The Monotype

Parts and Accessories

Lanston Monotype Machine Co.
Philadelphia, Pa.

The Monotype

PARTS AND ACCESSORIES

A LIST OF PARTS WITH PRICES

FOR

CASTING MACHINE AND KEYBOARD

AND

(herein lies the value of this book)

DIRECTIONS

WHICH, IF FOLLOWED, WILL INSURE

OUR CUSTOMERS RECEIVING

THE PARTS WANTED

Philadelphia, Pa.

LANSTON MONOTYPE MACHINE CO.

No. 1231 Callowhill Street

DEDICATION

TO all Monotype users we dedicate this book, hoping that it will not only eliminate mistakes in filling orders, but also enable our early customers to bring their machines up to date.

Its "authors," sanguine men, are hopeful that you will read the directions in the following pages, for if these be not read they have "authored" in vain and this perpetual list of parts will not realize the ambitions of its creators and "fill a long-felt want."

DIRECTIONS

FOR convenience in symboling, the CASTING MACHINE is divided into eight groups of parts, these groups being lettered from A to H, inclusive. Each of these groups performs a different function; for example, the A group comprises the mechanism for carrying the MATRICES and holding the MATRIX over the opening in the MOLD while the type is being cast. Similarly, the KEYBOARD is divided into three groups, lettered KA, KB, and KC, respectively, each of which performs its separate function.

The groups are divided into sections, each section containing one or more pieces which, for convenience in ordering, are naturally grouped together. The different sections in each group are numbered from 1 up, this number being placed in front of the letter designating the group. The separate pieces in each section are numbered from 1 up on the Style D KEYBOARD list, while on the other lists the first piece in the section takes the section number and group letter only. The piece number is placed after the letter designating the group. Thus, referring to page 1 of the CASTING MACHINE list, the symbol of the BRIDGE LEG is 1A2. This denotes that it is piece number 2 in the first section of the A group.

For accuracy in manufacture, it is necessary, in some cases, to furnish two or more pieces together. Such pieces are indicated by a Roman figure 1, placed one em leader to the left of the right end of the leader line. While some of the major pieces cannot be furnished without their minor pieces, the minor pieces may often be furnished without the major pieces. In such cases, the major piece will have a Roman figure 1 one em leader to the left of the right end of the leader line, and the minor pieces will have an Italic figure (*1*) in parentheses in the same relative position. For example, referring to the A group of the CASTING MACHINE, the BRIDGE 1A and the BRIDGE LEG 1A2 cannot be furnished separately because the two are ground to proper bearing surface

after they are screwed together. The BRIDGE-LEG SCREWS 1A3 and 1A4 and the BRIDGE PIN 1A10 must always be furnished when the BRIDGE is ordered, but may be furnished separately if required; this is indicated by the Italic figure (*1*) in parentheses. The price of $30.00 given on the same line with the BRIDGE 1A includes all the pieces that must be furnished with it, namely, the BRIDGE LEG 1A2, SCREWS 1A3 and 1A4, and PIN 1A10. Since the BRIDGE LEG cannot be furnished separately, no price is given for it, but a price is given for the SCREWS 1A3 and 1A4 and PIN 1A10, in case they should be required separately.

In some instances, a section contains two or more independent assembled parts, each of which is made up of pieces that must be furnished in combination, but any one of the assembled parts may be furnished independent of the others. To distinguish between these independent assembled parts, Roman and Italic figure 1's are used for the first part, figure 2's for the second part, etc.

In the case of the Style D KEYBOARD, an improvement has been made in listing the parts that must be furnished together, which, in conjunction with the system described above, works for clearness and accuracy. Each section containing parts that must be furnished assembled is followed by one or more notes which state clearly what pieces must be furnished together and gives the price of the assembled parts. To call attention to the note, the symbol of the major piece is altered by placing the letter K after the piece number, and the price is omitted. Since the minor pieces can be furnished separately, a price is given for them following their respective symbols in the section, but these prices are put in Italic to indicate that they are included in the price of the major piece given in the note below; therefore, in adding the prices of the individual pieces of a section to find the price of a complete section, omit all prices in Italic.

To order all of the pieces of an assembled part, it is necessary only to give the name of the major piece and its symbol (being careful to include the extra letter K which follows the piece number in the case of the Style D KEYBOARD). All the minor pieces will then be furnished assembled with the major piece. Do not specify the minor pieces in your order or an extra set of these will be sent in addition to the set assembled with the major piece.

To order all of the pieces of a section, it is necessary only to give the name of the main piece followed by its symbol and the

word (complete), as given on the last line of each section. In the case of the Style D KEYBOARD, be careful to include in the symbol of the complete section the cap X which is prefixed to the symbol.

When a piece is altered so that it is not interchangeable with the corresponding piece on previous machines without altering some other part of those machines, or when it is altered due to a change in its function, the symbol is modified to show this by placing a lower case letter in front of it. For the first change, the lower case a is used; for the second change, in the same piece, the lower case b, etc. It is imperative, therefore, when giving a symbol, to give it entire—without omitting any of the letters or figures.

To carry out the symboling system, it was necessary to select some group of machines as standard. When a piece of an earlier or a later machine differs from the corresponding piece of the standard machine, it is listed within a border immediately following the section containing the corresponding piece of the so-called standard machine. The whole section is not repeated in this border, but only the pieces which differ from those in the standard section. At the top of each of these border sections is given the numbers of the machines to which this improvement applies, and at the right of the line is given the improvement number. This improvement number refers to a correspondingly numbered sheet printed on blue paper and tipped in at the end of the price list. This blue sheet gives a complete list of all pieces required to apply this improvement; thus our earlier customers may keep their machines strictly up to date.

It is our fixed policy to make all improvements so that they can be applied to any earlier machine, and improvements made after this price list was compiled are printed on pink paper and inserted in the consecutive order of the improvement numbers. As new improvements are made, we will send each MONOTYPE user a pink insert containing a list of parts necessary to apply this improvement to previous machines. *In ordering parts, always look first at the pink sheets, as improvements made after this book was compiled are not listed in the body of the price list.*

Supersedes sheet dated 1-24-10 headed "Summary."

SUMMARY

DON'T assume that you know how to use this Price List until you have read the directions and this summary. A few moments thus spent will save delays that are always annoying and usually costly.

First, determine the number of the machine for which the piece is required and state this number on your order.

Second, find the desired piece in the Price List and give its name and symbol accurately. Use the Plate Books in conjunction with this Price List.

Third, when a section in a border follows the section containing the piece desired, note from the number of your machine whether to order from the border section or from the standard section.

Fourth, if this improvement has not already been applied to the machine in question and if you desire to bring it up-to-date, see the blue sheet for this improvement and order all parts for "Improvement No. 10" for example. When you apply an improvement to one of your machines note on this improvement sheet the number of the machine and the date on which the change was made.

Fifth, if your copy of this Price List contains pink sheets always refer to them before making out your order.

LOAN MATERIAL

THE MONOTYPE has been well called "the always-busy-machine." Because of its flexibility, the ease with which it handles all classes of composition and its efficiency as a type caster, it eliminates "idle time."

We recognize that the stoppage of so important a part of a printing-office is a serious matter. We cannot build a machine that is proof against accidents, but we can and do use every effort to make repairs as quickly as possible.

As the principal expense for repairing highly productive machinery is not the cost of the parts required, but the time lost making repairs, we have arranged to reduce this time to the minimum by lending our customers parts for use while they return theirs to us.

To make this plan a success this loaned material must be returned to us promptly upon receipt of the repaired material. The loan of this material is an accommodation and its prompt return is necessary if other customers are to be accommodated. To put this in dollars and cents: We charge only a small fixed fee for the use of loan material, and then a daily rental for the detention of the loan material *after the receipt of the repaired material.*

The parts which we will loan together with the fixed fees and daily rental charges are as follows:

	Fixed Fee	Daily Rental
MOLD	$6.00	$1.50
CAM SHAFTS (pair)	5.00	1.00
NORMAL WEDGE	1.00	.50
Regular Wedges; we cannot loan special Wedges.		

This daily rental begins on the day following the receipt of the repaired part by the customer. Therefore our material should be shipped back to us on the same day that the customer receives his own material. The customer pays transportation charges in both directions on loan material and on repaired material. All shipments of loan material must, of course, be made by express.

Corrections in Price List
Monotype Parts and Accessories
October 1, 1911

To keep your copy of our Price List up to date, please make the following corrections NOW.

Casting Machine, page 3:
Change the symbol of CENTERING-PIN-STAND BUSHING from 6A5 to a6A5.

Casting Machine, page 12:
Strike out the TYPE-SUPPORT-SPRING-BAR STUD b31B3 (in the section inside the border), as this is made a part of the BAR c31B1.

Casting Machine, page 15:
Strike out the MOLD-BLADE-ABUTMENT-SLIDE-ANVIL DOWEL (2) 14C4, as these are no longer furnished.

Casting Machine, page 26:
Change the symbol of the BELT-SHIFTER-ARM SET SCREW from 2S2 to 2S3.

Casting Machine, page 34:
Change the price of the LOCKING-BAR-BELL-CRANK STUD b32E (in the section inside the border) from $0.40 to $0.35.

Casting Machine, page 35:
Strike out the LOCKING-BAR CAM a86E, as we no longer furnish this narrow CAM but furnish instead the wide CAM b86E (see Improvement No. 2).

Change the quantity of LOCKING-BAR-LEVER-LINK PIN 34E from (1) to (2).

Casting Machine, page 45:
Change the section beginning "WORM SHAFT" to read as follows:

WORM SHAFT	1	80E	15.60
gear	(1)	80E1	*4.50*
hand wheel	(1)	80E2	*5.00*
key (for Worm)	(1)	80E3	*.05*
" (long, for Gear and Hand Wheel)	(1)	80E4	*.05*
nut		80E5	.11
worm	(1)	80E6	*3.00*
WORM SHAFT 80E (complete)			15.71

Casting Machine, page 67:
Change the price of the PIPE BRACKET a16H as follows and note that the SCREEN a16H4 has been added:

PIPE BRACKET	a16H	2.50
screen	a16H4	.10
screw (large) (2)	a16H1	.08
" (small)	a16H3	.05
PIPE BRACKET a16H (complete)		2.81

Casting Machine, page 69:

Strike out the PUMP-BODY LIFTING LEVER (NOZZLE end) 26H, as this old style LIFTING LEVER can no longer be furnished. The STUD 26H1 and NUT 26H2 are, of course, still standard. When the improved PUMP-BODY LIFTING LEVER a26H is ordered, the PIN a26H3 and NUT a26H4 will always be furnished with it; this PIN and NUT may, however, be furnished separately if desired. Therefore, change the section inside the border to read as follows:

PUMP-BODY LIFTING LEVER (Nozzle end)	1	a26H	3.25
pin (bearing for Pump Body)	(1)	a26H3	.10
" nut	(1)	a26H4	.04
PUMP-BODY LIFTING LEVER 26H (complete)			3.72

Casting Machine, page 70:

Strike out the PUMP-BODY-SPRING-ROD-SLEEVE WASHER 31H12 and change the price of the PUMP-BODY SPRING 31H (complete) from $8.70 to $8.60.

Casting Machine, page 81:

Change the price of the NORMAL-WEDGE-LOCKING-PIN SPRING b14B8 from $0.08 to $0.20.

Casting Machine, page 84:

Add the following sentence to the last paragraph in the heading: "The BASE 1E must be drilled for the PIPES to pass out the rear near the floor and PIPE connections must be made to plumbing outside, instead of inside, the BASE."

Change the price of the PIPE BRACKET a16H (complete) from $0.81 to $2.81.

Casting Machine, page 88:

Strike out the LINE-HOOK-OPERATING-SLIDE-LATCH-LOCKING-PIN GUIDE PIN a23F3, as this piece is not furnished.

Casting Machine, page 100:

Change the price of the GALLEY-TRIP-ROD ARM a9D (complete) from $1.25 to $1.20.

Style D Keyboard, page 13:

Change the first NOTE following "UNIT-RACK STOP X31KB" to read as follows:

NOTE: 31KB3K is assembled with 31KB4, 31KB5, 31KB6, and 31KB8 to 31KB17, inclusive, and cannot be furnished without these parts. Price assembled 5.51

The Casting Machine

CASTING MACHINE PRICES

Complete List for Machines 103 and Following

A GROUP

Mechanism for carrying the Matrices and accurately positioning the proper Matrix over the opening in the Mold while the type is being cast.

BRIDGE	1..	1A	30.00
screw (2)		1A1	.10
leg	1..	1A2	
" screw (side) (2)	(1)..	1A3	.06
" " (top)	(1)..	1A4	.06
" spring post (for Fibre-stop Spring)		1A5	.05
bushing (for Carrying-frame Guide Rod) (2)		1A6	2.00
" nut (2)		1A7	.45
" adjusting screw (front)		1A8	.05
" " " (rear)		1A9	.10
pin (for Fibre Stop)	(1)..	1A10	.05
BRIDGE 1A (complete)			35.30

Bridge Bushing, for Centering Pin, see Centering-pin Stand 6A
Bridge-centering-pin-stand Adjusting Screw, see Centering-pin-stand Adjusting Screw 6A1
Bridge Fibre Stop, for Carrying Frame, see Fibre Stop 7A

BRIDGE LEVER		a2A	1.75
connecting link		2A1	1.25
fulcrum rod		2A2	.15
" " forked eye		2A3	.60
" " nut (2)		2A4	.05
" pin		2A5	.05
" " cotter		2A6	.00
BRIDGE LEVER a2A (complete)			3.90

For machines 103 to 501 inclusive order: Improvement No. 4

BRIDGE LEVER	2A	1.75
BRIDGE LEVER 2A (complete)		3.90

Bridge-lever-connecting-link Stud, in Centering-pin Lever, see Centering-pin-lever Stud 16E4

BRIDGE-LEVER-LINK PIN	1..	3A	.50
spring	1..	3A1	
BRIDGE-LEVER-LINK PIN 3A (complete)			.50

CARRYING FRAME		4A	6.50
guide rod (2)		4A1	2.50
" " stop nut (2)		4A2	.40
" " " " lock nut (2)		4A3	.05
" " oil cap (2)		a4A4	.10
" " " " screw (2)		a4A5	.03
" " cross beam	1..	a4A6	1.75
" " " " nut (2)		4A7	.05
" " " " stud	(1)..	a4A8	.25
" " " " " adjusting nut		4A9	.15
" " " " " " " lock nut		4A10	.05
" " " " " spring		4A11	.10
raising spring (2)		4A12	.12
CARRYING FRAME a4A (complete)			15.05

For machines 103 to 501 inclusive order: **Improvement No. 4**

CARRYING FRAME guide rod oil cap (2)		4A4	.10
" " " " screw (2)		4A5	.03
" " cross beam	1..	4A6	1.75
" " " " stud	(1)..	4A8	.25
CARRYING FRAME 4A (complete)			15.05

The OIL CAP a4A4 and its SCREW a4A5 are interchangeable if ordered together.

Carrying-frame Cam, see Centering-pin Cam	a13E	
Carrying-frame Fibre Stop, see Fibre Stop	7A	
Carrying-frame-guide-rod Bushing, see Bridge Bushing	1A6	

CENTERING PIN		a5A	3.50
adjusting nut		5A1	.20
" " lock nut		5A2	.05
spring		a5A3	.12
" abutment (lower)		a5A4	.25
" " (upper)		a5A5	.60
CENTERING PIN a5A (complete)			4.72

If the CENTERING PIN becomes worn so that perfect alignment cannot be obtained it should be returned to our Factory to be reground and tested. Price..... 1.00

For machines 103 to 501 inclusive order: **Improvement No. 4**

CENTERING PIN		5A	3.50
spring		5A3	.08
" abutment (lower)		5A4	.15
" " (upper)		5A5	.40
CENTERING PIN 5A (complete)			4.38

For machines 103 to 501 inclusive equipped with Display-type Attachment order: **Improvement No. 13**

CENTERING-PIN ABUTEMENT (lower)		3S	.20

For machines 103 to 501 inclusive equipped with Display-type Attachment order:	Improvement No. 13	
CENTERING-PIN SPRING (2)	4S	.08
abutment (lower)	4S1	2.70
" (upper)	4S2	2.50
" stud (2) (1)	4S3	.10
" " nut (2)	4S4	.04
" " washer (2)	4S5	.03
CENTERING-PIN SPRING 4S (complete)		5.50

For machines 502 and following equipped with Display-type Attachment order:	Improvement No. 13	
CENTERING-PIN SPRING (2)	4S	.08
abutment (lower)	a4S1	2.95
" (upper)	a4S2	2.75
" stud (2) (1)	4S3	.10
" " nut (2)	4S4	.04
" " washer (2)	4S5	.03
CENTERING-PIN SPRING a4S (complete)		6.00

Centering-pin Cam	a13E	
CENTERING-PIN STAND	6A	5.00
adjusting screw (right and left) (2)	6A1	.05
" " (front and rear) (2)	6A2	.05
bolt (2)	6A3	.08
" washer (2)	6A4	.05
bushing	6A5	3.00
" adjusting sleeve	6A6	.30
" " nut	6A7	.20
" guide screw	6A8	.05
CENTERING-PIN STAND 6A (complete)		9.01
Connecting Link, see Bridge-lever Connecting Link	2A1	
Connecting-link Pin, for Bridge Lever, see Bridge-lever-link Pin	3A	
Connecting-link Stud, see Centering-pin-lever Stud	16E4	
Cover Plate, for Matrix Case, see Matrix-case Cover Plate	8A1	
Cross Beam, see Carrying-frame-guide-rod Cross Beam	a4A6	
Draw Rod, see Sliding-frame Draw Rod	9A1	
Draw Rod, see Cross-slide Draw Rod	5C1	
FIBRE STOP	7A	.30
spring	7A1	.05
FIBRE STOP 7A (complete)		.35
Fibre-stop-spring Post, see Bridge-leg Spring Post, for Fibre-stop Spring	1A5	
Fibre-stop Pin, see Bridge Pin, for Fibre Stop	1A10	
Guide Rod, see Carrying-frame Guide Rod	4A1	
Guide-rod Cross Beam, see Carrying-frame-guide-rod Cross Beam	a4A6	
Guide-rod Spring, see Carrying-frame Raising Spring	4A12	
Link Pin, see Bridge-lever-link Pin	3A	

MATRIX CASE.....1..	8A	7.50
cover plate.....(1)..	8A1	2.50
" " screw (4).....(1)..	8A2	.02
wire (15).....(1)..	8A3	.02
" plate.....(1)..	8A4.	.30
" " screw (2).....(1)..	8A5	.03
MATRIX CASE 8A (complete).....		7.50

Matrix-case Carrying Frame, see Carrying Frame..... 4A

For machines equipped with Display-type Attachment order: Improvement No. 13

MATRIX HOLDER, (for Sorts Matrices, 14 point and over).....1..	14S	3.75
bushing (for Centering Pin)..(1)..	14S1	.25
clamp (back).....(1)..	14S2	.40
" (left).....(1)..	14S3	.40
" (right).....(1)..	14S4	.40
" spring (3).....(1)..	14S6	.05
" screw (3).....(1)..	14S7	.04
MATRIX HOLDER 14S (complete).....		3.75

For casting sorts, 12 point or under, on the style B mold, from matrices of the Display-type pattern order:

MATRIX HOLDER (for Sorts Matrices, 12 point and under).....1..	50S	3.75
bushing (for Centering Pin)..(1)..	50S1	.25
clamp (back).....(1)..	50S2	.40
" (left).....(1)..	50S3	.40
" (right).....(1)..	50S4	.40
" (spring) (3).....(1)..	50S6	.05
" (screw) (3).....(1)..	50S7	.04
MATRIX HOLDER 50S (complete).....		3.75

SLIDING FRAME.....1..	a9A	12.00
draw rod.....	9A1	.70
" " clamp.....1..	a9A2	
" " " screw (front).....(1)..	a9A3	.05
" " " " (rear).....(1)..	9A4	.04
SLIDING FRAME 9A (complete).....		12.70

For machines 103 to 504 inclusive order:

SLIDING FRAME draw rod clamp screw (front)..... 9A3 .05

SLIDING-FRAME-DRAW-ROD CLAMP a9A2 is tapped in place on SLIDING FRAME a9A and cannot be furnished alone. Should new CLAMP be required return SLIDING FRAME to our Factory. Price for special CLAMP..... 1.50

B GROUP

Mechanism for moving the Matrix Case right and left, positioning the Normal and Justification Wedges and removing the type after it has been ejected from the Mold.

AIR PIN (14)	1B	.20
spring (14)	1B1	.05
AIR PIN 1B (complete) each		.25
AIR PIN (fixed, permanent stop for eighteen unit row)	2B	.05
AIR-PIN BLOCK (front)	3B	60.00
dowel (left)	3B1	.05
" (right)	3B2	.05
screw (5–16″ x 1 5–8)″ (2)	3B3	.07
" (5–16″ x 15–16″)	3B4	.07
" (1–4″ x 1 7–16″)	3B5	.07
" (1–4″ x 1 1–4″)	3B6	.07
" (1–4″ x 7–8″)	3B7	.06
AIR-PIN BLOCK 3B (complete)		60.51

For machines 1203 and following order: Improvement No. 3

AIR-PIN BLOCK	a3B	60.00
AIR-PIN BLOCK a3B (complete)		60.51

Air-pin-block Cover Plate, see Air-pin Plate 4B
Air-pin-block Shoe, for Matrix Jaw, see Matrix-jaw Shoe. 8B
Air-pin-block Shoe, for Type Carrier, see Type-carrier Shoe. 23B
Air-pin Jaw, see Pin Jaw 16B

AIR-PIN PLATE	4B	3.00
dowel (2)	4B1	.04
screw (4)	4B2	.06
AIR-PIN PLATE 4B (complete)		3.32

Fixed Pin, see Air Pin, fixed 2B
Guide Rod, for Pin Jaw, see Pin-jaw Guide Rod 18B
Justification Wedge 10D
Locking Bar, see Matrix-jaw-stop-rack Locking Bar a13B
Locking Pin, for Normal Wedge, see Normal-wedge Locking Pin a14B
Locking-pin Stand, see Normal-wedge-locking-pin Stand a15B
Matrix Case 8A

MATRIX JAW (left)		5B	2.50
screw (for Tongs)		5B1	.08
" cover		5B2	.08
MATRIX JAW 5B (complete)			2.66

For machines 1603 and following order:
MATRIX JAW screw cover ..... a5B2 .08
To equip machines 103 to 1602 inclusive with this improved part requires that clearance for the COVER be cut in the end of the MATRIX JAW 5B.

MATRIX JAW (right)		6B	2.25
screw (for Tongs)		6B1	.08
" cover		6B2	.08
MATRIX JAW 6B (complete)			2.41

For machines 1603 and following order:
MATRIX JAW screw cover ..... a6B2 .08
To equip machines 103 to 1602 inclusive with this improved part requires that clearance for the COVER be cut in the end of the MATRIX JAW 6B.

Matrix-jaw Cam, see Jaw-tongs Cam 23E
Matrix-jaw Draw Rod, see Sliding-frame Draw Rod 9A1

MATRIX-JAW LATCH (in 5B, for Normal Wedge)	1	a7B	.75
pin	(1)	a7B1	.03
nut		7B3	.10
spring		a7B2	.05
MATRIX-JAW LATCH 7B (complete)			.85

For machines 103 to 1702 inclusive when ordering a7B, a7B1 or a7B2 for the first time all three must be ordered together.
NOTE: The MATRIX-JAW-LATCH-PIN COTTER 7B2 can still be supplied for machines equipped with the old style LATCH.

MATRIX-JAW SHOE		8B	2.25
screw (top) (2)		8B1	.07
" (rear)		8B2	.07
MATRIX-JAW SHOE 8B (complete)			2.46

MATRIX-JAW-SHOE PACKING BLOCK (left, large)		9B	1.50
clamp screw		9B1	.05
dowel		9B2	.04
screw		9B3	.07
MATRIX-JAW-SHOE PACKING BLOCK 9B (c'pl't).			1.66

MATRIX-JAW-SHOE PACKING BLOCK (left, small)		10B	.35

MATRIX-JAW-SHOE PACKING BLOCK (right)		11B	.60
bolt		11B1	.05
cover		11B2	.35
" screw		11B3	.05
MATRIX-JAW-SHOE PACKING BLOCK 11B (complete)			1.05

MATRIX-JAW STOP RACK (front).....a12B 3.50

For machines 103 to 320 inclusive, 322 to 501 inclusive and 503 to 519 inclusive order: Improvement No. 1

MATRIX-JAW STOP RACK..... 12B 3.50

MATRIX-JAW-STOP-RACK LOCKING BAR (front).....a13B 2.00
bearing (for Lever)...a13B1 .35
" lock nut.....a13B2 .05
tube.....a13B3 .10

MATRIX-JAW-STOP-RACK LOCKING BAR a13B (c'pl't). 2.50

For machines 103 to 320 inclusive, 322 to 501 inclusive and 503 to 519 inclusive order: Improvement No. 1

MATRIX-JAW-STOP-RACK LOCKING BAR (front)..... 13B 2.00
bearing (for Lever)..... 13B1 .60
bolt..... 13B2 .08
tube..... 13B3 .15
MATRIX-JAW-STOP-RACK LOCKING BAR 13B (c'pl't). 2.83

Matrix-jaw-stop-rack-locking-bar Bell Crank (upper), see Locking-bar Bell Crank.....a29E
Matrix-jaw-stop-rack-locking-bar Shoe, see Air-pin-block Shoe, for Front Locking Bar..... a3D6
Matrix-jaw Tongs..... 37E
Micrometer Wedge..... 20D
Normal Wedge..... 21D
Normal-wedge Abutment..... 17C
Normal-wedge Latch, see Matrix-jaw Latch..... 7B

NORMAL-WEDGE LOCKING PIN.....a14B 2.00
adjusting nut..... 14B1 .05
" " lock nut..... 14B2 .05
bushing.....a14B3 3.00
" adjusting sleeve..... 14B4 .30
" " nut..... 14B5 .20
" guide screw.....a14B6 .05
shank.....a14B7 .20
spring.....a14B8 .15
" abutment (lower)..... 14B9 .08
" " (upper)..... 14B10 .60
tube.....a14B11 .15

NORMAL-WEDGE LOCKING PIN a14B (c'pl't)..... 6.76

For machines 103 to 702 inclusive order: Improvement No. 11

NORMAL-WEDGE LOCKING PIN..... 14B 2.00
bushing guide screw.. 14B6 .05

For machines 103 to 501 inclusive order: Improvement No. 4

NORMAL-WEDGE LOCKING PIN shank..... 14B7 .20
spring..... 14B8 .08
tube..... 14B11 .15

For machines 963 and following order: Improvement No. 4

NORMAL-WEDGE LOCKING PIN..... b14B 2.00
spring..... b14B8 .20

NORMAL-WEDGE-LOCKING PIN b14B (c'pl't) .

Omit SPRING ABUTMENT (lower) 14B9 and TUBE a14B11.

To apply b14B to machines 103 to 962 inclusive order also b14B8 or shorten TUBE a14B11 to 1–4″.

To apply b14B8 to machines 103 to 962 inclusive order also b14B and discard 14B9 and a14B11, or shorten a14B11 to 1–4″ and discard 14B9.

For machines 103 to 1602 inclusive equipped with Display-type Attachment. Improvement No. 13

NOTE: The NORMAL-WEDGE-LOCKING-PIN SHANK a14B7 has been lengthened on machines 1603 and following so that the regular NUTS 14B1 and 14B2 may be used when adjusting the NORMAL WEDGE to cast display type. The special ADJUSTING NUT 23S and its LOCK SCREW 23S1 will no longer be furnished. If one of these be required for a machine prior to number 1603 it will be necessary to order instead the new SHANK a14B7 and the regular NUTS 14B1 and 14B2.

Normal-wedge-locking-pin Cam, see Centering-pin Cam...a13E

NORMAL-WEDGE-LOCKING-PIN STAND.....a15B 15.00
bolt (3–16″ x 9–16″)..... 15B1 .05
dowel (2)..... 15B2 .04
screw (1–4″ x 7–8″)..... 15B3 .06
" (1–4″ x 5–8″)..... 15B4 .06
" (3–16″ x 5–8″)..... 15B5 .05
" (3–16″ x 1–2″)..... 15B6 .05

NORMAL-WEDGE-LOCKING-PIN STAND a15B (c'pl't). 15.35

For machines 103 to 501 inclusive, when ordering Normal-wedge-locking-pin Stand a15B see Improvement No. 11

Normal-wedge locking-pin-stand Spring, see Micrometer-wedge-adjusting-screw Spring.....a20D3
Normal-wedge-locking-pin-stand Spring Post, see Type-pusher-guiding-lever Spring Post..... 30B3
Packing Block, see Matrix-jaw-shoe Packing Block..... 9B
Pin Block, see Air-pin Block..... 3B

PIN JAW (left).....1.. 16B 1.25
stud (for Tongs).....(1).. 16B1 .08
" nut..... 16B2 .04
" washer..... 16B3 .05
PIN JAW 16B (complete)..... 1.34

PIN JAW (right).....1.. 17B 1.35
stud (for Tongs).....(1).. 17B1 .08
" nut..... 17B2 .04
" washer..... 17B3 .05
PIN JAW 17B (complete)..... 1.44

Pin-jaw Cam, see Jaw-tongs Cam..... 23E

PIN-JAW GUIDE ROD..... 18B 1.00

Pin-jaw-guide-rod Stand (left), see Matrix-jaw-shoe Packing Block (left, large)..... 9B
Pin-jaw-guide-rod Stand (right), see Normal-wedge-locking-pin Stand.....a15B

PIN-JAW-GUIDE-ROD STOP..... 19B .08

Pin-jaw Stop, see Air Pin, fixed..... 2B
Pin-jaw Tongs.....a55E
Shoe, see Matrix-jaw Shoe..... 8B
Stop, see Pin-jaw-guide-rod Stop..... 19B
Stop Rack, see Matrix-jaw Stop Rack.....a12B
Stop-rack Locking Bar, see Matrix-jaw-stop-rack Locking Bar.....a13B
Transfer-wedge Shifter..... 55D
Transfer-wedge-shifter Bearing, see Normal-wedge-locking-pin Stand.....a15B

TYPE CARRIER.....1..a20B
abutment (for Type Support Spring) ..(*1*).. 20B1 .10
" rivet.....(*1*).. 20B2 .01
lever (for Type Support Spring) .....(*1*).. 20B3 .50
" pin.....(*1*).. 20B4 .02
shield.....(*1*).. 20B5 .05
" screw (2).....(*1*).. 20B6 .02
abutment (for Type-clamp Spring)....(*1*)..a20B7 .10

TYPE CARRIER 20B (complete); includes the EYE 21B1, EYE PIN 21B3, DOWEL 21B4, TYPE CLAMP 26B (complete), TYPE-CLAMP SHOE 27B (complete) and TYPE SUPPORT SPRING a31B (complete) *and cannot be furnished without them*..... 25.00

For machines 1203 and following order: Improvement No. 3

TYPE CARRIER (Universal).....1.. b20B
lever (for Type Support Spring)(*1*).. b20B3 2.00
" pin.....(*1*).. a20B4 .02
" stand.....(*1*).. a20B1 1.50
" " rivet (2).....(*1*).. a20B2 .01
shield .....(*1*).. a20B5 .05
" screw (2).....(*1*).. 20B6 .02

TYPE CARRIER b20B (complete), includes the EYE 21B1, EYE PIN 21B3, DOWEL 21B4, TYPE CLAMP a26B (complete), TYPE-CLAMP SHOE a27B (complete), and TYPE SUPPORT SPRING b31B (complete) *and cannot be furnished without them*..... 30.00

NOTE: For machines 1203 to 1482 inclusive when ordering LEVER b20B3 for the first time the SHOE a23B must be ordered also.

TYPE-CARRIER CONNECTING ROD..... 21B .15
forked eye (Carrier end).....1.. 21B1 .75
" " lock nut (L. H.)..... 21B2 .05
" " pin.....1.. 21B3

TYPE-CARRIER CONNECTING ROD—*Continued*

forked eye pin dowel.....(1)..		21B4	.03
" " (Cam Lever end).....	a21B5	1.00
" " lock nut.....		21B6	.05
" " pin.....		21B7	.07
" " " cotter.....		21B8	.00
spring.....		21B9	.18
" abutment.....		21B10	.20
sleeve.....		21B11	.25
TYPE-CARRIER CONNECTING ROD a21B (c'pl't)...			2.70

Type-carrier Cover Plate, see Type-clamp Shoe..... 27B

TYPE-CARRIER EXTENSION.....		22B	.15
lock nut.....		22B1	.05
sleeve.....		22B2	.25
" nut.....		22B3	.05
spring.....		22B4	.20
TYPE-CARRIER EXTENSION 22B (complete).....			.70

Type-carrier-extension Guide, see Type-carrier-spring-abutment Stand.....a25B
Type-carrier Pin, see Type-carrier-connecting-rod-forked-eye Pin..... 21B3
Type-carrier Shoe, see Type-clamp Shoe..... 27B

TYPE-CARRIER SHOE (long).....		23B	.50
screw (right and centre) (2).....		23B1	.06
" (left).....		23B2	.06
TYPE-CARRIER SHOE 23B (complete).....			.68

For machines 1203 and following order: Improvement No. 3

TYPE-CARRIER SHOE (long).....		a23B	1.50
TYPE-CARRIER SHOE a23B (complete).....			1.68

TYPE-CARRIER SHOE (short).....		24B	.25
screw (2).....		24B1	.06
TYPE-CARRIER SHOE 24B (complete).....			.37

For machines 1203 and following order: Improvement No. 3

TYPE-CARRIER SHOE (short).....		a24B	.25
TYPE-CARRIER SHOE a24B (complete).....			.37

TYPE-CARRIER-SPRING-ABUTMENT STAND.....a25B			.95
screw (front) (2).....		25B1	.06
" (top).....		25B2	.06
TYPE-CARRIER-SPRING-ABUTMENT STAND a25B (complete).....			1.13

For machines 103 to 501 inclusive and 503 to 519 inclusive order:

TYPE-CARRIER-SPRING-ABUTMENT STAND.....		25B	1.50
TYPE-CARRIER-SPRING-ABUTMENT STAND 25B (complete).....			1.50

TYPE CLAMP	26B	1.75
extension	26B1	.01
spring	26B2	.05
TYPE CLAMP 26B (complete)		1.81

§ For machines 1203 and following order: Improvement No. 3 §

§ TYPE CLAMP	a26B	2.25 §
extension	a26B1	.01 §
spring	a26B2	.05 §
TYPE CLAMP a26B (complete)		2.31 §

TYPE-CLAMP SHOE	27B	.15
screw (5)	27B1	.02
TYPE-CLAMP SHOE 27B (complete)		.25

§ For machines 1203 and following order: Improvement No. 3 §

§ TYPE-CLAMP SHOE	a27B	.25 §
screw (4)	a27B1	.02 §
TYPE-CLAMP SHOE a27B (complete)		.33 §

TYPE-CLAMP TRIP	28B	.60
screw	28B1	.05
TYPE-CLAMP TRIP 28B (complete)		.65

§ For machines 1203 and following order: Improvement No. 3 §

§ TYPE-PUSHER GUIDE	a28B	2.00 §
screw	28B1	.05 §
cover	a28B2	.15 §
" screw (2)	a28B3	.03 §
TYPE-PUSHER GUIDE a28B (complete)		2.26 §

TYPE PUSHER 1..	29B	6.00
blade 1..	29B1	
" rivet (head end) (2) (*I*)..	29B2	.01
" " (eye end, long) (*I*)..	29B3	.01
" " (" " short) (*I*)..	29B4	.01
eye 1..	29B5	
" pin	29B6	.08
" " cotter	29B7	.00
TYPE PUSHER 29B (complete)		6.08

§ For machines 1203 and following order: Improvement No. 3 §

§ TYPE PUSHER	a29B	6.00 §
TYPE PUSHER a29B (complete)		6.08 §

Type-pusher Guide, see Type-clamp Trip	28B	

TYPE-PUSHER GUIDING LEVER	30B	.75
fulcrum screw	30B1	.05
spring	30B2	.05
" post	30B3	.04
TYPE-PUSHER GUIDING LEVER 30B (complete)		.89

§ For machines 1203 and following omit 30B (complete). §

Type-pusher-guiding-lever Stand, see Normal-wedge-locking-pin Stand.....a15B

TYPE SUPPORT SPRING .....(1).. 31B .08
bar.....1..a31B1 .70
" rivet(2).....(1).. 31B2 .01
" stud.....(1)..a31B3 .03
" spring..... 31B6 .05
TYPE SUPPORT SPRING a31B (complete)..... .75

When TYPE SUPPORT SPRING a31B (complete) is ordered for machines 103 to 522 inclusive the TYPE CARRIER must be drilled and tapped for special TYPE-CARRIER STOP SCREW a20B8 and this SCREW ordered.
TYPE-CARRIER STOP SCREW (special)..... a20B8 .05

For machines 1203 and following order: Improvement No. 3
TYPE SUPPORT SPRING.....(1).. a31B .08
bar.....1.. c31B1 .75
" rivet (2).....(1).. 31B2 .01
" spring..... a31B6 .05
" stud.....(1).. b31B3 .03
" yoke..... a31B4 .75
TYPE SUPPORT SPRING b31B (complete)..... 1.55
Note: When ordering BAR c31B for the first time for machines 1203 to 1789 inclusive the hole in the Yoke a31B4 must be opened out to receive it.

Type-support-spring-bar Lever, see Type-carrier Lever, for Type Support Spring..... 20B3
Type-support-spring-bar-spring Abutment, see Type-Carrier Abutment, for Type Support Spring..... 20B1
Wedge, see Justification Wedge..... 10D
Wedge, see Micrometer Wedge..... 20D
Wedge, see Normal Wedge..... 21D

C GROUP

Mechanism for moving the Matrix Case forward and back; drawing the Mold Blade back for the proper size type and ejecting the type from the Mold.

