Aug. 20, 1968 MICHITOSHI NATSUME 3,397,935

LIQUID CUP AND CONTAINER ASSEMBLY USABLE AS A BINOCULAR TELESCOPE

Filed Aug. 30, 1965

FIG. 1

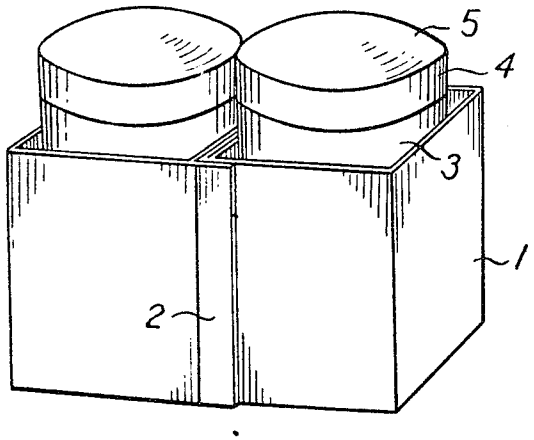


FIG. 3

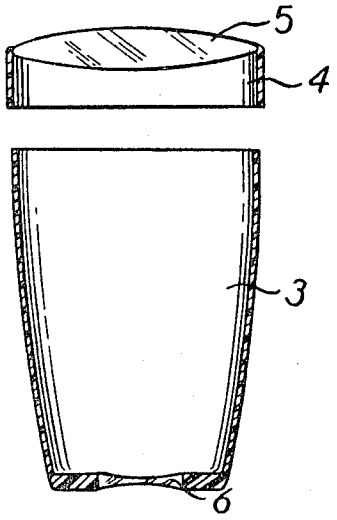
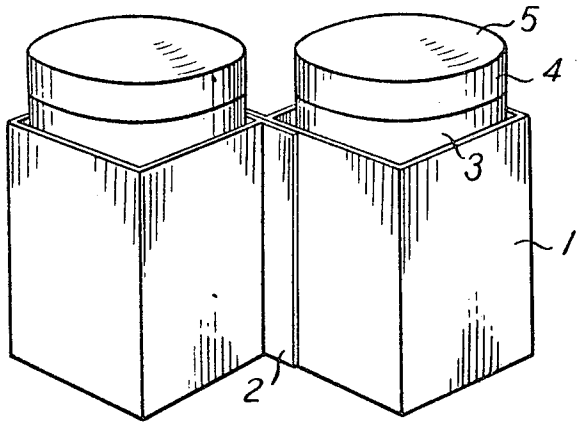


FIG. 2



United States Patent Office 3,397,935
Patented Aug. 20, 1968

3,397,935

LIQUID CUP AND CONTAINER ASSEMBLY USABLE AS A BINOCULAR TELESCOPE

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Filed Aug. 30, 1965, Ser. No. 483,768
Claims priority, application Japan, Oct. 5, 1964, 39/56,598
1 Claim. (Cl. 350—71)

ABSTRACT OF THE DISCLOSURE

An assembly of two cups each of which is capable of holding liquid is usable as a binocular. Each cup includes a tumbler shaped bottom portion with a lens in the bottom and a cover portion with the lens in the top of the cover. The lenses of the bottom and cover form a telescopic lens system when the cover is on the bottom tumbler portion. The cups are supported in containers each approximately square in section and a flexible hinge connects the containers so that they may be flush with each other along one side or may be pivoted outwardly along an axis parallel with the axis of the cup in order to form a binocular which is inexpensive and lightweight and which may previously have been used to hold liquid.

This invention relates to a cup assembly usable as a binocular. In particular, this invention relates to a cup assembly usable as a binocular having an improved supporting container.

While binoculars have been used extensively in traveling, hiking, theater, races, etc., in general binoculars having a high magnifying power and a wide field of view are large in size and expensive. With small size binoculars which are convenient for carrying, a wide field of view cannot be obtained due to the smallness of the objective lens.

