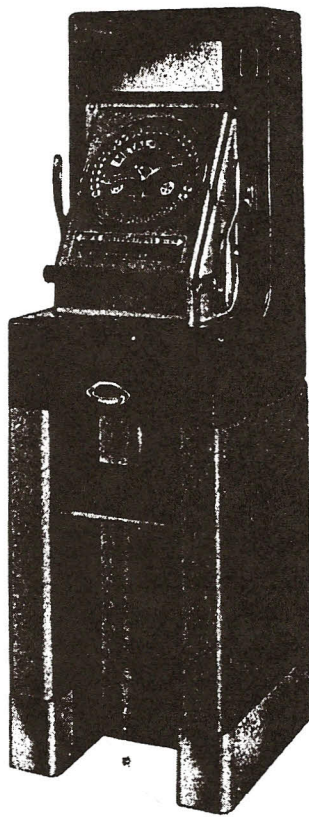


**STANDARD METAL TYPER**  
**SERVICE MANUAL**



STANDARD HARVARD METAL  
TYPER COMPANY  
CHICAGO, ILL.

This service manual was compiled to alleviate maintenance of STANDARD METAL TYPERS.

Contained herein are instructions and related sketches to aid in proper service.

STANDARD METAL TYPERS are manufactured to exacting requirements, and engineered with simplicity of mechanical maintenance an important factor.

STANDARD HARVARD METAL  
TYPER COMPANY  
CHICAGO, ILL.

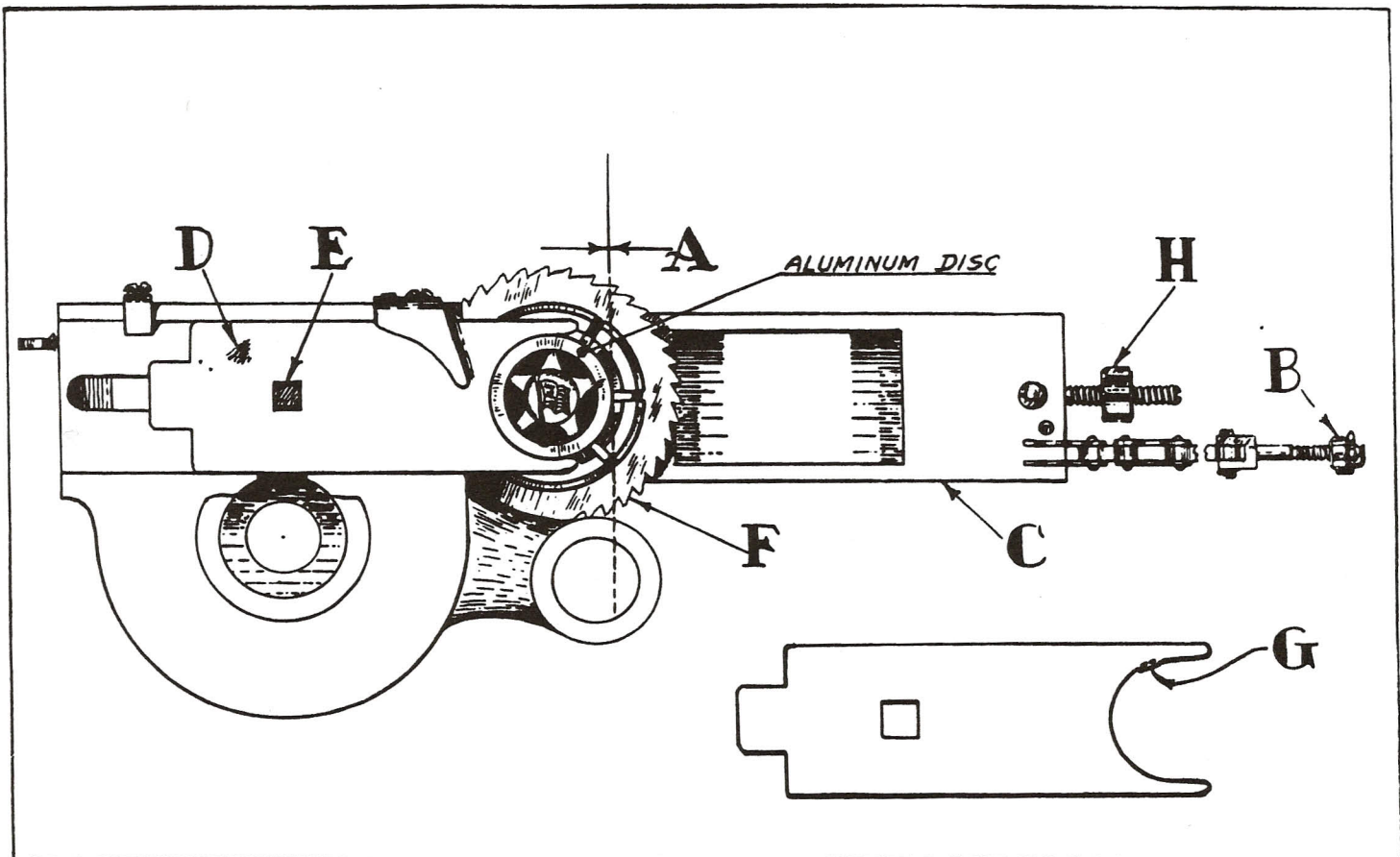


FIGURE 1

### DIFFICULTY

Aluminum disc jams in chuck or disc holder "F".

