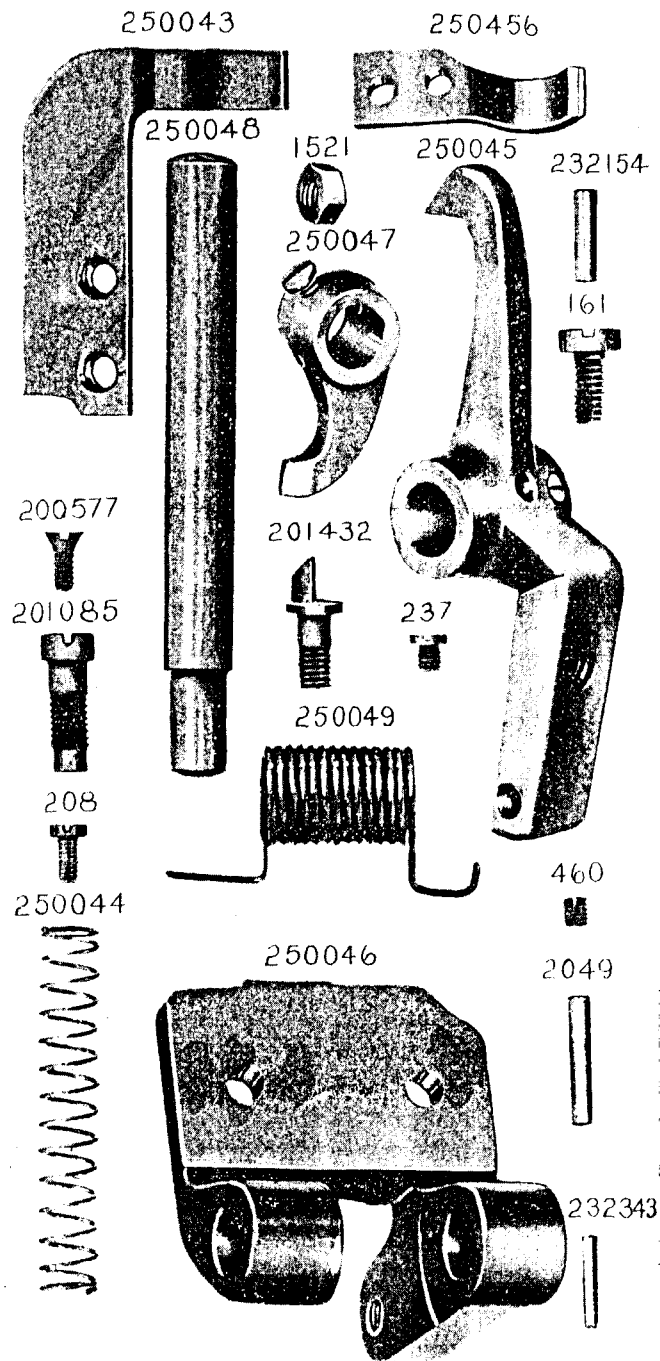


PLATE 13818—ONE-HALF SIZE

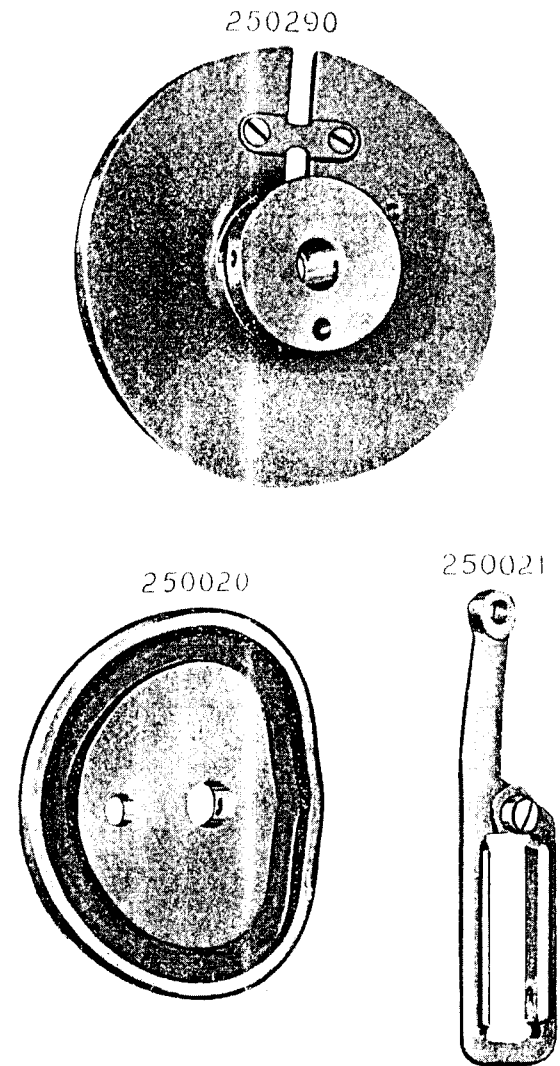


PLATE 13823—ONE-HALF SIZE

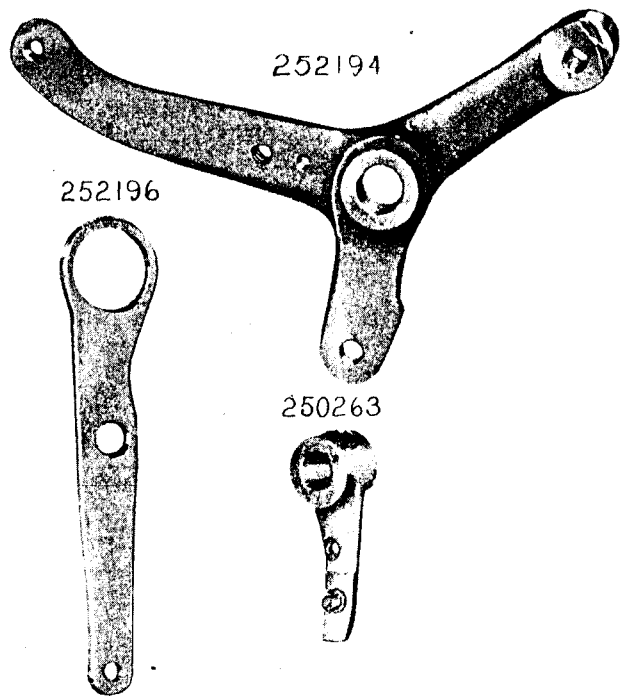


PLATE 13825—FULL SIZE

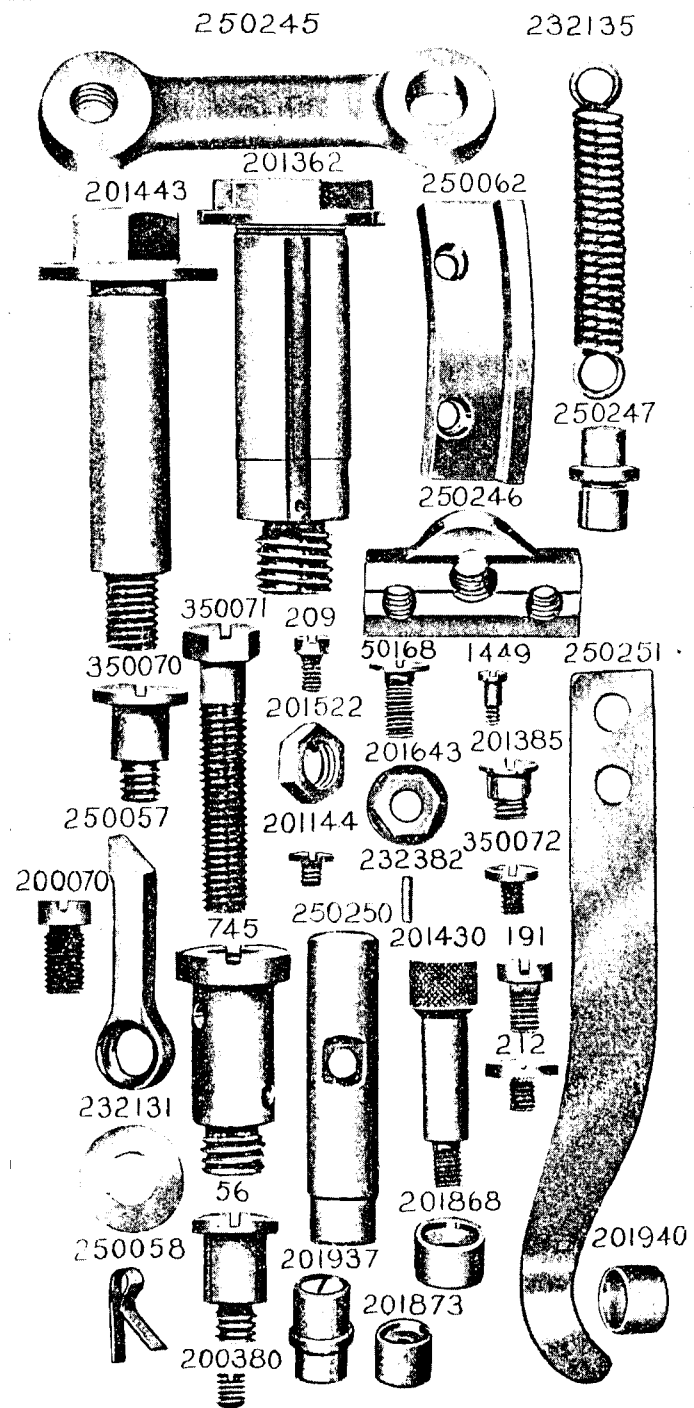
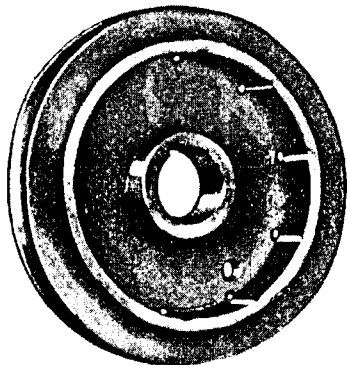
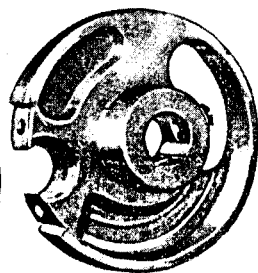


PLATE 13834—ONE-HALF SIZE

250050

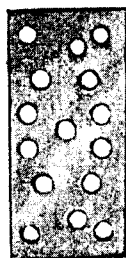


232110



— FULL SIZE —

232112



40025



200363

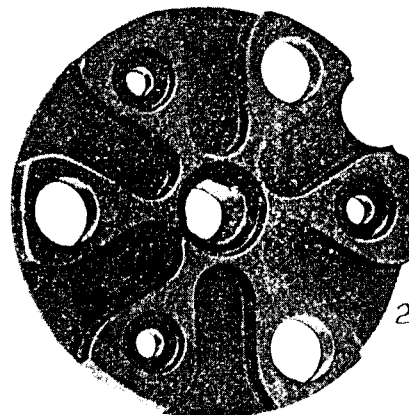


232113



PLATE 13839—FULL SIZE

250097



201435



201704



201898



176



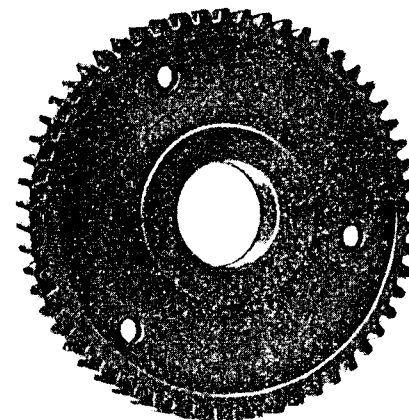
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250098



250100  
ONE-HALF SIZE

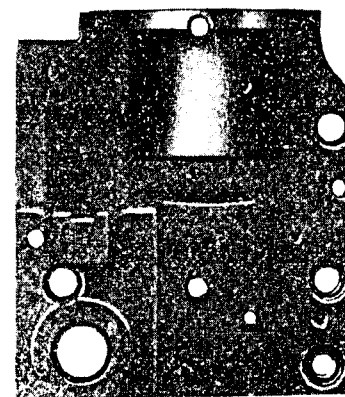


PLATE 13840—FULL SIZE

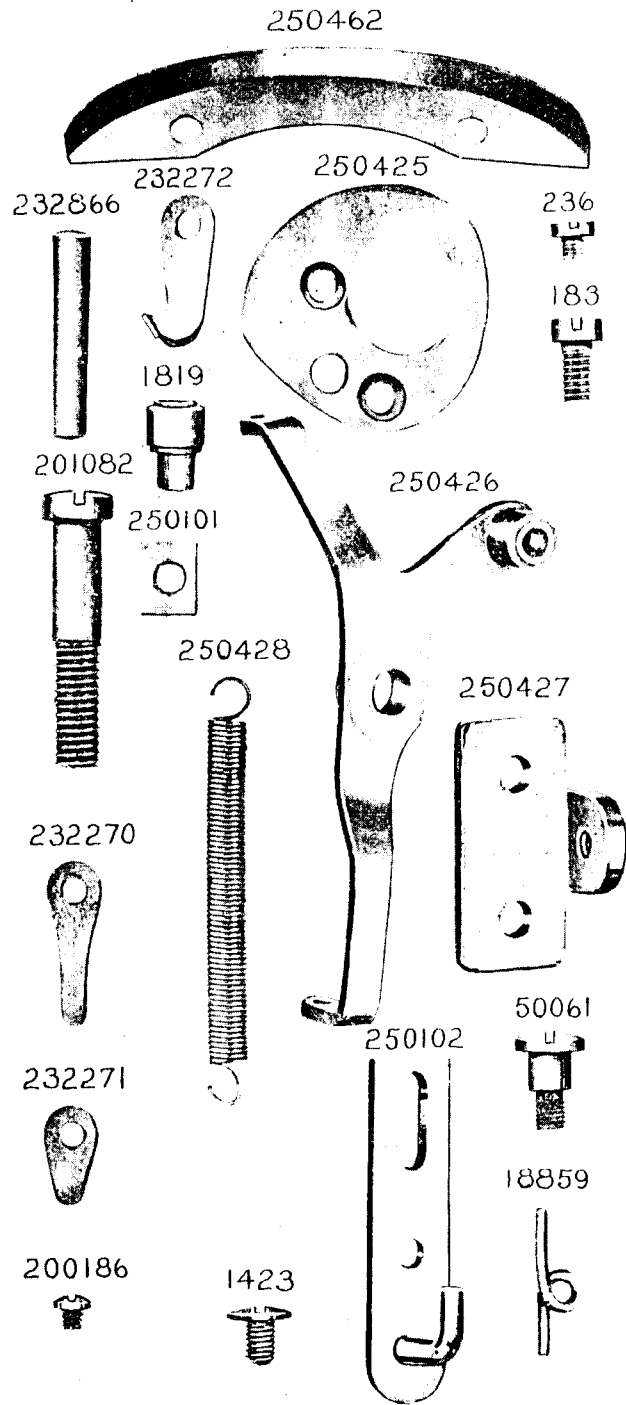


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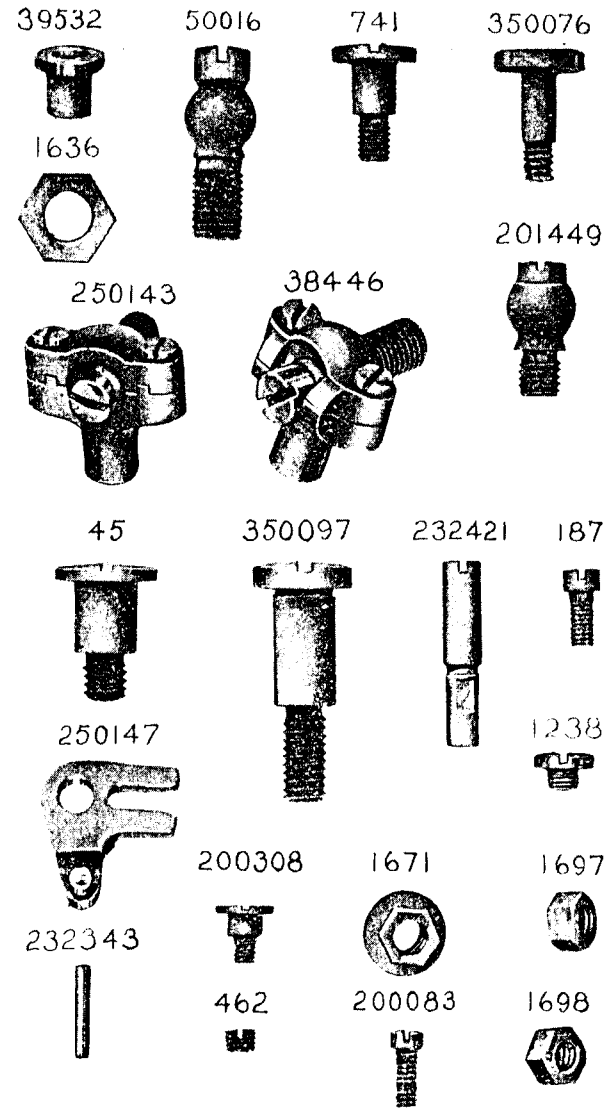
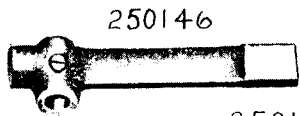
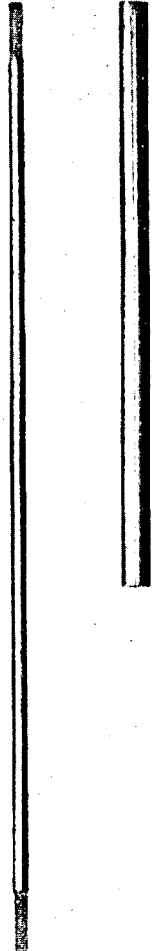


PLATE 13848—ONE-HALF SIZE

250142 250145



250144



250140



250141



232420

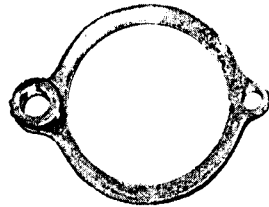
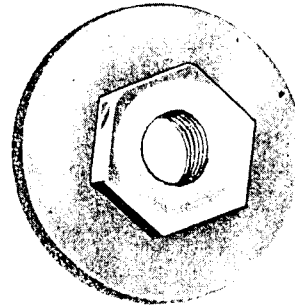


PLATE 13849—FULL SIZE

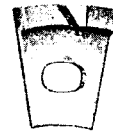
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250148



