G. G. COOKE.

DRINKING FOUNTAIN.

APPLICATION FILED JUNE 10, 1910.

1,032,589.

Patented July 16, 1912.

2 SHEETS—SHEET 1.

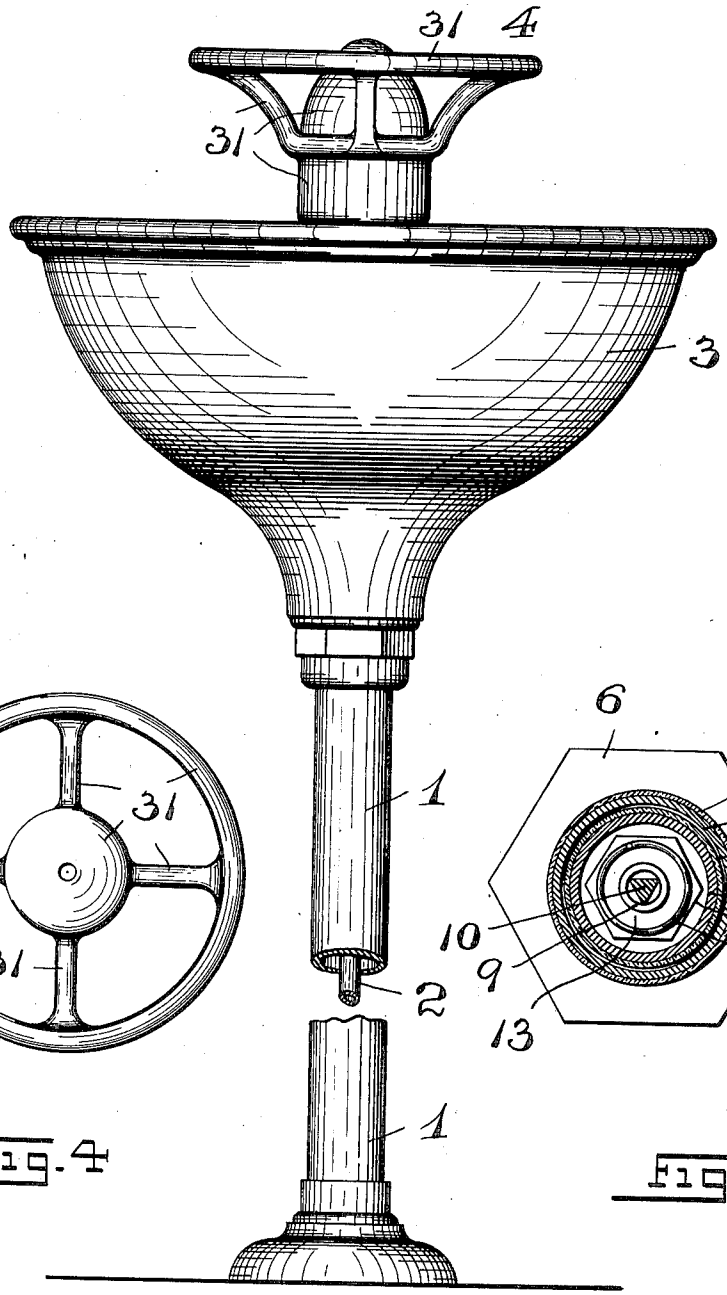

Fig. 1

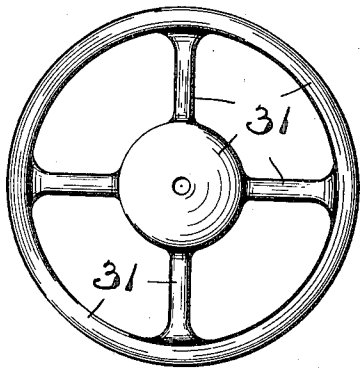

Fig. 4

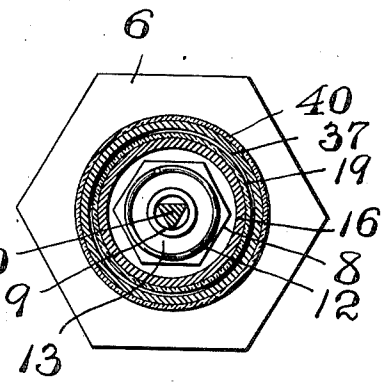

