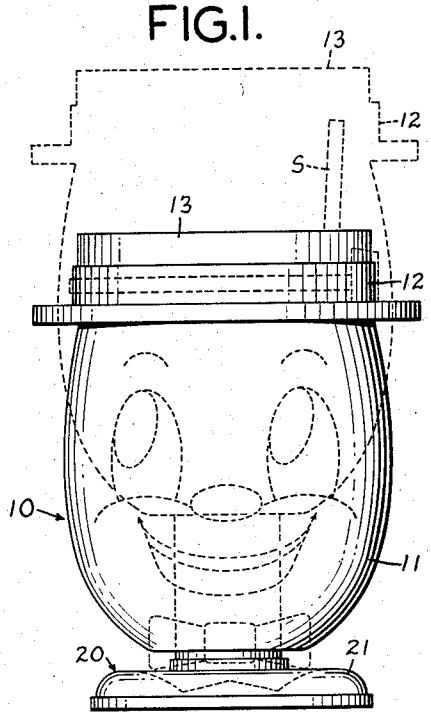
July 7, 1959 G. BARRADAS 2,893,591

EDUCATIONAL AND TRAINING DEVICE FOR CHILDREN

Filed Aug. 2. 1955

FIG.1.



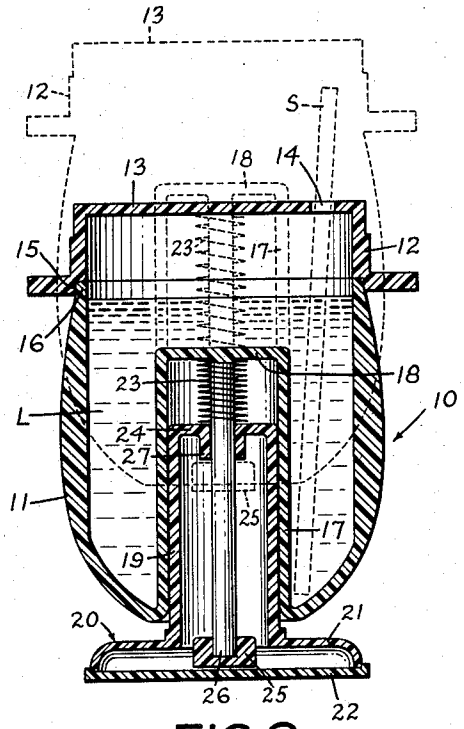


FIG.2.

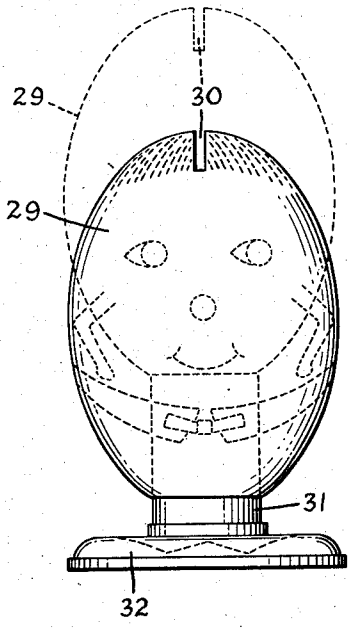


FIG.3.

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EDUCATIONAL AND TRAINING DEVICE FOR CHILDREN

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This invention relates to educational devices and it relates more particularly to receptacles for beverages, food and the like, by means of which children can be encouraged to eat at mealtimes, without the need for extensive supervision and coaxing.

The invention also includes other types of receptacles, such as, for example, coin banks, by means of which the habit of saving can be encouraged.

It is well recognized that there are periods during childhood when it is difficult to interest children in eating and drinking at mealtimes. Many types of dishes, cups, drinking glasses and the like have been provided which have features that are intended to promote the interest of the child in a beverage or food therein.

The present invention relates to a class of receptacles that encourages a child to consume a food or beverage therein or to make other suitable use of the receptacle because the appearance of the receptacle changes as the weight of its contents varies. More particularly, the present invention involves a receptacle having a container portion which is suitably designed to receive a food, a beverage, or the like, the container portion being mounted on a foot or base in such a manner that as the weight in the container portion varies, the over-all height of the receptacle will change. When a receptacle of the type embodying the present invention is embodied in the form of a drinking goblet, the container portion is the bowl of the goblet. The stem of the goblet interposed between the bowl and its base is constructed and arranged to telescope within the bowl against the biasing action of a spring so that when the bowl is full, the stem is almost completely telescoped within the bowl and thus the bowl of the goblet appears to rest almost, if not quite, on the base or foot thereof. As the contents of the goblet are consumed, the decreased weight enable the biasing spring to raise the goblet farther along the stem thereby causing the goblet to grow in over-all height, ultimately fully extending the stem when all of the contents thereof are consumed. The goblet may be suitably ornamented to resemble a fanciful or storybook figure by forming a face on the bowl to give the appearance of a head. The base may be molded or otherwise decorated to resemble feet or shoes and the stem may be ornamented to resemble legs. Such ornamentation makes the goblet resemble a figure which shrinks or grows depending upon the weight of the contents of the bowl.

