

- MAGAZINE FRAME OPERATING HANDLE LOCK CABLE ADJUSTING SCREW NUTS**, view, 364; adjustment, 365.
- MAGAZINE FRAME OPERATING HANDLE LOCK CABLE CONNECTOR**, illustrated, 364; function, 365.
- MAGAZINE FRAME OPERATING HANDLE LOCK CABLE SUPPORT**, view, 364; setting, 365.
- MAGAZINE FRAME OPERATING MECHANISM (manual)**, 347; described and illustrated, 358-362; adjustments, 362-364; maintenance, 364.
- MAGAZINE FRAME OPERATING MECHANISM (power)**, application to models, 347-348; driving and control mechanism described and illustrated, 377-381; safety devices, 381-383; mechanical and electrical tests, 383-389; adjustments, 389-393; removal of parts and maintenance, 394; erection of machine, 394-397.
- MAGAZINE FRAME OPERATING MOTOR**, view, 379; operation, 380; replenishing oil supply, 394.
- MAGAZINE FRAME OPERATING MOTOR CUT-OUT SWITCH**, view, 379; purpose, 384; electrical tests, 388; turning off before removing the operating control switch mechanism, 389, 392.
- MAGAZINE FRAME OPERATING MOTOR SWITCH**, view in relation to motor, 379; single and three-phase A.C. switch illustrated, 385; two-phase A.C. switch illustrated, 386; D.C. switch illustrated, 387.
- MAGAZINE FRAME OPERATING MOTOR SWITCH RELAY**, summary of electrical tests and views of A.C. and D.C. units, 384-388.
- MAGAZINE FRAME OPERATING SAFETY LEVER**, views, 379, 382; relation to safety plungers described, 383; relation to adjustment of operating switch, 390.
- MAGAZINE FRAME OPERATING SAFETY LEVER PLUNGER**, illustrated, 379, 382.
- MAGAZINE FRAME OPERATING SAFETY SWITCH**, view, 379; function and operation, 381; mechanical checks, 383, 384; electrical tests, 388; adjustment, 390.
- MAGAZINE FRAME OPERATING SWITCH**, view, 379; function and operation, 380-381; detail illustration, 382; testing, 384, 388; adjustment, 390.
- MAGAZINE FRAME OPERATING SWITCH ACTUATING PLATE**, illustrated, 379; operation, 380-381; detail view, 382.
- MAGAZINE FRAME OPERATING TELESCOPIC SHAFT**, described, 361; setting, 362; illustrated, 363; oiling, 364.
- MAGAZINE FRAME OPERATING TELESCOPIC SHAFT DRIVER**, function and operation, 361; adjustment, 362; view, 363; oiling, 364.
- MAGAZINE FRAME OPERATING TELESCOPIC SHAFT SLEEVE**, 361; view and timing relationship described, 363.
- MAGAZINE FRAME OPERATING UNIVERSAL JOINTS**, 361; views, 363; maintenance, 364.
- MAGAZINE FRAME OPERATING WORM**, described, 378; view, 379; operation, 380; maintenance, 394.
- MAGAZINE FRAME OPERATING WORM BRAKE**, illustrated, 379; purpose, 381; removal and adjustment described, 393.
- MAGAZINE FRAME OPERATING WORM GEAR**, described and illustrated, 378-379; maintenance, 394.
- MAGAZINE FRAME OPERATING WORM THRUST BEARINGS**, 378; view, 379.
- MAGAZINE FRAME PINION**, view, 358; 359; timing, 361; relation to magazine frame power operating mechanism described and illustrated, 378-379.
- MAGAZINE FRAME PINION LINK**, view, 358; function, 359; oiling, 361; view in relation to magazine frame power operating mechanism, 379.
- MAGAZINE FRAME PINION LINK STOP SCREWS**, view, 379; purpose, 380-381; adjustment, 389.
- MAGAZINE FRAME RACK**, view, 358; 359; 361; relation to magazine frame power operating mechanism illustrated, 379.
- MAGAZINE FRAME SAFETY LATCH (side magazine)**, described and illustrated, 369-370.

