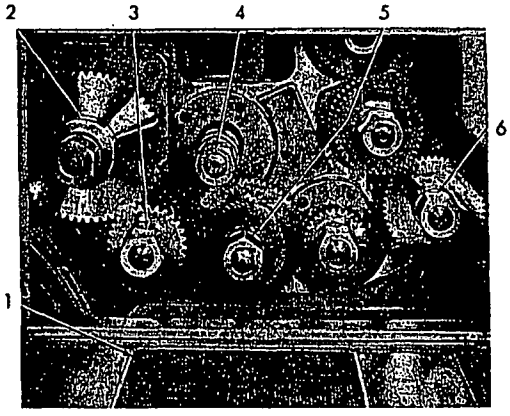

Fig. 15. This view located inside door 6 Fig. 2.

or chuck, be sure to mount the gear blank or shipping dummy on the arbor or in the chuck before setting control lever in the advance position.) Jog the machine until the sliding base is in the fully withdrawn position. Turn off the main line switch. Loosen the hex screw 3 Fig. 14 and turn the adjusting screw 1 Fig. 14 in the increase or decrease direction until the required throw is indicated on the scale 9 Fig. 6. The throw should be 1/16″ greater than the whole depth of the gear being cut. (When cutting without generating roll, it is desirable to reduce the throw to a minimum in order to increase the efficiency of the cycle. If possible, use less than 1/16″ clearance.) The whole depth is given on the cutting summary. Tighten hex screw 3 Fig. 14. NOTE: Machine will not run unless door 5 Fig. 14 is closed. This setting controls the withdraw of the sliding base after each tooth has been cut in order to give clearance for indexing to the next tooth.

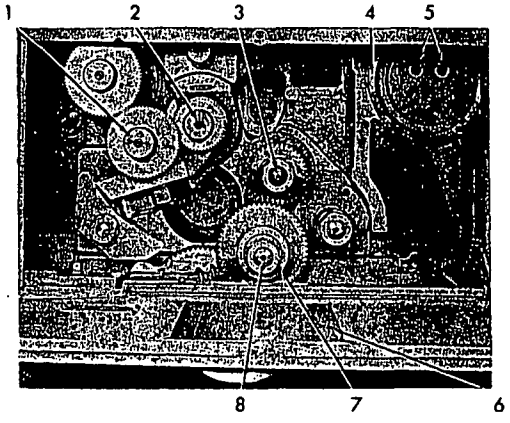

Fig. 16. This view located inside door 4 Fig. 2.

13. Feed and Speed Gears

The plate 1 Fig. 15 on the door of change gear compartment specifies the gears necessary for various feeds and speeds. The driver shaft in each case is identified on the plate. The proper feeds and speeds are given on a special chart sent with the machine.

14. Install Ratio of Roll Gears

Consult the summary for the ratio of roll gears. If not specified on the summary, consult the Nc/50 Ratio Change Gear Tables furnished with the machine. The driver shaft is indicated in the change gear compartment at 2 Fig. 16. Be sure to allow just enough backlash in each gear mesh to prevent the gears from binding. These gears determine the relative rate of roll of the cradle with respect to the rate of roll of the work spindle. A change in the ratio of roll will change the pressure angle and spiral angle.

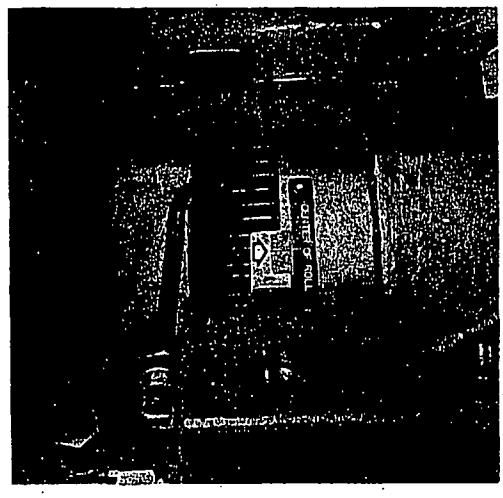

Fig. 17. This view located on left inside door 6 Fig. 2.

15. Set Cradle Angle and Install Cradle Roll Gears

A. Jog the machine to the center of roll, lining up pointer and "center of roll" line on feed cam Fig. 17.

B. Note the cradle angle setting on scale and vernier 2 Fig. 12.

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