No. 876,110. PATENTED JAN. 7, 1908.

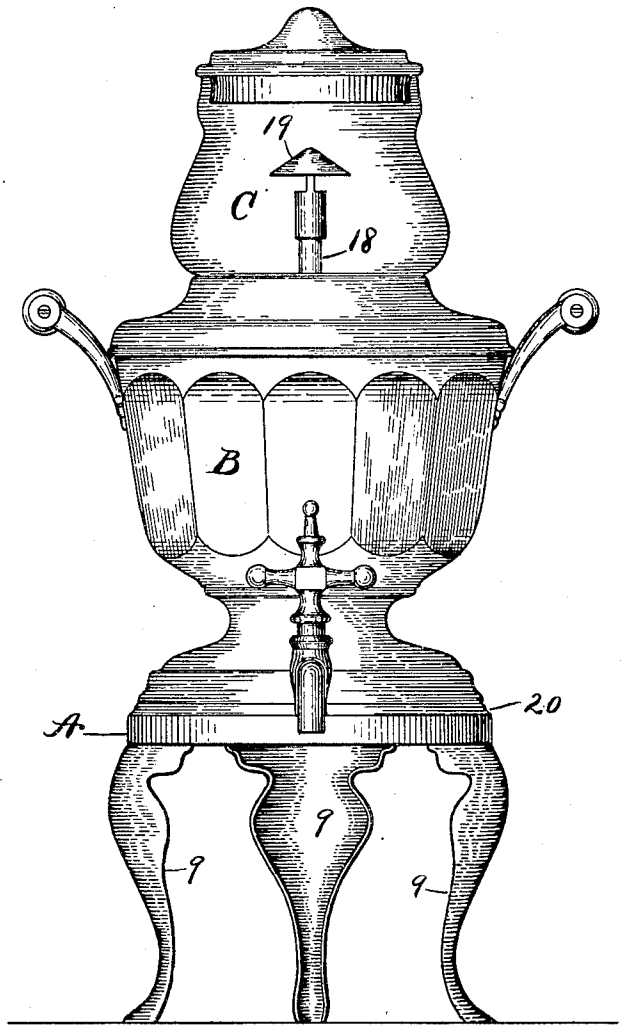
C. E. TREWHELLA.

PERCOLATOR.

APPLICATION FILED APR. 13, 1906.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses.
S. H. Clarke.
P. J. Egan

Inventor.
Charles E. Trewhella.
By James Shepard.
Atty.

No. 876,110. PATENTED JAN. 7, 1908.

C. E. TREWHELLA.

PERCOLATOR.

APPLICATION FILED APR. 13, 1906.

2 SHEETS—SHEET 2.

Fig. 2.

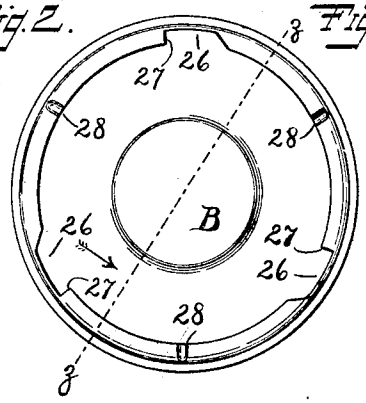


Fig. 3.

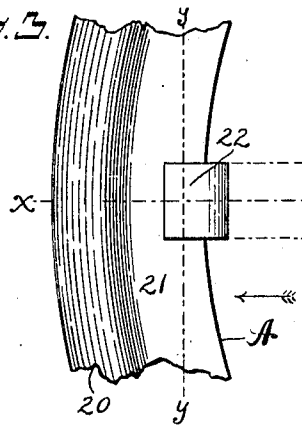


Fig. 4.

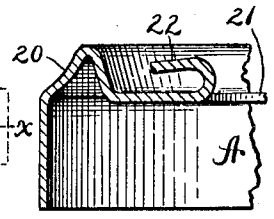


Fig. 5.

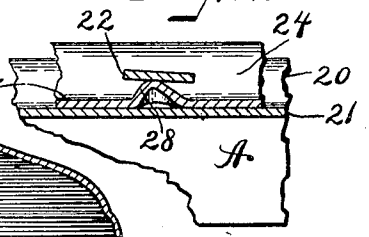


Fig. 6.

Fig. 7.

