

No. 623,218.

Patented Apr. 18, 1899.

J. ORMEROD.
MINERAL WATER HEAD.

(Application filed Oct. 9, 1897.)

(No Model.)

Fig. 4.

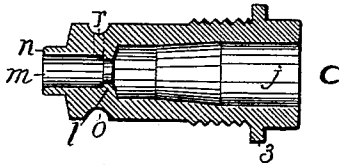


Fig. 5.

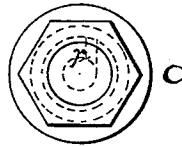


Fig. 1.

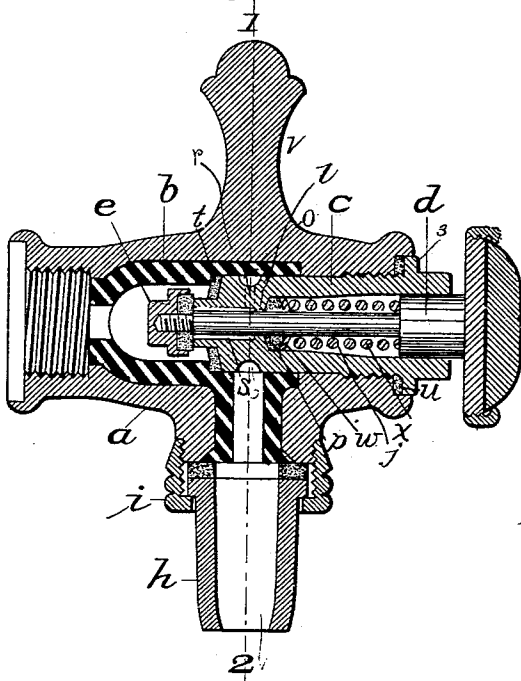


Fig. 2.

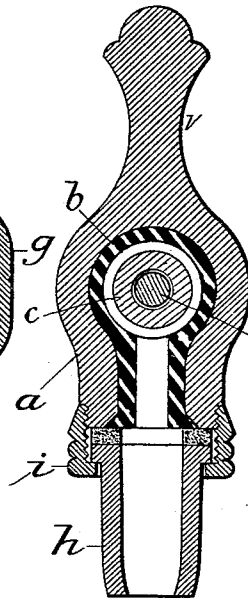
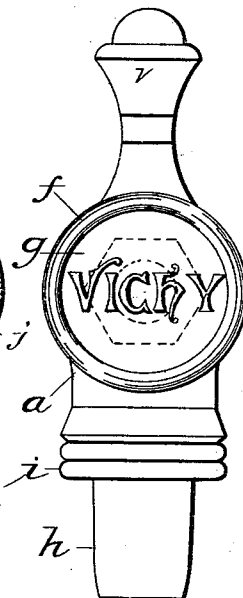


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOHN ORMEROD, OF NEW YORK, N. Y.

MINERAL-WATER HEAD.

SPECIFICATION forming part of Letters Patent No. 623,218, dated April 18, 1899.

Application filed October 9, 1897. Serial No. 654,637. (No model.)

To all whom it may concern:

Be it known that I, JOHN ORMEROD, a citizen of the United States, and a resident of New York, (Brooklyn,) in the county of Kings and State of New York, have invented certain new and useful Improvements in Mineral-Water Heads, of which the following is a specification.

My invention relates to mineral-water-dispensing heads for soda-water fountains, and has for its object a valve for such apparatus that possesses advantages over others and in which both valve and seat can be removed from the head without requiring the removal of the head also.

The objects are attained by the means set forth in these specifications and the accompanying drawings, which, taken together, constitute a full, clear, and exact description of my invention, such as will enable others skilled in the art to which it appertains to make and use the same.

In the drawings similar letters and figures refer to like parts throughout the several views.

Figure 1 is a vertical longitudinal section sidewise through the head. Fig. 2 is a transverse section through line 1 2, Fig. 1. Fig. 3 is a front end view of the head. Figs. 4 and 5 are details of the valve construction.

The shaded portions *b* of the shell *a* indicate block-tin lining of the shell. The internally-threaded end is for attachment to the usual stem front of a fountain.

h indicates the outflow, held in place by a nut *i*.

c represents a plug screwed into the shell and embracing all the operative parts of the valve.

The general principles of the valve construction herein shown are very similar to the valve for siphon-heads which forms the subject-matter of another application for patent by me, said application having been executed the 9th day of September, 1897.

The plug or shell *c* (separately shown in Fig. 4) screws into the bore of the head *a*, as shown in Fig. 1. It is chambered to receive the hub *d* of the handle-knob *g*, which slides easily therein. Between the hub *d* and the flange *l* at the bottom of the chamber packing *p*, a washer *w*, and a spring *x* are inserted,

the spring compressing the packing to its place. The large end of the shell is provided with a flange *z*, forming a shoulder for making a water and gas tight bearing. The end of the shell is formed for the application of a wrench, as shown in Fig. 5.

The valve-stem *j* is fast to the hub *d* and extends through the flange *l*, and the valve *e* is fast to the outer end of the stem. The bore through the valve end of the shell is enlarged between the flange *l* and the valve, forming an annular space around the stem. From this annular space one or more holes *r* connects with a groove *o* in the outer face of the shell. The small end of the shell forms the seat for the valve *e*, as shown.

A shoulder *t* is formed in the lining of the head, and when the shell *c* is inserted the end of the shell abuts against the shoulder and forms a tight joint, which may be metal to metal or it may be made with packing, as shown. The same may be said of the joint *u*—i. e., that it may be metal to metal instead of by packing, as shown.

The packed joint *u* prevents escape of gas or fluids at that point. The packing *p* prevents their escape into the spring-chamber, and the tight joint *t* prevents leakage at that place.

Pressing against the knob *g* pushes the valve *e* from its seat and allows the charged fluids to pass through the annular space *s*, through the outlet *r*, and the annular space *o*, formed by the groove *o* and the walls of the head surrounding it. Thence they pass downward and out of the spout *h*.

The elevation *v* is designed as a grip for the fingers while the ball of the hand presses upon the knob *g*.

It is obvious that the embodiment of all the valve and operative parts connected with it upon the plug or shell *c* and screwing the shell in the head in the manner shown reduces the trouble of access to the valve and of repairs to a minimum.

Having described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

The combination in a mineral-water head of a body lined with soft metal and chambered to receive the valve end of the valve-containing shell, the hard metal of the said body also

chambered and threaded to receive the closely-fitting and threaded end of said shell, the said body closely investing all of the shell below the flange 3 except the valve end and the annular space *s*, said annular space lying within the soft-metal lining, with the shell *c* containing the valve-head and valve-stem attachments controllable by a spring and knob as shown, and passages from said annular space
10 *s* to and around the valve-stem communicat-

ing with the chamber *O* when the valve is open substantially as herein shown and described.

Signed at Brooklyn, in the county of Kings and State of New York, this 17th day of September, A. D. 1897.

JOHN ORMEROD.

Witnesses:

HOWARD M. FIELD,
LUTHER G. CORWITH.