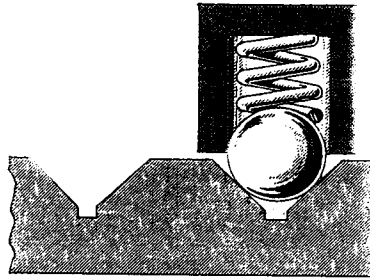


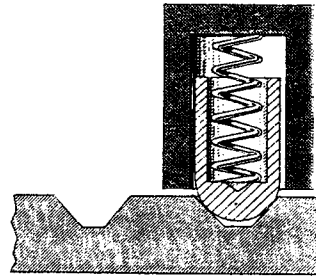
Detent designs for stopping mechanical movements

Some of the more robust and practical devices for locating or holding mechanical movements are surveyed by the author.

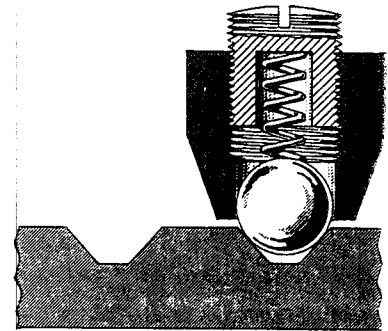
LOUIS DODGE



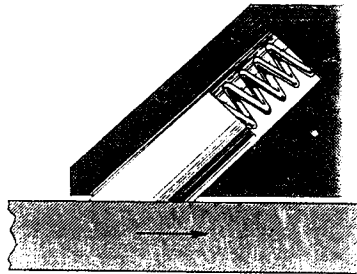
FIXED HOLDING POWER IS CONSTANT IN BOTH DIRECTIONS



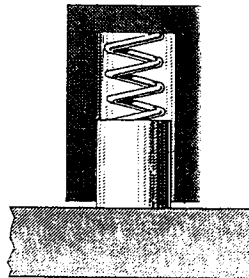
DOMED PLUNGER HAS LONG LIFE



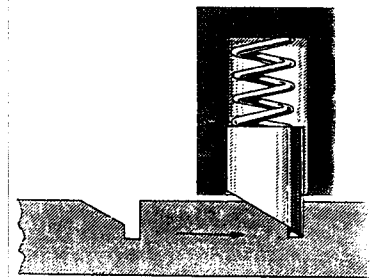
ADJUSTABLE HOLDING POWER



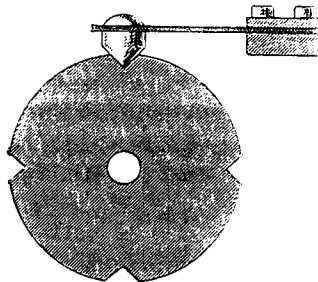
WEDGE ACTION LOCKS MOVEMENT IN DIRECTION OF ARROW



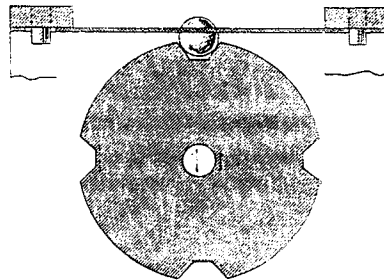
FRICTION RESULTS IN HOLDING FORCE



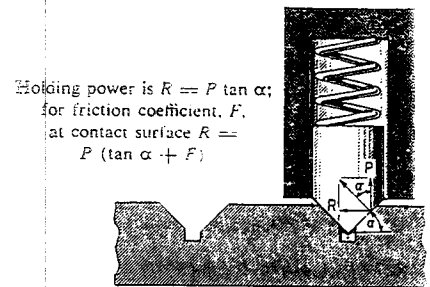
NOTCH SHAPE DICTATES DIRECTION OF ROD MOTION



LEAF SPRING PROVIDES LIMITED HOLDING POWER

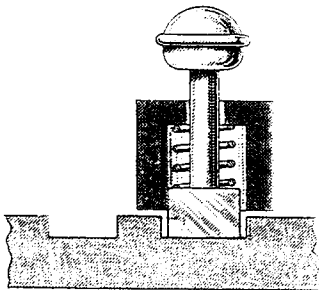


LEAF SPRING DETENT CAN BE REMOVED QUICKLY

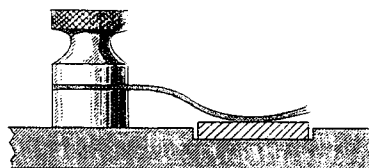


Holding power is $R = P \tan \alpha$; for friction coefficient, F , at contact surface $R = P (\tan \alpha + F)$

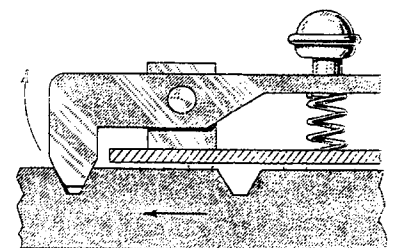
CONICAL OR WEDGE-ENDED DETENT



POSITIVE DETENT HAS MANUAL RELEASE



LEAF SPRING FOR HOLDING FLAT PIECES



AUTOMATIC RELEASE OCCURS IN ONE DIRECTION. MANUAL RELEASE NEEDED IN OTHER DIRECTION