- MAGAZINE FRAME SAFETY LATCH LINK, described and illustrated, 369-370.
- MAGAZINE FRAME SHAFT (lower), illustrated, 358; described, 359; timing in relation to racks, 361; relation to magazine frame power operating mechanism described and illustrated, 378-380; oiling, 394.
- MAGAZINE FRAME SHAFT (lower) YOKE, view, 358; described, 359.
- MAGAZINE FRAME SHAFT (upper) ROLL, illustrated, 358; function, 359; maintenance, 361.
- MAGAZINE FRAME SLIDES, view, 414; described, 415-416.
- MAGAZINE FRAME SLIDE OPERATING LEVERS, illustrated, 414; operation, 415-416.
- MAGAZINE FRAME STOP SCREWS, illustrated, 358; adjustment, 361.
- MAGAZINE FRAME SUPPORTING BLOCK, view, 360; function, 361; detail view, 392.
- MAGAZINE FRAME SUPPORTING BRACKETS, illustrated, 358; described, 359; relation to the magazine frame power operating mechanism described and illustrated, 378-379.
- MAGAZINE LIFTING LEVER (lower), view, 290; operation, 291, 292, 295.
- MAGAZINE LIFTING LEVER (L.H.), 289; operation, 292; view in relation to magazine carriage, 293; 295; operation by power channel entrance mechanism, 306-307.
- MAGAZINE LIFTING LEVER (R.H.), described and illustrated, 290-291; operation, 292; view in relation to magazine carriage, 293; detail view, 294; 295; relation to power channel entrance mechanism illustrated, 304; described, 306-307; relation to magazine frame power operating mechanism illustrated and described, 379, 381.
- MAGAZINE LIFTING LEVER BRACKET, view, 290.
- MAGAZINE LIFTING LEVER CONNECTING LINK, 289; views, 290, 294; 301; oiling, 302; view in relation to power channel entrance mechanism, 305; relation to magazine frame operating handle lock described and illustrated, 364-365.
- MAGAZINE LIFTING LEVER CONNECTING LINK STOP SCREW, view, 294; adjustment, 301.
- MAGAZINE LIFTING LEVER COUNTERBALANCE SPRING, illustrated, 294; adjustment, 301.
- MAGAZINE LIFTING LEVER SHOE (L.H.), 292; view, 293; adjustment, 301-302, 309.
- MAGAZINE LIFTING LEVER STOP BRACKET, illustrated, 294; described, 295; maintenance, 302.
- MAGAZINE RELEASING BELLCRANK, described, 292; illustrated, 293, 304, 308; relation to power channel entrance mechanism, 305.
- MAGAZINE RELEASING CABLE, view, 290; operation, 291, 292; adjustment, 300-301; relation to power channel entrance mechanism, 305; adjustment, 311-312.
- MAGAZINE RELEASING CABLE CAM, view, 304.
- MAGAZINE RELEASING CABLE CAM LEVER, 305.
- MAGAZINE RELEASING CABLE FITTING, described and illustrated, 291.
- MAGAZINE RELEASING CABLE GUIDE, 291.
- MAGAZINE RELEASING CABLE LEVER, view, 290; 300.
- MAGAZINE RELEASING CAM LEVER, illustrated, 294; described, 295; maintenance, 302.
- MAGAZINE RELEASING LEVER, view, 290; operation, 291, 292, 295.
- MAGAZINE RELEASING LEVER ADJUSTING SCREW, view, 290; adjustment, 300.
- MAGAZINE RELEASING ROD, view, 291; operation, 292; detail view, 294.
- MAGAZINE RELEASING ROD ADJUSTING NUT, illustrated, 291; adjustment, 302, 312.
- MAGAZINE RELEASING ROD BLOCK, views, 291, 294; operation, 295.
- MAGAZINE SHOE, described and illustrated, 397-398.

