minimum modular head as small as possible. The theoretical discharge is given by the formula $D = 3.09\ W\ (d + ha)^{1.5}$ where D is the discharge in cusecs and w, d, ha the throat width, the depression and velocity head. Further investigations are required to establish validity of this formula for the geometric profile of flume which includes surface slope length of expansion flume and the flume curves. Standing wave flume having raeteable discharge with desirable accuracy are being manufactured in masonary.

It is essential to maintain records of the rate of flow to regulate the supplies in a canal system. Several types of water works meters such as positive piston type, semi positive type, and inferential type are not suitable for rating purpose because they measure volume only. Current or velocity meters which include Grant-Mitchell and Dethbridge meter have been succesfully used in California and Australia. Rate of flow meters are suitable for Irrigation Works. Any guage outlet, semi-module or broad crested weir can be used as measuring devices for the known water levels and the coefficients. For a wide range of flow, venturi meter gives a fairly accurate measurement of discharge.

The process of selecting an appropriate module for an outlet depends upon the availability of minimum working head and the upstream head. The chosen outlets are set to correct rating with the correct guage reading at the average level of design discharge between silted and scoured bed conditions. The irrigators complaints regarding outlet discharges are disposed off by checking the water level marks upstream and downstream of the module and to see that the accessories are functioning in accordance with design parameters. In actual operation the modules are tampered with, but it has been observed that Gibb Module, free fall pipe and standing wave are not easy to temper. However irrigators resort to smashing of these modules or tunneling through the masonary part. Vigilance on the part of a canal engineer can prevent loss of precious irrigation water.

The moduling of outlets by vrious types of modules have been practiced in Punjab. The proportional distribution with the use of semi-modules has certain disadvantages considering the convenience of canal engineer than the needs of the irrigator. Positive moduling is the ideal from irrigator's point of view, but it has some disadvantages under practical conditions. Semi-modules used with low flexibility