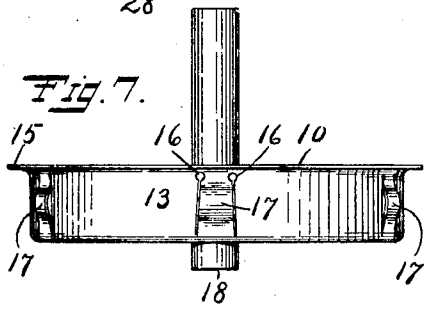
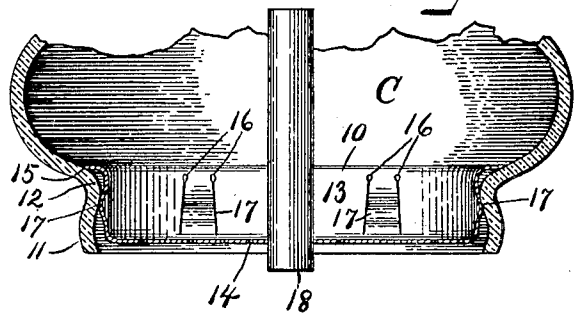


Fig. 8.



Witnesses.

S. H. Clarke.

P. J. Egan

Inventor.

Charles E. Trewhella.

By James Shepard.

Atty.

UNITED STATES PATENT OFFICE.

CHARLES E. TREWHELLA, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO AMERICAN SILVER COMPANY, OF BRISTOL, CONNECTICUT, A CORPORATION.

PERCOLATOR.

No. 876,110. Specification of Letters Patent. Patented Jan. 7, 1908.

Application filed April 13, 1906. Serial No. 311,505.

To all whom it may concern:

Be it known that I, CHARLES E. TREWHELLA, a citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Percolators, of which the following is a specification.

My invention relates to improvements in percolators, and the objects of my improvements are simplicity and economy in construction, with convenience and efficiency in use, particularly with reference to securing the strainer in the glass cup and in securing the urn to its stand.

In the accompanying drawing: Figure 1 is a front elevation of my percolator. Fig. 2 is a reversed plan view of the bottom of the urn. Fig. 3 is an enlarged broken plan view of a part of the stand for the urn. Fig. 4 is a sectional view thereof, on the line *x x* of Fig. 3. Fig. 5 is a sectional view of the same on the line *y, y,* of Fig. 3, together with a portion of the base flange of the urn. Fig. 6 is a sectional view of the lower portion of the urn and the ring of the stand, on the plane indicated by the line *z z* of Fig. 2, and with the parts unlocked ready to lift the urn off the stand. This figure is on a smaller scale than Figs. 3, 4, and 5, and on a larger scale than Figs. 1 and 2. Fig. 7 is a detached side elevation of the strainer, and Fig. 8 is a central vertical section of the same together with the lower part of the glass cup to which it is fitted for forming the bottom of the said cup.

A, designates the top rim or ring of the stand which is supported on legs 9 in any ordinary manner, so that a lamp may be placed under the stand to heat the pot, vessel, or urn B, that may be placed thereon. A glass cup C is placed on the top of the urn and is provided with a detachable strainer 10 which forms the bottom of the said cup for holding the coffee, tea or other material, as in ordinary percolators. This glass cup is provided with a reduced portion or base 11, that fits into the top of the pot or urn, while its larger part rests thereon, as shown in Fig. 1. At the junction of the base 11 and body of the cup on the inside there is a slightly contracted corner 12.

The strainer 10 is made of thin sheet metal in the form of a shallow cup with substantially vertical sides 13, perforated bottom 14, and an outwardly turned flange 15 at its top edge. The said sides are provided with slits 16 arranged in pairs at different points in its circumference, preferably at six points, to form the metal between each pair of slits into springs, the metal being bent or swaged outwardly a little to make the middle portion 17 of each spring project slightly beyond the rest of the sides 13 of the strainer, so that when the strainer is crowded down into place within the bottom of the glass cup, the springs may yield a little to pass the corner 12 of the cup and then spring outwardly to bear on the inner wall of the base 11 as shown in Fig. 8, and hold the strainer snugly in place against accidental displacement, but leaving it free to be forced out for removal. The strainer is provided with the usual central tube 18, to receive the upper end of the ordinary percolator tube, not shown, and may also be provided with any ordinary spreader 19.

It is common in this class of percolators or analogous pots, to provide a stand having a ring or rim for its top, for use with a lamp, and with a pot or urn removably fitted to the said ring or rim by means of interlocking devices on the urn and stand, and the same is hereby disclaimed.

My stand has its rim or ring A provided with an upwardly projecting annular bead 20 and inside of the said bead is an inwardly projecting horizontal flange 21. Over this flange and spaced therefrom there are three locking lugs 22, which are preferably formed integral with the said flange by being first cut out when in the plane of the said flange as indicated by the broken contour lines in Fig. 3, and then doubled up as shown in Fig. 4. But instead of leaving them parallel with the said flange 21 they are twisted slightly to make a wedging space between the confronting faces of the lug and flange which space is the greatest at the entrance side, as best shown in Fig. 5, the said entrance side being the left hand side edge of the said lug.

