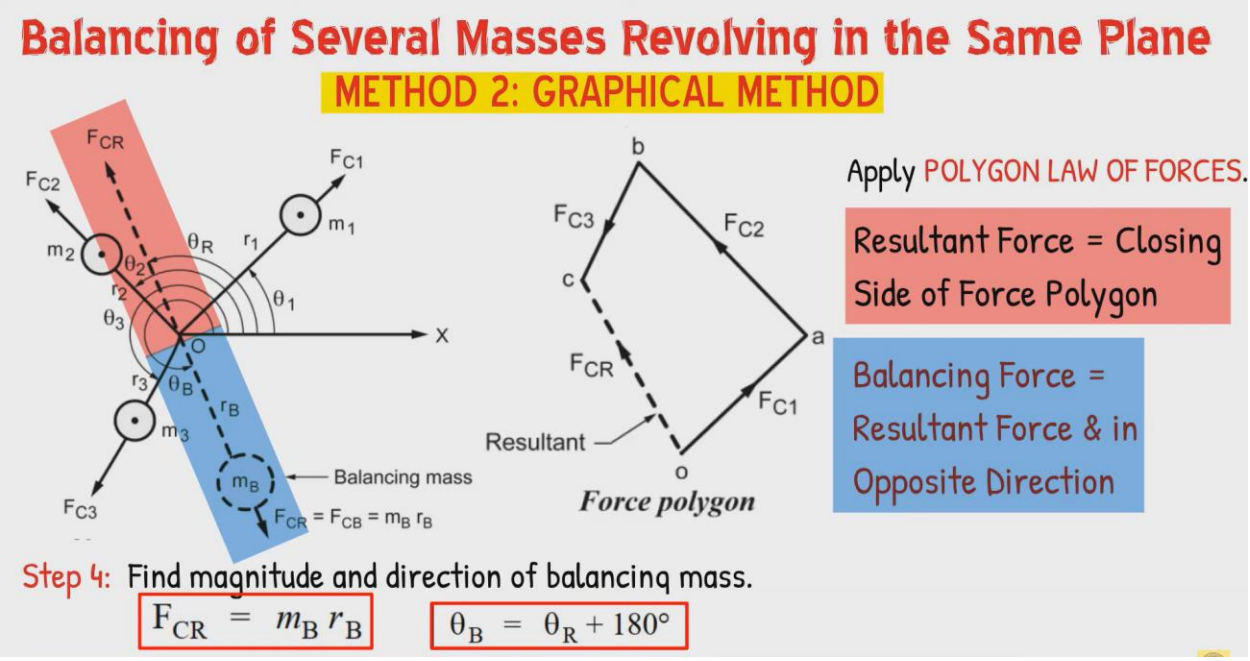


Governors

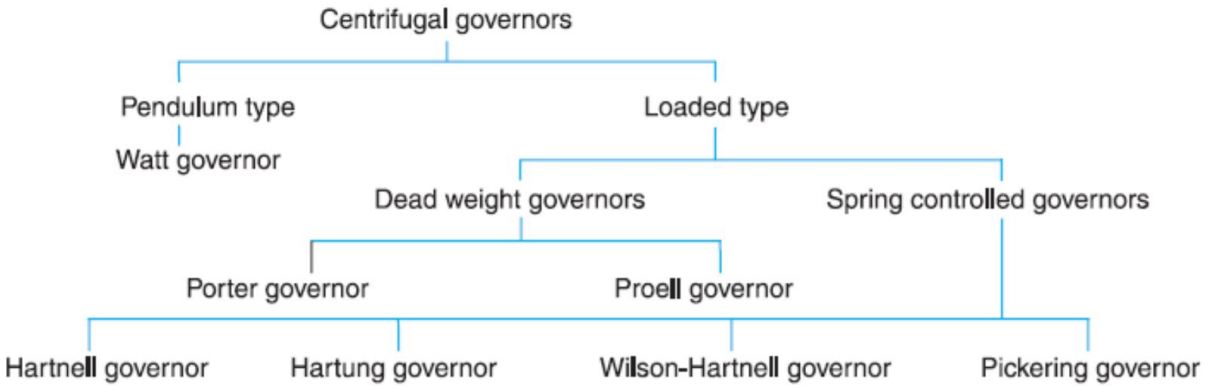
- The function of a governor is to regulate the mean speed of an engine, when there are variations in the load *e.g.* when the load on an engine increases, its speed decreases, therefore it becomes necessary to increase the supply of working fluid.
- On the other hand, when the load on the engine decreases, its speed increases and thus less working fluid is required.
- The governor automatically controls the supply of working fluid to the engine with the varying load conditions and keeps the mean speed within certain limits.