### SOLUTION

Aluminum disc must locate in center of opening in chuck "F" as indicated by dotted line "A".

The following procedure will correct trouble.

1. Slide "D" must thrust aluminum disc to center of chuck "F" when right hand handle is at forwardmost position. This is determined by adjustment of chain bolt castle nut "B".

2. Main slide pin opening "E" should fit snugly about pin attached to "C". If loose, tighten by staking slide "D" 1/16" AFT OF HOLE.

3. Stop adjustment bolt "H" should be set to meet slide "C" at end of pull of right hand handle.

4. Location of aluminum disc to left or right is accomplished by staking the periphery of slide to either side as required, as shown at point "G".

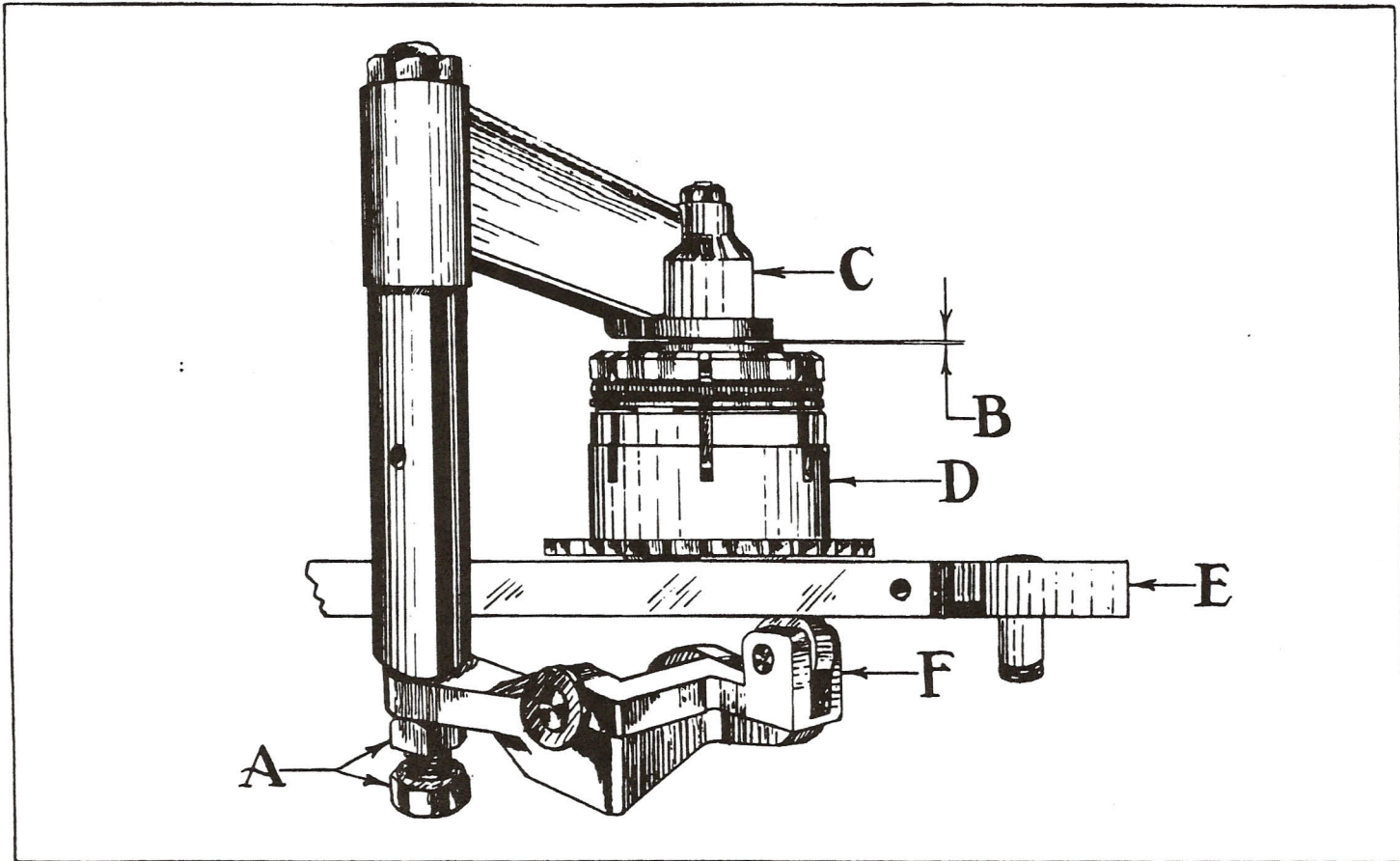


FIGURE 2

### DIFFICULTY

Aluminum disc overlaps between hold down valve "C" and chuck "D".

### SOLUTION

Clearance between hold down valve "C" and chuck "D" when right hand handle is at end of stroke, should be no more than  $\frac{1}{3}$  the thickness of aluminum disc. To adjust, pull right hand handle to extent and raise or lower, as required, valve "C" with adjustment bolt and lock nut "A" which is actuated by motion of "E" and "F".

