

DRINKING WATER FOUNTAIN

The present utility model relates to a drinking water fountain, and more particularly to a drinking water fountain that is assembled and dismantled easily and conveniently, thereby facilitating maintenance of the drinking water fountain.

A conventional drinking water fountain comprises a main body, a cover mounted on a side of the main body by a plurality of screw members, and a plurality of filters mounted between the main body and the cover and secured on the main body by a plurality of elastic snaps and screw members. However, a user has to unscrew the screw members by aid of a tool, such as a screwdriver, so as to remove the cover from the main body, thereby causing inconvenience to the user in maintenance of the filters of the conventional drinking water fountain. In addition, the conventional drinking water fountain cannot be disposed at an upright state, thereby causing inconvenience to the user when replacing the filters of the conventional drinking water fountain.

The primary objective of the present utility model is to provide a drinking water fountain, wherein the insertion plates of the cover are inserted into the insertion grooves of the support plate of the main body, and the magnetic members of the cover are magnetically attached on the magnets of the main body, so that the cover is combined with the main body rigidly and stably.

Another objective of the present utility model is to provide a drinking water fountain, wherein the support plate of the main body provides a support effect, so that the drinking water fountain is disposed at an upright state to facilitate a user dismantling and replacing the filters of the drinking water fountain.

A further objective of the present utility model is to provide a drinking water fountain, wherein each of the diatomaceous earth ceramic filter, the activated water converter and the active carbon filter is clamped and positioned in the opening of the respective holding seat of the main body and the larger opening of the respective support seat of the main body.

A further objective of the present utility model is to provide a drinking water fountain, wherein the cover is detached from the main body easily and conveniently, thereby facilitating maintenance of the drinking water fountain.

In accordance with the present utility model, there is provided a drinking water fountain, comprising a main body, and a cover mounted on a side of the main body, wherein:

the main body has an inside formed with a chamber;

the chamber of the main body has a face provided with a plurality of holding seats arranged in a horizontal manner, a plurality of support seats arranged in a horizontal manner, a plurality of clips arranged in a vertical manner, and a fixing seat arranged in a vertical manner;

the chamber of the main body has a periphery formed with a plurality of posts each formed with a mounting recess for mounting a magnet;

the main body has a bottom formed with a protruding flat support plate formed with a plurality of insertion grooves;

5 the cover has an inside formed with a chamber;

the chamber of the cover has a periphery formed with a plurality of blocks each aligning with a respective one of the posts of the main body and each formed with a mounting recess for mounting a magnetic member which is magnetically attached on the magnet of a respective one of the posts of the
10 main body, so that the cover is combined with the main body; and

the cover has a bottom mounted on the support plate of the main body and formed with a plurality of insertion plates each inserted into a respective one of the insertion grooves of the support plate of the main body.

Further benefits and advantages of the present utility model will
15 become apparent after a careful reading of the detailed description with appropriate reference to the accompanying drawings.

In the drawings:

Fig. 1 is a perspective view of a drinking water fountain in accordance with the preferred embodiment of the present utility model;

20 Fig. 2 is an exploded perspective view of the drinking water fountain as shown in Fig. 1;

Fig. 3 is a partially perspective broken view of the drinking water fountain as shown in Fig. 1;

Fig. 4 is a front plan view of the drinking water fountain as shown in Fig. 3;

5 Fig. 5 is a plan cross-sectional of the drinking water fountain taken along line 5-5 as shown in Fig. 4;

Fig. 6 is a plan cross-sectional of the drinking water fountain taken along line 6-6 as shown in Fig. 4;

Fig. 7 is a partially exploded view of the drinking water fountain as
10 shown in Fig. 1; and

Fig. 8 is a partially perspective broken view of the drinking water fountain as shown in Fig. 1.

Referring to the drawings and initially to Figs. 1-7, a drinking water fountain in accordance with the preferred embodiment of the present utility
15 model comprises a main body 1, and a cover 2 mounted on a side of the main body 1.

The main body 1 has an inside formed with a chamber 11. The chamber 11 of the main body 1 has a face provided with a plurality of holding seats 12 arranged in a horizontal manner, a plurality of support seats 13
20 arranged in a horizontal manner, a plurality of clips 14 arranged in a vertical manner, and a fixing seat 10 arranged in a vertical manner. Each of the support seats 13 of the main body 1 has an inside formed with a recess 131 and has a

top wall formed with an arc-shaped larger opening 133 communicating with the recess 131 and a bottom wall formed with an arc-shaped smaller opening 132 communicating with the recess 131.

The chamber 11 of the main body 1 has a periphery formed with a plurality of posts 15 each formed with a mounting recess 152 for mounting a magnet 151 by a screw member 153 which is extended through the magnet 151 and screwed into the respective post 15.

