THIS BOOKLET covers the Linotype Self-Quadder as applied to Linotype No. 57090 and up. The following pages contain instructions for its care and operation. There are also diagrams to illustrate the various settings and adjustments described. It is suggested that the entire book be read through to become familiar with the contents and then return to the specific items of interest.
The Linotype Self-Quadder

The LINOTYPE SELF-QUADDER sets short-line measure in the center or at either end of Linotype slugs. Special skill and considerable time formerly required, of the operator, for this sort of composition is eliminated. It is no longer necessary to fill out short-measure lines with quads, as in regular Linotype operation.

The Self-Quadder will carry out the functions of Right-Hand Quadding, Left-Hand Quadding, and Centering, on lines nearly full or containing but a single character. It will provide blank slugs, if no matrices are present, while set for any of the self-quadding operations. It sets white space at the beginning or end of a line, without the expenditure of the operator’s time or effort.

Its versatility, precision, sturdiness and simplicity are qualities that make its use indispensable on otherwise tedious and more difficult composition.

Spaceband wedge action, for the purpose of tightening lines, is eliminated, by being made inoperative, while the Self-Quadder is in use. All short-measure lines are instead made tight through sufficient and additional clamping pressure, exerted by the vise jaws at the ends of the line.

The functioning of the Self-Quadder is eliminated if the stud shifter lever 1, Fig. 1, is pushed in, when the selector handle 2, is set at “Reg.” and “R.H. Quad.” The machine can then be operated “regular,” the same as any Linotype, not equipped with the device.

INSTRUCTIONS FOR OPERATING

For all composition the operator should make the usual scale adjustments, such as setting the assembler slide, ejector blade and knife block, to conform to the length and point size of the slug to be cast. The line stop is automatic in its action and needs no manual positioning. The assembling elevator is designed so that one
OPERATING REGULAR: That is, operating as a Linotype machine not equipped with a Self-Quadder. Shift the Selector Handle to the position marked "Reg." and "R.H. Quad." Push in Stud Shifting Lever. Make all settings that would be necessary on a regular machine before assembling a line and casting a slug therefrom.

QUADDING TO THE RIGHT: Shift the Selector Handle to the position marked "Reg." and "R.H. Quad." Pull out Stud Shifting Lever to couple L.H. Vise Jaw Operating Lever to the Vise Jaw Control Latch Rod, completing linkage which will move L.H. Vise Jaw to right, so that the composition can be cast on R.H. end of slug.
SET FOR L.H. QUADDING
Quadding Mechanism Operative for R.H. Vise Jaw Only.

SET FOR CENTERING
Quadding Mechanism Operative for Both Vise Jaws

Control Latch

Selector Handle

Control Rod Latch Rack

Vise Jaw Control Latch Rod

Stud Shifting Lever

Vise Jaw R.H. Operating Lever

Out

Vise Jaw L.H. Operating Lever

In

QUADDING TO THE LEFT: Shift the Selector Handle to the Position marked "L.H. Quad." This will push out Stud Shifting Lever. The composition can then be cast on L.H. end of slug.

CENTERING: Shift the Selector Handle to the position marked "Cent." This will push out Stud Shifting Lever. The composition can then be cast in the center of the slug.

Position of the vise jaw control rod latch with respect to position of selector handle.
or more matrices can be assembled and delivered into the first elevator jaw without the necessity of moving the delivery slide long finger, to support them. The action of the long finger is automatic.

To set the left-hand vise jaw for required length, lift the latch 1, Fig. 2, on the adjusting rod 2, located at right-hand end of the vise frame. Pull the adjusting rod to the right as far as possible, then turn it clockwise one-quarter turn. The left-hand vise jaw can then be moved until the desired length of line is indicated by the cm scale pointer 3. Now turn the adjusting rod counter-clockwise until the locking latch enters the retaining slot 4, and push the adjusting rod to the left as far as possible.

FIG. 2.

ADJUSTMENTS, CARE AND MAINTENANCE

The following pages of adjustments, care and maintenance of the Linotype Self-Quadder give the machinist and operator the necessary instructions for maintaining it at its highest operating efficiency.

Operators and machinists should read these instructions carefully, particularly those regarding adjustments.

All settings are carefully made at the factory, and if changed later, due care should be exercised. If, when consulting diagrams, you are in doubt regarding the parts referred to, consult parts catalog of the “Linotype Self-Quadder,” where will be found photographs of parts with associate letters and part numbers. Under “Index to Parts” will be found the letter and part number of all parts referred to in the drawings of this book. Turn to the page or pages indicated, and by photographs identify the part desired and note the name on the opposite page.