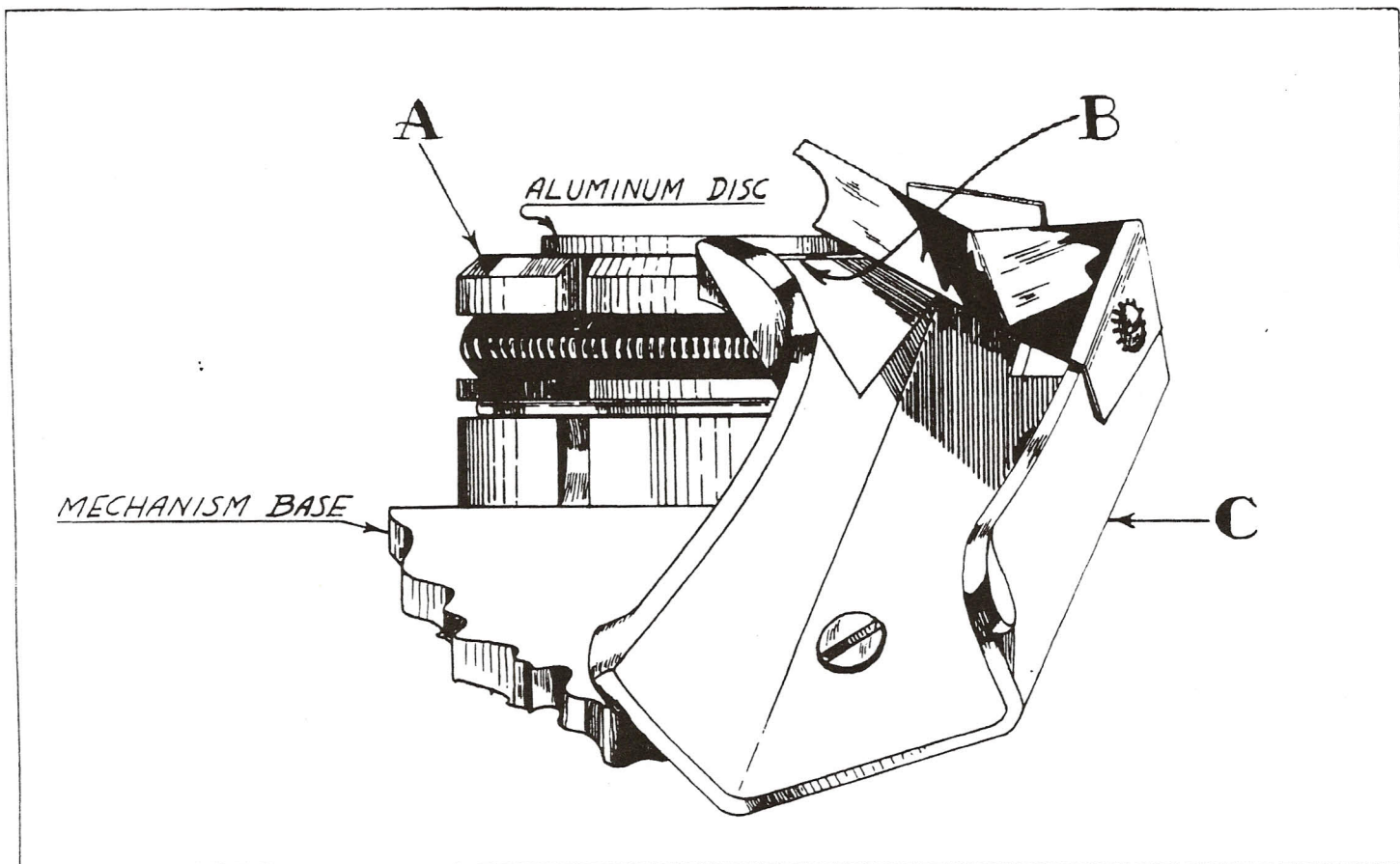


FIGURE 3

### DIFFICULTY

Aluminum disc jam at contact with chute "C".

### SOLUTION

Surface of chute "C" at point "B" should be slightly below top of chuck "A". If too high, file surface down to permit easy passage of disc from chuck to chute.