The main body 1 has a bottom formed with a protruding flat support plate 19 formed with a plurality of insertion grooves 191. Each of the holding seats 12 of the main body 1 has an inside formed with a substantially C-shaped opening 121.

The cover 2 has an inside formed with a chamber 21. The chamber 21 of the cover 2 has a periphery formed with a plurality of substantially rectangular blocks 22 each aligning with a respective one of the posts 15 of the main body 1 and each formed with a mounting recess 221 for mounting a substantially U-shaped magnetic member 23 by a screw member 24 which is extended through the magnetic member 23 and screwed into the respective block 22. The magnetic member 23 mounted in each of the blocks 22 of the cover 2 is attached on the magnet 151 of a respective one of the posts 15 of the main body 1 by a magnetic attraction force, so that the cover 2 is combined with the main body 1 rigidly and stably.

The cover 2 has a bottom mounted on the support plate 19 of the main body 1 and formed with a plurality of insertion plates 25 each inserted into a respective one of the insertion grooves 191 of the support plate 19 of the main body 1.

5 A diatomaceous earth ceramic filter “a”, an activated water converter “b” and an active carbon filter “c” are mounted on the holding seats 12 of the main body 1 and supported by the support seats 13 of the main body 1 respectively. Preferably, each of the diatomaceous earth ceramic filter “a”, the activated water converter “b” and the active carbon filter “c” is clamped in the
10 opening 121 of the respective holding seat 12 of the main body 1 and the larger opening 133 of the respective support seat 13 of the main body 1. A magnetic resonator “d” is mounted on and supported by the fixing seat 10 of the main body 1. A grating filter “e” is mounted on and supported by the clips 14 of the main body 1.

15 An inlet connector 17 is mounted on the main body 1 and is externally connected to a water source (not shown).

Preferably, the grating filter “e” has a first end connected to the inlet connector 17, the diatomaceous earth ceramic filter “a” has a first end connected to a second end of the grating filter “e”, the activated water
20 converter “b” has a first end connected to a second end of the diatomaceous earth ceramic filter “a”, the active carbon filter “c” has a first end connected to

a second end of the activated water converter “b”, and the magnetic resonator “d” has a first end connected to a second end of the active carbon filter “c”.

A proximal outlet connector 161 is mounted on a mediate portion of the main body 1 and is selectively connected to a second end of the magnetic resonator “d” by a connecting pipe 162 as shown in Fig. 3, and a proximal outlet faucet 16 is selectively mounted on the proximal outlet connector 161, so that the proximal outlet faucet 16 is connected to the magnetic resonator “d”.

A distal outlet connector 181 is mounted on a lower portion of the main body 1 and is selectively connected to the second end of the magnetic resonator “d” by a connecting pipe 184 as shown in Fig. 8, and a distal outlet faucet 18 is selectively mounted on the distal outlet connector 181 by a guiding pipe 182, so that the distal outlet faucet 18 is connected to the magnetic resonator “d”.

In assembly, as shown in Figs. 6 and 7, each of the insertion plates 25 of the cover 2 is inserted into a respective one of the insertion grooves 191 of the support plate 19 of the main body 1. Then, the cover 2 is moved toward the main body 1 until the magnetic members 23 of the cover 2 are magnetically attached on the magnets 151 of the main body 1, so that the cover 2 is combined with the main body 1 rigidly and stably.

In practice, as shown in Figs. 1-6, unfiltered water from the water source passes through the inlet connector 17 into the grating filter “e” which

filters and removes rough impurities (such as ferrite rust, sand particles or the like) contained in the water. Then, the water passes through the grating filter “e” into the diatomaceous earth ceramic filter “a” which filters and removes the bacteria or microbes contained in the water. Then, the water passes through
5 the diatomaceous earth ceramic filter “a” into the activated water converter “b” which converts the water molecules into smaller water molecules. Then, the water passes through the activated water converter “b” into the active carbon filter “c” which uses the oxidation-reduction action to remove articles that are harmful to the human bodies. Finally, the water passes through the active
10 carbon filter “c” into the magnetic resonator “d” which produces a magnetic field to oscillate and resonate the water molecules to excite the free electrons so as to activate the water to produce purified drinkable water.

As shown in Figs. 3 and 4, the proximal outlet faucet 16 is selectively mounted on the proximal outlet connector 161, so that the purified drinking
15 water from the magnetic resonator “d” passes through the connecting pipe 162 and the proximal outlet connector 161 and flows outward from the proximal outlet faucet 16 for use.