Toggle Lever—The distance between centers of studs on vise jaw control rod lever and vise jaw locking toggle lever must be set at not more than 1”, as indicated in Fig. 3, and this distance is obtained by the adjusting screw. The spring nut 13, should be adjusted as indicated.

FIG. 3. View showing standard dimensions of vise jaw locking toggle lever and vise jaw control rod lever.
Vise Jaw Control Latch Rod – The vise jaw control latch rod, see Diag. pages 4 and 5, is properly-adjusted at the factory for correct height. If this vise jaw control latch rod is set too high, the selector handle will not shift back and forth easily, and the right-hand vise jaw will not have sufficient end play. If the vise jaw control latch rod is set too low, the selector handle will not operate the vise jaw control rod latch.

To test for proper height of vise jaw control latch rod, set selector handle at “L.H. Quad.” and move the right-hand vise jaw back and forth. The end play should be about .010 of an inch. To adjust the vise jaw control latch rod to obtain this end motion, readjust the screw 16, Fig. 4, located on top of the air cushion cylinder bracket.

If the vise jaws do not return to their normal positions it is an indication that the vise jaw control latch rod is not rising high enough. This may be due to the 1” dimension between centers of vise jaw locking toggle lever and vise jaw control rod lever, being off. This can be corrected by adjusting screw shown in Fig. 3.

With the machine in normal position, turn screw 21, Fig. 4, until the cam roll 18 just lightly touches the cam. Also adjust screw 12, Fig. 4A, until it clears the cross member of the vise frame by \( \frac{1}{64} \) of an inch.

Vise Jaw Control Latch Guide – Safety is provided, by mechanism indicated at

FIG. 4. Side view of the Self-Quadder mechanism.
FIG. 4A. View showing vise jaw control latch guide.

9, Fig. 4A, against rotating the vise jaw control latch 1, after it has started to move down and until it has again returned to its highest elevated position. It prevents uncoupling the vise jaw control latch with the vise jaw R.H. and L.H. operating levers, 2 and 13, Fig. 4A, during the operative cycle of the Self-Quadder. In its highest elevated position, the vise control latch 1 should just clear the vise jaw control rod latch guide 9 in order to rotate.

Selector Handle—Shifting selector handle at any time before vise jaws have returned to normal position will cause jaws to be out of time with indicator. To retime, depress the lever 39, Fig. 4, which is below the left-hand galley bracket. This causes the control rod to travel downward. Observe the movement of the vise jaws as the control rod travels downward. Shift the selector handle so that the indicator plate reading coincides with the movement of the jaws. Then allow control rod to return to normal position.

Left-Hand Vise Jaw Operating Lever—The lever 13, Fig. 4A, is in two sections, and has an adjusting screw and lock nut. This adjustment permits the moving of the left-hand vise jaw so that exact centering can be accomplished.

To adjust, proceed as follows:

Set the margins on both ends of a 30-em slug, when selector handle is set at "Reg."

Cast a single character (space rule preferred) on a slug with the selector handle set at center. This will determine which way the jaw should be moved to position the single character in the exact center of the slug.

Loosen the plate screws 10, Fig. 4A, holding the two sections of lever 13. They will be found (by opening the vise) down under left-hand jaw. These screws require a specially formed wrench, which is supplied with the Self-Quadder.

After loosening the plate screws 10, slightly, turn the screw 11, turning clockwise to move the jaw forward, or counter-clockwise to move the jaw backward. After this adjustment is made, tighten the plate screws, making sure that the
FIG. 5. View of the first elevator front jaw with the matrix detent in position to steady the last matrix of the line.

Jaw is held pressed to the left with the two sections of lever 13, banking on screw 11.

Matrix Detent—The first elevator jaw is equipped with a matrix detent 23, Fig. 5. Its purpose is to steady the last matrix of each line delivered into the jaw. It will be observed that when quadding left or centering, the last matrix is moved away from the jaw spring pawls. In this position, the detent comes in contact with the last matrix and prevents it from turning and falling out of the jaw as the first elevator rises after casting. Its action is equally effective in recasting. This detent should be kept clean and in good operating condition at all times.

