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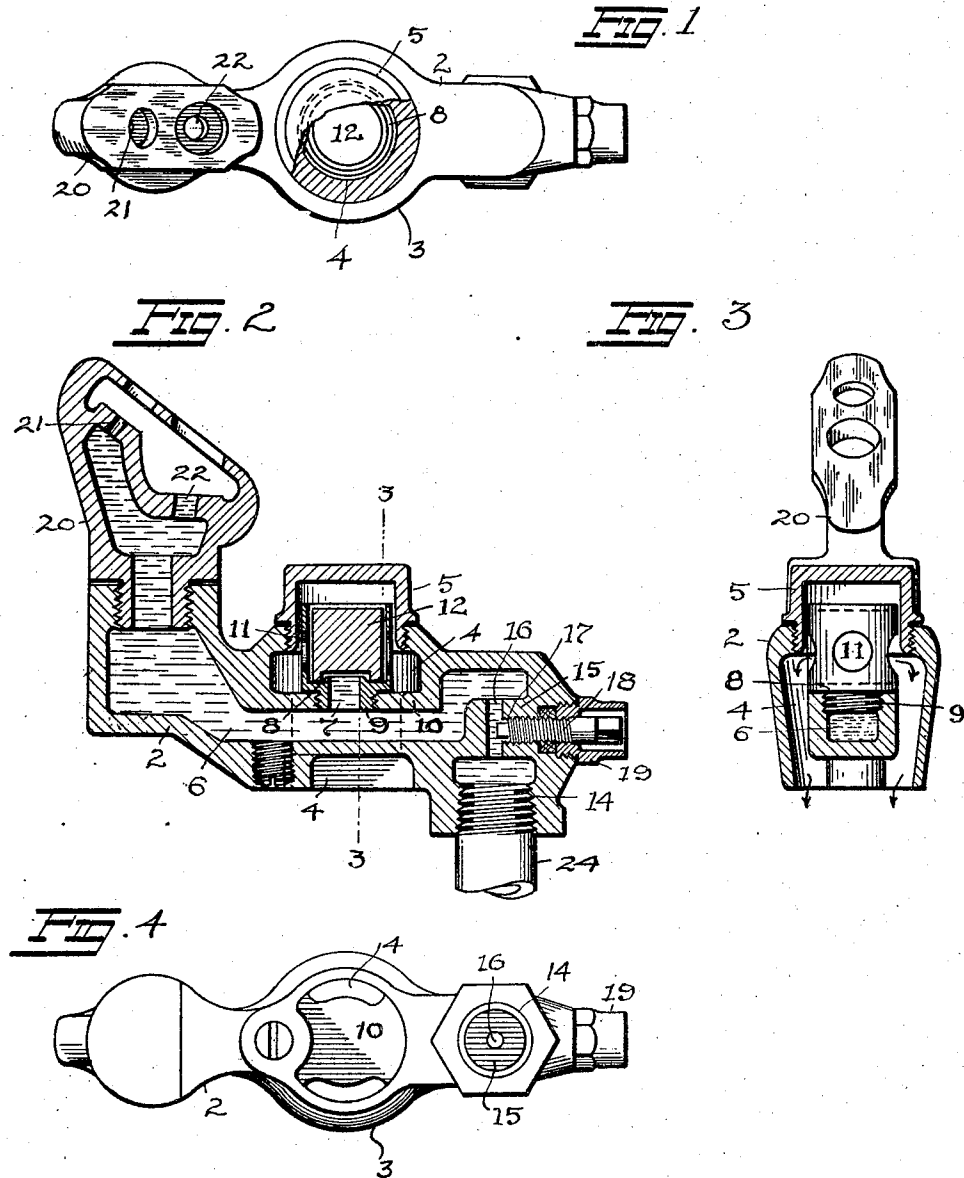
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DRINKING FOUNTAIN

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DRINKING FOUNTAIN.

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The present invention relates to an improvement in drinking fountains, and in general my object is to provide a drinking fountain head of simple construction in which an automatic device is particularly arranged to permit the drinking stream to flow uniformly at a constant height under varying pressures, for example when a sudden heavy demand on the water line creates a momentary decrease of flow at the fountain head, or where a sudden increase in pressure or pulsating flow causes the water to spurt from the discharge nozzle and produce an objectionable drinking stream.

In the accompanying drawings, Fig. 1 is a top view of a drinking fountain head containing my improvement, and Fig. 2 is a vertical section longitudinally through the middle thereof. Fig. 3 is a vertical section transversely of the head on line 3—3 of Fig. 2. Fig. 4 is a bottom view of the head. Fig. 5 is a side elevation and part sectional view of the same drinking fountain shown in the other views, but containing a modified form of the controlling device for the drinking stream. Figs. 6 and 7 are perspective views of the floating cap and relief nozzle, respectively, illustrated in Fig. 5.