As shown in Fig. 8, the distal outlet faucet 18 is selectively mounted on the distal outlet connector 181, so that the purified drinking water from the
20 magnetic resonator “d” passes through the connecting pipe 184, the distal outlet connector 181 and the guiding pipe 182 and flows outward from the distal outlet faucet 18 for use.

Accordingly, the insertion plates 25 of the cover 2 are inserted into the insertion grooves 191 of the support plate 19 of the main body 1, and the magnetic members 23 of the cover 2 are magnetically attached on the magnets 151 of the main body 1, so that the cover 2 is combined with the main body 1 rigidly and stably. In addition, the support plate 19 of the main body 1 provides a support effect, so that the drinking water fountain is disposed at an upright state to facilitate a user dismantling and replacing the filters of the drinking water fountain. Further, each of the diatomaceous earth ceramic filter “a”, the activated water converter “b” and the active carbon filter “c” is clamped and positioned in the opening 121 of the respective holding seat 12 of the main body 1 and the larger opening 133 of the respective support seat 13 of the main body 1. Further, the cover 2 is detached from the main body 1 easily and conveniently, thereby facilitating maintenance of the drinking water fountain.

Although the utility model has been explained in relation to its preferred embodiment(s) as mentioned above, it is to be understood that many other possible modifications and variations can be made without departing from the scope of the present utility model. It is, therefore, contemplated that the appended claim or claims will cover such modifications and variations that fall within the true scope of the utility model.

CLAIMS

1. A drinking water fountain, comprising a main body, and a cover mounted on a side of the main body, wherein:

5 the main body has an inside formed with a chamber;

 the chamber of the main body has a face provided with a plurality of holding seats arranged in a horizontal manner, a plurality of support seats arranged in a horizontal manner, a plurality of clips arranged in a vertical manner, and a fixing seat arranged in a vertical manner;

10 the chamber of the main body has a periphery formed with a plurality of posts each formed with a mounting recess for mounting a magnet;

 the main body has a bottom formed with a protruding flat support plate formed with a plurality of insertion grooves;

 the cover has an inside formed with a chamber;

15 the chamber of the cover has a periphery formed with a plurality of blocks each aligning with a respective one of the posts of the main body and each formed with a mounting recess for mounting a magnetic member which is magnetically attached on the magnet of a respective one of the posts of the main body, so that the cover is combined with the main body;

20 the cover has a bottom mounted on the support plate of the main body and formed with a plurality of insertion plates each inserted into a respective one of the insertion grooves of the support plate of the main body;

the magnet is mounted in the mounting recess of each of the posts of the main body by a screw member which is extended through the magnet and screwed into the respective post;

each of the blocks of the cover is substantially rectangular;

5 the magnetic member of each of the blocks of the cover is substantially U-shaped;

the magnetic member is mounted in the mounting recess of each of the blocks of the cover by a screw member which is extended through the magnetic member and screwed into the respective block; and

10 further comprising a diatomaceous earth ceramic filter, an activated water converter and an active carbon filter each mounted on the holding seats of the main body and supported by the support seats of the main body respectively, a magnetic resonator mounted on and supported by the fixing seat of the main body, and a grating filter mounted on and supported by the
15 clips of the main body.

2. The drinking water fountain in accordance with claim 1, wherein each of the holding seats of the main body has an inside formed with a substantially C-shaped opening, each of the support seats of the main body has an inside formed with a recess and has a top wall formed with an arc-
20 shaped larger opening communicating with the recess and a bottom wall formed with an arc-shaped smaller opening communicating with the recess, and each of the diatomaceous earth ceramic filter, the activated water converter and the active carbon filter is clamped in the opening of the

respective holding seat of the main body and the larger opening of the respective support seat of the main body.

3. The drinking water fountain in accordance with claim 1, further
5 comprising an inlet connector mounted on the main body, wherein the grating filter has a first end connected to the inlet connector, the diatomaceous earth ceramic filter has a first end connected to a second end of the grating filter, the activated water converter has a first end connected to a second end of the diatomaceous earth ceramic filter, the active carbon filter has a first end
10 connected to a second end of the activated water converter, and the magnetic resonator has a first end connected to a second end of the active carbon filter.

4. The drinking water fountain in accordance with claim 3, further comprising a proximal outlet connector mounted on a mediate portion of the main body and selectively connected to a second end of the magnetic
15 resonator by a connecting pipe, and a proximal outlet faucet selectively mounted on the proximal outlet connector, so that the proximal outlet faucet is connected to the magnetic resonator.

5. The drinking water fountain in accordance with claim 3, further comprising a distal outlet connector mounted on a lower portion of the main
20 body and selectively connected to the second end of the magnetic resonator by a connecting pipe, and a distal outlet faucet selectively mounted on the distal outlet connector by a guiding pipe, so that the distal outlet faucet is connected to the magnetic resonator.