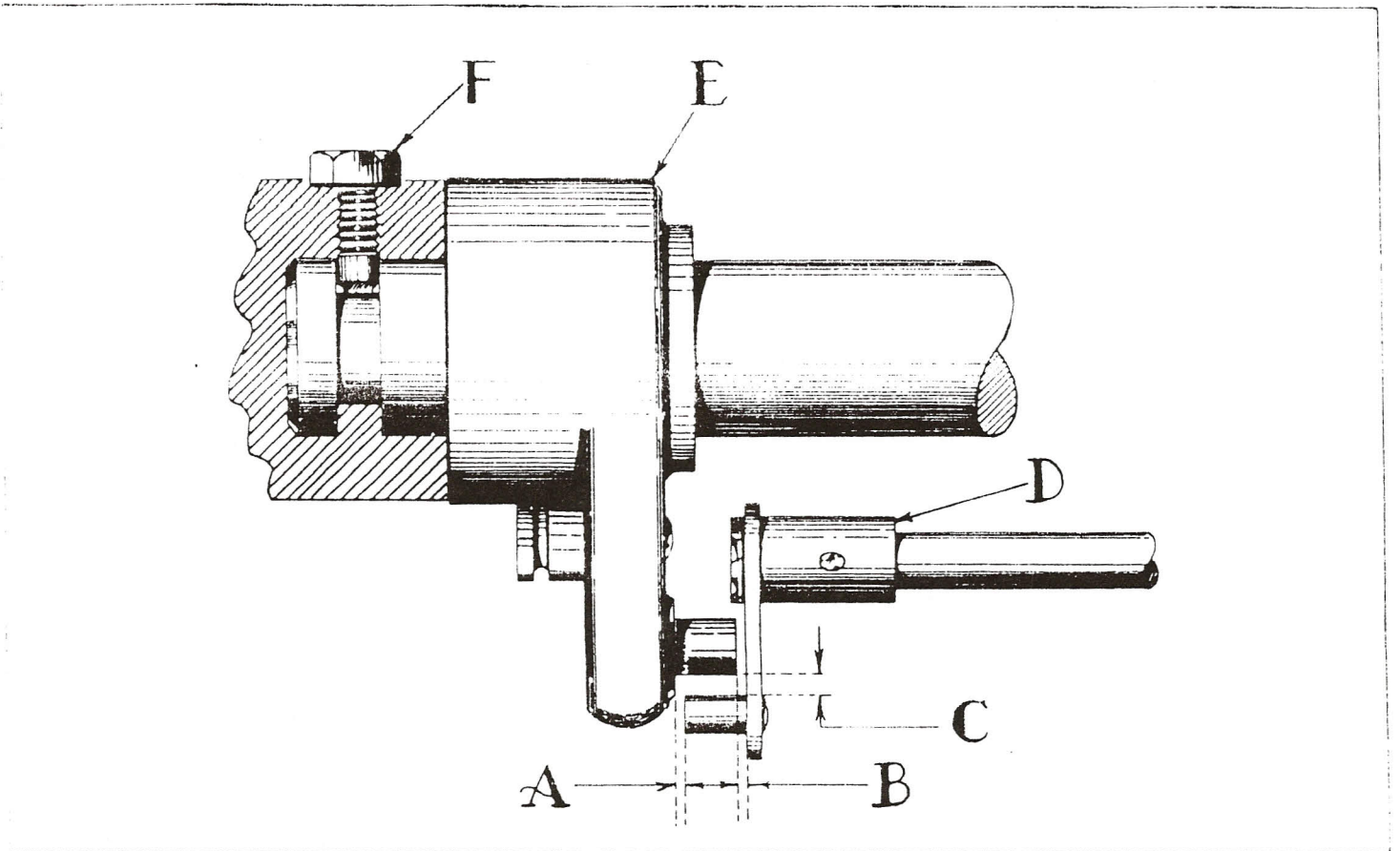


FIGURE 4

### DIFFICULTY

Printing handle does not engage when coin is inserted.

### SOLUTION

Pins attached to "D" and "E" should have clearance as shown in "A", "B" and "C". Pin in "E" may be adjusted in or out by hammering, then stake casting "E" with center punch around circumference of pin.

Screw "F" should have sufficient clearance in slot of shaft to permit easy operation of handle.

