No. 653,417. Patented July 10, 1900.

T. H. W. IDRIS & R. H. GRIFFITH.

SIPHON FOR AERATED LIQUIDS.

(Application filed Mar. 6, 1900.)

(No Model.)

Fig. 1.

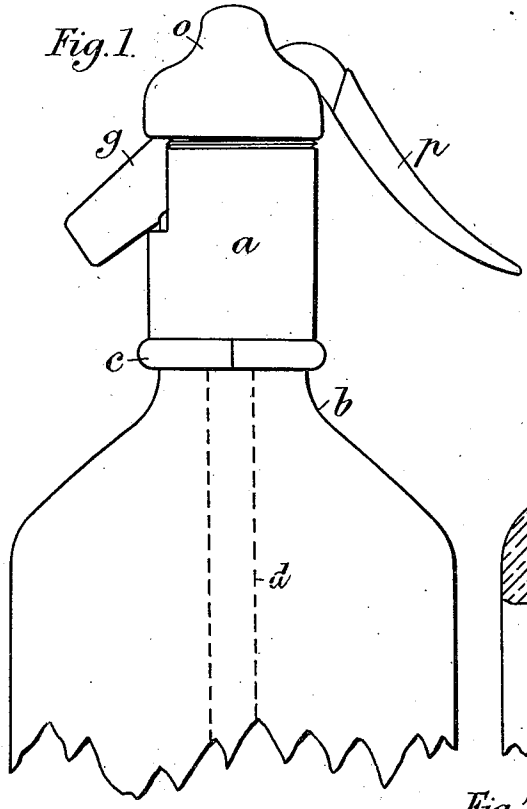


Fig. 2.

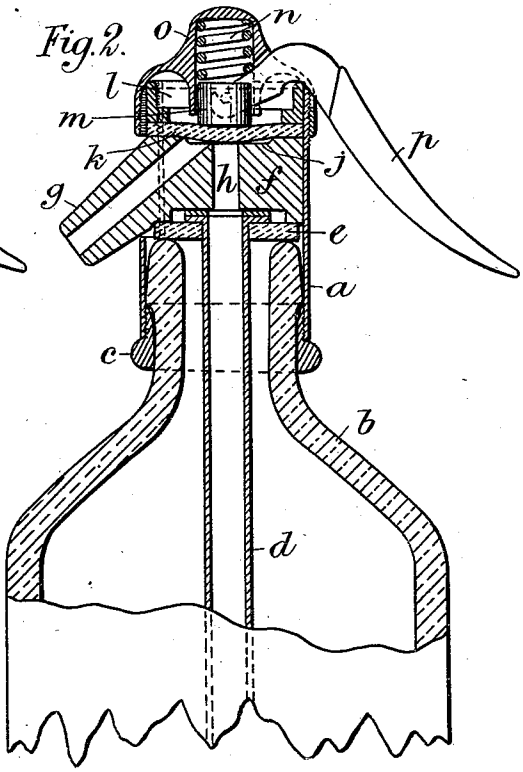


Fig. 3.

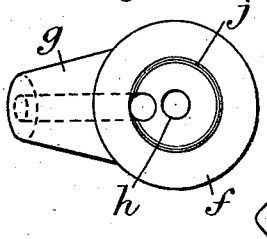


Fig. 5.

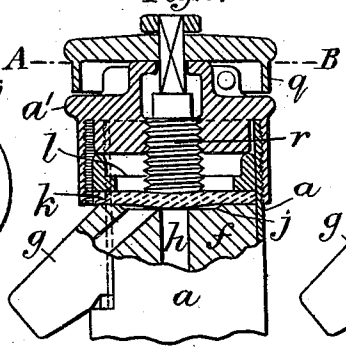


Fig. 4.

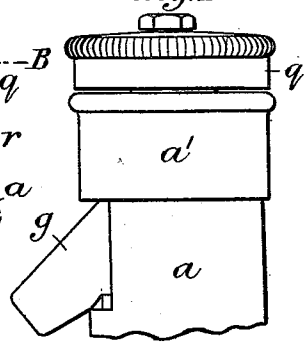
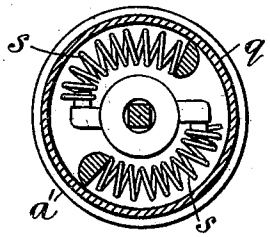


Fig. 6.



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UNITED STATES PATENT OFFICE.

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SIPHON FOR AERATED LIQUIDS.

SPECIFICATION forming part of Letters Patent No. 653,417, dated July 10, 1900.