250372



203



211



250444



391



250443



647



145



40025



168



453



175



232600

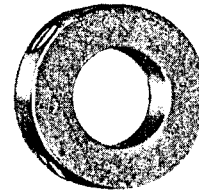
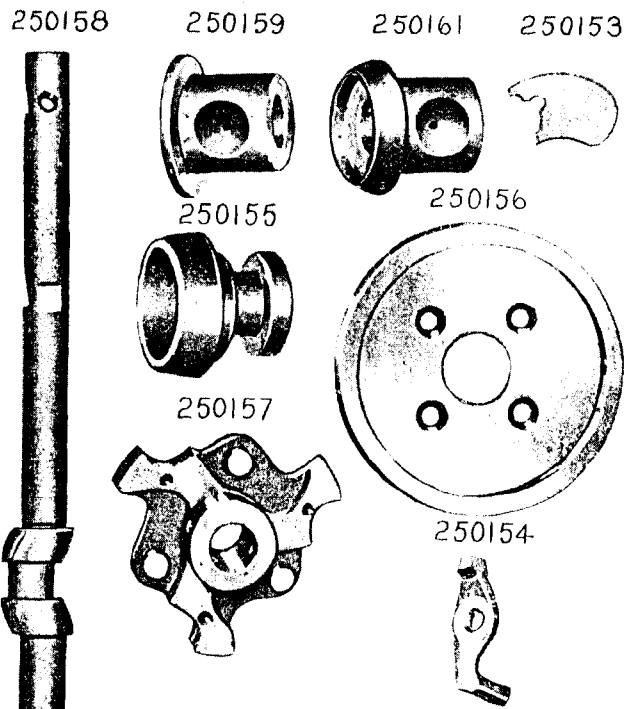