Fig. 5

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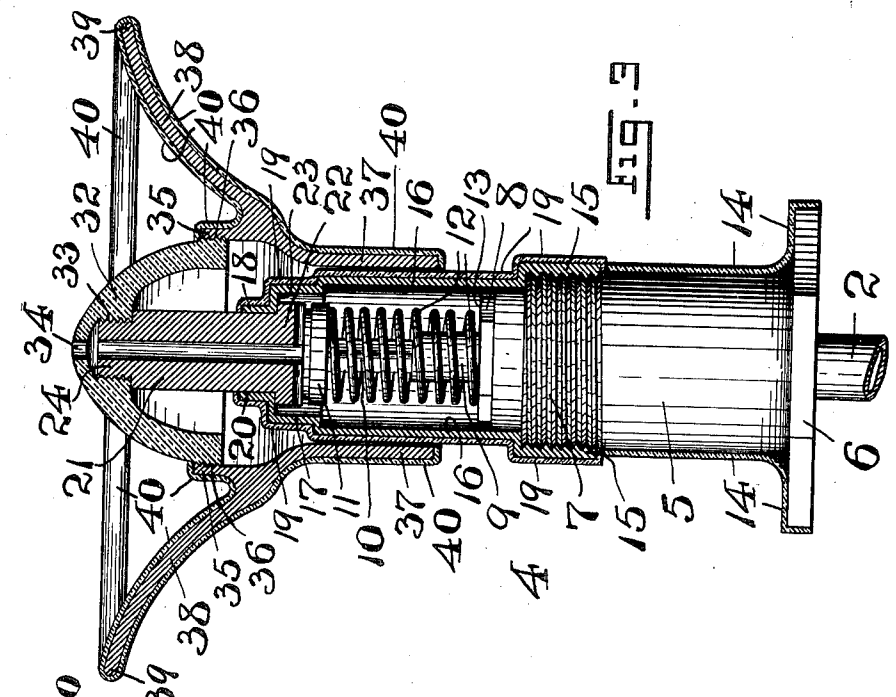

Fig. 1

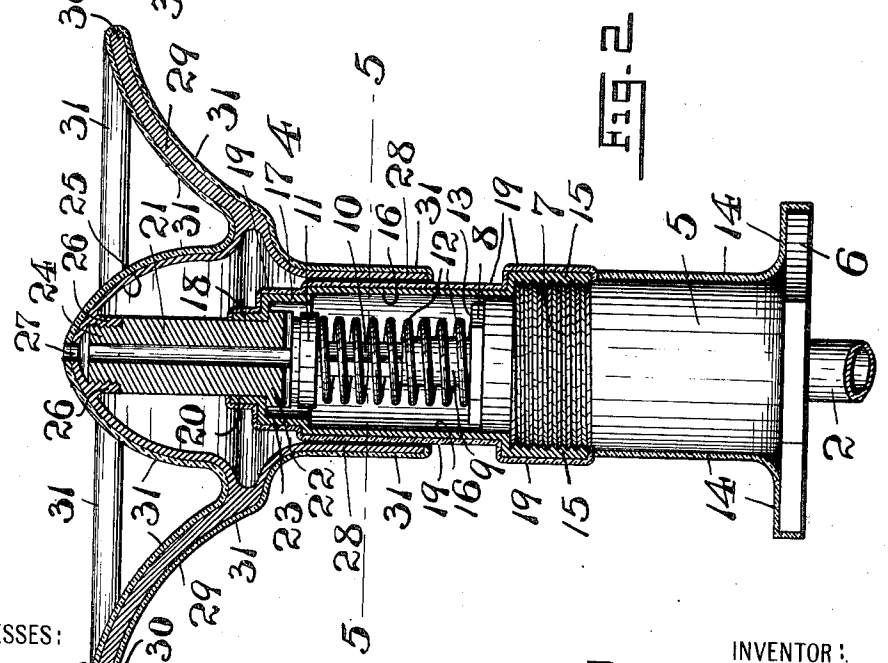

Fig. 2

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UNITED STATES PATENT OFFICE.