Types of Governors

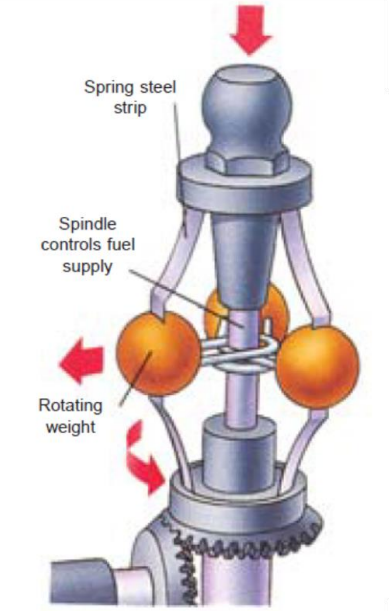
The governors may, broadly, be classified as

1. Centrifugal governors and
2. Inertia governors.

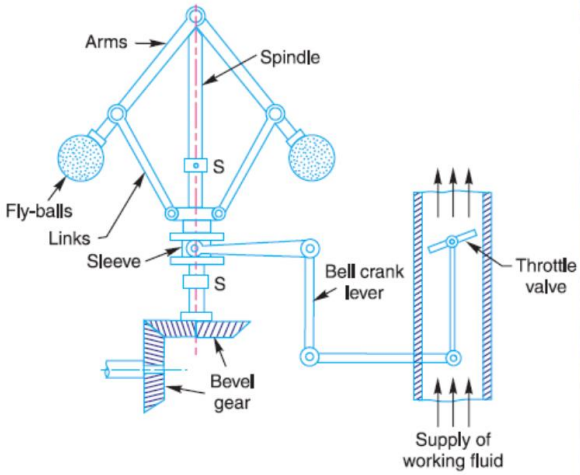
The centrifugal governors, may further be classified as follows :



Centrifugal Governor

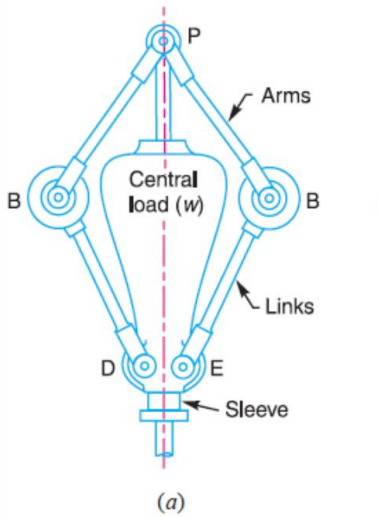


A governor controls engine speed. As it rotates, the weights swing outwards, pulling down a spindle that reduces the fuel supply at high speed.

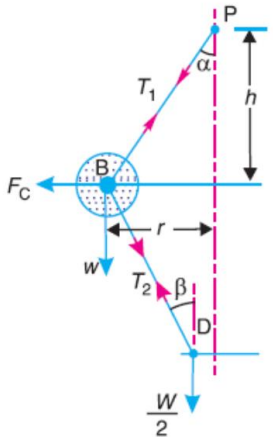


Porter Governor

- The Porter governor is a modification of a Watt's governor, with central load attached to the sleeve as shown in Fig. The load moves up and down the central spindle. This additional downward force increases the speed of revolution required to enable the balls to rise to any predetermined level.



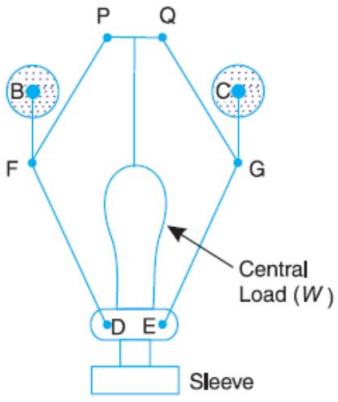
(a)



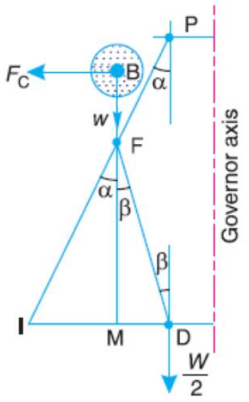
(b)

Proell Governor

The Proell governor has the balls fixed at *B* and *C* to the extension of the links *DF* and *EG*, as shown in Fig. The arms *FP* and *GQ* are pivoted at *P* and *Q* respectively.



(a)



(b)