- MAGAZINE SHUTTER**, 15.
- MAGAZINE SHUTTER CAM**, view in relation to automatic font selector, 414.
- MAGAZINE SIDE GUIDE** (lower), view, 355.
- MAGAZINE STUB**, described and illustrated, 354-356.
- MAGNET**, use in D.C. installations of bulb-type thermostat, 121.
- MAIN MAGAZINE FRAME**. *See Magazine Frame (main)*.
- MAINTENANCE**. *See Machine (maintenance)*.
- MATRICES**, transposition and non-response, 6; cleaning, 8; double response, 9; care, 15; construction described and illustrated, 27; movements during transfer, 200; horizontal alignment with second-elevator bar, 201; positions in first-elevator jaw illustrated and described, 204-207; relation to transfer channel, 207; transfer of line illustrated, 209, 211; movements through distributing mechanism, 233-234; views of matrices in process of distribution, 238; relation of matrices to mixer distributor illustrated, 248; ordering procedure, 443-445.
- MATRIX**, 29; alignment, 30, 47; importance of combination teeth, 201; release of blank tooth matrices in transfer channel, 208; alignment of matrix teeth with second-elevator bar teeth, 210; view of matrices supported on second-elevator bar, 211; relation to distributor box font distinguisher, 230; relation to distributing mechanism, 233-234; bar point slot, 236, 247; selector notches, 256; principle of matrix distribution illustrated and described, 271-273; pi tooth combination described, 272, 319; selector notches for Universal mixer machines, 409-412.
- MATRIX DELIVERY BELT**, adjustment, 18.
- MATRIX DETECTOR**, view, 379; purpose and operation, 383.
- MATRIX GUARD**, relation to single distributor channel entrance, 279; view, 280; removal, 286; double distributor matrix guards described and illustrated, 287-288; detail side view, 298.
- MATRIX LIFT** (double distributor), view, 248; described, 249; operation, 250; timing relative to distributor screws, 251; adjustment, 251; maintenance, 252.
- MATRIX LIFT CAM LEVER** (double distributor), view, 248; function, 249; operation, 250; adjustment, 251; maintenance, 252.
- MATRIX LIFT CAM LEVER ADJUSTING SCREW** (double distributor), 251.
- MATRIX LIFT CAM LEVER SHIFTER** (double distributor), view, 248; operation, 250.
- MATRIX LIFT CAM ROLL** (double distributor), view, 248; operation, 250; maintenance, 252.
- MATRIX LIFT LEVER** (double distributor), view, 248; described, 249, 250.
- MATRIX LIFT LEVER YOKE** (double distributor), view, 248; described, 249; maintenance, 252.
- MATRIX LIFT MECHANISM** (double distributor), described and illustrated, 247-251; adjustments, 251-252; care and maintenance, 252.
- MATRIX SLIDES AND SLIDE BLOCKS**, described and illustrated, 36; use, 37.
- MATRIX TRAFFIC LIGHT**. *See Distributor Signal Light*.
- METAL POT**, general construction, 80; sectional view, 81; described and illustrated, 83; movements described, 85; removal of parts and maintenance, 90.
- METAL POT** (electric), sectional view, 88; construction, 99; perspective view of complete system, 100; general maintenance, 111; D.C. wiring diagram, 111; A.C. wiring diagram, 112; A.C. maintaining circuit diagram, 114; removing and packing, 115; A.C. opening circuit diagram, 116; wiring diagram for bulb-type thermostat, 120.
- METAL POT** (gas), removing and packing, 95; view, 96.
- MIXER DISTRIBUTOR**. *See Distributor (double)*.
- MIXER FONT SELECTOR**. *See Font Selector*.
- MIXER MACHINE**. *See Machine (double distributor)*.

- MIXER NOTCHES.** *See Matrix (selector notches).*
- MODELS (general),** system of differentiation and basic standardization policy, 345; extent of conversion, 348; basic differences between the Universal and Star Base machines, 348-349; Universal machine illustrated, 350; Star Base machine illustrated, 352.
- MODELS (Star Base),** single distributor type described, 353; Model A, 353; Model B, 353; Model C, 354; double distributor machines described, 354; Model F, 354; Model G, 354; tabular summary, 357.
- MODELS (Universal),** general description of non-mixer machine, 349; Model 72-90 C2, 349; Model 72-90 C4, 349-350; Model Twin C2, 350; Model Twin C4, 350; general description of mixer machine, 351; Model F2, 351; Model F4, 351; Model G2, 351; Model G4, 351; general description of straight machine, 351-352; Model C1, 352; Model C2, 352; Model C3, 353; Model C4, 353; Model H4, 353; tabular summary, 357.
- MOHR INTERTYPE Saw,** 166; purpose, operation and general features, 425, 427.
- MOLD,** care, 55; "breaking in" process, 56; changing, 56; polishing, 57; view showing removal of mold cap, 57.
- MOLDS (six-mold disk),** illustrated, 187; method of fastening on disk, 188; construction, 189, 190; changing, 191.
- MOLD, ADVERTISING FIGURE,** illustrated, 55.
- MOLD, ADVERTISING FIGURE (six-mold disk),** view, 194.
- MOLD, HEADLETTER RECESSED (six-mold disk),** illustrated, 193.
- MOLD, RECESSED,** illustrated, 55.
- MOLD, TRIANGULAR SHELF,** described, 53; illustrated, 54.
- MOLD, TRIANGULAR SHELF (six-mold disk),** 190.
- MOLD, UNIVERSAL ADJUSTABLE,** described, 52; illustrated, 53.
- MOLD BANKING BLOCKS,** adjustment, 130.
- MOLD BODY,** 35, 52.
- MOLD CAM AND DRIVING GEAR,** 58, 63; illustration showing movements imparted by cam, 65; view in relation to driving mechanism, 322; described, 323; ratio to driving shaft pinion, 332; view in relation to assembled cams, 336; summary of actions imparted by cam, 337; 339, 340, 341.
- MOLD CAM LEVER,** 58, 63; view, 64, 67, 69.
- MOLD CAM LEVER HANDLE,** adjustment, 65.
- MOLD CAM ROLL ECCENTRIC STUD,** adjustment, 64.
- MOLD CAP,** classification, 33; casting range, 33-34; 52; purpose of recesses, 53.
- MOLD COOLING ATTACHMENT,** illustrated, 140; described, 141; application to hard metal machine, 424.
- MOLD DISK,** timing, 56; described, 57, 58; illustrated, 58; movements described, 59.
- MOLD DISK COVER PLATE (six-mold disk),** 189.
- MOLD DISK GEAR (six-mold disk),** 189, 192, 193.
- MOLD DISK GUIDE,** adjustment, 58.
- MOLD DISK GUIDE SUPPORT SCREW,** adjustment, 66.
- MOLD DISK LOCKING STUDS,** 60, 61.
- MOLD DISK LOCKING STUDS (six-mold disk),** view, 187; described, 188.
- MOLD DISK LOCKING STUD BLOCKS,** 60; illustrated, 61.
- MOLD DISK OPERATING MECHANISM (six-mold disk),** illustrated, 190.
- MOLD DISK PINION (six-mold disk),** 192, 193.
- MOLD DISK SLIDE,** described, 57, 58; illustrated, 58; movements, 63; view of assembly, 64; removal, 64.
- MOLD DISK SLIDE SAFETY ATTACHMENT (first style),** described, 66; illustrated, 67; adjustment, 68.
- MOLD DISK SLIDE SAFETY ATTACHMENT (new style),** described, 68; adjustment and illustration, 69.