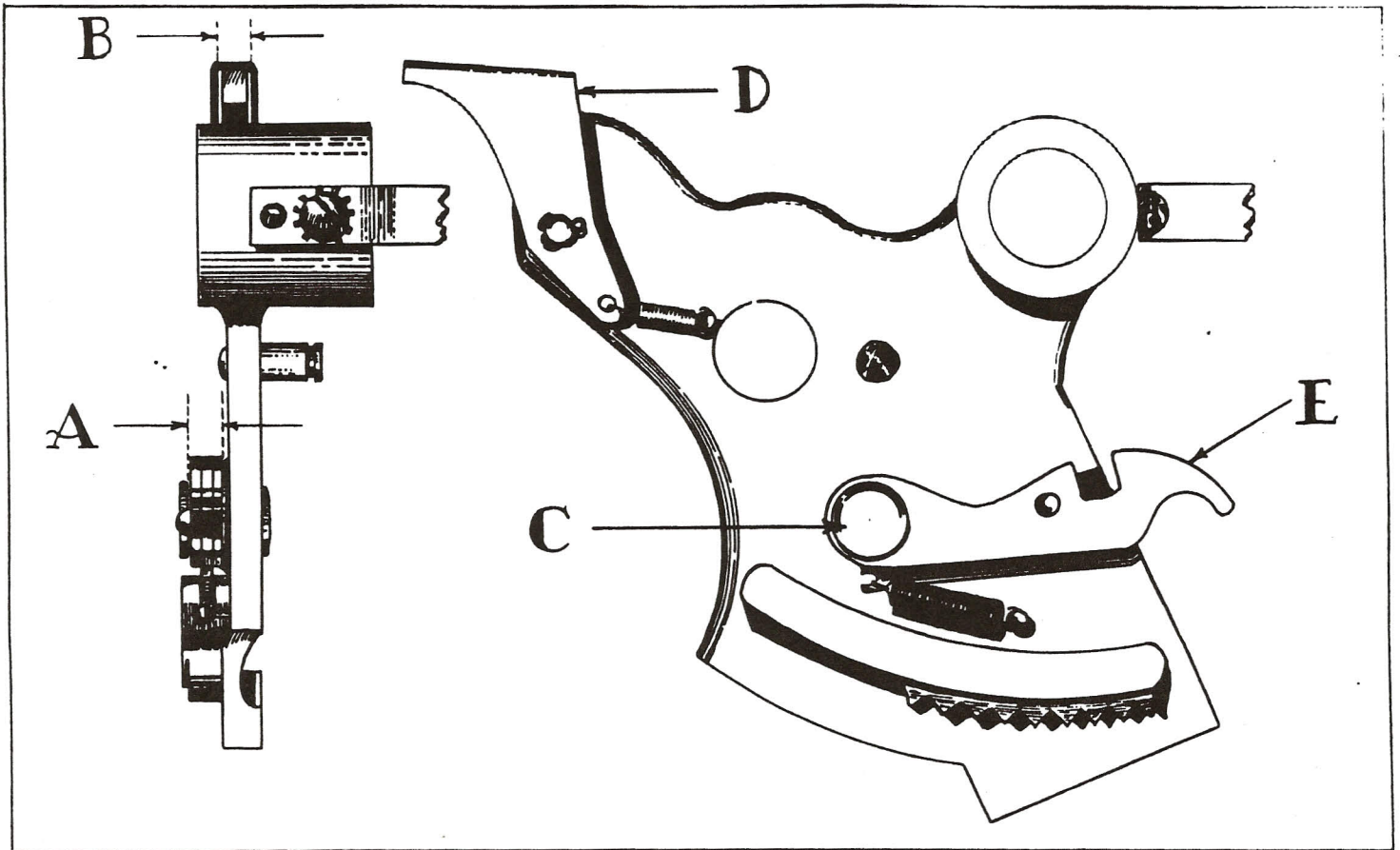


FIGURE 5

### DIFFICULTY

Left hand handle does not engage or print after inserting coin.

### SOLUTION

Dog "E" must operate freely. Clearance as indicated at point "A" should be approximately  $1/64$ " between rivet head "C" and dog "E"

Hammer lift "D" should have clearance as shown in "B". If hammer lift "D" sticks, relieve pinhole through casting with number 10 drill bit.

