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(54) Title: DISCHARGE VALVE

(57) Abstract

The invention provides an improved discharge valve comprising an upper housing (5, 101, 106), an upwardly movable main valve assembly (35) within the housing and forming with the upper part thereof a variable volume upper chamber (6), a restricted passage (9) between the upper chamber (6) and the exterior thereof, an outlet (19) leading down from the lower part of the housing, a seat (13) for the main valve assembly at the entry to the outlet (19) so that, in the lowered position of the main valve assembly, the outlet is blocked against ingress of fluid in which the device is immersed, and a pilot valve (2, 54, 92) actuatable remotely from the housing (5, 101, 106) to put the upper chamber (6) in free communication with the outlet (19), the arrangement being such that, on such free communication being established, fluid escapes the upper chamber (6) and the change in relative pressures above and below the main valve assembly (35) causes the latter to unseat thereby permitting flow of the immersing fluid into the outlet (19) and its substantially complete discharge, the cessation of flow of the immersing fluid allows the main valve assembly (35) to revert to its seated position with the pilot valve (2, 54, 92) cutting off said free communication, and air penetrates the upper chamber (6) and on replenishment of immersing fluid a net downward pressure is created on the main valve assembly (35) to keep it seated, and wherein the pilot valve (2, 54, 92) has a hollow stem (2, 54, 92) communicating to atmosphere above the normal full set level (23) of fluid in the cistern (1), the main valve assembly (35) and the hollow stem (2, 54, 92) defining therebetween a hollow annulus (16).