PLATE 13851—ONE-HALF SIZE



FULL SIZE

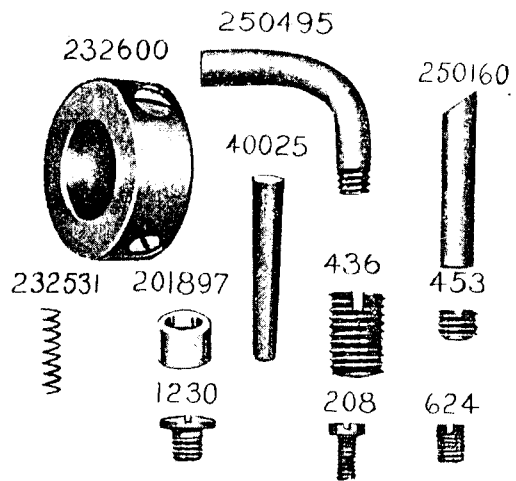


PLATE 13852—ONE-HALF SIZE

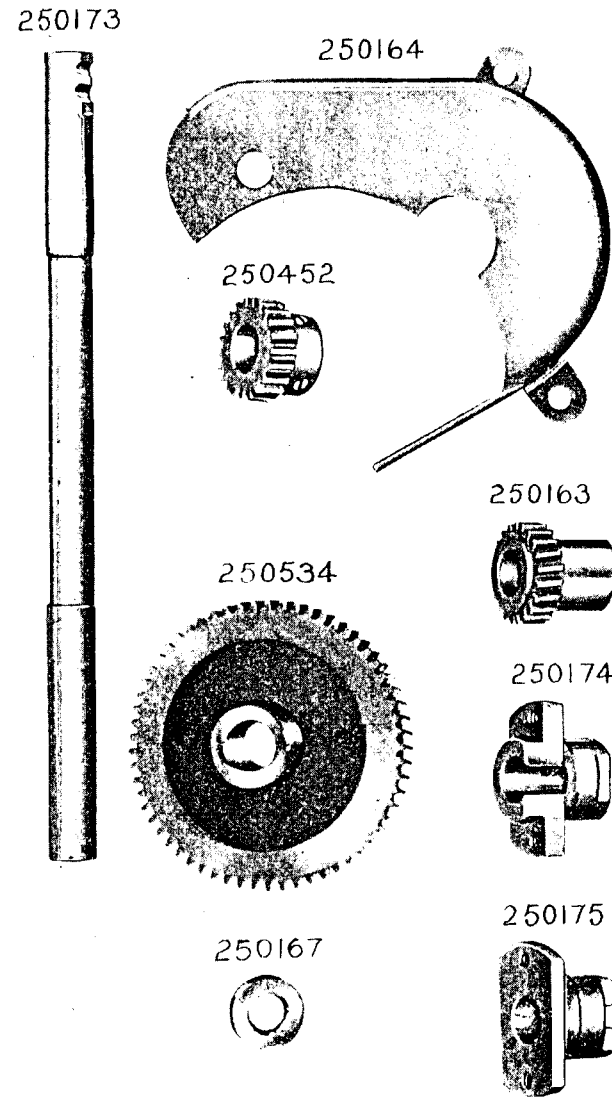


PLATE 13854—FULL SIZE

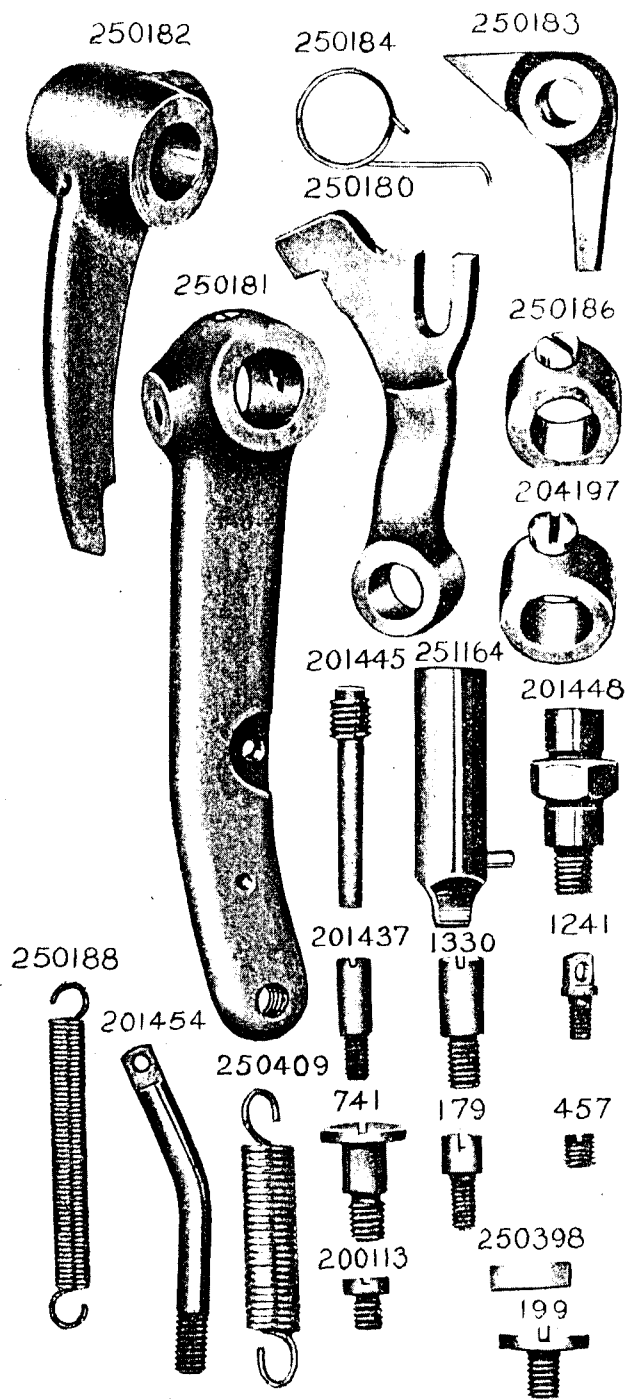


PLATE 13856—FULL SIZE

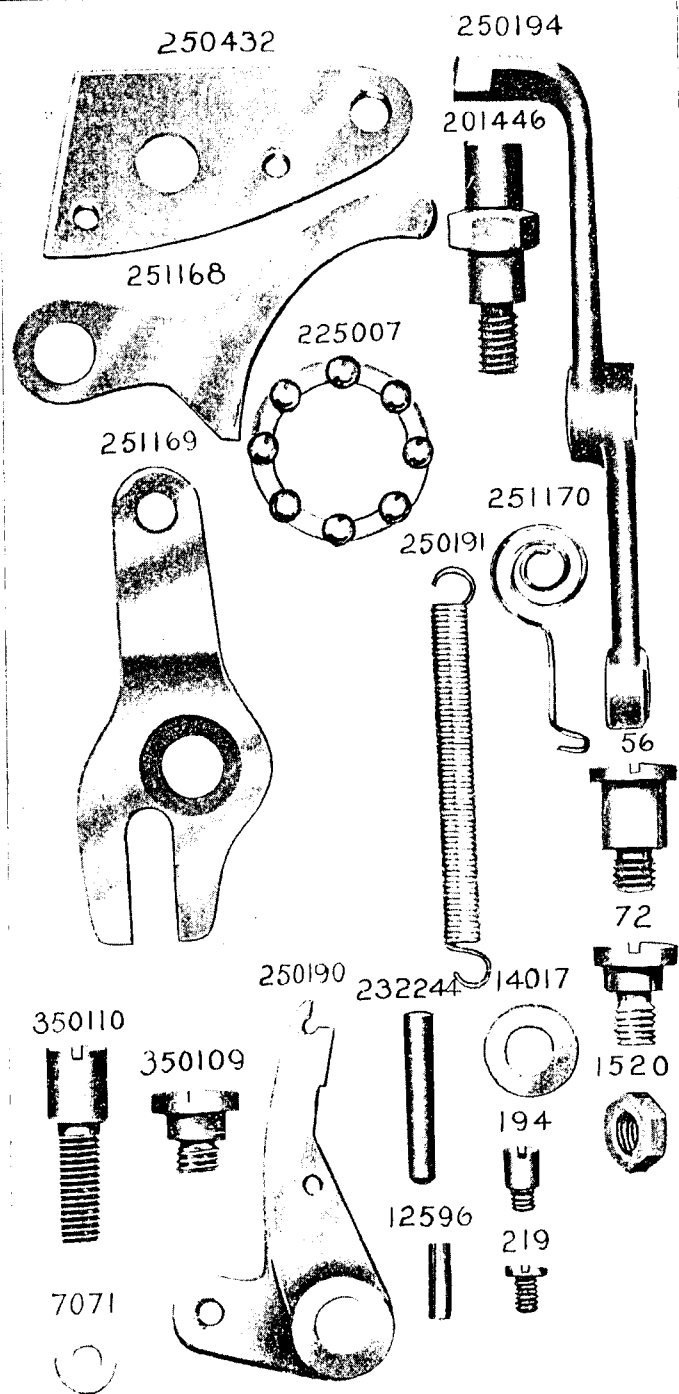




PLATE 13857—FULL SIZE

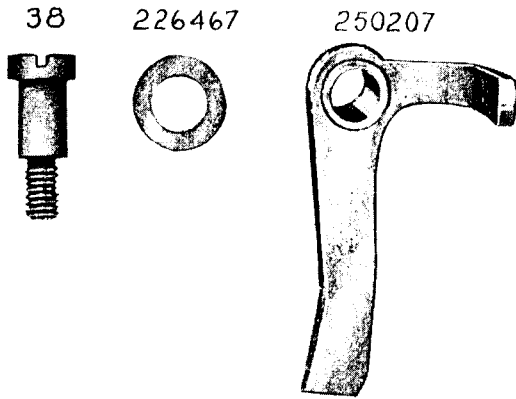


PLATE 13858—ONE-HALF SIZE

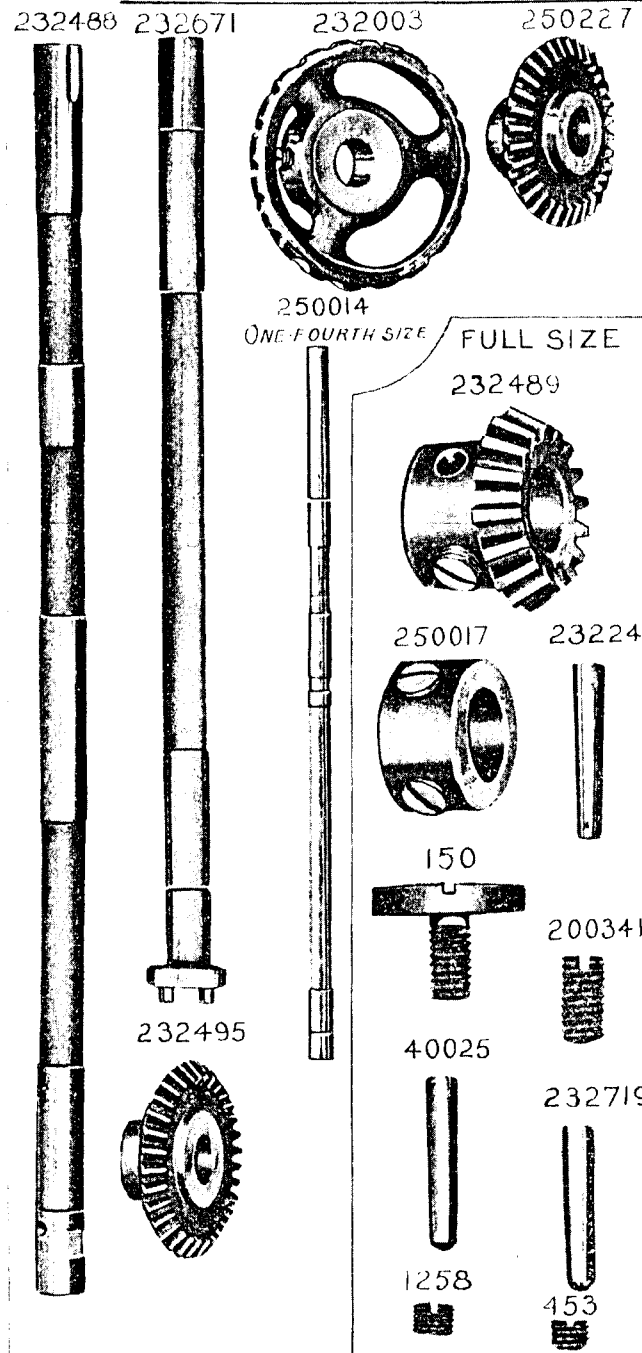


PLATE 13860—FULL SIZE

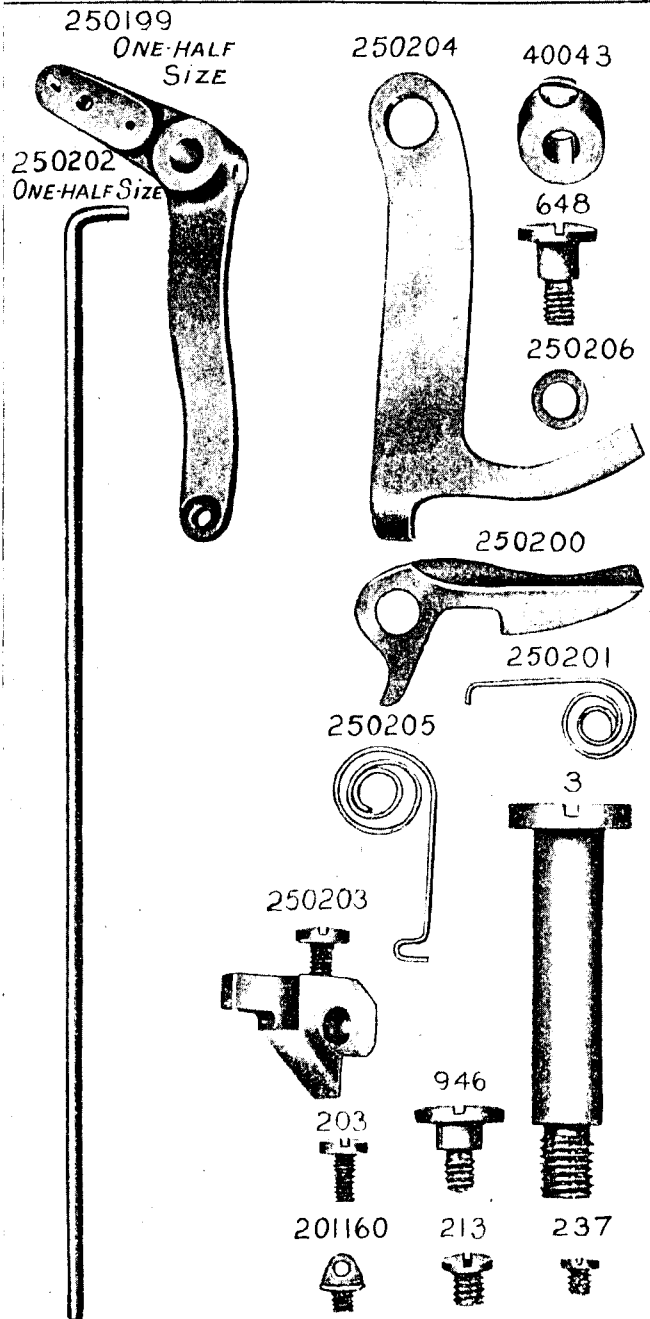


PLATE 13861—ONE-HALF SIZE

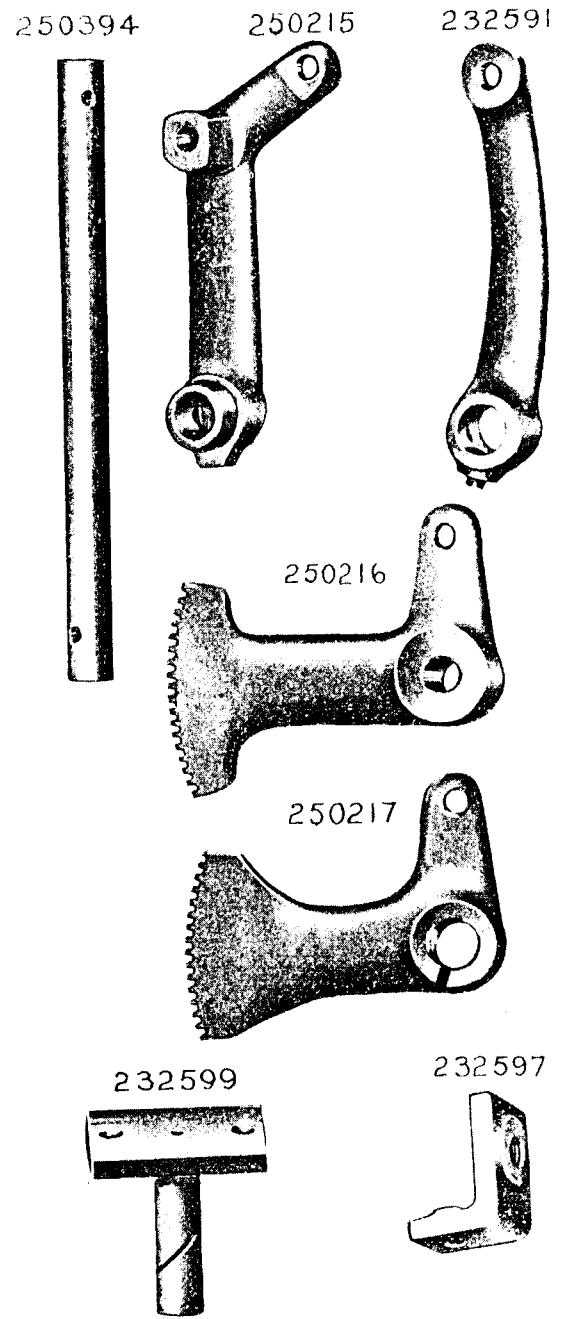


PLATE 13862—FULL SIZE

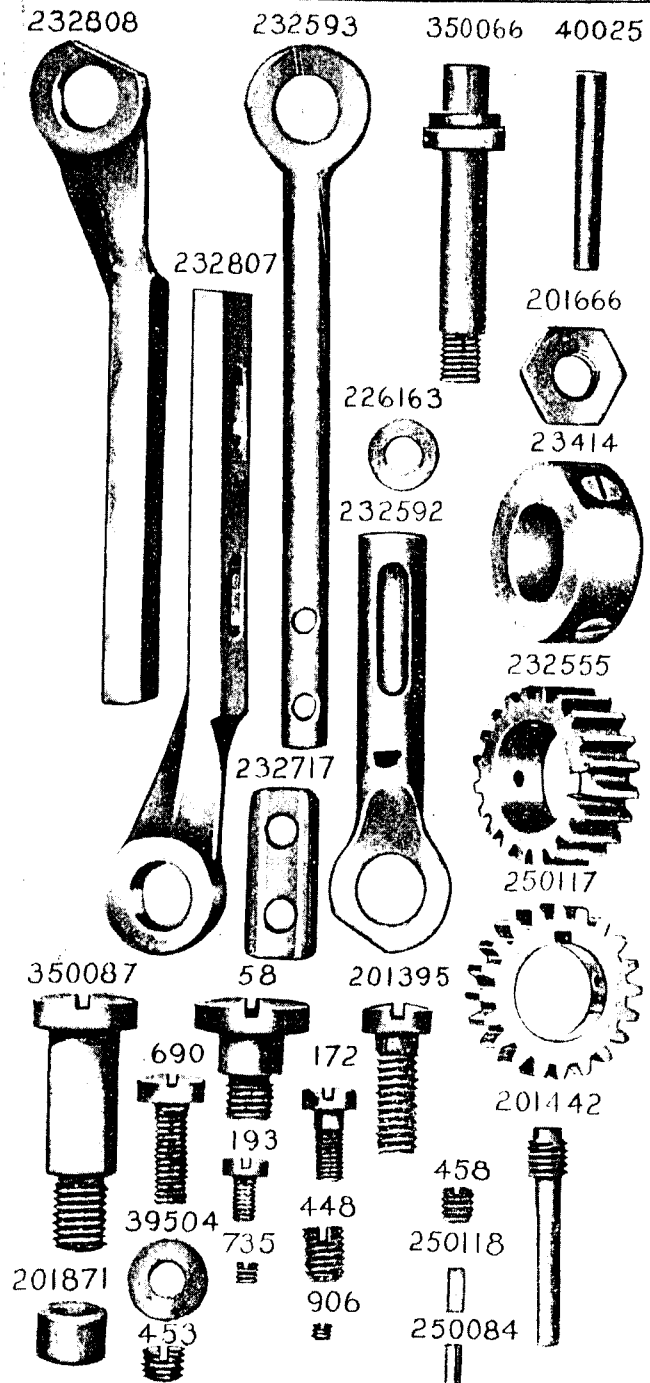


PLATE 13863—ONE-HALF SIZE

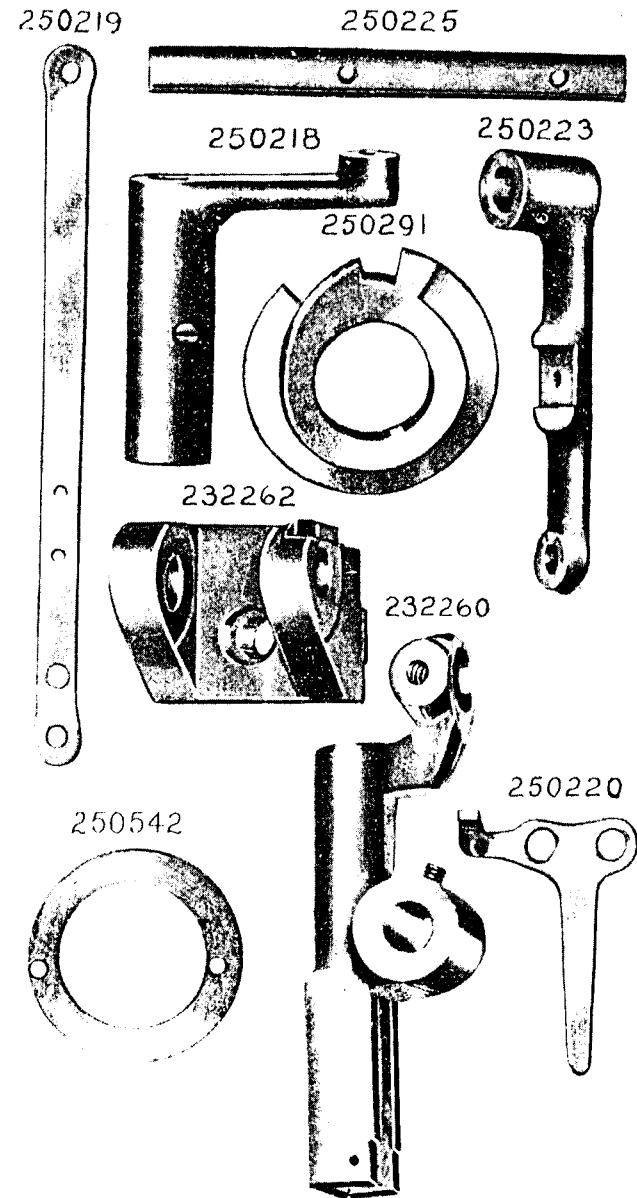


PLATE 13864—FULL SIZE

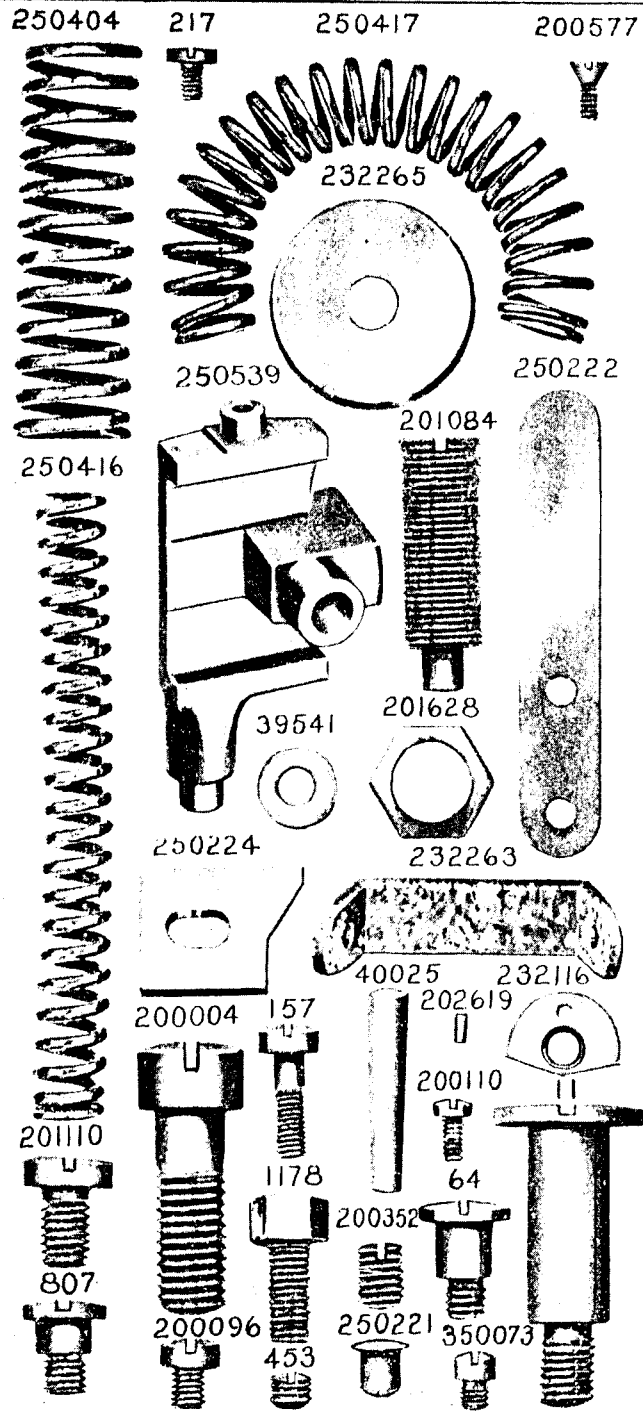


PLATE 13865—ONE-FOURTH SIZE

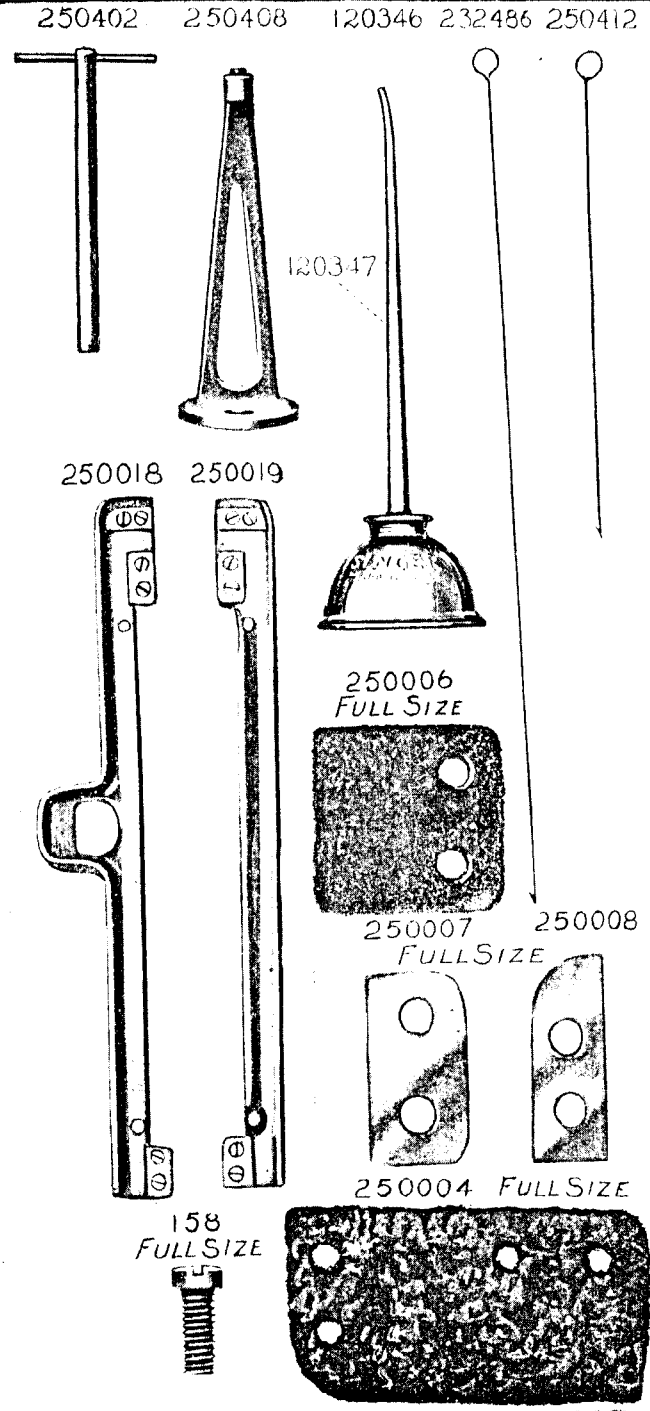


PLATE 13866—ONE-HALF SIZE

