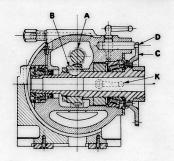
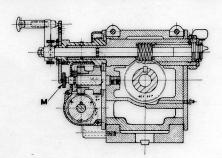
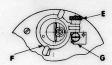
OPERATION OF

UNIVERSAL SPIRAL INDEX CENTER





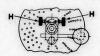
FOR RAPID INDEXING OF TAPS, REAMERS, ETC.: The worm A is arranged to be thrown out of mesh with the worm wheel B and allow the spindle to be turned by hand, and locked by the index plate C and pin D.



TO THROW THE WORM OUT OF MESH: Withdraw index stop pin M from index plate (if engaged). Loosen nut E and swing bolt clear of adjusting collar F. Rotate adjusting collar F until it comes to stop G. This will disengage the worm from the wheel.

TO RE-ENGAGE THE WORM: Care should be used. If the worm threads fail to enter, which would cause resistance to be felt in engagement of the gear teeth, a slight rotation of the spindle will avoid this interference and permit collar F to return to its original stop.

Worm and gear are set at factory with minimum backlash for accurate indexing. When used with power, cutting spirals, or work where a free movement of mechanism is desirable, we recommend a .010 feeler be placed between stop G and adjusting collar F.



TO USE THE FINE ADJUSTMENT OF INDEX CRANK: Lock the index plate by means of the stop pin at the back, bring the work to the desired position and adjust the index crank by means of the screws H-H until the index crank pin drops into the nearest hole.

When the work is revolved a small amount relative to the index plate,

adjust the screws **H-H** with the stop pin and index crank engaged.

The stop pin at back of index plate must be disengaged when the head is geared for cutting spirals. Spindle can be locked by means of lever K.

BROWN & SHARPE MFG. CO., PROVIDENCE, R. I., U.S.A.