Carnot's Ideal Heat Engine

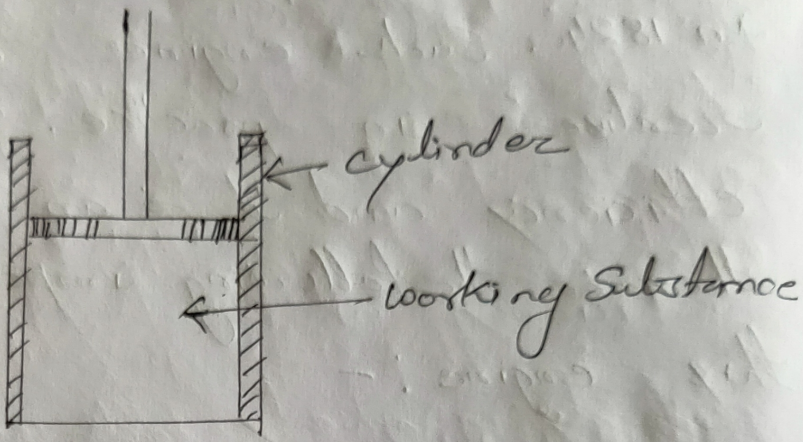
It is theoretical engine which is free from all practical imperfection is is Conceived by Sadi Carnot (French Engineer) in 1824. Such engine cannot be realised in practice. It has maximum efficiency and it is an ideal heatengine. There are the following important parts of this engine :-

1. A cylinder :- A cylinder having perfectly non-conducting walls, a perfectly conducting base B is provided with a perfectly non-conducting piston which moves without friction in the cylinder. The cylinder contains one mole of perfect gas as the working substance.

2. Source :- A reservoir maintained at a constant temperature T_1 from which the engine can draw heat by perfect conduction. It has infinite thermal capacity and any amount of heat can be drawn from it at constant temperature T_1.

3. Heat insulating stand;- A perfectly non-conducting platform acts as a stand for adiabatic processes.

Sink :-



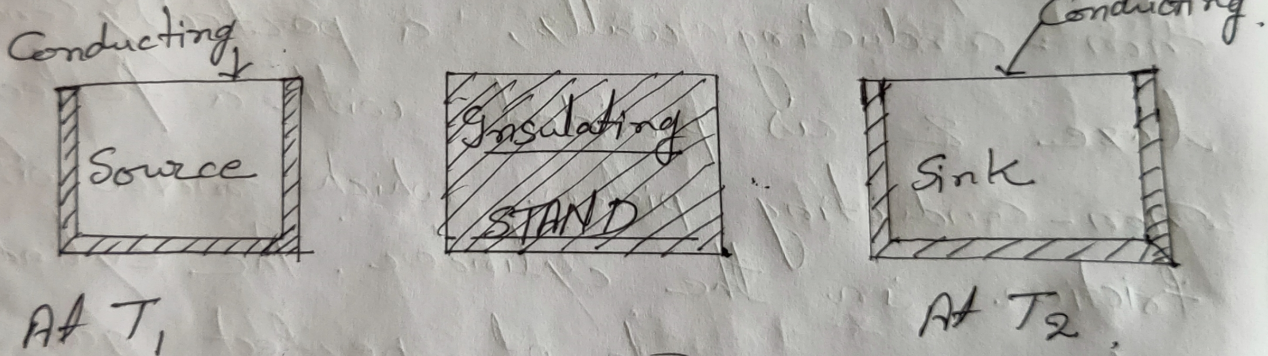


fig:- (1)