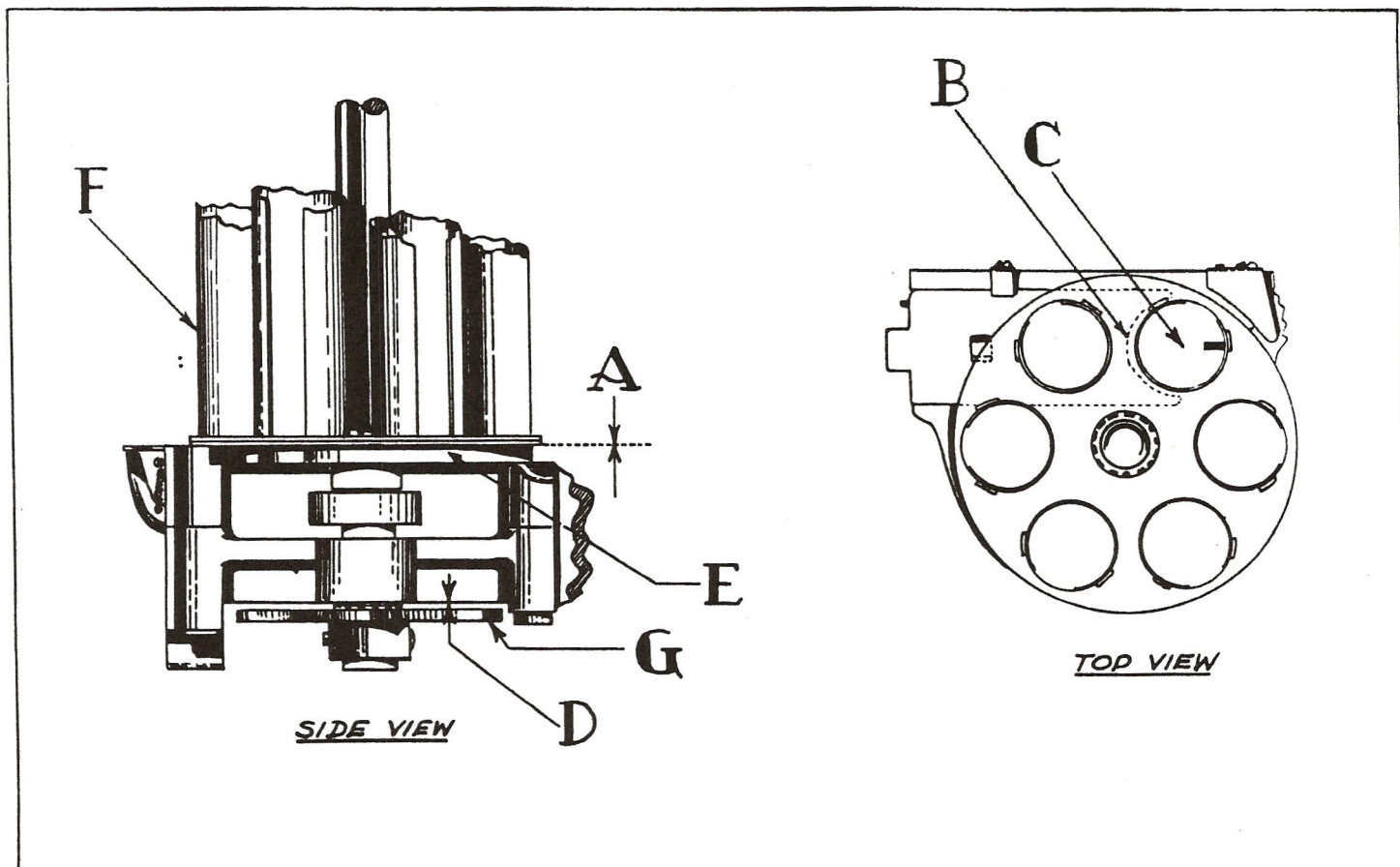


FIGURE 6

### DIFFICULTY

Aluminum disc jam under magazine.

### SOLUTION

1. Clearance between "F" and "E" at point "A" must be no more than one third the thickness of aluminum disc. This is controlled by distance "D" between star wheel "G" and mechanism base.
2. Slide "B" must be clear of opening in magazine Area "C", in which token rests, must be clear of any obstruction when both handles are not engaged.



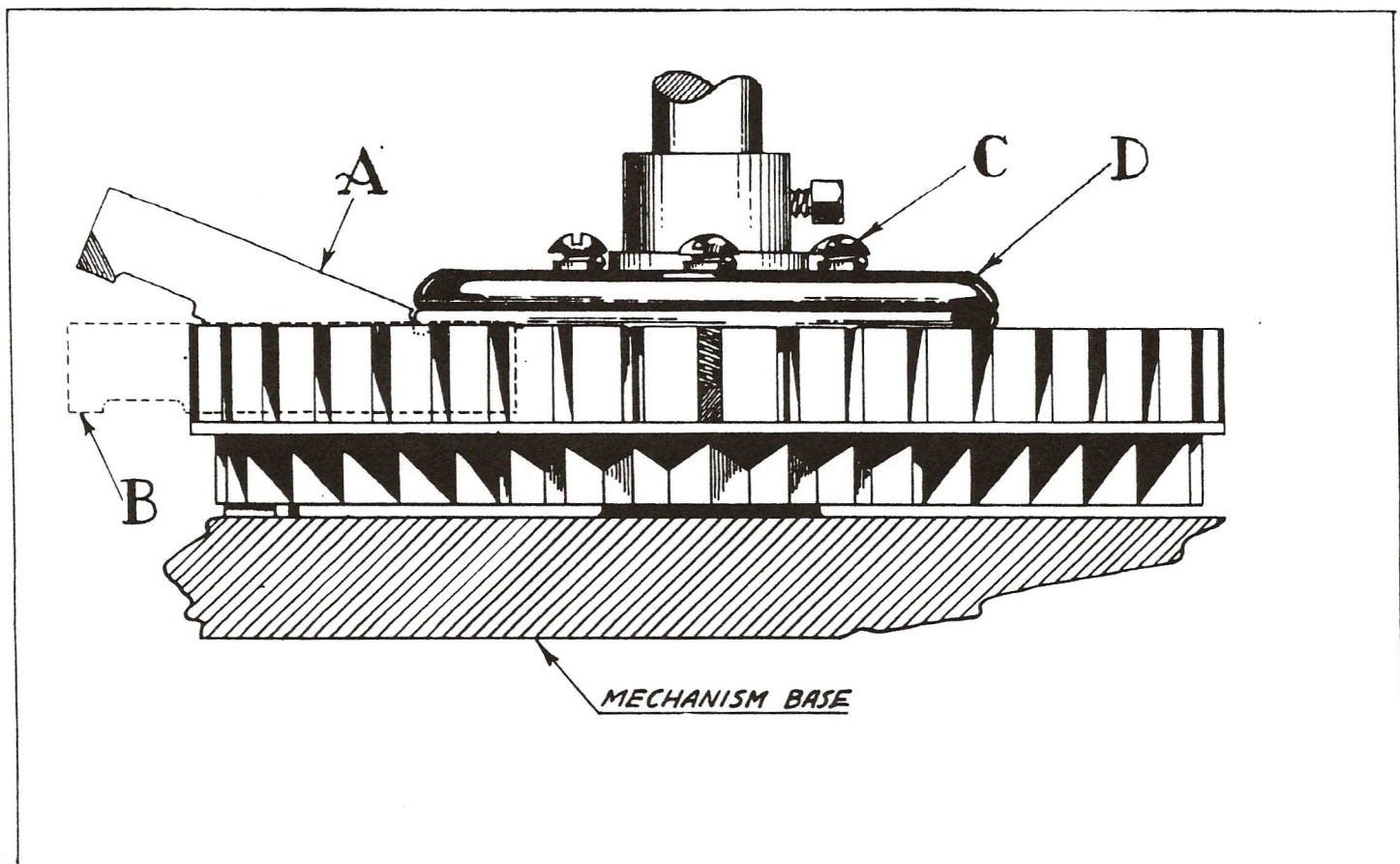


FIGURE 4-7

### LETTER DIE REPLACEMENT

1. Loosen screws "C" until collar "D" and letter dies "A" rise to position shown.
2. Push desired letter for removal down to horizontal position as shown by dotted outline "B" and pull outward. Reverse procedure to install replacement.

