



## The Horizontal Pump,

RIGHT HAND, WITH SUCTION PRIMER ATTACHED.

It is frequently desirable to use our Pump as shown above. It is as though a "Vertical" Pump was turned over on its side, the shaft then being horizontal—the circumstance which gives the pump its distinguishing name.

In point of execution there is no important difference between the Horizontal and the Vertical Pump. The former has the advantage of being more readily examined in case of accident.

In using the Horizontal Pump it is necessary that the Pump should be full of water before it will start. If the water is taken from a tank or flume level with the Pump the water should stand in them as high as top of the Pump; if the water is to be taken from a point below the Pump there must be a Foot Valve at the bottom of the suction pipe, to hold it and the Pump full of water, which must be put in, either at the discharge opening with pails, or by means of a Suction Primer H H, as shown above attached to Pump. The part shown at the extreme right is a small lift-pump, worked by hand, and used only in charging the main pump before starting; the pet-cock (shown on top of shell) is opened and the Primer is worked until no more air is driven out of it. When the Pump is evidently full (and not before) the pet-cock is closed, and the main Pump is then ready to be started. The Pump may be emptied by withdrawing the screws near the bottom of Primer and shell of Pump. This should always be done when the Pump is liable to freeze up over night.

The Primer is finished ready to attach the suction pipe at K. All our Primers have rubber valves.