The bottom 23 of the pot or urn, may be of any ordinary construction. At the bottom of the pot or urn and rigid with the same, is an attaching flange or ring having sides 24 that fit inside of the annular bead 20 on the stand ring A, and an inwardly turned flange 25 that is designed to rest on the top of the horizontal flange 21 of the said stand ring A. This flange 25 is cut away or notched in three places, as at 26, in Fig. 2, to admit the three lugs 22 of the stand. The metal at one side of these notches is turned up to

form the stop lugs 27. At points midway between the said notches, the flange 25 is provided with three holding ribs 28 which are preferably formed by swaging the metal of the flange 25, as best shown in Fig. 5.

In order to fasten the pot to the stand it is only necessary to place the pot thereon with the sides 24 of the attaching ring inside the annular bead 20 of the stand and rotate the pot thereon until the lugs 22 pass through the notches in the flange 25 and the said flange 25 rests upon the horizontal flange 21 of the stand, as shown in Fig. 6. Then rotate the pot in the direction for turning in a right hand screw so as to bring the lugs 22 over the solid portions of the flange 25 with the holding ribs 28 in the spaces between the ends of the said lugs and the confronting horizontal flange 21, and force the parts snugly into place. The lugs being set on the incline as shown in Fig. 5, will easily admit the holding ribs and then bind them tighter and tighter as they are forced in, and at length stop the further turning of the pot without more force than will ordinarily be applied, whereby the parts will stop in about the position shown in the said Fig. 5. The pot and stand are then rigidly secured together beyond any liability of being accidentally unfastened. In order to detach the pot from the stand, turn it on the stand in the direction for unscrewing a right hand screw until the stop lugs 27 on the flange 25 engage the lugs 22 as shown in Fig. 6, when the lugs will register with the notches and the pot or vessel may be lifted from the stand.

By my improvement the strainer is readily put in and removed from the bottom of the glass cup, and the top flange makes a close joint between the cup and the strainer. The pot and the stand are very conveniently and firmly secured together, and the stop lug on the pot prevents the pot from being turned so far on the stand, when detaching, as to carry the holding lugs and notches beyond their registering position.

I claim as my invention:—

1. In a percolator, the combination of a glass cup having a reduced base portion with a detachable strainer in the form of a shallow cup with vertical sides and a top flange and springs projecting from the said sides to engage the interior of the said base.

2. In a percolator, the combination of a glass cup having a reduced base portion with a detachable strainer in the form of a shallow cup, with vertical sides, and integral springs projecting outwardly from the said sides from between the slits in the metal thereof, substantially as described.

3. In coffee pot or percolator, the combination of the vessel having on its bottom the inwardly turned horizontal flange provided with notches and holding ribs between the said notches, and the stand having an upwardly projecting annular bead and inwardly projecting horizontal flange provided with holding lugs for being engaged by the said flange and ribs of the vessel, substantially as described.

4. In a coffee pot or percolator, the combination of the vessel having on its bottom the inwardly turned horizontal flange provided with notches and holding ribs, and the stand having a top ring provided with an inwardly projecting horizontal flange and holding lugs facing the flange of the said stand which stand is provided with a wedging shaped space between the said flange and lugs of the stand, and arranged to be engaged by the flange and ribs of the vessel substantially as described.

5. In a coffee pot or percolator, the combination of a vessel having on its bottom a holding flange provided with notches, with a stand for the said vessel, the said stand having a top ring provided with lugs adapted to be passed through the said notches and then into engagement with the said flange, and a stop lug on the said holding flange of the said vessel, the said lug projecting from the said flange at one side of one of the said notches.

6. In a coffee pot or percolator, the combination of a vessel having on its bottom an inwardly turned flange, and a stand having an upwardly projecting annular bead, an inwardly projecting horizontal flange inside of said bead and holding lugs supported from the inner edge of the said stand and extending outwardly above the same forming a space between the said lugs and flange for the reception of the said inwardly turned flange of the vessel.

7. In a coffee pot or percolator, the combination of a vessel and a stand having interlocking flanges with suitable recesses and lugs for detachably connecting the said pot from the said stand, and holding ribs on one of the said flanges intermediate the said lugs for tightening up the parts after the locking flanges are first engaged with each other.

CHARLES E. TREWHELLA.

Witnesses:
GUSTAF A. JOHNSON,
JAMES A. MAGUIRE.