

Upward and downward draught carburettors. The carburettor described in Art. 27.11 is a downward draught carburettor. The air enters at the top and leaves at the bottom. In the upward draught carburettors, the air enters at the bottom and leaves at the top. In the passenger cars, downward draught is more popular.

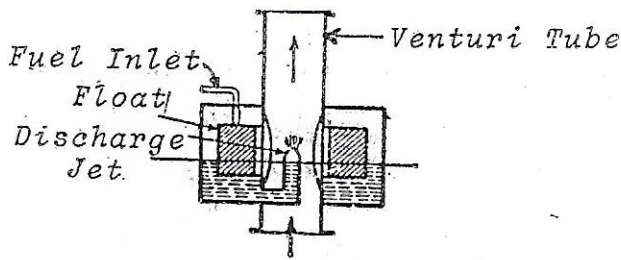
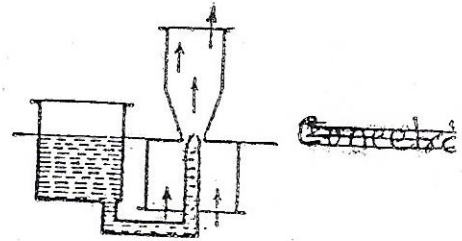


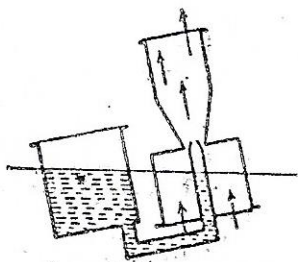
Fig. 27.10 (Concentric type)



Engine Horizontal

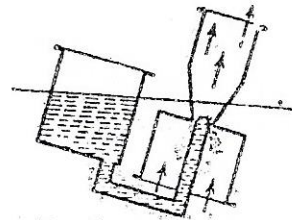
Fig. 27.11 (Eccentric)

Concentric and eccentric-float chambers. When the float chamber is placed around the venturi tube in Fig. 27.10, it is called concentric type; if the float chamber is placed on the side of the venturi tube, it is called eccentric type as shown in Fig. 27.11. Both the type of arrangements have been shown for the upward draught type carburettors.



Grade Causing Weak Mixture

(b)



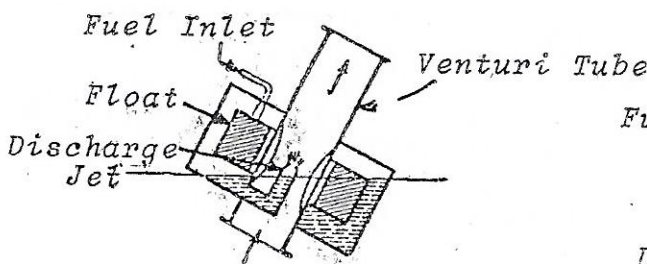
Grade Causing Rich Mixture

(a)

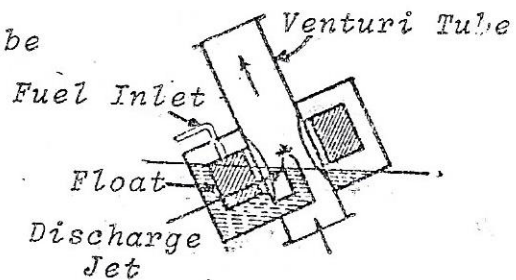
Fig. 27.12

In the eccentric type of carburettors, difficulty is experienced with the level in the float chamber and hence in the discharge jet.

Thus either too rich or too weak mixture is sucked in when the machine is inclined on a gradient. This is explained in Fig. 27.12 (a) and (b). But in concentric type, this difficulty is eliminated and the level in the discharge jet remains fairly constant on any gradient as explained in Fig. 27.13 (a) and (b). Thus the concentric type or similar arrangement is getting popular with the modern trends for carburettor.



(a)



(b)

Fig. 27.13

Difficulty experienced in Eccentric type:

Either too rich or too weak mixture is sucked when the m/c is inclined on a gradient.