No. 833,620. PATENTED OCT. 16, 1906.

R. NIELSEN.

ICE CREAM SPOON.

APPLICATION FILED FEB. 26, 1906.

2 SHEETS—SHEET 1.

Fig. 1.

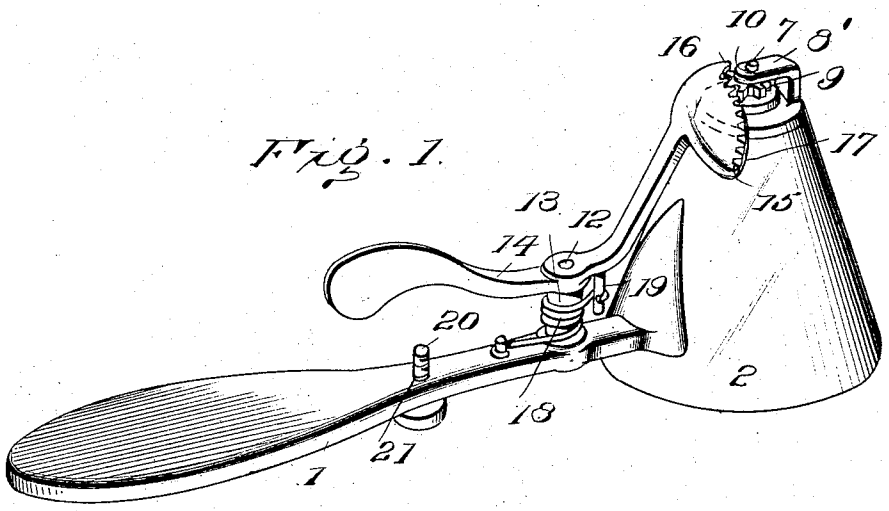
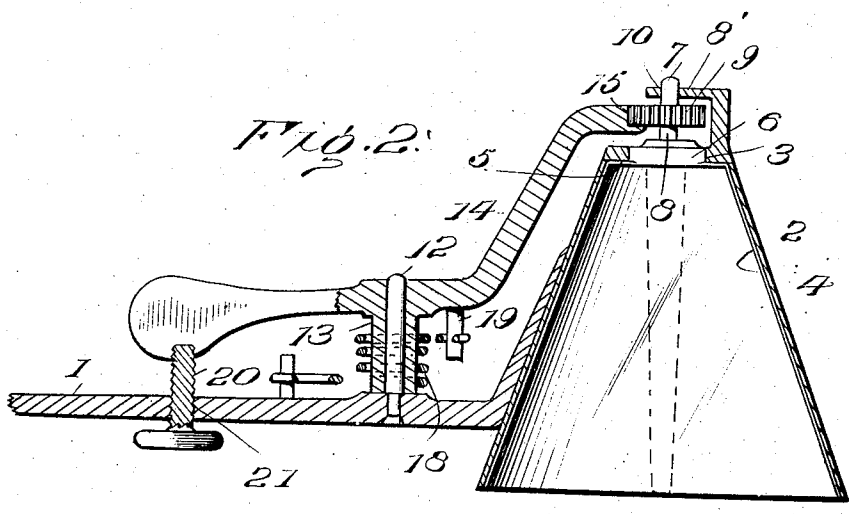


Fig. 2.



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2 SHEETS—SHEET 2.

Fig. 3

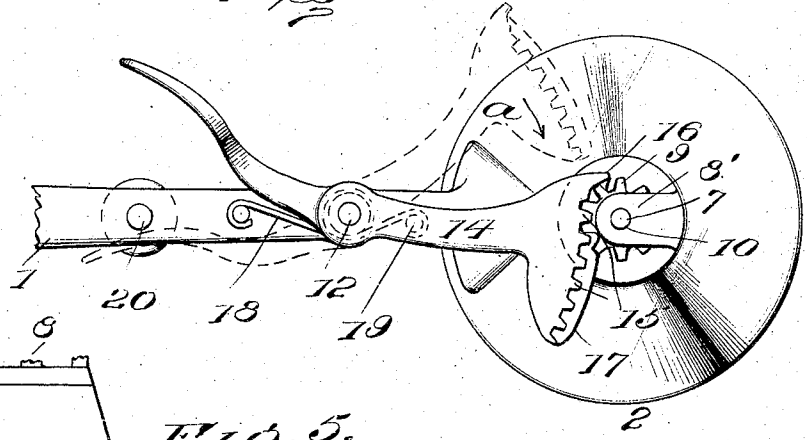


Fig. 5.