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DRINKING-FOUNTAIN.

1,032,589. Specification of Letters Patent. Patented July 16, 1912.

Application filed June 10, 1910. Serial No. 566,163.

To all whom it may concern:

Be it known that I, GEORGE G. COOKE, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Drinking-Fountains; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to characters of reference marked thereon, which form a part of this specification.

The invention has reference, generally, to improvements in drinking fountains; and, the present invention relates, more particularly, to that class of drinking fountains which are used in schools, parks, and other public buildings and public thoroughfares and places, and which are used to obviate any contagion which may lead to dangerous diseases.

The present invention has for its principal object to provide a sanitary drinking fountain of the general character hereinafter more fully set forth, the nozzle or mouth-piece and other parts of which are incased in an enameled or other suitable covering or casing which will not collect dirt and other obnoxious and unclean matter, and therefore, of itself is practicably self-cleaning and consequently very sanitary.

The invention has for its further purpose to provide a drinking nozzle or mouth-piece for drinking-fountains which is immune to any deleterious action of objectionable chemicals or other matter that may be contained in the water.

Other objects of this invention not at this time more particularly enumerated will be clearly understood from the following detailed description of the present invention.

With the various objects of this invention in view, the said invention consists, primarily, in the novel drinking fountain hereinafter set forth; and, the invention consists, furthermore, in the novel arrangements and combinations of the various devices and parts, as well as in the details of the construction of the same, all of which will be more particularly described in the following specification and then finally embodied in the clauses of the claim which are appended to and which form an essential part of this specification.

The invention is clearly illustrated in the accompanying drawings, in which:—

Figure 1 is a view of a drinking fountain provided with a nozzle or mouth-piece embodying the principles of the present invention. Fig. 2 is a transverse vertical section of the nozzle or mouthpiece of the drinking fountain, the said view being made on an enlarged scale, and showing one embodiment of the principles of the present invention. Fig. 3 is a similar section of a nozzle or mouthpiece of a modified construction, but still embodying the principles of this invention. Fig. 4 is a top or plan view of the nozzle or mouthpiece of the drinking fountain, said view being made on a reduced scale; and Fig. 5 is a horizontal section taken on line 5—5 in said Fig. 2.

Similar characters of reference are employed in all of the above described views, to indicate corresponding parts.

Referring now to the several figures of the drawings, the reference-character 1 indicates a suitably formed base or stand which is hollow or tubular for the arrangement therein of the usual water-conveying pipe 2. The said base or stand is provided at the top with a basin-like part 3 in which the drinking fountain 4 is arranged and is suitably attached to and connected with the said water-pipe 2. The said drinking fountain 4 consists, essentially, of a lower tubular member 5 formed with a suitable base-portion, as 6, and with the screw-threaded portion 7. Above the said screw-threaded portion 7, and suitably connected with the member 5, is a part 8 formed with a tube or pipe-like element 9, in which is movably disposed an angularly formed valve-stem 10, upon the upper end-portion of which is a valve-disk or plate 11. Encircling the said tube or pipe-like element 9 and that portion of the angularly formed valve-stem 10 is coiled spring 12, having its one end bearing upon the surface-portion 13 of the part 8 and having its opposite end bearing against the lower face of the valve-disk or plate 11. That portion of the said lower tubular member 5, below its screw-threaded part 7, as

well as the base-portion 6, are incased in a sanitary covering, shell or casing, as 14, in the form of suitable enamel, or the like. Suitably screwed upon the said screw-threaded part 7 of the member 5 is the internally screw-threaded portion of a nut-shaped member or union, as 15, with which is connected a tubular body 16 formed at its upper end with two suitably reduced portions 17 and 18, the said nut-shaped member or union 15, the tubular body 16, and the said reduced portions 17 and 18, all being incased in a sanitary covering, shell, or casing, as 19, of a suitable enamel, or the like. Slidably disposed in the tubular part 20 of the reduced portion 18, is a tubular shank or element 21 formed at its lower end-portion with a head or enlargement, as 22, said head or enlargement resting upon the valve-disk or plate 11, the marginal edge-portions of the said head or enlargement 22, under normal conditions, being forced by the action of the spring 12 directly against the off-set or shoulder 23 formed by the two reduced portions 17 and 18, in the manner clearly shown in Figs. 2 and 3 of the drawings, and in which positions of the said parts, the supply of water is shut off by the usual valve-disk connected with the lower end of the valve-stem, and not here shown in the accompanying drawings.