The matrix detent is depressed by the action of the line stop to allow the line of matrices to enter the first elevator jaw. As the matrices enter the jaw, the line stop is forced outward allowing the detent to hold the matrices in position. When the line of matrices is being transferred to the second elevator bar, the transfer rod attached to the transfer slide carries the line stop fully into the first elevator jaw. At the transfer position the plungers 25, are depressed, which action withdraws the matrix detent so that there is no tension against the matrices at this position. It is important that the transfer rod should carry the line stop fully into the first elevator jaw to be in position for the next line of matrices to enter.

FIG. 6. View of the vise cap and vise jaws showing the vise jaw left-hand safety detent and the pump stop operating lever.
Left-Hand Vise Jaw Detent Operating Lever—This operating lever 26, Fig. 6 and 7, and associated parts contained in the left-hand vise jaw should be kept clean and free from small particles of metal, which may prevent free operation. It is the pressure of the matrices against the lever 26 that operates the pump stop lever operating lever 27, Fig. 6, through the movement of the safety detent bar 28. The safety detent operating lever should always extend beyond the face of the vise jaw after the matrices have risen from between the vise jaws. If this lever remains flush with the face of the vise jaw or remains depressed, the pump stop lever will be open, which would allow machine to cast with a short line or with the jaws open. The detent bar 28, Fig. 6, must be parallel with the vise cap. If this bar becomes bent or damaged, it should be straightened or replaced with a new one otherwise the pump stop lever operating lever will not function properly.

Pump Stop Lever—The operating lever 27, Fig. 8, is set in the factory so that the stop lever 32 will clear the catch block on the pump lever, by $\frac{1}{4}$ of an inch or

FIG. 7. View showing details of the vise jaw left-hand safety detent and first elevator jaw matrix detent.

FIG. 8. View of the pot pump operating lever.
less when the plunger descends. *This is a very important adjustment and should be checked often.* Adjustment is made by screw 29, with a full line of matrices and spacebands between the vise jaws.

**Adjustment of Vise Jaw Left-Hand Safety Detent**—Adjust stop screw 93, Fig. 8A, until roll 94 comes into operating contact with bevel of actuating cam 99 and secure in position with lock nut 95.

Manually move operating lever 27 to limit of travel in direction of arrow, at which time lever 98 is against its stop pin. Adjust screw 96 until it just contacts lever 27 when roll 94 is on the highest surface of actuating cam 99 securing it with lock nut 97.

**Air Cushion Cylinder**—Air cushion cylinder 22, Figs. 4 and 9, which is located below the waste metal pan, controls the action of the vise jaws as they return to normal position. There is a regulating valve 34, Fig. 9, below the cylinder which regulates the action of the jaws.

If the jaws snap back too fast, loosen lock nut and turn adjusting screw up into cylinder which will restrict the flow of air and slow down movement of the jaws. After adjusting the screw, the lock nut should be tightened to maintain the adjustment.

If the jaws do not move back to normal fast enough, adjust screw down, which will allow air in cylinder to escape and the jaws will return to normal quickly. This action is very similar to that which controls the delivery of matrices into the elevator jaws, an air cylinder being used in each instance to properly regulate the speed of the movement.
Toggle Lock

Its Purpose—This mechanism prevents the vise jaws from moving back, previous to cast, when they have quadded or centered a line. It also permits the exerted pressure of the vise jaws against the line of matrices to be released after the cast, allowing the jaws to move back approximately \(\frac{1}{2}\) of an inch. This permits the first elevator jaw with the line of matrices to rise freely and yet have the vise jaws act as a guide until the first elevator jaw has risen above the vise jaws. At this point the toggle lock is released allowing the vise jaw or jaws to move back to their normal position.

Its Operation—After the first elevator jaw has descended to the vise cap, the vise jaw control latch rod 3, Fig. 10, starts down causing either or both the vise jaws to close against the line of matrices. When the vise jaw or jaws reach the line of matrices, their inward motion is halted.

Following this, lever 39, Fig. 10, moves downward until pin 38, contacts screw 36, and continuing, in turn pulls the center of stud 37, down to a point slightly above the horizontal center line of the toggle arms, 42. Stud 37, maintains this position until all alignment has been completed. Then roll 18, Fig. 13, rises on the face of cam 57, at point 60. This action through lever 39, brings stud 37, Fig. 10A, .020 below the horizontal center line of toggle arms 42, completing the toggle locking action on the vise jaw control latch rod 3. In this locking action, shoe 47, has been forced back until it banks against adjusting screw 40, and the back shoe 48, which has serrations on it, has moved to engage similar serrations in the vise jaw control latch rod 3.