Abutment Slide, for Mold Blade, see Mold-blade Abutment Slide	14C	
AIR PIN (14)	1C	.20
spring (14)	1C1	.05
AIR PIN 1C (complete), each		.25
AIR PIN (fixed, permanent stop for bottom row)	2C	.05
AIR-PIN BLOCK (rear)	3C	50.00
dowel (No. 6 x 2 1–2″)	3C1	.05
" (No. 6 x 2″)	3C2	.05
" (No. 5 x 1 1–4″)	3C3	.04
screw (5–16″ x 1 5–8″) (2)	3C4	.07
" (5–16″ x 2 1–2″) (2)	3C5	.09
" (1–4″ x 5–8″) (2)	3C6	.06
AIR-PIN BLOCK 3C (complete)		50.58

§ **For machines 1003 and following order:**
§ AIR-PIN BLOCK stud (stop for 16C7) a3C7 .05 §

Air-pin-block Abutment, see Normal-wedge Abutment	17C	
Air-pin-block Shoe, see Cross-slide-extension Shoe	6C	
Air-pin-block Stand, for Guide Rod, see Pin-jaw-guide-rod Stand	22C	
Air-pin-block Stop, for Matrix Jaw, see Matrix-jaw Stop	a10C	
Air-pin Jaw, see Pin Jaw	18C	
AIR-PIN PLATE	a4C	3.00
dowel (2)	4C1	.04
screw (4)	4C2	.06
AIR-PIN PLATE a4C (complete)		3.32

§ When ordering AIR-PIN PLATE a4C for machines 103 to 702 inclusive order also MATRIX-JAW STOP a10C (complete). §

CROSS SLIDE 1..	a5C		8.00
draw rod	5C1		.60
" " clamp screw (*1*)..	a5C2		.06
extension 1..	5C3		
" rivet (2) (*1*)..	5C4		.05
plate (bearing for Matrix Case) (*1*)..	5C5		.65
" screw (3) (*1*)..	5C6		.04
CROSS SLIDE a5C (complete)			8.60

For machines 103 to 543 inclusive order:
CROSS SLIDE draw rod clamp screw..... 5C2 .05

CROSS-SLIDE-EXTENSION SHOE.....1.. 6C 1.50
screw (small) (4)..... 6C1 .05
spring post.....(1).. 6C2 .04
CROSS-SLIDE-EXTENSION SHOE 6C (complete).. 1.70

Cross-slide-extension-shoe Screw (large), see Air-pin-block Screw..... 3C5

CROSS-SLIDE GUIDE..... 7C 5.00
cover plate..... 7C1 .40
screw (4)..... 7C2 .05
CROSS-SLIDE GUIDE 7C (complete)..... 5.60

Draw Rod, see Cross-slide Draw Rod..... 5C1
Draw Rod, see Sliding-frame Draw Rod..... 9A1
Fibre Stop, for Pin Jaw, see Pin-jaw-guide-rod Fibre Stop 21C
Fixed Pin, see Air Pin, fixed..... 2C
Guide Rod, see Pin-jaw Guide Rod..... 20C
Guide-rod Stand, see Pin-jaw-guide-rod Stand..... 22C
Justification-wedge Cover, see Wedge Cover..... 24C
Locking Bar, see Matrix-jaw-stop-rack Locking Bar.....a13C
Matrix Case..... 8A
Matrix-case Cross Slide, see Cross Slide..... a5C

MATRIX JAW (front)..... 8C 1.40
screw (for Tongs)..... 8C1 .08
" cover..... 8C2 .08
MATRIX JAW 8C (complete)..... 1.56

MATRIX JAW (rear)..... 9C 1.40
screw (for Tongs)..... 9C1 .08
" cover..... 9C2 .08
MATRIX JAW 9C (complete)..... 1.56

Matrix-jaw Cam, see Jaw-tongs Cam..... 23E
Matrix-jaw Draw Rod, see Cross-slide Draw Rod..... 5C1

MATRIX-JAW STOP (front).....a10C .30
rivet (2).....a10C1 .02
MATRIX-JAW STOP a10C (complete)..... .34

For machines 103 to 702 inclusive when ordering for the first time a10C or a10C1, both of these parts must be ordered. On machines 103 to 501 inclusive file a seat on the AIR-PIN PLATE 4C to receive this new STOP a10C and drill holes in the PLATE to receive the RIVETS a10C1.

MATRIX-JAW STOP (rear)..... 11C .45
screw (2)..... 11C1 .07
MATRIX-JAW STOP 11C (complete)..... .59

MATRIX-JAW STOP RACK (rear).....a12C 3.00

For machines 103 to 320 inclusive, 322 to 501 inclusive and 503 to 742 inclusive order: Improvement No. 1
MATRIX-JAW STOP RACK (rear)..... 12C 3.00

MATRIX-JAW-STOP-RACK LOCKING BAR (rear).....a13C 1.60
bearing (for Lever).....a13C1 .50
" lock nut.....a13C2 .06
MATRIX-JAW-STOP-RACK LOCKING BAR a13C (c'pl't). 2 16

For machines 103 to 320 inclusive, 322 to 501 inclusive and 503 to 519 inclusive order: Improvement No. 1
MATRIX-JAW-STOP-RACK LOCKING BAR (rear)..... 13C 1.60
bearing (for Lever) 13C1 .40
bolt..... 13C2 .35
tube..... 13C3 .15
MATRIX-JAW-STOP-RACK LOCKING BAR 13C (c'pl't). 2.50

For machines 520 to 742 inclusive order:
MATRIX-JAW-STOP-RACK LOCKING BAR (Special).... a13C 1.60

Matrix-jaw-stop-rack-locking-bar Bell Crank, see Locking-bar Bell Crank.....a28E
Matrix-jaw-stop-rack-locking-bar Guide Screw, see Air-pin-block Guide Screw, for rear Locking Bar..... a3D11
Matrix-jaw Tongs..... 37E

MOLD-BLADE ABUTMENT SLIDE.....1.. 14C 10.00
adjusting screw.....(1).. 14C1 .30
" " lock screw (1).. 14C2 .10
anvil.....(1).. 14C3 1.25
" dowel (2).....(1).. 14C4 .03
" plunger.....(1).. 14C5 .35
" " spring (3)..(1).. 14C6 .05
" screw (2).....(1).. 14C7 .03
spring post.....(1).. 14C8 .03
MOLD-BLADE ABUTMENT SLIDE 14C (complete) 10.00

Mold-blade-abutment-slide Cover Plate, see Cross-slide-guide Cover Plate..... 7C1

MOLD-BLADE-ABUTMENT-SLIDE SPRING..... 15C .06

Mold-blade-abutment-slide Spring Post, in Cross-slide-extension Shoe, see Cross-slide-extension-shoe Spring Post..... 6C2
Mold-blade-abutment-slide Spring Post..... 14C8

MOLD-BLADE OPERATING ROD	16C	1.00
distance sleeve (between Spring Abut's)	16C1	.15
ejecting spring (2)	16C2	.18
" " abutment	16C3	.25
" " sleeve	16C4	.25
fork	16C5	2.00
" pin	16C6	.50
" " spring	16C7	.10
" " " screw (2)	16C8	.03
nut	16C9	.05
sizing spring	16C10	.20
" " sleeve (inside)	16C11	.15
" " " (outside)	16C12	.15
" " abutment (front)	16C13	.15
" " " (rear)	16C14	.15
MOLD-BLADE OPERATING ROD 16C (complete).		5.52

For machines 941 and following order: Improvement No. 3

MOLD-BLADE OPERATING ROD distance sleeve..... a16C1 .15
sizing spring sleeve (inside)..... a16C11 .15

These parts are interchangeable if ordered together for machines 103 to 940 inclusive.

Normal Wedge	21D	
NORMAL-WEDGE ABUTMENT (on rear Air-pin Block)	17C	1.50
dowel (2)	17C1	.03
screw (2)	17C2	.05
NORMAL-WEDGE ABUTMENT 17C (complete)		1.66
Pin Block, see Air-pin Block	3C	
PIN JAW (front)	18C	1.35
stud (for Tongs) (1)	18C1	.08
" nut	18C2	.04
" washer	18C3	.05
PIN JAW 18C (complete)		1.44
PIN JAW (rear)	19C	1.25
stud (for Tongs) (1)	19C1	.08
" nut	19C2	.04
" washer	19C3	.05
PIN JAW 19C (complete)		1.34
Pin-jaw Cam, see Jaw-tongs Cam	23E	
Pin-jaw Fibre Stop, see Pin-jaw-guide-rod Fibre Stop	21C	
PIN-JAW GUIDE ROD	20C	.90
PIN-JAW-GUIDE-ROD FIBRE STOP	21C	.02
PIN-JAW-GUIDE-ROD STAND (front)	22C	.90
nut	22C1	.05
PIN-JAW-GUIDE-ROD STAND 22C (complete)		.95

PIN-JAW-GUIDE-ROD STAND (rear)....1..	23C	1.00
clamp screw....(1)..	23C1	.05
nut*....	23C2	.05
PIN-JAW-GUIDE-ROD STAND 23C (complete)....		1.05
Pin-jaw Tongs....	56E	
Pin-jaw Stop, for bottom row, see Air Pin, fixed	2C	
Stop Rack, see Matrix-jaw Stop Rack....a	12C	
Transfer-wedge Abutment, see Normal-wedge Abutment ...	17C	
Transfer-wedge Cover, see Wedge Cover....	24C	
WEDGE COVER....	24C	.30
screw....	24C1	.03
WEDGE COVER 24C (complete).....		.33

D GROUP

Mechanism for bringing the Space Transfer Wedge into position when casting justifying spaces; disconnecting the Pump while the Justification Wedges are shifted and starting the Galley mechanism into action.

AIR PIN (justification, right and left) (2)	1D	.25
AIR PIN (space, central)	2D	.25
AIR-PIN BLOCK (justification)	3D	20.00
cover plate	3D1	1.00
" " screw	3D2	.05
" " " (long) (2)	3D3	.05
dowel (2)	3D4	.04
screw (4)	3D5	.07
shoe (for front Locking Bar)	a3D6	.35
" screw (2)	a3D7	.05
stud (for front Pin-jaw Tongs)	3D8	.10
" nut	3D9	.05
" washer	3D10	.05
guide screw (for rear Locking Bar)	a3D11	.08
AIR-PIN BLOCK 3D (complete)		22.24

For machines 103 to 320 inclusive and 322 to 501 inclusive order: **Improvement No. 1**

AIR-PIN BLOCK shoe (for front Locking Bar)	3D6	.35
" screw (2)	3D7	.05

Parts a3D6 and a3D7 may be applied to these machines if furnished together when ordered for the first time.

For machines 923 and following order:

AIR-PIN BLOCK	a3D	20.00
set screw (for Fulcrum Pin 7D)	a3D12	.03

To equip machines 103 to 922 inclusive with BLOCK a3D, the SET SCREW a3D12 must also be ordered. If a3D12 be ordered alone for machines 103 to 922 inclusive the AIR-PIN BLOCK 3D must be drilled and tapped for this SCREW.

Air-pin-block Centering Tooth, for Justification Wedge, see Justification-wedge Centering Tooth 12D

Air-pin-block Plate, for Lifting-arm Spring, see Justification-wedge-lever-arm-spring Plate 17D

Air-pin-block Tongs Stud, for Matrix Jaws, see Matrix-jaw-tongs Stud (rear) 40E

BELL CRANK (centre, for Lever Arm for Transfer-wedge Shifter)	4D	1.00
abutment screw (for Air Pin)	4D1	.03
" " lock nut	4D2	.04
stop screw	4D3	.03
" " lock nut	4D4	.04
BELL CRANK 4D (complete)		1.14
BELL CRANK (left, for Lever Arm for .0075" Wedge)	5D	1.00
abutment screw (for Air Pin)	5D1	.03
" " lock nut	5D2	.04
stop screw	5D3	.03
" " lock nut	5D4	.04
BELL CRANK 5D (complete)		1.14
BELL CRANK (right, for Lever Arm for .0005" Wedge)	6D	1.00
abutment screw (for Air Pin)	6D1	.03
" " lock nut	6D2	.04
stop screw	6D3	.03
" " lock nut	6D4	.04
BELL CRANK 6D (complete)		1.14
Bell Crank Lever, see Justification-wedge Lever	13D	
Bell Crank Lever, see Transfer-wedge-shifter Lever	56D	
Centering Tooth, see Justification-wedge Centering Tooth	12D	
BELL-CRANK FULCRUM PIN	7D	.05
cotter	7D1	.00
BELL-CRANK FULCRUM PIN 7D (complete)		.05
GALLEY TRIP ROD	8D	.25
nut	8D1	.05
GALLEY TRIP ROD 8D (complete)		.30
GALLEY-TRIP-ROD ARM	9D	.75
rock lever	9D1	.35
" " fulcrum pin	9D2	.06
" " " " nut	9D3	.04
GALLEY-TRIP-ROD ARM 9D (complete)		1.20
Guide Block, for Locking-bar Operating Rod, see Justification-wedge Stop Block	19D	
Guide Block, see Transfer-wedge-operating-rod Guide	54D	
JUSTIFICATION WEDGE (front or .0075")	10D	5.00
JUSTIFICATION WEDGE (rear or .0005")	11D	5.00

For machines equipped with Display-type Attachment order: Improvement No. 13		
JUSTIFICATION WEDGE (for varying sizes cast with Normal Wedge 47S by 1–8 points)	46S	5.00
gage	46S1	.75
JUSTIFICATION WEDGE 46S (complete)		5.75

JUSTIFICATION-WEDGE CENTERING TOOTH	12D	1.50
screw (2)	12D1	.04
JUSTIFICATION-WEDGE CENTERING TOOTH 12D (c'pl't).		1.58
Justification-wedge-centering-tooth Stand, see Air-pin Block	3D	
Justification-wedge Jaw, see Matrix Jaw	5B	
JUSTIFICATION-WEDGE LEVER (for back, or .0005" Wedge)...1..	13D	2.50
pin (for Arm)....(1)..	13D1	.06
" cotter....(1)..	13D2	.00
plate....(1)..	13D3	.04
" screw....(1)..	13D4	.04
JUSTIFICATION-WEDGE LEVER 13D (complete).		2.50
JUSTIFICATION-WEDGE LEVER (for front, or .0075" Wedge)....1..	14D	2.50
pin (for Arm)....(1)..	14D1	.06
" cotter....(1)..	14D2	.00
plate....(1)..	14D3	.04
" screw....(1)..	14D4	.04
JUSTIFICATION-WEDGE LEVER 14D (complete)..		2.50
JUSTIFICATION-WEDGE-LEVER ARM (2)	15D	.40
adjusting nut (2)	15D1	.06
" " lock nut (2)...	15D2	.04
rod (2)	15D3	.10
JUSTIFICATION-WEDGE-LEVER ARM 15D (complete) each		.60
Justification-wedge-lever-arm Operating Bell Crank, see Bell Crank	5D	
Justification-wedge-lever-arm Plate, see Centering-pin-lever Plate	16E2	
JUSTIFICATION-WEDGE-LEVER-ARM SPRING (2)	16D	.05
JUSTIFICATION-WEDGE-LEVER-ARM-SPRING PLATE	17D	.03
Justification-wedge-lever-arm-spring-plate Support, see Air-pin-block-cover-plate Screw (long)	3D3	
JUSTIFICATION-WEDGE-LEVER FULCRUM PIN	18D	.04
JUSTIFICATION-WEDGE STOP BLOCK	19D	.25
screw	19D1	.07
JUSTIFICATION-WEDGE STOP BLOCK 19D (c'pl't).		.32
Locking Bar, see Matrix-jaw-stop-rack Locking Bar	a13C	
Locking-bar Guide Screw, for rear Locking Bar, see Air-pin-block Guide Screw, for rear Locking Bar	a3D11	
Locking-bar Shoe, see Air-pin-block Shoe, for front Locking Bar	a3D6	

MICROMETER WEDGE	20D	2.50
adjusting screw	a20D2	.25
" " spring	a20D3	.08
" " " screw (2)	20D4	.03
shank	a20D1	.10
" nut	a20D5	.04
" " lock nut (discarded)		
" spring	20D7	.05
MICROMETER WEDGE a20D (complete)		3.08

For Machines 103 to 501 inclusive order:	Improvement No. 8	
MICROMETER WEDGE adjusting nut	20D2	.25
" " spring	20D3	.08
shank	20D1	.25
" nut	20D5	.04
" " lock nut	20D6	.04
MICROMETER WEDGE 20D (complete)		3.27

Micrometer-wedge Stand, see Normal-wedge-locking-pin Stand a15B

NORMAL WEDGE (Regular, any Set)	21D	7.50

If a regular NORMAL WEDGE 21D becomes worn so that it does not give the correct width type bodies in all positions, it should be returned to our factory to be re-scraped and tested.

Price for re-scraping and testing 2.50

NORMAL WEDGE (Tabular, any Set)	22D	10.00

If a tabular NORMAL WEDGE 22D becomes worn so that it does not give the correct width type bodies in all positions, it should be returned to our factory to be re-scraped and tested.

Price for re-scraping and testing 3.50

For machines equipped with Display-type Attachment order:		Improvement No. 13
NORMAL WEDGE 1..	47S	5.00
gage	47S1	.60
handle (*1*)..	47S2	.20
packing piece 2..	47S3	1.50
" " pin 2..	47S4	
NORMAL WEDGE 47S (complete)		7.10

NOTE: The old style NORMAL WEDGES 17S to 20S inclusive are no longer furnished.

Normal-wedge Abutment	17C	
Normal-wedge Jaw, see Matrix Jaw	5B	
Normal-wedge Locking Pin	a14B	
Operating-rod Guide, see Transfer-wedge-operating-rod Guide	54D	

Pin Block (justification), see Air-pin Block (justification) a3D
Pin Plate, see Air-pin-block Cover Plate 3D1
Pump Trip (hand) 35H

PUMP-TRIP OPERATING LEVER (2) .....1.. 48D .90
fulcrum pin ..... 48D1 .08
" " cotter ..... 48D2 .00
separating pin (2). (*1*) .... 48D3 .02
PUMP-TRIP OPERATING LEVER 48D (complete) .98

Pump-trip-operating-lever Stand, see Air-pin Block 3D

PUMP-TRIP TUBE .....1..a49D .80
collar ..... 49D1 .35
" set screw ..... 49D2 .06
spring post .....(*1*).. 49D3 .03
PUMP-TRIP TUBE a49D (complete) 1.21

For machines 103 to 534 inclusive when ordering:
PUMP-TRIP TUBE ..... a49D .80
order also,
PUMP TRIP ROD COTTER ..... a35H10 .00
and drill the rear end of the PUMP-TRIP ROD, where it projects through the MAIN STAND, to receive this COTTER.

PUMP-TRIP SPRING ..... 50D .12
plate (2) ..... 50D1 .03
PUMP-TRIP SPRING 50D (complete) ..... .18

PUMP-TRIP-TUBE SPRING POST (in Main Stand) ..... 51D .03

Pump-trip-tube Spring Post, in Pump-trip Tube 49D3
Set Normal Wedge, see Normal Wedge 21D
Space Lifting Arm, see Transfer-wedge-shifter-lever Arm 57D

SPACE TRANSFER WEDGE 52D 3.50
adjusting screw ..... 52D1 .75
" " lock nut ..... 52D2 .05
SPACE TRANSFER WEDGE 52D (complete) 4.30

For machines 1013 and following order:
SPACE TRANSFER WEDGE a52D 3.50
SPACE TRANSFER WEDGE a52D (complete) 4.30
See note after a53D (complete).

Space-transfer-wedge Abutment, see Air-pin Block 3C

SPACE-TRANSFER-WEDGE OPERATING ROD .....1.. 53D 2.00
nut ..... 53D1 .04
" lock nut ..... 53D2 .04
washer (rawhide) ..... 53D3 .05
yoke .....(*1*).. 53D4 .25
SPACE-TRANSFER-WEDGE OPERATING ROD 53D (c'pl't). 2.13

For machines 1013 and following order:

SPACE-TRANSFER-WEDGE OPERATING ROD yoke..... a53D4 .25

SPACE-TRANSFER-WEDGE OPERATING ROD a53D (complete)..... 2.13

NOTE: To equip machines 103 to 1012 inclusive with the improved parts a52D and a53D4 requires that both these parts be ordered together and that clearance for the YOKE be cut in the TYPE PUSHER 29B and the AIR-PIN BLOCK 3C.

Space-transfer-wedge-operating-rod Crosshead, see Transfer-tongs-space-wedge-lever Crosshead 59D10

Space-transfer-wedge-operating-rod Guide, see Transfer-wedge-operating-rod Guide..... 54D

Space-transfer-wedge-operating-rod Shifter, see Transfer-wedge Shifter..... 55D

Space-transfer-wedge Tongs, see Transfer Tongs..... 59D

Tabular Wedge, see Normal Wedge, Tabular, any Set 22D

TRANSFER TONGS

cam lever extension .....1..	59D1		
lower connecting link (2).....1..	59D2		
" " " bushing (2) .....1..	59D3		
upper connecting link (2) .....1..	59D4		
" " " pin (in 59D1).....1..	59D5		
" " " separating block.....1..	59D6		
" " " " " bushing.1..	59D7		
" " " " " rivet (2) 1..	59D8		
space wedge lever (2).....1..	59D9		
" " " crosshead.....1..	59D10		
" " " eye (on Spring-box Rod).....1..	59D11		
" " " separating pin (3) .....1..	59D12		
type wedge lever (2).....1..	59D13		
" " " bolt (for Link 59D4).....(*1*)..	59D14	.07	
" " " bolt nut.....(*1*)..	59D15	.05	
" " " crosshead.....1..	59D16		
" " " separating pin(2).....1..	59D17		
TRANSFER TONGS 59D (complete).....			20.00

We cannot furnish separate parts of these TONGS. Instead we exchange repaired TONGS for worn TONGS.
Price for exchange..... 7.50

Transfer-tongs-space-wedge-lever-eye Lock Nut, see Transfer-wedge-spring-box Lock Nut..... 60D10

Transfer Wedge, see Space Transfer Wedge..... 52D

Transfer Wedge, see Type Transfer Wedge..... 62D

Transfer-wedge Abutment, see Normal-wedge Abutment... 17C

Transfer-wedge Cam.....a69E

TRANSFER-WEDGE-OPERATING-ROD GUIDE.....	54D	2.75
cap.....	54D1	.15
" screw (2).....	54D2	.03
screw (2).....	54D3	.06
TRANSFER-WEDGE-OPERATING-ROD GUIDE 54D (c'pl't).		3.08

TRANSFER-WEDGE SHIFTER	55D	1.50
spring (inside)	55D1	.08
" (outside)	55D2	.09
" abutment (lower)	55D3	.15
" " (upper)	55D4	.15
nut	55D5	.05
TRANSFER-WEDGE SHIFTER 55D (complete)		2.02
Transfer-wedge-shifter Bearing, see Normal-wedge-locking-pin Stand	a15B	
TRANSFER-WEDGE-SHIFTER LEVER	56D	.80
fulcrum screw	56D1	.10
TRANSFER-WEDGE-SHIFTER LEVER 56D (c'pl't).		.90
Transfer-wedge-shifter-lever Stand, see Normal-wedge-locking-pin Stand	a15B	
Transfer-wedge-shifter-lever Pin, see Transfer-wedge-shifter-lever-arm Fulcrum Pin	57D3	
TRANSFER-WEDGE-SHIFTER-LEVER ARM	57D	.70
adjusting nut	57D1	.08
" " lock nut	57D2	.04
fulcrum pin (for Lever)	57D3	.02
rod	57D4	.10
TRANSFER-WEDGE-SHIFTER-LEVER ARM 57D (c'pl't).		.94
Transfer-wedge-shifter-lever-arm Bell Crank, see Bell Crank	4D	
TRANSFER-WEDGE-SHIFTER-LEVER-ARM SPRING	58D	.05
Transfer Tongs	59D	
Transfer-wedge-shifter-lever-arm Plate, see Centering-pin-lever Plate	16E2	
Transfer-wedge-shifter-lever-arm Spring Plate, see Justification-wedge-lever-arm-spring Plate	17D	
TRANSFER-WEDGE SPRING BOX		
tube	60D1	.70
cap	60D2	.30
forked eye	60D3	.50
" " pin	60D4	.05
" " " cotter (2)	60D5	.00
rod	60D6	.20
" head	60D7	
" adjusting nut (for Springs)	60D8	.05
" " " lock nut	60D9	.05
lock nut (for Transfer-tongs Eye)	60D10	.05
spring abutment (2)	60D11	.06
" (inside)	60D12	.20
" (outside)	60D13	.20
TRANSFER-WEDGE SPRING BOX 60D (complete)		2.42
Transfer-wedge-spring-box-rod Eye, see Transfer-tongs-space-wedge-lever Eye	59D11	

E GROUP

Mechanism for receiving power from the belt and transmitting it to the various portions of the machine.

BASE	a1E	150.00
hinge (for Door) (2)	1E1	.20
BASE a1E (complete)		150.40
BELT-SHIFTER ARM (front)	2E	1.00
clamp screw	2E1	.07
BELT-SHIFTER ARM 2E (complete)		1.07
BELT-SHIFTER ARM (rear, carrying Eye)	3E	1.00
clamp	3E2	.20
" bolt	3E3	.08
set screw	3E1	.07
BELT-SHIFTER ARM 3E (complete)		1.35

For machines equipped with Display-type Attachment order:	Improvement No. 13	
BELT-SHIFTER ARM	2S	1.25
clamp	2S1	.20
" bolt	2S2	.08
set screw	2S2	.07
BELT-SHIFTER ARM 2S (complete)		1.60

BELT-SHIFTER EYE	4E	1.25

For machines equipped with Display-type Attachment order:	Improvement No. 13	
BELT-SHIFTER EYE (forked)	1S	1.75

Belt-shifter Lever, see Operating Lever	32F	
BELT-SHIFTER RING	5E	3.25
clamp screw	5E1	.07
guide pin	5E2	.15
BELT-SHIFTER RING 5E (complete)		3.47
BELT-SHIFTER ROD	6E	.90
fibre washer	6E1	.05
spring	6E2	.45
BELT-SHIFTER ROD 6E (complete)		1.40
CAM-LEVER SHAFT (front, for Type-carrier-cam, Pump-cam and Transfer-wedge-cam Levers)	7E	1.40

CAM-LEVER SHAFT (rear, for Paper-tower-cam, Mold-blade-cam and Type-pusher-cam Levers)..... 8E 1.20
cotter..... 8E1 .00
set screw..... 8E2 .10
washer..... 8E3 .10
CAM-LEVER SHAFT 8E (complete).. ..... 1.40

Cam-lever Shaft, for Centering-pin-cam Lever, see Centering-pin-cam-lever Shaft..... 15E
Cam-lever Shaft, for Jaw-tongs-cam Lever, see Jaw-tongs-cam-lever Shaft..... 25E

CAM-LEVER-SHAFT STAND (for Centering-pin-cam and Jaw-tongs-cam Levers)... a9E 20.00
bolt (4)..... 9E1 .10
CAM-LEVER-SHAFT STAND a9E (complete)..... 20.40

For machines 103 to 501 inclusive and 503 to 519 inclusive order: Improvement No. 2
CAM-LEVER-SHAFT STAND (for Centering-pin-cam and Jaw-tongs-cam Levers).. 9E 20.00
CAM-LEVER-SHAFT STAND 9E (complete)..... 20.40

Cam-lever-shaft Stand, for Shafts 7E and 8E, see Cam-shaft Stand a12E

CAM SHAFT (driving)..... 10E 12.00
cam key..... 10E1 .15
key (for driving Pulley)..... 10E3 .05
nut " " " ..... 10E4 .12
gear (graduated)..... 10E5 5.00
" key..... 10E6 .10
CAM SHAFT a10E (complete): see Note under CAM SHAFT 11E (complete).

For machines 103 to 501 inclusive and 503 to 519 inclusive order:
CAM SHAFT distance ring..... 10E2 .75
CAM SHAFT 10E (complete): see Note under CAM SHAFT 11E (complete)

CAM SHAFT (driven)..... 11E 10.75
cam key..... 11E1 .15
distance ring..... 11E2 .75
gear..... 11E3 4.50
" key..... 11E4 .10

CAM SHAFTS are furnished only in pairs, that is a10E (complete) and 11E (complete), with all the following CAMS in place; TYPE-CARRIER CAMS 71E and 71E1; PUMP CAMS 66E and 66E1; TRANSFER-WEDGE CAMS 69E and 69E1; CENTERING-PIN CAMS a13E and a13E1; LOCKING-BAR CAM a86E; JAW-TONGS CAMS 23E and 23E1; PAPER-TOWER CAMS 52E and 52E1; MOLD-BLADE CAMS 43E and 43E1; TYPE-PUSHER CAMS 75E and 75E1.
Price per pair 80.42

Should it be necessary to replace a pair of CAMS the two SHAFTS 10E and 11E must be returned to the Factory. No charge other than for the material used (at the prices listed) is made for repairing CAM SHAFTS.

For machines 103 to 501 inclusive order: Improvement No. 4

CAM SHAFT 10E (complete) and 11E (complete) with all the following CAMS in place; TYPE-CARRIER CAMS 71E and 71E1; PUMP CAMS 66E and 66E1; TRANSFER-WEDGE CAMS 69E and 69E1; CENTERING-PIN CAMS 13E and 13E1; JAW-TONGS CAMS 23E and 23E1; PAPER-TOWER CAMS 52E and 52E1; MOLD-BLADE CAMS 43E and 43E1; TYPE-PUSHER CAMS 75E and 75E1.

Price per pair..... 78.42

For machines 503 to 519 inclusive order the same as above except that in place of CENTERING-PIN CAMS 13E and 13E1 order CENTERING-PIN CAMS a13E and a13E1. The price is the same.

Cam-shaft Pulley, see Pulley..... 64E

CAM-SHAFT STAND.....1..a12E			100.00
cap (long, for Cam Shaft) (3).....(*1*)..	12E1		1.80
" (short, " " ").....(*1*)..	12E2		1.60
" screw (for 12E1 and 12E2) (16).(*1*)..	12E3		.08
" (front, for Cam-lever Shaft) ....(*1*)..	12E4		1.00
" (rear, " " " ").....(*1*)..	12E5		1.00
" pin (in Cap 12E4).....(*1*)..	12E6		.03
" screw (for 12E4 and 12E5) (4)..(*1*)..	12E7		.07
" (for Worm Shaft).....(*1*)..	12E8		2.50
" screw (for 12E8) (4).....(*1*)..	12E9		.07
oil pipe (long).....(*1*)..	12E10		.15
" " (short).....(*1*)..	12E11		.10
screw (7–16" x 1 1–8") (4).....	12E12		.09
" (7–16" x 1 3–8") (4).....	12E13		.09
Winkley oiler (6).....(*1*)..	12E14		.15
CAM-SHAFT STAND a12E (complete).....			100.72

For machines 103 to 501 inclusive and 503 to 519 inclusive order: Improvement No. 2

CAM-SHAFT STAND..... 12E 100.00

CAM-SHAFT STAND 12E (complete)..... 100.72

Carrying-frame-cam Lever, see Centering-pin-cam Lever ..a14E

CENTERING-PIN CAM (driving, marked D in circle). ...a13E 5.50
(driven, marked D in square).....a13E1

CENTERING-PIN CAM a13E (complete): see Note under CAM SHAFT 11E (complete).

For machines 103 to 501 inclusive order: Improvement No. 4

CENTERING-PIN CAM (driving marked D in circle)... 13E 5.50
(driven marked D in square).. 13E1

CENTERING-PIN CAM 13E (complete): see Note under CAM SHAFT 11E complete.

CENTERING-PIN-CAM LEVER	1..	a14E	15.00
bushing (2)	(*I*)..	14E1	.18
" pin (2)	(*I*)..	14E2	.01
roller	(*I*)..	14E3	.30
" pin	(*I*)..	14E4	.15
set screw		14E5	.10
CENTERING-PIN-CAM LEVER a14E (complete)..			15.10

For machines 103 to 501 inclusive and 503 to 519 inclusive order:

CENTERING-PIN-CAM LEVER	14E	15.00
CENTERING-PIN-CAM LEVER 14E (complete)..		15.10

CENTERING-PIN-CAM-LEVER SHAFT	15E	1.20

Centering-pin-cam-lever-shaft Stand, see Cam-lever-shaft Stand a9E

CENTERING-PIN LEVER	1..	a16E	13.00
screw (to Cam Lever) (3)		16E1	.08
plate (for Lever-arm Rods 15D3 and 57D4)		16E2	.05
" screw (2)		16E3	.04
stud (for Bridge-lever Link)	(*I*)..	16E4	.05
" cotter		16E5	.00
CENTERING-PIN LEVER a16E (complete)			13.37

For machines 103 to 501 inclusive order:

CENTERING-PIN LEVER	16E	13.00
CENTERING-PIN LEVER 16E (complete)		13.37

Centering-pin-lever Link, to Bridge Lever, see Bridge-lever Connecting Link 2A1

Clamp, for Mold, see Mold Clamp 48E

For machines equipped with Display-type Attachment order:

Improvement No. 13		
COUNTERSHAFT	5S	3.00
cone pulley	5S1	4.00
" " key	5S2	.05
pulley (fast)	5S3	5.50
" " key	5S4	.05
" (loose) 1..	5S5	5.55
" screw (for oil hole) (*I*)..	5S6	.05
COUNTERSHAFT 5S (complete)		18.15
COUNTERSHAFT STAND: 1..	6S	23.20
bolt (3)	6S1	.18
" nut (3)	6S2	.08
cap (2) (*I*)..	6S3	1.00
" oiler (2)	6S4	.15
" screw (4)	6S5	.08
COUNTERSHAFT STAND 6S (complete)		24.60
COUNTERSHAFT TIGHTENER PULLEY	7S	5.00
arm	7S1	3.00
" fulcrum stud	7S2	1.25
" " " nut	7S3	.11
" spring (inside)	7S4	.25

COUNTERSHAFT TIGHTENER PULLEY—*Continued*			
arm spring (outside)		7S5	.25
" " rod		7S6	1.50
" " " fulcrum stud		7S7	.35
" " " " " nut		7S8	.05
" " " nut (2)		7S9	.06
" " " washer		7S10	.05
stud		7S11	1.00
" nut		7S12	.11
COUNTERSHAFT TIGHTENER PULLEY 7S (c'pl't).			13.04

DOOR	1..	17E	4.50
hinge pin (2)	(1)..	17E1	.05
knob	(1)..	17E2	.30
latch	(1)..	17E3	.25
DOOR 17E (complete)			4.50
Door Hinge, see Base Hinge, for Door		1E1	
Gear, see Cam-shaft Gear		10E5	
GEAR COVER		19E	4.50
screw (lower)		19E1	.06
" (upper)		19E2	.07
GEAR COVER 19E (complete)			4.63
GEAR VERNIER		20E	1.25
screw (2)		20E1	.03
GEAR VERNIER 20E (complete)			1.31
Hand Wheel, see Worm-shaft Hand Wheel		80E2	
Hand-wheel Shaft, see Worm Shaft		80E	
Idler Gear, see Worm-shaft Gear		80E1	
Jaw Tongs, see Matrix-jaw Tongs		37E	
Jaw Tongs, see Pin-jaw Tongs		a55E	
JAW-TONGS BELL CRANK (lower)	1..	a21E	10.00
ball stud	(1)..	a21E1	.30
stud (short)		21E6	.25
" nut (lower)		21E3	.07
" " (upper)		21E4	.05
" washer		21E5	.05
(upper)	2..	a21E10	9.00
ball stud	(2)..	a21E11	.30
stud (long)		21E2	.30
" nut (lower)		21E7	.07
" " (upper)		21E8	.05
" washer		21E9	.05
JAW-TONGS BELL CRANK a21E (complete)			19.89

For machines 103 to 320 inclusive, 322 to 501 inclusive and 503 to 519 inclusive order: Improvement No. 1

JAW-TONGS BELL CRANK	1..	21E	10.00
ball stud	(1)..	21E1	.40
JAW-TONGS BELL CRANK 21E (complete)			10.89

Omit parts a21E10 and a21E11.

Jaw-tongs-bell-crank Ball Socket, see Jaw-tongs-spring-box Ball Socket.....a27E

JAW-TONGS-BELL-CRANK FULCRUM STUD.....	22E	1.00
nut (lower).....	22E1	.11
" (upper).....	22E2	.08
washer.....	22E3	.07
JAW-TONGS-BELL-CRANK FULCRUM STUD 22E (c'pl't).		1.26

JAW-TONGS CAM (driving, marked E in circle).....1..	23E	5.50
(driven, marked E in square).....1..	23E1	

JAW-TONGS CAM 23E (complete): see Note under CAM SHAFT 11E (complete).

JAW-TONGS-CAM LEVER.....1..a24E		14.50
clamp bolt (for Ball Extension) (2)	24E2	.09
bushing (2).....(1)..	24E3	.18
" pin (2).....(1)..	24E4	.01
roller.....(1)..	24E5	.30
" pin.....(1)..	24E6	.15
adjusting screw (for Ball Extension).....a24E7		.20
" " lock nut.....a24E8		.06
JAW-TONGS-CAM LEVER a24E (complete).....		14.94

For machines 103 to 320 inclusive, 322 to 501 inclusive and 503 to 519 inclusive order: Improvement No. 1

JAW-TONGS-CAM LEVER.....	24E	13.00
ball extension.....	24E1	1.00
JAW-TONGS-CAM LEVER 24E (complete).....		14.09

Omit parts a24E7 and a24E8.

Jaw-tongs-cam-lever Ball Extension, see Jaw-tongs-spring-box Ball Extension.....a26E1

JAW-TONGS-CAM-LEVER SHAFT.....	25E	.45
set screw.....	25E1	.10
JAW-TONGS-CAM-LEVER SHAFT 25E (complete).		.55

Jaw-tongs-cam-lever-shaft Stand, see Cam-lever-shaft Stand a9E

JAW-TONGS SPRING BOX		
ball extension.....a26E1		1.75
" socket (left bearing for Ball).....a26E2		2.00
" " guide pin.....a26E3		.01
" " plug.....a26E4		.40
" " " button.....a26E5		.50
" plug (right bearing for Ball).....a26E6		.75
" " nut.....a26E7		.05
" " washer.....a26E8		.40
spring (inside) (2).....a26E9		.20
" (outside) (2).....a26E10		.25
" abutment (4).....a26E11		.40
" brake (wood) (2).....a26E12		.35
" " cone (2).....a26E13		.75
" rod (lower) (Plug for Ball Socket).....a26E14		1.00
" " nut.....a26E15		.05

JAW-TONGS SPRING BOX—*Continued*

spring rod nut lock nut	a26E16	.06
" " (upper)	a26E17	.75
" " lock nut (Crosshead end)	a26E18	.08
" " nut	a26E19	.05
" " " lock nut	a26E20	.06
" " crosshead	a26E21	1.25
" " " ball plug	a26E22	.60
" " " " " lock nut	a26E23	.08
tube (2)	a26E24	1.00
" cap	a26E25	2.85
" " stud (2)	a26E26	.15
" " " nut (2)	a26E27	.05
" plate	a26E28	.25

JAW-TONGS SPRING BOX a26E (complete) includes BALL SOCKET a27E (complete) and BALL SOCKET a81E (complete) *and cannot be furnished without them*..... 21.94

For machines 103 to 320 inclusive, 322 to 501 inclusive and 503 to 519 inclusive order: Improvement No. 1

JAW-TONGS SPRING BOX

tube (outside)	26E1	2.65
adjusting cap	26E2	.75
" " lock nut	26E3	.45
plug (right end)	26E4	.35
spring rod (right)	26E5	.18
" " nut	26E6	.05
" " spring abutment	26E7	.40
" " washer	26E8	.10
" (right, inside)	26E9	.20
" (" intermediate)	26E10	.25
" (" outside)	26E11	.30
tube (inside)	26E12	2.15
" ball plug (right end)	26E13	.40
" plug (left end)	26E14	.35
ball plunger	26E15	2.00
" " brake (wood)	26E16	.35
spring rod (left)	26E17	.10
" " nut	26E18	.05
" " " lock nut	26E19	.05
" " spring abutment	26E20	.40
" (left, inside)	26E21	.20
" (" intermediate)	26E22	.25
" (" outside)	26E23	.30
JAW-TONGS SPRING BOX 26E (complete)		12.28

JAW-TONGS-SPRING-BOX BALL SOCKET (lower).....a27E .70
lock nut.....a27E1 .25

JAW-TONGS-SPRING-BOX BALL SOCKET (lower) a27E (complete)..... .95

For machines 103 to 320 inclusive, 322 to 501 inclusive and 503 to 519 inclusive order: Improvement No. 1

JAW-TONGS-SPRING-BOX BALL SOCKET	27E	.90
plug	27E1	.75
" lock nut (2)	27E2	.30
JAW-TONGS-SPRING-BOX BALL SOCKET 27E (c'pl't).		2.25

Jaw-tongs-spring-box-ball-socket Plug (lower), see Jaw-tongs-spring-box-spring Rod.....a26E14

JAW-TONGS-SPRING-BOX BALL SOCKET (upper).....a81E .70
lock nut.....a81E1 .25

JAW-TONGS-SPRING-BOX BALL SOCKET (upper) a81E (complete)..... .95

For machines 103 to 320 inclusive, 322 to 501 inclusive and 503 to 519 inclusive omit parts a81E and a81E1. Improvement No. 1

Jaw-tongs-spring-box-ball-socket Plug (upper), see Jaw-tongs-spring-rod-crosshead Ball Plug.....a26E22
Jaw-tongs Stud (front), in Air-pin Block, see Air-pin-block Stud for front Pin-jaw Tongs..... 3D8
Jaw-tongs Stud (rear), in Main Stand, see Pin-jaw-tongs Stud..... 63E
Locking Bar (front), see Matrix-jaw-stop-rack Locking Bar (front).....a13B
Locking Bar (rear), see Matrix-jaw-stop-rack Locking Bar (rear).....a13C

LOCKING-BAR BELL CRANK (lower, for rear Bar)....1..b28E 2.75
spring post.....(*1*).. 28E1 .05
fulcrum pin (for Latch)(*1*)..a28E2 .04

LOCKING-BAR BELL CRANK b28E (complete).. 2.75

See Note after LOCKING-BAR-BELL-CRANK STUD b32E (complete).