11831 225498 250522 232900

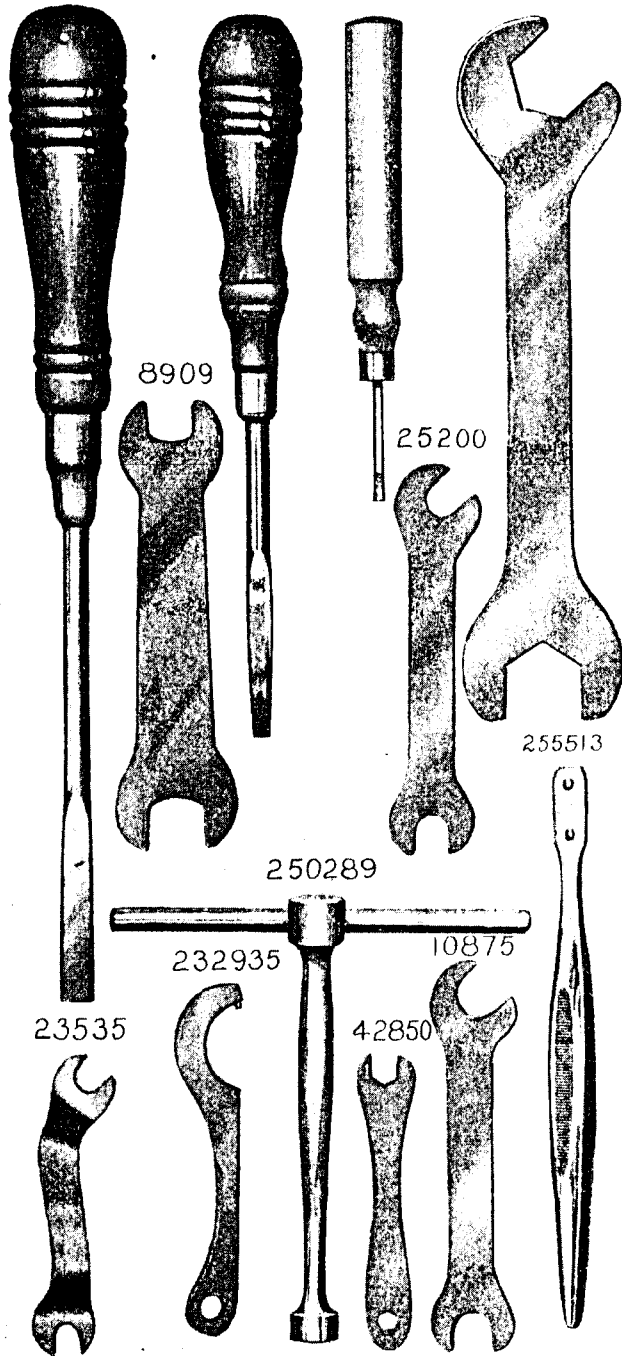


PLATE 13869—ONE-HALF SIZE

228584 228569 228593

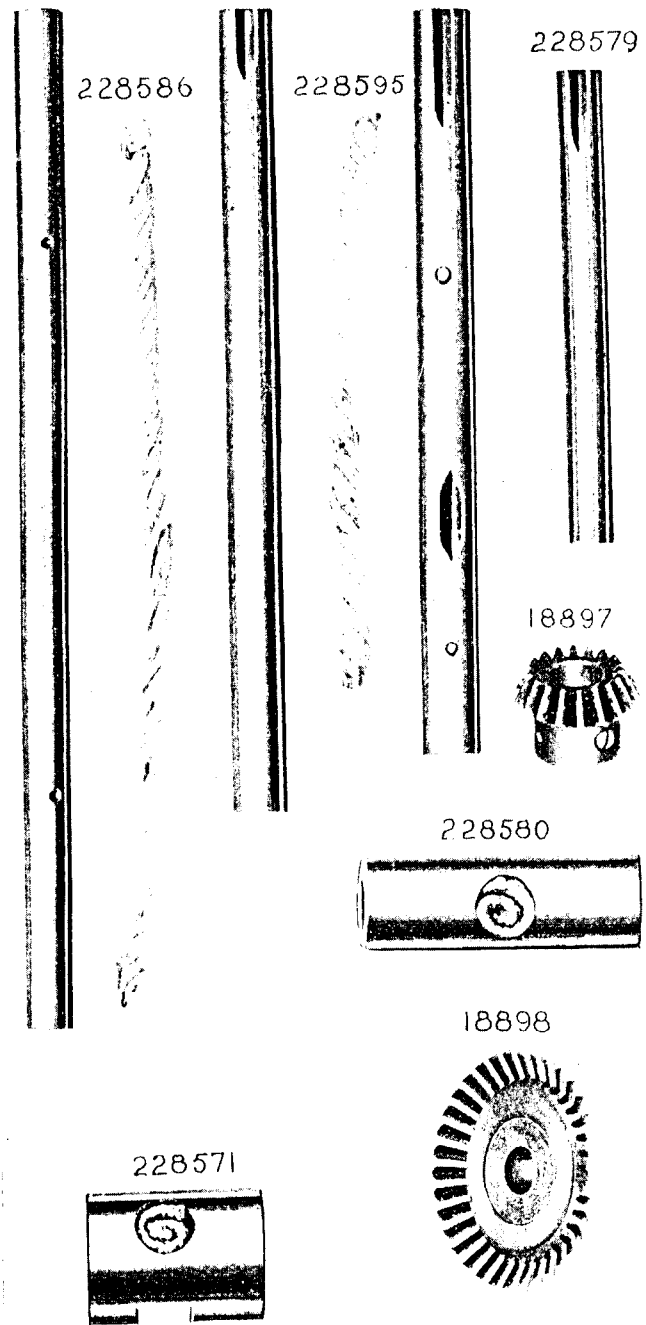


PLATE 13870—ONE-SIXTH SIZE

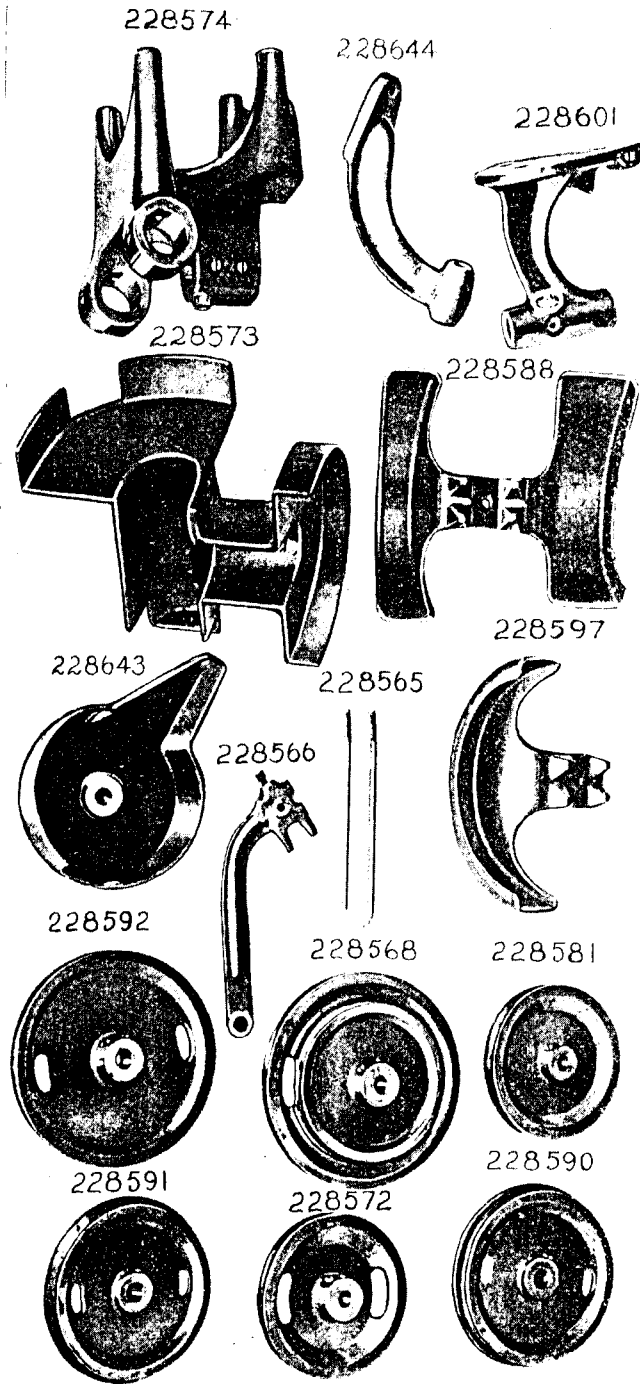


PLATE 13871—FULL SIZE

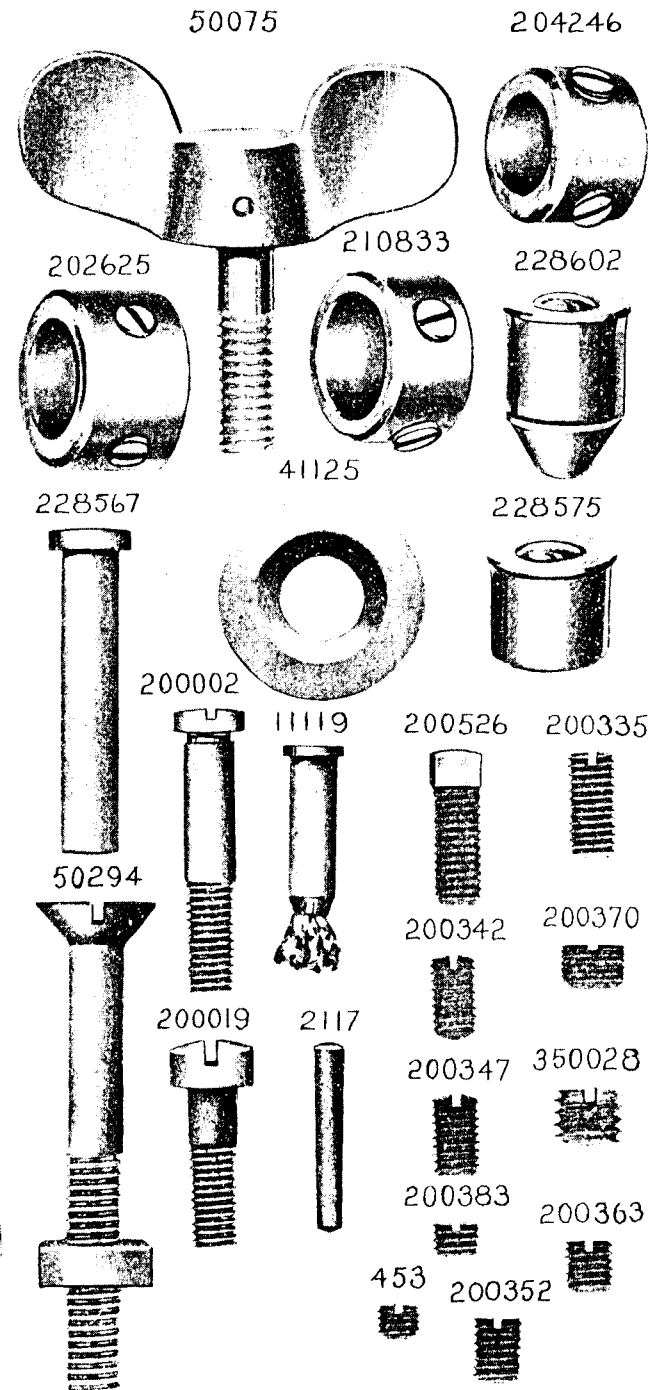
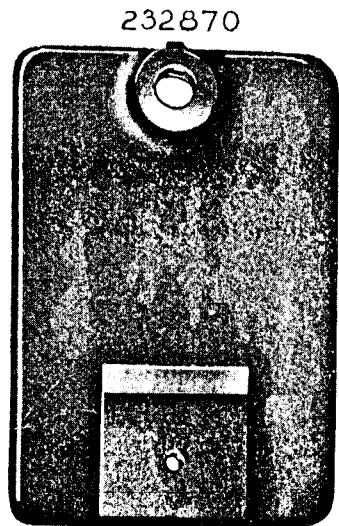
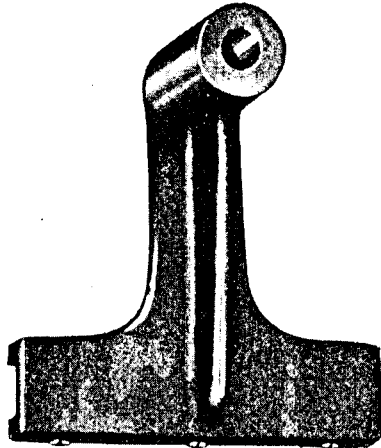


PLATE 13874—ONE-HALF SIZE



232870



232874



232873



232877

232876



232872



59  
FULL SIZE



448  
FULL SIZE



PLATE 13883—FULL SIZE

250022



40025



200364



50031



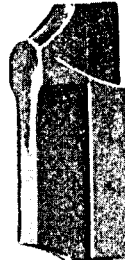
1698



39541



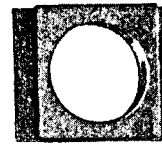
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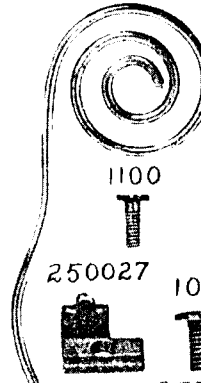
1454



232038



232044



1100



250027



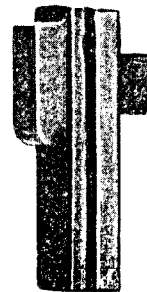
251135 (L)  
251136 (M)