The tubular shank or element 21 is formed at its upper end with a reduced portion 24 which is screw-threaded, as shown, onto which is screwed an internally screw-threaded hub-like member 26 of a drinking-nozzle or mouth-piece 25. This nozzle or mouth-piece is preferably of a conical or dome-shaped configuration, being chambered or hollow, as shown, and being formed in its apex with an opening 27 through which the water is discharged for drinking, when the water supply-valve has been opened. Connected with the lower portion of the said conical or dome-shaped nozzle or mouthpiece 25 is a cylindrically formed tubular member or element 28, and extending upwardly and outwardly from the said member or element 28 are arms, as 29, with the outer end-portions of which is suitably connected a ring 30. The said nozzle or mouthpiece 25, the tubular member or element 28, the said arms 29, and the said ring 30, are all incased in a sanitary covering, shell or casing 31, of suitable enamel, or the like. The said member or element 28 is slidably arranged upon the previously mentioned tubular body 16, substantially as shown.

In Fig. 3 of the drawings, I have represented a slightly modified form of fountain. In this construction, the reference-character 32 indicates a nozzle or mouthpiece which is made from porcelain, or similar material, which is sanitary, the said porcelain nozzle or mouthpiece having an internally screw-threaded socket, as 33, by means of which the nozzle or mouthpiece is screwed upon the reduced portion 24 of the tubular shank or element 21, and the said porcelain nozzle or mouthpiece being formed with a delivery opening or hole 34. The lower portion of the porcelain nozzle or mouthpiece is externally screw-threaded, as at 35, and screwed thereon is an internally screw-threaded ring-like member 36 from which extends in a downward direction, and is slidably arranged upon the tubular member 16, a cylindrically formed tubular member or element 37. Extending upwardly from said member or element 37 are arms, as 38, with the outer end-portions of which is suitably connected a ring 39. The said ring-like member 36, the tubular element 37, the arms 38, and the ring 39, are all incased in a sanitary covering, shell or casing 40, of suitable enamel, or other sanitary material.

To open the supply-valve of the fountain, a slight pressure of the hands upon the ring 30 of the device represented more particularly in Fig. 2 of the drawings, or upon the ring 39 of the construction illustrated in Fig. 3 of the drawings, is all that is necessary, the telescopic sliding arrangement of the various parts opening the supply valve, when the water bubbles up from the nozzle in a clear, pure and uncontaminated stream. When the pressure is removed from the ring, the parts automatically return to their normal initial positions, again closing the supply valve.

The coverings, shells or casings of the various metal parts of the drinking fountain being made of a purely sanitary material, are readily kept clean, and are not subject to the deleterious chemical combination of the metal parts with chemicals which may be contained in the water, and which otherwise are harmless, so that at all times a perfectly sanitary drinking fountain is the result, thus avoiding all danger of contamination. Furthermore, the detachable arrangement of the porcelain nozzle shown in Fig. 3 of the drawings, permits the same to be easily and quickly removed for cleaning purposes; and, the various parts being incased in the sanitary shells or coverings, they are reinforced so that they can not become easily broken. Also, the absence of joints and crevices readily commends the device for use as a sanitary drinking fountain.

I claim:

1. A sanitary drinking fountain of the character set forth comprising a tubular member to which a water pipe is adapted to be attached, a second tubular body connected with said tubular member, said tubular body being formed with a tubular guiding part, a tubular shank movably ar-

ranged in said tubular guiding part, said tubular shank having a screw-threaded upper end-portion, a drinking-nozzle provided with a screw-threaded hub-like member screwed upon said screw-threaded upper portion of said shank, and a valve-controlling means in said tubular body adapted to be actuated by the downward movement of said shank and the nozzle, substantially as and for the purposes set forth.

