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E. L. BLACKMAN

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DRIP TRAY FOR HUMAN FEEDING, ETC

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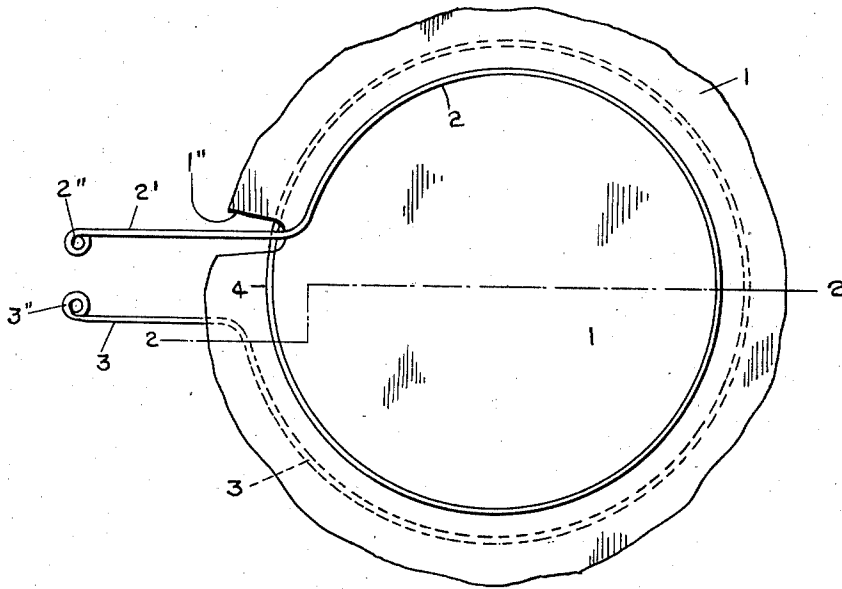


Fig. 1

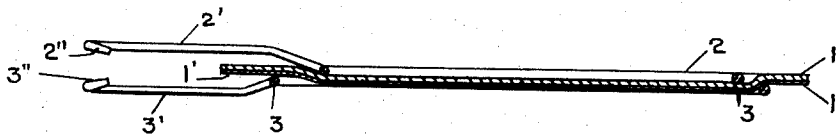


Fig. 2

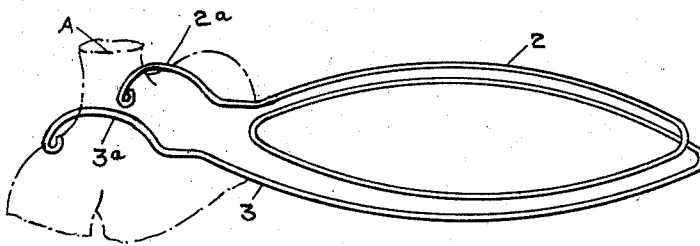


Fig. 3

INVENTOR.
EDWARD L. BLACKMAN.

BY

Stephen S. Cox

ATTORNEY.

UNITED STATES PATENT OFFICE

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DRIP TRAY FOR HUMAN FEEDING, ETC.

Edward L. Blackman, New York, N. Y.

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7 Claims. (Cl. 65—29)

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The improvements relate primarily to small trays or the like with absorbent bottoms and adapted to catch particles of solid food and drops of liquid food which may fall from the fork, spoon or cup while being conveyed to the mouth of a person eating, and are particularly useful to sick patients, invalids, small children and also normal persons who enjoy eating in bed. They have many other uses, however, as will be seen by the following description, including use for eating on airplanes, while driving and aboard boats. They can also be employed in connection with picnic lunches and buffet suppers, etc., and with paper plates or plates of other material.

Among the objects of the improvements are the provision of a disk, preferably of absorbent material such as "blotting paper" and with a non-absorbent bottom coating, and a holder in which it is removably and replaceably carried composed of a piece of resilient wire formed into a plurality of superposed rings with an extending handle, all of strong, light and efficient form, which may be held in one hand of the person using it or of the nurse or other person attending him while the other hand is employed in the feeding operation or otherwise. Other uses and advantages will be apparent from the following specification, in which the accompanying drawing is referred to, and in which drawing—

Figure 1 is a plan of an absorbent tray and holder embodying the invention;

Fig. 2 is a medial cross section of the same substantially on the line 2—2 of Fig. 1.

Fig. 3 is a modified handle member.

The disk 1 is composed of a flexible sheet of fibrous absorbent material, preferably of the blotting paper order, and has a coating of water-proof or moisture resistant material 1' on its under side so that liquid will not pass through it while it is in use but will spread thereon and be absorbed thereby. It has a notch 1'' in its edge at one point so that it can pass the upper and inner loop or ring 2 of the holder near its handle and where it passes downwardly to form the lower and outer loop or ring 3, so that it will fit in between the two rings, extend beyond them all around and be held in position firmly between the said loops.

The rings or loops 2 and 3 are made of a single piece of resilient wire or the like bent in flat spiral form, the ring 2 being smaller and slightly above the loop 3 but normally engaged therewith throughout its periphery or at a number of points therein. The wire after forming the ring 2 turns downwardly, and outwardly, as indicated at 4 and

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is formed into the outside lower ring 3 substantially parallel with ring 2 but slightly below it, so that when the disk 1 is inserted between the two rings they will grip it between them and also depress the central portion of the disk while slightly elevating its edges so as to form it into a shallow saucer shape and prevent liquid or solids from spilling over the said edges. The ring 2 also forms a guard around the periphery of this central portion to assist in this function.