At this point adjustable shoe 50, Fig. 12, engages hook end of link 52, and by action of the auxiliary cam 58, Fig. 13, through associated mechanism and spring 63, forces cam 53, Fig. 12, to contact fixed roller 54, resulting in a downward motion of shoe guide 55. This action causes serrated block 48, Fig. 11, which is engaged with vise jaw control latch rod 3, to be forced down, thus applying extra pressure through the vise jaws against the line of matrices. This assures tight lines.

The Unlocking Action—Shortly after cast the cam roll 18, Fig. 13, leaves the cam 57 and the auxiliary roll 64 also leaves the auxiliary cam 58.

These combined cam release actions permit the spring 20, Fig. 4, to raise lever 39,
until adjusting screw Fig. 3, contacts the vise jaw control rod lever and then continuing causes it to raise the vise jaw control latch rod 3, and the serrated block 48, Fig. 10A, to which it still is engaged.

The small initial upward movement of the vise jaw control latch rod 3, causes the vise jaws to move back slightly, so that the line of matrices in the first elevator jaw may rise freely without any pressure against the matrices, and also makes certain that the line of matrices is held loosely intact until after it has left the vise jaws.

This position of the locking mechanism is maintained until the first elevator jaw has lifted clear of the vise jaws at which time the releasing latch 64, Fig. 14, which is attached to the first elevator slide, contacts releasing lever 73, which revolves cam 41, Fig. 10, to its lowest position. This relieves the pressure on front shoe 47, thus permitting the arms 42 to snap up. This in turn withdraws the back shoe 48 from the vise jaw control latch rod 3. The rod 3, is then free to move upward and return vise jaws to normal position.

FIG. 10A. View of the toggle lock mechanism in the locked position.
FIG. 11. View of the toggle lock mechanism in the locked position with extra pressure.
To hold the back shoe 48, Fig. 10, away from the control rod 3 after the unlocking action, a plunger and spring 34 exerts pressure against the edge of slide 14.

To adjust Shoe 50, Fig. 12—Adjust screw 61, Fig. 13, until the center of shaft for roller 64 is 8 1/2 inches from the center of the main camshaft. This is shown in Fig. 4. Then adjust shoe 50, Fig. 12, so that link 52, will just clear it when vise frame is swung open.

Adjust nut 62, Fig. 13, so that 1/4" of eyebolt projects beyond lock nut 62, resulting in spring being under proper tension.

To adjust Toggle Lock—Take off first elevator slide stop from bottom of first elevator slide. Remove slug adjuster lever cam and remove hinge pin 65, Fig. 14, from first elevator link and draw first elevator slide up and out of gib, without disturbing setting of gib.

Before attempting to adjust toggle lock make certain that adjustment between control rod lever and locking toggle lever, shown in Fig. 3, is correct.

Set screw 36, Fig. 10, so that 3/8" of the thread extends in the opening of link 35. Then press lever 39, Fig. 4, down as far as possible, with foot. Hold it in this position, adjust screw 40, Fig. 10A, until toggle lock holds control rod 3, from moving upward, then turn lever 73, Fig. 10, counter-clockwise, releasing lock.

With selector handle set for “R.H. Quad.”, allow machine to revolve until cam roll 18, Fig. 13, is at point 59 on cam 57, stop machine at this point. Remove locking toggle cover 43, Fig. 10. Back off screw 36, Fig. 10. It should then be possible to move the left-hand vise jaw manually to the left.

Now adjust screw 36, upward so that when the vise jaw is again manually pushed to the left, a ratchet-like sound will be indicated. The teeth in the back shoe 48 will then be touching but not meshed with the teeth in the control rod 3. This adjustment of screw 36 is made prior to the final locking action which occurs when cam roll 18 is on rise 60 of cam 57, Fig. 13. The ratchet-like sound will not occur in actual operation of the Self-Quadder.

The machine should then be revolved until cam roll 18 has advanced upon the rise 60 on cam 57. It should not be possible to move the left hand vise jaw manually as the locking mechanism will be then in the locked condition.

Restore the first elevator slide to its original position on the machine, and adjust the release lever 64, Fig. 14, by means of the adjusting screw so that it clears the cross rib of the vise frame by 1/4 of an inch. This is an important adjustment.

Cleaning or Repairing Toggle Lock

To properly clean the toggle lock or to make any repairs it is necessary to remove it from machine. The adjusting screw block 45, Fig. 10, should be taken off by removing the two holding screws.