MOLD DISK SLIDE SAFETY LOCK, described, 325; illustrated, 326.

MOLD DISK STUD, 58.

MOLD DRIVING MECHANISM, view of assembly, 59.

MOLD DRIVING PINION SHAFT, view, 56; described, 60.

MOLD DRIVING PINION SHAFT FRICTION DISK, illustrated, 61; described, 62.

MOLD LINERS, use with recessed molds, 35; 52; changing, 53.

MOLD SYSTEM, described, 33.

MOLD TURNING BEVEL PINION, 60.

MOLD TURNING CAM, illustration showing movements imparted by cam, 60; view in relation to assembled cams and summary of actions imparted by cam, 336-337; 339, 340.

MOLD TURNING SEGMENTS, described and illustrated, 59, 60.

MOLD WIPER (back), illustrated, 58.

MOTOR DRIVE, overhead and underslung types compared, 331; electrical specifications, 332; overhead motor described and illustrated, 333-334; maintenance, 335.

MOTOR DRIVING GEAR GUARD, described and illustrated, 334.

MOTOR DRIVING GEAR PULLEY, 321; view in relation to friction clutch mechanism, 322; 323; view in relation to assembled driving shaft, 326; removal, 330; maintenance, 331; operating speed, 332; relation to overhead motor, 333; illustrated, 334.

MOTOR FASTENING SCREWS, 333; view, 334.

MOTOR FASTENING SCREW BUSHINGS, adjustment described, 333; view, 334.

MOTOR PINION, described, 332; relation to operating speed of machine, 333; illustrated, 334.

MOTOR SWITCH, location and overload feature described, 335.

MOUTHPIECE. *See Pot Crucible Mouthpiece.*

N

NEOPRENE, use in channel entrance frame stop screws, 297.

NEWSPAPER HEADLINES, pyramidal style illustrated and described, 168.

NEWSPAPER MEASURES, vise jaw device for odd double and three-column measures, 147; odd linear measures obtainable with quadding vise closing attachment, 159.

NON-QUADDING MACHINES, operating speed, 333.

NORMAL POSITION. *See Machine Positions (normal).*

O

OILING ROUTINE. *See Machine (maintenance).*

OILITE BEARINGS, 21, 141, 312.

ONE-LETTER MATRICES, alignment, 31.

OPEN CIRCUITS, testing, 110.

OPENING QUAD, described and illustrated, 144.

OPERATING, general suggestions, 438-442.

OPERATING CHANGES (quadding and centering device), procedure, 164.

OUTSIDE GALLEY. *See Galley (outside).*

OVERHANGING WORK, 191.

OXIDE, accumulation on mold, 56.

P

PI CHUTE BRACKET, illustrated, 318; adjustment 319.

PI MATRIX, combination teeth and distribution described, 272; classification of pi characters, 319.

PI STACKER (double distributor), illustrated, 318; described, 319; adjustment and maintenance, 319-320.

PI STACKER BLOCK, view, 318; described, 319.

PI STACKER FRAME, view, 318; function, 319.

PI STACKER STAR, illustrated, 318; operation, 319.

PI STACKER TUBE, view, 318; 319.