The radially projecting handle members 2' and 3' of the rings 2 and 3 are integral with their respective rings and terminate in small loops or beads 2'', 3'' which are the terminals of the wire of which the entire holder is formed. As the handle member 3' is on a little lower plane than the member 2', and these members are turned vertically away from each other, when these members are pressed together, they not only contract the rings but cause them to separate to a sufficient extent to permit the disk to be easily inserted or removed. When the disk is inserted in the holding rings and the handle members released the latter can be used as a handle to hold the tray in position; or these members may be extended to pass over the shoulders or wholly and partly around the neck and over the shoulders of the person to whom they are applied (Fig. 3) to position and support the tray without the use of the hands; and in this particular size and form the device can be used as a catch tray in dental work or for treatments of the oral cavity generally. This modification is illustrated in Fig. 3, in which the handle or supporting members 2^a and 3^a extend upwardly, over the shoulders and partly around the neck of the wearer—indicated at A—and then downwardly behind the shoulders. Moreover, the beaded ends 2'' and 3'' of the handle may be turned vertically so that when brought together they will overlap and interlock and maintain the position of the said members.

Various modifications of the details herein described and shown and various uses of the improvements may be made without departing from the scope of the invention.

What I claim is:

1. In a device of the character described, a piece of spring wirelike material formed into a plurality of approximately parallel but non-coincident inner and outer loops with its ends separated and extending away from said loops to form a handle and holding and loop flexing member, a sheet of flexible absorbent material adapted to be inserted between said loops and held in position by their sheet-gripping and

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flexing spring action, span the space enclosed by them and extend beyond them and forming therewith a tray with a relatively rigid border composed of the loops and having an absorbent upper interior portion and a relatively impervious bottom with a holding and carrying member projecting from the edge thereof at a portion of its circumference.

2. In a device of the character described, a piece of spring wirelike material formed into a plurality of approximately parallel but non-coincident inner and outer loops with its ends separated and extending away from said loops to form a handle and holding and loop flexing member, a sheet of flexible absorbent fibrous material having a non-absorbent under surface adapted to be inserted between said loops and held in position by their sheet-gripping and flexing spring action, span the space enclosed by them and extend beyond them and forming therewith a tray with a relatively rigid border composed of the loops and having an absorbent upper interior portion and a relatively impervious bottom with a holding and carrying member projecting from the edge thereof at a portion of its circumference, said extending ends when compressed toward each other constructed and arranged and adapted to cause separation of the loops to permit free insertion or removal of said sheet.

3. In a device of the character described, a piece of spring wirelike material formed into a plurality of approximately parallel but non-coincident inner and outer loops with its ends separated and extending away from said loops to form a handle and holding and loop flexing member, a sheet of flexible absorbent material having a moisture resistant under surface adapted to be inserted between said loops and held in position by their sheet-gripping and flexing spring action, span the space enclosed by them and extend beyond them and forming therewith a tray with a relatively rigid border composed of the loops and having an absorbent upper interior portion and a relatively impervious bottom with a holding and carrying member projecting from the edge thereof at a portion of its circumference.

4. In a device of the character described, a piece of spring wirelike material formed into a plurality of approximately parallel but non-coincident inner and outer loops with its ends separated and extending away from said loops to form a handle and holding and loop flexing member, a sheet of flexible absorbent material adapted to be inserted between said loops and held in position by their sheet-gripping and flexing spring action, span the space enclosed by them and extend beyond them and forming therewith a tray with a relatively rigid border composed of the loops and having an absorbent upper interior portion and a relatively impervious bottom with a holding and carrying member projecting from the edge thereof at a portion of its circumference said sheet being formed into a shallow bowl-like contour.

5. In a device of the character described, a piece of spring wirelike material formed into a plurality of approximately parallel but non-coincident inner and outer loops with its ends separated and extending away from said loops to form a handle and holding and loop flexing member, a sheet of flexible absorbent material adapted to be inserted between said loops and held in position by their sheet-gripping and flexing spring

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action, span the space enclosed by them and extend beyond them and forming therewith a tray with a relatively rigid border composed of the loops and having an absorbent upper interior portion and a relatively impervious bottom with a holding and carrying member projecting from the edge thereof at a portion of its circumference said loops being spaced one slightly outside the other and exerting pressure on the portion of the sheet between the loops upwardly while the other exerts pressure thereon downwardly to give the sheet a concave form.

6. In a device of the character described, a piece of spring wirelike material formed into a plurality of approximately parallel juxtaposed loops with its ends extending away from said loops to form a handle and holding member, a sheet of flexible absorbent material adapted to be inserted between said loops and held in position by their convergent spring action, span the space enclosed by them and extend beyond them and forming therewith a tray with a relatively rigid border composed of the loops and having an absorbent upper interior portion with a holding and carrying member projecting from the edge thereof at a portion of its circumference said extending ends being spaced apart and adapted, constructed and arranged when pressed toward each other to contract said loops and separate them vertically to permit the insertion and removal of said sheet of material.

7. In a device of the character described, a piece of spring wirelike material formed into a plurality of approximately parallel juxtaposed loops with its ends extending away from said loops to form a handle and holding member, a sheet of flexible absorbent material adapted to be inserted between said loops and held in position by their convergent spring action, span the space enclosed by them and extend beyond them and forming therewith a tray with a relatively rigid border composed of the loops and having an absorbent upper interior portion with a holding and carrying member projecting from the end thereof at a portion of its circumference said extending ends being spaced apart vertically and laterally and adapted, constructed and arranged when pressed toward each other to contract said loops and separate them vertically to permit the insertion and removal of said sheet of material.

EDWARD L. BLACKMAN.

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