The invention comprises a hollow body 2 of elongated form having a round enlargement 3 at its middle containing an overflow and drainage chamber 4 which is open at its bottom for the free discharge of water overflowing thereinto, but which is closed at its top by a hollow screw cap 5. A main water passage 6 extends through body 2 and has open communication with overflow chamber 4 by way of a small vertical duct or opening 7 of small diameter situated centrally beneath cap 5, and this opening 7 is preferably formed within a separate removable member 8 having a screw-threaded base extension 9 adapted to be screwed into a screw-threaded opening formed in the top of the horizontal cross wall 10 which spans the middle of overflow chamber 4. In one form of the invention member 8 is of cup-shape having an open top and a series of lateral discharge openings 11 in its side wall, see Figs. 2 and 3. A cylindrical plunger 12 is loosely confined within the cup member 8 and has a recessed bottom adapted to enclose the ribbed or beaded outlet end of the relief duct or vent opening 7. The size and weight of loose plunger 12 is such that escape of water from opening 7 is prevented under a predeter-

mined normal pressure, especially when the flow of water through head or body 2 is otherwise uninterrupted. A screw-threaded bottom intake 14 is provided at one end of body 2 which is separated from main passage 6 by a thick division wall 15 having a small vertical bore 16 therein and also a horizontal opening 17 which is screw-threaded to receive a pressure regulating screw 18. The inner extremity of screw 18 is adapted to be projected into bore 16 more or less to restrict the flow of water therethrough, and the outer controlling end of the screw projects through an enclosing gland or packing member 19 attached to body 2. A discharge nozzle 20 is attached to the top of the opposite end of body 2, and in the present instance this nozzle contains two separate discharge orifices 21 and 22, which are inclined in respect to each other to bring two small streams of water into confluence and thereby form a vertically widened drinking stream at one side of the nozzle substantially as delineated in Fig. 5. However, any other form or style of nozzle may be used instead of the type shown, inasmuch as the invention resides more particularly in the stream controlling features and a fountain head constructed as hereinbefore described.

The fountain head shown in Fig. 5 is in the main the same as that shown in the other figures and similar reference characters are employed for designating like parts. The only modification is in the use of a nipple 8' in lieu of a cupped member 8, and a heavy inverted cup 12' instead of plunger 12. The sides of nipple 8' are ribbed to space the sides of cup 12' apart from the nipple and permit the overflow to escape into drainage chamber 4. Cap 5, in either construction shown, serves to close the top of the drainage chamber and to limit the upward movement of the weighted member controlling the outflow of water from vertical duct 7. Removal of this cap gives access to the parts covered thereby which are preferably removable and interchangeable to meet various requirements.

In use the fountain head may be connected to a supply pipe 24 and mounted within or above a basin 25, and the regulating screw 18 may be adjusted to restrict the flow and pressure at the intake to meet any given condition in the line of supply. If a regulating screw is alone depended upon to regulate the flow of water through the fountain head a

decrease in pressure will produce a weak and poorly formed drinking stream and a sudden increase in pressure will spurt the water and also produce a malformation in the drinking stream. With an automatic plunger controlling device to supplement the regulating screw the flow of water through the fountain head may be controlled to maintain a uniform stream or body of water at a constant height even though the line pressure may vary fifty pounds, and the device may be regulated to produce an unchangeable drinking stream or pressures ranging from fifteen to two hundred pounds.

What I claim as my invention is:

1. In a drinking fountain, a single unit comprising a hollow head of elongated form having a central integral enlargement containing a drainage chamber open at its top and bottom and formed with a horizontal supply passage extending through said chamber, an overflow valve exposed to the flow of the water through said supply passage, a valve seating member removably mounted within said chamber in constant open communication with said supply passage, and a cap closing the top of said chamber and detachably connected with the wall of said head.

2. In a drinking fountain, a single unit comprising a hollow head of elongated form having a main passage with an intake connection provided with a pressure regulating device at one end and a stream forming nozzle at its opposite end and formed with an overflow chamber within the head itself intermediate said ends, a valve seating member screwed removably to said head within said chamber having an overflow duct communicating with said main passage, a

weighted valve member slidably engaging said screw member adapted to control the overflow through said duct, and a hollow screw cap for closing the top of said chamber and freely enclosing said valve member, said screw cap being screw-connected with the upper wall of said head.

3. In a drinking fountain, a hollow head having a main water passage provided with a pressure regulating screw at the intake side and formed with a stream forming nozzle constantly open to said passage, said head having an integral boss at its top and an overflow chamber within said boss open to said passage, a cap for said chamber detachably affixed to said integral boss, a valve seating member removably mounted within said chamber beneath said cap, and a weighted valve member adapted to control the outflow into said chamber.

4. In a drinking fountain, a hollow head of elongated form having a main passage in its bottom portion and a screw-threaded intake with adjustable water controlling means at one end, a nozzle member detachably connected with said head at the opposite end of said passage, a central hollow enlargement at the top of said head having a screw-threaded opening and an open bottom, an overflow member extending from the main passage through said open bottom into said enlargement and removably connected with said head, a weighted valve member having a recessed bottom seated upon said overflow member, and a cap screw-connected with said enlargement apart from said overflow member.

In testimony whereof I affix my signature.

HALSEY W. TAYLOR.