For machines 103 to 320 inclusive and 322 to 501 inclusive order: Improvement No. 1
LOCKING-BAR BELL CRANK (lower, for rear Bar).1.. 28E 2.75
spring post.....(*1*).. 28E1 .05
LOCKING-BAR BELL CRANK 28E (complete).. 2.75
Omit PIN a28E2.

LOCKING-BAR BELL CRANK (upper, for front Bar)...1..b29E 2.75
spring post.....(*1*).. 29E1 .05
fulcrum pin (for Latch). (*1*)..a29E2 .04

LOCKING-BAR BELL CRANK b29E (complete).. 2.75

See Note after LOCKING-BAR-BELL-CRANK STUD b32E (complete).

For machines 103 to 320 inclusive and 322 to 501 inclusive order: Improvement No. 1
LOCKING-BAR BELL CRANK (upper, for front Bar).1.. 29E 2.75
spring post.....(*1*).. 29E1 .05
LOCKING-BAR BELL CRANK 29E (complete).. 2.75
Omit Pin a29E2.

LOCKING-BAR-BELL-CRANK LATCH (lower).....1..a82E 1.00
spring post.....(*1*)..a82E1 .04

LOCKING-BAR-BELL-CRANK LATCH a82E (c'pl't). 1.00

For machines 103 to 320 inclusive and 322 to 501 inclusive omit a82E and a82E1. Improvement No. 1

LOCKING-BAR-BELL-CRANK LATCH (upper).....1..a83E 1.00
spring post.....(1)..a83E1 .04

LOCKING-BAR-BELL-CRANK LATCH a83E (c'pl't). 1.00

For machines 103 to 320 inclusive and 322 to 501 inclusive omit a83E and a83E1. Improvement No. 1

LOCKING-BAR-BELL-CRANK-LATCH SPRING (2).....a84E .10

For machines 103 to 320 inclusive and 322 to 501 inclusive omit a84E. Improvement No. 1

LOCKING-BAR-BELL-CRANK-LATCH-SPRING POST (in Main Stand).....a85E .05

For machines 103 to 320 inclusive and 322 to 501 inclusive omit a85E. Improvement No. 1

LOCKING-BAR-BELL-CRANK SPRING (2)..... 30E .11
plate (4)..... 30E1 .03

LOCKING-BAR-BELL-CRANK SPRING 30E (complete) each..... .17

LOCKING-BAR-BELL-CRANK-SPRING POST (in Main Stand). 31E .05

LOCKING-BAR-BELL-CRANK STUD (in Main Stand).....b32E .35
nut.....b32E1 .05

LOCKING-BAR-BELL-CRANK STUD b32E (c'pl't.). .40

For machines 103 to 320 inclusive and 322 to 501 inclusive order: Improvement No. 1
LOCKING-BAR-BELL-CRANK STUD (in MAIN STAND).. 32E .35
Omit NUT b32E1.

Note: When ordering any of the following parts for the first time for machines 321 and 502 to 1602 inclusive all of these parts must be ordered. Improvement No. 1

LOCKING-BAR BELL CRANK (lower).....	b28E	2.75
LOCKING-BAR BELL CRANK (upper).....	b29E	2.75
LOCKING-BAR-BELL-CRANK STUD.....	b32E	.40
nut.....	b32E1	.05

This new STUD is 7–16″ diameter and is tapering where it fits in the MAIN STAND. To apply it requires special tools which we will loan the customer, charging $37.60 for them but giving full credit on their return in good condition. Credit will also be given for the old BELL CRANKS a28E and a29E upon their return in good condition. No credit will be given for broken BELL CRANKS or for the STUD and NUT. Machines 1603 and following are already equipped with these new parts.

Locking-bar Operating Rod (follows a35E)..... a33E

LOCKING-BAR CAM.....a86E 2.75
See Note under CAM SHAFT 11E (complete).

For machines 103 to 501 inclusive and 503 to 519 inclusive omit a86E. Improvement No. 2

For machines 1603 and following order: Improvement No. 2
LOCKING-BAR CAM..... b86E 2.75

LOCKING-BAR-CAM LEVER.....1..a34E 9.50
bushing (2).....(1)..a34E1 .18
" pin (2).....(1)..a34E2 .01
roller.....(1)..a34E3 .30
" pin.....(1)..a34E6 .15
stud (for Operating-rod Eye)..... 34E4 .25
" nut..... 34E5 .05
LOCKING-BAR-CAM LEVER a34E (complete).... 9.80

For machines 103 to 501 inclusive and 503 to 519 inclusive order: Improvement No. 2
LOCKING-BAR LEVER..... 34E 3.00
link (2)..... 34E1 .50
" pin..... 34E2 .08
" " cotter (4)..... 34E3 .00
LOCKING-BAR LEVER 34E (complete)..... 4.46
Omit part a34E6.

For machines 1151 and following order:
LOCKING-BAR-CAM LEVER oil pipe.....(1).. a34E7 .20

For machines 1151 to 1602 inclusive order:
LOCKING-BAR-CAM LEVER oil pipe block.....(1).. a34E8 .20

For machines 1603 and following order: Improvement No. 2
LOCKING-BAR-CAM LEVER.....1.. b34E 9.50
bushing (2).....(1).. b34E1 .18
" pin (2).....(1).. b34E2 .01
roller.....(1).. b34E3 .30
" pin.....(1).. b34E6 .15
LOCKING-BAR-CAM LEVER b34E (complete).. 9.80

Locking-bar-cam-lever Stand, see Cam-shaft Stand.....a12E

LOCKING-BAR-CAM-LEVER FULCRUM STUD.....a35E 1.00
nut.....a35E1 .14
LOCKING-BAR-CAM-LEVER FULCRUM STUD a35E (complete)..... 1.14

For machines 103 to 501 inclusive and 503 to 519 inclusive order:

	Improvement No. 2	
LOCKING-BAR-LEVER FULCRUM STUD	35E	.60
nut (front)	35E1	.06
" (rear)	35E2	.08
washer	35E3	.05
LOCKING-BAR-LEVER FULCRUM STUD 35E (c'pl't).		.79

Locking-bar Latch, see Locking-bar-bell-crank Latch.....a82E

LOCKING-BAR OPERATING ROD	a33E	.50
bearing block	a33E1	.75
" " lock nut	a33E2	.05
eye	a33E5	.50
" lock nut (L. H.)	a33E6	.05
spring	a33E7	.30
stop	a33E8	.10
LOCKING-BAR OPERATING ROD a33E (c'pl't).		2.25

For machines 103 to 320 inclusive and 322 to 501 inclusive order:

	Improvements Nos. 1 and 2		
LOCKING-BAR OPERATING ROD		33E	.50
bearing block	1	33E1	1.50
" " lock nut (R.H.)		33E2	.05
" " plate	1	33E3	
" " rivet (2)	(1)	33E4	.01
eye		33E5	.50
" lock nut (L.H.)		33E6	.05
LOCKING-BAR OPERATING ROD 33E (c'pl't)...			2.60

Omit SPRING a33E7.

Locking-bar-operating-rod-eye Stud, see Locking Bar-cam lever Stud, for Operating-rod Eye..... 34E4

Locking-bar-operating-rod Guide Block, see Matrix-jaw-tongs Stud.....a39E

MAIN STAND								1	36E	200.00
air pipe	(	Tower to	5	unit	Pin,	B Block)	(1)		36E1	.35
" "	(	" "	6	"	"	")	(1)		36E2	.35
" "	(	" "	7	"	"	")	(1)		36E3	.35
" "	(	" "	8	"	"	")	(1)		36E4	.35
" "	(	" "	9	"	"	")	(1)		36E5	.35
" "	(	" "	9	"	"	")	(1)		36E6	.35
" "	(	" "	9	"	"	")	(1)		36E7	.35
" "	(	" "	10	"	"	")	(1)		36E8	.35
" "	(	" "	10	"	"	")	(1)		36E9	.35
" "	(	" "	11	"	"	")	(1)		36E10	.35
" "	(	" "	12	"	"	")	(1)		36E11	.35
" "	(	" "	13	"	"	")	(1)		36E12	.35
" "	(	" "	14	"	"	")	(1)		36E13	.35
" "	(	" "	15	"	"	")	(1)		36E14	.35
" "	(	" "	A	Pin,	C	Block)	(1)		36E15	.35
" "	(	" "	B	"	"	)	(1)		36E16	.35
" "	(	" "	C	"	"	)	(1)		36E17	.35
" "	(	" "	D	"	"	)	(1)		36E18	.35
" "	(	" "	E	"	"	)	(1)		36E19	.35

MAIN STAND—*Continued*

air pipe (Tower to F Pin, C Block) .....(1)..	36E20	.35
" " (" " G " ") .....(1)..	36E21	.35
" " (" " H " ") .....(1)..	36E22	.35
" " (" " I " ") .....(1)..	36E23	.35
" " (" " J " ") .....(1)..	36E24	.35
" " (" " K " ") .....(1)..	36E25	.35
" " (" " L " ") .....(1)..	36E26	.35
" " (" " M " ") .....(1)..	36E27	.35
" " (" " N " ") .....(1)..	36E28	.35
" " (" " 1 (right, or .0005" Pin, D Block).....(1)..	36E29	.35
" " (" " 2 (left, or .0075" Pin, D Block).....(1)..	36E30	.35
" " (" " 3 (centre, or Space Pin, D Block).....(1)..	36E31	.35
" " (Tower to Leading Attachment) (3).....(1)..	36E32	.35
" " (for air blast).....(1)..	36E33	.35
bolt (1–2" x 3 1–2").....	36E34	.20
" nut (for 36E34).....	36E35	.08
" (7–16" x 3 1–2").....	36E36	.20
" (7–16" x 2") (3).....	36E37	.10
" nut (for 36E36 and 36E37) (4).....	36E38	.07
MAIN STAND 36E (complete).....		201.06

For machines 1603 and following order:
MAIN STAND bushing (brass, for water holes) (2)... a36E39 .03
NOTE: These may be applied to machines 103 to 1602 inclusive if the holes in the MAIN STAND be opened out to receive them.

Main-stand Water Connection (front), see Water Connection 79E
Main-stand-water-pipe Connection (side), see Water-pipe Connection 47H

MATRIX-JAW TONGS (front) (complete)

connecting link (2).....	37E1	
" " bushing (2).....	37E2	
" " pin (2).....	37E3	
lever (4).....	37E4	
" bushing (Jaw end) (2).....	37E5	
link (centre) (2).....	37E6	
" pin (centre) (2).....	37E7	
MATRIX-JAW TONGS 37E (complete).....		15.00

We cannot furnish separate parts of these TONGS. Instead we exchange repaired TONGS for worn TONGS.
Price for exchange..... 4.50

MATRIX-JAW TONGS (rear) (complete)

connecting link (2).....	a38E1	
" " bushing (2)	a38E2	
" " pin (2)	38E6	
lever (4)	38E7	
" bushing (Jaw ends) (2).....	38E8	
link (centre) (2).....	38E9	
" pin (centre) (2).....	38E10	
MATRIX-JAW TONGS a38E (complete).....		15.00

We cannot furnish separate parts of these TONGS. Instead we exchange repaired TONGS for worn TONGS.
Price for exchange..... 4.50

For machines 103 to 501 inclusive and 503 to 519 inclusive order:

MATRIX-JAW TONGS			
connecting eye.....1..		38E1	
" " (L.H.).....1..		38E2	
" " adjusting nut.....(1)..		38E3	.50
" " " " lock nut.....(1)..		38E4	.05
" " " " " " (L.H.).(1)..		38E5	.05
MATRIX-JAW TONGS 38E (complete).....			15.00

Matrix-jaw-tongs Bell Crank, see Jaw-tongs Bell Crank...a21E
Matrix-jaw-tongs Cam, see Jaw-tongs Cam..... 23E
Matrix-jaw-tongs Spring, see Pin-jaw-tongs Spring..... 57E
Matrix-jaw-tongs Spring Box, see Jaw-tongs Spring Box...a26E
Matrix-jaw-tongs Stud (front), in Bell Crank, see Jaw-tongs-bell-crank Stud (front)..... 21E2
Matrix-jaw-tongs Stud (front), in Main Stand.....a39E
Matrix-jaw-tongs Stud (rear), in Bell Crank, see Jaw-tongs-bell-crank Stud (rear)..... 21E6
Matrix-jaw-tongs Stud (rear), in Justification-air-pin Block..... 40E

MATRIX-JAW-TONGS STUD (front, in Main Stand).....a39E		1.00
nut (lower).....	39E1	.11
" (upper).....	39E2	.05
arm (for Paper Winding Spring)...a39E3		.15
MATRIX-JAW-TONGS STUD a39E (complete)....		1.31

For machines 103 to 320 inclusive and 322 to 501 inclusive order: Improvement No. 1

MATRIX-JAW-TONGS STUD (front, in Main Stand)....	39E	1.00
MATRIX-JAW-TONGS STUD 39E (complete)....		1.21

MATRIX-JAW-TONGS STUD (rear, in Justification-air-pin Block).....	40E	.80
nut (lower).....	40E1	.08
" (upper).....	40E2	.05
washer.....	40E3	.05
MATRIX-JAW-TONGS STUD 40E (complete).....		.98

MOLD-BLADE BELL CRANK.....1..	41E	4.00
ball stud.....(1)..	41E1	.30
MOLD-BLADE BELL CRANK 41E (complete)....		4.00

Mold-blade-bell-crank Connecting Rod, see Mold-blade Connecting Rod..... 45E

MOLD-BLADE-BELL-CRANK STUD.....	42E	.45
nut (lower).....	42E1	.08
" (upper).....	42E2	.06
washer.....	42E3	.05
MOLD-BLADE-BELL-CRANK STUD 42E (complete).		.64

MOLD-BLADE CAM (driving, marked G in circle).....	1..	43E	5.50
(driven, marked G in square)	1..	43E1	
MOLD-BLADE CAM 43E (complete): see Note under CAM SHAFT 11E (complete).			
MOLD-BLADE-CAM LEVER	1..	44E	11.50
extension.....	(1)..	44E1	.40
bushing (2).....	(1)..	44E2	.18
" pin (2).....	(1)..	44E3	.01
roller.....	(1)..	44E4	.30
" pin.....	(1)..	44E5	.15
MOLD-BLADE-CAM LEVER 44E (complete).....			11.50

For machines equipped with Display-type Attachment order:

		Improvement No. 13	
MOLD-BLADE-CAM LEVER.....	1..	15S	11.50
bushing (2).....	(1)..	15S1	.18
" pin (2).....	(1)..	15S2	.01
compound lever.....		15S3	2.00
" " locking screw.....		15S4	.35
" " " " collar...		15S5	.08
" " stud.....		15S6	.40
" " " nut.....		15S7	.07
roller.....	(1)..	15S8	.30
" pin.....	(1)..	15S9	.15
MOLD-BLADE-CAM LEVER 15S (complete)....			14.41
MOLD-BLADE-CAM-LEVER-COMPOUND-LEVER ABUTMENT (in Main Stand).....		16S	.75
nut.....		16S1	.06
washer.....		16S2	.05
MOLD-BLADE-CAM-LEVER-COMPOUND-LEVER ABUTMENT 16S (complete).....			.86

Mold-blade-cam-lever Shaft, see Cam-lever Shaft, (rear)...		8E	
MOLD-BLADE CONNECTING ROD.....		45E	.55
lock nut.....		45E1	.05
" " (L. H.).....		45E2	.05
MOLD-BLADE CONNECTING ROD 45E (complete).			.65
MOLD-BLADE-CONNECTING-ROD BALL SOCKET (on Cam Lever).....		46E	.70
lock nut.....		46E1	.25
plug.....		46E2	.65
MOLD-BLADE-CONNECTING-ROD BALL SOCKET 46E (complete).....			1.60
MOLD-BLADE-CONNECTING-ROD BALL SOCKET (on Bell Crank).....		47E	.70
lock nut.....		47E1	.25
plug (L. H.).....		47E2	.65
MOLD-BLADE-CONNECTING-ROD BALL SOCKET 47E (complete).....			1.60
Mold-blade Operating Rod.....		16C	

MOLD CLAMP (front)		48E	.20
bolt		48E1	.06
" washer		48E2	.05
MOLD CLAMP 48E (complete)			.31
MOLD CLAMP (side)		49E	.20
bolt		49E1	.06
" washer		49E2	.05
MOLD CLAMP 49E (complete)			.31
MOLD SCREW (No. 14 x 1 9–16″) (Style M MOLD) (2)		50E	.08
MOLD SCREW (1–4″ x 1 1–4″) (Style B MOLD) (3)		a50E	.08
MOLD SCREW (No. 14 x 1 1–8″) (Style M MOLD)		51E	.08
Normal-wedge-locking-pin Cam, see Centering-pin Cam		a13E	
PAPER-TOWER CAM (driving, marked F in circle)	1..	52E	5.50
(driven, marked F in square)	1..	52E1	
PAPER-TOWER CAM 52E (complete): see Note under CAM SHAFT 11E (complete).			
PAPER-TOWER-CAM LEVER	1..	53E	11.50
bushing (2)	(1)..	53E1	.18
" pin (2)	(1)..	53E2	.01
roller	(1)..	53E3	.30
" pin	(1)..	53E4	.15
stud (for Operating-rod Eye)		53E5	.15
" nut		53E6	.05
PAPER-TOWER-CAM LEVER 53E (complete)			11.70
Paper-tower-cam-lever Shaft, see Cam-lever Shaft, (rear)		8E	
PAPER-TOWER OPERATING ROD		54E	.60
eye (lower)		54E1	.50
" lock nut		54E2	.05
" (upper)		54E3	.40
" lock nut (L. H.)		54E4	.05
PAPER-TOWER OPERATING ROD 54E (complete)			1.60
Paper-tower-operating-rod Stud, in Paper-tower-cam Lever, see Paper-tower-cam-lever Stud		53E5	
Paper-tower-operating-rod Stud, in Paper-tower Operating Lever, see Paper-tower-lever Stud		19G3	
Paper-tower-operating-rod Arm, for Winding-spool Ratchet, see Winding-spool-driving-ratchet-pawl-arm Operating Finger		23G3	
PIN-JAW TONGS (front)			
connecting eye	1..	a55E1	
" " (L. H.)	1..	a55E2	
" " adjusting stud	(1)..	a55E15	.40
" " " " lock nut	(1)..	a55E16	.04
" " " " " (L. H.)	(1)..	a55E17	.04
" " pin (2)	1..	a55E14	
lever (left, with Spring Post)	1..	55E3	

PIN-JAW TONGS (front)—*Continued*

lever (right)	1..	55E4	
" bushing (end) (4)	1..	55E5	
" " washer (end) (4)	1..	55E6	
lever bushing (centre) (2)	1..	55E7	
" " washer (centre) (2)	1..	55E8	
link (centre, upper) (2)	1..	55E9	
" (" lower) (2)	1..	55E10	
" fulcrum pin (2)	1..	55E11	
" bushing (Stud end) (2)	1..	55E12	
spring post (in left Lever) (*1*)	1..	55E13	.05
PIN-JAW TONGS a55E (complete)			13.50

We cannot furnish separate parts of these TONGS, except as indicated above by the Italic figure (*1*) following the name of the piece furnished separately. Instead we exchange repaired TONGS for worn TONGS. Price for exchange 4.00

PIN-JAW TONGS (rear)

connecting eye	1..	56E1	
" " (L. H.)	1..	56E2	
" " adjusting stud (*1*)	1..	56E3	.40
" " " " lock nut (*1*)	1..	56E4	.04
" " " " " (L. H.) (*1*)	1..	56E5	.04
" " pin (2)	1..	56E6	
lever (front)	1..	56E7	
" (rear, with Spring Post)	1..	56E8	
" bushing (end) (4)	1..	56E9	
" " (centre) (2)	1..	56E10	
" " washer (end) (4)	1..	56E11	
" " " (centre) (2)	1..	56E12	
link (3)	1..	56E13	
" bushing (Stud end) (2)	1..	56E14	
" fulcrum pin (2)	1..	56E15	
" (lower Link at centre of rear Lever)	1..	56E16	
spring post (in rear Lever) (*1*)	1..	56E17	.05
PIN-JAW TONGS 56E (complete)			13.50

We cannot furnish separate parts of these TONGS, except as indicated above by the Italic figure (*1*) following the name of the piece furnished separately. Instead we exchange repaired TONGS for worn TONGS. Price for exchange 4.00

Pin-jaw-tongs Bell Crank, see Jaw-tongs Bell Crank.....a21E
Pin-jaw-tongs Cam, see Jaw-tongs Cam..... 23E

PIN-JAW-TONGS SPRING (inside)	57E	.35
(outside)	57E1	.40
guide tube	57E2	.90
" " eye	57E3	.35
" " nut	57E4	.12
" " spring sleeve	57E5	.25
" rod	57E6	.15
" " spring plate	57E7	.08
" " " " rivet	57E8	.01
PIN-JAW-TONGS SPRING 57E (complete)		2.61

PIN-JAW-TONGS-SPRING BELL CRANK (front).....	1..	58E	2.00
pin (for Link).....	(1)..	58E1	.05
" (for Guide-tube Eye)..	(1)..	58E2	.05
" cotter.....		58E3	.00
PIN-JAW-TONGS-SPRING BELL CRANK 58E (c'pl't).			2.00
PIN-JAW-TONGS-SPRING-BELL-CRANK STUD.....		59E	.40
nut (lower).....		59E1	.05
" (upper).....		59E2	.05
washer.....		59E3	.05
PIN-JAW-TONGS-SPRING-BELL-CRANK STUD 59E (complete).....			.55
Pin-jaw-tongs-spring-bell-crank-stud Stand, see Cam-lever-shaft Stand.....		a9E	
Pin-jaw-tongs Spring Box, see Jaw-tongs Spring Box.....		a26E	
PIN-JAW-TONGS-SPRING CONNECTING LINK (long, front)..		60E	.20
PIN-JAW-TONGS-SPRING CONNECTING LINK (short, rear)..		61E	.15
PIN-JAW-TONGS-SPRING LEVER (rear).....	1..	62E	1.25
pin (for Link).....	(1)..	62E1	.05
" (for Guide-rod Spring Plate)...	(1)..	62E2	.05
PIN-JAW-TONGS-SPRING LEVER 62E (complete).			1.25
Pin-jaw-tongs-spring-lever Stud, see Mold-blade-bell-crank Stud.....		42E	
PIN-JAW-TONGS STUD (rear, in Main Stand).....		63E	.70
nut (lower).....		63E1	.08
" (upper).....		63E2	.05
washer.....		63E3	.05
PIN-JAW-TONGS STUD 63E (complete).....			.88
Pin-jaw-tongs-stud (front), in Bell Crank, see Jaw-tongs-bell-crank Stud (front).....		21E2	
Pin-jaw-tongs-stud (front), in Justification-air-pin Block, see Air-pin-block Stud, for Pin-jaw Tongs.....		3D8	
Pin-jaw-tongs Stud (rear), in Bell Crank, see Jaw-tongs bell-crank Stud (rear).....		21E6	
Pin-jaw-tongs Stud (rear), in Main Stand.....		63E	
Post, see Base.....		1E	
PULLEY (driving).....		64E	5.50
PULLEY (loose).....	1..	65E	5.50
screw (for Oil Hole).....	(1)..	65E1	.05
PULLEY 65E (complete).....			5.50

For machines equipped with Display-type Attachment order:		**Improvement No. 13**	
PULLEY (fast, on Cam Shaft).....	1..	28S	6.00
pin (for Cone Pulley).....	(1)..	28S1	.05
PULLEY 28S (complete).....			6.00

For machines equipped with Display-type Attachment order:	Improvement No. 13	
PULLEY (cone, on Cam Shaft)	29S	18.00
PULLEY NUT (on Cam Shaft)	30S	1.00

Pulley, see Countershaft Tightener Pulley, follows 16E... 7S

PUMP CAM (driving, marked B in circle)....1.. 66E 5.50
(driven, marked B in square)....1.. 66E1

PUMP CAM 66E (complete): see Note under CAM SHAFT 11E (complete).

PUMP-CAM LEVER....1.. 67E 11.50
bushing (2)....(*1*).. 67E1 .18
" pin (2)....(*1*).. 67E2 .01
roller....(*1*).. 67E3 .30
" pin....(*1*).. 67E4 .15
PUMP-CAM LEVER 67E (complete).... 11.50

Pump-cam-lever Pin, for Connecting Rod, see Pump-cam-lever-connecting-rod-eye Pin.... 68E5
Pump-cam-lever Shaft, see Cam-lever Shaft (front).... 7E

PUMP-CAM-LEVER CONNECTING ROD.... 68E .50
eye (L. H.).... 68E1 1.00
" lock nut (L. H.).... 68E2 .07
" 68E3 1.00
" lock nut.... 68E4 .07
" pin (2).... 68E5 .10
" " cotter (4).... 68E6 .00
PUMP-CAM-LEVER CONNECTING ROD 68E (c'pl't). 2.84

Shaft, see Cam Shaft.... 10E
Shaft, see Cam-lever Shaft.... 7E
Shaft, see Centering-pin-cam-lever Shaft.... 15E
Shaft, see Galley-cam Shaft.... 15F
Shaft, see Jaw-tongs-cam-lever Shaft.... 25E
Shaft, see Worm Shaft.... 80E
Shaft Stand, see Cam-shaft Stand....a12E
Spring Box, for Jaw Tongs, see Jaw-tongs Spring Box...a26E
Spring-box Cam, see Jaw-tongs Cam.... 23E
Tongs Bell Crank, see Jaw-tongs Bell Crank....a21E
Tongs, Matrix Jaw, see Matrix-jaw Tongs.... 37E
Tongs, Pin Jaw, see Pin-jaw Tongs....a55E
Tongs Spring, see Pin-jaw-tongs Spring.... 57E
Tongs Spring Box, see Jaw-tongs Spring Box....a26E
Tongs, Transfer, see Transfer Tongs.... 59D
Top Stand, see Main Stand.... 36E

TRANSFER-WEDGE CAM (driving, marked C in circle).1.. 69E 5.50
(driven, marked C in square)..1.. 69E1

TRANSFER-WEDGE CAM 69E (complete): see Note under CAM SHAFT 11E (complete).

TRANSFER-WEDGE-CAM LEVER.....1..	70E	11.75
bushing (2).....(1)..	70E1	.18
" pin (2).....(1)..	70E2	.01
clamp bolt.....	70E3	.08
extension adjusting bolt.....	70E4	.09
" " " lock nut	70E5	.05
roller.....(1)..	70E6	.30
" pin.....(1)..	70E7	.15
TRANSFER-WEDGE-CAM LEVER 70E (complete)...		11.97
Transfer-wedge-cam-lever Extension, see Transfer-tongs-cam-lever Extension.....	59D1	
Transfer-wedge-cam-lever Shaft, see Cam-lever Shaft (front)	7E	
Transfer-wedge-operating-rod Guide.....	54D	
TYPE-CARRIER CAM (driving, marked A in circle)....1..	71E	5.50
(driven, marked A in square)...1..	71E1	
TYPE-CARRIER CAM 71E (complete): see Note under CAM SHAFT 11E (complete).		
TYPE-CARRIER-CAM LEVER.....1..	72E	12.50
bushing (2).....(1)..	72E1	.18
" pin (2).....(1)..	72E2	.01
clamp bolt.....	72E3	.08
extension.....a	72E4	1.00
" adjusting bolt.....	72E5	.09
" " " lock nut.....	72E6	.05
roller.....(1)..	72E7	.30
" pin.....(1)..	72E8	.15
TYPE-CARRIER-CAM LEVER a72E (complete)....		13.72
Type-carrier-cam-lever Pin, see Type-carrier-connecting-rod-forked-eye Pin.....	21B7	
Type-carrier-cam-lever Shaft, see Cam-lever Shaft (front)...	7E	
Type Pusher..	29B	
TYPE-PUSHER BELL CRANK.....1..	73E	4.00
ball stud.....(1)..	73E1	.30
TYPE-PUSHER BELL CRANK 73E (complete)....		4.00
Type-pusher-bell-crank Pin, see Type-pusher-eye Pin.....	29B6	
TYPE-PUSHER-BELL-CRANK FULCRUM STUD.....	74E	.30
nut.....	74E1	.08
TYPE-PUSHER-BELL-CRANK FULCRUM STUD 74E (c'pl't).		.38
TYPE-PUSHER CAM (driving, marked H in circle).....1..	75E	5.50
(driven, marked H in square)....1..	75E1	
TYPE-PUSHER CAM 75E (complete): see Note under CAM SHAFT 11E (complete).		
Type-pusher-cam Stop Pin, see Belt-shifter-ring Guide Pin	5E2	

TYPE-PUSHER-CAM LEVER	1..	76E	11.50
ball extension	(1)..	76E1	.30
bushing (2)	(1)..	76E2	.18
" pin (2)	(1)..	76E3	.01
roller	(1)..	76E4	.30
" pin	(1)..	76E5	.15
TYPE-PUSHER-CAM LEVER 76E (complete)			11.50

Type-pusher-cam-lever Shaft, see Cam-lever Shaft (rear)... 8E

TYPE-PUSHER CONNECTING ROD		77E	.50
ball socket (long, Cam Lever end)		77E1	.80
" " (short, Cam Lever end)		77E2	.50
" " nut		77E3	.05
" " " lock nut		77E4	.05
lock nut (for Bell-crank-ball-socket Plug)		77E5	.05
spring		77E6	.30
TYPE-PUSHER CONNECTING ROD 77E (complete)			2.25

For machines 1151 and following order:

TYPE-PUSHER CONNECTING ROD spring (inside)		a77E6	.30
" (outside)		a77E7	.30
TYPE-PUSHER CONNECTING ROD 77E (c'pl't).			2.50

Omit LOCK NUT 77E5.

To equip machines 103 to 1150 inclusive with these improved parts requires that both these parts be furnished together, that TYPE-PUSHER CONNECTING ROD ball socket (short) 77E2 be ordered and that LOCK NUT 77E5 be discarded.

TYPE-PUSHER-CONNECTING-ROD BALL SOCKET (Bell Crank end)		78E	.70
lock nut		78E1	.25
plug		78E2	.65
TYPE-PUSHER-CONNECTING-ROD BALL SOCKET 78E (complete)			1.60

Vernier, see Gear Vernier... 20E

WATER CONNECTION (front)		79E	.15
screw (2)		79E1	.04
WATER CONNECTION 79E (complete)			.23

Water-pipe Connection (side) on Main Stand... 47H

WORM SHAFT		80E	3.00
gear		80E1	4.50
hand wheel		80E2	5.00
key (for Worm)		80E3	.05
" (long, for Gear and Hand Wheel)		80E4	.05
nut		80E5	.11
worm		80E6	3.00
WORM SHAFT 80E (complete)			15.71

Jaw-tongs-spring-box Ball Socket (upper), follows Ball Socket a27E.....a81E
Locking-bar-bell-crank Latch (lower), follows Bell Crank a29E.....a82E
Locking-bar-bell-crank Latch (upper).....a83E
Locking-bar-bell-crank-latch Spring.....a84E
Locking-bar-bell-crank-latch-spring Post.....a85E
Locking-bar Cam follows Bell-crank Stud a32E.....a86E

F GROUP

Mechanism for receiving the type from the Type Carrier and assembling it in lines on the galley pan.

Belt-shifter Lever, see Operating Lever		32F	
Channel Block, see Type-channel Block		50F	
COLUMN PUSHER	1	1F	16.00
line support stop (and Type Guide)	(1)	1F1	.15
" " " screw	(1)	1F2	.02
spring post	(1)	1F3	.05
COLUMN PUSHER 1F (complete)			16.00
Column-pusher Cam, see Galley Cam	a	14F	
COLUMN-PUSHER ADJUSTING SCREW (for varying "point size")	1	2F	1.10
disc	1	2F1	
" pin	(1)	2F2	.02
COLUMN-PUSHER ADJUSTING SCREW 2F (c'pl't)			1.10
COLUMN-PUSHER-ADJUSTING-SCREW STAND	1	3F	3.25
spring	(1)	3F1	.10
stud	(1)	3F2	.25
" nut	(2)	3F3	.08
COLUMN-PUSHER-ADJUSTING-SCREW STAND 3F (c'pl't).			3.41
COLUMN-PUSHER FULCRUM SCREW (long)		4F	.25
(short)		4F1	.25
lock nut	(2)	4F2	.11
COLUMN-PUSHER FULCRUM SCREW 4F (c'pl't)			.72
COLUMN-PUSHER LEVER		5F	2.20
Column-pusher-lever Adjusting Screw, see Column-pusher Adjusting Screw		2F	
COLUMN-PUSHER-LEVER STUD		6F	.45
nut		6F1	.08
washer		6F2	.07
COLUMN-PUSHER-LEVER STUD 6F (complete)			.60
Column-pusher Line Support, see Line Support		29F	
COLUMN-PUSHER SPRING		7F	.25
plate	(2)	7F1	.03
COLUMN-PUSHER SPRING 7F (complete)			.31

COLUMN-PUSHER SPRING BOX		8F	1.00
adjusting ball plug		8F1	1.05
" " " lock nut		8F2	.25
ball plunger		8F3	1.00
" " washer		8F4	.05
plug		8F5	1.00
spring		8F6	.15
COLUMN-PUSHER SPRING BOX 8F (complete)			4.50
Column-pusher-spring Post, in Main Galley Stand, see Main-galley-stand Spring Post		31F5	
Column-pusher-spring Post, in Column Pusher, see Column pusher-spring Post		1F3	
Column-pusher Stand, see Main Galley Stand		31F	
COLUMN SUPPORT (short, for columns 9 to 13½ picas inclusive)			
bar	1	9F1	1.75
" finger catch	(1)	9F2	.15
" " " screw (2)	(1)	9F3	.02
slide	1	9F4	
" plate	1	9F5	
" finger catch	(1)	9F6	.15
" " " rivet	(1)	9F7	.05
" stop pin	(1)	9F8	.05
spring	(1)	9F9	.06
" guide rod	1	9F10	
COLUMN SUPPORT 9F (complete)			1.75
COLUMN SUPPORT (medium, for columns 13½ to 20 picas inclusive)			
bar	1	10F1	2.00
" finger catch	(1)	10F2	.15
" " " screw (2)	(1)	10F3	.02
slide	1	10F4	
" plate	1	10F5	
" finger catch	(1)	10F6	.15
" " " rivet	(1)	10F7	.05
" stop pin	(1)	10F8	.05
spring	(1)	10F9	.08
" guide rod	1	10F10	
COLUMN SUPPORT 10F (complete)			2.00
COLUMN SUPPORT (long, for columns 20 to 30½ picas inclusive).			
bar	1	11F1	2.25
" finger catch	(1)	11F2	.15
" " " screw (2)	(1)	11F3	.02
slide	1	11F4	
" plate	1	11F5	
" finger catch	(1)	11F6	.15
" " " rivet	(1)	11F7	.05
" stop pin	(1)	11F8	.05
spring	(1)	11F9	.10
" guide rod	1	11F10	
COLUMN SUPPORT 11F (complete)			2.25

COLUMN SUPPORT (extra long, for columns 26½ to 42 picas inclusive).

bar	1..	12F1	2.50
" finger catch	(1)..	12F2	.15
" " " screw (2)	(1)..	12F3	.02
slide	1..	12F4	
" plate	1..	12F5	
" finger catch	(1)..	12F6	.15
" " " rivet	(1)..	12F7	.05
" stop pin	(1)..	12F8	.05
spring	(1)..	12F9	.15
" guide rod	1..	12F10	
COLUMN SUPPORT 12F (complete)			2.50

Column-width Stop, see Stop Slide..... 44F
Cover Plate, see Sort Tray..... 42F

GALLEY BAR	1..	13F	4.50
plate	(1)..	13F1	.18
" rivet (2)	(1)..	13F2	.02
" pin	(1)..	13F3	.05
GALLEY BAR 13F (complete)			4.50

GALLEY CAM	1..a14F		18.00
driving pawl	2..	14F1	1.50
" " pin (for Spring)	(2)..	14F2	.01
" " fulcrum screw		14F3	.20
" " " " washer		14F4	.05
" " spring		14F5	.05
" " " post (in Galley Cam)		14F6	.05
" " stop pin (in Galley Cam)	(1)..	14F7	.12
sleeve		14F8	4.00
GALLEY CAM a14F (complete)			23.85

For machines 103 to 501 inclusive and 503 to 522 inclusive order: Improvement No. 7

GALLEY CAM		14F	18.00
GALLEY CAM 14F (complete)			23.85

For machines 1665 and following order:

GALLEY CAM	1..	b14F	18.00
driving pawl fulcrum stud	(1)..	a14F3	.20
" " " " washer (lower)	..	14F4	.05
" " " " " (upper)	..	a14F9	.05
" " " " nut		a14F10	.05
GALLEY CAM a14F (complete)			23.85

To equip machines 103 to 1664 inclusive with b14F requires that a14F3, a14F9 and a14F10 be also furnished. The improved parts a14F3, a14F9 and a14F10 may be applied to machines 103 to 1664 inclusive by opening out the hole in the old CAM 14F or a14F to receive a14F3 with a driving fit.