350111



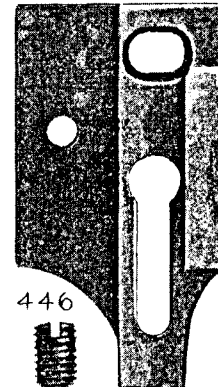
232043



232724



250474



446



201474



250475



250468



1281



990



201892



201366



201524



200051



228026



232150



PLATE 13891—FULL SIZE

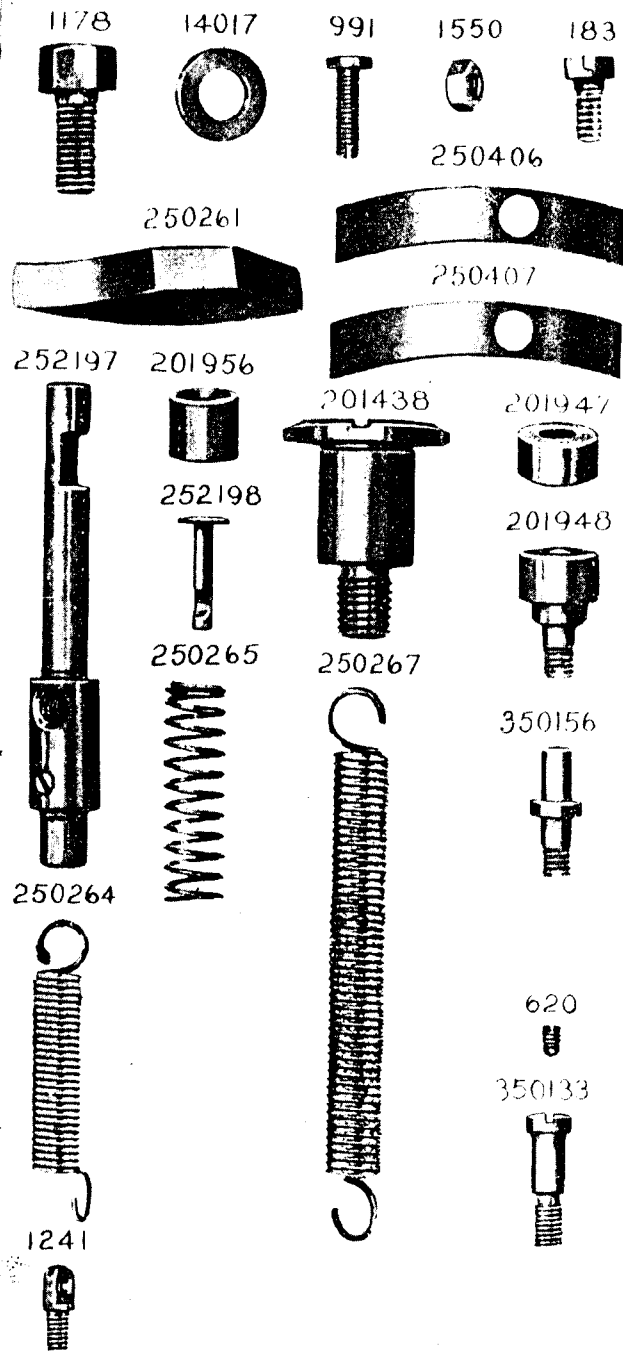


PLATE 13893—ONE-HALF SIZE

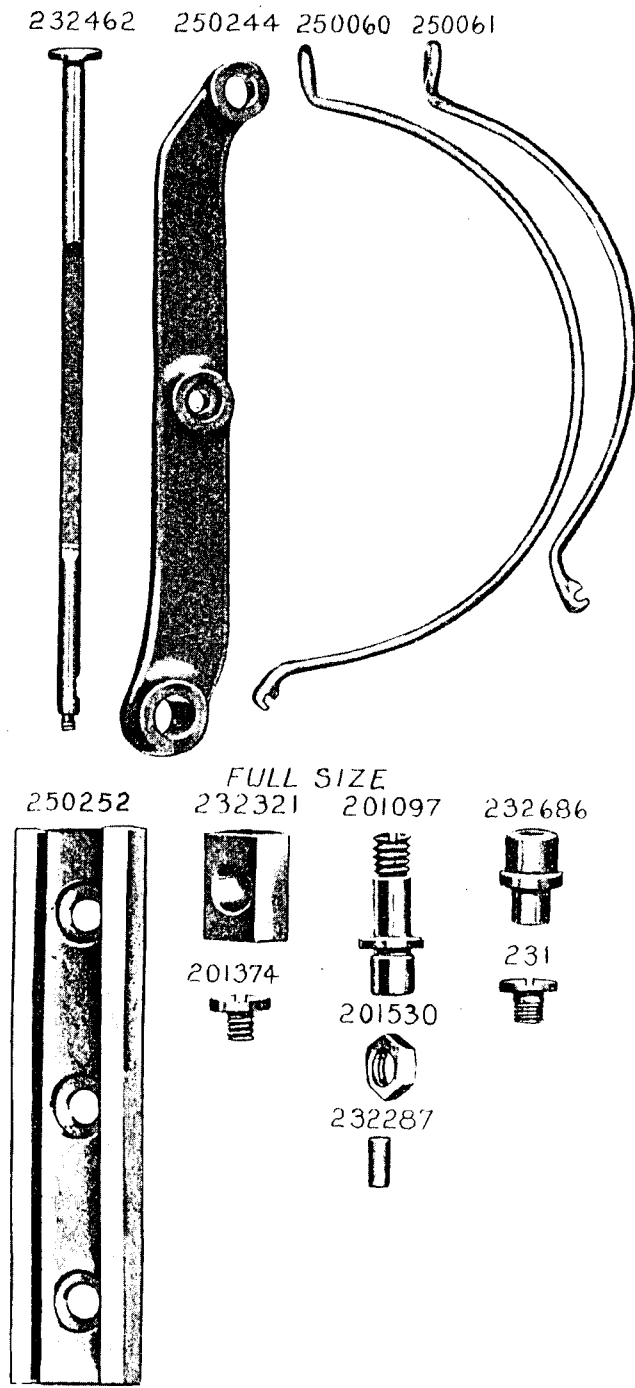


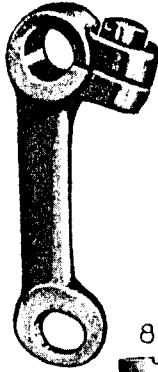


PLATE 13895—FULL SIZE

201439



250274



2269



250551



1528

1819



807

1241



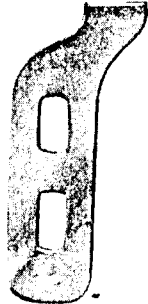
808



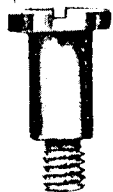
207



250275



659



1253

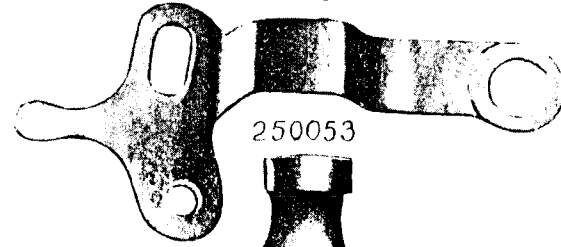


232200



PLATE 13898—ONE-HALF SIZE

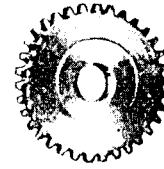
250052



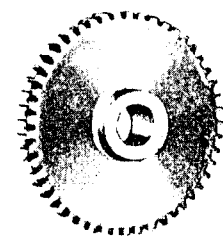
250053



232521



250054



250395  
ONE-FOURTH SIZE

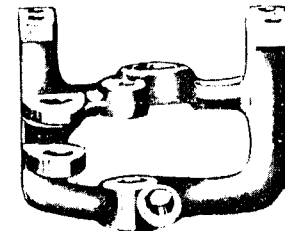


PLATE 13899—FULL SIZE

