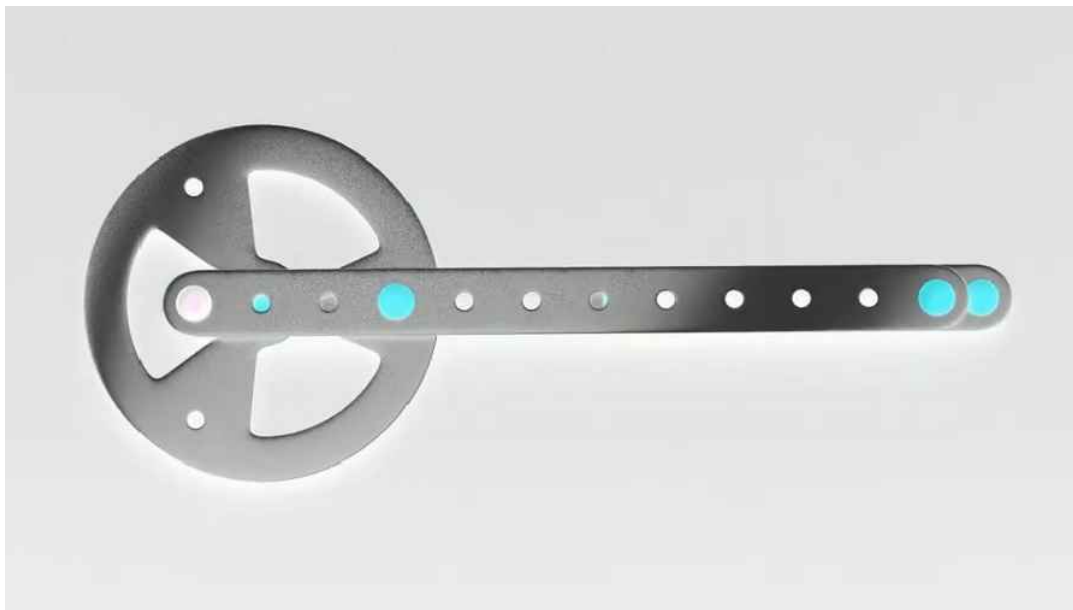
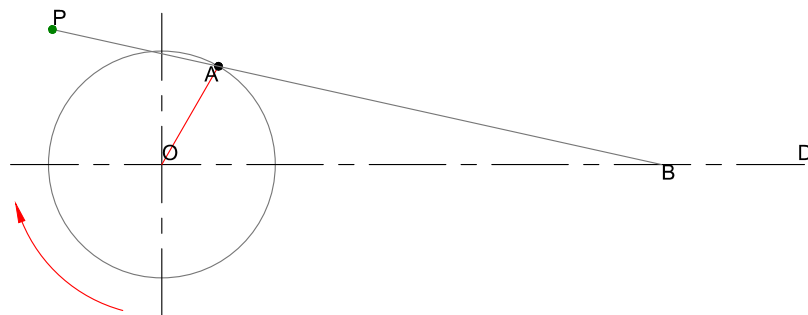


## Crank and piston extended.

This mechanism is made up of the following components:

- a) one crank;
- b) one extended linkage;
- c) one slider.

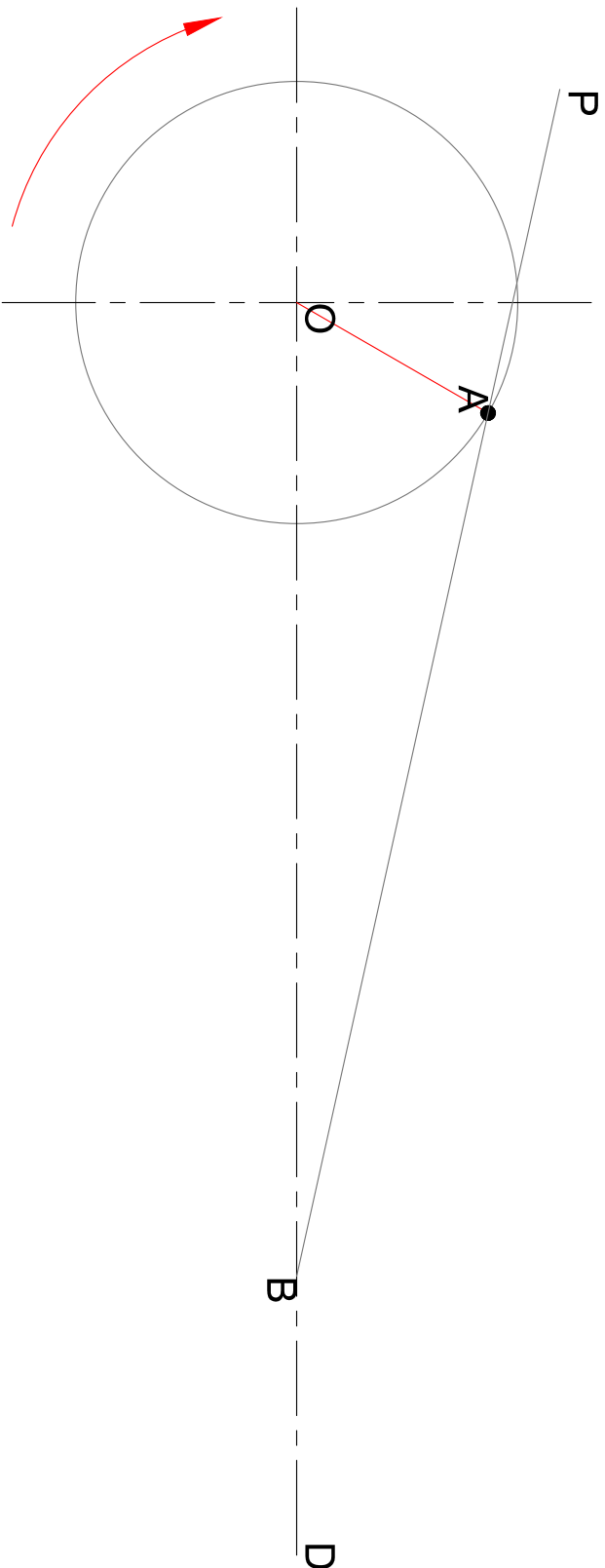
Plot the locus of point P for one complete revolution of the crank.



To help you visualize the mechanical motion better you can visit:  
<https://youtu.be/zK3HrMYoJ6w> for a video of the locus of this mechanism.

### Loci exercise Crank and piston extended - **STARTER SHEET**

The diagram shows a crank mechanism OA which rotates around centre O. Connecting rod PB is connected to the crank at A. Rod PB slides along line CD at B. Find the locus of point 'P' on the connecting rod as crank OA makes one whole revolution.



### Loci exercise Crank and piston extended - ANSWER SHEET

The diagram shows a crank mechanism  $OA$  which rotates around centre  $O$ . Connecting rod  $PB$  is connected to the crank at  $A$ . Rod  $PB$  slides along line  $CD$  at  $B$ . Find the locus of point 'P' on the connecting rod as crank  $OA$  makes one whole revolution.

