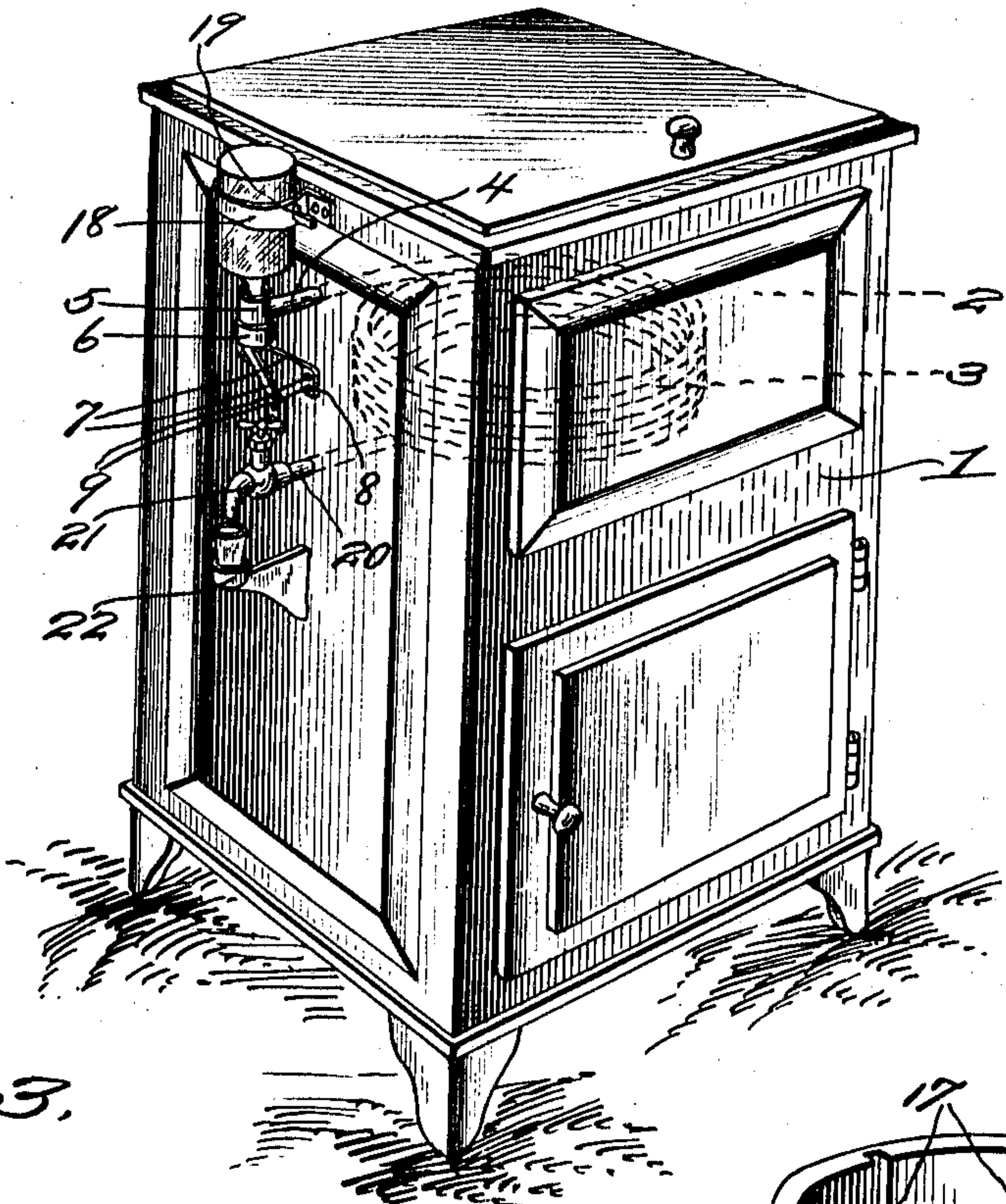


T. A. STEVENS.  
 SANITARY WATER COOLER AND FILTER.  