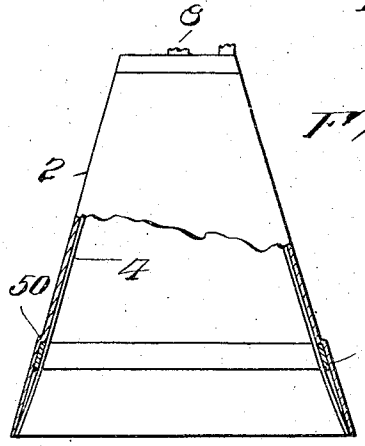
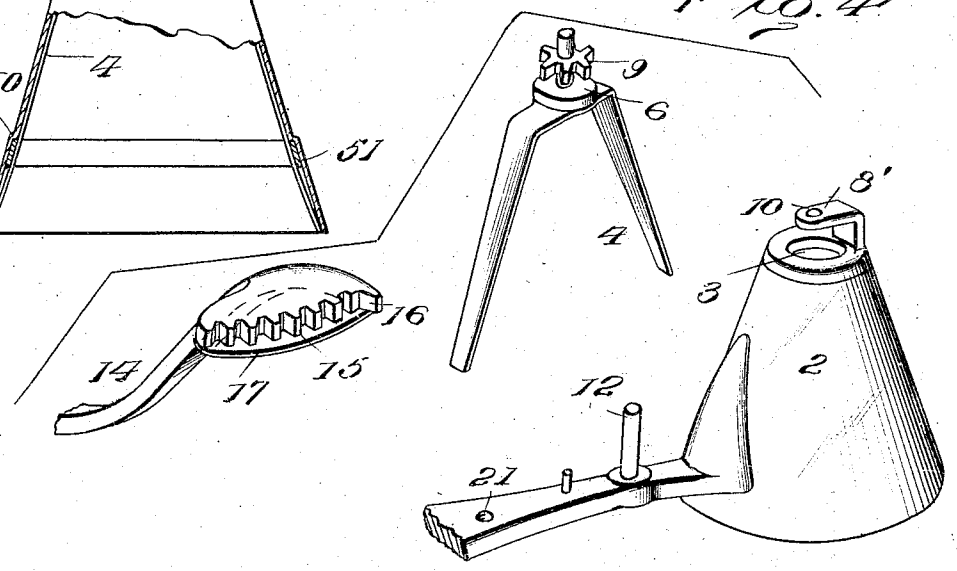


Fig. 4



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UNITED STATES PATENT OFFICE.

RASMUS NIELSEN, OF TROY, NEW YORK, ASSIGNOR TO CATHERINE NIELSEN AND HENRY S. GILES, OF TROY, NEW YORK.

ICE-CREAM SPOON.

No. 833,620. Specification of Letters Patent. Patented Oct. 16, 1906.

Application filed February 26, 1906. Serial No. 303,071.

To all whom it may concern.

Be it known that I, RASMUS NIELSEN, a citizen of the United States, residing at Troy, in the county of Rensselaer and State of New York, have invented new and useful Improvements in Ice-Cream Spoons, of which the following is a specification.

This invention relates to improvements in ice-cream spoons.

In this art dealers are compelled by sanitary laws to keep the spoons exceptionally clean, and to do so means must be provided to prevent the accumulation of cream in the crevices of the bowl and between the parts. If the cream is not thoroughly removed after the spoon has been used, it becomes sour and in time germs prevail, making it exceedingly dangerous to health.

It is the purpose of my present invention to provide a structure whereby the means operating the fingers may be assembled in such manner that they will form a substantial structure and yet permit of dismantling and separating of the parts quickly.

To this end it is the prime object of this invention to arrange the elements so that by reversing a simple device, such—for instance, as a screw or the like—the fingers may be released and removed from the bowl.

The invention also comprehends improvements in the specific details of construction and the means employed for holding the parts in operative position.

Other objects and advantages will be hereinafter referred to and particularly pointed out in the claims.

In the drawings, Figure 1 is a perspective view of my improvement. Fig. 2 is a vertical central section of the same. Fig. 3 is a plan view illustrating in dotted lines the full movement of the operating-lever to disengage the gears to permit of the removal of the fingers. Fig. 4 is a perspective view of the parts separated. Fig. 5 is a detail view, partially in section, to illustrate a slight modification.

The numeral 1 indicates a main handle having at one end a bowl 2, formed with an opening 3 to receive a journal on the end of the cleaning-fingers 4. Fingers 4, two in number, conform to the configuration of the interior of the bowl 2 and are formed from a single strip of metal bent at the center to provide a shoulder 5. Extending from the shoulder 5 is a hub 6, having an extension 8, on which is a gear-wheel 9, the extension projecting beyond the gear to provide a journal 7. Projecting from the outer end of the bowl is an overhanging bearing 8′, having an opening 10. The hub 6 finds a bearing in opening 3, while the journal 7 has a bearing in the opening 10, shoulder 5 preventing the fingers coming through the opening 3 in the end of the bowl.

Mounted on a stub-shaft 12 on handle 1 is a hub 13 of a finger-operating handle 14, one end of the latter having a finger-engaging portion and the opposite end being bent to be in line with gear 9 and provided with teeth 15. At one end of teeth 15 is a projection 16, while at the bottom is a flange 17 below the plane of the gear.

A spring 18 is coiled around hub 13, having one terminal engaging a projection 19 on finger-operating handle 14 and its other terminal engaging a similar projection-handle 1. The spring tends to normally turn handle 14 in direction of arrow *a* to cause projection 16 to engage the gear 9, which limits the movement of the finger-operating handle 14 in one direction. Movement of the finger-operating handle in the opposite direction is limited by an adjusting-screw 20, passing through a threaded opening 21 in handle 1, its end projecting in the path of movement of the finger-operating handle 14.