2. A sanitary drinking fountain of the character set forth comprising a tubular member to which a water pipe is adapted to be attached, a second tubular body connected with said tubular member, said tubular body being formed with a tubular guiding part, a tubular shank movably arranged in said guiding part, said tubular shank having a screw-threaded upper end-portion, a drinking-nozzle provided with a screw-threaded hub-like member screwed upon said screw-threaded upper portion of said shank, a valve-controlling means in said tubular body adapted to be actuated by the downward movement of said shank and the nozzle, and shells or casings surrounding the said tubular member and the said tubular body, substantially as and for the purposes set forth.

3. A sanitary drinking fountain of the character set forth comprising a tubular member to which a water-pipe is adapted to be attached, a second tubular body connected with said tubular member, said tubular body being formed with a tubular guiding part, a tubular shank movably arranged in said tubular guiding part, said tubular shank having a screw-threaded upper end-portion, a drinking-nozzle provided with a screw-threaded hub-like member screwed upon said screw-threaded upper portion of said shank, a valve-controlling means in said tubular body adapted to be actuated by the downward movement of said shank and the nozzle, a cylindrically formed tubular element telescopically arranged upon said tubular body, upwardly and outwardly extending arms connected with said last-mentioned tubular element, a ring connected with said arms, and a shell or casing surrounding said cylindrically formed tubular element, said arms, and said ring, substantially as and for the purposes set forth.

4. A sanitary drinking fountain of the character set forth comprising a tubular member to which a water-pipe is adapted to be attached, a second tubular body connected with said tubular member, said tubular body being formed with a tubular guiding part, a tubular shank movably arranged in said tubular guiding part, a drinking nozzle mounted upon said shank, a valve-controlling means in said tubular body adapted to be actuated by the downward movement of said shank and the nozzle, said nozzle being provided with an externally screw-threaded portion, an internally screw-threaded ring-like member screwed upon said screw-threaded portion of the nozzle, a cylindrically formed tubular element extending from said ring-like member and telescopically arranged upon said tubular body, upwardly and outwardly extending arms extending from said last-mentioned tubular element, and a ring connected with said arms, substantially as and for the purposes set forth.

5. A sanitary drinking fountain of the character set forth comprising a tubular member to which a water-pipe is adapted to be attached, a second tubular body connected with said tubular member, said tubular body being formed with a tubular guiding part, a tubular shank movably arranged in said tubular guiding part, a drinking nozzle mounted upon said shank, a valve-controlling means in said tubular body adapted to be actuated by the downward movement of said shank and the nozzle, said nozzle being provided with an externally screw-threaded portion, an internally screw-threaded ring-like member screwed upon said screw-threaded portion of the nozzle, a cylindrically formed tubular element extending from said ring-like member and telescopically arranged upon said tubular body, upwardly and outwardly extending arms extending from said last-mentioned tubular element, a ring connected with said arms, and a shell or casing surrounding said internally screw-threaded ring-like member, said cylindrically formed tubular element, said arms, and the ring connected with said arms, substantially as and for the purposes set forth.

6. A sanitary drinking fountain of the character set forth comprising a tubular member to which a water-pipe is adapted to be attached, a second tubular body connected with said tubular member, said tubular body being formed with a tubular guiding part, a tubular shank movably arranged in said tubular guiding part, a drinking nozzle mounted upon said shank, a valve-controlling means in said tubular body adapted to be actuated by the downward movement of said shank and the nozzle, said nozzle being provided with an externally screw-threaded portion, an internally screw-threaded ring-like member screwed upon said screw-threaded portion of the nozzle, a cylindrically formed tubular element extending from said ring-like member and telescopically arranged upon said tubular body, upwardly and outwardly extending arms extending from said last-mentioned tubular element, a ring connected with said arms, a shell or casing surrounding said internally screw-threaded ring-like member, said cylindrically formed tubular element,

said arms, and the ring connected with said arms, and shells or casings surrounding said first-mentioned tubular member and the said tubular body with which said tubular member is connected, substantially as and for the purposes set forth.

In testimony, that I claim the invention set forth above I have hereunto set my hand this 8th day of June, 1910.

GEORGE G. COOKE.

Witnesses:
FREDK. C. FRAENTZEL,
FREDK. H. W. FRAENTZEL.