Galley-cam Cover Plate, see Sort Tray..... 42F
Galley-cam-driving-pawl Trip Lever, see Trip Lever..... 45F

GALLEY-CAM SHAFT.....1.. 15F 3.00
key (3).....(1).. 15F1 .05
ratchet..... 15F2 2.75
worm wheel..... 15F3 6.00
GALLEY-CAM SHAFT 15F (complete)..... 11.75

Galley-cam-shaft-stand Stud, for Line-hook-operating-slide Lever, see Line-hook-operating-slide-lever Stud..... 26F
Galley-cam-shaft Worm, see Worm-shaft Worm..... 80E6

GALLEY-CAM STAND..... 16F 30.00
dowel..... 16F1 .05
screw (4)..... 16F2 .08
GALLEY-CAM STAND 16F (complete)..... 30.37

Galley-cam Stop Pin, see Galley-cam-driving-pawl Stop Pin 14F7
Galley-cam Trip Lever, see Trip Lever..... 45F
Galley Column Support, see Column Support..... 9F

GALLEY-PAN SHELF.....a17F 9.00
adjusting bar (for Galley Pan)..... 17F1 .10
" " clamp..... 17F2 .25
" " " bevel nut..... 17F3 .10
" " " bolt..... 17F4 .07
screw (4)..... 17F5 .08
set screw (2)..... 17F6 .07
GALLEY-PAN SHELF a17F (complete)..... 9.98

For machines 103 to 501 inclusive and 503 to 519 inclusive order: Improvement No. 5
GALLEY-PAN SHELF..... 17F 9.00
GALLEY-PAN SHELF 17F (complete)..... 9.98

GALLEY-PAN SUPPORT.....a18F 5.00
bar (2).....a18F1 .70
bevel nut (3)..... 18F2 .10
" " bolt (3)..... 18F3 .07
block (for Galley Bar)..... 18F4 .20
corner block (rear, for Galley Pan)..... 18F5 .25
" " (front, for Galley Pan)..... 18F6 .25
set screw (2).....a18F7 .07
GALLEY-PAN SUPPORT a18F (complete)..... 7.75

For machines 103 to 501 inclusive and 503 to 519 inclusive order: Improvement No. 5
GALLEY-PAN SUPPORT.....1.. 18F 6.00
bar (2).....(1).. 18F1 .70
GALLEY-PAN SUPPORT 18F (complete)..... 7.21
Omit SET SCREWS a18F7.

Galley-pan-support-bar Set Screw, see Galley-pan-shelf Set Screw..... 17F6

Galley Stand, see Main Galley Stand..... 31F
Galley Trip Lever, see Trip Lever..... 45F
Galley Trip Rod..... 8D
Knockout Slide, see Stop Slide..... 44F

LINE HOOK (complete)
(lower)..... 19F1
(upper)..... 19F2
lever..... 19F3
rivet (2)..... 19F4
separator..... 19F5
LINE HOOK 19F (complete)..... 5.00

Line-hook Cam, see Galley Cam.....a14F

LINE-HOOK CARRIAGE..... 20F 3.00
friction plunger (2)..... 20F1 .05
" " spring (2)..... 20F2 .05
LINE-HOOK CARRIAGE 20F (complete)..... 3.20

Line-hook-carriage Shoe, see Line-hook-operating-slide Shoe 24F
Line-hook-carriage Stud, for Line Hook, see Line-hook Stud 28F

LINE-HOOK OPERATING BAR.....a21F 2.20
friction plunger..... 21F1 .05
" " spring..... 21F2 .05
locking rod.....a21F3 .75
LINE-HOOK OPERATING BAR a21F (complete). 3.05

For machines 103 to 501 inclusive and 503 to 522 inclusive order: Improvement No. 7
LINE-HOOK OPERATING BAR..... 21F 2.00
LINE-HOOK OPERATING BAR 21F (complete). 2.10
Omit LOCKING ROD a21F3.

LINE-HOOK-OPERATING-BAR STOP..... 22F .55
adjusting screw.....a22F1 .03
screw (2)..... 22F2 .06
LINE-HOOK-OPERATING-BAR STOP 22F (complete) .64

For machines 103 to 501 inclusive and 503 to 522 inclusive order: Improvement No. 7
LINE-HOOK-OPERATING-BAR STOP adjusting screw... 22F1 .03

LINE-HOOK OPERATING SLIDE.....1..a23F 3.00
latch (for Line Support).....a23F1 .50
" locking pin.....a23F2 .15
" " " spring.....a23F4 .05
" operating rod (hand)..... 23F5 .15
" " " pin..... 23F6 .05
" stud..... 23F8 .05
" washer..... 23F9 .05
pin (for Operating Bar).....(*1*).. 23F7 .08
LINE-HOOK OPERATING SLIDE a23F (complete). 4.00

For machines 103 to 501 inclusive and 503 to 529 inclusive order:		Improvement No. 10	
LINE-HOOK OPERATING SLIDE	1..	23F	3.00
latch (for Line Support)		23F1	.50
" locking pin		23F2	.15
" " " guide pin		23F3	.01
" " " spring		23F4	.05
pin (for Operating Bar)	(1)..	23F7	.08
LINE-HOOK OPERATING SLIDE 23F (c'pl't)			4.01

For machines 1603 and following order:		Improvement No. 12	
LINE-HOOK OPERATING SLIDE	1..	b23F	3.00
spring pin		a23F11	.04
pin (for Operating Bar)	(1)..	23F7	.08
LINE-HOOK OPERATING SLIDE b23F (c'pl't)			3.04

Omit a23F (complete).

For machines 1603 and following order:		Improvement No. 12	
LINE-HOOK-OPERATING-SLIDE LATCH		a53F	.50
frame	1..	a53F1	2.00
" operating lever	2..	a53F2	.50
" " " stud	2..	a53F3	
" " " " cotter		a53F4	.00
" " " spring		a53F5	.05
" spring		a53F7	.05
" " pin	(1)..	a53F6	.04
spring		a53F9	.05
stud (in Latch Frame)		a53F8	.05
LINE-HOOK-OPERATING-SLIDE LATCH a53F (c'pl't)			3.20

Line-hook-operating-slide Bar, see Line-hook Operating Bar a21F

Line-hook-operating-slide Pin, in Spring Box, see Line-hook-operating-slide-spring-box Pin 27F2

Line-hook-operating-slide Shoe, follows 26F 24F

LINE-HOOK-OPERATING-SLIDE LEVER	1..	25F	5.00
cam roller		25F1	.30
" " pin	(1)...	25F2	.25
LINE-HOOK-OPERATING-SLIDE LEVER 25F (c'pl't)			5.30

Line-hook-operating-slide-lever Stand, see Galley-cam Stand 16F

LINE-HOOK-OPERATING-SLIDE-LEVER STUD		26F	1.50
nut		26F1	.11
LINE-HOOK-OPERATING-SLIDE-LEVER STUD 26F (c'pl't)			1.61

LINE-HOOK-OPERATING-SLIDE SHOE		24F	2.20
screw (5)		24F1	.06
LINE-HOOK-OPERATING-SLIDE SHOE 24F (c'pl't)			2.50

Line-hook-operating-slide Pin, for Spring Box, see Line-hook-operating-slide-spring-box Pin, in Lever 27F1

LINE-HOOK-OPERATING-SLIDE SPRING BOX	27F	1.50
pin (in Lever)	27F1	.05
" (in Operating Slide)	27F2	.12
plug (rear)	27F3	.40
spring	27F4	.15
" abutment (front)	27F5	.15
" " (rear)	27F6	.05
rod	27F7	.55
" adjusting nut	27F8	.05
" " " lock nut	27F9	.05
" eye	27F10	.50
" " lock nut	27F11	.05
LINE-HOOK-OPERATING-SLIDE SPRING BOX 27F (complete)		3.62

§ For machines 1603 and following order: Improvement No. 12 §
§ LINE-HOOK-OPERATING-SLIDE SPRING BOX pin (in Operating Slide) a27F2 .12 §

LINE-HOOK STUD	28F	.65
nut	28F1	.05
LINE-HOOK STUD 28F (complete)		.70

Line-travel Lever, see Line-hook-operating-slide Lever 25F

LINE SUPPORT (thin, from 5½ pt. to 8 pt. inclusive) 1	29F	1.25
spring (1)	29F1	.05
" screw (1)	29F2	.02
LINE SUPPORT 29F (complete)		1.25

LINE SUPPORT (thick, from 9 pt. to 12 pt. inclusive) 1	30F	1.25
spring (1)	30F1	.05
" screw (1)	30F2	.02
LINE SUPPORT 30F (complete)		1.25

Line-support Latch, see Line-hook-operating-slide Latch a23F1
Line-support Stop, see Column-pusher-line-support Stop 1F1

MAIN GALLEY STAND	31F	100.00
dowel	31F1	.05
screw (1–2″ x 1 3–8″)	31F2	.10
" (7–16″ x 1 1–8″)	31F3	.09
" (3–8″ x 1 1–8″)	31F4	.08
spring post (for Column-pusher Spring)	31F5	.05
MAIN GALLEY STAND 31F (complete)		100.37

Main-galley-stand Plate, for Type Channel, see Type-channel Plate 49F
Main-galley-stand Shoe, for Carriage and Slide, see Line-hook-operating-slide Shoe 24F
Main-galley-stand Spring Post, for Operating-lever-latch Spring, see Operating-lever-latch-spring Post 35F
Main-galley-stand Spring Post, for Trip Lever, see Trip-lever-spring Post 48F

OPERATING LEVER	32F	5.00

For machines 103 to 511 order:

OPERATING LEVER plate	32F1	.30
" rivet (2)	32F2	.02

The OPERATING LEVER 32F is interchangeable since it is now made without the above PLATE.

OPERATING-LEVER LATCH	33F	3.00
bar (for Stop-slide Lever)	33F1	.55
" clamp	33F2	.50
" " screw	33F3	.04
fulcrum screw (rear)	33F4	.10
" " (headless, front)	33F5	.05
" " lock nut	33F6	.05
OPERATING-LEVER LATCH 33F (complete)		4.29
Operating-lever-latch Lever, for Stop Slide, see Stop-slide Lever	44F9	
OPERATING-LEVER-LATCH SPRING	34F	.08
OPERATING-LEVER-LATCH-SPRING POST (in Main Galley Stand)	35F	.05
OPERATING-LEVER-LATCH STAND	36F	.30
bolt (2)	36F1	.07
OPERATING-LEVER-LATCH STAND 36F (complete)		.44
OPERATING-LEVER SPRING BOX	37F	1.50
plunger	37F1	.45
" stop pin	37F2	.03
spring	37F3	.08
OPERATING-LEVER SPRING BOX 37F (complete)		2.06
Operating-lever-spring-box Abutment Arm, see Belt-shifter Arm (front)	2E	
Operating-lever-spring-box Guide, see Galley-cam Stand	16F	
Operating-lever Stand, see Main Galley Stand	31F	
OPERATING-LEVER STUD	38F	1.15
nut	38F1	.07
OPERATING-LEVER STUD 38F (complete)		1.22
Pusher, see Column Pusher	1F	
RULE	39F	6.00
guide pin (1)	39F1	.12
" " rivet (2) (1)	39F2	.01
lifting rod (1)	39F3	.50
" " adjusting nut	39F4	.05
" " " " lock nut	39F5	.05
" " sleeve	39F6	.08
" " spring	39F7	.11
" " support 1	39F8	
" " " rivet (4) (1)	39F9	.01
" " washer (3)	39F10	.05
RULE 39F (complete)		6.44

Rule Cam, see Galley Cam		a14F	
RULE LEVER	1..	40F	5.50
cam roller	(1)..	40F1	.30
" " oil pipe	(1)..	40F2	.05
" " pin	(1)..	40F3	.30
" " " nut	(1)..	40F4	.06
" " " washer	(1)..	40F5	.05
RULE LEVER 40F (complete)			5.50
RULE-LEVER STUD		41F	.65
Rule-lever Stand, see Galley-cam Stand		16F	
Shelf, for Galley Pan, see Galley-pan Shelf		a17F	
SORT TRAY		42F	3.25
SORT-TRAY SUPPORT BAR	1..	43F	.60
stud (long)		43F1	.18
" (short)		43F2	.12
" nut (2)		43F3	.05
" (for Sort Tray)	(1)..	43F4	.10
" nut (knurled)		43F5	.40
SORT-TRAY SUPPORT BAR 43F (complete)			1.40
STOP SLIDE (for long and short lines)	1..	44F	2.75
adjusting stand (for column width)		44F1	2.50
" " guide bar (for adjusting column width)		44F2	1.75
" " guide bar clamp		44F3	.50
" " " " " bolt		44F4	.08
" " " " plate		44F5	1.25
" " " " rivet (2)		44F6	.01
" " plate		44F7	1.50
" " " screw (3)		44F8	.03
lever	2..	44F9	1.25
" bolt		44F10	.06
" " bevel nut		44F11	.10
" bushing		44F12	.15
" " washer		44F13	.05
" pin	(2)..	44F14	.05
pin	(1)..	44F15	.05
STOP SLIDE 44F (complete)			12.05
Stop-slide-lever Latch, see Operating-lever Latch		33F	
Stop-slide Stand, see Main Galley Stand		31F	
Support, for Galley Pan, see Galley-pan Support		a18F	
TRIP LEVER	1..	45F	5.00
adjusting screw		45F1	.03
" " clamp screw		45F2	.05
latch	(1)..	45F3	.55
" guide pin	(1)..	45F4	.02
" stud	(1)..	45F5	.12
" " cotter	(1)..	45F6	.00
" " washer	(1)..	45F7	.05
spring post (in Lever)	(1)..	45F8	.05

TRIP LEVER—*Continued*		
stop screw	45F9	.07
" " lock nut	45F10	.05
TRIP LEVER 45F (complete)		5.20
TRIP-LEVER FULCRUM SCREW	46F	.60
TRIP-LEVER SPRING	47F	.08
TRIP-LEVER-SPRING POST (in Main Galley Stand)	48F	.05
Trip-lever Stand, see Main Galley Stand	31F	
Trip Rod, see Galley Trip Rod	8D	
TYPE CHANNEL PLATE	49F	5.00
screw (2)	49F1	.05
TYPE CHANNEL PLATE 49F (complete)		5.10
TYPE CHANNEL BLOCK (adjustable) (*1*)	50F	2.50
bolt	50F6	.07
" washer	50F7	.05
clamp 1	50F1	12.00
" latch (*1*)	50F2	.75
" " pin (3) (*1*)	50F3	.03
" spring (*1*)	50F4	.05
" tongue 1	50F5	
" " rivet (3) (*1*)	50F8	.01
stop plate (for Clamp Tongue) (*1*)	50F9	.05
" " screw (2) (*1*)	50F10	.03
type trimmer (*1*)	50F11	1.75
" " screw (*1*)	50F12	.05
TYPE CHANNEL BLOCK 50F (complete)		12.12

For machines equipped with Display-type Attachment order:	Improvement No. 13	
TYPE CHANNEL BLOCK (adjustable) (*1*)	40S	2.50
clamp 1	40S1	12.00
" latch (*1*)	a40S2	1.00
" " pin (3) (*1*)	40S3	.03
" spring (*1*)	40S4	.05
" tongue 1	40S5	
" " rivet (3) (*1*)	40S6	.01
" " stop plate (*1*)	40S7	.05
" " " " screw (2) (*1*)	40S8	.03
" type guide 1	40S9	
TYPE CHANNEL BLOCK 40S (complete)		12.00

TYPE CHANNEL BLOCK (fixed) 1	51F	2.75
dowel (No. 5 x 1 1–2″, front)	51F1	.04
" (No. 5 x 1 1–4″, rear)	51F2	.04
latch (*1*)	51F3	1.00
" pin (2) (*1*)	51F4	.03
screw (1–4″ x 1 1–8″)	51F5	.07
" (1–4″ x 1 3–8″)	51F6	.07
TYPE CHANNEL BLOCK 51F (complete)		2.97

Line-hook-operating-slide Latch, follows b23F.....a53F

For machines equipped with Display-type Attachment order:			Improvement No. 13
TYPE CHANNEL BLOCK (fixed)	1..	a41S	2.75
screw (rear)		41S1	.06
latch	(1)..	a41S2	.15
" screw (2)	(1)..	a41S3	.02
TYPE CHANNEL BLOCK 41S (complete)			2.81

Type Clamp, in Type Channel Block, see Type-channel-block Clamp..... 50F1
Type Guide, see Column-pusher-line-support Stop..... 1F1
Type Trimmer, see Type-channel-block Type Trimmer.... 50F11
Worm Shaft, see Galley-cam Shaft..... 15F

G GROUP

Mechanism for moving and positioning the paper ribbon and admitting air to the Pin Blocks.

Air-tower Housing, (follows Air-pipe Cover 8G)	1G	
AIR BAR (including Valve Body) (1)	2G	5.00
clamp screw (1)	2G1	.04
leather packing (1)	2G2	.10
spring (2)	2G3	.08
" stud (2)	2G4	.05
" " washer (2)	2G5	.03
" " nut (2)	2G6	.04
" " " lock nut (2)	2G7	.04
valve (1)	2G8	.25
" spring (1)	2G9	.05
" body plug (in Air Bar) (1)	2G10	.15
AIR BAR 2G (complete)		5.48
Air-bar Operating Rod, see Air-bar-clamping-lever Connecting Rod	4G	
AIR-BAR CLAMPING LEVER (also operates Air-bar Valve),	3G	2.25
stud (for Operating Rod)	3G1	.15
" nut	3G2	.04
screw (for operating Valve)	3G3	.04
" lock nut	3G4	.04
AIR-BAR CLAMPING LEVER 3G (complete)		2.52
AIR-BAR-CLAMPING-LEVER CONNECTING ROD	4G	.15
adjustable sleeve	a4G7	.15
" " lock nut	a4G8	.04
connecting hook	4G1	.50
" " lock nut	4G2	.04
" link	4G3	1.35
" " lock nut	4G4	.04
spring	4G5	.08
" seat	4G6	.03
washer	a4G9	.03
AIR-BAR-CLAMPING-LEVER CONNECTING ROD 4G (complete)		2.41

For machines 103 to 682 inclusive when ordering for the first time AIR-BAR-CLAMPING-LEVER-CONNECTING-ROD ADJUSTABLE SLEEVE a4G7, its LOCK NUT a4G8 or the WASHER a4G9 all three of these parts and also the CONNECTING ROD 4G must be ordered together.

Air-bar-clamping-lever-connecting-rod Operating Lever, see Paper-tower Lever	19G	

AIR-BAR SHAFT	5G	1.10
distance collar	5G1	.10
headless screw (end)	5G2	.03
" " nut	5G3	.04
" " " lock nut	5G4	.04
" " washer	5G5	.03
AIR-BAR SHAFT 5G (complete)		1.34
Air-bar-shaft Air Connection, see Air-pipe Connection	6G1	
Air-bar-valve Operating Rod, see Air-bar Clamping Lever	3G	
AIR PIPE (to Air Bar)	6G	.50
connection	6G1	.65
AIR PIPE 6G (complete)		1.15
Air Pipe	a1H	
Air Pipe, see Air-tower-housing Air Pipe	1G2	
Air Pipe, see Main-stand Air Pipe	36E1	
AIR-PIPE COVER (right)	7G	.25
screw (3)	7G1	.02
AIR-PIPE COVER 7G (complete)		.31
AIR-PIPE COVER (left)	8G	.75
screw (3)	8G1	.02
guide (for Winding Spool) (*1*)	8G2	
" rivet (copper) (4) (*1*)	8G3	.01
" screw (2)	8G4	.03
AIR-PIPE COVER 8G (complete)		.87
Air Shaft, see Air-bar Shaft	5G	
Air Supply Pipe, see Air Pipe	6G	
AIR-TOWER HOUSING (front, with bearing for Pawl Ring)	1G	11.00
(rear)	1G1	6.25
air pipe (31)	1G2	.15
base	a1G3	2.10
" screw (between Housings, left)	1G4	.07
" " (" " right)	a1G22	.07
cross girt (brass)	1G5	4.75
" " cap (brass)	1G6	2.75
" " " dowel	1G7	.04
" " " screw (top) (2)	1G8	.06
" " " " (side) (2)	1G9	.05
dowel (to Cross Girt) (4)	1G10	.03
screw (to Base) (4)	1G11	.05
" (to Cross Girt) (3)	1G12	.05
" (to Cross Girt, thin head)	1G13	.05
" (to Main Stand) (4)	1G14	.06
stud (for Paper-tower Lever)	1G16	.20
" washer	1G17	.05
" nut	1G18	.05
stop pin (for Paper-feed Locking Lever)	1G19	.02
stop screw (for Ring) (2)	1G20	.04
" " lock nut (2)	1G21	.04
AIR-TOWER HOUSING a1G (complete)		36.00

Air-tower-housing Cover, for Air Pipe, see Air-pipe Cover	7G	
Air-tower-housing Pawl, see Paper-feed Pawl	13G	
Air-tower-housing Ring, see Paper-feed-pawl Ring	14G	
Air-tower-housing Stud, for Pawl, see Paper-feed-pawl Stud	15G	
Air-tower-housing Spring Box, for Winding Spool, see Winding-spool Spring Box	25G	
Air-tower-housing Spring Post, replaced by Matrix-jaw-tongs-stud Arm, for Paper Winding Spring	a39E3	
BASKET		
bottom	9G1	
leather strip (front)	9G2	
" " (rear)	9G3	
" " rivet (6)	9G4	
side plate (2)	9G5	
wire connecting rod (2)	9G6	
BASKET 9G (complete)		4.00
Feed Pawl, see Paper-feed Pawl	13G	
NAME PLATE	10G	.60
screw (4)	10G1	.03
NAME PLATE 10G (complete)		.72
Paper Basket, see Basket	9G	
PAPER-FEED LOCKING LEVER (for stopping movement of paper)	12G	.55
stud	12G1	.03
PAPER-FEED LOCKING LEVER 12G (complete)		.58
Paper-feed-locking-lever Stop Pin, see Air-tower-housing Stop Pin, for Paper-feed Locking Lever	1G19	
PAPER-FEED PAWL		
(locking, upper) 1..	13G1	6.50
" hub 1..	13G2	
" operating link 1..	13G3	
" " " pin (also Spring Post).(*1*)..	13G4	.03
" " " bushing (*1*)..	13G5	.05
(feeding, lower) 1..	13G6	
" connecting link (2) 1..	13G7	
" " " rivet (2) (*1*)..	13G8	.03
" spring post (*1*)..	13G9	.03
spring	13G10	.05
PAPER-FEED PAWL 13G (complete)		6.55
Paper-feed-pawl Ratchet, see Pin-wheel Ratchet	20G4	
PAPER-FEED-PAWL RING 1..	14G	1.85
pin (Stop for Feeding Pawl) (*1*)..	14G1	.01
friction spring (2)	14G2	.05
" " screw (2)	14G3	.12
" " washer (2)	14G4	.03
PAPER-FEED-PAWL RING 14G (complete)		2.25

Paper-feed-pawl-ring Stop Screw, in Housing, see Air-tower-housing Stop Screw, for Ring	1G20	
Paper-feed-pawl Stop Pin, in Ring, see Paper-feed-pawl-ring Pin	14G1	
PAPER-FEED-PAWL STUD (lower, in Pawl Ring)	15G	.03
PAPER-FEED-PAWL STUD (upper, in Air-tower Housing)	16G	.20
nut	16G1	.04
PAPER-FEED-PAWL STUD 16G (complete)		.24
Paper-feed Pin Wheel, see Pin Wheel	20G	
PAPER-FEED SPRING BOX		
connection (upper) (1)	17G1	.85
pin (1)	17G2	.12
" cotter	17G3	.00
" washer	17G4	.03
spring	17G5	.10
" rod	17G6	1.00
" " nut	17G7	.05
" " washer (2)	17G8	.05
tube	17G9	1.15
PAPER-FEED SPRING BOX 17G (complete)		3.28
Paper-feed-spring-box Operating Lever, see Paper-tower Lever	19G	
PAPER TENSION BAR (large, right)	18G	.35
arm (right) (2)	18G1	.15
(small, left)	18G2	.30
arm (left) (2)	18G3	.20
arm fulcrum pin	18G4	.02
" distance sleeve	18G5	.10
" guide plate	18G6	.35
connecting link (2)	18G7	.05
" " fulcrum pin (in Housing)	18G8	.15
" " pin (to lift Tension Bar)	18G9	.02
PAPER TENSION BAR 18G (complete)		2.09
Paper-tower Housing, see Air-tower Housing	1G	
PAPER-TOWER LEVER	19G	1.00
stud (for Clamping-lever Connecting Rod)	19G1	.15
" nut	19G2	.04
" (for Pawl Spring Box and Operating Rod)	19G3	.15
" nut	19G4	.05
PAPER-TOWER LEVER 19G (complete)		1.39
Paper-tower-lever Operating Rod, see Paper-tower Operating Rod	54E	
Paper-tower-lever Stud, see Air-tower-housing Stud, for Paper-tower Lever	1G16	
Paper Winding Spool, see Winding Spool	21G	
Pawl, see Paper-feed Pawl	13G	
Pawl Spring Box, see Paper-feed Spring Box	17G	

PIN WHEEL (rear)	1..	20G	14.00
(front)	1..	20G1	
pin (96)	(1)..	20G2	.01
shaft	1..	20G3	
ratchet	(1)..	20G4	2.00
PIN WHEEL 20G (complete)			14.00
Ratchet, see Pin-wheel Ratchet		20G4	
Spool Basket, see Basket		9G	
Tension Bar, see Paper Tension Bar		18G	
Valve Body, see Air Bar		2G	
WINDING SPOOL			
flange	1..	21G1	3.40
" bushing (for Driving Pin)	1..	21G2	
" spring (for holding paper)	1..	21G3	
plug (rear)		21G4	.95
shaft	2..	21G5	1.00
" head	2..	21G6	
" driving disc	3..	21G7	.50
" " " pin	3..	21G8	
" " " lock nut		21G9	.05
" spring		21G10	.10
" " abutment		21G11	.25
" " " tube		21G12	.25
tube	1..	21G13	
WINDING SPOOL 21G (complete)			6.50
WINDING-SPOOL DRIVING DISC	1..	22G	.90
shaft	1..	22G1	
" nut		22G2	.05
WINDING-SPOOL DRIVING DISC 22G (complete).			.95
WINDING-SPOOL DRIVING RATCHET		23G	2.25
pawl	1..	23G1	1.25
" arm	1..	23G2	
" " operating finger		23G3	.20
" " stop pin	(1)..	23G4	.01
" pin	(1)..	23G5	.03
WINDING-SPOOL DRIVING RATCHET 23G (c'pl't).			3.70
Winding-spool Guide, on Pipe Cover, see Air-pipe-cover Guide		8G2	
WINDING-SPOOL OPERATING SPRING		24G	.08
Winding-spool-operating-spring Arm, see Matrix-jaw-tongs-stud Arm, for Paper Winding Spring		a39E3	
WINDING-SPOOL SPRING BOX (discarded) (cast on 1G1).		25G	
plunger		25G1	.50
" button		25G2	.45
" cotter		25G3	.00
" spring		25G4	.05
rivet (to Housing) (discarded)			
WINDING-SPOOL-SPRING-BOX PLUNGER 25G1 (c'pl't).			1.00

H GROUP

Mechanism for melting metal and forcing it into the Mold; also all piping, connections, etc., except the Air Pipes in the Main Stand and Air Tower and the Air Pipe connected to the Air-bar Shaft.

Air Pipe, follows Air Cock a2H..... a1H

AIR COCK (for air supply, 1–8″)..... a2H .60
(for air blast)..... 2H1 .60
AIR COCK a2H (complete)..... 1.20

For machines 103 to 501 inclusive and 503 to 506 inclusive order: **Improvement No. 6**

AIR COCK (for air supply, 1–8″)..... 2H .60
AIR COCK 2H (complete)..... 1.20

AIR PIPE (copper, .190″ x 1 1–2″)..... a1H .10
(" .190″ x 19″)..... a1H1 .40
(iron, 1–8″ x 1″) (2)..... 1H2 .05
(" 1–8″ x 2″)..... 1H3 .08
(" 1–8″ x 3 7–8″)..... a1H4 .10
(" 1–8″ x 8 1–8″)..... a1H5 .16
(" 1–8″ x 24″)..... a1H13 .25
elbow (1–8″) (4)..... 1H6 .05
expansion elbow..... 1H7 .35
" " nut..... 1H8 .08
" " packing (leather) (3)..... 1H9 .02
tee (1–8″)..... 1H11 .05
union (brass, .190″) (2)..... 1H12 .04
" (iron, 1–8″)..... a1H14 .12
" packing (rubber)..... a1H15 .01
AIR PIPE a1H (complete)..... 2.14

For machines 103 to 501 inclusive and 503 to 506 inclusive order: **Improvement No. 6**

AIR PIPE (copper, .190″ x 2″)..... 1H .10
(" .190″ x 28 1–4″)..... 1H1 .60
(iron, 1–8″ x 2″) (2)..... 1H3 .08
(" 1–8″ x 7 3–4″)..... 1H4 .15
(" 1–8″ x 16 1–8″)..... 1H5 .20
plug (1–8″)..... 1H10 .04
AIR PIPE 1H (complete)..... 2.17
Omit a1H13, a1H14 and a1H15.

Air Cock, precedes Air Pipe a1H..... a2H
Air Pipe, see Air Pipe to Air Bar..... 6G

Air Pipe, see Air-tower-housing Air Pipe..... 1G2
Air Pipe, see Main-stand Air Pipe..... 36E1

For machines 103 to 501 inclusive and 503 to 506 inclusive order: Improvement No. 6

AIR-PIPE CLAMP (2)..... 3H .18
screw (2)..... 3H1 .06
AIR-PIPE CLAMP 3H (complete) each..... .24

Bell Crank operating Pump, see Pump Bell Crank..... 21H
Burner, see Gas Burner..... 4H

Casing, for Metal Pot, see Melting-pot Casing..... 12H1
Chimney, see Melting-pot Chimney..... 13H

GAS BURNER (for Melting Pot) (2)..... 4H 1.35
cone (2)..... 4H1 .50
GAS BURNER 4H (complete) each..... 1.85

For machines 103 to 501 inclusive and 503 to 506 inclusive order: Improvement No. 6

GAS BURNER (for light in Base) (1–8″)..... 5H .15
tip..... 5H1 .20
GAS BURNER 5H (complete)..... .35

GAS-BURNER STAND..... a6H 2.50
bolt..... 6H1 .20
" nut..... 6H2 .08
set screw (for Nipple) (2)..... 6H3 .06
GAS-BURNER STAND a6H (complete)..... 2.90

For machines 103 to 501 inclusive when ordering for the first time GAS-BURNER STAND a6H order also the two GAS NIPPLES a8H.

GAS COCK (1–4″ x 1–4″) (with close Nipple, for gas supply) a7H .40

For machines 103 to 501 inclusive and 503 to 506 inclusive order: Improvement No. 6

GAS COCK (1–4″ x 3–8″) (with close Nipple, for gas supply)..... 7H .40

GAS HOSE (1–2″ x 18″)..... 49H .40

GAS HOSE (3–8″ x 15 3–4″)..... 50H .35

GAS HOSE (3–8″ x 19 1–2″)..... 51H .40

GAS NIPPLE (in Gas-burner Stand) (2)..... a8H .10

For machines 103 to 501 inclusive when ordering for the first time the GAS NIPPLES a8H, the holes for these in the old GAS-BURNER STAND 6H must be opened out to receive them.

Gas-nipple Set Screw, in Gas-burner Stand, see Gas-burner-stand Set Screw..... 6H3

GAS PIPE (iron, 1–4″ x 1 3–8″) (2)	9H	.05
(“ 1–4″ x 3 3–4″)	a9H1	.09
(“ 1–4″ x 18 5–8″)	a9H2	.25
elbow (1–4″) (4)	9H5	.05
nipple (1–4″, brass, for Hose)	9H7	.15
union (1–4″, iron)	a9H8	.14
“ packing (rubber)	a9H9	.01
GAS PIPE 9H (complete)		.94

For machines 103 to 501 inclusive and 503 to 506 inclusive order:

Improvement No. 6		
GAS PIPE (iron, 1–4″ x 1 3–8″) (1)	9H	.05
(“ 1–4″ x 8 1–8″)	9H1	.15
(“ 1–4″ x 9 3–4″)	9H2	.15
(“ 1–4″ x 1 1–2″)	9H3	.05
(“ 1–8″ x 1″)	9H4	.05
elbow (1–4″) (3)	9H5	.05
“ (1–4″ with 1–8″ side outlet)	9H6	.20
nipple (1–4″ brass, for Hose)	9H7	.15
GAS PIPE 9H (complete)		.95

Omit a9H8 and a9H9.

Gas-pipe Bracket, see Pipe Bracket a16H

GAS REGULATING VALVE (2) ..... 1..	10H	2.50
handle ..... 1..	10H1	
spring ..... 1..	10H2	
body ..... 1..	10H3	
nipple (outlet) ..... (1)..	10H4	.15
GAS REGULATING VALVE 10H (complete) each..		2.50

GAS-REGULATING-VALVE STAND	11H	.95
elbow (1–4″, 45°)	11H1	.05
nipple (for Hose)	11H2	.15
pipe (1–4″ x 1 3–8″)	11H3	.05
screw (2)	11H4	.07
GAS-REGULATING-VALVE STAND 11H (complete).		1.34

Hose, see Gas Hose 49H

For machines equipped with Display-type Attachment order:

Improvement No. 13		
LATCH	8S	2.00
plate	8S1	.25
“ screw (2)	8S2	.04
LATCH 8S (complete)		2.33
LATCH ABUTMENT	9S	2.00
plate	9S1	.25
“ screw (2)	9S2	.04
LATCH ABUTMENT 9S (complete)		2.33
LATCH-ABUTMENT SPRING	10S	.12

For machines equipped with Display-type Attachment order: — **Improvement No. 13**

LATCH PIN	1..	11S	2.00
cotter		11S1	.00
plate	1..	11S2	
" spring pin	(1)..	11S3	.05
" stop pin	(1)..	11S4	.05
LATCH PIN 11S (complete)			2.00
LATCH SPRING		12S	.05
LATCH STAND		13S	.75
shaft	1..	13S1	2.25
" arm	1..	13S2	
" nut		13S3	.08
" " lock nut		13S4	.08
" spring		13S5	.10
spring pin (for Latch Spring)		13S6	.05
LATCH STAND 13S (complete)			3.31

MELTING POT		12H	5.00
casing (inside)		12H1	7.50
" (outside)		12H2	12.00
" plate (large)		12H3	1.25
" " screw (8)		12H4	.06
" " (small)		12H5	.85
" " screw (3)		12H6	.06
" screw (right)		12H8	.12
" stud (2)		a12H9	.08
" " nut (2)		a12H10	.05
" " washer (2)		a12H11	.05
MELTING POT a12H (complete, with Magnesia Packing)			32.25

For machines 103 to 578 inclusive and 580 to 662 inclusive order: — **Improvement No. 9**

MELTING POT casing screw (left) (2) ..... 12H7 .05

Omit a12H9, a12H10 and a12H11.

Melting-pot Adjusting Screw, see Swing-frame Adjusting Screw a37H7

MELTING-POT CHIMNEY 13H 1.50

Melting-pot-Raising Screw, see Swing-frame Screw 39H

Melting-pot Stand, for Pump-body Lifting Lever, see Pump-body-lifting-lever Stand 25H3

Melting-pot Stud, for Lifting Lever, see Pump-body-lifting-lever Stud 26H1

Melting-pot Swing Frame, see Swing Frame a37H

NOZZLE (13 threads)		14H	.75
(special 5–8", 13 threads)		14H1	.75

For machines equipped with Display-type Attachment order: — **Improvement No. 13**

NOZZLE (13 threads)	24S	.75
(special 5–8″, 13 threads)	24S1	.75

Nozzle Operating Rod, see Pump-body Operating Rod.... 28H

NOZZLE SQUARING PIN	15H	1.75
(special for 5–8″ Nozzle)	15H1	1.75

PIPE BRACKET	a16H	.60
screw (large) (2)	a16H1	.08
screw (small)	a16H3	.05

PIPE BRACKET a16H (complete)..... .81

For machines 103 to 501 inclusive and 503 to 506 inclusive order: — **Improvement No. 6**

PIPE BRACKET	16H	.60
screw (2)	16H1	.06
washer (2)	16H2	.05

PIPE BRACKET 16H (complete)..... .82

PISTON	17H	1 75
handle (1..)	17H1	.35
" stem (1..)	17H2	
" " nut (1..)	17H3	

PISTON 17H (complete)..... 2.10

PISTON (.003″ oversize)	a17H	1.75

For machines equipped with Display-type Attachment order: — **Improvement No. 13**

PISTON	25S	1.75
handle (1.)	25S1	.35
" stem (1.)	25S2	
" " nut (1..)	25S3	

PISTON 25S (complete)..... 2.10

PISTON (.003″ oversize)	a25S	1.75

Piston Guide and Stop, see Pump-body Guide..... 23H2

PISTON LEVER	18H	4 50
bearing (front)	18H1	1.00
" (rear)	18H2	1.00
" screw (2)	18H3	05

PISTON LEVER 18H (complete)..... 6 60

Piston-lever Crosshead, see Piston-operating-rod Crosshead 19H3
Piston-lever Link, see Pump-lever Connecting Link.... 32H
Piston-lever Operating Rod, see Piston Operating Rod.... 19H
Piston-lever Pin, in Spring-rod Eye, see Piston-spring-rod-eye Pin..... 20H3
Piston-lever Spring, see Piston Spring..... 20H

PISTON OPERATING ROD	19H	2.75
crosshead (lower, for Pump Bell Crank)	19H1	3.00
" dowel	19H2	.05
" (upper, for Piston Lever)	19H3	3.00
nut	19H4	.14
PISTON OPERATING ROD 19H (complete.)		8.94

For machines equipped with Display-type Attachment order:	Improvement No. 13	
PISTON-OPERATING-ROD CROSSHEAD	26S	3.50
stud (for depressing Nozzle)	26S1	.20
" nut	26S2	.05
" " lock nut	26S3	.05
PISTON-LEVER-OPERATING-ROD CROSSHEAD 26S (complete)		3.80

Piston-operating-rod-crosshead Stop, see Pump-body-spring-rod-crosshead Stop	31H8	
Piston-lever Spring, see Piston Spring	20H	
PISTON SPRING	20H	1.00
rod	20H1	1.75
" eye	20H2	.55
" " pin	20H3	.15
" " " cotter	20H4	.00
" nut	20H5	.11
PISTON SPRING 20H (complete)		3.56

For machines equipped with Display-type Attachment order:	Improvement No. 13	
PISTON-SPRING-ROD EYE	27S	.75

Piston Stop, see Pump-body Guide	23H2	
Port-opening Regulating Screw, see Pump-body Regulating Screw	23H5	
PUMP BELL CRANK	21H	3.50
shaft	21H1	.45
" set screw	21H2	.13
PUMP BELL CRANK 21H (complete)		4.08
PUMP-BELL-CRANK CONNECTING ROD	22H	.45
eye	22H1	1.00
" lock nut	22H2	.07
" (L. H.)	22H3	1.00
" lock nut (L. H.)	22H4	.07
" pin (2)	22H5	.10
" " cotter (4)	22H6	.00
PUMP-BELL-CRANK CONNECTING ROD 22H (c'pl't).		2.79
Pump-bell-crank Pin, in Connecting-rod Eye, see Pump-bell-crank-connecting-rod-eye Pin	22H5	
Pump-bell-crank-shaft Bearing, see Swing-frame Post	38H	

PUMP BODY.....1..	23H	9.50
bearing (Nozzle end for Lifting Lever)....(1)..	23H1	.10
guide (and Stop, for Piston).....(1)..	23H2	1.00
" screw (2).....(1)..	23H3	.07
plug (bottom).....(1)..	23H4	.50
regulating screw (for flow of metal).....(1)..	23H5	.50
valve.....(1)..	23H6	.45
PUMP BODY 23H (complete).....		9.50

If PUMP BODY 23H becomes worn so that PISTON 17H fits too loosely use oversize PISTON a17H. When this PISTON becomes too loose exchange PUMP BODY for a repaired PUMP BODY a23H (a BODY that has been re-bored and bushed). NOTE: This rebushing *can not* be done without special tools to preserve the PISTON alignment.