To assemble the parts, spring 18 is placed in position and the finger-operating handle 14 is mounted on its projection and engages the spring. Handle 14 is then turned on its pivot in position shown in dotted lines in Fig. 3 and the fingers are placed in the bowl, journal 7 fitting in bearing 10, the gear 9 being in a plane with teeth 15. Pressure on handle 14 is now released, when teeth 15 will engage with gear 9, flange 17 engaging the under side of said gear to hold the fingers in position in the bowl, stop 16 engaging the edge of the gear and limiting the movement, as before described. Adjusting-screw 20 is now screwed toward handle 14 until its end is in the path of its movement. Hence movement of the fingers in the opposite direction is limited.

To dismantle the parts for cleaning or repairs, screw 20 is withdrawn from the path of movement of handle 14. Then the latter is turned on its pivot to the dotted-line position

shown in Fig. 3, which removes flange 17 from under gear 9, whereupon the fingers 4 will fall from the bowl, when the parts can be conveniently and readily cleaned.

The advantages of the improvement will be thoroughly understood and appreciated by those skilled in the art to which my invention appertains, and further description of the merits of the invention is not deemed necessary.

In Fig. 5 I have shown a slight offset 50 in the bowl to receive a strengthening-band 51. I find this construction essential in bowls of unusual size, because of the liability of bending the fingers when dipping cream.

Obviously I may substitute a different form of latch in place of the screw 20. I may also change the location of the handle from the position shown in the drawings to the smaller end of the bowl. These several changes may be made without departing from the spirit and scope of my invention.

Having described my invention, what I claim is—

1. In an ice-cream spoon, the combination with a handle and a bowl, of a finger operating in the bowl and formed with an extension, a finger-operating handle, means on the finger-operating handle coöperating with the finger extension for holding the finger in operative position, and adjustable means for permitting of the disengagement of the former means for the removal of the finger.

2. In an ice-cream spoon, the combination with a handle and a bowl, of fingers in the bowl and having a gear-wheel thereon, a finger-operating handle formed with teeth and a flange, said teeth engaging the gear and the flange holding the fingers in position in the bowl, means for limiting the movement of the operating-handle in one direction, means for limiting the movement of said handle in the opposite direction, said latter means being adjustable to permit separation of the fingers from the bowl.

3. In an ice-cream spoon, the combination with a handle and a bowl, of fingers in the bowl, a gear on the fingers, a finger-operating handle having teeth and a flange, said teeth engaging the gear and the flange retaining the fingers in position by engaging with the gear.

4. In an ice-cream spoon, the combination with a handle and a bowl, of fingers in the bowl, a finger-operating handle, means between the finger-operating handle and fingers for holding the fingers in position, and removable means for permitting movement of the finger-operating handle for disengagement of the fingers from the bowl.

5. In an ice-cream spoon, the combination with a handle, of a bowl, fingers in the bowl, a shoulder formed on the fingers, a journal extending from the shoulder, a bearing for the journal, a finger-operating handle, a flange between the finger-operating handle and the fingers for holding the fingers in cooperative relationship, means permitting disengagement of the fingers from the finger-operating handle, and means for turning the fingers by the finger-operating handle.

6. In an ice-cream spoon, the combination with a main handle and a bowl, of fingers operating in the bowl, a gear operating in conjunction with the fingers, a finger-operating handle pivotally mounted on the main handle, teeth on the finger-operating handle, said teeth engaging with the gear, a lug adjacent the teeth to limit the movement of the finger-operating handle in one direction, a flange between the end of the finger-operating handle and the fingers to hold the fingers in operative position, a spring on the finger-operating handle for normally positioning the lug to limit the movement of said finger-operating handle, and an adjustable element in the path of movement of the finger-operating handle to limit its movement in the opposite direction, said element when adjusted permitting removal of the fingers from the bowl.

7. In an ice-cream spoon, the combination with a handle and a bowl, fingers in the bowl, a finger-operating handle, means between the finger-operating handle and spoon for transmitting rotary motion to the fingers, means for retaining the fingers and finger-operating handle in operative relation, and a set-screw which limits the movement of the finger-operating handle in one direction, said set-screw adapted to be adjusted to permit disengagement of the fingers from the bowl and the finger-operating handle.

8. An ice-cream spoon comprising a bowl formed with an opening, fingers in the bowl, a gear on the end of the fingers and adapted to pass through the opening, a finger-operating handle having teeth which coöperate with the gear, and means adapted to hold the teeth in mesh with the gear or permit disengagement of said teeth and gear.

9. An ice-cream spoon comprising a bowl formed with a depression, fingers mounted to move on the inside of the bowl, a reinforcing-band seated in the depression and connected to the fingers, and means for operating the fingers.

In testimony whereof I affix my signature in presence of two subscribing witnesses.

RASMUS NIELSEN.

Witnesses:
L. H. GILES,
N. P. NIELSEN.