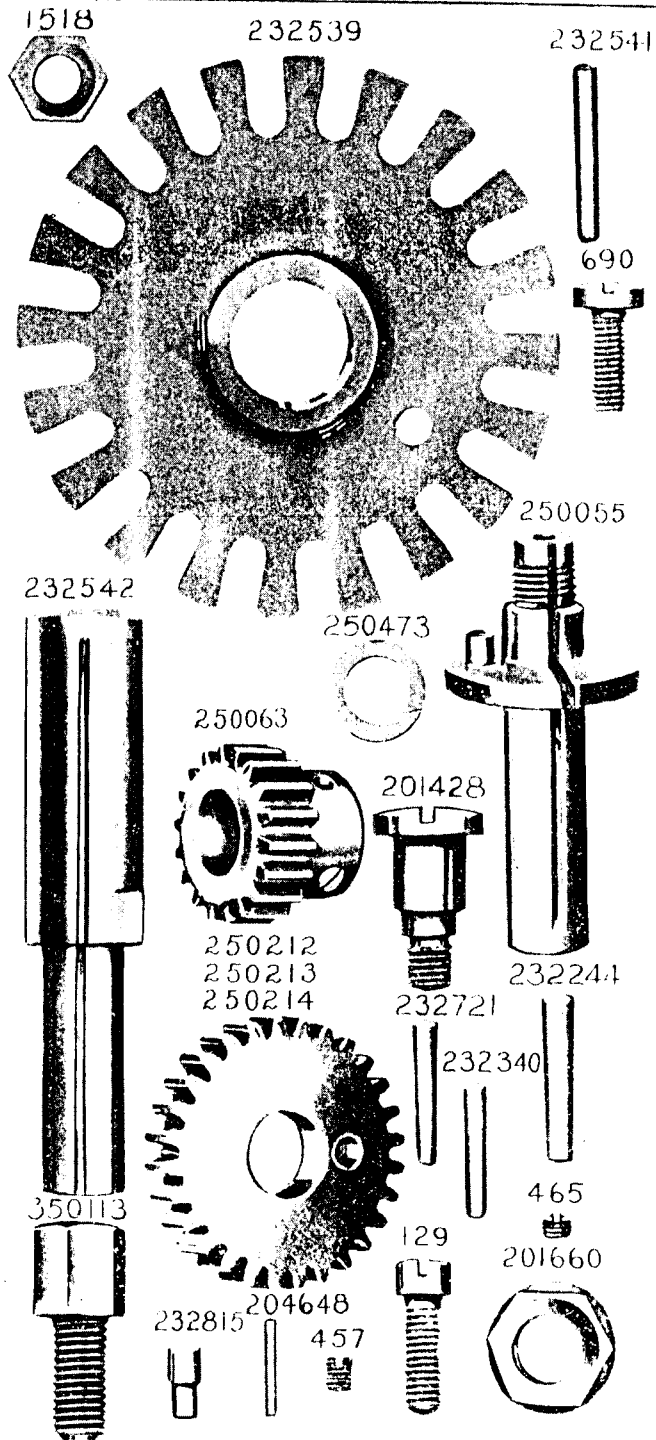


PLATE 13900—FULL SIZE

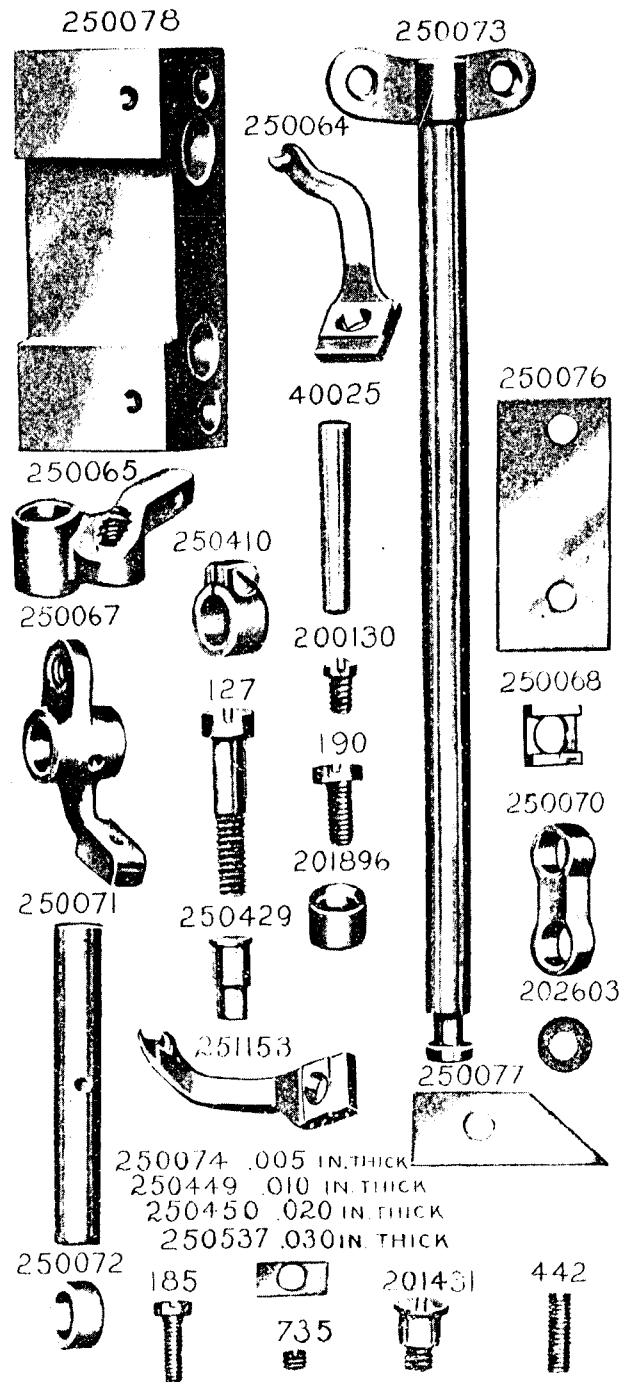


PLATE 13901—FULL SIZE

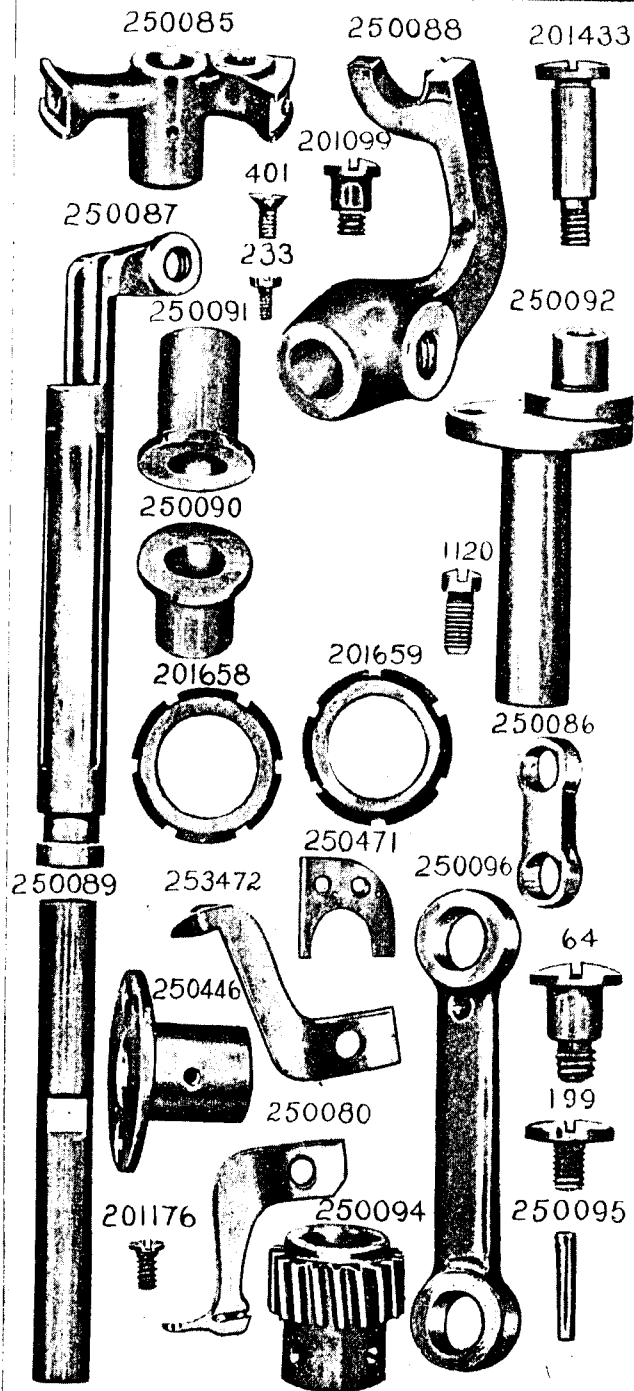


PLATE 13902—FULL SIZE

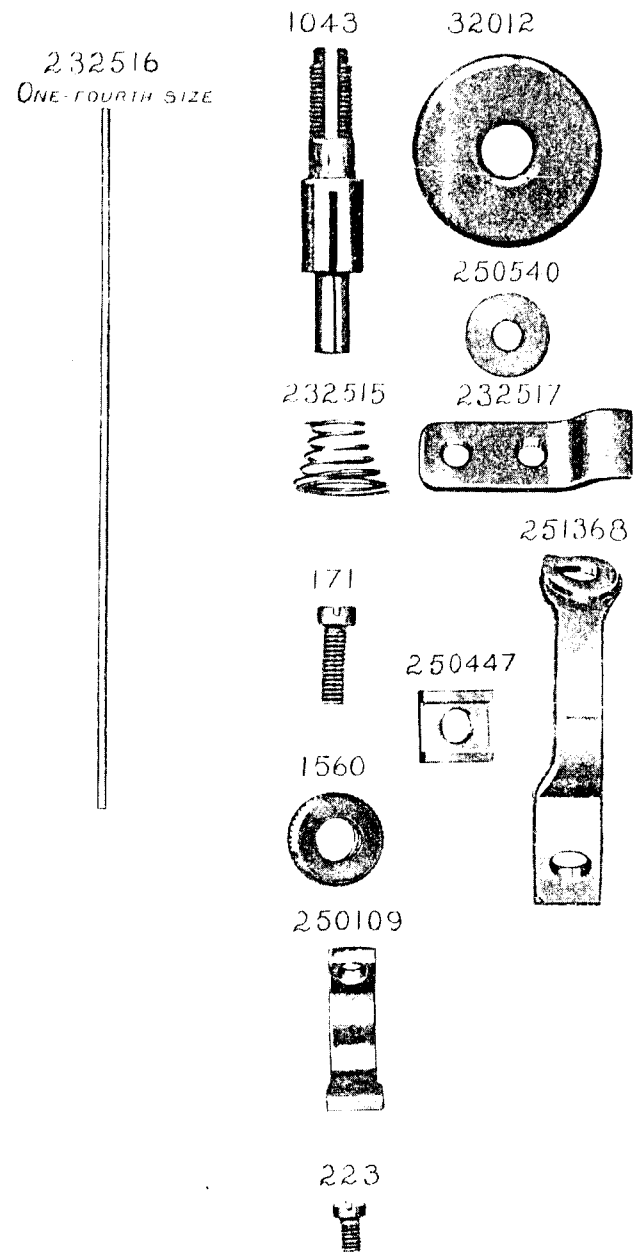


PLATE 13903—FULL SIZE

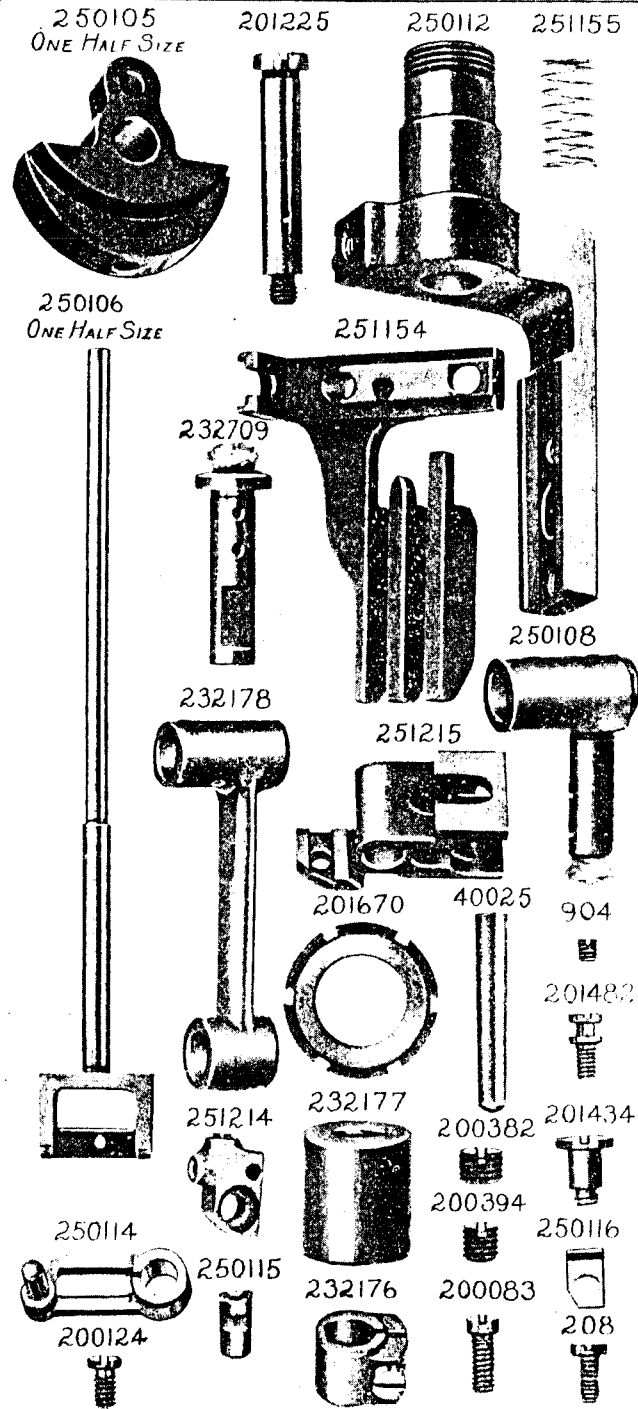


PLATE 13909—FULL SIZE

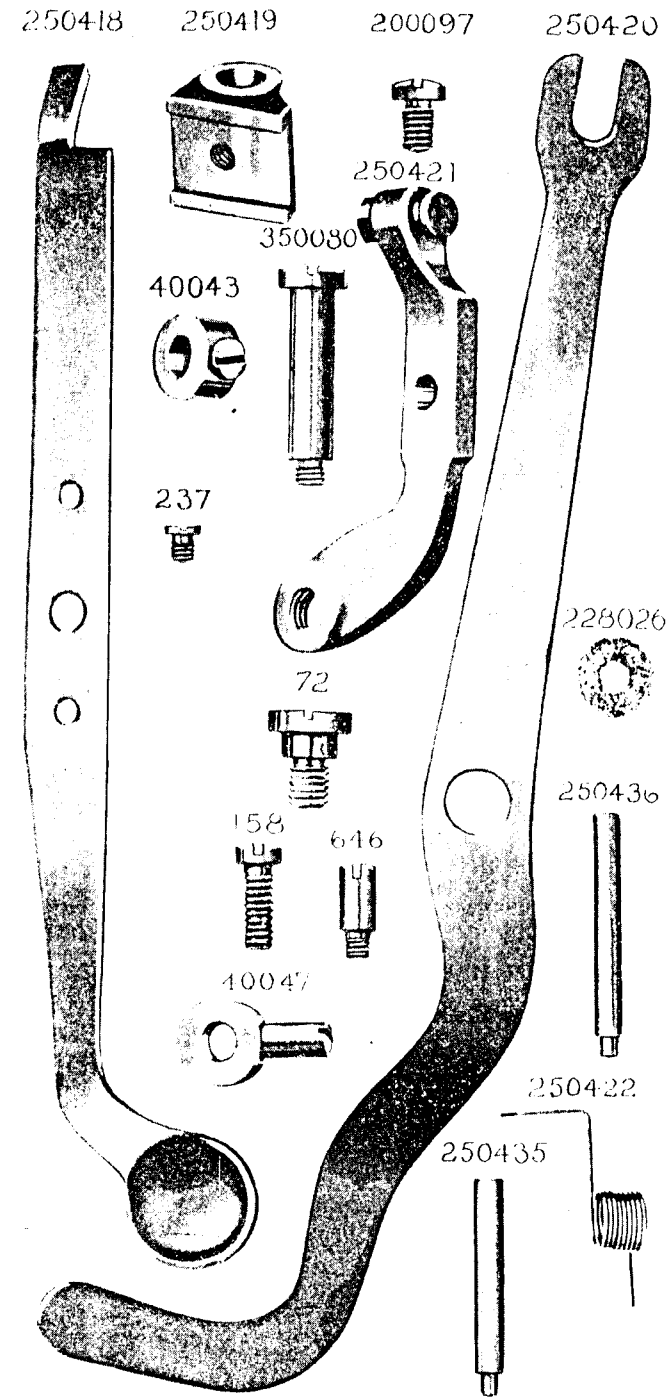


PLATE 13926—ONE-FOURTH SIZE

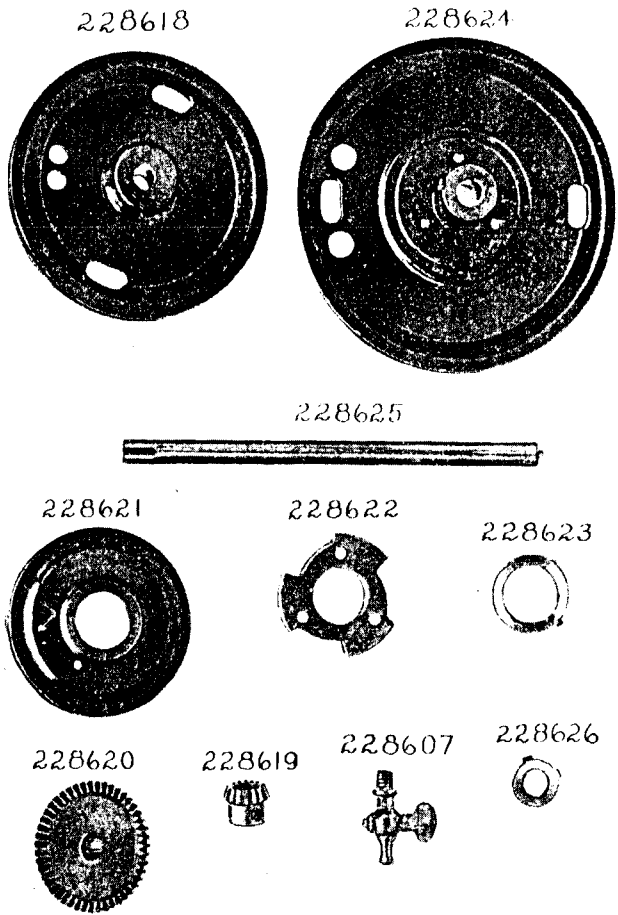


PLATE 13932—ONE-HALF SIZE

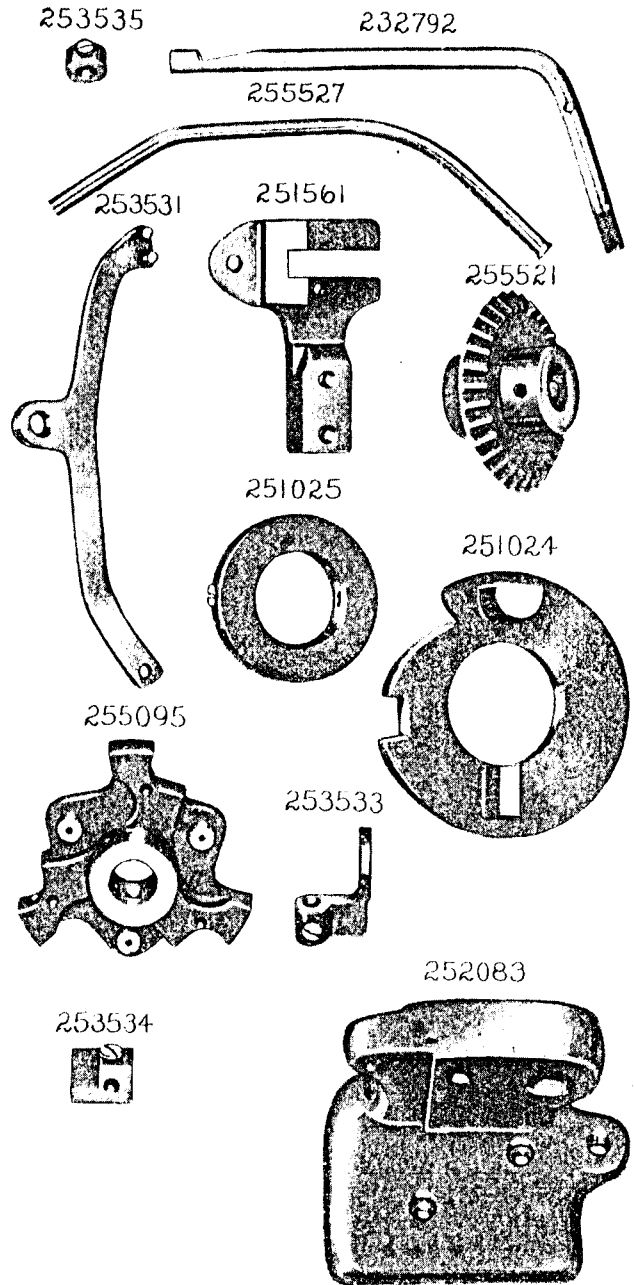


PLATE 13933—ONE-FOURTH SIZE

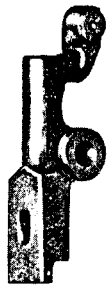
228632 255009



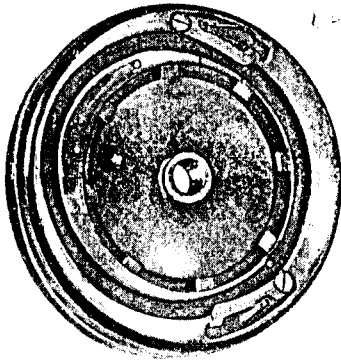
251500



251026



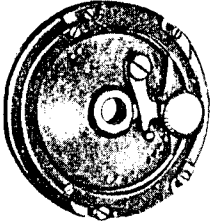
255020



255010



251552



253532



PLATE 13934—FULL SIZE

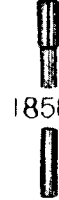
350224 255072



230



255056



18587



202



10145



250119



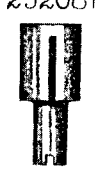