 APPLICATION FILED NOV. 12, 1910.

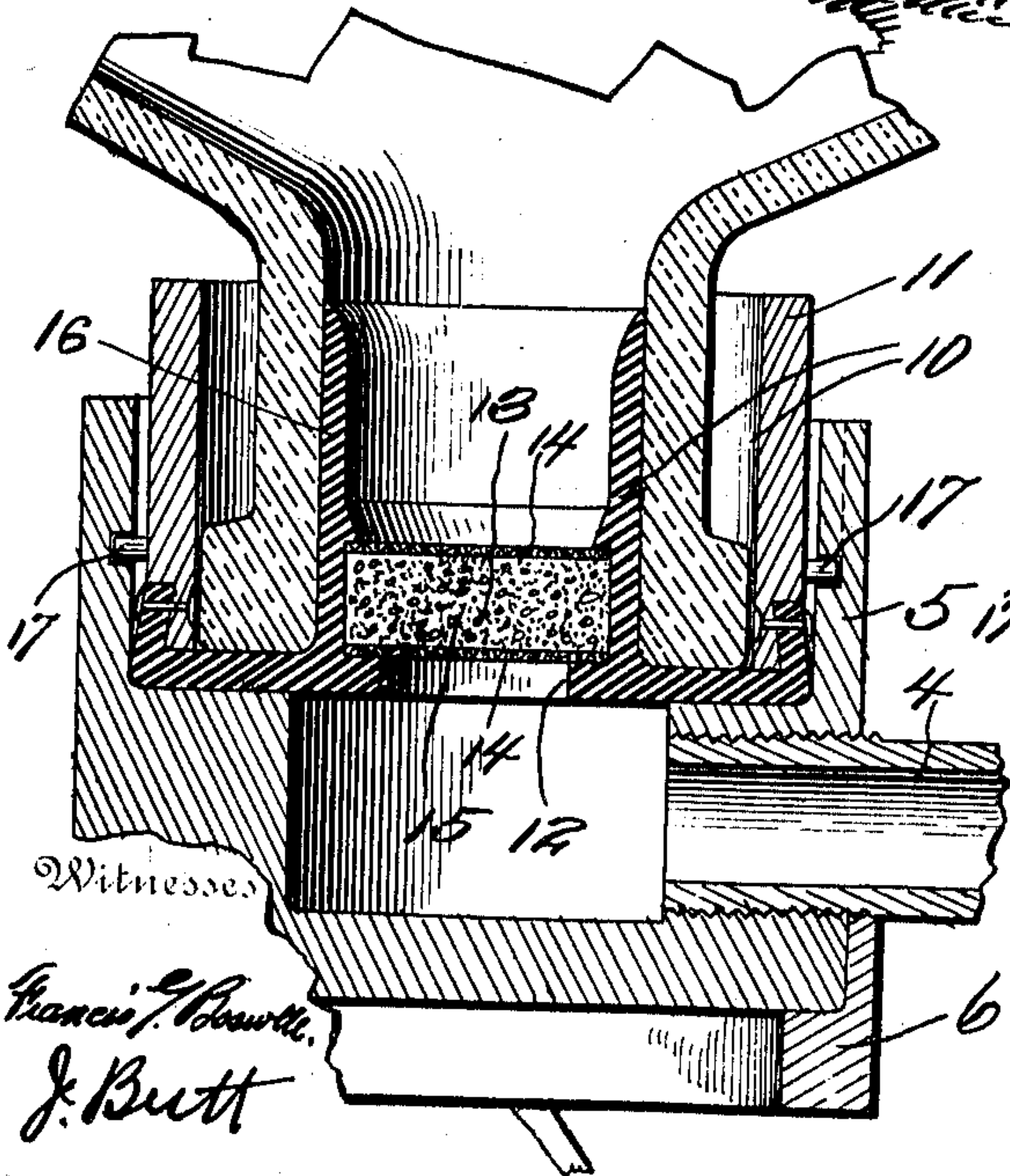
992,921.

Patented May 23, 1911.