According to this invention, two cups have incorporated therein a lens system and they are provided with a supporting container of special construction. The cup assembly-binocular according to this invention is inexpensive, convenient for sale and may be used as a binocular directly after its use as drinking cups. In view of the fact that the diameter and height of the cups are relatively large, it can be sold as a container for food and drink at sporting events, etc., and then used as a binocular on the spot.

This invention is illustrated by way of example, in reference to the accompanying drawings.

In the drawings:

FIG. 1 is a perspective view of the assembly according to this invention;

FIG. 2 is a perspective view showing the use as a binocular; and

FIG. 3 is a section view of cup as an example of this invention.

FIG. 1 shows the cup assembly according to this invention. The cup assembly includes a pair of cups, and each cup **3** is provided with a cover **4** having a lens **5**. The cups are carried in a supporting container **1** of sheet plastic or the like, providing approximately square holders for the cups. The supporting container **1** has a bonding member **2** on its side for hingedly joining the two supporting units by virtue of the bonding member **2** being attached to a side of each supporting unit. In FIG. 3 illustrating the cup **3** according to this invention, a lens **6** is provided in the bottom of the cup and a lens **5** in the cover **4** so that lenses **5** and **6** form a telescope when the cup **3** is covered with the cover **4**, and empty of contents. The cover **4** may

be telescopically slidably positionable on cup **3** so that the distance between lenses **5** and **6** may be adjusted.

Since this invention is constructed as described above, one side wall of each support unit will be in contact with that of the other, as shown in FIG. 1 when it is sold containing a drink. Thus the carrying space required for a number of cup assemblies is reduced. It is possible to provide a carrying handle, such as a string, attached to the outer side walls of the supporting units. To use as a binocular after emptying the contents of the cups, each cup is covered with its cover **4** and the support units are separated along the edge where the bonding member is attached, as shown in FIG. 2. In this manner, the objective lens of each cup may be positioned at a position adjustable to the eye spacing of any user since the support units may be separated freely along the hinge edges.

In the described example, the hinging of the support units is accomplished by means of flexible bonding member **2** which is united with each support unit. It may be, however, accomplished by other suitable means.

A suitable opaque coating may be provided to the inner or outer surface of support units.

As mentioned above, according to this invention a cup assembly of a simple structure may be used as a relatively large binocular. Since the supporting container for the cup is formed so that it may be opened and closed, it is closed on carrying so as to be stable and occupy a small area. When the cup is used as a binocular after its contents have been emptied, it may be positioned at the position to see easily by opening it arbitrarily. A suitable and inexpensive binocular can be purchased at events where binoculars are used, eliminating the inconvenience of carrying a large heavy and expensive binocular.

While the invention has been particularly shown and described with reference to a preferred embodiment thereof, it will be understood by those skilled in the art that various changes in form and details may be made therein without departing from the spirit and scope of the invention.

What is claimed is:

1. An assembly of a pair of cups capable of holding liquid and usable as a binocular, the assembly comprising; a pair of cups of circular cross-section, each cup including a bottom tumbler portion with a lens in the bottom thereof and a cover portion with a lens in the top thereof, the lenses providing a telescopic lens system when the cover portion is on the tumbler portion and defining an optical axis therein, a pair of hollow, open-ended supporting containers each of uniform square cross-section, each container gripping peripheral portions of a corresponding cup, and a flexible strip-like hinge member bonded to side portions of the containers' adjacent contacting edges, thereby connecting the supporting containers to pivot about an axis parallel to the optical axis of the telescopic lens system in each cup so that one side of each of the containers may be flush with the other for compact storage in the holding of liquids but the containers may be pivoted about the hinge connection to separate the cups sufficiently so that with the telescopic lens system of each cup, the separated cups can be used as binoculars.

References Cited

UNITED STATES PATENTS

287,978	11/1883	Tetlow	350—243 X
2,733,635	2/1956	Crandall	88—1 X
3,009,567	11/1961	Erickson	350—243 X

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