Price for PUMP BODY exchange..... 5.00

PUMP-BODY LEVER.....	24H	4.50
bearing (front).....	24H1	1.00
" (rear).....	24H2	1.00
" screw (2).....	24H3	.05
PUMP-BODY LEVER 24H (complete).....		6.60

Pump-body-lever Crosshead, see Pump-body-spring-rod Crosshead..... 31H2

Pump-body-lever Link, see Pump-lever Connecting Link.. 32H

Pump-body-lever Pin, in Crosshead Eye, see Pump-body-spring-rod-crosshead-eye Pin..... 31H5

PUMP-BODY LIFTING LEVER (Piston end).....	25H	4.00
locating latch.....	25H1	.25
" " screw.....	25H2	.05
stand (front, on Pot).....	25H3	.95
" (rear, on Pot)....1..	25H4	2.50
" cap.....1..	25H5	
" " screw (2)...(1)..	25H6	.06
" screw (6).....	25H7	.06
PUMP-BODY LIFTING LEVER 25H (complete)..		8.11

PUMP-BODY LIFTING LEVER (Nozzle end).....	26H	3.25
stud.....	26H1	.40
" nut.....	26H2	.07
PUMP-BODY LIFTING LEVER 26H (complete)..		3.72

For machines 1123 and following order:

PUMP-BODY LIFTING LEVER (Nozzle end).....	a26H	3.25
pin (bearing for Pump Body).	a26H3	.10
" nut.....	a26H4	.04
PUMP-BODY LIFTING LEVER 26H (complete).		3.86

These parts are interchangeable if furnished together.

PUMP-BODY LIFTING SPRING.....a27H		.20
plate (upper).....	27H1	.03
" (lower).....a27H2		.06
PUMP-BODY LIFTING SPRING 27H (complete)..		.29

For machines 103 to 1593 when ordering PUMP-BODY LIFTING SPRING a27H for the first time order also PUMP-BODY-LIFTING-SPRING PLATE (lower) a27H2; when ordering the PLATE a27H2 the old LIFTING SPRING 27H may be made to conform to the new LIFTING SPRING a27H by cutting off two coils from the bottom of the SPRING.

NOTE: All machines equipped with the Display-type Attachment have the improved parts.

Pump-body-lifting-spring Post, in Swing Frame, see Swing-frame Spring Post 37H6

PUMP-BODY OPERATING ROD	28H	.35
distance sleeve	28H1	.10
extension (for Spring Plate)	28H2	.25
" pin	28H3	.02
nut (3)	28H4	.10
" lock nut (2)	28H5	.06
washer	28H6	.05
PUMP-BODY OPERATING ROD 28H (complete)		1.19

For machines 913 and following order:

PUMP-BODY OPERATING ROD	a28H	.35
extension (for Spring Plate)	a28H2	.25

Omit SLEEVE 28H1 and WASHER 28H6.

These parts are interchangeable if furnished together. To equip machines 103 to 912 inclusive with the improved End a28H2, cut off the lower end of the OPERATING ROD 28H to make its total length 5 5–8".

PUMP-BODY-OPERATING-ROD LEVER	29H	1.05
pin	29H1	.15
" cotter	29H2	.00
stand	29H3	.95
PUMP-BODY-OPERATING-ROD LEVER 29H (c'pl't)		2.15
PUMP-BODY-OPERATING-ROD-LEVER-STAND SUPPORT	30H	1.50
screw (2)	30H1	.08
PUMP-BODY-OPERATING-ROD-LEVER-STAND SUPPORT 30H (complete)		1.66
PUMP-BODY SPRING	31H	1.00
rod	31H1	2.25
" crosshead	31H2	2.50
" " eye	31H3	.65
" " " nut	31H4	.08
" " " pin	31H5	.15
" " " " cotter	31H6	.00
" " " washer	31H7	.07
" " stop	31H8	.90
" " " nut	31H9	.11
" nut (upper)	31H10	.11
" sleeve	31H11	.50
" " washer	31H12	.10
" stop nut (bottom) (2)	31H13	.14
PUMP-BODY SPRING 31H (complete)		8.70

For machines equipped with Display-type Attachment order: **Improvement No. 13**

PUMP-BODY-SPRING-ROD-CROSSHEAD EYE	32S	.65
PUMP-BODY-SPRING-ROD STOP BLOCK	33S	1.00
spring post (in Stop Block)...(*1*)	33S1	.03
stud	33S2	.25
" washer	33S3	.10
PUMP-BODY-SPRING-ROD STOP BLOCK 33S (c'pl't).		1.35
PUMP-BODY-SPRING-ROD-STOP-BLOCK SPRING	34S	.08
PUMP-BODY-SPRING-ROD-STOP-BLOCK-SPRING POST (in 38H)	35S	.10
Pump-cam-lever-connecting-rod Lever, see Pump Operating Lever	34H	
PUMP-LEVER CONNECTING LINK (between Levers 18H and 24H)	32H	2.25
pin (2)	32H1	20
" cotter (2)	32H2	00
plunger	32H3	.10
" spring	32H4	.08
PUMP-LEVER CONNECTING LINK 32H (complete)		2 83
Pump Rocker Arm, follows 34H	33H	
PUMP OPERATING LEVER (engaged by Pump-rocker-arm Latch)	34H	1.85
clamp bolt...(*1*)	34H1	.08
PUMP OPERATING LEVER 34H (complete)		1.85
Pump-operating-lever Pin, for Connecting Rod, see Pump-cam-lever-connecting-rod-eye Pin	68E5	
Pump Plunger, see Piston	17H	
PUMP ROCKER ARM	33H	7.00
latch	33H1	2.00
" pin	33H2	.10
" " cotter (2)	33H3	.00
plunger	33H4	.25
" cotter	33H5	.00
" spring	33H6	.10
shaft	33H7	1.00
PUMP ROCKER ARM 33H (complete)		10 45

For machines 1125 and following order:

PUMP ROCKER ARM	a33H	7.00
plunger	a33H4	.25
" spring	a33H6	.10
plug	a33H8	.40
PUMP ROCKER ARM 33H (complete)		10.85

Omit COTTER 33H5.
These parts are interchangeable if furnished together

Pump-rocker-arm-locking-latch Trip, see Pump-trip Tube..a49D
Pump-rocker-arm Pin, in Bell-crank-connecting-rod Eye, see Pump-bell-crank-connecting-rod-eye Pin..... 22H5
Pump Operating Lever..... 34H

PUMP TRIP (hand)
rod.....1.. 35H1 1.27
" cotter.....a35H10 .00
" nut..... 35H2 .05
" washer..... 35H3 .05
" plate.....(1).. 35H4 .25
" " rivet (2).....(1)..a35H5 .01
spring box..... 35H6 1.00
" " handle..... 35H7 .35
" " nut..... 35H8 .45
" " spring..... 35H9 .12
PUMP TRIP 35H (complete)..... 3.29

Note: When the Rivets a35H5 are ordered for machines 103 to 1602 inclusive open out the tap holes in the Rod 35H1 to receive them.

For machines 1123 and following order:
PUMP TRIP rod..... a35H1 1.27
" stop nut..... b35H10 .05
" " washer..... a35H11 .05
PUMP TRIP 35H (complete)..... 3.39
These improved parts may be applied to any machine if furnished together.

For machines 103 to 501 inclusive order:
PUMP-TRIP CATCH PLATE (on Main Galley Stand)... 36H .10
screw (2)..... 36H1 .05
PUMP-TRIP CATCH PLATE 36H (complete)..... .20

Pump-trip Tube..... 49D
Regulating Screw, for flow of metal, see Pump-body Regulating Screw..... 23H5
Regulating Valve, see Gas Regulating Valve..... 10H
Squaring Pin, see Nozzle Squaring Pin..... 15H

SWING FRAME (for Melting Pot).....a37H 45.00
guide block..... 37H1 .95
" " screw (2)..... 37H2 .06
handle.....1.. 37H3 .35
" stem.....1.. 37H4
" " nut.....1.. 37H5
spring post (for Pump-body Lifting Spring)..... 37H6 .05
adjusting screw (for Casing, long) (2).....a37H7 .03
" " (" " short) (2).....a37H8 .03
SWING FRAME a37H (complete)..... 46.59

Swing-frame Guide Pin, in Post, see Swing-frame-post Guide Pin..... 38H3

SWING-FRAME POST	38H	50.00
bolt (to Main Stand)	38H1	.14
clamp bolt	38H2	.10
guide pin (for Swing Frame)	38H3	.12
screw (lower)	38H4	.25
" (upper)	38H5	.10
SWING-FRAME POST 38H (complete.)		50.71
SWING-FRAME SCREW (for raising and lowering Pot)	39H	9.00
nut	39H1	.11
washer	39H2	.20
" pin	39H3	.02
SWING-FRAME SCREW 39H (complete)		9.33
SWING-FRAME-SCREW CRANK....1..	40H	2.50
clamp bolt....(1)..	40H1	.08
handle....(1)..	40H2	.85
SWING-FRAME-SCREW CRANK 40H (complete)..		2.50
THERMOMETER	41H	5.00
support....a41H2		.25
" hook....a41H3		.16
" " nut....a41H4		.04
" lock nut....a41H5		.05
THERMOMETER 41 H(complete)		5.50
Valve, Air, see Air Cock	a2H	
Valve, Gas, see Gas Cock	a7H	
Valve, Gas Regulating, see Gas Regulating Valve	10H	
Valve, Water Escape, see Water Escape Valve	42H	
Valve, Water Supply, see Water Supply Valve	48H	
WATER ESCAPE VALVE	42H	
body	42H1	
gland	42H2	
" packing (rubber)	42H3	
" " ring	42H4	
(regulating)	42H5	
handle	42H6	
" rivet	42H7	
WATER ESCAPE VALVE 42H (complete)		2.00
WATER PIPE		
(copper, drain from Main Stand, 5–16″ x 9 1–2″)...a43H		.30
(" " " " " 5–16″ x 18 7–8″)..a43H1		.60
(" " " " " .190″ x 1 3–4″)...a43H3		.12
union (5–16″) (2)	43H2	.08
WATER PIPE a43H (complete)		1.18

For machines 103 to 501 inclusive and 503 to 506 inclusive order: **Improvement No. 6**

WATER PIPE		
(copper, drain from Main Stand, 5–16″ x 2″)	43H	.15
(copper, drain from Main Stand, 5–16″ x 31 1–8″)	43H1	.95
union (5–16″) (1)	43H2	.08
WATER PIPE 43H (complete)		1.18

Omit a43H3.

WATER PIPE (copper, drain from Mold, .190″ x 1 1–4″). 44H .10
(" " " " .190″ x 20 1–2″)a44H1 .40
(" " " " .190 ″x 14 1–2″)a44H3 .30
union (.190″) (2)..... 44H2 .04
WATER PIPE 44H (complete)..... .88

For machines 103 to 501 inclusive and 503 to 506 inclusive order: Improvement No. 6

WATER PIPE
(copper, drain from Mold, .190″ x 1 1–4″).. 44H .10
(" " " .190″ x 35″)..... 44H1 .70
union (.190″) (1)..... 44H2 .04
WATER PIPE 44H (complete)..... .84
Omit a44H3.

WATER PIPE (copper, supply, 5–16″ x 2 3–8″)..... 45H .15
(" " 5–16″ x 3″).....a45H1 .18
(" " 5–16″ x 19 1–4″).....a45H3 .60
(iron, supply, 1–8″ x 3 3–8″).....a45H4 .10
(" " 1–8″ x 3 7–8″).....a45H5 .10
(" " 1–8″ x 15 1–8″).....a45H6 .20
(" " 1–8″ x 18″).....a45H7 .24
elbow (1–8″) (3).....a45H8 .05
union (copper, 5–16″) (2)..... 45H2 .08
" (iron, 1–8″).....a45H9 .12
" packing (rubber).....a45H10 .01
WATER PIPE 45H (complete)..... 2.01

For machines 103 to 501 inclusive and 503 to 506 inclusive order: Improvement No. 6

WATER PIPE (copper, supply, 5–16″ x 2 3–8″)..... 45H .15
(" " 5–16″ x 16 13–16″)... 45H1 .55
union (5–16″) (1.)..... 45H2 .08
WATER PIPE 45H (complete)..... .78
Omit parts a45H3 to a45H10 inclusive.

WATER PIPE
(iron, drain from Pipe Bracket, 3–8″ x 3 3–8″).....a46H .12
(" " " " 3–8″ x 4 7–8″).....a46H1 .14
(" " " " " 3–8″ x 14 1–2″).....a46H2 .23
(" " " " " 3–8″ x 18″).....a46H3 .28
elbow (iron, 3–8″) (3).....a46H4 .06
union (iron, 3–8″).....a46H5 .16
" packing (rubber).....a46H6 .01
WATER PIPE a46H (complete)..... 1.12

For machines 103 to 501 inclusive and 503 to 506 inclusive order: Improvement No. 6

WATER-PIPE CLAMP..... 46H .15
screw..... 46H1 .06
WATER-PIPE CLAMP 46H (complete)..... .21
Omit parts a46H2 to a46H6 inclusive.

Water Pipe Bracket, see Pipe Bracket.....a16H

WATER-PIPE CONNECTION (side, on Main Stand).....	47H	.60
screw (3).....	47H1	.04
WATER-PIPE CONNECTION 47H (complete)....		.72
WATER SUPPLY COCK.....a52H		.60
WATER SUPPLY VALVE		
body.....	48H1	
gland (2).....	48H2	
" packing (rubber) (2).....	48H3	
" " ring (2).....	48H4	
(regulating).....	48H5	
" handle.....	48H6	
" " rivet.....	48H7	
(shut off).....	48H8	
" " handle.....	48H9	
" " " rivet.....	48H10	
WATER SUPPLY VALVE 48H (complete).....		3.00
Gas Hose (1–2″ x 18″), *follows Gas Cock a7H*.....	49H	
Gas Hose (3–8″ x 15 3–4″).....	50H	
Gas Hose (3–8″ x 19 1–2″).....	51H	
Water Supply Cock, follows Water-pipe Connection 47H..a52H		

CASTING MACHINE PRICES
APPENDIX

Improvement No. 1

In effect on machines 321, 502, 520 and following.

When applied to your machines fill in the following:

Applied to machines Nos. **Date**

Object: Improved adjustment of the Pin Jaws and Matrix Jaws by giving independent motion to the Tongs in the B and C groups, and to provide a lock on the Matrix-jaw-stop-rack Locking Bars to hold them in the Stop Racks positively while the Matrix Jaws are closing.

To equip machines 103 to 320 inclusive, 322 to 501 inclusive and 503 to 519 inclusive with this improvement requires the following parts. These parts must be furnished together when ordered for the first time.

MATRIX-JAW STOP RACK (front)		a12B	3.50
MATRIX-JAW-STOP-RACK LOCKING BAR a13B (complete)			2.50
MATRIX-JAW STOP RACK (rear)		a12C	3.00
MATRIX-JAW-STOP-RACK LOCKING BAR a13C (complete)			2.16
AIR-PIN BLOCK shoe (for front Locking Bar)		a3D6	.35
" screw (2)		a3D7	.05
guide screw		a3D11	.08
JAW-TONGS BELL CRANK (lower)	1	a21E	10.00
ball stud	(1)	a21E1	.30
(upper)	2	a21E10	9.00
ball stud	(2)	a21E11	.30
JAW-TONGS-CAM LEVER a24E (complete)			14.94
JAW-TONGS SPRING BOX a26E (complete)			20.04
JAW-TONGS-SPRING-BOX BALL SOCKET a27E (complete)			.95
JAW-TONGS-SPRING-BOX BALL SOCKET a81E (complete)			.95
LOCKING-BAR BELL CRANK b28E (complete)			2.75
LOCKING-BAR BELL CRANK b29E (complete)			2.75
LOCKING-BAR-BELL-CRANK STUD b32E (complete)			.40
LOCKING-BAR-BELL-CRANK LATCH a82E (complete)			1.00
LOCKING-BAR-BELL-CRANK LATCH a83E (complete)			1.00

LOCKING-BAR-BELL-CRANK-LATCH SPRING (2)	a84E	.10
LOCKING-BAR-BELL-CRANK-LATCH-SPRING POST (in Main Stand)	a85E	.05
LOCKING-BAR OPERATING ROD (Special)	a33E	.50
bearing block	a33E1	.75
" " lock nut	a33E2	.05
eye (Special)	a33E5	.50
" lock nut	a33E6	.05
stop	a33E8	.10
MATRIX-JAW-TONGS STUD (front, in Main Stand)	a39E	1.00
MATRIX-JAW-TONGS STUD arm (for Paper Winding Spring)	a39E3	.15
PIN-JAW TONGS a55E (complete)		13.50

When applying this improvement, file a bevel on the AIR-TOWER-HOUSING BASE 1G3 to clear the JAW-TONGS-SPRING-BOX-SPRING-ROD CROSSHEAD a26E21. Bend the PAPER-TOWER OPERATING ROD 54E to clear the SPRING BOX. Drill and tap the MAIN STAND for the LOCKING-BAR-BELL-CRANK-LATCH-SPRING POST a85E, and drill and taper ream it for the LOCKING-BAR-BELL-CRANK STUD b32E. Drill and tap the AIR-PIN BLOCK 3D for the AIR-PIN-BLOCK GUIDE SCREW a3D11. Shorten the JUSTIFICATION-WEDGE-LEVER FULCRUM PIN 18D to 3 1–8″ in length (to clear the LATCHES a82E and a83E) and re-slot the end. The necessary tools will be loaned for these purposes.

NOTE: To give our customers the benefit of our latest improvements we will furnish all the parts for this improvement complete at a special price..... 50.00

All material replaced by this improvement must be returned to us in order to obtain this special price.

Improvement No. 2

In effect on machines 520 and following except as noted.

When applied to your machines fill in the following:

Applied to machines Nos. Date

Object: To change the timing of the Locking Bars by the use of an individual Cam to operate them.

The following applies to machines to which the new Locking Bar mechanism without Latches (Improvement sheet not yet issued) is to be applied; machines not to be equipped with this new mechanism are taken care of by the notes following the individual items.

To equip machines 103 to 519 inclusive with Improvement No. 2 requires the following parts. These parts must be furnished together when ordered for the first time.

CAM-LEVER-SHAFT STAND a9E 20.00

NOTE: The old STAND 9E can be altered to a9E by sawing off the lug which carried the superseded LOCKING-BAR-CAM LEVER 34E.

CAM-SHAFT STAND a12EE 100.00

LOCKING-BAR CAM c86E 2.75

NOTE: Machines 520 to 1602 inclusive were equipped with LOCKING-BAR CAM a86E; machines 1603 to 3862 inclusive were equipped with CAM b86E, which has a wider face than CAM a86E and when applied for the first time to previous machines requires that LOCKING-BAR-CAM LEVER c34EE (see below) be furnished also; machines 3863 and following are equipped with CAM c86E. This CAM c86E cannot be used on a machine not equipped with the new LOCKING-BAR BELL CRANKS without LATCHES; machines 3603 and following are so equipped.

NOTE: If the machine is not to be equipped with LOCKING-BAR BELL CRANKS without LATCHES order LOCKING-BAR CAM b86E.

LOCKING-BAR-CAM LEVER ..... 1 .. c34EE

bushing (2)	(*1*)	b34E1	*.18*
" pin (2)	(*1*)	b34E2	*.01*
roller	(*1*)	b34E3	*.30*
" pin	(*1*)	b34E6	*.15*
oil pipe	(*1*)	a34E7	*.20*

NOTE: c34EE is assembled with b34E1, b34E2, b34E3, b34E6, and a34E7 and cannot be furnished without these parts, price assembled 9.50

NOTE: Machines 1603 and following are equipped with LOCKING-BAR-CAM LEVER c34EE, for use with LOCKING-BAR CAM b86E and c86E. Machines 520 to 1602 inclusive were equipped with a narrow faced LOCKING-BAR CAM, which, when worn, should be replaced with the wide faced CAM; this change requires the corresponding change in the LOCKING-BAR-CAM LEVER.

LOCKING-BAR-CAM-LEVER FULCRUM STUD (complete)....Xa35E		1.14
LOCKING-BAR OPERATING ROD.....b33E		.50
eye.....c33E1*		
" lock nut.....a33E2		.05
hook.....a33E5		.50
" lock nut (L.H.).....a33E6		.05
spring.....b33E7*		
" washer.....a33E9		.05

*While these parts are listed here because they form part of the OPERATING ROD group they are not furnished as part of the Improvement No. 2 and no price is here given for them, because they form part of the Improvement of the new LOCKING BAR mechanism without LATCHES (Improvement sheet not yet issued).

NOTE: Machines 520 to 3882 inclusive were equipped with OPERATING ROD a33E; machines 3883 and following are equipped with OPERATING ROD b33E; a33E can be made b33E by drilling a new hole for adjusting. Machines 520 to 3602 inclusive had LOCKING-BAR BELL CRANKS b28E and b29E with LATCHES and were equipped with BEARING BLOCK a33E1; machines 3603 to 3882 inclusive had LOCKING-BAR BELL CRANKS c28E and c29E without LATCHES and were equipped with BEARING BLOCK b33E1; machines 3883 and following have LOCKING-BAR BELL CRANK d28E and are equipped with EYE c33E1 instead of the BEARING BLOCK. Machines 520 and following are equipped with EYE LOCK NUT a33E2, HOOK a33E5, and HOOK LOCK NUT a33E6. Machines 520 to 3882 inclusive were equipped with OPERATING-ROD SPRING a33E7; machines 3883 and following are equipped with OPERATING-ROD SPRING b33E7. Machines 2710 and following are equipped with WASHER a33E9.

NOTE: If the machine is to be equipped with this Improvement No. 2 but not with LOCKING-BAR BELL CRANK without LATCHES, order LOCKING-BAR OPERATING ROD a33E, LOCKING-BAR-OPERATING-ROD BEARING BLOCK a33E1, and LOCKING-BAR-OPERATING-ROD SPRING a33E7 instead of the corresponding parts listed above, also order LOCKING-BAR-OPERATING-ROD STOP a33E8.

SPECIAL PRICE: To share with our customers the benefit of our latest improvements we will make a special price on this improvement, furnished complete, of..... 85.00

NOTE: This special price is made with the understanding that a new part will not be furnished when the old part can be altered; for example, we do not furnish a new CAM-LEVER-SHAFT STAND a9E but alter the old one as described.

Improvement No. 3

In effect on machines 1203 and following.

When applied to your machines fill in the following:

Applied to machines Nos. **Date**

Object: To handle all type from 5 to 36 point inclusive by the use of one carrier only.

To equip machines 103 to 1202 inclusive with this improvement requires the following parts. These parts must be furnished together when ordered for the first time.

TYPE CARRIER (complete) Xc20B, includes the EYE 21B1B, EYE PIN 21B3, DOWEL 21B4, TYPE CLAMP (complete) Xb26B, TYPE-CLAMP SHOE (complete) Xa27B, and TYPE SUPPORT SPRING (complete) Xb31B *and cannot be furnished without them*..... 30.00

NOTE: Machines 1203 to 2524 inclusive were equipped with TYPE CARRIER (complete) Xb20B which includes TYPE CLAMP (complete) Xa26B instead of Xb26B. To take care of kerned type the new TYPE CLAMP Xb26B was adopted on machines 2525 and following. To equip machines 1203 to 2524 inclusive with the improved CLAMP Xb26B requires that a notch be ground in the left side of the fixed TYPE BLOCK for Y MOLDS and that the lug on the TYPE BLOCK for Z MOLDS be ground off.

TYPE-CARRIER CONNECTING ROD forked eye (Cam Lever end)..... a21B5 1.00

TYPE-CARRIER SHOE (long)..... a23B 1.50

TYPE-CARRIER SHOE (short)..... a24B .25

TYPE-PUSHER GUIDE (complete).....Xa28B 2.26

TYPE PUSHER..... b29BB

NOTE: b29BB is assembled with b29B1, 29B2, 29B3, 29B4, and a29B5 and cannot be furnished without these parts, price assembled..... 6.00

NOTE: To use the Universal TYPE CARRIER a change in TYPE PUSHER was required; this took place on machine 1203 when TYPE PUSHER a29BB having TYPE-PUSHER BLADE 29B1 was adopted. On machine 2616 the TYPE PUSHER was still further modified to clear the STOP RACK when an extra tooth was added to the latter; that TYPE PUSHER was b29BB having TYPE-PUSHER BLADE a29B1. On machine 3883 the TYPE PUSHER was again modified when the new style LOCKING BARS were adopted; this TYPE PUSHER is still symboled b29BB because interchangeable but its BLADE is changed to b29B1 and its EYE to a29B5. Any one of these three TYPE PUSHERS will work with the Universal TYPE CARRIER.

TYPE-CARRIER-CAM LEVER extension.....a72E4 1.00

On machines 103 to 1202 inclusive the AIR-PIN BLOCK (front) 3B must be altered to take the TYPE-PUSHER GUIDE a28B. Machines 1203 to 1842 inclusive were equipped with AIR-PIN BLOCK (front) a3B which was made to take the GUIDE a28B. On machine 1843 the AIR-PIN BLOCK was again modified to take the new style fixed AIR PIN with the SPRING under it; this AIR-PIN BLOCK was b3B. On machines 3603 and following the AIR-PIN BLOCK was again modified to take the new style STOP RACKS and LOCKING BARS without LATCHES and this latest style cannot be used on machines not equipped with this improved LOCKING BAR mechanism.

On machines 103 to 1202 the MOLD-BLADE-OPERATING-ROD-SIZING-SPRING SLEEVE (outside) 16C12 must be shortened to 1 7–16".

For machines 103 and 940 inclusive order also:

MOLD-BLADE OPERATING ROD distance sleeve (between Spring Abutments).....a16C1 .15
and shorten the OPERATING-ROD-SIZING-SPRING SLEEVE (inside) 16C11 to 2 13–32".

SPECIAL PRICE: To share with our Customers the benefit of our latest improvements we will furnish all the parts for this improvement complete at a special price of. 30.00

Improvement No. 4

In effect on machines 502 and following.

When applied to your machines fill in the following:

Applied to machines Nos. **Date**

Object: Improved alignment by increased stroke of the Centering Pin.

To equip machines 103 to 501 inclusive with this improvement requires the following parts. These parts must be furnished together when ordered for the first time.

BRIDGE LEVER	a2A	1.75
CARRYING FRAME guide rod cross beam (1)	a4A6	1.75
" " " " stud (1)	a4A8	.25
CENTERING PIN	a5A	3.50
spring	a5A3	.12
" abutment (lower)	a5A4	.25
" " (upper)	a5A5	.60
CENTERING-PIN STAND bushing	a6A5	3.00
NORMAL-WEDGE LOCKING PIN shank	a14B7	.20
spring	b14B8	.08
JUSTIFICATION-WEDGE-LEVER ARM rod (2)	15D3	.10
TRANSFER-WEDGE-SHIFTER-LEVER ARM rod	57D4	.10
CENTERING-PIN CAM a13E (complete)		5.50
CENTERING-PIN LEVER stud (for BRIDGE-LEVER LINK)	16E4	.05

In addition to ordering the above new parts, the following parts must be altered to conform to the new requirements. Directions for altering these parts will be furnished when required.

BRIDGE LEVER connecting link	2A1
MATRIX-JAW-STOP-RACK LOCKING BAR (front)	13B
NORMAL-WEDGE LOCKING PIN tube	14B11
TYPE PUSHER	29B
TYPE-PUSHER GUIDING LEVER	30B
AIR-PIN BLOCK (rear)	3C
MOLD-BLADE ABUTMENT SLIDE	14C

Improvement No. 5

In effect on machines 502, 520 and following.

When applied to your machines fill in the following:

Applied to machines Nos. **Date**

Object: To permit the use of different lengths of Galley Pans.

To equip machines 103 to 501 inclusive and 503 to 519 inclusive with this improvement requires the following parts. These parts must be furnished together when ordered for the first time.

GALLEY-PAN SHELF	a17 F	9.00
GALLEY-PAN SUPPORT	a18 F	5.00
bar (2)	a18 F1	.70
set screw (2)	a18 F7	.07

Improvemont No. 6

In effect on machines 502, 507 and following.

When applied to your machines fill in the following:

Applied to machines Nos. Date

Object: To facilitate the adjustment of the flow of water through the Mold.

To equip machines 103 to 501 inclusive and 503 to 506 inclusive with this improvement requires the following parts. These parts must be furnished together when ordered for the first time.

Air Cock (for air supply, 1–8″)	a2H	.60
Air Pipe (copper, .190″ x 1 1–2″)	a1H	.10
(“ .190″ x 19″)	a1H1	.40
(iron, 1–8″ x 1″)	a1H2	.05
(“ 1–8″ x 3 7–8″)	a1H4	.10
(“ 1–8″ x 8 1–8″)	a1H5	.16
(“ 1–8″ x 24″)	a1H13	.25
union (iron, 1–8″)	a1H14	.12
“ packing (rubber)	a1H15	.01
Gas Cock (1–4″ x 1–4″) (with close Nipple, for gas supply)	a7H	.60
Gas Nipple (in Gas-burner Stand) (2)	a8H	.10
Gas Pipe (iron 1–4″ x 1 3–8″)	9H	.05
(“ 1–4″ x 3 3–4″)	a9H1	.09
(“ 1–4″ x 18 5–8″)	a9H2	.25
elbow	9H5	.05
union (1–4″, iron)	a9H8	.14
“ packing	a9H9	.01
Pipe Bracket a16H (complete)		.81
Water Pipe (copper, drain from Main Stand, 5–16″ x 9 1–2″)	a43H	.30
“ “ “ “ “ 5–16″ x 18 7–8″)	a43H1	.60
“ “ “ “ “ .190″ x 1 3–4″)	a43H3	.08
Water Pipe (copper, drain from Mold, .190″ x 20 1–2″)	a44H1	.40
(“ “ “ “ .190″ x 14 1–2″)	a44H3	.30
Water Pipe (copper, supply, 5–16″ x 3″)	a45H1	.18
(“ “ 5–16″ x 19 1–4″)	a25H3	.60
(iron, supply, 1–8″ x 3 3–8″)	a45H4	.10
(“ “ 1–8″ x 3 7–8″)	a45H5	.10
(“ “ 1–8″ x 15 1–8″)	a45H6	.20
(“ “ 1–8″ x 18″)	a45H7	.24
elbow	a45H8	.05
union (copper, 5–16″) (2)	a45H2	.08
“ (iron, 1–8″)	a45H9	.12
“ packing, (rubber)	a45H10	.01
Water Pipe a46H (complete)		1.12

Improvement No. 7

In effect on machines 502, 523 and following.

When applied to your machines fill in the following:

Applied to machines Nos. Date

Object: To prevent overthrow of the Line-hook Carriage by giving a positive stop for it, and to give improved timing of its stroke.

To equip machines 103 to 501 inclusive and 503 to 522 inclusive with this improvement requires the following parts. These parts must be furnished together when ordered for the first time.

GALLEY CAM	a14 F	18.00
LINE-HOOK OPERATING BAR	a21 F	2.20
locking rod	a21 F3	.75
LINE-HOOK-OPERATING-BAR STOP adjusting screw	a22 F1	.03

Improvement No. 8

In effect on machines 502 and following.

When applied to your machines fill in the following:

Applied to machines Nos. **Date**

Object: Greater facility for adjusting the Micrometer Wedge.

To equip machines 103 to 501 inclusive with this improvement requires the following parts. These parts must be furnished together when ordered for the first time.

MICROMETER WEDGE adjusting screw	a20D2	.25
" " spring	a20D3	.08
shank	a20D1	.10
" nut	a20D5	.04

When applying this improvement the NORMAL-WEDGE-LOCKING-PIN STAND 15B must be counter-bored and tapped to receive the ADJUSTING SCREW a20D2. Directions for this alteration will be furnished when required.

Improvement No. 9

In effect on machines 579 and following.

When applied to your machines fill in the following:

Applied to machines Nos. **Date**

Object: Improved adjustment of the Melting Pot for centering the Nozzle and to hold the Melting Pot firmly in position when adjusted.

To equip machines 103 to 578 inclusive with this improvement requires the following parts. These parts must be furnished together when ordered for the first time.

MELTING POT casing stud (2)	a12H9	.08
" " nut (2)	a12H10	.05
" " washer (2)	a12H11	.05
SWING FRAME adjusting screw (for Casing, long) (2)	a37H7	.03
" " (" " short) (2)	a37H8	.03

When applying this improvement the SWING FRAME 37H must be drilled and tapped for the ADJUSTING SCREWS a37H7 and a37H8. Directions for this alteration will be furnished when required.

Improvement No. 10

In effect on machines 502, 530 and following.

When applied to your machines fill in the following:

Applied to machines Nos. Date

Object: Improved operation of Latch for Line Support.

To equip machines 103 to 501 inclusive and 503 to 529 inclusive with this improvement requires the following parts. These parts must be furnished together when ordered for the first time.

LINE-HOOK OPERATING SLIDE latch (for Line Support)	a23 F1	.50
" locking pin	a23 F2	.15
" " " guide pin	a23 F3	.01
" " " spring	a23 F4	.05

Improvement No. 11

In effect on machines 502 and following.

When applied to your machines fill in the following:

Applied to machines Nos. **Date**

Object: To prevent breakage of the teat on the Guide Screw 14B6 and to facilitate the adjustment of the Micrometer Wedge.

NOTE: The NORMAL-WEDGE-LOCKING-PIN STAND 15B can no longer be furnished; instead we furnish:

NORMAL-WEDGE-LOCKING-PIN STAND	a15B	15.00

When this STAND is ordered for the first time for machines 103 to 501 inclusive the following parts must also be furnished:

NORMAL-WEDGE LOCKING PIN bushing guide screw	a14B6	.05
MICROMETER WEDGE shank	a20D1	.10
adjusting screw	a20D2	.25
" " spring	a20D3	.08
shank nut	a20D5	.04

When applying a14B6 to machines 103 to 702 inclusive open the keyway in the NORMAL-WEDGE LOCKING PIN 14B and its BUSHING 14B3 to 11–64″, keeping the keyway central in 14B.

Improvement No. 12

In effect on machines 1603 and following.

When applied to your machines fill in the following:

Applied to machines Nos. Date

Object: To provide a heavier return spring on the Line-hook-operating-slide Latch and to remove this Latch from the path of the Line Support at the point of rest.

To equip machines 103 to 1602 inclusive with this improvement requires the following parts. These parts must be furnished together when ordered for the first time.

LINE-HOOK OPERATING SLIDE	b23 F	3.00
spring pin	a23 F11	.04
LINE-HOOK-OPERATING-SLIDE LATCH a53F (complete)		3.20
LINE-HOOK-OPERATING-SLIDE SHOE	24 F	2.20
LINE-HOOK-OPERATING-SLIDE SPRING BOX pin (in Operating Slide)	a27 F2	.12

Improvement No. 13

When applied to your machines fill in the following:

Applied to machines Nos. **Date**

Object: To enable the Casting Machine to cast type from 14 to 36 point in addition to the smaller point sizes.

To equip any machine with this improvement requires the following parts. These parts must be furnished together when ordered for the first time.

Note: To handle type from 14 to 36 point requires the Universal Type Carrier b20B (see Improvement No. 3) in addition to the following parts.

BELT-SHIFTER EYE (forked)	1S	1.75
BELT-SHIFTER ARM	2S	1.25
clamp	2S1	.20
" bolt	2S2	.08
set screw	2S3	.07
BELT-SHIFTER ARM 2S (complete)		1.60
CENTERING-PIN ABUTMENT (lower)	a3S	.35
(upper)	a3S1	.70
CENTERING-PIN ABUTMENT a3S (complete)		1.05

Replaces a5A4 and a5A5 when the Display-type Attachment is applied to machines 502 to 1103. Machines 1104 and following have this.

For machines 103 to 501 inclusive order:

CENTERING-PIN ABUTMENT (lower)	3S	.20

Replaces 5A4 when the Display-type Attachment is applied to machines 103 to 501 inclusive.

CENTERING-PIN SPRING (2)	4S	.08
abutment (lower)	a4S1	2.95
" (upper)	a4S2	2.75
" stud (2) *(1)*	4S3	.10
" " nut (2)	4S4	.04
" " washer (2)	4S5	.03
CENTERING-PIN SPRING a4S (complete)		6.00

For machines 103 to 501 inclusive order:

CENTERING-PIN SPRING (2)	4S	.08
abutment (lower)	4S1	2.70
" (upper)	4S2	2.50
" stud (2) *(1)*	4S3	.10
" " nut (2)	4S4	.04
" " washer (2)	4S5	.03
CENTERING-PIN SPRING 4S (complete)		5.50

Cone Pulley, see Pulley, Cone on Cam Shaft	29S	
COUNTERSHAFT	5S	3.00
cone pulley	5S1	4.00
" " key	5S2	.05
pulley (fast)	5S3	5.50
" key	5S4	.05
" (loose)...1..	5S5	5.55
" screw (for oil hole)...(1)..	5S6	.05
COUNTERSHAFT 5S (complete)		18.15
COUNTERSHAFT STAND...1..	6S	23.20
bolt (3)	6S1	.18
" nut (3)	6S2	.08
cap (2)...(1)..	6S3	1.60
" oiler (2)	6S4	.15
" screw (4)	6S5	.08
COUNTERSHAFT STAND 6S (complete)		24.60
COUNTERSHAFT TIGHTENER PULLEY	7S	5.00
arm	7S1	3.00
" fulcrum stud	7S2	1.25
" " " nut	7S3	.11
" spring (inside)	7S4	.25
" " (outside)	7S5	.25
" " rod	7S6	1.50
" " " fulcrum stud	7S7	.35
" " " " " nut	7S8	.05
" " " nut (2)	7S9	.06
" " " washer	7S10	.05
stud	7S11	1.00
" nut	7S12	.11
COUNTERSHAFT TIGHTENER PULLEY 7S (c'pl't).		13.04
Fast Pulley on Cam Shaft, see Pulley, fast on Cam Shaft	28S	
Fast Pulley on Countershaft, see Countershaft Pulley, fast	5S3	
JUSTIFICATION WEDGE (used with 47S to obtain 1–8 point sizes)	46S	5.00
gage	46S1	.75
JUSTIFICATION WEDGE 46S (complete)		5.75
LATCH	8S	2.00
plate	8S1	.25
" screw (2)	8S2	.04
LATCH 8S (complete)		2.33
LATCH ABUTMENT	9S	2.00
plate	9S1	.25
" screw (2)	9S2	.04
LATCH ABUTMENT 9S (complete)		2.33
LATCH-ABUTMENT SPRING	10S	.12

LATCH PIN	1..	11S	2.00
cotter		11S1	.00
plate	1..	11S2	
" spring pin	(1)..	11S3	.05
" stop pin	(1)..	11S4	.05
LATCH PIN 11S (complete)			2.00
LATCH SPRING		12S	.05
Latch-spring Pin, see Latch-pin-plate Spring Pin		11S3	
Latch-spring Pin, see Latch-stand Spring Pin, for Latch Spring		13S6	
LATCH STAND		13S	.75
shaft	1..	13S1	2.25
" arm	1..	13S2	
" nut		13S3	.08
" " lock nut		13S4	.08
" spring		13S5	.10
spring pin (for Latch Spring)		13S6	.05
LATCH STAND 13S (complete)			3.31
Latch-stand-shaft-arm Guide, see Pump-body-spring-rod-crosshead Eye		32S	
Latch-stand-shaft Sleeve, see Latch Abutment		9S	
Loose Pulley on Countershaft, see Countershaft Pulley, loose		5S5	
MATRIX HOLDER (for Sorts Matrices, 14 point and over)	1..	14S	3.75
bushing (for Centering Pin)	(1)..	14S1	.25
clamp (back)	(1)..	14S2	.40
" (left)	(1)..	14S3	.40
" (right)	(1)..	14S4	.40
" spring (3)	(1)..	14S6	.05
" screw (3)	(1)..	14S7	.04
MATRIX HOLDER 14S (complete)			3.75
MOLD-BLADE-CAM LEVER	1..	15S	11.50
bushing (2)	(1)..	15S1	.18
" pin (2)	(1)..	15S2	.01
compound lever		15S3	2.00
" " locking screw		15S4	.35
" " " " collar		15S5	.08
" " stud		15S6	.40
" " " nut		15S7	.07
roller	(1)..	15S8	.30
" pin	(1)..	15S9	.15
MOLD-BLADE-CAM LEVER 15S (complete)			14.40

Replaces 44E when the Display-type Attachment is applied.

