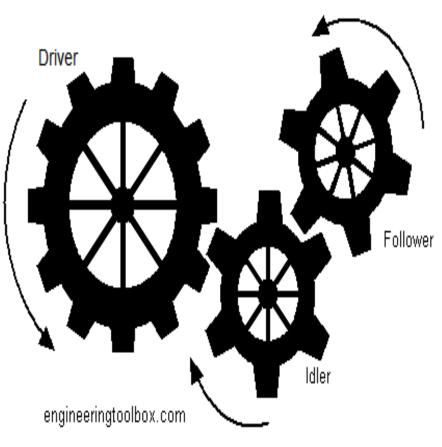
# WHY WE USE IDLER GEAR?

The only function of the idler gear is to change the direction of rotation.

It has no affect on the gear ratio.



#### ADVANTAGES OF SIMPLE GEAR TRAIN

to connect gears where a large center distance is required

➤ to obtain desired direction of motion of the driven gear (CW or CCW)

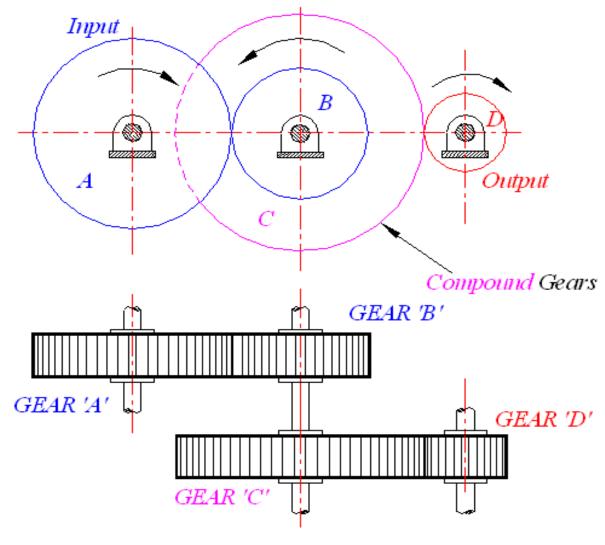
> to obtain high speed ratio

### COMPOUND GEAR TRAIN

When there are more than one gear on a shaft,it is called a



### **COMPOUND GEAR TRAIN**



## ADVANTAGES OF COMPOUND GEAR TRAIN

> A much larger speed reduction from the first shaft to the last shaft can be obtained with small gear.

> If a simple gear trains used to give a large speed reduction, the last gear has to be very large.