- PLUNGER.** *See Pot Pump Plunger.*
- POT BALANCING SPRING,** 84.
- POT CAM,** 81, 83; illustration showing movements imparted by cam, 84; view in relation to assembled cams, 336; summary of actions imparted by cam, 337; 339, 340.
- POT CAM ROLL,** view, 88; assembling and lubricating, 91.
- POT CAM WIPER,** 91.
- POT CONTROL BOX,** illustrated, 100; described, 101, 105; bulb-type thermostat control box described, 120.
- POT CRUCIBLE,** 81; described and illustrated, 82; sectional view, 88; cleaning well, 90; cleaning crucible throat, 93; importance of cleaning on hard metal machine, 422-423.
- POT CRUCIBLE MOUTHPIECE,** described and illustrated, 82; purpose of vents, 83; adjusting for height and parallelism, 86; stoning, 89; removing wedge mouthpiece, 91; mouthpiece remover, 91; new style baffle mouthpiece illustrated, 92; grinding in with crucible, 93; curing mouthpiece leak, 93; cleaning mouthpiece jets and vents, 93; baffle mouthpiece described, 94; removal, 94; adjusting temperature, 97; maintenance and operating temperature on hard metal machine, 423-424.
- POT CRUCIBLE MOUTHPIECE DRIFT,** 93.
- POT CRUCIBLE MOUTHPIECE WIPER,** described, 149; operation, 150; application to hard metal machine, 422.
- POT GAS BURNER SYSTEM,** described, 95; illustrated, 96; maintenance, 99.
- POT GAS GOVERNOR,** 95; illustrated, 96; description and operation, 97; detail views, 98; adjustment, 99.
- POT GASOLINE BURNER EQUIPMENT,** described, 121.
- POT HEATERS,** sectional view, 88; illustrated, 100; wiring for different voltages, 101; testing, removal and replacement, 113.
- POT JACKET,** 81.
- POT LEG ADJUSTING SCREWS,** 81, 86; illustrated, 87; method of adjusting, 89.
- POT LEG BUSHINGS,** 86; view, 87.
- POT LEVER,** 81, 84; view, 88; removal and lubrication, 90; adjusting for clearance, 91.
- POT LEVER EYEBOLT,** 81; adjustment and illustration, 88; described, 89.
- POT PUMP CAM,** 82; illustrated, 83; view showing movements imparted by cam, 85; view in relation to assembled cams, 336; 337, 340.
- POT PUMP CAM WIPER,** 91.
- POT PUMP LEVER,** 77, 82.
- POT PUMP MECHANISM,** illustrated, 83; described, 84.
- POT PUMP PLUNGER,** described and illustrated, 82; movements described, 85; cleaning, 90; removing stuck plunger from well, 90.
- POT PUMP QUICK DROP LATCH,** 85.
- POT RELAY COIL, A.C.,** illustrated, 107.
- POT RELAY MECHANISM, D.C. relay** illustrated, 104; described, 105; A.C. relay illustrated, 106; D.C. adjustment, 107; A.C. operation and maintenance, 108; removal of D.C. parts and maintenance, 108.
- POT RESISTOR,** 105.
- POT RETURN CAM,** function, 338.
- POT RHEOSTAT,** 105, 108; operation, removal and maintenance, 109; illustrated, 109; testing, 110.
- POT THERMOSTAT (bulb-type),** described and illustrated, 117; view in relation to pot cover, 118; adjustments, removal and maintenance, 119; replacement parts, 121.
- POT THERMOSTAT (lever-type),** illustrated, 100; described, 101; detail view, 102; operation, 103; removal and maintenance, 105.
- POWER SHIFT.** *See Magazine Frame Operating Mechanism (power).*
- PRUSSIAN BLUE,** use in testing lock-up, 89.
- PUMP STOP,** described, 77; illustrated, 78; adjustment, 79.

Q

QUADDING, how done on machines not equipped with automatic quadding and centering device, 155; automatic quadding described, 157, 167, 168, 171, 175, 183; illustrated, 170, 172.

QUADDING AND CENTERING DEVICE (automatic), functions and advantages, 150; described, 150-178; lubrication of parts illustrated, 174; removal of parts and maintenance, 177.

QUADDING MACHINES, two basic characteristics, 150; operating speed, 333.

QUADS, special for display italic matrices, 144.

QUAD BOX, described, 208; illustrated, 208, 211.

QUICK DROP LATCH. *See Pot Pump Quick Drop Latch.*

R

RECASTING, facilitated by double-acting mold attachment, 149; use of recasting block when duplicating italic or boldface lines, 207; locking of transfer levers, 219; relation to automatic safety pawl, 338.

RECESSED MOLD. *See Mold, Recessed.*

RED LEAD, use in testing lock-up, 89.

RELAYS (electric pot). *See Pot Relay Mechanism.*

REPEAT CASTING ATTACHMENT (automatic), described, 149.

RESISTOR. *See Pot Resistor.*

RHEOSTAT. *See Pot Rheostat.*

RULES, cast on matrix slides, 37.

S

SECOND-ELEVATOR ADJUSTABLE GUIDE PLATE, illustrated, 208; described, 209; adjustment, 212.

SECOND-ELEVATOR ADJUSTING SPRING, described and illustrated, 210-211; 223.

SECOND-ELEVATOR BAR, alignment at transfer and distributing positions, 200-201; views, 209, 211; repairing, 215; view in

relation to elevator transfer slide finger, 218; described, 223; alignment at distributor illustrated and described, 226-227; construction for double distributor machine, 227; maintenance, 229.