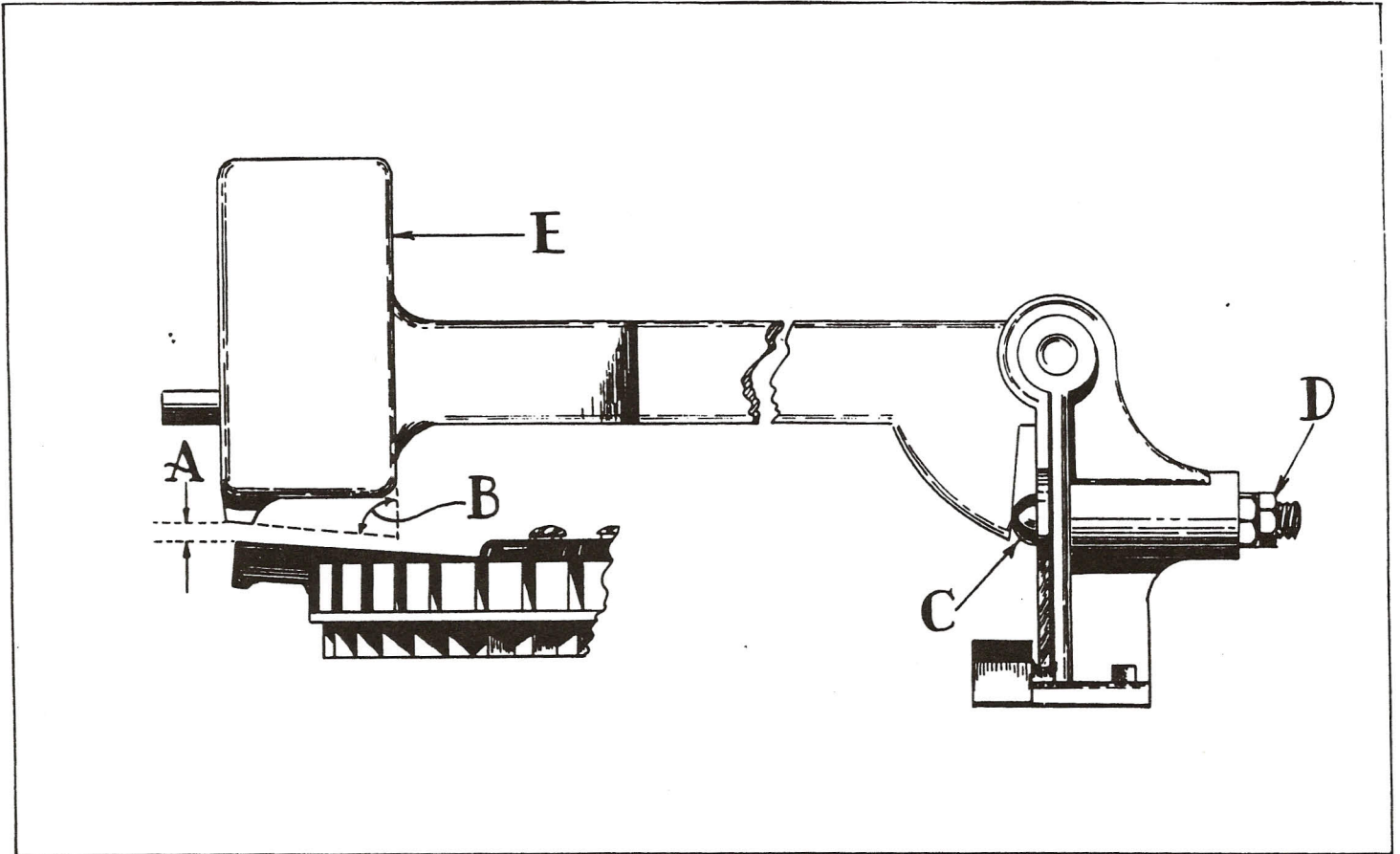


FIGURE 1-8

### DIFFICULTY

Letter dies do not print clearly or space to full 32 letters.

### SOLUTION

1. Angle of surface of hammer contact point "B" may be altered by filing, which will effect clearness and full spacing of 32 letters around disc.

2. Stroke of hammer "E" is increased or lessened, to print heavier or lighter as desired, by adjustment of ball pin "C" with lock nuts "D". Gap "A" when decreased will cause embossing of disc to be heavier, and when increased will cause embossing to be lighter.

