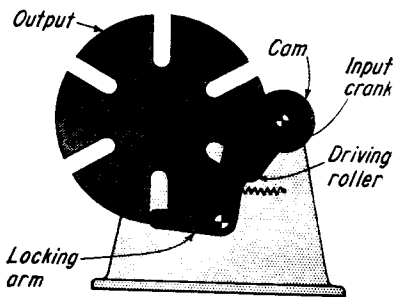
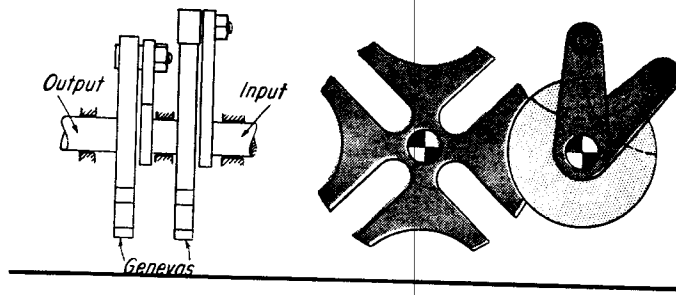


# GENEVA MECHANISMS

**Locking-arm geneva**



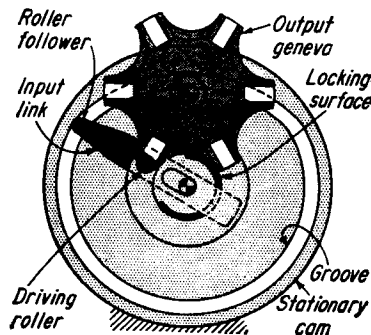
**Twin geneva drive**



The driven member of the first geneva acts as the driver for the second geneva. This produces a wide variety of output motions including very long dwells between rapid indexes.

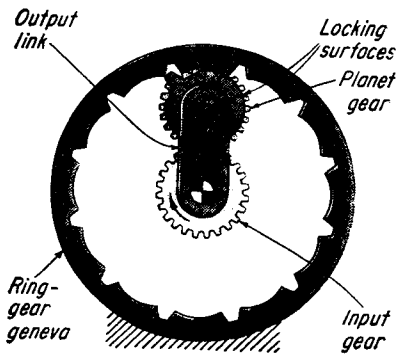
As with most genevas, the driving follower on the rotating input crank enters a slot and rapidly indexes the output. In this version, the roller of the locking-arm (shown leaving the slot) enters slot to prevent the geneva from shifting when not indexing.

**Groove cam geneva**



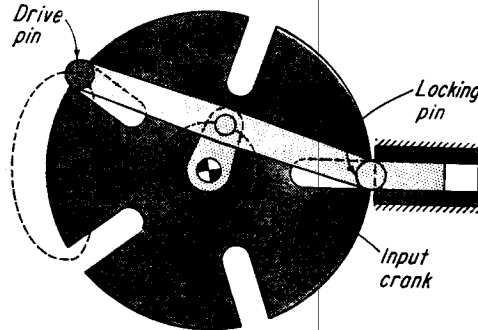
When a geneva is driven by a roller rotating at a constant speed it tends to have very high acceleration and deceleration characteristics. In this modification the input link, which contains the driving roller, can move radially while rotating by means of the groove cam. Thus, as the driving roller enters the geneva slot it moves radially inward, which reduces the geneva acceleration force.

**Planetary gear geneva**




The output link remains stationary while the input gear drives the planet gear with single tooth on the locking disk, which is part of the planet gear, and which meshes with the ring-gear geneva to index the output link one position.

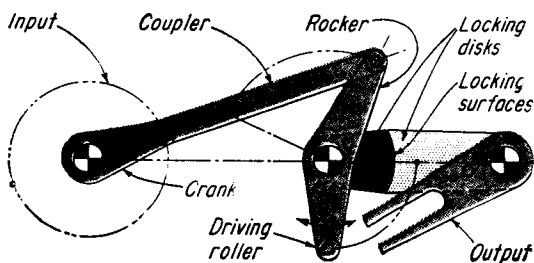
**Locking-slide geneva**



One pin locks and unlocks the geneva; the second rotates the geneva during the unlocked portion. In the position shown the drive pin is about to enter the slot to index the geneva, whereas the locking pin is just clearing the slot.

Symbol  indicates a pivot point that is fixed to frame

**Four-bar geneva**



For obtaining a long-dwell motion form an oscillating output. Rotation of the input causes a driving roller to reciprocate in and out of the slot of the output link. The two disk surfaces keep the output in the position shown during the dwell period.