SECOND-ELEVATOR BAR LINK, 210, 223.

SECOND-ELEVATOR BAR PLATE, 210; described, 223, 227; construction for double distributor machines, 227; maintenance, 229.

SECOND-ELEVATOR BAR PLATE ANGLE, described and illustrated, 210-211; maintenance, 214; 223.

SECOND-ELEVATOR CAM, 223; view in relation to second-elevator lever, 224; illustration showing movements imparted by cam, 225; view in relation to assembled cams, 336; summary of actions imparted by cam, 337; 340, 341:

SECOND-ELEVATOR CAM LEVER, 223; illustrated, 224; 226.

SECOND-ELEVATOR CAM ROLL, 223; view, 224.

SECOND-ELEVATOR GUIDE (lower), function, 200; illustrated, 209, 210, 211; adjustment, 210-212; maintenance, 214; 223.

SECOND-ELEVATOR GUIDE (upper), view, 226; described, 227; maintenance, 229.

SECOND-ELEVATOR LEVER, 200; movements described, 223-224; illustrated, 224; 227; construction for double distributor machine, 227; maintenance, 229.

SECOND-ELEVATOR LEVER ADJUSTING BOLT, 223; view, 224; adjustment, 226.

SECOND-ELEVATOR SAFETY PAWL, view, 224; function and operation, 224-226.

SECOND-ELEVATOR WEIGHT LEVER, 223; described and illustrated, 224; adjustment, 226.

SECOND JUSTIFICATION. *See Justification (second).*

SELECTOR. *See Font Selector.*

SHIFTING CAM BUSHING (justified quadding), adjustment, 184.

SHORT CIRCUITS, testing, 110.

- SIDE KNIVES.** *See Knives.*
- SIDE MAGAZINE FRAME.** *See Magazine Frame (side).*
- SINGLE DISTRIBUTOR.** *See Distributor (single).*
- SINGLE DISTRIBUTOR MACHINES.** *See Models (Star Base and Universal).*
- SIX-MOLD DISK,** illustrated, 187; described, 188-197; mechanism, 192-194; safety devices, 194; removal of mold disk, 194, 195.
- SLUGS,** lengths cast on standard triangular shelf mold, 54; ejection from mold, 56; withdrawal from matrix line, 173; hard metal for direct printing, 421.
- SLUG LEVER** (inside galley), illustrated, 132; (outside galley), illustrated, 133; adjustment illustrated, 134; described, 135.
- SLUG SAW.** *See Mohr Intertype Saw.*
- SOLID SLUG MOLD** (six-mold disk), view, 192.
- SPACEBANDS,** assembling, 14; care, 15; expansive range described and illustrated, 37; types used for different kinds of composition, 38; relation to justification, 70; special for stick attachment, 142; illustrated, 143; release preceding transfer of line, 199; movements during transfer, 200-201; relation to transfer channel, 208; illustrated in transfer of line, 211; return to spaceband box described, 216-217; engagement by spaceband lever pawl illustrated, 220.
- SPACEBAND BOX,** detail view, 13; maintenance, 14; removal, 15.
- SPACEBAND BUFFER FINGER,** function, 26.
- SPACEBAND CAM,** 11; action, 14.
- SPACEBAND CHUTE,** 14.
- SPACEBAND KEYROD,** 12.
- SPACEBAND LEVER,** actions during transfer of line, 200; view, 214; described, 215; movements outlined, 215-216; relation to elevator transfer slide releasing lever, 222; maintenance, 223.
- SPACEBAND LEVER BUFFER,** 219; view, 220.
- SPACEBAND LEVER PAWL,** 200; illustrated, 214; described, 215-216; view showing relation to elevator transfer slide finger, 220; adjustment, 220-221.
- SPACEBAND LEVER PAWL LATCH,** 159; use when recasting lines, 207, 219; locking during transfer stop, 222.
- SPACEBAND LEVER TURNBUCKLE,** view, 214; described, 215; adjustment, 220.
- SPACEBAND RELEASING MECHANISM,** view, 13.
- SPACEBAND RELEASING PLUNGER,** adjustment, 14.
- SPACEBAND RETAINING BLOCK,** adjustment, 14.
- STAR BASE MACHINES.** *See Models (Star Base).*
- STAR WHEEL.** *See Assembler Star Wheel.*
- STARTING AND STOPPING LEVER,** described and illustrated, 324; relation to mold disk slide safety lock described, 325; illustrated, 326.
- STARTING AND STOPPING LEVER CONNECTING ROD,** views, 322, 324; operation, 324, 325; illustration showing relation to mold disk slide safety lock, 326.
- STARTING AND STOPPING LEVER LINK,** described and illustrated, 324.
- STICK.** *See Composing Stick.*
- STICK ATTACHMENT,** described, 142-147; mechanism described and illustrated, 145; adjustments, 147.
- STOP-OFF BLOCK,** use with triangular shelf mold, 53.
- STREAMLINING,** application to Universal machines, 348; illustrated, 350.
- SUPPLIES,** ordering procedure, 442-445.

