All regular cross slides and tool arms are operated from the cam shaft on the front of the machine. A positive return has been provided for the 1st position cross slide. An optional attachment, the 4th position cross slide, can be purchased. This attachment is operated from the extension on the tool spindle cam shaft.

The chuck and feed cam permits the feeding of a bar of stock of the largest diameter and the maximum length of feed by simply feeding against the polished stock stop. Length of stock to be fed can be quickly changed by a crank conveniently located on the feed slide at the front of the machine.

After the stock has been inserted into the carrier, it can be loaded into the collets by a simple stock loading mechanism. This is so designed, that the operator can insert all five bars into the collets without leaving the operating position.

When changing from one cycle time to another, it is necessary to change only one feed gear. Hardened plate type cams are used and are mounted on carriers, making it easy to change cams. The carriers have keys which indicate "0" on the cam shaft. When putting cams on the tool spindle carrier be sure the key is at the top and rise or lettering is on the left hand side. The tool spindle cams are put on with the 3rd position cam on first, followed by 2nd, 4th, 1st, and 5th.

When putting the cams on the front carrier the lettering faces down and the rise is on the right hand side. The front carriers sequence is 3rd, 2nd, 5th, 1st, and positive return cam. Extra cam carriers can be purchased, making it possible to assemble cams for a new set up while the machine is still in operation on its present job, thus reducing the set up time.

THE POWER SUPPLY OF THE MODEL B

Machine is powered by a 7-1/2 H.P., totally enclosed, fan cooled, ball bearing motor which drives two V Belt Drive pulleys. The driven pulley is an 8.6 pitch diameter and the motor pulley driver for the 75 cycle is 7.4 pitch diameter. For 60 cycle, it is 6.0 pitch diameter, and for 45 cycle it is 4.6 pitch diameter. As you will note, it will only be necessary to change the one pulley to get the various cycles. There are four matched belts of even length for this drive. The final tension on these belts is applied by a turnbuckle attached to the motor mount. Next on the drive shaft long (MB-9) we find another pulley which is used for the lubricator. At 75 cycle the lubricator is driven at approximately 1000 R.P.M. Further to the left is the 32 tooth gear (934). It is secured to the shaft by a left hand nut. This gear in turn drives a 32 tooth compound gear which is (MB-41) a 26 tooth portion of the compound gear meshes the 104 tooth driving clutch hub gear (5080-227-4). An operator standing in the front of the machine pushes the starting shaft hand lever (5080-383) to the left. This engages the clutch, driving the starting clutch drive shaft (5080-141) as we proceed to the left on this shaft we find an 80 tooth gear which is the quick index gear (5080-50). It engages with the 40 tooth quick index driven gear (5080-51). You