MOLD-BLADE-CAM-LEVER-COMPOUND-LEVER ABUTMENT (in Main Stand)	16S	.75
nut	16S1	.06
washer	16S2	.05
MOLD-BLADE-CAM-LEVER-COMPOUND-LEVER ABUTMENT 16S (complete)		.86

36E is drilled and faced for 16S when the Display-type Attachment is applied to machines 103 to 963 inclusive.

NORMAL WEDGE (produces type 19 1–4 to 36 points set-ways) 1..	47S	5.00
gage	47S1	.60
handle (*1*)..	47S2	.20
packing piece (on 47S produces type 2 1–4 to 19 points set-ways) 2..	47S3	1.50
packing piece pin 2..	47S4	
NORMAL WEDGE 47S (complete)		7.10

NOTE: NORMAL-WEDGE ADJUSTING NUT 23S and its LOCK NUT 23S1 will no longer be furnished. When one of these parts is required we will furnish instead a new NORMAL-WEDGE-LOCKING-PIN SHANK a14B7 which is now made longer to permit of the use of the regular ADJUSTING NUT 14B1 and its LOCK NUT 14B2 at all times.

NOZZLE (13 threads)	24S	.75
(special 5-8″, 13 threads)	24S1	.75

Replace 14H or 14H1 when casting display type.

Nut, see Pulley Nut	30S	
PISTON	25S	1.75
handle 1..	25S1	.35
" stem 1..	25S2	
" " nut 1..	25S3	
PISTON 25S (complete)		2.10

Replaces 17H when casting display type.

PISTON-OPERATING-ROD CROSSHEAD	26S	3.50
stud (for depressing Nozzle)	26S1	.20
" nut	26S2	.05
" " lock nut	26S3	.05
PISTON-LEVER-OPERATING-ROD CROSSHEAD 26S (complete)		3.80

Replaces 19H3 when the Display-type Attachment is applied.

PISTON-SPRING-ROD EYE	27S	.75

Replaces 20H2 when the Display-type Attachment is applied.

PULLEY (fast, on Cam Shaft).....1.. 28S 6.00
pin (for Cone Pulley).....(1).. 28S1 .05
PULLEY 28S (complete)..... 6.00

Replaces 64E when the Display-type Attachment is applied.

PULLEY (cone, on Cam Shaft)..... 29S 18.00

Pulley, cone, on Countershaft, see Countershaft Cone Pulley 5S1

PULLEY NUT (on Cam Shaft)..... 30S 1.00

Replaces 10E4 when the Display-type Attachment is applied.

PUMP-BODY LIFTING SPRING..... 31S .20
plate (lower)..... 31S1 .06
" (upper)..... 31S2 .03
PUMP-BODY LIFTING SPRING 31S (complete).... .29

Machines 1593 and following already have this.
31S is made from 27H by cutting off two coils when the Display-type Attachment is applied.

PUMP-BODY-SPRING-ROD-CROSSHEAD EYE..... 32S .65

PUMP-BODY-SPRING-ROD STOP BLOCK.....1.. 33S 1.00
spring post (in Stop Block).....(1).. 33S1 .03
stud..... 33S2 .25
" washer..... 33S3 .10
PUMP-BODY-SPRING-ROD STOP BLOCK 33S (c'pl't). 1.35

38H is drilled and tapped for 33S2 when the Display-type Attachment is applied to machines 103 to 907 inclusive.

PUMP-BODY-SPRING-ROD-STOP-BLOCK SPRING..... 34S .08

PUMP-BODY-SPRING-ROD-STOP-BLOCK-SPRING POST (in 38H)..... 35S .10

38H is drilled and tapped for 35S when the Display-type Attachment is applied to machines 103 to 907 inclusive.

Pump-body-spring-rod-stop-block Spring Post, see Pump-body-spring-rod-stop-block Spring Post, in Stop Block 33S1

Tightener Pulley, see Countershaft Tightener Pulley..... 7S
Type Carrier, Universal, see Improvement No. 3.....b20B

TYPE CHANNEL BLOCK (adjustable)	(1)	40S	2.50
clamp	1	40S1	12.00
" latch	(1)	a40S2	1.00
" " pin (3)	(1)	40S3	.03
" spring	(1)	40S4	.05
" tongue	1	40S5	
" " rivet (3)	(1)	40S6	.01
" " stop plate	(1)	40S7	.05
" " " " screw (2)	(1)	40S8	.03
" type guide	1	40S9	
TYPE CHANNEL BLOCK 40S (complete)			12.00

Replaces 50F when casting display type. The BOLT 50F6 and WASHER 50F7 are used with 40S.

TYPE CHANNEL BLOCK (fixed)	1	a41S	2.75
screw (rear)		41S1	.06
latch	(1)	a41S2	.15
" screw (2)	(1)	a41S3	.02
TYPE CHANNEL BLOCK 41S (complete)			2.81

Replaces 51F when casting display type. SCREW 51F5 (front) is used with 41S.

Wedge, see Justification Wedge 46S
Wedge, see Normal Wedge 47S

Improvement No. 14

In effect on machines 1813, 1814, 1816, 1818, 1820, 1821, 1823 and following.

When applied to your machines fill in the following:

Applied to machines Nos. **Date**

Object: To prevent the Stud from working loose.

To equip machines 103 to 1812 inclusive, 1815, 1817, 1819 and 1821 with this improvement requires that Trip-lever Fulcrum Stud a46F be ordered complete and that the hole in the old Main Galley Stand 31F be opened out to receive the Stud.

MAIN GALLEY STAND	a31F	100.00
TRIP-LEVER FULCRUM STUD	a46F	.60
nut	a46F1	.05
washer	a46F2	.05
TRIP-LEVER FULCRUM STUD a46F (complete)		.70

Improvement No. 15

In effect on machines 1843 and following.

When applied to your machines fill in the following:

Applied to machines Nos. **Date**

Object: To reduce the strain on the fixed Air Pin and prevent its breakage.

To equip machines 103 to 1842 inclusive with this improvement requires the following parts. Either Air-pin Block may be furnished independent of the other, but requires the Air Pin and Spring when ordered for the first time.

AIR PIN (fixed, permanent stop for eighteen unit row)...	a2B	.20
spring.....	a2B1	.05
AIR PIN a2B (complete).....		.25
AIR-PIN BLOCK (front).....	b3B	60.00
AIR PIN (fixed, permanent stop for bottom row).....	a2C	.20
spring.....	a2C1	.05
AIR PIN a2C (complete).....		.25
AIR-PIN BLOCK (rear).....	a3C	50.00

Improvement No. 16

In effect on machines 1843 and following:

When applied to your machines fill in the following:

Applied to machines Nos. **Date**

Object: To prevent wear of the threads in the Main Stand 36E.

To equip machines 103 to 1842 inclusive with this improvement requires that the Stud and Nut be furnished together when ordered for the first time.

MOLD CLAMP stud	a48E1	.08
" nut	a48E3	.05
MOLD CLAMP 48E (complete)		.38
MOLD CLAMP stud	a49E1	.08
" nut	a49E3	.05
MOLD CLAMP 49E (complete)		.38

NOTE: When a MOLD CLAMP (complete) is ordered, the new style will always be furnished at the price here listed.

Improvement No. 17

In effect on machines 1923 and following:

When applied to your machines fill in the following:

Applied to machines Nos. **Date**

Object: Increased strength.

To equip machines 103 to 1922 inclusive with this improvement requires that the Rod and Arm be furnished together when ordered for the first time

GALLEY TRIP ROD	a8D	.25
GALLEY TRIP ROD a8D (complete)		.30
GALLEY-TRIP-ROD ARM	a9D	.75
GALLEY-TRIP-ROD ARM a9D (complete)		1.25

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Page "[Casting Machine] 102" was not present in the original document.

Improvement No. 20

In effect on machines 2013, 2015 and following.

When applied to your machines fill in the following:

Applied to machines Nos. **Date**

Object: To have threads on these Rods and Nuts the same pitch as on Studs a26E26 and Nuts a26E27 and thus prevent injury to threads if Nuts are interchanged.

To equip machines 321, 502, 520 to 2012 inclusive and 2014 with this improvement requires that each Rod and its two Nuts be furnished together when ordered for the first time.

Note: Improvement No. 20 may be applied to any other machine equipped with Double Spring Box a26E. See Improvement No. 1, page 77.

JAW-TONGS SPRING BOX spring rod (lower)	b26E14	1.00
" " nut	b26E15	.05
" " " lock nut	b26E16	.05
" " (upper)	b26E17	.75
" " nut	b26E19	.05
" " " lock nut	b26E20	.05

JAW-TONGS SPRING BOX a26E (complete) includes BALL SOCKET a27E (complete) and BALL SOCKET a81E (complete) *and cannot be furnished without them* 21.92

Improvement No. 21

In effect on machines 2003 and following.

When applied to your machines fill in the following:

Applied to machines Nos. **Date**

Object: To reduce the wear on the Springs.

Note: The old style Springs a84E can no longer be furnished. When ordering the new Springs b84E for the first time for machines 321 and 502 to 2002 inclusive, one each of the Plates a84E1 and a84E2 must be ordered with each Spring.

LOCKING-BAR-BELL-CRANK-LATCH SPRING (2)	b84E	.08
plate (long) (2)	a84E1	.03
" (short) (2)	a84E2	.03
LOCKING-BAR-BELL-CRANK-LATCH SPRING (complete) (each)	b84E	.14

The Keyboard

STYLE D KEYBOARD PRICES

Complete List for Keyboards 3127 and Following

KA GROUP

Mechanism for transferring the motion of the Keys to the required Plungers; includes also the Base and Standard.

BASE		1KA1	49.00
cover	1..	1KA2K	
" latch	(1)..	1KA3	.18
" " knob	(1)..	1KA4	.34
" support (2)	(1)..	1KA5	.14
" " rivet (4)	(1)..	1KA6	.01
cup (lower stop for 14KB3K)		1KA7	.20
BASE complete with above parts		X1KA	51.20
NOTE: 1KA2K is assembled with 1KA3, 1KA4, 1KA5 and 1KA6 and cannot be furnished without these parts. Price assembled			2.00
BASE STANDARD	1..	2KA1K	
column	1..	2KA2	
" screw (for raising X1KA)	1..	2KA3	
" " hand wheel	1..	2KA4	
" " lock nut	1..	2KA5	
BASE STANDARD complete with above parts		X2KA	20.00
NOTE: 2KA1K is assembled with 2KA2, 2KA3, 2KA4 and 2KA5 and these parts cannot be furnished separately. Price assembled			20.00
COPY BRACKET		3KA1	1.00
extension		3KA2	.15
" clamp stud		3KA3	.20
" " " collar		3KA4	.25
" " " nut		3KA5	.15
stud		3KA6	.20
COPY BRACKET complete with above parts		X3KA	1.95
COPY HOLDER (includes Rollers and Frame)	1..	4KA1K	
thumb screw	(1)..	4KA2	.25
COPY HOLDER complete with above parts		X4KA	3.25
NOTE: 4KA1K is assembled with 4KA2 and cannot be furnished without this part. Price assembled			3.25

COPY HOOK (2)	5KA1	.15
ring (2)	5KA2	.35
COPY HOOK complete with above parts (each)	X5KA	.50
COPY-HOOK-RING SCREW (right)	15KA1	.08
Intermediate Bank, see Keybar	8KA1	
KEYBANK (left)	6KA1	7.70
bracket (left)	6KA2	1.25
" screw (2)	6KA3	.05
" (right)	6KA4	1.25
" screw (2)	6KA5	.05
button (designate by character) (137)	6KA6	.05
" lever (regular) (lug to left) (71)	6KA7	.04
" " (regular) (lug to right) (66)	6KA8	.04
" " (justifying space) (2) ..... 1..	6KA9K	
" " abutment rod (13)	6KA10	.04
" " fulcrum rod (13)	6KA11	.06
" " " " sleeve (long)	6KA12	.15
" " " " " (short)	6KA13	.07
" " tie bar (lower) ..... 1..	6KA14	
" " " " rivet (4) ..... *(1)*..	6KA15	*.02*
" " " " (upper) ..... 2..	6KA16K	
" " " " finger plate ..... 2..	6KA17	
number (in 6KA1) (3)	a6KA18	.05
KEYBANK (left) complete with above parts	X6KA	25.00

NOTE: 6KA9K is assembled with 6KA14 and 6KA15 and cannot be furnished without these parts. Price assembled ..... .40

NOTE: 6KA16K is assembled with 6KA17 and these parts cannot be furnished separately. Price assembled. .20

KEYBANK (right)	7KA1	7.70
bracket (left)	7KA2	1.25
" screw (2)	7KA3	.05
" (right)	7KA4	1.25
" screw (2)	7KA5	.05
button (designate by character) (137)	7KA6	.05
" lever (regular) (lug to left) (71)	7KA7	.04
" " (regular) (lug to right) (66)	7KA8	.04
" " (justifying space) (2) ..... 1..	7KA9K	
" " abutment rod (13)	7KA10	.04
" " fulcrum rod (13)	7KA11	.06
" " " " sleeve (long)	7KA12	.15
" " " " " (short)	7KA13	.07
" " tie bar (lower) ..... 1..	7KA14	
" " " " rivet (4) ..... *(1)*..	7KA15	*.02*
" " " " (upper) ..... 2..	7KA16K	
" " " " finger plate ..... 2..	7KA17	
number (in 7KA1) (3)	a7KA18	.05
KEYBANK (right) complete with above parts	X7KA	25.00

NOTE: 7KA9K is assembled with 7KA14 and 7KA15 and cannot be furnished without these parts. Price assembled ..... .40

NOTE: 7KA16K is assembled with 7KA17 and these parts cannot be furnished separately. Price assembled. .20

KEYBAR (left bank) (139) ..... 1..	8KA1		
frame (left bar) ..... 1..	8KA2K		
" (right bar) ..... 1..	8KA3		
" connecting bar (front) ..... 1..	8KA4		
" " " screw (end) (2) ....(1)..	8KA5	.06	
" " " " (top) (2) ....(1)..	8KA6	.06	
" " plate (rear) ..... 1..	8KA7		
" " " screw (2) ..... (1)..	8KA8	.06	
guide (front) ..... (1)..	8KA9	1.00	
" screw (2) ..... (1)..	8KA10	.06	
" (rear) ..... (1)..	8KA11	.80	
" screw (2) ..... (1)..	8KA12	.06	
stop bar ..... 1..	8KA13		
" " screw (2) ..... (1)..	8KA14	.07	
" " " nut (2) ..... (1)..	8KA15	.05	
number (in 8KA4) (3) ..... (1)..	8KA16	.05	
KEYBAR complete with above parts X8KA		20.00	

NOTE: 8KA2K is assembled with 8KA1 and 8KA3 to 8KA16 inclusive and cannot be furnished without these parts. Price assembled 20.00

For Keybar Banks having the Frame in one piece order:

KEYBAR (left bank) (139) ..... 1..	8KA1		
frame ..... 1..	a8KA2K		
" pin ..... (1)..	a8KA3	.05	
guide (front) ..... 1..	a8KA9		
" screw (2) ..... (1)..	a8KA10	.06	
" (rear) ..... 1..	a8KA11		
" screw (3) ..... (1)..	a8KA12	.05	
" separator (for 8KA1) (20) ..... 1..	a8KA4		
" " clamp (20) ..... 1..	a8KA5		
" " " rivet (in a8KA9) (long) (10) ...1..	a8KA6		
" " " rivet (in a8KA11) (short) (10)...1..	a8KA7		
stop bar ..... 1..	8KA13		
" " screw (2) ..... (1)..	a8KA14	.06	
number (in a8KA2K) (3) ..... (1)..	8KA16	.05	
KEYBAR complete with above parts X8KA		20.00	

NOTE: a8KA2K is assembled with 8KA1, a8KA3, a8KA4, a8KA5, a8KA6, a8KA7, a8KA9, a8KA10, a8KA11, a8KA12, 8KA13, a8KA14 and 8KA16 and cannot be furnished without these parts. Price assembled 20.00

Note: When Keybar Banks having one piece Frames are used for the first time on Keyboards 3127 to 3441 inclusive, 3443, 3444, 3445, 3447 and 3449 it will be necessary to shorten the two lugs on the under side of Base 1KA1 to give clearance for the Banks. Directions for this alteration will be furnished when required.

KEYBAR (right bank) (139)....1..	9KA1		
frame (left bar)....1..	9KA2K		
" (right bar)....1..	9KA3		
" connecting bar (front)....1..	9KA4		
" " " screw (end) (2)....(1)..	9KA5	.06	
" " " " (top) (2)....(1)..	9KA6	.06	
" " plate (rear)....1..	9KA7		
" " " screw (2)....(1)..	9KA8	.06	
guide (front)....(1)..	9KA9	1.00	
" screw (2)....(1)..	9KA10	.06	
" (rear)....(1)..	9KA11	.80	
" screw (2)....(1)..	9KA12	.06	
stop bar....1..	9KA13		
" " screw (2)....(1)..	9KA14	.07	
" " " nut (2)....(1)..	9KA15	.05	
number (in 9KA4) (3)....(1)..	9KA16	.05	
KEYBAR complete with above parts....	X9KA	20.00	

NOTE: 9KA2K is assembled with 9KA1 and 9KA3 to 9KA16 inclusive and cannot be furnished without these parts. Price assembled.... 20.00

§ KEYBAR (right bank) (139)....1..	9KA1		§
frame....1..	a9KA2K		
" pin....(1)..	a9KA3	.05	
guide (front)....1..	a9KA9		
" screw (2)....(1)..	a9KA10	.06	
" (rear)....1..	a9KA11		
" screw (3)....(1)..	a9KA12	.05	
" separator (for 9KA1) (20)....1..	a9KA4		
" " clamp (20)....1..	a9KA5		
" " " rivet (in a9KA9) (long) (10)....1..	a9KA6		
" " " rivet (in a9KA11) (short) (10)....1..	a9KA7		
stop bar....1..	9KA13		
" " screw (2)....(1)..	a9KA14	.06	
number (in a9KA2K)....(1)..	9KA16	.05	
KEYBAR complete with above parts....	X9KA	20.00	

NOTE: a9KA2K is assembled with 9KA1, a9KA3, a9KA4, a9KA5, a9KA6, a9KA7, a9KA9, a9KA10, a9KA11, a9KA12, a9KA13, a9KA14 and 9KA16 and cannot be furnished without these parts. Price assembled.... 20.00

Note: When Keybar Banks having one piece Frames are used for the first time on Keyboards 3127 to 3441 inclusive, 3443, 3444, 3445, 3447, and 3449 it will be necessary to shorten the two lugs on the under side of Base 1KA1 to give clearance for the Banks. § Directions for this alteration will be furnished when required.

Key Button, see Keybank Button....	6KA6
Key Lever, see Keybank-button Lever....	6KA7

NAME PLATE (large)	10KA1	.50
screw (4)	10KA2	.03
(small) (Trade Mark)	10KA3	.25
screw (4)	10KA4	.03
NAME PLATE complete with above parts	X10KA	.99
Plunger Bar, see Valve Bar	13KA1	
ROCK SHAFT (33)	11KA1K	
post (long) (6 in each Shaft) (198)	11KA2	
" (short) (2 " " ") (66)	11KA3	
rod (long) (2 to " ") (66)	11KA4	
" (short) (1 " " ") (33)	11KA5	
ROCK SHAFT complete with above parts	X11KA	49.50
NOTE: Each ROCK SHAFT 11KA1K is assembled with six 11KA2, two 11KA3, two 11KA4 and one 11KA5 and these parts cannot be furnished separately. Price assembled, each		1.50
ROCK-SHAFT BRACKET (left)	12KA1	4.00
(right)	12KA2	4.00
connecting bar (front)	12KA3	2.75
" " guide (for X13KA) (2)	12KA4	.25
" " " screw (4)	12KA5	.05
" " screw (front) (2)	12KA6	.05
" " " (side) (2)	12KA7	.05
" " (rear)	12KA8	2.75
" " guide (for X13KA) (2)	12KA9	.25
" " " screw (4)	12KA10	.05
" " screw (large) (2)	12KA11	.07
" " " (small) (2)	12KA12	.05
" " tie bar	12KA13	3.50
" " " " screw (2)	12KA14	.06
screw (8)	12KA15	.06
stop bar (2)	12KA16	.25
ROCK-SHAFT BRACKET complete with above parts	X12KA	
NOTE: X12KA is assembled with X11KA and cannot be furnished without these parts. Price assembled		69.44
VALVE BAR (C)	13KA1	.25
(M)	13KA2	.25
(L)	13KA3	.25
(J)	13KA4	.25
(G)	13KA5	.25
(D)	13KA6	.25
(N)	13KA7	.25
(F)	13KA8	.25
(O)	13KA9	.25
(H)	13KA10	.25
(I)	13KA11	.25
(K)	13KA12	.25
(E)	13KA13	.25
(17)	13KA14	.25
(S)	13KA15	.25
(A)	13KA16	.25

VALVE BAR—*Continued*

(JD)....1..		13KA17K	
plate....(*1*)..		13KA18	*.05*
" rivet (2)....(*1*)..		13KA19	*.02*
(R)....2..		13KA20K	
plate....(*2*)..		13KA21	*.05*
" rivet (2)....(*2*)..		13KA22	*.02*
(B)....		13KA23	.25
(8)....		13KA24	.25
(6)....		13KA25	.25
(3)....		13KA26	.25
(12)....		13KA27	.25
(1)....		13KA28	.25
(9)....		13KA29	.25
(16)....		13KA30	.25
(7)....		13KA31	.25
(14)....		13KA32	.25
(2)....		13KA33	.25
(10)....		13KA34	.25
(13)....		13KA35	.25
(5)....		13KA36	.25
(15)....		13KA37	.25
(4)....		13KA38	.25
(11)....		13KA39	.25
VALVE BAR complete with above parts....X		13KA	8.75

NOTE: 13KA17K is assembled with 13KA18 and 13KA19 and cannot be furnished without these parts. Price assembled.... .25

NOTE: 13KA20K is assembled with 13KA21 and 13KA22 and cannot be furnished without these parts. Price assembled.... .25

NOTE: The VALVE BARS are listed above in the order in which they are arranged on the Keyboard, reading from left to right.

VALVE RETURNING ROCK SHAFT....1..		14KA1K	
fulcrum screw (2)....		14KA2	.05
" " nut (2)....		14KA3	.05
finger (2)....(*1*)..		14KA4	*.10*
operating arm....(*1*)..		14KA5	*.15*
" " rod....		14KA6	.25
" " " head....		14KA7	.15
" " " nut....		14KA8	.04
" " " spring....		14KA9	.06
" " " washer....		14KA10	.03
VALVE RETURNING ROCK SHAFT complete with above parts....X		14KA	2.23

NOTE: 14KA1K is assembled with 14KA4 and 14KA5 and cannot be furnished without these parts. Price assembled.... 1.50

Copy-hook-ring Screw (right), follows X5KA.... 15KA1

KB GROUP

Mechanism for counting and registering ems and units, justifying spaces, and lines set; for indicating the proper justification and for driving and reversing these mechanisms.

BELL		1KB1	1.00
bracket	1..	1KB2K	
" clamp (for 23KB1)		1KB3	.06
" " screw		1KB4	.03
" piston		1KB5	.25
" plug (head for cylinder)		1KB6	.25
" screw (long)		1KB7	.06
" " (short)		1KB8	.05
" spring post (for 2KB12)	(1)..	1KB9	*.04*
" stud (for 1KB1)	(1)..	1KB10	*.16*
" " nut	(1)..	1KB11	*.04*
screw		1KB12	.05
BELL complete with above parts		X1KB	5.75

NOTE: 1KB2K is assembled with 1KB9, 1KB10 and 1KB11 and cannot be furnished without these parts. Price assembled 4.00

BELL HAMMER	1..	2KB1K	
head	1..	2KB2	
lever	2..	2KB3K	
" fulcrum stud		2KB4	.12
" " " nut		2KB5	.04
" piston link		2KB6	.15
" " " stud	(2)..	a2KB7	*.06*
" " " " cotter	(2)..	a2KB8	*.00*
" " " " washer	(2)..	a2KB9	*.03*
" stud (for engaging 23KB2)	(2)..	2KB10	*.08*
" " nut	(2)..	2KB11	*.04*
spring		2KB12	.05
" post	(1)..	2KB13	*.04*
stud		2KB14	.10
" nut		2KB15	.04
BELL HAMMER complete with above parts		X2KB	2.60

NOTE: 2KB1K is assembled with 2KB2 and 2KB13 and cannot be furnished without these parts. Price assembled ..... .35

NOTE: 2KB3K is assembled with a2KB7, a2KB8, a2KB9, 2KB10 and 2KB11 and cannot be furnished without these parts. Price assembled 1.75

BELL TRIP LEVER		3KB1	.25
spring		3KB2	.05
stud		3KB3	.04
BELL TRIP LEVER complete with above parts		X3KB	.34

Counter, see Line Counter	23KB1	
EM RACK	4KB1K	
bell trip (1)	4KB2	.03
pointer (1)	4KB3	.15
EM RACK complete with above parts	X4KB	2.00
NOTE: 4KB1K is assembled with 4KB2 and 4KB3 and cannot be furnished without these parts. Price assembled		2.00
EM-RACK SLIDE	5KB1K	
head (1)	5KB2	1.00
" screw (2) (1)	5KB3	.05
screw (2)	5KB4	.07
spring hook (for 26KB4) (1)	5KB5	.10
" post (for 7KB3) (1)	5KB6	.04
EM-RACK SLIDE complete with above parts	X5KB	7.39
NOTE: 5KB1K is assembled with 5KB2, 5KB3, 5KB5 and 5KB6 and cannot be furnished without these parts. Price assembled		7.25
EM-RACK STOP (left handle)	6KB1	.75
(right handle)	6KB2	1.00
pointer	6KB3K	
" guide pin	6KB4	
spring	6KB5	.05
stud	6KB6	.07
EM-RACK STOP complete with above parts	X6KB	2.42
NOTE: 6KB3K is assembled with 6KB4 and these parts cannot be furnished separately. Price assembled		.55
EM-RACK-STOP RACK	7KB1	1.00
hook	7KB2	.18
" spring	7KB3	.09
EM-RACK-STOP RACK complete with above parts	X7KB	1.27
EM-RACK-STOP-RACK ADJUSTING SCREW	a8KB1K	
head	a8KB2	
" pin	8KB3	
EM-RACK-STOP-RACK ADJUSTING SCREW complete with above parts	X8KB	.95
NOTE: a8KB1K is assembled with a8KB2 and 8KB3 and these parts cannot be furnished separately. Price assembled		.95
EM SCALE	9KB1K	
holder	9KB2	
" screw (2)	9KB3	.05
" " washer (2)	9KB4	.03
EM SCALE complete with above parts	X9KB	2.66
NOTE: 9KB1K is assembled with 9KB2 and these parts cannot be furnished separately. Price assembled		2.50
JUSTIFYING SCALE (designate by set)	10KB1	1.50

Justifying-scale Driving Cylinder, see Unit-wheel-standard Cap	a	46KB5	
JUSTIFYING-SCALE DRIVING RACK		11KB1	.90
JUSTIFYING-SCALE GEAR SEGMENT		12KB1	2.35
stud		12KB2	.15
JUSTIFYING-SCALE GEAR SEGMENT complete with above parts	X	12KB	2.50
JUSTIFYING-SCALE PINION	1..	13KB1K	
pin (3)	(1)..	13KB2	*.04*
spring post	(1)..	13KB3	*.03*
stud		13KB4	.25
JUSTIFYING-SCALE PINION complete with above parts	X	13KB	2.00
NOTE: 13KB1K is assembled with 13KB2 and 13KB3 and cannot be furnished without these parts. Price assembled			1.75
JUSTIFYING-SCALE POINTER		14KB1	.35
bracket		14KB2	.15
rack	1..	14KB3K	
" nut (for 14KB2)		14KB4	.04
" pin (trip for 31KC11)	(1)..	14KB5	*.01*
stud		14KB6	.14
" nut		14KB7	.04
" washer		14KB8	.03
JUSTIFYING-SCALE POINTER complete with above parts	X	14KB	3.25
NOTE: 14KB3K is assembled with 14KB5 and cannot be furnished without this part. Price assembled			2.50
JUSTIFYING-SCALE-POINTER DETENT PAWL	1..	15KB1K	
pin (for tripping Pawl)	(1)..	15KB2	*.03*
spring		15KB3	.05
" post (in Pawl)	(1)..	15KB4	*.04*
JUSTIFYING-SCALE-POINTER DETENT PAWL complete with above parts	X	15KB	.55
NOTE: 15KB1K is assembled with 15KB2 and 15KB4 and cannot be furnished without these parts. Price assembled			.50
Justifying-scale-pointer-detent-pawl Fulcrum Stud, see Unit-wheel-standard-cap Stud		46KB12	
JUSTIFYING-SCALE-POINTER LIFTING PAWL	1..	16KB1K	
pin (for tripping Pawl)	(1)..	16KB2	*.03*
spring		16KB3	.05
" post (in Pawl)	(1)..	16KB4	*.04*
JUSTIFYING-SCALE-POINTER LIFTING PAWL complete with above parts	X	16KB	.55
NOTE: 16KB1K is assembled with 16KB2 and 16KB4 and cannot be furnished without these parts. Price assembled			.50

Justifying-scale-pointer-lifting-pawl Stud, see Justifying-scale-pointer-operating-lever Stud..... 17KB5

JUSTIFYING-SCALE-POINTER OPERATING LEVER.....1.. 17KB1K
fulcrum stud..... 17KB2 .15
" " nut..... 17KB3 .04
piston link..... 17KB4 .15
stud (for 16KB1K).(*1*).. 17KB5 *.04*
" (for 17KB4)...(*1*)..a17KB6 *.06*
" cotter.....(*1*)..a17KB7 *.00*
" washer.....(*1*)..a17KB8 *.03*

JUSTIFYING-SCALE-POINTER OPERATING LEVER complete with above parts.....X17KB 1.59

NOTE: 17KB1K is assembled with 17KB5, a17KB6, a17KB7 and a17KB8 and cannot be furnished without these parts. Price assembled..... 1.25

JUSTIFYING-SCALE-POINTER-PAWL-SPRING POST (in a46KB1K) (for 15KB3)..... 18KB1 .10
nut..... 18KB2 .04
plate (for 16KB3)..... 18KB3 .10

JUSTIFYING-SCALE-POINTER-PAWL-SPRING POST complete with above parts.....X18KB .24

JUSTIFYING-SCALE-POINTER-RACK GUIDE PLATE..... 19KB1 .60
screw (4).. 19KB2 .04

JUSTIFYING-SCALE-POINTER-RACK GUIDE PLATE complete with above parts.....X19KB .76

JUSTIFYING-SCALE SPINDLE.....1.. 20KB1K
head.....1.. 20KB2

JUSTIFYING-SCALE SPINDLE complete with above parts..... X20KB .30

NOTE: 20KB1K is assembled with 20KB2 and these parts cannot be furnished separately. Price assembled. .30

JUSTIFYING-SCALE SPRING..... 21KB1 .10

JUSTIFYING-SCALE-SPRING TAKE UP..... 22KB1 .20
lock nut..... 22KB2 .04

JUSTIFYING-SCALE-SPRING TAKE UP complete with above parts.....X22KB .24

LINE COUNTER..... 23KB1 2.25
split collar (on Shaft)..... 23KB2 .35
" " clamp screw..... 23KB3 .03

LINE COUNTER complete with above parts.....X23KB 2.63

Pipe, nickeled, supply for operating Justifying Scale, second section, see Unit-wheel-standard-cap-head Pipe.. 46KB8
Pipe, nickeled, to Unit-wheel Driving Cylinder, second section, see Unit-wheel-driving-cylinder-ring Pipe..... 36KB4

RESTORING ROCKER ARM	1..	24KB1K	
fork		24KB2	.20
link (for 24KB4K)		24KB3	.15
" lever (for raising a38KB1K)	2..	24KB4K	
" " fulcrum stud		24KB5	.15
" " " " nut		24KB6	.04
" " stud (for 24KB3)	(2)..	a24KB7	.06
" " " cotter	(2)..	a24KB8	.00
" " " washer	(2)..	a24KB9	.03
piston link		24KB10	.15
shaft		24KB11	.10
" set screw		24KB12	.02
stud (for 24KB2)	(1)..	a24KB13	.06
" cotter	(1)..	a24KB14	.00
" washer	(1)..	a24KB15	.03
" (for 24KB3)	(1)..	a24KB16	.06
" cotter	(1)..	a24KB17	.00
" washer	(1)..	a24KB18	.03
" (for 24KB10)	(1)..	a24KB19	.06
" cotter	(1)..	a24KB20	.00
" washer	(1)..	a24KB21	.03
RESTORING ROCKER ARM complete with above parts.		X24KB	4.81

NOTE: 24KB1K is assembled with a24KB13, a24KB14, a24KB15, a24KB16, a24KB17, a24KB18, a24KB19, a24KB20 and a24KB21 and cannot be furnished without these parts. Price assembled..... 2.50

NOTE: 24KB4K is assembled with a24KB7, a24KB8 and a24KB9 and cannot be furnished without these parts. Price assembled..... 1.50

UNIT INDICATOR	1..	25KB1K	
bracket	(1)..	25KB2	.20
" screw		25KB3	.04
rivet (2)	(1)..	25KB4	.02
UNIT INDICATOR complete with above parts		X25KB	.49

NOTE: 25KB1K is assembled with 25KB2 and 25KB4 and cannot be furnished without these parts. Price assembled..... .45

UNIT RACK	1..	b26KB1K	
link	(1)..	26KB2	.10
" stud	(1)..	26KB3	.05
spring		26KB4	.08
UNIT RACK complete with above parts		Xb26KB	1.48

NOTE: b26KB1K is assembled with 26KB2 and 26KB3 and cannot be furnished without these parts. Price assembled..... 1.40

Unit Rack b26KB1K is standard on Keyboards 3601 and following. When ordered for the first time for Keyboards prior to 3601 all the parts listed in Improvement No. 1 must be furnished. (See Improvement No. 1 for Special Price.)

Parts 26KB2, 26KB3 and 26KB4 are standard on all Keyboards.

UNIT-RACK ABUTMENT	1..	27KB1K	
brace	2..	27KB2K	
" spring		27KB3	.05
" " post	(2)..	27KB4	.04
bracket	3..	a27KB5K	
" spring post	(2)(3)..	27KB6	.04
" stud	(3)	27KB7	.05
" " washer		27KB8	.03
spring		27KB9	.05
" post	(1)..	27KB10	.04

UNIT-RACK ABUTMENT complete with above parts.. Xa27KB 3.58

NOTE: 27KB1K is assembled with 27KB10 and cannot be furnished without this part. Price assembled.. 1.50

NOTE: 27KB2K is assembled with 27KB4 and cannot be furnished without this part. Price assembled.. .80

NOTE: a27KB5K is assembled with 27KB6 and cannot be furnished without this part. Price assembled.. 1.00

On Keyboards 3127 to 3269 inclusive (which have not already been equipped with Improvement No. 1) when ordering Unit-rack-abutment Bracket a27KB5K, the holes for the Studs 27KB7 both in the Unit-wheel Standard and in the Bracket must be elongated to permit of proper adjustment. Directions for this alteration will be furnished when required.

UNIT-RACK-ABUTMENT ADJUSTING STUD (in a46KB1K)..		28KB1	.10
nut		28KB2	.04

UNIT-RACK-ABUTMENT ADJUSTING STUD complete with above parts.. X28KB .1

UNIT-RACK SLIDE	1..	a29KB1K	
eccentric bushing		29KB2	.30
shoe (for 38KB6)	(1)..	29KB3	.20
" rivet (2)	(1)..	29KB4	.02
stud (for a38KB12)		a29KB5	.10
" nut		a29KB6	.04

UNIT-RACK SLIDE complete with above parts.. Xa29KB 3.94

NOTE: a29KB1K is assembled with 29KB3 and 29KB4 and cannot be furnished without these parts. Price assembled.. 3.50

For Keyboards 3127 to 3600 inclusive order: Improvement No. 1

UNIT-RACK SLIDE stud (for 38KB12)		29KB5	.10
" nut		29KB6	.04

Note: Unit-rack Slide a29KB1K is standard on Keyboards 3601 and following. When ordered for the first time for Keyboards 3127 to 3600 inclusive all the parts listed in Improvement No. 1 must be furnished. (See Improvement No. 1 for Special Price.)

Parts 29KB2, 29KB3 and 29KB4 are standard on all Keyboards.

UNIT-RACK-SLIDE ABUTMENT		30KB1	.20
adjusting screw	(2)	30KB2	.06
stud		30KB3	.05

UNIT-RACK-SLIDE ABUTMENT complete with above parts.. X30KB .37

Unit-rack-slide Operating Lever, see Tension-arm-connecting-rod Lever 39KC1K

Unit-rack-slide Raising Lever, see Unit-wheel-pawl Operating Lever a38KB12

UNIT-RACK STOP (lug on top) (1st, 3d, 5th, 7th, 9th, 11th, 13th, 15th, 17th) (9)		31KB1	.65
(lug on bottom) (2nd, 4th, 6th, 8th, 10th, 12th, 14th, 16th, 18th) (9)		31KB2	.65
bracket	1..	31KB3K	
" guide (right)	(1)..	31KB4	.45
" " (left)	(1)..	31KB5	.45
" " rivet (4)	(1)..	31KB6	.01
" screw (4)		31KB7	.06
fulcrum rod	(1)..	31KB8	.15
" " cotter (2)	(1)..	31KB9	.00
liner (.01" thick) (17)	(1)..	31KB10	.02
" rod (2)	(1)..	31KB11	.10
" " cotter (4)	(1)..	31KB12	.00
" separator (18)	(1)..	31KB13	.04
spring (4)	(1)..	31KB14	.05
" bail (2)	(1)..	31KB15	.15
" pin (2)	(1)..	31KB16	.04
" rod	(1)..	31KB17	.05
UNIT-RACK STOP complete with above parts		X31KB	17.45

NOTE: 31KB3K is assembled with 31KB4, 31KB5, 31KB6, 31KB16 and 31KB17 and cannot be furnished without these parts. Price assembled 5.51

UNIT-RACK STOPS begin numbering at the left; that is, the four-unit STOP is No. 1, the five-unit STOP is No. 2, etc.