T

- TALLOW,** use on mouthpiece wiper, 422.
- TELEPHONE BOOKS,** hard metal slugs for direct printing, 421.
- TEST LAMP,** use in testing open and short circuits, 110.
- THERMOMETER,** 105.

THERMOSTAT. *See Pot Thermostat.*

THIN SPACE, use in setting font selector feelers, 262.

TIGHT LINE RELEASE LEVER, function, 23.

TIN, proportion in type metal, 122.

TRANSFER, general introduction, 199; sequence of actions, 199-200; importance of correct adjustment, 200-201; mechanical requirements for efficient transfer, 201; upward movement of first-elevator slide illustrated, 203; transfer adjustments, 209-213; testing transfer by hand, 212-213; general maintenance, 213-215; starting machine after transfer stop, 222.

TRANSFER BAR, 201; function, 202; illustrated, 203, 206, 209, 211; adjustment, 212-213; maintenance, 213.

TRANSFER BAR ADJUSTING SCREWS, 202; views, 203, 211.

TRANSFER BAR PAWL, described and illustrated, 203; action during transfer, 205; views during transfer of line, 209, 211; vertical setting, 212; maintenance, 213-214.

TRANSFER CHANNEL, 199; described, 207-209; views, 208, 209, 211; maintenance, 214.

TRANSFER CHANNEL MATRIX STOPS, described and illustrated, 208.

TRANSFER CHANNEL SPACEBAND FRICTION WEIGHT, illustrated, 208; described, 208-209.

TRANSFER CHANNEL SPACEBAND RAIL, described and illustrated, 208.

TRANSFER POSITION. *See Machine Positions (transfer).*

TRANSPOSITIONS, causes, 6.

TRIANGULAR SHELF MOLD. *See Mold, Triangular Shelf.*

TRIPOD MAGAZINE FRAME. *See Magazine Frame (side).*

TWIN CHANNEL ATTACHMENT, described and illustrated, 5.

TWO-LETTER MATRICES, alignment, 30-31.

TYPE, preventing slurred characters, 173.

TYPE METAL, adjusting temperature (gas pot), 97; (electric pot), 103; (bulb-type thermostat), 119; composition, 121, 122; analyzing and melting, 122; contaminating agents, 123; action and replacement of hard metal, 422; operating temperature of hard metal, 424.

U

UNIVERSAL ADJUSTABLE MOLD. *See Mold, Universal Adjustable.*

UNIVERSAL AUTOMATIC QUADDING AND CENTERING DEVICE. *See Quadding and Centering Device (automatic).*

UNIVERSAL EJECTOR. *See Ejector (universal).*

UNIVERSAL KNIFE BLOCK. *See Knife Block (universal).*

UNIVERSAL MACHINES. *See Models (Universal).*

V

VERTICAL STARTING LEVER, illustrated, 322, 324; operation, 324.

VERTICAL STARTING LEVER (stick attachment), view, 145; described, 147.

VERTICAL STARTING LEVER SPRING ADJUSTING SCREW, view, 324; adjustment, 329.

VERTICAL STARTING LEVER STOP SCREW, view, 324; adjustment, 329.

VISE ADJUSTING MECHANISM, described and illustrated, 75.

VISE AUTOMATIC, 49; described and illustrated, 50; adjustment, 51.

VISE AUTOMATIC STOP LEVER, 51.

VISE AUTOMATIC STOP MOLD DISK DOG, 50.

VISE AUTOMATIC STOP ROD, 50, 51.

VISE AUTOMATIC STOP ROD PAWL, 50.

VISE CAP, 52.

VISE CLOSING AND JUSTIFICATION MECHANISM, described and illustrated, 70; view of parts just before first justification, 73; after first justification, 74; maintenance, 77; release of matrix line in preparation for transfer, 199.