1664



255073



252081



255007



255004



10106



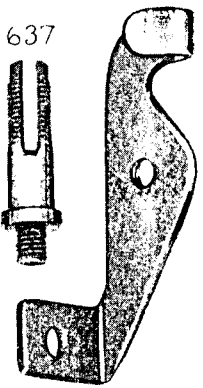
253152



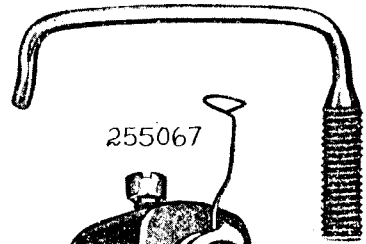
637



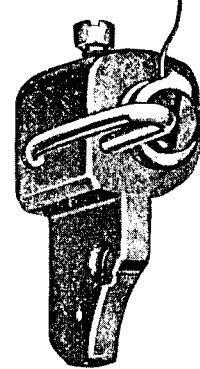
253153



253629



255067



255006



252082



39713



996



159



PLATE 13935—ONE-HALF SIZE

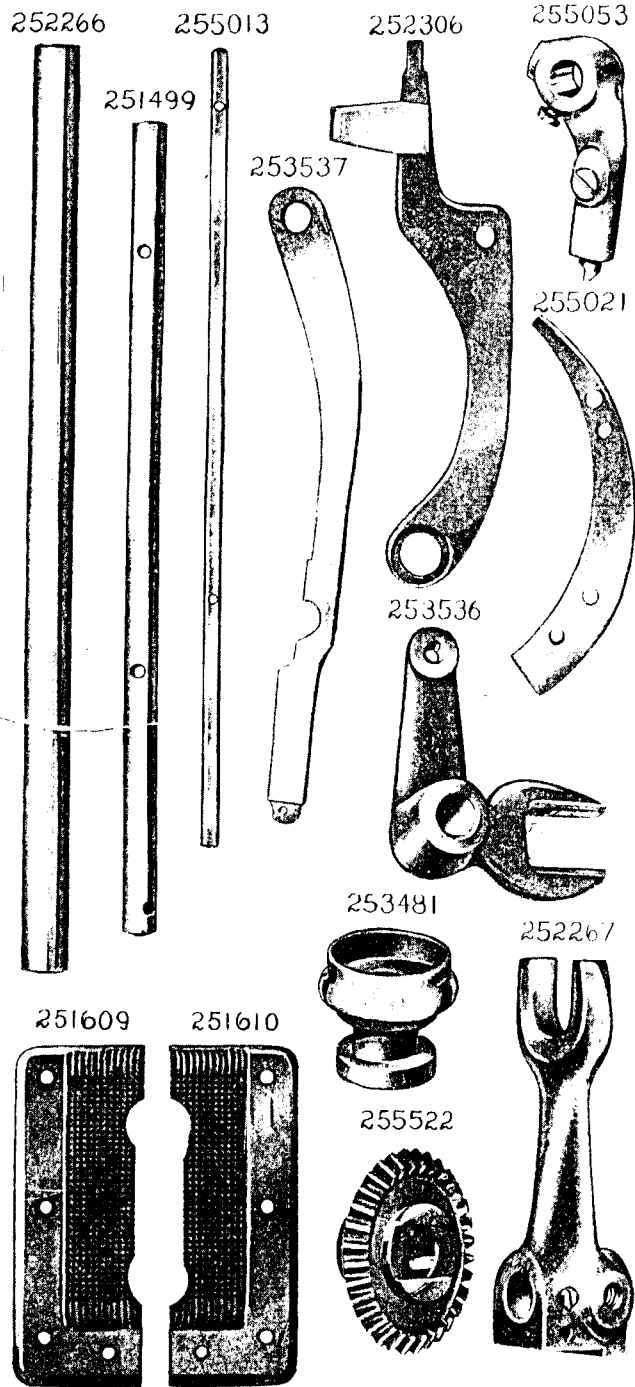


PLATE 13936—FULL SIZE

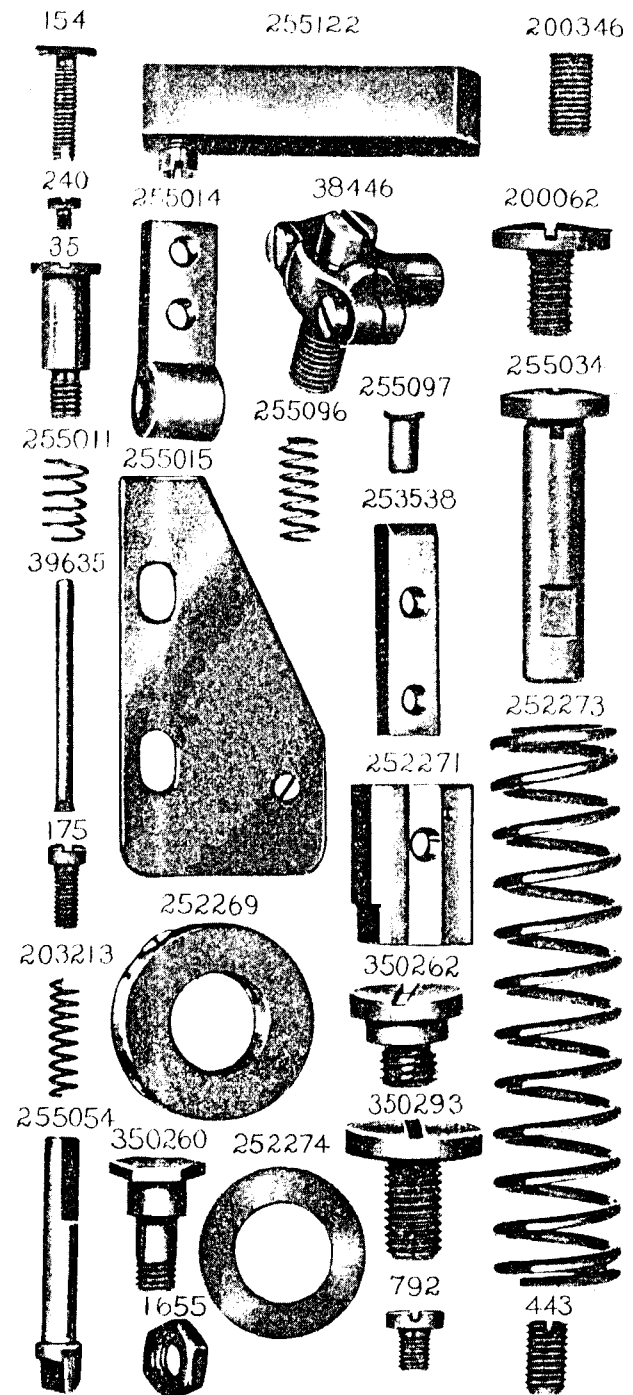


PLATE 13937—FULL SIZE

250599 250600 250552 250528

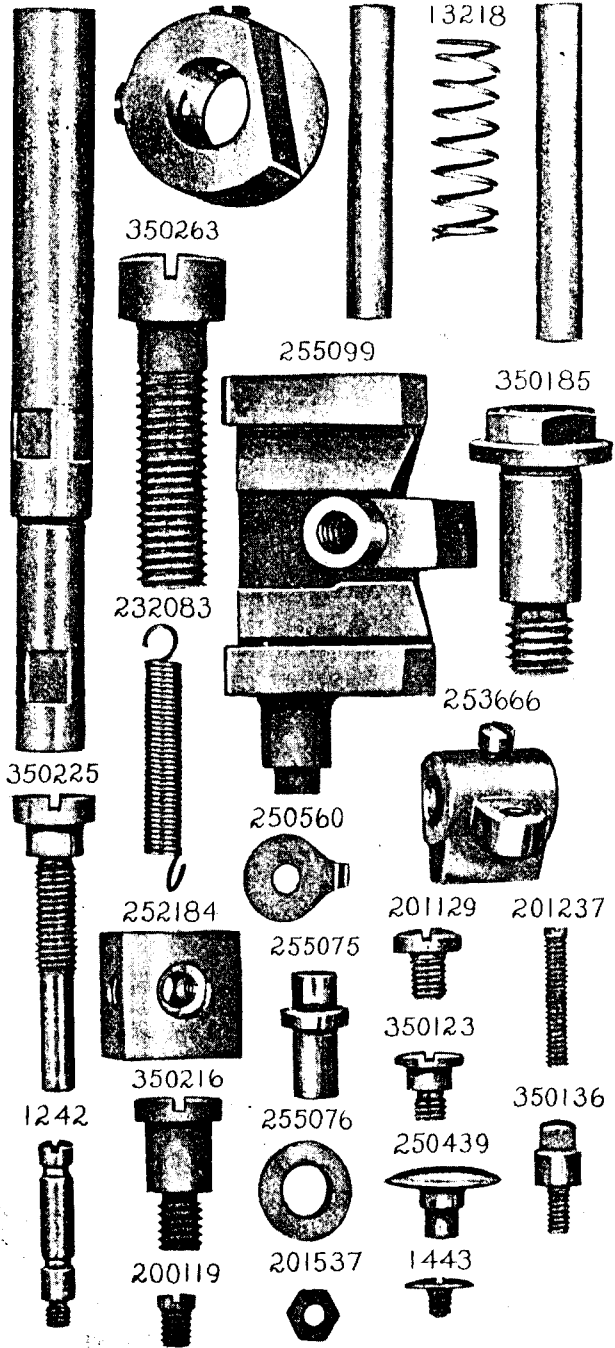


PLATE 13938—FULL SIZE

255082 255061 250597 350198

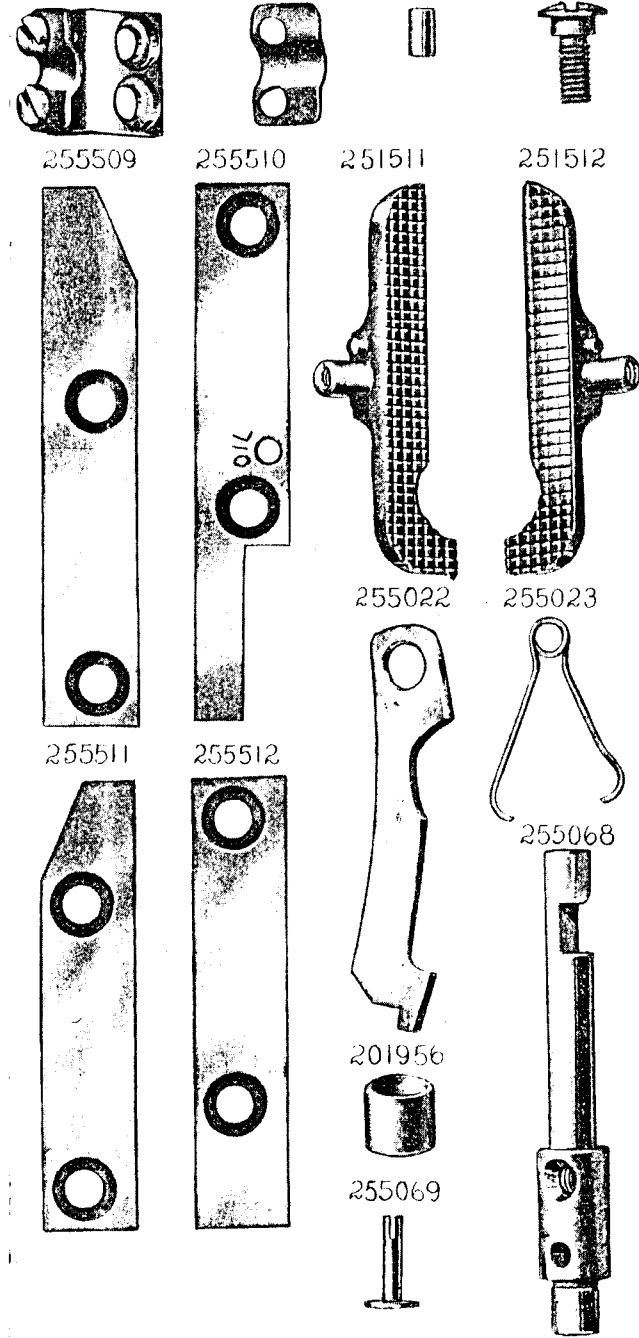




PLATE 13944—ONE-FOURTH SIZE

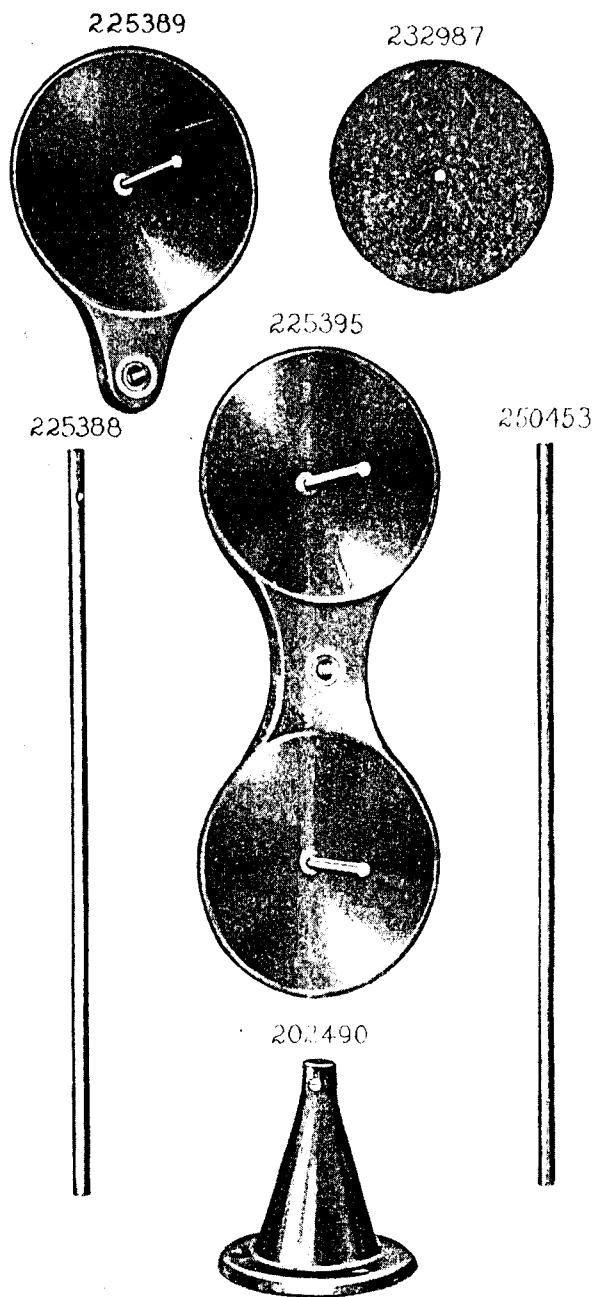


PLATE 13956—FULL SIZE

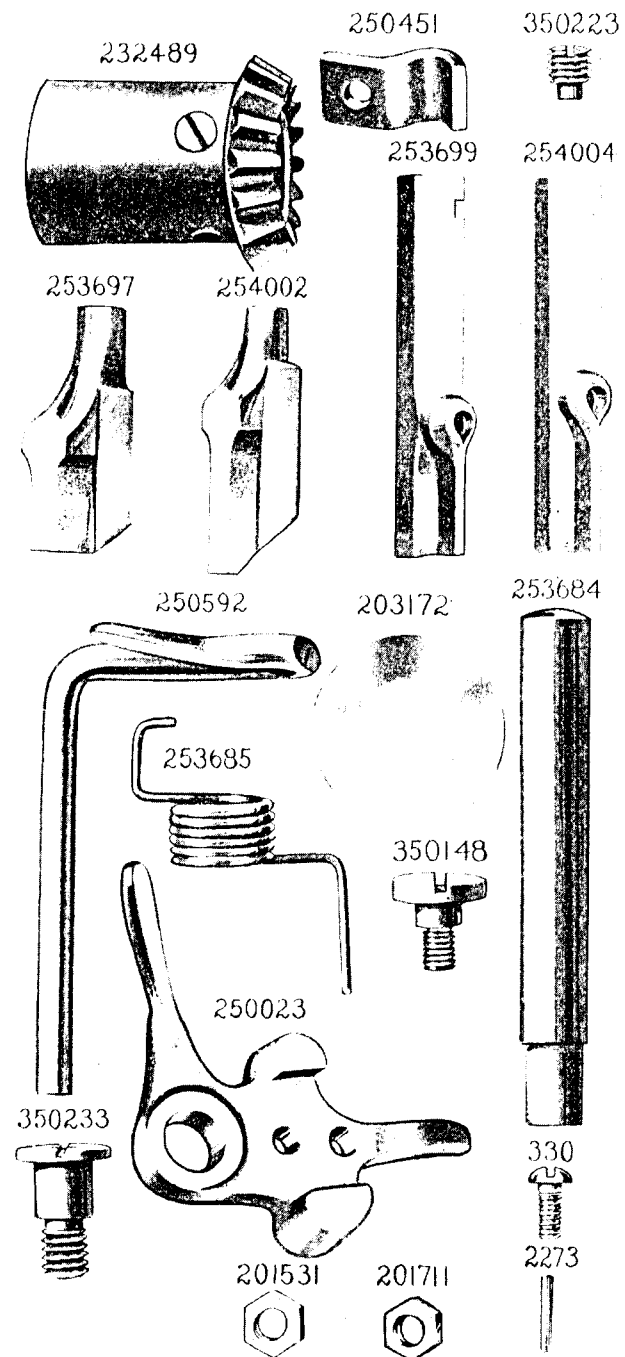


PLATE 13957—ONE-FOURTH SIZE

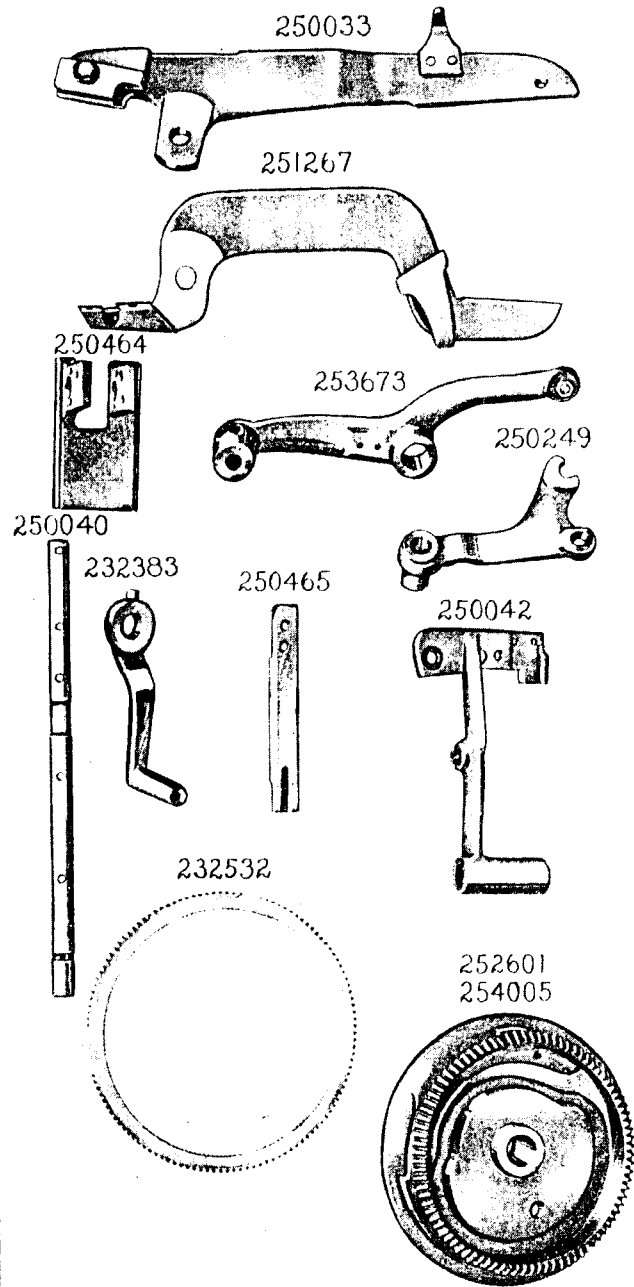


PLATE 13958—ONE-HALF SIZE

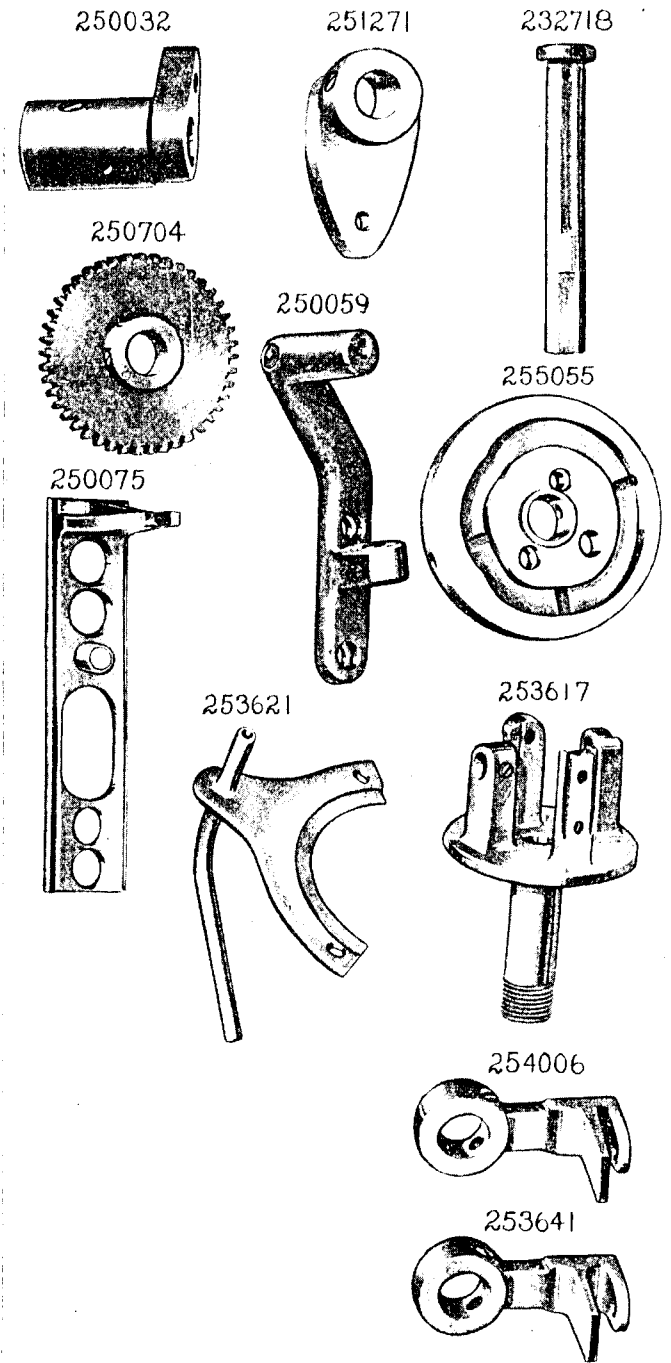


PLATE 13959—FULL SIZE