UNIT-RACK-STOP BAR (plain) (11)	1..	32KB1K	
(with Block, Spring Plate and Rivets) (2)	1..	32KB2	
case	1..	32KB3	
" cap	(1)..	32KB4	.25
" " screw (2)	(1)..	32KB5	.03
" dummy plate (5)	(1)..	32KB6	.05
" separator (17)	(1)..	32KB7	.05
" " rod (lower)	(1)..	32KB8	.05
" " " collar (2)	(1)..	32KB9	.04
" " " (upper)	(1)..	32KB10	.05
" " washer (26)	(1)..	32KB11	.03
" shoe (lower)	(1)..	32KB12	.20
" " (upper)	(1)..	32KB13	.30
" " screw (4)	(1)..	32KB14	.03
" spring post (for 32KB16) (2)	(1)..	32KB15	.03
spring (for 9 and 10 unit Bars) (2)	(1)..	32KB16	.06
UNIT-RACK-STOP BAR complete with above parts		X32KB	15.00

NOTE: 32KB1K is assembled with 32KB2, 32KB3, 32KB4, 32KB5, 32KB6, 32KB7, 32KB8, 32KB9, 32KB10, 32KB11, 32KB12, 32KB13, 32KB14, 32KB15 and 32KB16 and cannot be furnished without these parts. Price assembled 15.00

Unit-rack-stop-bar-case Plunger, see Punch-bar-lever-bracket Plunger 34KC8

UNIT-RACK-STOP GUIDE		33KB1	1.20
screw (2)		33KB2	.05
" washer (2)		33KB3	.03
UNIT-RACK-STOP GUIDE complete with above parts		X33KB	1.36
UNIT-RACK-STOP-GUIDE ADJUSTING SCREW		34KB1	.07
bracket (also guide for 38KB6)		34KB2	1.10
" screw (2)		34KB3	.06
lock nut		34KB4	.05
UNIT-RACK-STOP-GUIDE ADJUSTING SCREW complete with above parts		X34KB	1.34
Unit-rack-stop Operating Lever, see Punch-bar Lever		34KC1	
UNIT WHEEL	1	a35KB1K	
shaft	1	a35KB2	
rivet (6)	(1)	35KB3	*.02*
UNIT WHEEL complete with above parts		Xb35KB	5.00

NOTE: a35KB1K is assembled with a35KB2 and 35KB3 and cannot be furnished without these parts.
Price assembled 5.00

Unit Wheel Xb35KB is standard on Keyboards 3601 and following. When ordered for the first time for Keyboards prior to 3601 all the parts listed in Improvement No. 1 must be furnished. (See Improvement No. 1 for Special Price.)
Part 35KB3 is standard on all Keyboards.

UNIT-WHEEL DRIVING CYLINDER (2)		36KB1	2.00
head (2)		36KB2	1.25
ring (2)		36KB3	.60
" pipe (2)		36KB4	.35
" " union (male end) (2)		36KB5	.05
" " " nut (2)		36KB6	.10
UNIT-WHEEL DRIVING CYLINDER complete with above parts		X36KB	8.70
UNIT-WHEEL DRIVING RACK		37KB1	3.00
piston (2)		37KB2	.40
" packing (leather) (2)		37KB3	.07
" stud (2)		37KB4	.03
" washer (2)		37KB5	.03
" " screw (2)		37KB6	.05
rider (stop for 11KB1)		37KB7	.80
UNIT-WHEEL DRIVING RACK complete with above parts		X37KB	4.96
UNIT-WHEEL PAWL	1	a38KB1K	
bushing	1	38KB2	
" collar	1	38KB3	
connecting link (from a38KB12) (2)	1	38KB4	
" " pin (2)	(1)	38KB5	*.03*
latch (lock for a29KB1K)	1	38KB6	
" operating link (2)	1	38KB7	
" " " bushing (fulcrum)	1	38KB8	

UNIT-WHEEL PAWL—*Continued*

latch operating link pin (Latch end)...(*1*)..	38KB9	*04*
" " " rivet (2).....(*1*)..	38KB10	*02*
" " " separator.....1..	38KB11	
operating lever (also raises a29KB1K)...1..a38KB12		
" " oil pad.....(*1*)..a38KB13		*.02*

UNIT-WHEEL PAWL complete with above parts....Xa38KB 5.75

NOTE: a38KB1K is assembled with 38KB2, 38KB3, 38KB4, 38KB5, 38KB6, 38KB7, 38KB8, 38KB9, 38KB10, 38KB11, a38KB12 and a38KB13, and cannot be furnished without these parts. Price assembled.... 5.75

We cannot furnish repair parts for the UNIT-WHEEL PAWL (except the PINS, RIVETS and OIL PAD). Instead we exchange repaired UNIT-WHEEL PAWLS for worn UNIT-WHEEL PAWLS. Price for exchange..... 2.50

NOTE: This exchange price does not apply to KEYBOARDS prior to 3601 unless they have been equipped with Improvement No. 1.

Unit-wheel Pawl a38KB1K is standard on Keyboards 3601 and following. When ordered for the first time for Keyboards prior to 3601 all the parts listed in Improvement No. 1 must be furnished. (See Improvement No. 1 for Special Price.)

Parts 38KB2 to 38KB11 inclusive are standard on all Keyboards.

Part a38KB13 is standard on Keyboards 3701 and following. This part may be applied to any Keyboard prior to 3701, without any alteration being required.

UNIT-WHEEL-PAWL ADJUSTING BAR.....	39KB1	.40
nut (2).....	39KB2	.04
UNIT-WHEEL-PAWL ADJUSTING BAR complete with above parts.....X39KB		.48
UNIT-WHEEL-PAWL-LATCH SPRING.....	40KB1	.06
UNIT-WHEEL-PAWL SPRING.....a41KB1		.10
hook.....a41KB2		.05
plate.....a41KB3		.03
UNIT-WHEEL-PAWL SPRING complete with above parts.....X41KB		.18

For Keyboards 3127 to 3821 inclusive the Unit-wheel-pawl Spring must be furnished complete (X41KB) when ordered for the first time.

UNIT-WHEEL-PAWL-SPRING POST (in a46KB1K).....	42KB1	.15
nut.....	42KB2	.04
UNIT-WHEEL-PAWL-SPRING POST complete with above parts.....X42KB		.19
UNIT-WHEEL-PAWL STUD.....	43KB1	.10
Unit-wheel Reversing Cylinder, see Unit-wheel Driving Cylinder.....	36KB1	

UNIT-WHEEL STANDARD	1	a46KB1K	
cap (for 36KB1) (2)	1	46KB2	
" screw (3)	(1)	46KB3	.06
" stud (post for 22KB1)		46KB4	.25
" (for a35KB2)	1	a46KB5	
" head (for a46KB5)		46KB6	.50
" " sleeve nut (2)		46KB7	.07
" " pipe		46KB8	.30
" " " union (male end) (2)		46KB9	.07
" " " " nut (2)		46KB10	.07
" screw (4)	(1)	46KB11	.05
" stud (for 15KB1K)	(1)	46KB12	.04
oil pipe	(1)	a46KB19	.05
screw (4)		46KB13	.06
spring post (for 3KB2)	(1)	46KB14	.04
" " (for 40KB1)	(1)	46KB15	.04
stud (for 29KB2)	(1)	46KB16	.10
" nut	(1)	46KB17	.04
" washer	(1)	46KB18	.03

UNIT-WHEEL STANDARD complete with above parts. Xa46KB 20.71

NOTE: a46KB1K is assembled with 46KB2, 46KB3, a46KB5, 46KB11, 46KB12, 46KB14, 46KB15, 46KB16, 46KB17, 46KB18 and a46KB19, and cannot be furnished without these parts. Price assembled..... 19.00

Unit-wheel Standard a46KB1K is standard on Keyboards 3267, 3268, 3270 and following (except the Oil Pipe a46KB19—see below). When ordered for the first time for Keyboards 3127 to 3266 inclusive and 3270 all the parts listed in Improvement No. 1 must be furnished.

Unit-wheel-standard Oil Pipe a46KB19 is for conveying oil to the Tension-arm-connecting-rod-lever Roller Bearing 39KC10. This Oil Pipe is standard on Keyboards 3701 and following. It may be applied to Keyboards prior to 3701 if the Unit-wheel Standard is drilled to receive it. Directions for this alteration will be furnished when required.

Unit-wheel-standard-cap Piston, see Justifying-scale Driving Rack..... 11KB1

KC GROUP

Mechanism for driving the Punches through the paper, and for feeding and winding the paper.

Air Chamber, see Valve-bank Air Filter		41KC2K	
Exhaust Pipe, see Valve-bank-air-filter Vent Pipe		42KC1	
HOSE (rubber, supply) (30″ long)		1KC1	.50
coupling		1KC2	.35
" valve (3–8″)		1KC3	.70
nozzle		a1KC4	.90
HOSE complete with above parts		X1KC	2.45
PAPER-FEED-PAWL LEVER	1	a2KC1K	
pin (operating 7KC1)	(1)	2KC2	.04
stud (for 6KC1K)	(1)	a2KC3	.06
" cotter	(1)	a2KC4	.00
" washer	(1)	a2KC5	.03
" (for 9KC2)	(1)	a2KC6	.06
" cotter	(1)	a2KC7	.00
" washer	(1)	a2KC8	.03
" (for a21KC7)	(1)	a2KC9	.06
" cotter	(1)	a2KC10	.00
" washer	(1)	a2KC11	.03
PAPER-FEED-PAWL LEVER complete with above parts.		Xa2KC	1.25
NOTE: a2KC1K is assembled with 2KC2, a2KC3, a2KC4, a2KC5, a2KC6, a2KC7, a2KC8, a2KC9, a2KC10 and a2KC11 and cannot be furnished without these parts. Price assembled			1.25
PAPER-FEED-PAWL RING	1	3KC1K	
adjusting screw (2)		3KC2	.06
screw (3)		3KC3	.06
stud (for 5KC1K)	(1)	a3KC4	.06
" cotter	(1)	a3KC5	.00
" washer	(1)	a3KC6	.03
" (for 7KC1)	(1)	a3KC7	.06
" cotter	(1)	a3KC8	.00
" washer	(1)	a3KC9	.03
PAPER-FEED-PAWL RING complete with above parts		X3KC	2.80
NOTE: 3KC1K is assembled with a3KC4, a3KC5, a3KC6, a3KC7, a3KC8 and a3KC9 and cannot be furnished without these parts. Price assembled			2.50
PAPER-FEED-PISTON LINK (2)		4KC1	.15
lever	1	4KC2K	
" stud (for 4KC1) (2)	(1)	a4KC3	.06
" " cotter (2)	(1)	a4KC4	.00
" " washer (2)	(1)	a4KC5	.03

PAPER-FEED-PISTON LINK—*Continued*

lever stud (for 9KC2).....	(1)..	a4KC6	.06
" " cotter.....	(1)..	a4KC7	.00
" " washer.....	(1)..	a4KC8	.03

PAPER-FEED-PISTON LINK complete with above parts. X4KC 1.40

NOTE: 4KC2K is assembled with a4KC3, a4KC4, a4KC5, a4KC6, a4KC7 and a4KC8 and cannot be furnished without these parts. Price assembled..... 1.10

PAPER-FEED-RATCHET DETENT.....	1..	5KC1K	
pin (for 8KC1K)...	(1)..	5KC2	.02
spring.....		5KC3	.05

PAPER-FEED-RATCHET DETENT complete with above parts..... X5KC .40

NOTE: 5KC1K is assembled with 5KC2 and cannot be furnished without this part. Price assembled..... .35

PAPER-FEED-RATCHET PAWL (driving).....	1..	6KC1K	
pin (for 8KC1K).....	(1)..	a6KC2	.02
spring.....		6KC3	.05
" pin.....	(1)..	6KC4	.03

PAPER-FEED-RATCHET PAWL complete with above parts..... Xa6KC .40

NOTE: 6KC1K is assembled with a6KC2 and 6KC4 and cannot be furnished without these parts. Price assembled..... .35

PAPER-FEED-RATCHET PAWL (stop).....		7KC1	.35
spring.....		7KC2	.05

PAPER-FEED-RATCHET PAWL complete with above parts..... X7KC .40

PAPER FEED RELEASE PLATE.....	1..	8KC1K	
link.....		b8KC2	.30
spring.....		8KC4	.05
stud (for b8KC2).....	(1)..	b8KC5	.06
" cotter.....	(1)..	a8KC6	.00
" washer.....	(1)..	a8KC7	.03

PAPER FEED RELEASE PLATE complete with above parts..... Xa8KC .85

NOTE: 8KC1K is assembled with b8KC5, a8KC6 and a8KC7 and cannot be furnished without these parts. Price assembled..... .50

Paper-feed-release-plate Catch, see Paper-feed-release-plate-link Bracket..... b25KC1K

PAPER-FEED-RELEASE-PLATE-LINK BRACKET.....	1..	b25KC1K	
screw (2).....		25KC2	.03
pin.....	(1)..	a25KC3	.15

PAPER-FEED-RELEASE-PLATE-LINK BRACKET complete with above parts..... Xa25KC .41

NOTE: b25KC1K is assembled with a25KC3 and cannot be furnished without this part. Price assembled.. .35

PAPER FEED ROD		9KC1	.25
eye (2)		9KC2	.30
" lock nut (2)		9KC3	.04
stop nut (2)		9KC4	.06
" " lock nut (2)		9KC5	.04
washer (fibre) (2)		9KC6	.05
PAPER FEED ROD complete with above parts		X9KC	1.23
PAPER FEED VALVE		10KC1	.25
lever	1	10KC2K	
" pin (for 10KC1)	(1)	10KC3	*.05*
" roller	(1)	10KC4	*.10*
" " stud	(1)	10KC5	*.08*
" " " nut	(1)	10KC6	*.04*
PAPER FEED VALVE complete with above parts		X10KC	1.25
NOTE: 10KC2K is assembled with 10KC3, 10KC4, 10KC5 and 10KC6 and cannot be furnished without these parts. Price assembled			1.00
PAPER-FEED-VALVE BRACKET	1	11KC1K	
plug screw (brass) (2)	(1)	11KC2	*.02*
screw (4)		11KC3	.05
stud (for 4KC2K)	(1)	11KC4	*.07*
" nut		11KC5	.04
" washer		11KC6	.03
" (for 10KC2K)	(1)	11KC7	*.07*
PAPER-FEED-VALVE BRACKET complete with above parts		X11KC	1.52
NOTE: 11KC1K is assembled with 11KC2, 11KC4 and 11KC7 and cannot be furnished without these parts. Price assembled			1.25
PAPER-FEED-VALVE CAM		12KC1	.60
adjusting stud (2)		12KC2	.07
" " nut (2)		12KC3	.04
screw		12KC4	.05
" washer		12KC5	.03
PAPER-FEED-VALVE CAM complete with above parts		X12KC	.90
PAPER FEED WHEEL (left)	1	a13KC1K	
(right)	1	a13KC2	
dowel (2)	(1)	13KC3	*.03*
pin (44)	(1)	a13KC4	*.01*
ratchet (driving)	(1)	13KC5	*.80*
" (stop)	(1)	13KC6	*.80*
" rivet (4)	(1)	13KC7	*.02*
" separating washer	(1)	13KC8	*.32*
shaft	1	13KC9	
" knob (knurled)		13KC10	.30
" " set screw		13KC11	.03
PAPER FEED WHEEL complete with above parts		Xa13KC	13.93
NOTE: a13KC1K is assembled with a13KC2, 13KC3, a13KC4, 13KC5, 13KC6, 13KC7, 13KC8 and 13KC9 and cannot be furnished without these parts. Price assembled			13.60

Exchange of Paper Feed Wheels Xa13KC.

To replace a broken Paper-feed-wheel Shaft 13KC9 requires special tools (the distance between the wheels must be exact) and we do not, therefore, furnish these Shafts separately. Instead we exchange repaired Paper Feed Wheels Xa13KC for Paper Feed Wheels having a broken Shaft. We charge $13.93 for the repaired Paper Feed Wheels Xa13KC and make a credit of $11.93 upon the receipt in Philadelphia of the broken Shaft with all attached parts in good condition.

12-11-12

Insert facing page folioed
[Style D Keyboard] 19

For Keyboards 3127 to 3216 inclusive order:
PAPER FEED WHEEL pin (44) ..... (1).. 13KC4 .01
PAPER FEED WHEEL complete with parts a13KC1K, 13KC10 and 13KC11 ..... X13KC 13.93
Note: The above is due to change in diameter of the Pins.

PAPER GUIDE
brake arm (right) ..... 1.. 45KC1K
" " (left) ..... 1.. 45KC2
" rod ..... 1.. 45KC3
fulcrum pin (2) ..... 1.. 45KC4
" " plate (2) ..... 1.. 45KC5
" " " rivet (4) ..... 1.. 45KC6
rod ..... 1.. 45KC7
plate (right) ..... 1.. 45KC8
" (left) ..... 1.. 45KC9
tension rod ..... (1).. 45KC10 .15
" " spring (2) ..... (1).. 45KC11 .06
weight ..... 1.. 45KC12
PAPER GUIDE complete with above parts X45KC 5.00
NOTE: 45KC1K is assembled with 45KC2, 45KC3, 45KC4, 45KC5, 45KC6, 45KC7, 45KC8, 45KC9, 45KC10, 45KC11 and 45KC12 and cannot be furnished without these parts. Price assembled 5.00

PAPER SHAFT (for supply roll) ..... 14KC1 .20

PAPER SPOOL
flange (2) ..... 1.. 15KC1K
tube (inner) ..... 1.. 15KC2
" (outer) ..... 1.. 15KC3
PAPER SPOOL complete with above parts X15KC 1.00
NOTE: 15KC1K is assembled with 15KC2 and 15KC3 and these parts cannot be furnished separately. Price assembled 1.00

PAPER-SPOOL SHAFT ..... 1.. 16KC1K
head ..... 1.. 16KC2
PAPER-SPOOL SHAFT complete with above parts .... X16KC .50
NOTE: 16KC1K is assembled with 16KC2 and these parts cannot be furnished separately. Price assembled. .50

PAPER-SPOOL-SHAFT BEARING (left) ..... 17KC1 .20
" nut ..... 17KC2 .06
spring ..... 17KC3 .05
PAPER-SPOOL-SHAFT BEARING complete with above parts ..... X17KC .31

PAPER TOWER
cylinder ..... 1.. 18KC1K
" die (for X32KC) ..... 1.. 18KC2
" " screw (4) ..... (1).. 18KC3 .03
" dowel (2) ..... (1).. 18KC4 .07
" head (2) ..... 1.. 18KC5

PAPER TOWER—*Continued*

cylinder head screw (6)	(1)..	18KC6	.02
" screw (4)	(1)..	18KC7	.05
" slide (2)	1..	18KC8	
" " stop screw (2)	(1)..a	18KC38	.03
housing (left)	1..	18KC9	
" punch lock	2(1)..	18KC10K	
" " " knob	(1)..	18KC11	.25
" " " " dowel	(1)..	18KC12	.03
" " " pin	(2)(1)..	18KC13	.04
" screw (2)	..	18KC14	.06
" (right)	1..a	18KC15	
" paper wind shaft	3(1)..	18KC16K	
" " " " nut	(1)..	18KC17	.05
" " " " pin	(3)(1)..	18KC18	.03
" " " " spring post	(1)..	18KC19	.10
" " " " washer	(1)..	18KC20	.05
" screw (2)	..	18KC21	.06
" spring post (for 5KC3, 6KC3, 7KC2, 23KC2, 24KC2) (2)	(1)..a	18KC22	.10
" stop bracket (for a21KC7)	(1)..a	18KC23	.25
" stud (for a23KC1K)	(1)..b	18KC24	.10
" " cotter	(1)..a	18KC25	.00
" " washer	(1)..a	18KC26	.03
punch guide	(1)..	18KC29	2.75
" " index plate	(1)..	18KC30	.25
" " " " screw (2)	(1)..	18KC31	.03
" " screw (left, long)	(1)..	18KC32	.04
" " " (right, short)	(1)..	18KC33	.03
tension arm (for X33KC)	(1)..	18KC34	2.50
" " key (for 18KC36)	(1)..	18KC35	.03
" " lever (for 12KC1)	(1)..	18KC36	.40
" " " clamp screw	(1)..	18KC37	.05

PAPER TOWER complete with above parts.....X18KC

NOTE: X18KC is assembled with Xa2KC, X3KC, X5KC, Xa6KC, X7KC, Xa8KC, Xa13KC, X17KC, Xa21KC, X22KC, Xa23KC, Xa24KC, Xa25KC, X34KC and X35KC and cannot be furnished without these parts. Price assembled complete..... 74.01

NOTE: 18KC1K is the same as X18KC (see above) and must be assembled with the same parts except that 18KC1K does not include the four SCREWS 18KC14 and 18KC21. Price assembled..... 73.77

NOTE: 18KC10K is assembled with 18KC13 and cannot be furnished without this part. Price assembled... .46

NOTE: 18KC16K is assembled with 18KC18 and cannot be furnished without this part. Price assembled... 1.03

§ Paper-tower-cylinder-slide Stop Screws a18KC38 are to prevent § § the Slides being opened far enough to strike the Paper Feed Wheels. § § These Stop Screws are standard on Keyboards 3832 and following. § § They may be applied to Keyboards prior to 3832 if the Cylinder § § 18KC1K is drilled and tapped to receive them and the Slides 18KC8 § § are shortened. Directions for these alterations will be furnished § § when required. §

PAPER-TOWER COVER (rear)....1.. 19KC1K
knob....(1).. 19KC2 .10
thumb screw (in 35KC7) (2)..... 19KC3 .10

PAPER-TOWER COVER complete with above parts....X19KC . 1.05

NOTE: 19KC1K is assembled with 19KC2 and cannot be furnished without this part. Price assembled..... .85

PAPER-TOWER COVER (front, large)..... 20KC1 .20
(front, small)..... 20KC2 .10
screw (5)..... 20KC3 .04

PAPER-TOWER COVER complete with above parts....X20KC .50

PAPER WIND LEVER....1.. 21KC1K
stud (for b24KC1K).....(1)..a21KC2 .06
" cotter.....(1)..a21KC3 .00
" washer.....(1)..a21KC4 .03
" (for a21KC7).....(1)..a21KC5 .06
" cotter.....(1)..a21KC6 .00
driving rod.....a21KC7 .25
spring post (for a24KC4)....(1)..a21KC8 .04

PAPER WIND LEVER complete with above parts....Xa21KC 1.10

NOTE: 21KC1K is assembled with a21KC2, a21KC3, a21KC4, a21KC5, a21KC6 and a21KC8 and cannot be furnished without these parts. Price assembled..... .85

PAPER WIND RATCHET....1.. 22KC1K
spring..... 22KC2 .05
" post (in 22KC1K)..(1).. 22KC3 .04

PAPER WIND RATCHET complete with above parts..X22KC 1.05

NOTE: 22KC1K is assembled with 22KC3 and cannot be furnished without this part. Price assembled..... 1.00

PAPER-WIND-RATCHET DETENT....1..a23KC1K
spring..... 23KC2 .05
pin.....(1)..a23KC3 .02

PAPER-WIND-RATCHET DETENT complete with above parts.....Xa23KC .40

NOTE: a23KC1K is assembled with a23KC3 and cannot be furnished without this part. Price assembled.. .35

PAPER-WIND-RATCHET PAWL....1..b24KC1K
pin.....(1)..a24KC3 .02
spring (long)..... 24KC2 .08
spring (short).....a24KC4 .05
" post (for a24KC4)..(1)..a24KC5 .04

PAPER-WIND-RATCHET PAWL complete with above parts..... Xa24KC .48

NOTE: b24KC1K is assembled with a24KC3 and a24KC5 and cannot be furnished without these parts. Price assembled..... .35

Paper-feed-release-plate-link Bracket, follows Xa8KC....b25KC1K
Pawl Catch, see Paper-feed-release-plate-link Bracket.....b25KC1K
Pawl Trip Plate, see Paper Feed Release Plate..... 8KC1K

PIPE (in 29KC1K; to 46KB6; first section)		26KC1	.10
union (female end)		26KC2	.05
PIPE complete with above parts		X26KC	.15
PIPE (in 29KC1K; to 36KB1 right; first section)		27KC1	.20
(in 29KC1K; to 36KB1 left; first section)		27KC2	.20
union (female end) (2)		27KC3	.05
PIPE complete with above parts		X27KC	.50
Pipe, see Hose		1KC1	
Pipe, see Piston-block-base Pipe		30KC8	
Pipe, see Valve-bank-air-filter Vent Pipe		42KC1	
PISTON (regular) (9–16″ diam.) (38)		28KC1	.25
(for 24KB1K) (11–16″ diam.)		28KC2	.30
PISTON complete with above parts		X28KC	9.80
PISTON BLOCK	1	29KC1K	
plate (cover for Tension-arm Piston)	2	29KC2K	
" pin (for 29KC10)	(2)	29KC3	.04
" screw (2)		29KC4	.05
plug screw (brass) (3)		29KC7	.02
screw (8)		29KC8	.07
space switch piston		29KC9	.30
" " " spring		29KC10	.05
" " valve plunger		29KC11	.10
" " " " bushing	(1)	29KC12	.10
" " " " link		29KC13	.10
spring post (for 36KC5)		29KC14	.04
valve (for shifting the reverse)		29KC15	.25
" bushing	(1)	29KC16	.20
" handle		29KC17	.10
" " pin		29KC18	.01
" spring		29KC19	.05
PISTON BLOCK complete with above parts		X29KC	22.22
NOTE: 29KC1K is assembled with 29KC12 and 29KC16 and cannot be furnished without these parts. Price assembled			20.00
NOTE: 29KC2K is assembled with 29KC3 and cannot be furnished without this part. Price assembled			.50
PISTON-BLOCK BASE	1	30KC1K	
bracket (left)	(1)	30KC2	2.00
" (right)	(1)	30KC3	2.00
" plate (for Pipes)	1	30KC4	
" " screw (lower, long) (2)	(1)	30KC5	.06
" " " (rear, short) (2)	(1)	30KC6	.06
" screw (4)	(1)	30KC7	.07
pipe (from Plunger 11)	(1)	30KC8	.36
" (" " 4)	(1)	30KC9	.42
" (" " 15)	(1)	30KC10	.30
" (" " 5)	(1)	30KC11	.54
" (" " 13)	(1)	30KC12	.36
" (" " 10)	(1)	30KC13	.33
" (" " 2)	(1)	30KC14	.30
" (" " 14)	(1)	30KC15	.24

PISTON-BLOCK BASE—*Continued*

pipe (from Plunger 7)	(1)	30KC16	.42
" " " 16) (.0005 justifying)	(1)	30KC17	.17
" " " 9)	(1)	30KC18	.29
" " " 1)	(1)	30KC19	.30
" " " 12)	(1)	30KC20	.12
" " " 3)	(1)	30KC21	.20
" " " 6)	(1)	30KC22	.10
" " " 8)	(1)	30KC23	.21
" " " B)	(1)	30KC24	.27
" " " R)	(1)	30KC25	.30
" " " JD)	(1)	30KC26	.57
" " " A)	(1)	30KC27	.27
" " " S)	(1)	30KC28	.33
" " " 17) (.0075 justifying)	(1)	30KC29	.20
" " " E)	(1)	30KC30	.20
" " " K)	(1)	30KC31	.30
" " " I)	(1)	30KC32	.20
" " " H)	(1)	30KC33	.24
" " " O)	(1)	30KC34	.30
" " " F)	(1)	30KC35	.47
" " " N)	(1)	30KC36	.35
" " " D)	(1)	30KC37	.46
" " " G)	(1)	30KC38	.43
" " " J)	(1)	30KC39	.35
" " " L)	(1)	30KC40	.35
" " " M)	(1)	30KC41	.31
" " " C)	(1)	30KC42	.45
" (29KC11 to Space Switch)	(1)	30KC43	.35
" (30KC4 to Reversing-valve Chest)	(1)	30KC44	.66
" (30KC4 to Tension-arm Piston)	(1)	30KC45	.18
" (Reversing Valve to 36KB1 left)	(1)	30KC46	.35
" (29KC15 to 28KC2)	(1)	30KC47	.63
" (.0005 Justifying Piston to 29KC15)	(1)	30KC48	.54
" (28KC2 to 1KB2K)	(1)	30KC49	.39
" (Reversing Valve to 36KB1 right)	(1)	30KC50	.27
" (Justifying Space Piston to Justifying-scale-pointer Piston)	(1)	30KC51	.45
" (Tension-arm Piston to Reversing-valve Chest)	(1)	30KC52	.57
" (Tension-arm Piston to Paper-feed-valve Chest)	(1)	30KC53	.30
" (Paper-feed-valve Chest to Paper-feed Driving Piston)	(1)	30KC54	.12
" (Paper-feed-valve Chest to Paper-feed Return Piston)	(1)	30KC55	.12
" (Space Switch Piston to Space Piston)	(1)	30KC56	.30
screw (4)		30KC57	.07
PISTON-BLOCK BASE complete with above parts		X30KC	40.28

NOTE: 30KC1K is assembled with 30KC2 to 30KC56 inclusive and cannot be furnished without these parts.
Price assembled 40.00

PISTON LEVER (for first row of Links) (5)	31KC1	.40
(for second row of Links) (5)	31KC2	.40
(for third row of Links) (6)	31KC3	.40
(for fourth row of Links) (5)	31KC4	.40
(for fifth row of Links) (6)	31KC5	.40

PISTON LEVER—*Continued*

(for sixth row of Links) (6)	31KC6	.40
fulcrum rod (2)	31KC7	.10
" " bracket (left)	31KC8	2.00
" " " lever (for 29KC11)	31KC9	.15
" " " " fulcrum pin	31KC10	.05
" " " " hook	31KC11	.10
" " " (right)	31KC12	2.00
" " " screw (4)	31KC13	.07
link (33)	31KC14	.20
separator washer (33)	31KC15	.05
stop bar (lower)	31KC16	.40
" " screw (2)	31KC17	.05
" " (upper) (2)	31KC18	.20
" " screw (4)	31KC19	.05
PISTON LEVER complete with above parts	X31KC	27.33

PISTON LEVERS are listed according to the position of their LINKS. Thus, LEVERS 31KC1 have their LINKS nearest the front of the KEYBOARD.

Plunger, see Valve-bank Plunger	41KC12	
PUNCH (regular) (29)	32KC1	.15
(justifying) (2)	32KC2	.18
PUNCH complete with above parts	X32KC	4.71
PUNCH BAR (front) (10)	33KC1	.30
(middle) (11)	33KC2	.30
(rear) (12)	33KC3	.30
PUNCH BAR complete with above parts	X33KC	9.90

PUNCH BARS are listed according to the position of their lower end in the PISTON LEVERS 31KC1 to 31KC6 inclusive. Thus, PUNCH BARS 33KC1 have their lower end nearest the front of the KEYBOARD.

PUNCH-BAR LEVER (for operating 32KB1K and 32KB2) (regular) (14)	34KC1	.25
(left hand) (bent)	34KC2	.25
(right hand) (front end)	34KC3K	
(" ") (rear end)	34KC4	
(" ") packing piece (*1*)	34KC5	*.05*
rivet (2) (*1*)	34KC6	*.01*
bracket a	34KC7	5.00
" plunger (for 32KB3)	34KC8	.20
" " head (knurled)	34KC9	.15
" " sleeve nut	34KC10	.10
" " spring	34KC11	.05
" screw (4)	34KC12	.05
fulcrum rod	34KC13	.10
liner (.0284" thick) (14) a	34KC14	.04
" separator a	34KC15	.80
" " screw (4) a	34KC16	.04
PUNCH-BAR LEVER complete with above parts	X34KC	11.57

NOTE: 34KC3K is assembled with 34KC4, 34KC5 and 34KC6 and cannot be furnished without these parts.

Price assembled	.50

PUNCH-BAR SEPARATOR (32)..... 35KC1 .03
guide..... 35KC2 1.00
" screw (9–16″ long) (top) (2)..... 35KC3 .04
" " (13–16″ ") (rear) (2)..... 35KC4 .05
shoe (front)..... 35KC5 .25
" screw (2)..... 35KC6 .03
" (rear)..... 35KC7 .60
" screw (2)..... 35KC8 .05

PUNCH-BAR SEPARATOR complete with above parts X35KC 3.15

Punch-bar-separator-shoe Thumb Screw, see Paper-tower-cover Thumb Screw..... 19KC3

Reverse Shift Valve, see Piston-block Valve, for shifting the reverse..... 29KC15

REVERSING VALVE..... 36KC1 .25
bell crank.....1.. 36KC2K
" " pin (for 36KC1)....(1).. 36KC3 .05
" " piston link..... 36KC4 .15
" " spring..... 36KC5 .05
" " " post.....(1).. 36KC6 .03
" " stud (for 36KC4)...(1)..a36KC7 .06
" " " cotter.....(1)..a36KC8 .00
" " " washer.....(1)..a36KC9 .03

REVERSING VALVE complete with above parts..... X36KC 1.45

NOTE: 36KC2K is assembled with 36KC3, 36KC6, a36KC7, a36KC8 and a36KC9 and cannot be furnished without these parts. Price assembled..... 1.00

REVERSING-VALVE BRACKET.....1.. 37KC1K
plug screw (brass) (2).....(1).. 37KC2 .02
screw (4)..... 37KC3 .05
stud (for 36KC2K).....(1).. 37KC4 .07
" nut..... 37KC5 .04
" washer..... 37KC6 .03

REVERSING-VALVE BRACKET complete with above parts.....X37KC 1.27

NOTE: 37KC1K is assembled with 37KC2 and 37KC4 and cannot be furnished without these parts. Price assembled..... 1.00

TENSION-ARM CONNECTING ROD..... 38KC1 .12
forked eye (2)..... 38KC2 .25
" " lock nut (2)..... 38KC3 .04
" " oil pad (for lower Eye)...a38KC6 .02
" " pin (2)..... 38KC4 .05
" " " cotter (4)..... 38KC5 .00

TENSION-ARM CONNECTING ROD complete with above parts.....X38KC .82

TENSION-ARM-CONNECTING-ROD LEVER.....1.. 39KC1K
bracket..... 39KC2 .55
" oil pad (for 39KC8).a39KC11 .02
" screw (2)..... 39KC3 .06
bushing (center).....1.. 39KC4
" ring.....1.. 39KC5

TENSION-ARM-CONNECTING-ROD LEVER—*Continued*

bushing (end)	1..	39KC6	
" ring	1..	39KC7	
fulcrum pin		39KC8	.05
" " cotter (2)		39KC9	.00
roller bearing (for a38KB12)		39KC10	.10

TENSION-ARM-CONNECTING-ROD LEVER complete with above parts..... X39KC 1.94

NOTE: 39KC1K is assembled with 39KC4, 39KC5, 39KC6 and 39KC7 and these parts cannot be furnished separately. Price assembled..... 1.10

TENSION-ARM PISTON ROD	1..	40KC1K	
forked eye		40KC2	.25
" " lock nut		40KC3	.04
" " pin		40KC4	.05
" " " cotter (2)		40KC5	.00
head	1..	40KC6	

TENSION-ARM PISTON ROD complete with above parts. X40KC .49

NOTE: 40KC1K is assembled with 40KC6 and these parts cannot be furnished separately. Price assembled.. .15

Trip-plate Catch, see Paper-feed-release-plate-link Bracket		b25KC1K	
Valve, see Paper Feed Valve		10KC1	
Valve, see Piston-block Valve, for shifting the reverse		29KC15	
Valve, see Reversing Valve		36KC1	
Valve, see Valve-bank Plunger		41KC12	

VALVE BANK	1..	41KC1K	
air filter	2..	41KC2K	
" " cap	2..	41KC3	
" " " screw (8)	(2)..	41KC4	.06
" " frame (clamp for 41KC7) (4)	(2)..	41KC5	.15
" " " screw (12)	(2)..	41KC6	.04
" " packing (muslin) (8) (per set)	(2)..	41KC7	.10
" " screen (4)	(2)..	41KC8	.05
" " screw (to 41KC1K) (long) (4)		41KC9	.07
" " " (to 41KC1K) (short) (9)		41KC10	.06
bolt (to 30KC4) (10)		41KC11	.06
plunger (35)		41KC12	.05
" bushing (for 41KC12) (35)	(1)..	41KC13	.10
" return bar	(3) (2)..	41KC15K	
" " " bushing (2)	(3)	41KC16	.10
" " " plunger (2)	(2)..	41KC17	.10
" " " " bushing (2)	(2)..	41KC18	.10
" " " " cotter (2)	(2)..	41KC19	.00
" " " " nut (2)	(2)..	41KC20	.04
" " " " spring (2)	(2)..	41KC21	.05
" " " " washer (2)	(2)..	41KC22	.03

VALVE BANK complete with above parts..... X41KC 25.22

NOTE: 41KC1K is assembled with 41KC13 and cannot be furnished without these parts. Price assembled..... 10.50

NOTE: 41KC2K is assembled with 41KC3 to 41KC8 inclusive, 41KC15K, and 41KC17 to 41KC22 inclusive

and cannot be furnished without these parts. Price assembled..... 11.55

NOTE: 41KC15K is assembled with 41KC16 and cannot be furnished without these parts. Price assembled..... *1.06*

For Keyboards 3851 and following order: Improvement No. 2

VALVE BANK.....1..a41KC1K
air filter.....2..a41KC2K
oil pipe (2).....a41KC24 .11
" " cap (2).....a41KC25 .04
plunger return bar.....(3) (2)..a41KC15K
" " " bushing (2).....(3).....a41KC16 *.10*
" " " plunger (2).....(3).....a41KC17 *.10*
" " " " cotter (2).(3)..... 41KC19 *.00*
" " " oil pad.....(3).....a41KC23 *.11*

VALVE BANK complete with parts a41KC1K, a41KC2K, 41KC9, 41KC10, 41KC11, a41KC24, a41KC25, and 41KC12.....Xa41KC 25.52

NOTE: a41KC1K is assembled with 41KC13 and cannot be furnished without these parts. Price assembled..... 10.50

NOTE: a41KC2K is assembled with 41KC3, 41KC4, 41KC5, 41KC6, 41KC7, 41KC8, a41KC15K, 41KC18, 41KC20, 41KC21, and 41KC22 and cannot be furnished without these parts. Price assembled 11.55

NOTE: a41KC15K is assembled with a41KC16, a41KC17, 41KC19, and a41KC23 and cannot be furnished without these parts. Price assembled..... *1.25*

VALVE-BANK-AIR-FILTER VENT PIPE..... 42KC1 .10
coupling..... 42KC2 .05
elbow..... 42KC3 .05
" close nipple (1–8″, iron)..... 42KC4 .05
pet cock (1–8″)..... 42KC5 .60

VALVE-BANK-AIR-FILTER VENT PIPE complete with above parts.....X42KC .85

Paper Guide, follows Xa13KC..... 45KC1K

Improvement No. 1

In effect on Keyboards 3601 and following.

When applied to your Keyboards fill in the following:

Applied to Keyboards Nos. **Date**

Object: Improved shape of teeth on b26KB1K, a35KB1K and a38KB1K, and to reduce the wear on a29KB5 and a38KB12.

To equip Keyboards 3127 to 3600 inclusive with this improvement requires the following parts. These parts must be furnished together when ordered for the first time.

SPECIAL PRICE: To give our customers the benefit of our latest Improvement we will furnish the required parts of this Improvement, for any Keyboard not already equipped with them, at the Special Price of $9.00.