- VISE CLOSING ATTACHMENT**, described, 72; views, 73, 74; movements imparted to left vise jaw, 75.
- VISE CLOSING ATTACHMENT** (quadding), 159; illustrated, 160; adjustment, 175.
- VISE CLOSING CAM**, 71; illustration showing movements imparted by cam, 72; view in relation to assembled cams, 336; 337, 339, 340.
- VISE CLOSING CONNECTING ROD** (quadding), illustrated, 160.
- VISE CLOSING LEVER**, 71; action preceding transfer, 199.
- VISE CLOSING RACK** (quadding), illustrated, 160.
- VISE FRAME**, described, 52; illustrated, 61, 70.
- VISE JAWS** (non-quadding), 70, 72; illustrated, 73, 74; adjustment, 76.
- VISE JAWS** (quadding), movements outlined, 155; illustrated, 156; engagement with operating rack described, 156-157; adjustment of left vise jaw, 159; right vise jaw, 159.
- VISE JAW AUTOMATIC ADJUSTABLE RELEASE** (quadding), illustrated, 156.
- VISE JAW AUTOMATIC ADJUSTABLE RELEASE LATCH** (quadding), 158; operation and adjustment, 161; illustrated, 162.
- VISE JAW AUTOMATIC ADJUSTABLE RELEASE LEVER** (quadding), 158, 161.
- VISE JAW CUSHION CYLINDER** (quadding) 163.
- VISE JAW CUSHION CYLINDER NEEDLE VALVE** (quadding), adjustment, 163.
- VISE JAW CUSHION DEVICE** (quadding), illustrated, 156; function, 158; detail view and adjustment, 163.
- VISE JAW EM SCALE** (quadding), 159, 161.
- VISE JAW LEVER** (quadding), view, 156; operation, 157, 158, 164; detail view, 170.
- VISE JAW (L.H.) BLOCK** (quadding), 161.
- VISE JAW (L.H.) RACK** (quadding), illustrated, 156; relation to vise jaw gear, 157; adjustment, 161; position when changing vise jaw measure, 165.
- VISE JAW (L.H.) RACK GEAR** (quadding), illustrated, 156; described, 157, 161, 165.
- VISE JAW MANUAL CLOSING ATTACHMENT**, described, 79; illustrated, 80.
- VISE JAW ODD MEASURE DEVICE**, described, 147; operation and illustrated, 148.
- VISE JAW OPERATING LEVER** (quadding), illustrated, 156; operation, 158; detail view, 165.
- VISE JAW OPERATING LEVER ROLL** (quadding), illustrated, 156; operation, 164; detail view, 165.
- VISE JAW OPERATING LEVER SHOE** (quadding), adjustment, 164; view, 165.
- VISE JAW OPERATING MECHANISM** (quadding), 155; illustrated, 156; described, 158; adjustments, 159; movements outlined, 164; removal of parts, 178.
- VISE JAW RACK PAWL** (quadding), illustrated, 169, 170, 172, 174; described, 171, 173.
- VISE JAW RACK PAWL LEVER** (justified quadding), 181, 182, 183.
- VISE JAW RACK PAWL LEVER** (quadding), illustrated, 169, 170, 172, 174; described, 171, 173.
- VISE JAW RACK PAWL LEVER CAM** (justified quadding), 181, 182, 183.
- VISE JAW RACK PAWL LEVER CAM** (quadding), illustrated, 169, 170, 172, 174; described, 171, 173.
- VISE JAW RACK PAWL LEVER LATCH** (quadding), illustrated, 170, 172, 174; function and operation, 173.
- VISE JAW RACK PAWL LEVER LATCH BLOCK** (quadding), illustrated, 170, 172, 174; described, 173; adjustment, 175, 176.
- VISE JAW RACK PAWL REST** (justified quadding), 181, 182, 183.
- VISE JAW RACK PAWL REST** (quadding), illustrated, 169, 170, 172, 174; function, 171, 173.
- VISE JAW RACK RELEASE STOP** (quadding), 158, 161; illustration and adjustment, 162.

- VISE JAW (R.H.) RACK (justified quadding), 181, 182, 183.
- VISE JAW (R.H.) RACK (quadding), illustrated, 156; described, 157, 158, 162, 164, 165; detail view, 166; relation to line spread device, 167, 171, 173; illustrated, 169, 170, 172, 174; removal, 178.
- VISE JAW (R.H.) RACK BOLT (quadding), illustrated, 156; 157.
- VISE JAW SAFETY LEVER (quadding), 158.
- VISE JUSTIFICATION BAR BRACE, 71.
- VISE JUSTIFICATION BAR BRACE (quadding) illustrated, 170; function, 175.
- VISE JUSTIFICATION BAR BRACE ACTUATING FINGER (quadding), illustrated, 170; operation, 175.
- VISE JUSTIFICATION BAR BRACE CAM (quadding), view, 170.
- VISE JUSTIFICATION BLOCK, 71; normal position, 72; position during first justification, 74; during second justification, 75.
- VISE JUSTIFICATION BLOCK (quadding) 164; views, 169, 170.
- VISE JUSTIFICATION RODS, 71.
- VISE LOCKING SCREWS, 52.

W

- WAITING LINES, 40, 153, 338, 341.
- WEDGE LOCKING DEVICE (justified quadding), illustrated, 185; function and adjustment, 186.
- WEDGE LOCKING DEVICE (quadding), illustrated, 176; operation and adjustment, 177.
- WIRING DIAGRAMS. *See Metal Pot (electric).*