

A. M. H. GARDAM.
CUP AND SAUCER.
APPLICATION FILED JUNE 10, 1914.

1,187,899.

Patented June 20, 1916.

Fig. 1.

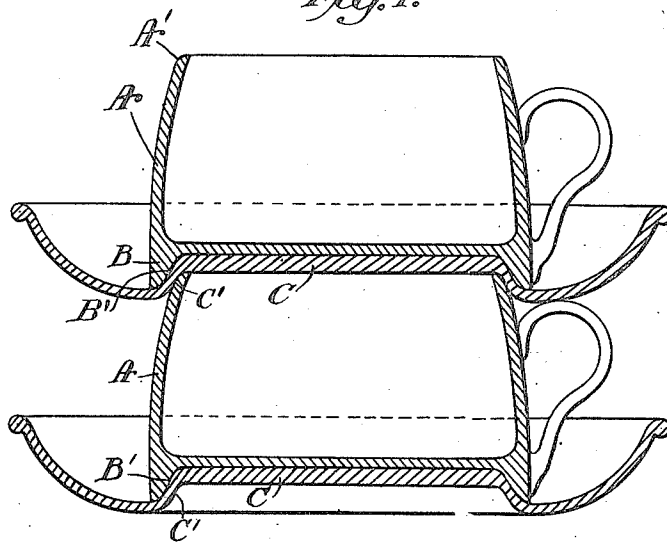


Fig. 2.

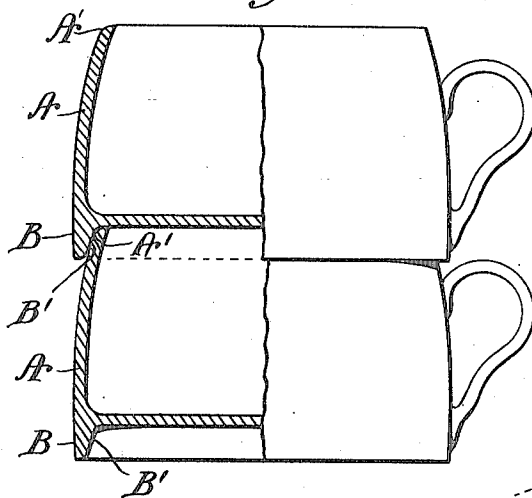


Fig. 3.

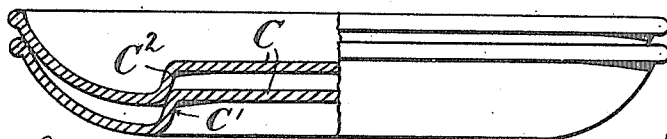
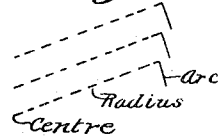


Fig. 4.



Attest:
Mary H. Lewis
Helen V. Fitzpatrick

by

Inventor:
Alice M. H. Gardam
S. J. Cox. Att'y.

UNITED STATES PATENT OFFICE.

ALICE M. H. GARDAM, OF LONDON, ENGLAND.

CUP AND SAUCER.

1,187,899.

Specification of Letters Patent.

Patented June 20, 1916.

Application filed June 10, 1914. Serial No. 844,196.

To all whom it may concern:

Be it known that I, ALICE M. H. GARDAM, a subject of the King of England, and a resident of the city of London, in the Kingdom of Great Britain and Ireland, have invented certain new and useful Improvements in Cups and Saucers, of which the following is a specification.

The improvements relate to drinking cups and saucers and similar articles and their objects are, among others, to provide an article of this character which may be safely and conveniently stored and used and carried about, singly, or together with others under conditions or in such a manner that would cause the ordinary article of this kind to slip and fall or spill its contents; to so form, construct and arrange the parts that they may be stacked or nested, either full or empty, and when so disposed will resist the tendency of the parts to slip due to the instability of their support or sudden shock or jar; and to provide for a simple, strong and durable construction convenient for use and not easily broken. Examples of the conditions under which the said cup and saucer may be used to great advantage are found on railway trains and vessels, and also in restaurants where it is desirable for the waiters to carry a number of cups with their liquid contents from the kitchen or serving room to the tables.

The improvements consist in the construction, combination and arrangement of parts hereinafter described and shown and illustrated in the accompanying drawings, in which—

Figure 1 is a view partly in side elevation and partly in vertical section of two superposed cups and saucers embodying the improvements. Fig. 2 is a similar view of two cups, and Fig. 3 is a like view of two saucers, one superposed upon the other in each instance. Fig. 4 is an illustration of a plan of forming the curved meeting surfaces of the cups and saucers in accordance with the improvements.