UNIT RACK.....1..b26KB1K

NOTE: b26KB1K is assembled with 26KB2 and 26KB3 and cannot be furnished without these parts. Price assembled..... 1.40

UNIT-RACK SLIDE.....1..a29KB1K
stud (for a38KB12).....a29KB5 .10
" nut.....a29KB6 .04

NOTE: a29KB1K is assembled with 29KB3 and 29KB4 and cannot be furnished without these parts. Price assembled..... 3.50

UNIT WHEEL complete.....Xb35KB 5.00

UNIT-WHEEL PAWL .....1..a38KB1K
operating lever.....1..a38KB12

NOTE: a38KB1K is assembled with 38KB2, 38KB3, 38KB4, 38KB5, 38KB6, 38KB7, 38KB8, 38KB9, 38KB10, 38KB11, a38KB12 and a38KB13 and cannot be furnished without these parts. Price assembled.... 5.75

To equip Keyboards 3127 to 3269 inclusive with this improvement requires, in addition to the above, the following new part:

UNIT-RACK ABUTMENT bracket.....3..a27KB5K

NOTE: a27KB5K is assembled with 27KB6 and cannot be furnished without this part. Price assembled.... 1.00

On Keyboards 3127 to 3267 inclusive and 3269 in addition to the above, the new UNIT-WHEEL STANDARD a46KB1K and the UNIT-WHEEL-STANDARD CAP a46KB5 must be furnished, or else the old STANDARD 46KB1K and its CAP 46KB5 must be altered to use with the new style UNIT WHEEL Xb35KB. Directions for this alteration will be furnished when required.

On Keyboards 3127 to 3350 inclusive it will be necessary to open out the holes in the UNIT-WHEEL STANDARD a46KB1K, for the UNIT-RACK-ABUTMENT-BRACKET STUDS 27KB7, to 9–32″. The opening in the front of the UNIT-WHEEL STANDARD must also be extended upward to provide a clearance for the NUT a29KB6. Directions for these alterations will be furnished when required.

Improvement No. 2

In effect on Keyboards 3851 and following.

When applied to your Keyboards fill in the following:

Applied to Keyboards Nos. **Date**

Object: Improved oiling facilities for the Valve-bank Plungers.

SPECIAL EXCHANGE PRICE: For Keyboards 3127 to 3850 inclusive, instead of furnishing a new VALVE BANK and AIR FILTER, we have arranged to alter the old style VALVE BANKS and AIR FILTERS to conform to this improvement. These alterations require special tools and fixtures and can be made only at our factory. In order not to delay our customers by having them send their VALVE BANKS to our factory for alteration, we will exchange a rebuilt VALVE BANK Xa41KC complete with all the parts of this improvement for the customer's old VALVE BANK X41KC complete at the Special Price of $7.00.

VALVE BANK	1	a41KC1K		
air filter	2	a41KC2K		
oil pipe (2)		a41KC24	.11	
" " cap (2)		a41KC25	.04	
plunger return bar	(3)	(2)	a41KC15K	
" " " bushing (2)	(3)		a41KC16	.10
" " " plunger (2)	(3)		a41KC17	.10
" " " " cotter (2)	(3)		41KC19	.00
" " " oil pad	(3)		a41KC23	.11

VALVE BANK complete with parts a41KC1K, a41KC2K, 41KC9, 41KC10, 41KC11, a41KC24, a41KC25, and 41KC12 ..... Xa41KC 25.52

NOTE: a41KC1K is assembled with 41KC13 and cannot be furnished without these parts. Price assembled 10.50

NOTE: a41KC2K is assembled with 41KC3, 41KC4, 41KC5, 41KC6, 41KC7, 41KC8, a41KC15K, 41KC18, 41KC20, 41KC21, and 41KC22 and cannot be furnished without these parts. Price assembled 11.55

NOTE: a41KC15K is assembled with a41KC16, a41KC17, 41KC19, and a41KC23 and cannot be furnished without these parts. Price assembled 1.25

On Keyboards 3127 to 3850 inclusive two holes must be drilled in the PISTON-BLOCK BASE 30KC1K for the OIL PIPES a41KC24 and the re-entrant corner on the upper surface of the BASE may need to be filed slightly to clear the left hand OIL PIPE a41KC24. These alterations can be made in the customer's plant. Tools and directions will be furnished for this when required.

The Mold

Mold Parts and Repairs to Molds

The Mold is the vital part of the Monotype; it is built with the greatest possible accuracy, and the errors in its construction do not exceed two ten-thousandths of an inch. To obtain such accuracy requires special tools and gages and workmanship of the highest order. In work of this character it is essential that the working parts of each Mold be fitted together and we therefore do not furnish these parts unless the Mold be returned to our factory to have them applied.

In the following price list the parts that can be applied without fitting are marked with an asterisk (*); these can be applied without returning the Mold to the factory and will be furnished on order.

It is to our mutual interest that Molds be as nearly perfect as possible; therefore we make no charge for fitting parts to Molds returned to our factory, charging only for the material furnished as per this price list.

Every Mold returned to us is thoroughly cleaned, adjusted and tested before being returned. Price for cleaning, adjusting and testing.....$2.50.

If a Mold be worn, through incorrect adjustment or failure to oil properly, it must be lapped to restore it to true. Price for lapping.....$4.00.

If a Mold be cut, through failure to oil properly, it must be ground as well as lapped. Price for grinding and lapping .....$6.00.

When a Mold is returned to us making type less than .917″ high to paper we apply the necessary parts to restore its height unless specifically notified not to do so.

Because of the importance of returning Molds to our customers as promptly as possible we do not submit estimates for Mold repairs where the cost of overhauling the Mold is less than $20.00, unless we are specifically instructed to do so.

STYLE E MOLD

For casting in justified lines (with either high or low quads and spaces at the will of the operator) or as sorts any one point size from 5 to 12 point inclusive; also for casting both high and low quads and space material of the same point size and up to 12 points in width setways.

BASE PLATE	1ME	16.50
bushing (copper) (1–2″ long)	1ME8	.02
" (copper) (11–16″ long)	1ME9	.02
front abutment*	1ME1	5.25
" " name plate*	1ME13	.15
" " " " screw (2)*	1ME14	.03
" " packing block (under 1ME1)	1ME12	3.00
" " screw (3)*	1ME2	.06
" " shoe*	1ME3	1.75
" " " adjusting screw (left, blunt)*	1ME4	.06
" " " adjusting screw (right, pointed).*	1ME11	.06
" " " adjusting screw lock nut (2)*	1ME5	.04
gate pusher cam*	1ME6	.75
" " " screw (3)*	1ME7	.04
CROSS BLOCK	4ME	6.00
coupling†	4ME1	1.15
" screw*	4ME2	.05
dowel (for 4ME11)	4ME13	.10
gate block (adjustable)	4ME9	13.50
" " adjusting screw*	4ME10	.04
" " screw (4) (from 4ME9)*	4ME7	.05
" " (fixed)	4ME11	13.50
" " oil pad (felt)*	4ME18	.04
" " screw (4) (from 4ME11)	4ME12	.05
" pusher†	4ME3	1.50

† Note: When this part is ordered, to be applied to a Mold outside our factory, the old part must be sent in with the order. All Mold parts are especially fitted by hand and in no other way can we be sure that the new part will fit.

MOLD BLADE (lower) (designate by point size)	8ME	7.00
stop	3ME1	3.00
" cap*	3ME7	.35
" " screw (2)*	3ME2	.04

*** Can be applied without returning Mold to factory.**

MOLD BLADE (upper) (designate by point size)		9ME	2.00
carrier		9ME20	16.00
" shoe	*	9ME3	.85
" " spring	*	2ME38	.05
" latch	*	9ME19M	
" " fulcrum pin	*	9ME1	.03
" " spring	*	9ME4	.05
" " " post (1)	*	9ME2	.03
" pin (stop for 9ME)	*	9ME22	.03
" spring post	*	9ME21	.02
rivet (long)		9ME24	.01
" (short) (3)		9ME23	.01

NOTE: 9ME19M is assembled with 9ME2 and cannot be furnished without this part. Price assembled 2.03

MOLD-BLADE-CARRIER GUIDE BLOCK (lower left guide for 9ME20)	*	13ME	.70
screw (2)	*	13ME1	.03
" washer (2)	*	13ME2	.03

MOLD-BLADE-CARRIER SIDE ABUTMENT (lower right guide for 9ME20)		12ME	.40
screw (left)		12ME3	.04
" (right)		12ME1	.04
" washer		12ME2	.03

MOLD-BLADE SHIELD		3ME5	2.50
screw (2)	*	3ME6	.04

MOLD-BLADE TOP GUIDE (upper right guide for 9ME)		3ME3	3.25
screw (2)	*	3ME4	.04

POINT BLOCK (designate by point size)		7ME	.75

TYPE BLOCK (adjustable) (5 to 12 point)		2ME12	12.50
bushing (copper) (5–32" long)		2ME14	.02
clamp bolt	*	2ME22	.30
" " nut	*	2ME24	.07
" " washer	*	2ME23	.05
nick pin		2ME13	.15
" " plug		2ME43	.10
oil pad	*	2ME21	.04
plug (brass) (in top)		2ME16	.02
" screw (brass) (4)	*	2ME11	.02
" " (brass) (2) (in right end)	*	2ME20	.02
screw (from 2ME) (lower) (2)	*	2ME17	.05
" (from 1ME)	*	2ME19	.06
" (from 2ME) (rear) (2)	*	2ME18	.05

TYPE BLOCK (fixed) (5 to 8 point)		2ME40	9.50
(9 to 12 point)		2ME41	9.50
adjusting screw (2)		2ME5	.04
bushing (copper) (3–32" long)		2ME47	.02
" (copper) (1–4" long)		2ME48	.02
cover plate		2ME35	.10
" " screw (2)	*	2ME36	.03

*** Can be applied without returning Mold to factory.**

TYPE BLOCK (fixed)—*Continued*			
guide screw (for 9ME3)	*	2ME32	.07
" " adjusting screw	*	2ME33	.03
" " " " lock nut	*	2ME34	.04
plug screw (brass) (2)	*	2ME50	.02
" " (brass) (in bottom)		2ME25	.02
screw (from 1ME)		2ME10	.06
" (from 2ME) (lower)		2ME8	.05
stop screw (stop for 2ME22)		2ME44	.03
screw (from 2ME) (rear)		2ME9	.05
TYPE-BLOCK SQUARING PLATE		2ME	22.50
adjusting screw (4)		2ME1	.04
bushing (copper) (1–2" long)		2ME3	.02
" (copper) (1–4" long)		2ME4	.02
" (copper) (3–16" long) (3)		2ME46	.02
plug screw (2) (in ends)	*	2ME7	.02
" " (in back)	*	2ME11	.02
screw (from 1ME) (3)		2ME2	.05

*** Can be applied without returning Mold to factory.**

STYLES Y AND Z MOLDS.

For casting sorts and high and low quads and space material. Pointways the range of the Style Y Mold is from 14 to 22 points inclusive and Style Z Mold from 24 to 36 points inclusive. Either Mold will cast up to 36 points inclusive setways.

This list of parts is for Molds for use with the Universal Type Carrier and does not apply to Molds 1Y to 21Y inclusive nor to Molds 1Z to 21Z inclusive which are for use with the Job Type Carrier.

BASE PLATE		1MS	18.50
front abutment		1M1	3.50
" "	screw (3)	* 1M2	.05
" "	shoe	*a1M3	1.50
" "	" screw (right, blunt)	* 1M4	.06
" "	" " (left, pointed)	*a1M11	.06
" "	" " lock nut (2)	* 1M5	.04
" "	oil pad (felt)	*a1M10	.05
" "	" " box	*a1M8	.14
" "	" " " screw (2)	*a1M9	.03

The earlier MOLDS have two blunt SCREWS 1M4 instead of one blunt and one pointed. When ordering SHOE a1M3 for the first time for one of these MOLDS the pointed SCREW a1M11 must also be ordered.

To apply the OIL-PAD BOX a1M8 to a MOLD not already equipped with it, requires that the BASE-PLATE FRONT ABUTMENT 1M1 be drilled and tapped to receive the two SCREWS a1M9. Directions for this will be furnished when required.

CROSS BLOCK		a4MS	10.00
coupling		* 4M1	1.15
"	screw	* 4M2	.05
dowel (for fixed Gate Block)		4M13	.10
gate block (adjustable)		a4MS9	5.25
" "	adjusting screw	* 4M10	.04
" "	(fixed)	a4MS11	5.25
" "	screw (4)	* 4MS12	.05
"	pusher	*a4MS3	1.00
squaring plate		4M6	5.25
" "	screw (to Cross Block) (3)	* 4M7	.04
" "	" (to Gate Blocks) (4)	* 4M8	.04

When a new COUPLING 4M1 is ordered, to be applied to a MOLD outside our factory, the old COUPLING must be sent in with the order. All MOLD parts are specially fitted by hand and we can in no other way be sure that the new COUPLING will fit.

*** Can be applied without returning Mold to factory.**

Gate Block, see Cross-block Gate Block	a4MS9	
Gate Pusher, see Cross-block Gate Pusher	a4MS3	
Jet Blade, see Cross-Block Gate Pusher	a4MS3	
Matrix Seat, see Type-block Matrix Seat	2MS6	
MOLD BLADE (high) (designated by point size)	6MS	9.00
stop	3MS	1.00
" screw (2)	*a3M2	.03
MOLD BLADE (low) (designated by point size)	5MS	9.00
bridge (for Style Z Molds)	5MS1	1.50
" plate	* 5MS2	.30
" screw (3)	* 5MS3	.04

For Style Y Molds order:

MOLD BLADE bridge	5MY1	1.50

Other parts of the group are the same as the Style Z MOLD.

For Molds without the separate Matrix Seat on the Adjustable Type Block 2MS12 order:

MOLD BLADE bridge (designated by point size)	8MS	1.50
screw	* 8MS1	.05

Omit parts 5MS1, 5MS2 and 5MS3.

Mold-blade Point Block, see Point Block	7MS	
Mold-blade Support, see Type-block-squaring-plate Bearing Block	a2M30	
POINT BLOCK (for Mold Blade) (designated by point size)	7MS	.75
adjusting screw	* 2MS22	.30
" " nut	* 2M24	.05
" " washer	* 2M23	.05

For Molds having Point-block Adjusting Screw 2MS22 with thread 13-16" long on the end taking the Nut 2M24 order:

POINT BLOCK adjusting screw washer	* 2MS23	.06

This improved WASHER may be applied to MOLDS not already equipped with it if the POINT-BLOCK ADJUSTING SCREW 2MS22 be ordered at the same time.

TYPE BLOCK (fixed) (for Style Z Molds)	2MS4	14.00
adjusting screw (2)	2M5	.04
nick pin	2MS13	.25
" " key	2M14	.12
plug screw	* 2M11	.02
screw (from Base Plate) (3)	2M10	.06
" (from Squaring Plate)	2MS9	.05
" washer	2MS34	.03

For all Style Y Molds order:

TYPE BLOCK (fixed)	2MY4	14.00

Other parts of the group are the same as the Style Z MOLD.

*** Can be applied without returning Mold to factory.**

TYPE BLOCK (adjustable)		2MS12	17.50
matrix seat		2MS6	1.50
" " screw (3)	*	2MS7	.04
" " abutment		2MS32	.50
" " " screw (2)	*	2MS33	.04
oil cup	*	2M16	.20
plug screw (brass) (3)	*	2M20	.02
screw (from Base Plate) (3)	*	2M19	.06
" (from Squaring Plate) (2)	*	2MS18	.05
" washer (5)	*	2MS35	.03

For Molds without the separate Matrix Seat on the Adjustable Type Block 2MS12 order:

TYPE BLOCK (adjustable)		a2MS12	17.50
plug screw (brass) (4)	*	2M20	.02

Omit parts 2MS6, 2MS7, 2MS32 and 2MS33.

Type-block Bridge, for Mold Blade, see Mold-blade Bridge		5MS1	
TYPE-BLOCK SQUARING PLATE		2MS	12.50
adjusting screw (4)		2M1	.04
bearing block (for Mold Blade)		a2M30	.25
screw (from Base Plate) (2)		a2M2	.06
TYPE-BLOCK WATER BASE		2MS25	11.00
plug screw (brass) (2)	*	2M28	.02
screw (from Base Plate) (2)		2MS29	.05
" (from Squaring Plate) (3)		2MS26	.06
Water Base, see Type-block Water Base		2MS25	

*** Can be applied without returning Mold to factory.**

Miscellaneous

MISCELLANEOUS PRICES

Miscellaneous Parts and Accessories for the Casting Machine, Keyboard and Compressor not listed in the regular Price Lists.

Air Compressor, see Compressor.

ASBESTOS CEMENT (for repairing packing of Metal Pot), per can.. .25

BELT (56″ long; from Motor on Cam Shaft side of Caster to Caster Pulley on machines not equipped with the Speed Regulating Attachment)..... 1.25

BELT (88″ long; from Motor on Melting Pot side of Caster to Caster Pulley on machines equipped with the Speed Regulating Attachment)..... 2.00

BRUSH (for cleaning Keyboard and Casting Machine)..... .10

Button Clip, see Key-button Clip.

CAM OILING ATTACHMENT, for the perfect lubrication of all CAMS on the CASTING MACHINE. Consists of OIL PAN, BRACKETS, SHELF, OIL GUARD, and necessary SCREWS, RIVETS, etc. Price complete..... 10.00

CAM OILING ATTACHMENT TOOLS* (for applying the Attachment) (Are included in the Display Attachment Tools)..... 5.00

NOTE: These tools are loaned, not sold. The customer will be charged but full credit will be made upon the return of the tools in good condition. All shipments of loan material must, of course, be made by express, and the customer pays transportation charges in both directions.

*NOTE: When the CAM OILING ATTACHMENT is applied to a CASTING MACHINE prior to No. 2647 there is required in addition to the CAM OILING ATTACHMENT TOOLS a special set of CAM-SHAFT-STAND CAPS, which see. The price of these CAPS is not included in the above price of CAM OILING ATTACHMENT TOOLS.

CAM-SHAFT-STAND CAPS (special set of four, including ten special big headed Screws, and forty Liners. Required for machines prior to No. 2647 in addition to the Display Attachment Tools when applying the Display Attachment or the Speed Regulating Attachment; also required for machines prior to No. 2647 in addition to the Cam Oiling Attachment Tools when applying the Cam Oiling Attachment)..... 25.00

NOTE: This special set of CAPS is loaned, not sold. The customer will be charged but full credit will be made upon the return of the set in good condition. All shipments of loan material must, of course, be made by express, and the customer pays transportation charges in both directions.

CARD COPY HOLDER (adjustable, for holding filing cards of any size) 12.00

CARRYING FRAME ADJUSTING GAGE 5.00

Caster Screw Driver, see Screw Driver, for Casting Machine.
Caster Wrench, see Wrench, for Casting Machine.

CASTING MACHINE INSTRUCTION BOOK ..... .50

CASTING MACHINE PLATE BOOK ..... .50

Casting Machine Reamer, see Reamer.

CELLULAR MATRIX CONE HOLE CLEANER 1.00

CENTERING-PIN ADJUSTING DEVICE TOOLS (for applying the device) 60.00

NOTE: These tools are loaned, not sold. The customer will be charged but full credit will be made upon the return of the tools in good condition. All shipments of loan material must, of course, be made by express, and the customer pays transportation charges in both directions.

COMPRESSOR (4 1-2″ x 4 1-2″, one cylinder, single acting, capacity 6 1-2 cu. ft. of free air per min. at 160 r.p.m., with Driving Pulley 24″ diam. and 4 1-2″ face)	1	91.00
gasket (rubber)	(1)	.65
grease cup (2)	(1)	.20
oil cup	(1)	.85
pet cock	(1)	.25
valve disk (2 extra with each Compressor)	(1)	1.00
wrench	(1)	.25

COMPRESSOR, 4 1-2″ x 4 1-2″, one cylinder (complete) 91.00

NOTE: Prices of other repair parts furnished on request.

COMPRESSOR (6″ x 6″, one cylinder, single acting, capacity 15 1-2 cu. ft. of free air per min. at 160 r.p.m., with Driving Pulley 32 1-2″ diam. and 5 1-2″ face)	1	116.00
gasket (rubber)	(1)	1.00
grease cup (2)	(1)	.25
oil cup	(1)	.85
pet cock	(1)	.25
valve disk (2 extra with each Compressor)	(1)	1.00
wrench	(1)	.25

COMPRESSOR, 6″ x 6″, one cylinder (complete) 116.00

NOTE: Prices of other repair parts furnished on request.

COMPRESSOR (6″ x 6″, two cylinder, single acting, capacity 31 cu. ft. of free air per min. at 160 r.p.m., with Driving Pulley 32 1-2″ diam. and 5 1-2″ face)	1	173.00
gasket (rubber) (2)	(1)	1.00
grease cup (4)	(1)	.25
oil cup (2)	(1)	.85
pet cock	(1)	.25
valve disk (2) (2 extra with each Compressor)	(1)	1.00
wrench	(1)	.25

COMPRESSOR, 6″ x 6″, two cylinder (complete) 173.00

NOTE: Prices of other repair parts furnished on request.

CONDENSING TANK (complete with Coils and Float Valve) 35.00

Copy Holder, see Card Copy Holder.
Copy Holder, regular 10″, see Style D Keyboard Price List, symbol 4KA1K.

COPY HOLDER (20″, for extra wide copy) (including Rollers and Frame) ..... 1.. 4.50
binder screw ..... (1) .. .12

COPY HOLDER (20″) complete with above parts 4.50

COPY HOLDER ROLLERS (10″), each ..... .40

COPY HOLDER ROLLERS (20″), each ..... .55

DISPLAY ATTACHMENT, enables the CASTING MACHINE to produce type from 14 to 36 point as sorts. Includes also the CAM OILING ATTACHMENT and SPEED REGULATING ATTACHMENT. Price complete (when furnished without the Display Molds) .. 125.00

DISPLAY ATTACHMENT TOOLS* (for applying the Attachment; also used for applying the Speed Regulating Attachment when this is furnished separately) 30.00

NOTE: These tools are loaned, not sold. The customer will be charged but full credit will be made upon the return of the tools in good condition. All shipments of loan material must, of course, be made by express, and the customer pays transportation charges in both directions.

*NOTE: When the DISPLAY ATTACHMENT or SPEED REGULATING ATTACHMENT is applied to a CASTING MACHINE prior to No. 2647 there is required in addition to the DISPLAY ATTACHMENT TOOLS a special set of CAM-SHAFT-STAND CAPS, which see. The price of these CAPS is not included in the above price of DISPLAY ATTACHMENT TOOLS.

DRILL (1-4″, for Pump Arm) ..... .25

DRILL (No. 30, for lower end of regular Nozzle and full length of Display Nozzle) ..... .07

DRILL (No. 50, for upper end of regular Nozzle) ..... .05

Gage, see Line Gage.
Gage, see Pica Gage.
Gage, see Storage-tank Pressure Gage.

GASOLINE BURNER (for Casting Machine)
These BURNERS are for liquid gasoline. We do not furnish supply tank, nor piping from supply tank to CASTER. The price of the GASOLINE BURNER outfit complete, consisting of GASOLINE BURNER complete, COPPER COIL, 1-8″ IRON PIPE, 1-4″ IRON PIPE, 1-4″ IRON ELBOW, two 1-8″ BRASS UNIONS, 1-4″ to 1-8″ IRON BUSHING, two 1-8″ to .190″ BRASS BUSHINGS, BURNER SUPPORT (rear), BURNER SUPPORT (front), RING (lower support for COIL), COIL SUPPORT (upper, front), COIL SUPPORT (upper, rear), and eight (3-16″ x 32 th.) SCREWS, is.. 20.00

Price of the GASOLINE BURNER alone, without extra parts, is, each 1.75

GASOLINE GAS BURNER (for Casting Machine)
These BURNERS can be used only for gasoline gas generated by a gas machine for illuminating purposes. They cannot be used for burning liquid gasoline. The price of the GASOLINE GAS BURNER outfit complete, consisting of two GASOLINE GAS BURNERS (with NIPPLES for attaching RUBBER HOSE), one GASOLINE GAS BURNER STAND, with two SET SCREWS, and two SPECIAL COLLARS, is 14.80

Price of the GASOLINE GAS BURNER alone is, each 6.00

Grease Cup, see Compressor Grease Cup.

HOSE (for Vacuum Cleaner, or Air Blast) (per foot) ..... .20

KEROSENE BURNER (for Casting Machine)
The price of the KEROSENE BURNER outfit complete, consisting of BURNER, BRACKET, KEROSENE TANK, FOOT PUMP, six extra SCREENS, PIPING and HOSE CONNECTION, is 25.00

KEYBOARD COVER (for D Keyboard) (cloth) 1.25

KEYBOARD COVER (for DD Keyboard) (cloth) 2.25

Keyboard Layout Card, see Table for Changing Pica Ems to Ems of Any Set.

KEYBOARD OIL (per gallon, without Can) 1.00

KEYBOARD OIL (per pint, including Can) ..... .20

KEYBOARD PLATE BOOK ..... .50

Keyboard Reamer, see Reamer.
Keyboard Screw Driver, see Screw Driver, for Keyboard.
Keyboard Wrench, see Wrench, for Keyboard.

KEY-BUTTON CLIP (slips over the regular Key Button, for quickly changing the layout) (designate by character), each ..... .05

KEY-BUTTON-CLIP LAYOUT BOARD (for holding the Clips when not in use on the Keyboard), each 2.50

LADLE (small, for Casting-machine Melting Pot) ..... .15

LINE GAGE (for lining up after changing face or point size) 15.00

LINE STANDARD (designate by size) ..... .50

LINE STANDARD (special .005" thick, for use under the regular Line Standards with faces which are .005" low line) ..... .50

LINE-STANDARD CASE ..... .75

LOW QUAD ATTACHMENT (to enable the Casting Machine to operate the Low-quad Composition Mold and produce composition with either high or low quads and spaces as desired) 50.00

LOW QUAD ATTACHMENT TOOLS (for applying the Attachment, including the Unlatching Device) 90.00

NOTE: These tools are loaned, not sold. The customer will be charged but full credit will be made upon the return of the tools in good condition. All shipments of loan material must, of course, be made by express, and the customer pays transportation charges in both directions.

MATRIX BOX (wooden, with compartments for holding extra composition Matrices) ..... .30

Matrices, all styles, for prices see Cellular Matrix Specimen Book.

MATRIX BOX (imitation leather, plush lined, for holding a font of Display Matrices) ..... .50

METAL MOLD (not water cooled) 2.00

MOLD (Style E, regular composition)
Furnished in any one of the following point sizes: 5, 5 1-2, 6, 7, 8, 9, 10, 11, and 12 points. Used for composition with either high or low quads and spaces at the will of the operator, also for casting sorts and both high and low quads and space material. Price per MOLD 150.00

MOLD (Style ES)
Furnished in any one of the following point sizes: 5, 5 1-2, 6, 7, 8, 9, 10, 11, and 12 points. Used for composition with high spaces and quads only. Similar to Style E MOLD except that it has a single BLADE and cannot therefore cast low quads or spaces. Price per MOLD 140.00

MOLD (Style VE)
Made adjustable to take MOLD BLADES of any point size from 5 to 12 points inclusive. The high and low BLADES of the same point size are carried in the MOLD together and cannot be furnished separately. Type and high and low quads and spaces of any given point size can be cast without exchanging MOLD BLADES. This MOLD is for casting sorts only and cannot be used for composition. The BLADES regularly furnished are 6, 8, 10, and 12 point but BLADES of any point size between the limits of 5 and 12 points inclusive can be furnished on order. Price of MOLD equipped with high and low MOLD BLADES of any one point size within the capacity of the MOLD 135.00

Additional MOLD BLADES for Style VE MOLD in any point size between the limits of 5 and 12 points inclusive, consisting of high BLADE, low BLADE, POINT BLOCK, and MOLD-BLADE STOP. Price, per point size, complete 20.00

MOLD (Style Y)
Made adjustable to take MOLD BLADES, either high or low, of any point size from 14 to 22 points inclusive. The high BLADES are for casting type and high quads and spaces. The low BLADES are for casting low quads and spaces and cannot be used for casting type. This MOLD is for casting sorts only and cannot be used for composition. The BLADES regularly furnished are 14, 18, and 20 point. Price of MOLD equipped with one BLADE, either high or low as ordered, for casting any one of the above regular point sizes 125.00

Additional MOLD BLADES for Style Y MOLD, either high or low as ordered, in 14, 18, or 20 point size, price per BLADE, complete with POINT BLOCK and MOLD-BLADE STOP 10.00

Additional MOLD BLADES for Style Y MOLD, either high or low as ordered, in any point size between the limits of 14 and 22 points inclusive (not included in the above regular sizes) will be made to order. Price, per BLADE, complete with POINT BLOCK and MOLD-BLADE STOP 12.00

MOLD (Style Z)
Similar to Style Y MOLD except that the Z MOLD is adjustable from 24 to 36 points inclusive. The BLADES regularly furnished are 24, 30, and 36 point. Price of MOLD equipped with one BLADE, either high or low as ordered, for casting any one of the above regular point sizes 125.00

Additional MOLD BLADES for Style Z MOLD, either high or low as ordered, in 24, 30, or 36 point size. Price, per BLADE, complete with POINT BLOCK and MOLD-BLADE STOP 10.00

Additional MOLD BLADES for Style Z MOLD, either high or low as ordered, in any point size between the limits of 24 and 36 points inclusive (not included in the above regular sizes) will be made to order. Price, per BLADE, complete with POINT BLOCK and MOLD-BLADE STOP 12.00

MOLD OILER 21M (complete with Sleeve a22M for supporting the Oiler when not in use) 4.50

MOLD-OILER SUPPORTING SLEEVE a22M (for supporting the Oiler when not in use. One furnished with each Mold Oiler without extra charge) ..... .30

MOLD PACKING PIECE 16M (.005", .010", or .015" thick as ordered) . .75

NOTE: These PACKING PIECES are for use under MOLDS which have to be ground in repairing so that their over-all height is below standard. The use of this PACKING PIECE obviates the necessity of changing the BRIDGE setting for these MOLDS.

MONOTYPE OIL (for the Casting Machine) (per gallon, without Can)
(f. o. b. Philadelphia Office) ..... .50
(" New York ") ..... .60
(" Boston ") ..... .60
(" Chicago ") ..... .60
(" San Francisco ") ..... .75

Monotype-oil Can, see Oil Can.

MONOTYPE PAINT, for touching up worn or scarred places on the machines, painting pipes, etc., per can ..... .50

Motor Belt, see Belt.

MOTOR BRACKET (for Motor on Cam Shaft side of Caster) (See note) 6.75
bolt (3-8" x 1 3-4") (4) ..... .15
fibre bushing (4) ..... .07
" washer (large) (4) ..... .08
" " (small) (4) ..... .05
screw (1-2" x 1 5-8") ..... .18
" (1-2" x 2 3-4") ..... .22
" (1-2" x 3 1-4") ..... .25
washer (steel) (4) ..... .05

MOTOR BRACKET complete with above parts 9.00

NOTE: This style MOTOR BRACKET is used when the CASTING MACHINE does not have the SPEED REGULATING ATTACHMENT or the DISPLAY ATTACHMENT. It attaches to the CAM SHAFT side of the CASTING MACHINE. It is regularly supplied for the General Electric 3-4—3-8 HP C.Q. Motor. If required for any other style Motor, write to Philadelphia for quotation.

MOTOR BRACKET (for Motor on Metal Pot side of Caster) (See note) ..... 1.. 3.00

bolt (from Bracket to 1E) (2) ..... .09
" washer (rubber; between Bracket and 1E) (2) ..... .15
" washer (steel; on top of Bracket) (2) ..... .05
" (from Motor to Bracket) (4) ..... .09
" nut (4) ..... .06
" sleeve (fibre; in Motor Base) (4) ..... .07
" washer (fibre; small; above Motor Base) (4) ..... .05
" washer (fibre; large; between Motor and Bracket) (4) . .08
" washer (steel; beneath Bracket) (4) ..... .05
support ..... (1).. .30

MOTOR BRACKET complete with above parts 5.18

NOTE: This style MOTOR BRACKET is required when the CASTER is equipped with SPEED REGULATING ATTACHMENT. It can be supplied for General Electric 3-4—3-8 HP C.Q. and 1-2—1-4 HP C.Q. Motors and for Crocker-Wheeler 2-5 HP Motors. Be sure to specify on the order the Motor to be used, as the BRACKETS can be used only with the style Motor for which they are designed.

MOTOR EQUIPMENT, including special slow-speed MOTOR with ARMATURE PULLEY and BELT TIGHTENER; MOTOR BRACKET (complete); STARTING and REGULATING RHEOSTAT; and endless BELT. Price, complete 75.00

NOTE: For prices on individual parts of this equipment see alphabetical list.

Nozzle Drill, see Drill, for Nozzle.
Oil, see Keyboard Oil.
Oil, see Monotype Oil.

OIL CAN (10 gallon, for shipping and storing) 1.00

OIL CAN (5 gallon, for shipping and storing) ..... .70

OIL CAN (2 gallon, for shipping and storing) ..... .40

OIL CAN (1 gallon, for shipping and storing) ..... .25

Oil Cup, for Compressor, see Compressor Oil Cup.
Oil Cup, see Mold Oiler.

OILING CAN (large, copper) ..... .75

OILING CAN (small, zinc) ..... .10

Paint, see Monotype Paint.
Pet Cock, for Storage Tank, see Storage-tank Pet Cock.

PICA GAGE (for setting column width on the Casting Machine)

20 picas long ..... .25
10 " " ..... .25
6 " " ..... .25
5 " " ..... .25
4 " " ..... .25
3 " " ..... .25
2 " " ..... .25

PICA GAGE—*Continued.*

1-2 picas long	.25
board	.25
squeeze standards (includes no squeeze, 1-2, 1, 1 1-2 and 2 point feelers)	.75
PICA GAGE complete with above parts	3.00
PIPE PLIERS (10″)	.45

Pressure Gage, see Storage-tank Pressure Gage.
Pump-arm Drill, see Drill, for Pump Arm.

REAMER

No. 000 (used for Dowel 13KC3, 18KC4, 18KC12, 61F3, and 57S8)	1.45
No. 0 (used for Dowel 21B4, 37F2, 1G10, 128S3, 128S5, and 145S3)	1.00
No. 2 (used for Dowel 10A2 and 17C1)	1.25
No. 5 (used for Dowel 4B1, 9B2, 15B2, 3C3, 4C1, 3D4, 51F1, and 51F2)	2.00
No. 6 (used for Dowel 3B1, 3B2, 3C1, 3C2, 16F1, 31F1, and 19H2)	2.25

RHEOSTAT (combined starting and regulating, for 3-4—3-8 C.Q. General Electric Motors)

110 volt	6.90
220 "	6.90
550 "	7.50

Safety Valve, see Storage-tank Safety Valve.

SCREW DRIVER (for Casting Machine)

(3″ x 3-16″)	.18
(6″ x 5-16″)	.50
(10″ x 3-8″)	1.00
SCREW DRIVER (for Casting Machine) complete set as above	1.68

NOTE: SCREW DRIVERS for the CASTING MACHINE are listed according to the length of blade and breadth of point.

SCREW DRIVER (for Keyboard)

(1-8″)	.35
(5-32″)	.35
(1-4″)	.35
(3-8″)	.40
SCREW DRIVER (for Keyboard) complete set as above	1.45

NOTE: SCREW DRIVERS for the KEYBOARD are listed according to the breadth of point.

SIXTY PICA ATTACHMENT (to enable the Casting Machine to handle any measure up to 60 picas inclusive) complete 100.00

SIXTY PICA ATTACHMENT TOOLS (for applying the Attachment) ... 25.00

NOTE: These tools are loaned, not sold. The customer will be charged but full credit will be made upon the return of the tools in good condition. All shipments of loan material must, of course, be made by express, and the customer pays transportation charges in both directions.

SKIMMER (small, for Casting-machine Melting Pot) ..... .25

Sort Box, see Matrix Box.

SPEED REGULATING ATTACHMENT (gives 19 speeds varying by small increments from 9 to 140 r.p.m. on the Casting Machine) complete 125.00

Speed Regulating Attachment Tools, same as Display Attachment Tools, which see.

STORAGE TANK	1	8.00
pet cock	(1)	.30
pressure gage		2.00
safety valve	2	1.50
" " weight	(2)	.30

STORAGE TANK complete with above parts 11.50

TABLE FOR CHANGING PICA EMS TO EMS OF ANY SET (mounted and varnished) ..... .25

Tank, see Condensing Tank.
Tank, see Storage Tank.
Tools, for applying the Cam Oiling Attachment, see Cam Oiling Attachment Tools.
Tools, for applying the Centering-pin Adjusting Device, see Centering-pin Adjusting Device Tools.
Tools, for applying the Display Attachment, see Display Attachment Tools.
Tools, for applying the Low Quad Attachment, see Low Quad Attachment Tools.
Tools, for applying the new style Unit Wheel, see Unit Wheel Tools.
Tools, for applying the Sixty Pica Attachment, see Sixty Pica Attachment Tools.
Tools, for applying the Speed Regulating Attachment, see Display Attachment Tools.

TYPEWRITER ATTACHMENT, for Style D or DD KEYBOARDS, consisting of a special UNIT-RACK-STOP-BAR CASE designated by the word "TYPEWRITER" stamped on its CAP, complete .. 5.00

UNIT WHEEL TOOLS (for applying Keyboard Improvement No. 1) (See Style D Keyboard price list, page 29) 12.00

NOTE: These tools are loaned, not sold. The customer will be charged but full credit will be made upon the return of the tools in good condition. All shipments of loan material must, of course, be made by express, and the customer pays transportation charges in both directions.

VACUUM KEYBOARD CLEANER, for quickly and neatly removing the paper punchings; may also be used as an Air Blast for cleaning purposes 3.00

Valve Disk, see Compressor Valve Disk.

WRENCH (for Casting Machine)

No. 81 (1 1-16")	.34
No. 82 (5-16" x 13-32")	.13
No. 83 (13-32" x 1-2") (Galley Wrench)	.16
No. 84 (5-8" x 3-4")	.22
No. 85 (13-16" x 7-8")	.32
No. 86 (7-32" sq. x 1-2" hex.) (Box Wrench)	.12

WRENCH (for Casting Machine)—*Continued.*

No. 87 (Spanner, medium, 1″ diam.)	.17
No. 88 (Spanner, small, 3-4″ diam.) (2)	.16
No. 89 (Spanner, large, 1 1-8″ diam.) (2)	.18
No. 810 (9-32″ x 5-16″)	.07
No. 827 (Pin Wrench, 15 degrees bend)	.13
No. 828 (Pin Wrench, 60 degrees bend)	.13
No. 829 (Spanner, extra large, 1 1-2″ diam.)	.60
WRENCH (for Casting Machine) complete set	3.07

NOTE: The dimensions give the size of the openings between the jaws; that is, the size NUT, measured across the flats, the WRENCH will fit. Where one dimension only is given, the WRENCH is single ended; where two dimensions are given, the WRENCH is double ended. All WRENCHES are open ended unless otherwise specified.

WRENCH (for Style D and DD Keyboards)

No. 82 (5-16″ x 13-32″)	.13
No. 83 (13-32″ x 1-2″)	.16
No. 810 (9-32″ x 5-16″)	.07
No. 824 (3-4″ box x 5-8″ open)	.35
No. 825 (7-32″)	.20
WRENCH (for Keyboard) complete set	.91

NOTE: The dimensions give the size of the openings between the jaws; that is, the size NUT, measured across the flats, the WRENCH will fit. Where one dimension only is given, the WRENCH is single ended; where two dimensions are given, the WRENCH is double ended. All WRENCHES are open ended unless otherwise specified.

WRENCH (for Mold) No. 826	.15