Application filed March 6, 1900. Serial No. 7,605. (No model.)

To all whom it may concern:

Be it known that we, THOMAS HOWELL WILLIAMS IDRIS, mineral-water manufacturer, and RICHARD HOOSON GRIFFITH, manager of siphon-factory, subjects of the Queen of Great Britain, residing at 120 Pratt street, Camden Town, London, in the county of Middlesex, England, have invented certain new and useful Siphons for Aerated Liquids, of which the following is a specification.

The objects of this invention are to simplify the construction of siphon-heads and to prevent the liquid from coming into contact with metal.

Figure 1 is a side elevation, and Fig. 2 a vertical section, of a siphon constructed according to this invention. Fig. 3 is a plan of the block *f*. Figs. 4 to 6 show a modification, Fig. 4 being a side elevation, Fig. 5 a vertical section, and Fig. 6 a horizontal section on the line A B, Fig. 5.

The outer casing of the head consists of a tube *a*, preferably made of nickel-plated steel or other hard metal, which is secured to the body *b* of the siphon by screwing it onto a split ring *c* in the usual way. The tube *d* descending into the siphon has around its top a washer *e*, of india-rubber or like material, which rests on the top of the siphon. Above this washer and fitting inside the tube is a block *f*, of earthenware or the like. This block has made in one piece with it the nozzle *g*, which projects through a slot made in the side of the tube *a*. The block is perforated axially at *h* for the passage of the liquid and has a groove *j* in its top communicating with the hole through the nozzle *g*. Above the block is a second washer *k*, forming the valve, and above this is a ring *l*, also fitting inside the tube *a*, but projecting above it. Inside the ring *l* is a plunger *m*, resting on the valve-washer *k*, and above it is a spring *n*. A cap *o* screws onto the top of the tube *a* and pressing on the spring *n* holds the parts in place. The lever *p* for actuating the valve passes through a slot in the cap and rests on the edge of the ring *l* as a fulcrum, its nose engaging with a slot in the plunger *m*.

In place of having a lever for operating the valves of these and other siphons a rotating cap may be employed, as shown in Figs. 4 to 6. This cap *q* turns a screw *r*, working in a fixed nut in the cap *a'* and having its end resting on the valve-washer *k*. Inside the cap *q* are springs *s*, tending to bring it back again when released.

What we claim is—

1. The combination of a siphon-body, a block of earthenware or like material having perforations in it leading from its upper face to the inside of the siphon and to the spout, an annular washer between the block and the body, a disk washer on the upper face of the block, means for pressing the edge of the disk washer and at the same time with it the block and annular washer toward the body, and means for pressing the middle of the disk washer against the upper face of the block.

2. The combination of a siphon-body, a block of earthenware or like material having perforations in it leading from its upper face to the inside of the siphon and to the spout, an annular washer between the block and the body, a disk washer on the upper face of the block, a ring above the disk washer, a tube surrounding the block and connected to the body, a cap screwing onto the tube and pressing on the ring, and means for pressing the middle of the disk washer against the upper face of the block.

3. The combination of a siphon-body, a block of earthenware or like material having perforations in it leading from its upper face to the inside of the siphon and to the spout, an annular washer between the block and the body, a disk washer on the upper face of the block, a ring above the disk washer, means for forcing the ring toward the body, and a lever working on the ring as a fulcrum and having one end acting on the middle of the disk washer.

4. The combination of a siphon-body, a block of earthenware or like material having perforations in it leading from its upper face to the inside of the siphon and to the spout, an annular washer between the block and the body, a disk washer on the upper face of the block, a ring above the disk washer, a tube surrounding the block and connected to the body, a cap screwing onto the tube and press-

ing on the ring, and a lever working on the ring as a fulcrum and having one end acting on the middle of the disk washer.

5. The combination of a siphon-body, a block of earthenware or like material having perforations in it leading from its upper face to the inside of the siphon and to the spout, an annular washer between the block and the body, a disk washer on the upper face of the block, a ring above the disk washer, a tube surrounding the block and connected to the body, a cap screwing onto the tube and pressing on the ring, a block in contact with the middle of the disk washer, a spring inside the cap pressing the block against the washer, and a lever working on the ring as a fulcrum and having one end pivoted to the block.

6. The combination of a siphon-body, a block of earthenware or like material having perforations in it leading to the inside of the siphon, and to the spout, a washer interposed between the block and the siphon-body, a tube secured to the siphon-body surrounding the block and extending above it, a disk on the upper face of the block, a cap above the disk secured to the upper end of the tube, and a loose ring interposed between the cap and the washer.

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