Located in the float chamber cover is the fuel inlet, the float chamber vent, and the float needle valve assembly — the latter being situated inside the float chamber cover. In addition, two power enrichment nozzles are pressed into the float chamber cover.

Idle Metering

The fuel passes through the idle metering jet (g) where it mixes with air entering through the idle air bleed (u) and converts into an emulsion. The emulsion is channelled to four small orifices located near the throttle valve. The amount of emulsion which is discharged through the lowest orifice is controlled by the idle mixture screw (w). Emulsion drawn into the induction barrel through the idle mixture orifice combines with induction air entering through the partly open throttle valve whereupon it atomizes into an idle mixture.

The idle mixture can be leaned out by turning the adjustment screws in, and enriched by turning the screws out. Both screws should always be equally set.

The idle speed adjustment controls the idle rpm; that is, by turning the idle speed adjustment clockwise the rpm are increased, by turning the adjustment counter-clockwise the rpm are decreased.

The idle system incorporated in this carbureter is known as an independent system. This is because the fuel is drawn from a point short of the main jet (y). As a result, negative pressure occuring in the induction barrels brings about a continuous response from the idle metering system. Due to this arrangement certain amount of the idle mixture continues to enter the induction barrels during normal power settings as well.

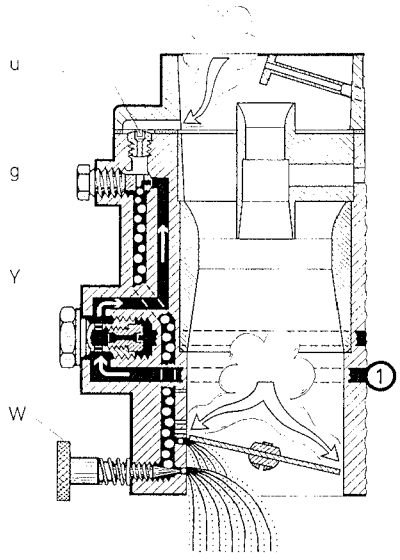

Fig. 5