A similar but reverse action may be obtained by making the container portion of the receptacle in the form of a coin bank having a slot therein to receive coins. The container portion of the bank is mounted to telescopically receive a supporting stem so that as the number of coins in the bank increases, more and more of the stem is telescoped into the container portion.

It will be understood that as the receptacle is lifted, the stem will move outwardly, but when the receptacle is again placed on its base, the stem will slowly retract a distance corresponding substantially to the weight remaining in the container portion.

The action of the goblet and its change in appearance arouses the interest of a small child and when the child sees that the appearance of the goblet can be changed by drinking the beverage in the goblet, the child will normally not need further encouragement to consume the beverage. A receptacle of the type indicated attracts the attention of the child to the food and offsets to a large extent the distractions which cause the child to lose interest in eating at mealtimes.

For a better understanding of the present invention, reference may be had to the accompanying drawing in which:

Fig. 1 is a front elevational view of a goblet of the type embodying the present invention shown in contracted or filled condition and also showing the goblet in an empty condition in dotted lines;

Fig. 2 is a view in vertical section through the goblet shown in a contracted or full condition, and also indicating in dotted lines the extended or empty condition of the goblet; and

Fig. 3 is a front elevational view of a coin bank embodying the present invention in contracted and full condition and showing the bank in empty or partially empty condition in dotted lines.

Figs. 1 and 2 disclose a preferred form of the invention which is in the form of a drinking goblet **10** suitable for receiving milk or the like for consumption by a child. The goblet is susceptible to considerable variation in size and dimensions and in the material from which it is made. As illustrated, the goblet is formed of a synthetic plastic, preferably of a translucent or opaque type, and it may have a face or the like painted or molded on the bowl **11** of the goblet. The bowl **11** is of rounded configuration and has an open upper end which may be suitably covered or closed by means of a removable cap **12** which, as illustrated, may simulate a straw hat. The cover **12** is also formed of plastic and has a flat top **13** containing an opening **14** through which a drinking straw S may be inserted. The cover or closure **12** has a rabbeted portion **15** therein which receives a complementarily shaped upper lip **16** of the bowl of the goblet **10**. The lower end or bottom of the bowl **11** is provided with an inwardly extending tubular portion **17** integral therewith and having an inner closed end **18**. A hollow cylindrical stem **19** on the base or foot **20** of the goblet is slidably received within the tubular portion **17** so that they may move relatively. The lower end of the stem **19** is integral with the concavo-convex upper section **21** of the base which is joined to a disk-like bottom closure **22** by means of cement or in any other suitable way.

A spring **23** is interposed between the upper end portion **24** of the stem **19** and the inner surface of the end closure **18** of the tubular portion of the bowl **11**. In this way, the bowl **11** is normally urged upwardly along the stem **19** to about the relation shown in dotted lines in Figs. 1 and 2. Upward movement of the goblet along the stem **19** is limited by means of a stop member **25** cemented or otherwise secured on an elongated member or rod **26** extending downwardly from the inner side of the end closure **18** and passing through a tubular guide portion **27** on the end **24** of the stem **19**. The length of the rod **26** is such that the stop **25** will engage the tubular portion **27** when the bowl **11** is at the upper end of the stem. Tipping of the bowl relative to the stem is prevented by contact of the stem **19** with the tubular portion **17** and engagement between the rod **26** and the portion **27**.

The spring is designed to compensate approximately for the weight of a liquid L in the bowl **11**. Thus, the

spring 23 will be fully compressed and the stem 19 will be substantially fully telescope into the bowl when the bowl is full of liquid. The spring is strong enough to move the bowl to the uppermost position on the stem when the bowl is empty or substantially so. In this way, the goblet, like the user thereof, may be caused to grow by consumption of the contents of the goblet.