Remove locking toggle cover 43, Fig. 10.

Toggle mechanism with slide 14, Fig. 10, can be removed and cleaned. Make sure that the ball and spring detent 34, remains in position when slide 14 is pulled upward. This ball and spring detent exerts pressure against the edge of slide 14 to hold the back shoe 48 away from the control rod after the unlocking operation.

By carefully removing these parts, no adjustments will be disturbed if parts are reassembled properly.

CAUTION: If for any reason metal becomes lodged between first elevator jaw and vise jaws, when first elevator is in casting position—Do not attempt to open vise frame until the hinge pin 65, Fig. 14, has been removed. This can be done quickly by releasing the knurled head screw and withdrawing the hinge pin.
Be sure the line stop in first elevator jaw is fully in before starting machine.
To back up machine, if roll 18, Fig. 13, is in pocket of cam 57, hold lever 17 toward rear of machine so that roll is free from cam.

Cleaning or Repairing Vise Jaw Control Latch

If metal or dirt should accumulate beneath the bevel pinion 72, Fig. 4A, in control latch 1, and it becomes necessary to remove this part for cleaning or repairing:
Remove screw 66, spring 67 and ball 68 from latch 1.
Remove screw 69, holding key 70 from latch 1. Latch 1, can then be withdrawn from the vise jaw control latch rod 3, being careful not to lose spring 71, which presses up against bevel pinion 72, and holds pinion 72, in mesh with rack pinion 8, when control rod 3, is in highest position.
Clean all metal or dirt from these parts and reassemble. Be sure spring 71 contacts bevel pinion and works freely.

FIG. 12. View showing the mechanism for applying the extra pressure to the vise jaws after the toggle lock is in the locked position. This extra pressure against the line of matrices assures a tight line.
Cleaning or Repairing First Elevator Jaw

Remove the two first elevator jaw binding screws. Remove line stop from jaws and then first elevator back jaw can be taken off.

To remove matrix detent 23, Fig. 5, from front jaw, remove screws 24 and pull out plungers and springs 25. Removal of these parts will allow detent to come out of jaw. Recessed in the jaw will be found two springs which press against the detent shoes that are attached to detent 23. As all parts are now removed, the front jaw can be cleaned.

Reassembling these parts, you first place springs back in recesses, then push detent 23 back against these springs. Then return plungers and springs 25 to their place and test detent. The detent must work freely.

Vise Jaws and Vise Cap

The right- and left-hand vise jaws should be cleaned every day and should move freely. To lubricate the track in which the vise jaw blocks slide, use a clean cloth dampened with a good grade of light oil.

Apply a drop of oil between stud on safety detent 31, Fig. 7, and operating pawl 30.

It is important that the above parts be lubricated daily.

To remove vise cap for repairs or cleaning, remove first elevator from vise and vise jaw wedge bracket; remove supporting plate under right-hand vise jaw;

FIG. 13, View of the locking toggle and auxiliary locking toggle cams and levers.
FIG. 14. View showing the toggle lock releasing mechanism and the first elevator lever link hinge pin. The releasing latch 64, which is attached to the first elevator slide contacts the locking toggle release lever 73 to release the toggle lock, thus allowing vise jaws to return to normal position.

remove four screws from vise cap, then cap can be lifted up and off vise. However, if the track on which the vise jaw blocks slide has received daily attention and the jaws move freely, it will not be necessary to remove the vise cap for cleaning.

After cleaning or repairing, replace vise cap and replace the four screws but do not tighten down these screws until vise jaw wedge bracket has been applied and the screws holding the wedge bracket tightened. Then tighten the four screws in vise cap. Replace support plate under right-hand vise jaw and replace knife block and first elevator slide.

Lowering Vise to Second Position to Remove Mold Disk from Machine—Advance machine to let first elevator down on vise cap. Then loosen screws in levers 39 and 15, Fig. 12, and remove studs 51 and 56. The vise can now be lowered into second position to remove mold disk and slide. In replacing, be sure that screws in the levers are tightened down on the studs. It is important that these levers be disconnected when lowering vise to second position to prevent breakage and change of adjustment. To call attention to the necessity for disconnecting the levers before lowering vise to second position, the vise frame rest has a cotter pin through it, which must be removed to allow lowering of vise. When cleaning the device with an air hose it has been found good practice to hang a piece of canvas or heavy paper behind the vise to shield the rest of the machine.