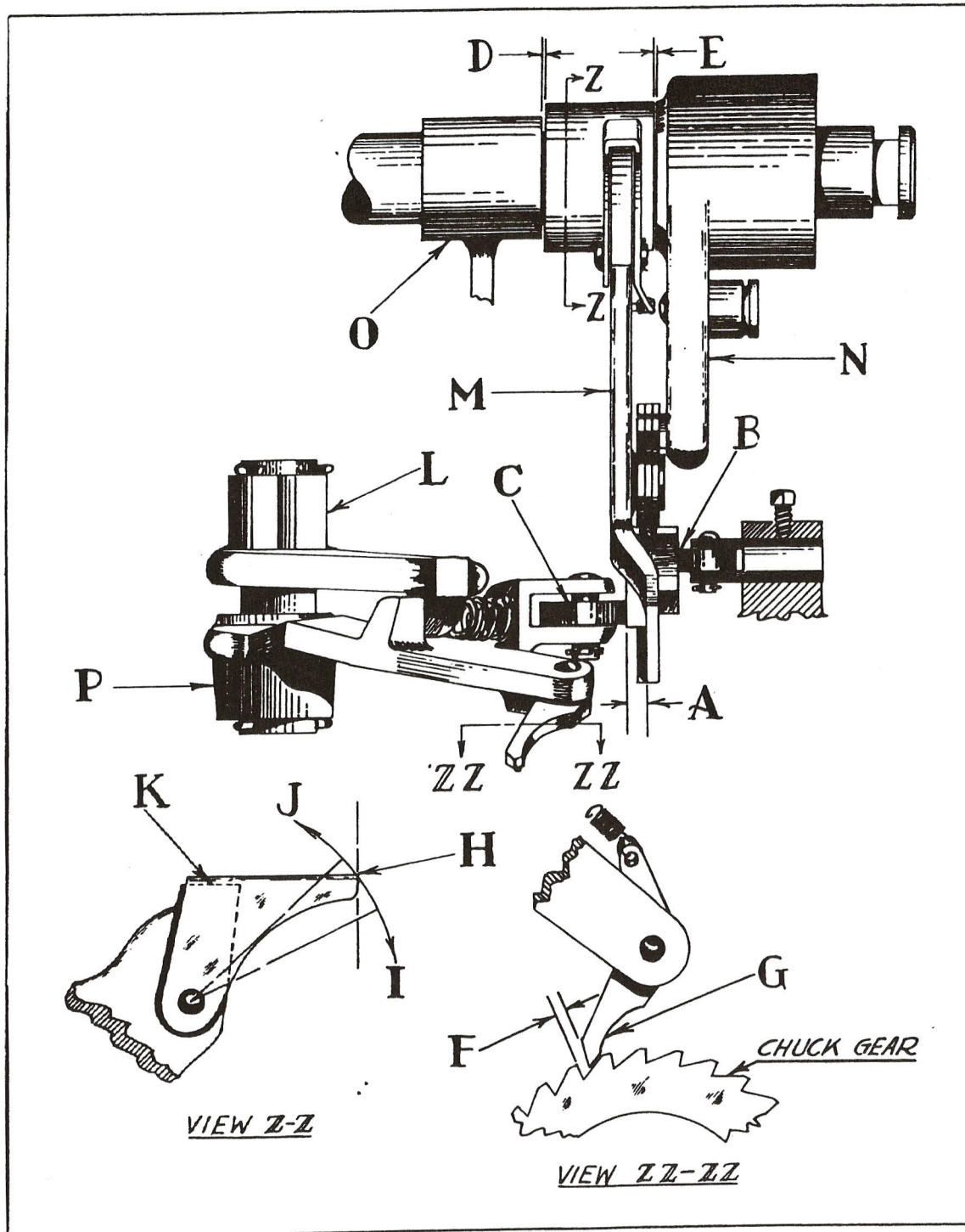


FIGURE 9

### DIFFICULTY

1. Spacing of letters irregular.
2. Skips whole space intermittently.
3. Overlapping of letters - chuck fails to revolve.

### SOLUTION

- (1.) To correct irregular spacing of letters on aluminum disc check the following.
  - a.) Roller "B" and yolk holder is loose. Adjust to permit no more than  $1/16$ " clearance between "M" and "N" and "M" and "O" at points "D" and "E". Tighten set screw.
  - b.) Hammer lift as shown in View Z-Z is worn at point "H". Replace part.
  - c.) Hammer falls too soon. Prolong lift of hammer by filing casting "K" at farthestmost point to permit hammer lift to fall in an arc from "J" to "I" approximately  $1/16$ ".
  - d.) Space between the two surfaces as indicated by "A" along which roller "C" rides is insufficient to permit dog "G" to engage next tooth in chuck gear, depending on nature of stroke of left hand printing handle. Increase this gap by filing lowest surface which roller "C" contacts at return of handle.
  - e.) Bottom of aluminum disc magazine jams on letter dies. File around the periphery of bottom of magazine to provide adequate clearance.
- (2.) To correct skipping a whole space check the following.
  - a.) Centering arm assembly "L" and "P" does not return to surface "A". Oil pin on which it moves. Shorten spring which actuates return of assembly "L" and "P" to increase tension.
  - b.) Dog "G" sticks intermittently. Oil and check for adequate clearance between bottom of dog "G" and top of slide, on which anvil in chuck rests.
  - c.) Hammer lift as shown in View Z-Z sticks. Oil pin in which it moves in an arc. Enlarge pin hole slightly. Check for adequate clearance of internal sides of hammer lift. If insufficient, file casting in area of hammer lift on both sides.
- (3.) To correct overlapping of letters check the following.
 

Chuck fails to revolve. Dog "G" as shown in View ZZ-ZZ does not engage next tooth in chuck gear. Space indicated by "F" must be maintained at end of stroke of printing handle. Also check explanations in paragraph (1.) under a.) and d.).