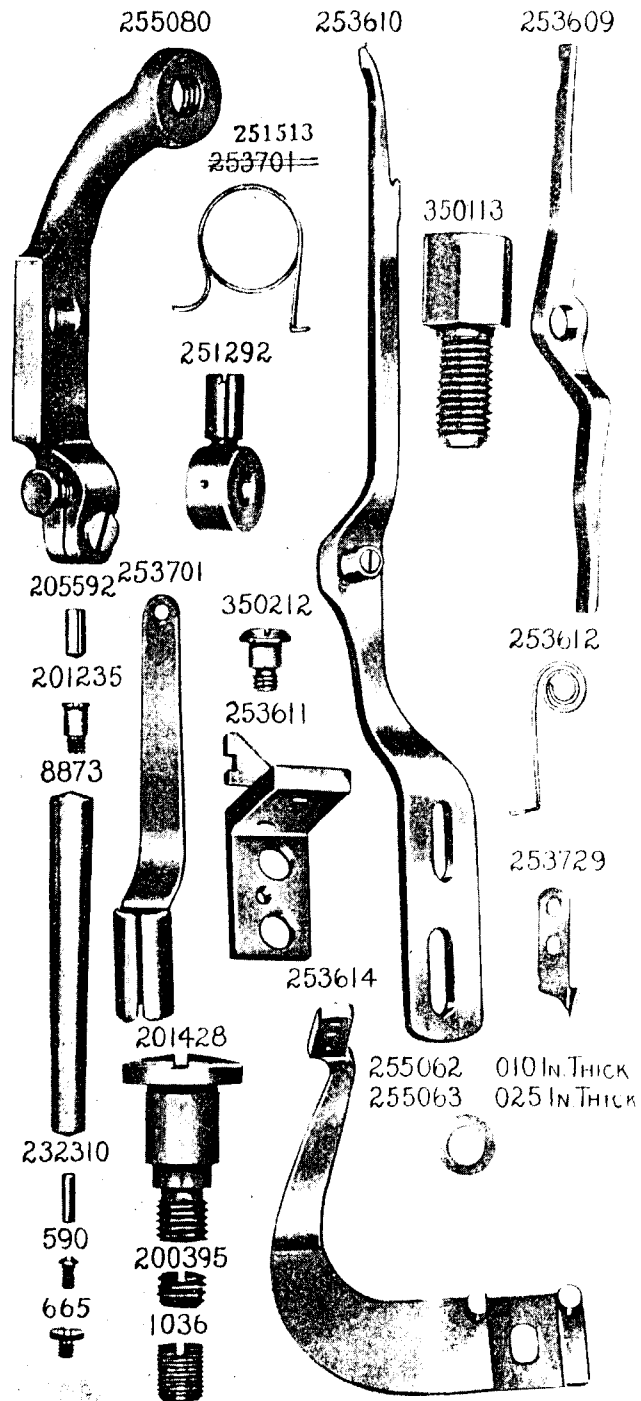


PLATE 13960—ONE-HALF SIZE

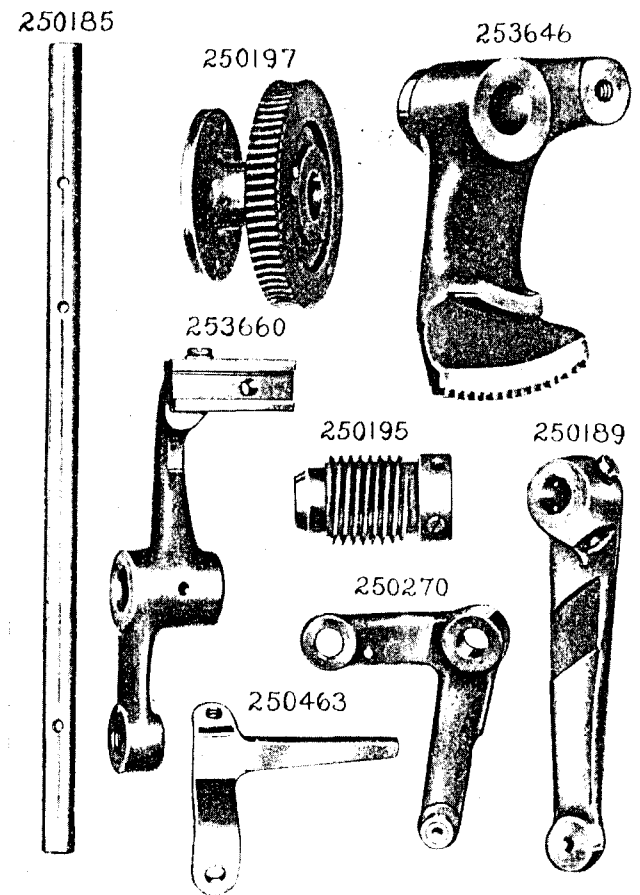


PLATE 13961—FULL SIZE

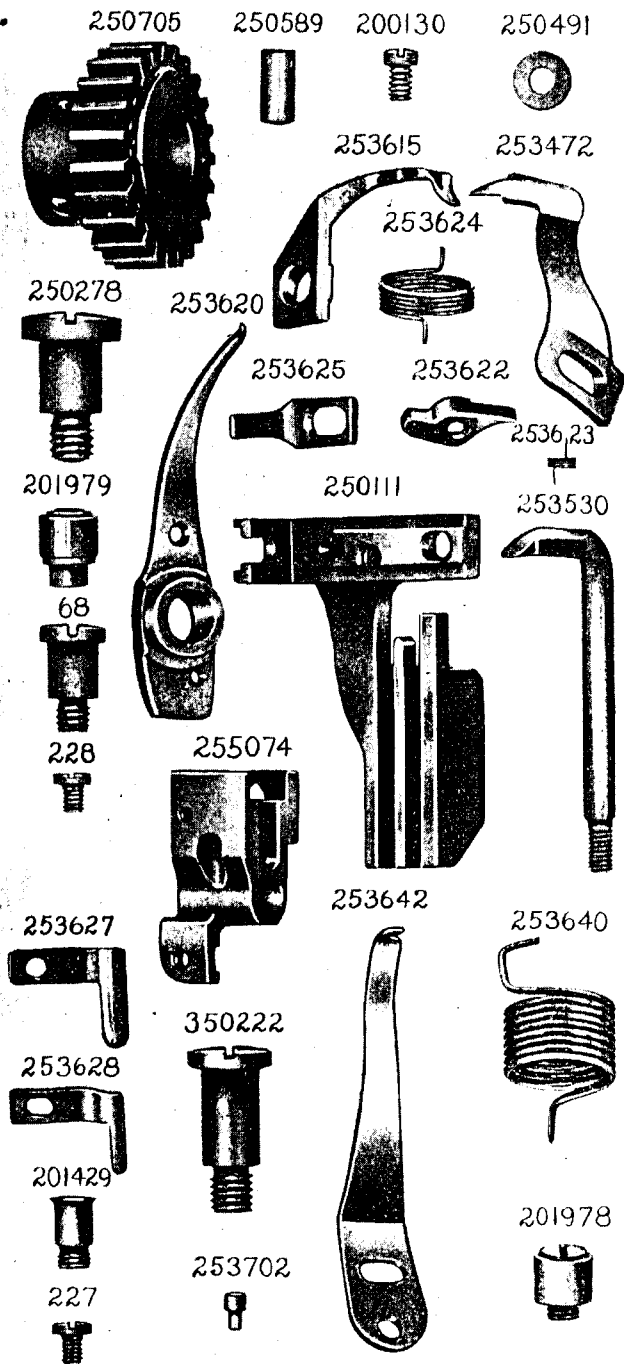


PLATE 13962—FULL SIZE

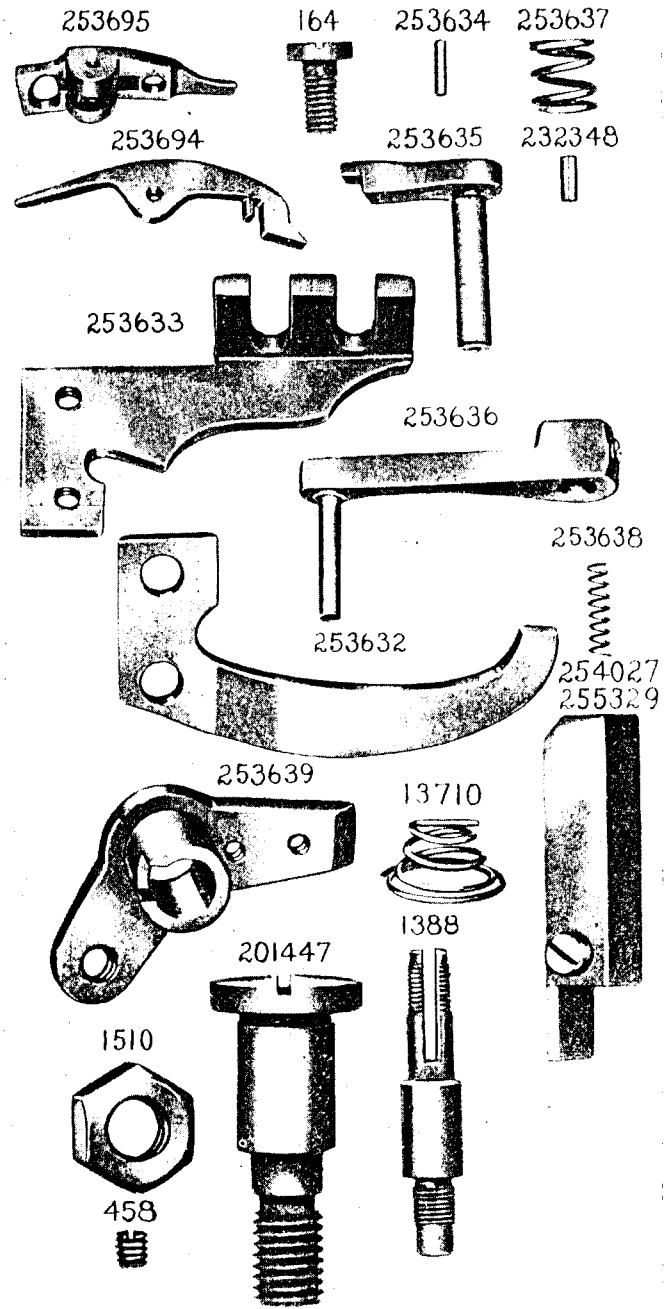


PLATE 13963—ONE-FOURTH SIZE

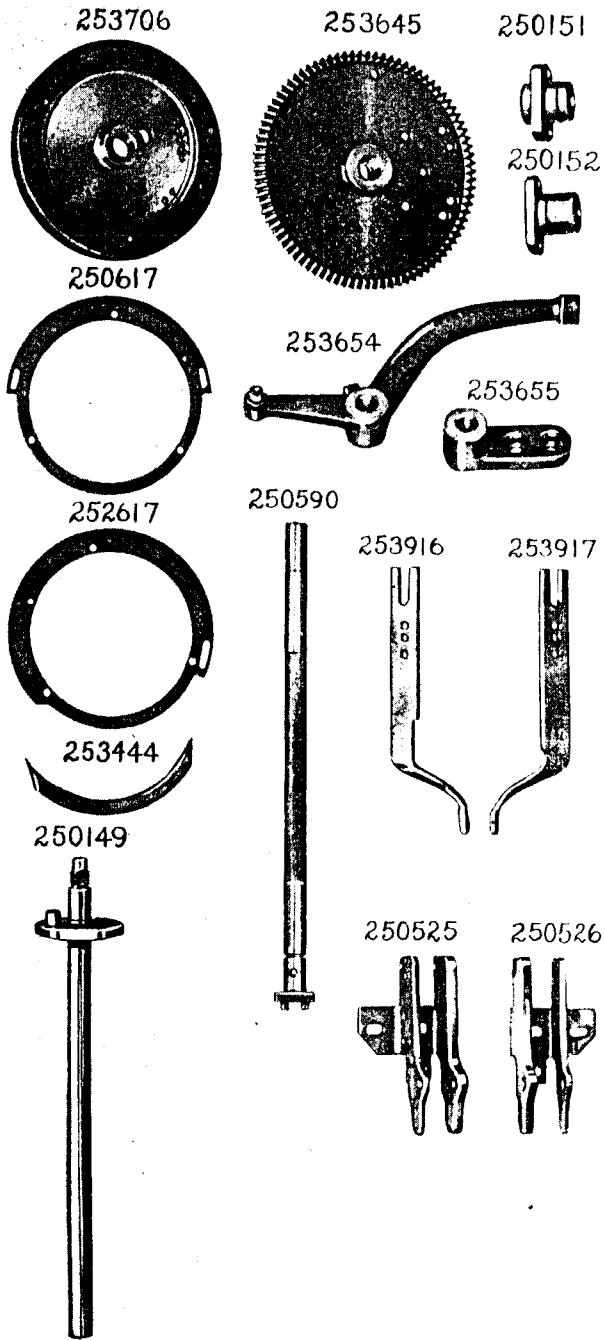


PLATE 13964—FULL SIZE

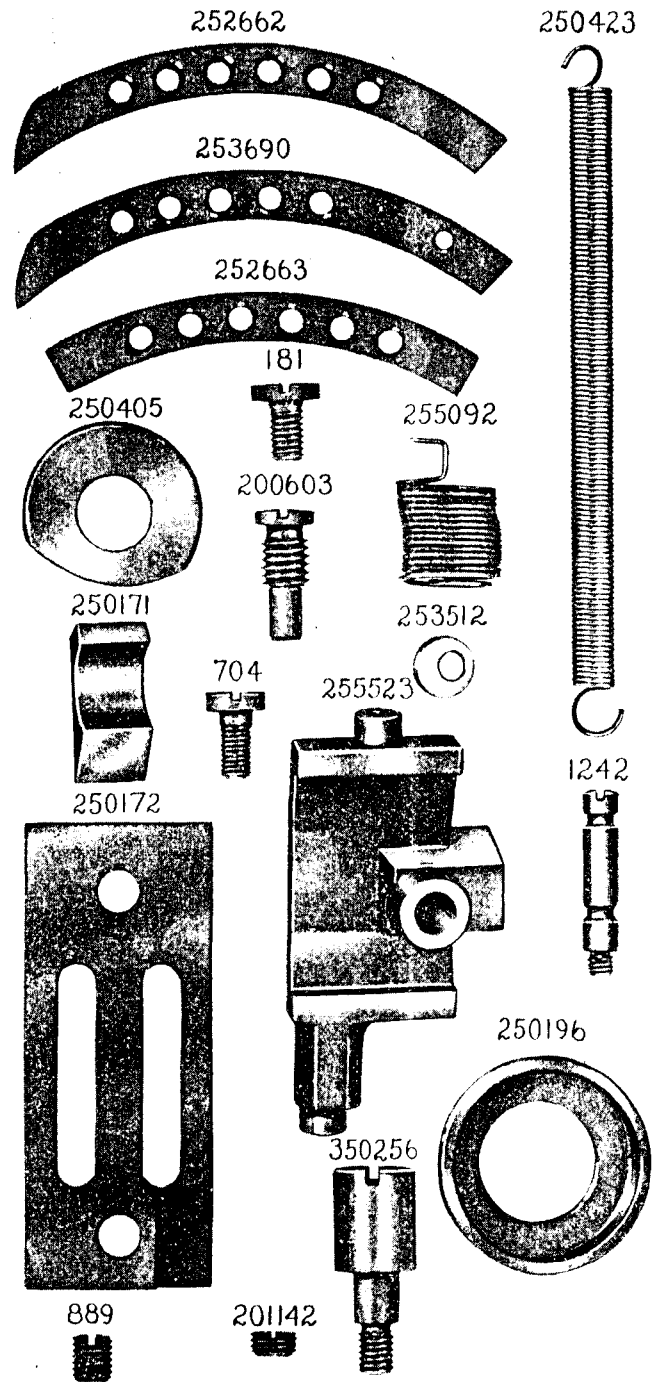


PLATE 13965—FULL SIZE

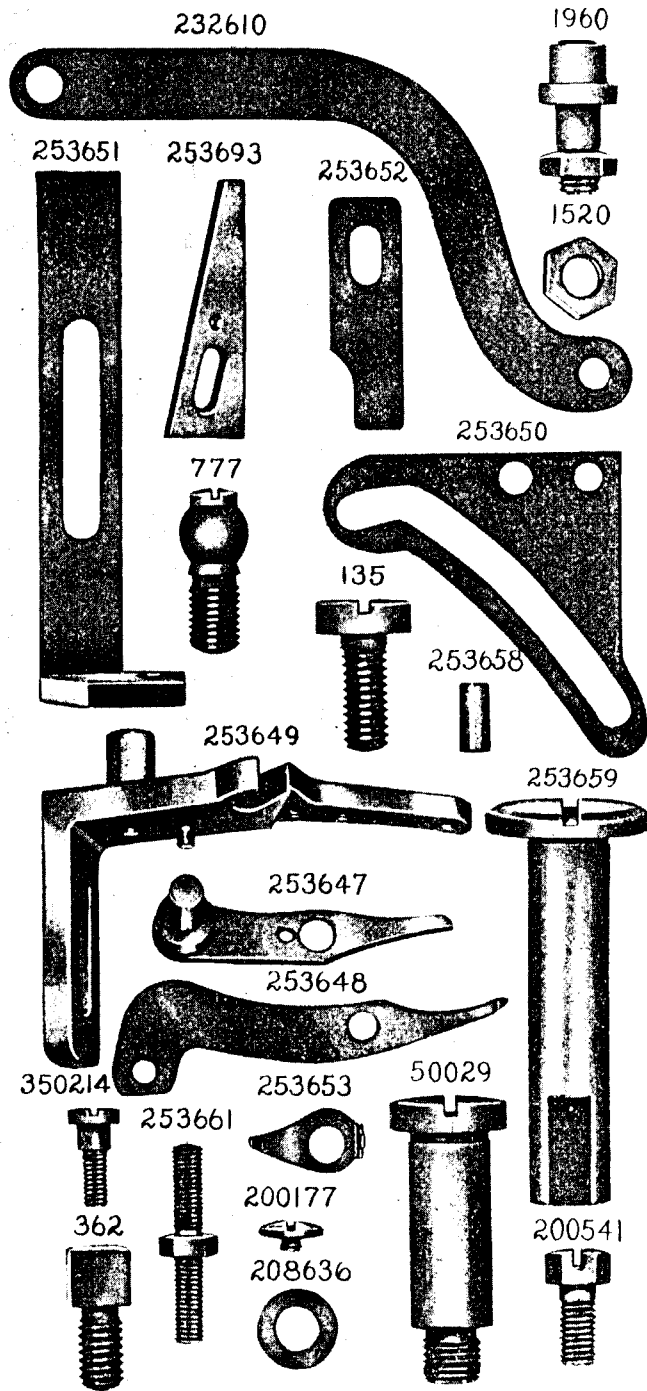


PLATE 13966—ONE-FOURTH SIZE

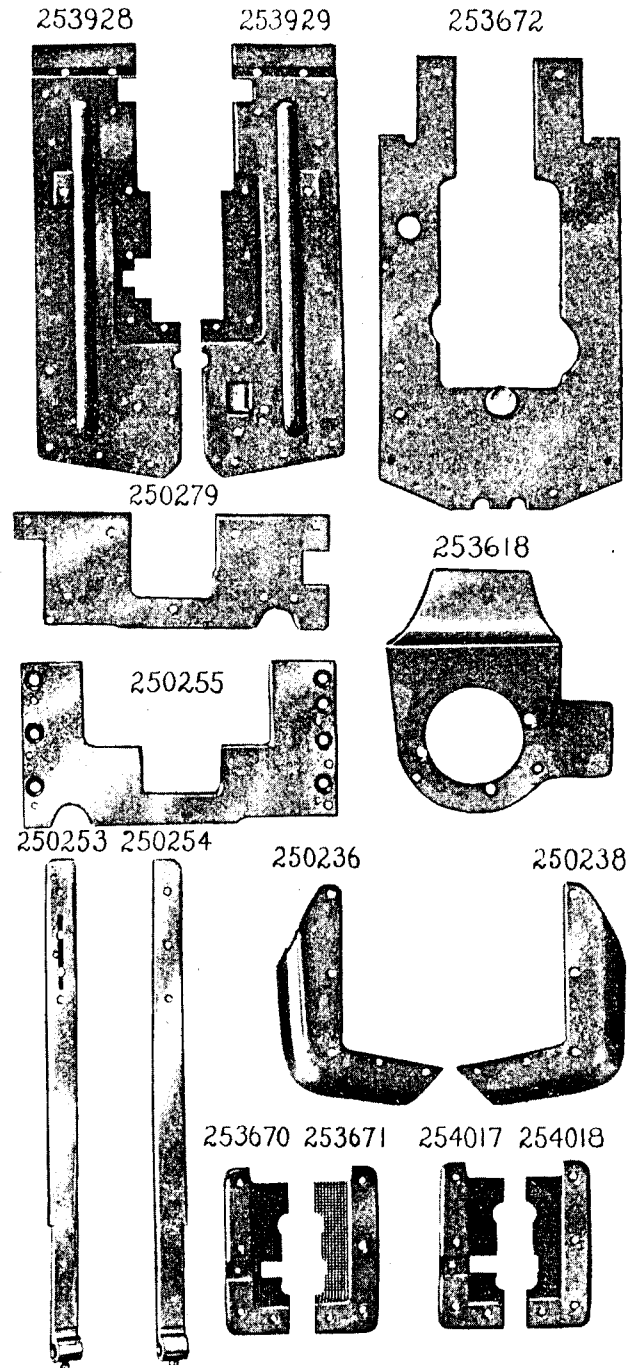


PLATE 13967—FULL SIZE

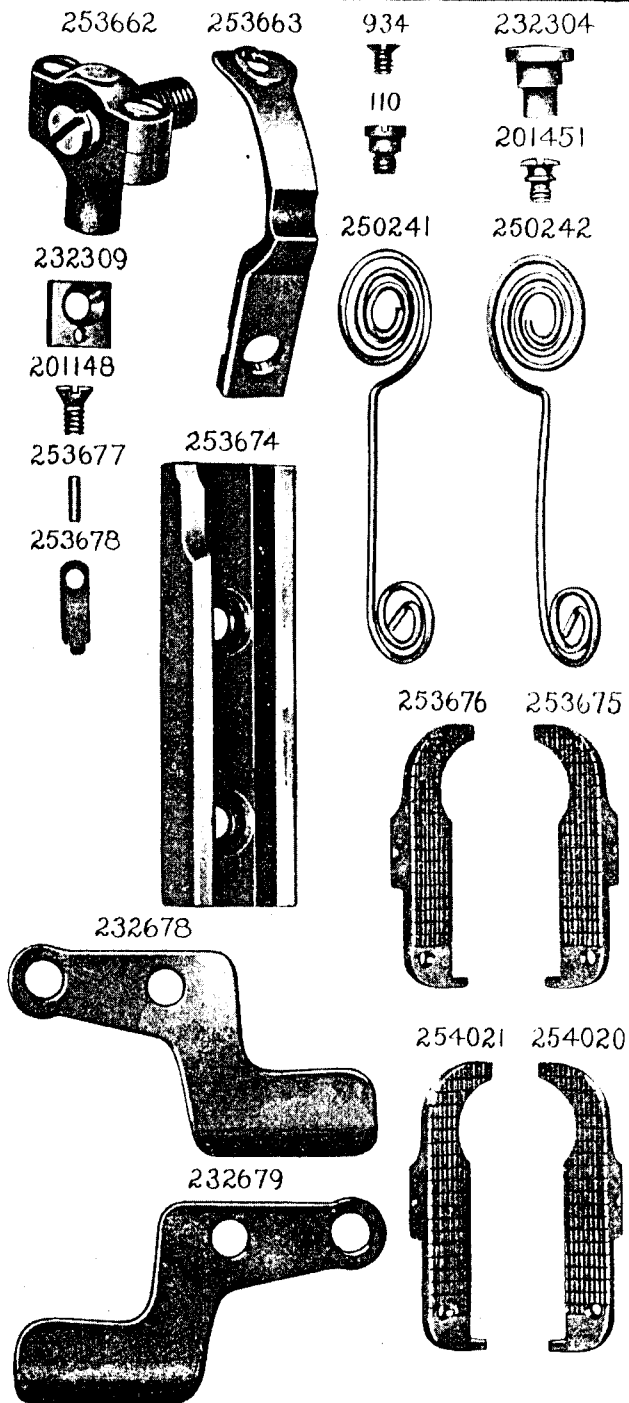


PLATE 13968—FULL SIZE

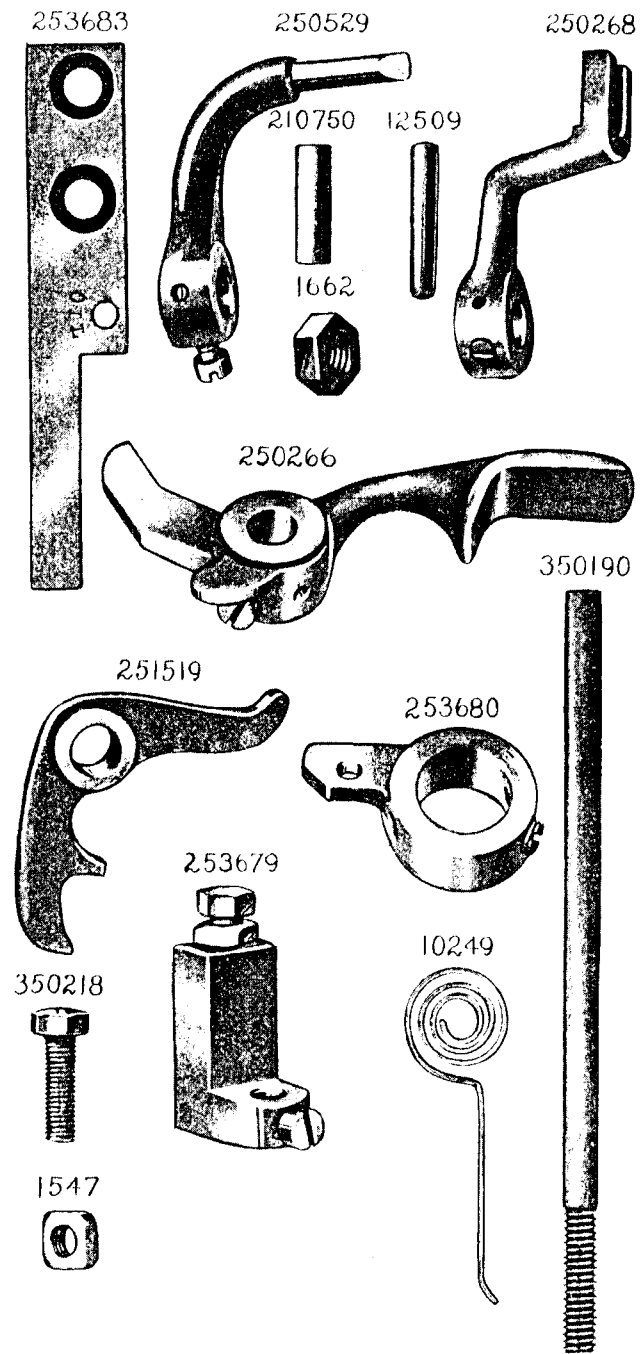


PLATE 13969—FULL SIZE

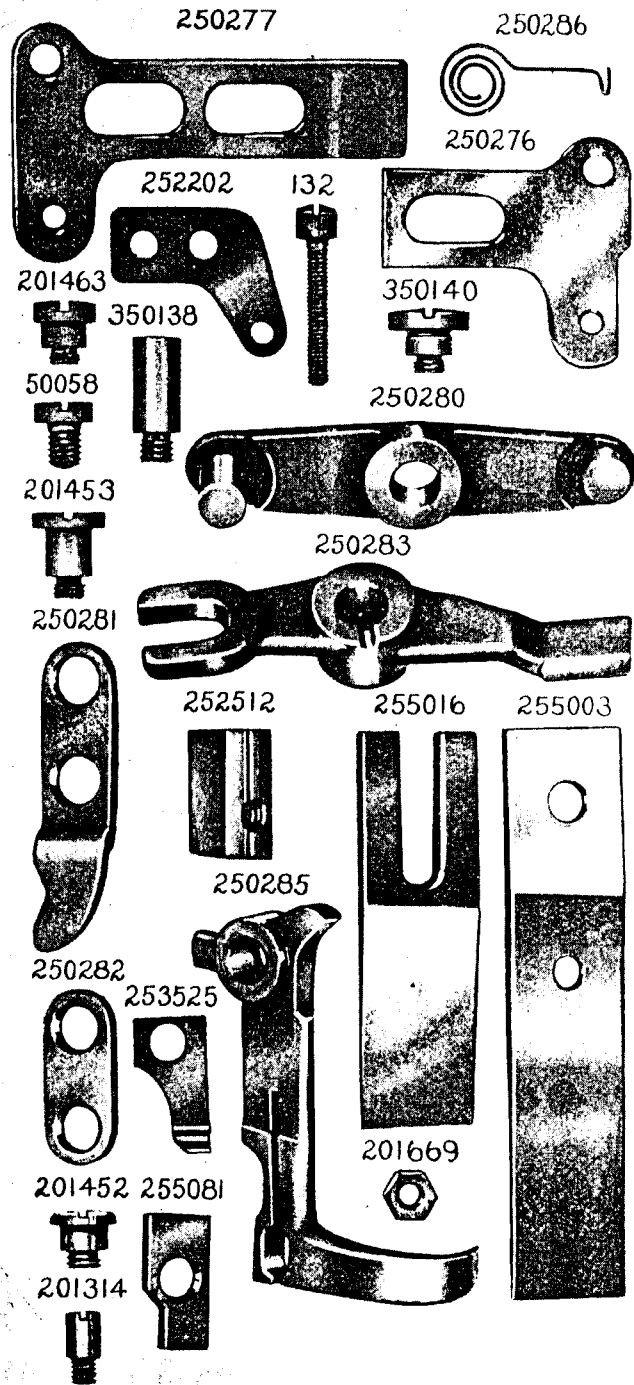


PLATE 13970—ONE-HALF SIZE

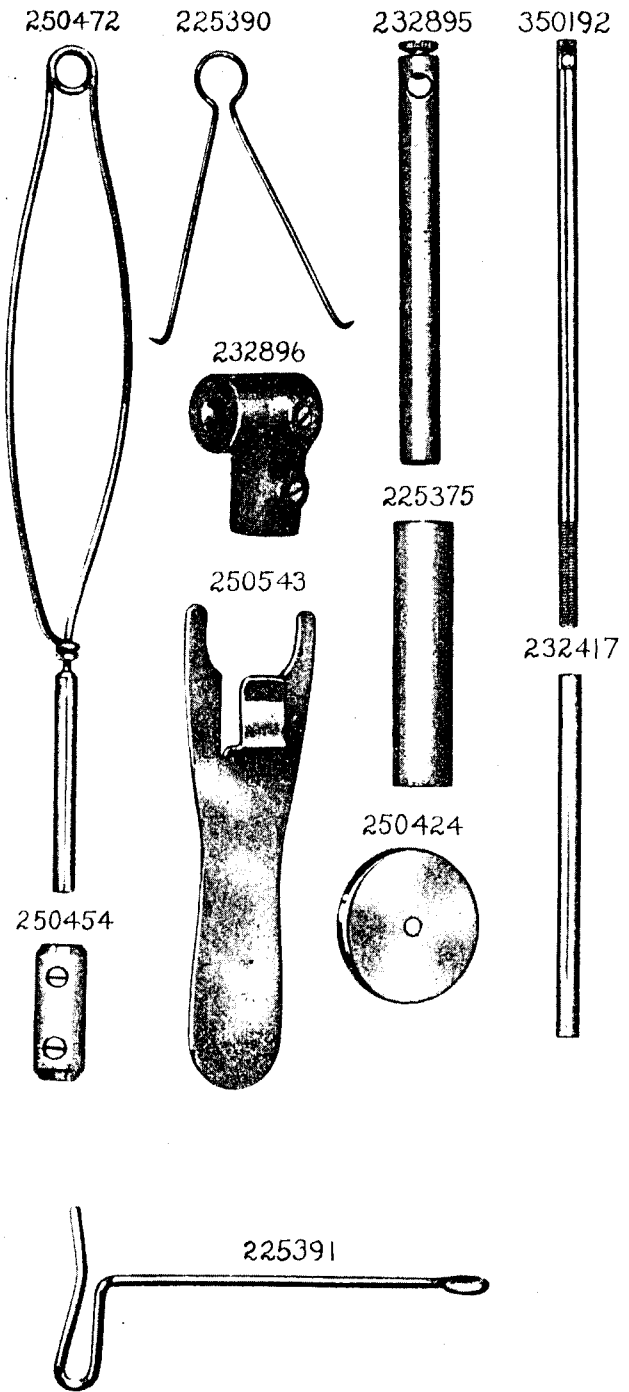




PLATE 13971—FULL SIZE

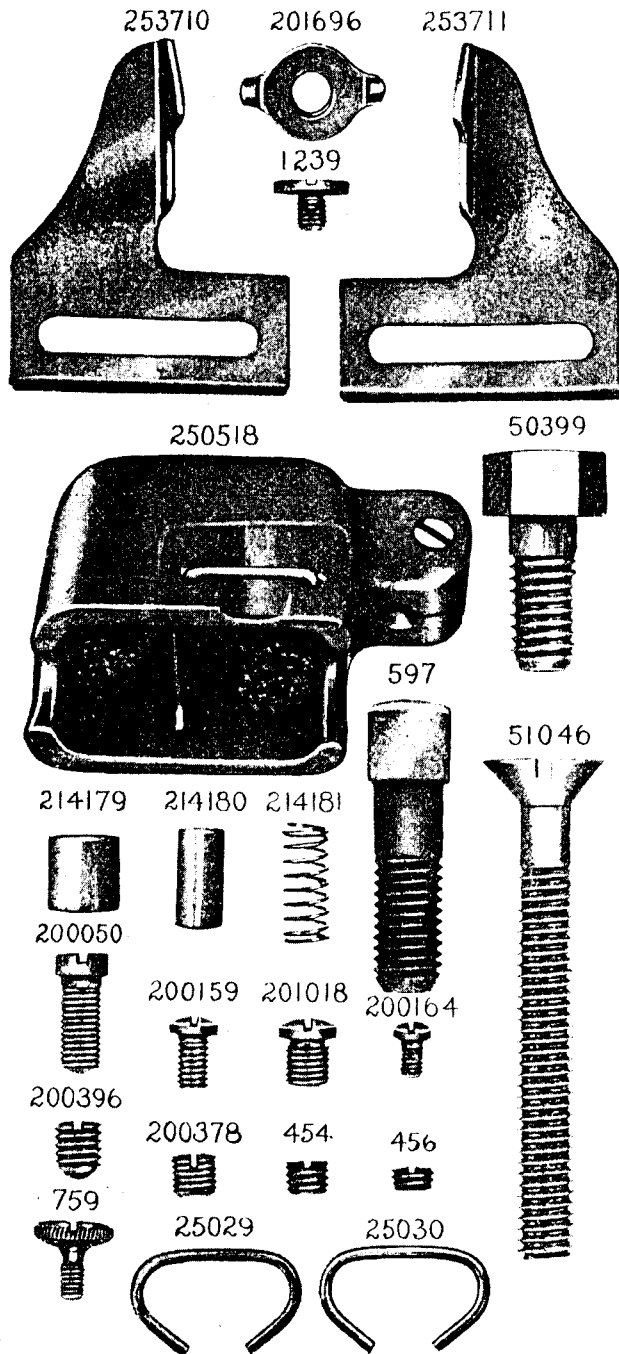


PLATE 15413—ONE-FOURTH SIZE