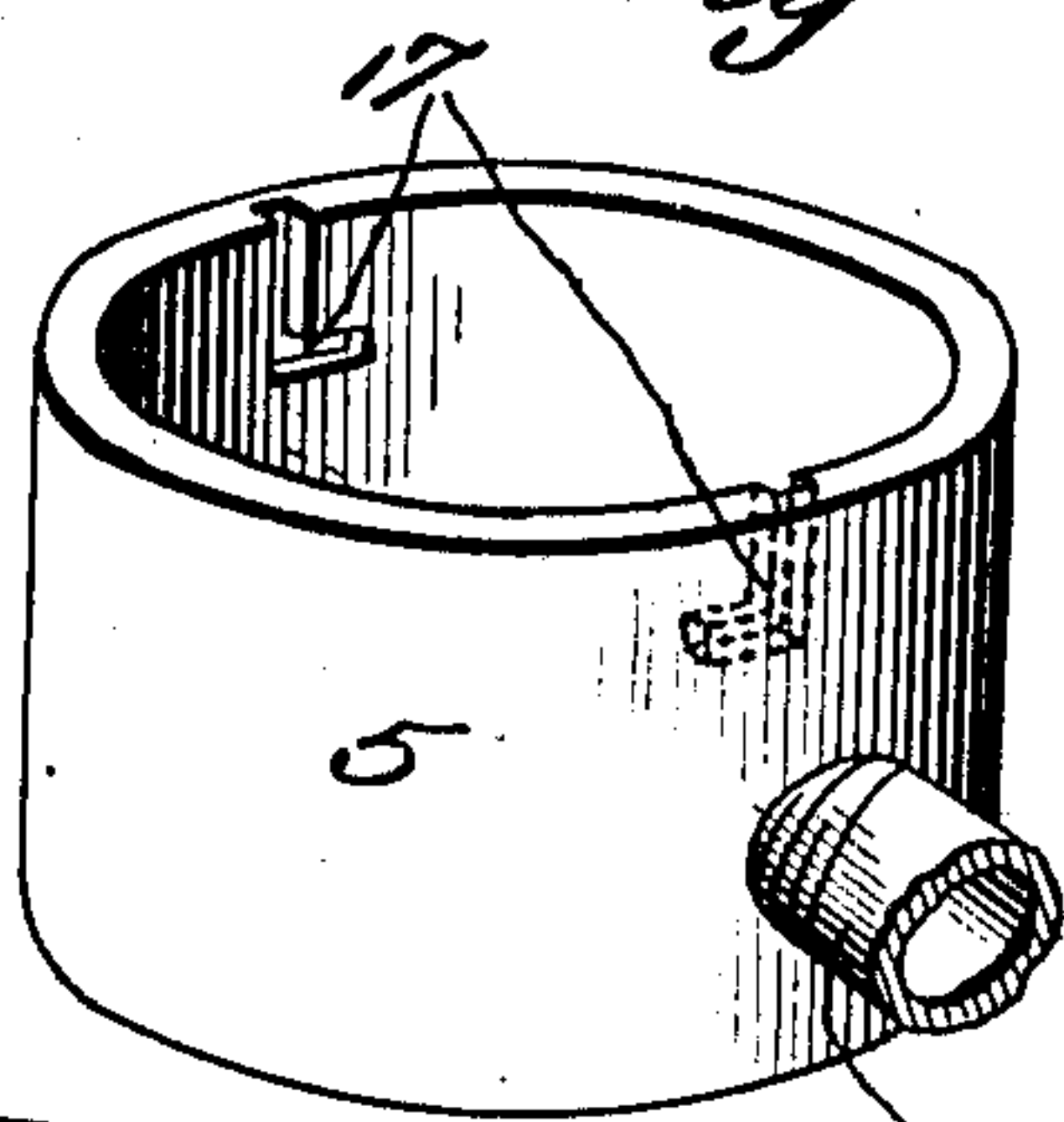
*Fig. 1.*



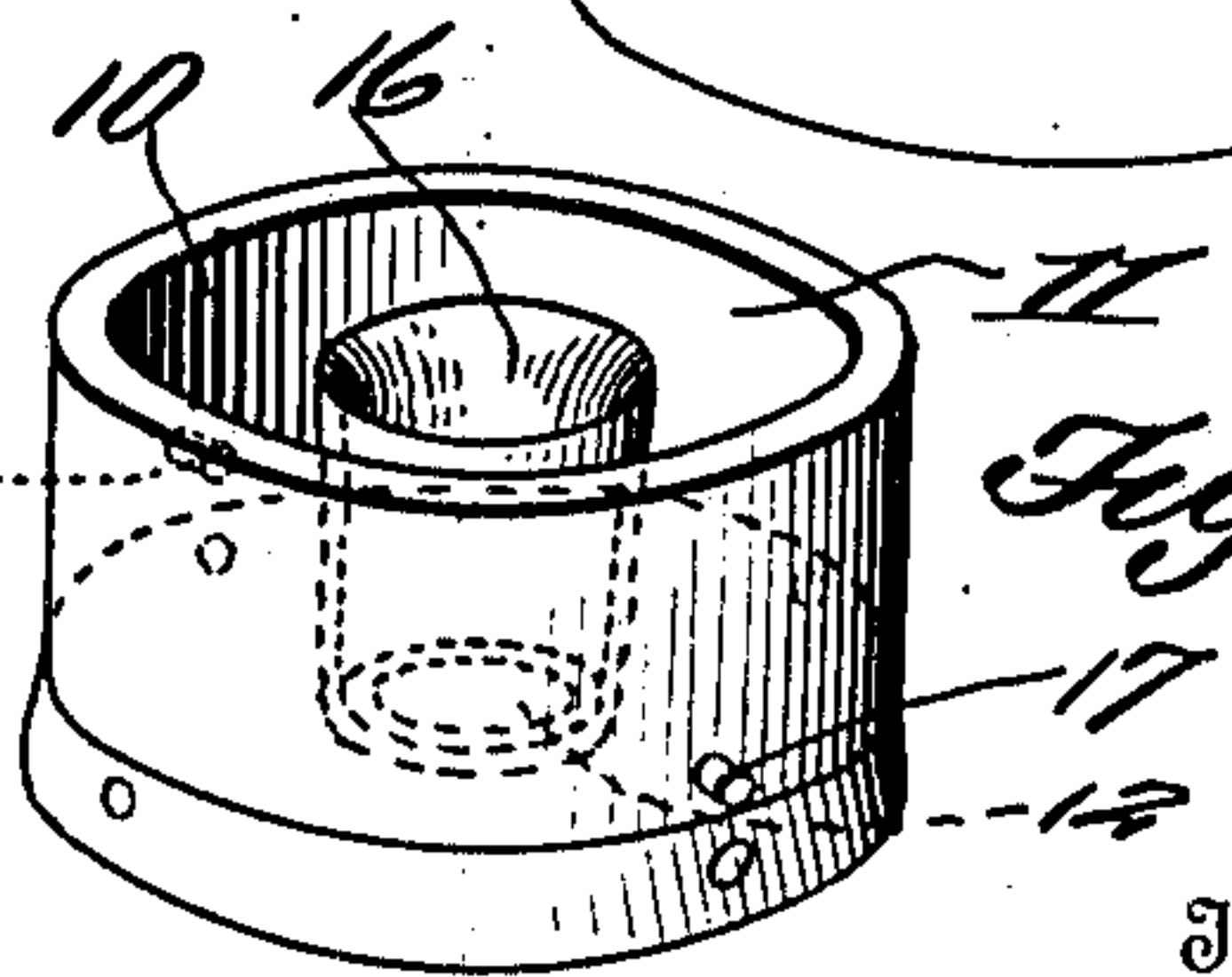
*Fig. 3.*



*Fig. 2.*



*Fig. 4.*



Inventor

*T. A. Stevens.*

By *D. Swift & Co.*

Attorneys

Witnesses

*Francis G. Bowler,*  
*J. Butt*



# UNITED STATES PATENT OFFICE.

THOMAS A. STEVENS, OF CANEY, KANSAS.

SANITARY WATER COOLER AND FILTER.

992,921.

Specification of Letters Patent.

Patented May 23, 1911.

Application filed November 12, 1910. Serial No. 592,115.

*To all whom it may concern:*

Be it known that I, THOMAS A. STEVENS, a citizen of the United States, residing at Caney, in the county of Montgomery and State of Kansas, have invented a new and useful Sanitary Water Cooler and Filter; 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.