The cup A consists of side walls inclined inwardly from bottom to top and an ordinary plane bottom. The walls of the cup extend below the bottom so as to form an annular flange B around the lower edge of the cup. The inner surface B' of this flange is disposed on oblique lines substantially parallel with the outer surfaces of the lip

A' of the cup, so that when one cup is placed upon another the rim of the lower cup will fit snugly within the flange B of the upper cup and thus form a temporary union similar to that of a box and its cover, whereby the accidental displacement and separation of the cups is prevented.

The saucer C is provided with a rim of ordinary construction and a raised central portion of substantially the same external diameter as the internal diameter of the pocket in the bottom of the cup formed by the flange B. Between the rim and this raised central portion is an oblique intermediate or connecting portion disposed parallel to the inner surface of the flange B and the outer surface of the lip A', and having an under surface C' and an upper surface C² so formed that the former will receive the lip A' and the latter the flange B. In this manner provision is made for fitting the cup on the saucer or vice versa in such a manner as to prevent accidental displacement of both.

The formation of the engaging surfaces of the lip and annular flange of the cup and the oblique connecting portion of the saucer is peculiar, and it is by forming these parts according to a certain clearly defined plan that the desired result is obtained. It will be seen that the cups may be stacked one upon the other and that the saucers may be similarly stacked, and that these parts may also be alternated or interposed in any desired manner, and that no matter how they are arranged they will fit snugly together and be held against relative lateral movement. This is due to the fact that all four contact surfaces (*i. e.* A', B', C' and C²) are parallel and that the curvature of these surfaces is such as to insure a close contact between the lip of the cup and the under surface of the saucer as well as between the said first named part and the inner surface of the flange B. If desired the rim of the saucer C may be also so formed as to permit the saucers to be placed in close contact throughout their area, but this is not essential.

By reference to Fig. 4 it will be seen that by curving the contact surfaces on radii of the same length drawn from centers in vertical alinement separated a distance equal to the thickness of the material, of which the said articles are made, the said surfaces will coincide when brought into contact with one

another, since coextending arcs of the same radius when moved until their ends and centers meet will always coincide.

It is obvious that the details of construction above described may be departed from to a certain extent and within certain limits without departing from the spirit and scope of the invention, and that these variations in details of construction include variations in the size, inclination and position of the co-acting parts, provided the relations of these parts referred to produce the result intended or maintained. The conformation of the coöperating surfaces of the bottom cup flange, lip and annular inclined portion of the saucer may also be varied without affecting the principle of construction or function. If these surfaces are curved on substantially the same radius drawn approximately parallel with the line of movement which brings them together or separates them, as shown in the drawings, they will always coincide and form a relatively snug fit when brought together. This rule will be a guide to those skilled in the art in the embodiment of the improvements, but may be departed from within certain limits by the use of mechanical skill and judgment without departing from the scope of the invention, or materially affecting the result.

What I claim is:

1. In a device of the character described, the combination of a cup provided with an annular flange extending below its bottom and formed substantially of a continuation of the side wall of the cup, and a saucer having an inclined portion in its upper surface substantially coincident and parallel with the inner surface of said annular flange of the cup, and the said saucer having an inclined portion on its bottom substantially parallel and coextensive with the lip of the cup when the said saucer is superposed on the cup.
2. A device of the character described, comprising in its construction a cup or the like having an inclined lip and a flange at its bottom formed substantially by a continuation of the wall of the cup below the cup bottom, the said lip and flange being substantially parallel, and the construction and

arrangement being such that one cup so constructed may be placed upon another and held against lateral displacement by the contact of their flanges and lips, and a saucer provided with an inclined portion parallel with the said co-acting surfaces of the cup, the construction and arrangement being such that the inclined portion of the saucer is of a size to fit over the lip and under the lower flange of the cup.

3. A device of the character described, comprising in its construction a cup or the like having an engaging recess in its bottom and a lip conforming substantially to the said recess, a saucer or the like having a central engaging portion conforming substantially to the recess in the bottom of the cup and a recess on its under side to which the lip of the cup and its own engaging portion substantially conforms, whereby cups may be placed upon cups or saucers upon saucers or cups and saucers placed alternately one upon the other and held against relative lateral movement by the engagement of the said parts.

4. A device of the character described, comprising in its construction a cup or the like having a curved surface at its lip, and a surface curved on substantially the same radius at its bottom, a saucer or the like having curved portions on its upper and lower surfaces also curved on substantially the same radius, the radius of the curvature of all four surfaces being substantially equal, and the construction and arrangement being such that the saucer is adapted to fit over the lip of the cup and under the bottom of the cup, and the curved surface on the bottom of the cup is adapted to fit over the lip of another cup of the same construction, and whereby the said articles may be superposed one upon another indiscriminately and held against lateral movement by the contact of the said surfaces.

Witness my hand this 27 day of May, 1914, at the city of London, England.

Alice M. H. Gardam.

Witnesses:

O. J. WORTH,
H. D. JAMSON.