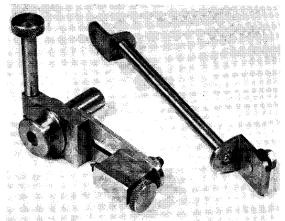


fit in the mandrel bore—19/32 in. for the ML7. Check for fit in the bore of your own mandrel when getting close to nominal size. Using the top-slide already set over, bore the taper seating in the end for the bolt head, opening it up by very light cuts till the bolt head seats flush when pushed in finger tight. Reverse in the chuck and turn the wheel seat end, checking with a change wheel for a really close fit in the wheel. When finish turned, drill the four $\frac{1}{8}$ in. holes round the plug end of the sleeve and make the sawcuts down into them. The 1 in. dia. portion, around which goes the clamp block, could be left a few thou wider than the \(\frac{3}{8}\) in. shown, until the clamp block has been made, then it can be faced back to provide a snug fit for the clamp.

Clamp block

The clamp block is retained in place on the sleeve by a $\frac{1}{16}$ in. thick ring, turned up from a piece of sheet, and drilled for three 6 BA countersunk holding screws. The tapped holes for these



The dividing attachment complete and ready for use.

in the edge of the collar are spotted through from the ring.

The clamp block is shaped up almost entirely in the four-jaw chuck, the ends being faced square and the 1 in. hole bored a close running fit over the collar on the extension piece. Drill for the 2 BA clamp stud No. 26 to depth, split the piece with a sawcut, open out the top half of the hole to 13/64 to clear the stud, tap the lower half of the hole and fit the stud.

It will be seen that the finger screw operating the clamp is quite a tall affair. This allows free access to the screw when a large change wheel is in position for dividing.

Tail piece

The $\frac{1}{8}$ in. thick tail piece is filed up from strip, with the curved end machined on the faceplate. It is attached to the clamp block by a couple of $\frac{1}{8}$ in. rivets from mild steel rod, flush riveted both sides and filed down smooth.

This piece carries the long detent block, in which are two studs. One has a nut on its outer end, serving also to clamp the top of the anchor bar, and fixing the block along the tail in the correct position relative to the change wheel being used for dividing. The other stud also engages the slot in the tail, but is cut down short to fractionally less than $\frac{1}{8}$ in., serving only to keep the detent block aligned to the change wheel.

The detent itself is plain turning from a stub of $\frac{3}{4}$ in. dia. rod, its thread being run down in stages, adjusting the die till a free but shakeless fit is obtained in the tapped hole in the detent block. Thread the detent by using the die in the tailstock dieholder.

The rigid anchoring of the attachment and