This invention belongs to the art of refrigerators and the like, and it more especially pertains to a new and useful device for cooling water, embodying a coil adapted to be arranged in the ice-box of the refrigerator, and including a holder at the inlet of the coil and a valve-controlled outlet at the other end of the coil, both being arranged upon the outside of the refrigerator; said holder designed to support and hold a water receptacle of any suitable structure. There are various receptacles upon the market in which water is shipped from place to place, especially when it is spring water or any other special kind of drinking fluid. This holder is designed to contain a filtering device, in order that particles that may be in the water may be prevented from running through the coils. However, there is very little foreign matter in spring water or other special kinds of drinking fluid. But in bottling special drinking fluid, certain foreign matter is included, such as small particles of sand. This foreign matter when included in the bottling of the water, settles through the mouth of the bottle down to the interior of the jar upon the interior of the ice receptacle of the cooler. This foreign matter settles in the jar below the valve-controlled outlet thereof, therefore the majority of it very seldom is drawn when filling a glass, excepting when the water runs very low. In this application it is desired to include the filter arrangement, in order to prevent the particles or other foreign matter from traveling through the coils and, subsequently, passing through the valve-controlled outlet.

One of the objects of this invention is to construct the filter arrangement so that the same can be readily removed, in order that it may be cleansed, and, furthermore, to provide novel means for supporting the holder

rigidly from the outside of the refrigerator, so that the holder may readily support the largest size of water bottle.

A further feature of the invention is to arrange novel means upon the outside of the refrigerator for engaging the upper portion of the water bottle, in order to prevent the same from toppling over to one side, in case the bottle or the refrigerator is accidentally jarred.

Many families have refrigerators with tanks upon the interior of the ice-box, and it has been found that the water in the tanks becomes contaminated by the odor of ammonia, which is used in the manufacture of ice. Other families place pitchers or other receptacles of water in the lower portions of the refrigerators, and, in this case, these become contaminated by the odors from various articles of food.

The main object of this invention is to produce a novel system including the bottle holder, the coil and the valve-controlled outlet thereof, adapted to be readily equipped to any refrigerator, now in use. This may be accomplished by arranging the coil within the ice-box, and allowing the free ends of the coil to penetrate the side of the refrigerator, so that the holder and the valve-controlled outlet may be arranged upon the exterior thereof. In the drawings, however, there is only disclosed one particular form of the invention, but in practical fields this form may require alterations, to which the applicant is entitled, provided the alterations are comprehended by the appended claims.

Further features and combinations of parts will be hereinafter more fully set forth, shown in the drawings, and claimed.

In the drawings:—Figure 1 is a view in perspective, showing the coil arranged in the ice-box, illustrating the same in dotted lines, with the free ends of the coil projecting exteriorly of the refrigerator, one being provided with a holder for the water receptacle, while the other is provided with a faucet. Fig. 2 is an enlarged detail view of the holder. Fig. 3 is a sectional view through the holder, illustrating the filter arrangement therein, while Fig. 4 is a detail perspective view of the filter removed from the holder.

Attention is directed to the accompanying drawings, in which the preferred form of



the invention is disclosed: 1 denotes the refrigerator as a whole, provided with the usual ice-box 2, in which is arranged the coil 3.

5 The extremity 4 of the coil, which is arranged exteriorly of the refrigerator, is provided with a cup-shaped holder or member 5, which is annular in contour. Extending from the holder 5, there being an annular  
10 ring 6 surrounding the holder, are the bracket braces 7, which are formed as a part of the annular ring. These bracket braces are provided with angular ends 8, which are secured to the side of the refrigerator by the screws 9, as shown in Fig. 1.