A similar arrangement can be used in a coin bank such as that shown in Fig. 3. Thus, the coin container 29 may, for example, take a hollow, substantially closed, egg-shaped form and might be ornamented or decorated to resemble "Humpty-Dumpty." It is provided with a coin-receiving slot 30 on the top or any other suitable location. The coin container 29 is mounted on a telescoping stem 31 and a base 32 in the manner described above. With this arrangement, when the coin container 29 is empty, it will be projected along the stem to the dotted line position shown in Fig. 3 and when it attains a predetermined weight of coins, the container 29 will be depressed along the stem 31 so that the latter is telescoped substantially completely within the container.

It will be understood that similar telescoping arrangements of stem and base may be used in other types of containers, for example, in dishes mounted on relatively wider but shorter stems or pedestals and that the design, appearance, size and proportions of the device may be modified as desired. Accordingly, the forms of the invention disclosed herein should be considered as illustrative and not as limiting the scope of the following claims.

I claim:

1. A receptacle comprising a hollow container having an opening in one end for introduction of a product into and discharge of said product from said container, a tubular portion extending inwardly from the opposite end of said container and disposed substantially entirely within said container, said tubular portion having its interior substantially isolated from the interior of said container to prevent escape of said product into said tubular portion, a base for supporting said container, a stem extending from said base into said tubular portion and in sliding engagement therewith, means interposed between said stem and said closed inner end of said tubular portion normally urging said container away from said base, the strength of said urging means being sufficient to lift the container substantially to the upper end of said stem when said container is substantially empty and to be compressed and thereby lower the container substantially completely to the bottom of said stem when the container is full, and means limiting the movement of said container relative to said base.

2. The receptacle set forth in claim 1, in which said hollow container is a cup member having said tubular portion in its bottom.

3. The receptacle set forth in claim 1, in which said hollow container is a substantially completely closed coin bank having a slot therein to receive coins.

4. A receptacle comprising a hollow cup for receiving liquids having an imperforate tubular portion extending from the bottom thereof inwardly and having an inner closed end, a base for supporting said container, a stem on said base extending into and slidable relative to said tubular portion, and having an outer end movable toward and away from said closed end, a spring interposed between the outer end of said stem and said closed end of said tubular portion and biasing said container away from said base, said spring being related to the weight of a material to be received in said container so that the spring is compressed and the container is adjacent to said base when the container is substantially full of a material and the spring is extended and the container is spaced from the base when the container is substantially empty, and means for retaining said stem in said tubular portion.

5. A receptacle comprising a cup member having a tubular portion disposed substantially entirely within said cup member and extending from the bottom thereof inwardly and having a closed inner end, a base for supporting said cup member, a stem extending from said base into said tubular portion and in sliding engagement therewith, means interposed between said stem and said closed inner end of said tubular portion normally urging said cup member away from said base, the strength of said urging means being sufficient to lift the cup member substantially to the upper end of said stem when said cup member is substantially empty and to be compressed and thereby lower the cup member substantially completely to the bottom of said stem when the cup member is full, means limiting the movement of said cup member relative to said base, and a cover for said cup member having a hole therein to receive a straw.

6. A receptacle comprising a hollow cup for receiving liquids having an imperforate tubular portion extending from the bottom thereof inwardly and having an inner closed end, a base for supporting said container, the hollow stem on said base extending into and slidable relative to said tubular portion and having an outer end movable toward and away from said closed end, said outer end having a hole in it, an elongated rod fixed to the inner end of said tubular portion and extending through said hole, an enlargement on the end of said rod larger than said hole to engage the outer end of said stem for retaining said rod against separation from said stem, and a spring interposed between the outer end of said stem and said closed end of said tubular portion and biasing said container away from said base, said spring being related to the weight of a material to be received in said container so that the spring is compressed and the container is adjacent to said base when the container is substantially full of a material and the spring is extended and the container is spaced from the base when the container is substantially empty.

References Cited in the file of this patent

UNITED STATES PATENTS

435,220	Goldsmith	Aug. 26, 1890
1,243,033	Beatty	Oct. 16, 1917
1,737,747	Zanardelli	Dec. 3, 1929
1,990,894	Brubaker	Feb. 12, 1935
2,226,308	Gibbs	Dec. 24, 1940
2,256,340	Gora	Sept. 16, 1941
2,436,604	Roberts	Feb. 24, 1948
2,505,380	Blefeld	Apr. 25, 1950
2,546,122	Goldfarb	Mar. 20, 1951
2,743,102	Seddon	Apr. 24, 1956

FOREIGN PATENTS

241,781	Sweden	Aug. 1, 1946