Manual Control of Spaceband Driver

The arrangement shown in Fig. 15, consists of two stops, 105 and 106 whose action is controlled by the movement of the shifting lever 2. This mechanism permits the spaceband driver to rise when the machine is used as “Regular” and prevents the spaceband driver from rising when the machine is being operated for right- or left-hand quadding and centering.

When operating as “Regular,” the selector handle is in the position as shown in Fig. 15. The extension 107 on shifting lever 2, is pushed inward disengaging the vise jaws from the vise jaw control rod. This action, by means of a suitable link-
age arrangement moves the stops 105 and 106 out of the path of the sleeve 79 and collar 80, permitting the spaceband driver to rise for spaceband justification.

When operated for “R.H. Quad.” the extension 107 is pulled outward, connecting the left-hand vise jaw to the control rod and moving the stops 105 and 106 into position to prevent the spaceband driver rising.

Moving the selector handle to “Cent.” or “L.H. Quad.” automatically causes the left-hand side of the shifting lever 2 to be forced outward in correct position to prevent the spaceband driver rising. At the same time, the right-hand side of the lever 2 moves inward connecting the vise jaw or jaws to the vise jaw control rod. The outward movement of the left-hand side of lever 2 is caused by the action of the lower portion of plate 103 on pin 102.

An adjustable link 104 is provided to locate the stops 105 and 106 correctly when they are in position to prevent the spaceband driver rising.

**Adjustment of Mold Cam Lever Eccentric Pin**

To adjust mold slide so that there is proper clearance between the face of the mold and matrices when justification takes place, the mold cam eccentric pin 92, Fig. 16, must be adjusted when cam roll 91 is on the section of mold slide cam marked 83, which is the highest point of cam. When cam roll is on 83, and when eccentric pin is properly adjusted, the space between the face of the mold and the vise jaws or matrices should not be less than .005” or more than .005”. This must be determined by using a thickness gauge.

Before making the adjustment of eccentric pin, it will be necessary to release the pressure of the pot lever spring. This is done by removing lock nut 84 and 85, wing pin 86 and eyebolt 87, as shown. Lock nuts 89 and 90 must not be disturbed.

When the adjustment is made, restore parts 84, 85, 86 and 87 to original position, taking care that space 88 is approximately $\frac{3}{16}$ of an inch when pot is in casting position.

**Adjustment of “Resilient” Mold Cam Lever**

For machines having the resilient mold cam lever, Fig. 17, instead of the solid cam lever, the screw 100 is used to adjust the mold slide so that there is proper clearance between the face of the mold and matrices when justification takes
place. This adjustment is made when cam roll 91 is on section of mold slide cam marked 83. When screw 100 is properly adjusted, the space between the face of the mold and the vise jaws or matrices should be not less than .003" or more than .005". This must be determined by using a thickness gauge. Lock nut 101 should be tightened securely after adjustment. Make certain that screw 100 does not turn while lock nut 101 is being tightened.

FIG. 16. View of the mold cam and driving gear when standing at right-hand side of machine, showing the mold cam roll and eccentric pin. The eccentric pin and roll are part of the solid type of mold cam lever and the eccentric pin is used to make the adjustment for the proper clearance between face of mold and matrices when justification takes place.

FIG. 17. View of the mold cam and driving gear when standing at right-hand side of machine, showing the resilient mold cam lever in position. For machines having this type of cam lever, adjustment for the proper clearance between face of mold and matrices when justification takes place is made by screw 100.
The Linotype Self-Quadder—Operating Instructions

OPERATING REGULAR: That is, operating as a Linotype machine not equipped with a Self-Quadder. Shift the Selector Handle to the position marked "Reg." and "R. H. Quad." Push in Stud Shifting Lever. Make all settings that would be necessary on a regular machine before assembling a line and casting a slug therefrom.

QUADDING TO THE RIGHT: Shift the Selector Handle to the position marked "Reg." and "R. H. Quad." Pull out Stud Shifting Lever to couple L. H. Vise Jaw Operating Lever and Stud Shifting Lever. The composition can then be cast on R. H. end of slug.

QUADDING TO THE LEFT: Shift the Selector Handle to the Position marked "L. H. Quad." This will push out Stud Shifting Lever. The composition can then be cast in the center of the slug.

CENTERING: Shift the Selector Handle to the position marked "Cen." This will push out Stud Shifting Lever. The composition can then be cast in the center of the slug.

Instructions for operating the Linotype Self-Quadder with views showing the position of the vise jaw control rod latch with respect to position of selector handle.