The interior wall of the holder is so shaped as to readily receive a filtering device 10, which comprises an annular sleeve member 11 and a flexible yielding cap secured thereto including an opening 12 therein centrally arranged. Over the opening is disposed an extension sleeve provided with supporting means for the filtering device proper 13. This filtering device 13 may be  
25 constructed of any suitable material, for example it may be made of a very fine wire mesh or screening, or any similar material 14. There may be arranged such material as charcoal or the like, as shown at 15 above  
30 the screening or other material, not only for the purpose of filtering the water, but acting as means for purifying. Extending annularly about the opening is an annular flange 16, which, as shown in the drawings, is designed to enter the mouth of the bottle  
35 for a considerable distance, and made somewhat flexible, so that when the bottle receives this annular flange, the flange will adhere to the interior wall of the mouth of the bottle. This annular flange may be formed of a certain material, such as rubber or the like, in order to accomplish the adhering feature of the flange to the interior wall of the mouth of the bottle. To prevent the  
45 filter from being withdrawn from the holder, when it is designed to change the bottle or remove it for re-filling it, the filtering device is provided with bayonet connections 17. This bayonet connection is provided because when there is an endeavor to remove  
50 the water bottle for any reason whatsoever, the filtering device is liable to adhere to the bottle, because of the annular flange adhering closely to the interior wall of the mouth of the bottle.

Attached to the side of the refrigerator is a band 18, which is designed to extend annularly about the upper portion of the bottle, in order to prevent the same from toppling over, incident to a jar upon the refrigerator or the bottle. This band, after being passed annularly about the bottle, penetrates itself and is bent, as shown at  
60 19 to prevent its withdrawal. The exterior end portion 20 of the coil is provided with

the usual form of faucet 21, which is arranged directly over a glass holder 22, so that the water, after passing through the coil, may be drawn into the glass by placing the glass in its holder.

Upon an observation of the drawing, it will be apparent, after applying the above descriptive matter to the drawing, that a novel form of cooling system is provided, for use in families, so that they can cool  
75 their drinking fluid. It is evident that most any person, especially a male, who may be mechanically inclined, may equip refrigerators with this device. Furthermore, it is apparent that not only spring water or the  
80 like, which is bottled, may be passed through this device, but that the ordinary river water, which, in many cities is filtered before reaching the various homes, may be passed through this system, that is, after the water  
85 receptacle is filled with such.

The invention having been set forth, what is claimed as new and useful is:—

1. A support for an inverted water bottle, comprising an outer cup-shaped member  
90 adapted to be connected to a coil, an annular sleeve member telescopically arranged in the cup-shaped member and surrounding the neck of the bottle, a flexible yielding cap secured to the annular sleeve between it and  
95 the cup-shaped member and provided with an extension sleeve fitted adheringly within the neck of the bottle, said annular sleeve member having connections with the cup-shaped member to prevent the removal of  
100 the sleeve when the bottle is removed.

2. A support for an inverted water bottle, comprising an outer cup-shaped member adapted to be connected to a coil, an annular sleeve member telescopically arranged  
105 in the cup-shaped member and surrounding the neck of the bottle, a flexible yielding cap secured to the annular sleeve between it and the cup-shaped member and provided with an extension sleeve fitted adheringly within  
110 the neck of the bottle, the cap having an opening registering with the opening of the neck of the bottle and provided with means adapted for supporting a filtering device, said cup-shaped member having means  
115 for holding the annular sleeve member spaced apart from the bottom of the cup-shaped member to permit of communication with the coil, and connections between the cup-shaped member and the annular  
120 sleeve member to prevent the removal of the sleeve member when the bottle is removed.

3. In combination, a holder adapted to be connected to a cooling coil, said holder  
125 having its interior provided with an annular shoulder and communicative with the coil, an inverted water bottle, an annular metal sleeve member telescopically received within the holder and provided with a rubber  
130



cap at its lower portion resting upon said  
shoulder, said sleeve member having a pin  
and slot connection with the holder to pre-  
vent its removal as the bottle is removed,  
5 said rubber cap having an annular exten-  
sion sleeve provided with interior annular  
shoulders and fitted within the mouth of the  
bottle so as to adhere closely therein, said  
rubber cap having an outlet opening, said  
10 annular shoulders of the sleeve extension

constituting means adapted for holding a  
filtering means in place.

In testimony whereof I have signed my  
name to this specification in the presence of  
two subscribing witnesses.

THOMAS A. STEVENS.

Witnesses:

T. C. HANSEN,  
R. H. BRULLEY.