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- (54) Benævnelse: **SKÆRESYSTEM TIL SKÆRING AF FRUGT ELLER GRØNTSAGER I SPIRALFORMEDE
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CUTTING SYSTEM FOR CUTTING FRUIT OR VEGETABLES IN SPIRAL-SHAPED GARLANDS

The invention relates to a cutting system for cutting fruit or vegetables into spiral-spiral-shaped ribbons.

From EP 2 218 561 B1, a device is known for the spiral-shaped cutting of fruit and hard vegetables, such as apples, radishes, carrots, turnips and cucumbers, comprising at least one main body formed as a wedge, funnel, cone or the like, in the outer surface of which at least one cutting device formed from a cutting gap and knife is arranged. The device consists of two main bodies connected to one another on the bottom side, designed as a wedge, funnel, cone or the like, each having at least one cutting device, wherein the cutting gaps of the device are different widths.

The disadvantage of this device is that it can only and exclusively cut two different types of ribbons.

From US 2008/0307980 A1, a device is known which can cut fruits and root vegetables and tuber vegetables. The device is operated in such a way that the item to be cut is placed in a closed cutting blade housing and is rotated by means of a hand crank, whereby the item to be cut is cut spirally by a spring-loaded cutting blade. Disadvantageously, this device is very complex and bulky. In addition, the device only and exclusively allows the item to be cut into a single type of ribbon in a single way.

A device is known from US 5 680 997 A which is suitable for chopping food into small pieces, but not for cutting fruit or vegetables into spiral-shaped ribbons. The device has a first housing that has a handle and a second housing that is releasably attached to the first housing. A cutting element is mounted in the second housing, while a device for driving the cutting element is mounted in the first housing. The drive device is operatively connected to the cutting element and is operated by a switch. The cutting element is designed as a frustoconical plastic hollow housing with metal cutting blades which are integrally moulded into the housing. The material to be comminuted is pressed against the outer side of the rotating cutting element, whereby parts of the material to be comminuted are continuously cut off and pass through the interior space of the cutting element to a discharge opening.

It is therefore the object of the present invention to disclose a cutting system which allows the cutting of different types of spiral-shaped ribbons.

The object is achieved by a cutting system of the above mentioned type, which is characterised in that the cutting system has a plurality of different cutting inserts and a

holding part with a cutting insert receptacle and with a dispensing opening for dispensing the spiral-shaped ribbons, wherein each cutting insert has a, in particular conical, receiving space for inserting food items, in which the food item can be rotated and wherein one of the cutting inserts can be selectively fixed in the cutting insert receptacle, in particular such that it can be detached again without the use of tools.

The invention has the particular advantage that food to be comminuted, such as carrots, radishes or cucumbers for example, can be selectively cut into different types of spiral-shaped ribbons which are particularly suitable for garnishing a meal, such as a salad preparation for example. This is achieved in that the user only needs to select one of a plurality of different types of cutting inserts and insert it into the holding part. The user thus has the possibility to cut different widths and/or different thicknesses of spiral-shaped ribbons and/or to select the cutting insert according to the size or the nature of the food item to be cut. In an advantageous manner, by selecting the cutting insert, the user can decide individually, for example, whether he wants to cut the food item into thin, thick, wide or narrow spiral-shaped ribbons. On the other hand, the invention has the particular advantage that particularly brittle or fragile foods, for which the ribbons tend to break if they are cut too thinly, can alternatively be cut into thicker spiral-shaped ribbons. Conversely, foods that are not suitable for cutting into thick spiral-shaped ribbons can selectively be cut into thin spiral-shaped ribbons.

In particular, as will be described in detail below, the cutting inserts can be designed to be very space-saving and/or even stackable. In this respect, the cutting system according to the invention can advantageously be designed to be very compact and easy to handle. In a particularly advantageous manner, the holding part can be formed to be held exclusively in one hand during use thereof such that, with their other hand, the user can rotate the item to be cut relative to the cutting insert inserted in the cutting insert receptacle. In particular, for this purpose, the holding part can advantageously have a handle portion.

In a particularly advantageous embodiment, the holding part is of circular-cylindrical form and/or elongate design. Such an embodiment has the particular advantage that the user can simply and reliably grip the holding part and securely hold it during the cutting operation. The diameter of the holding part can advantageously be in the range from 5 cm to 9 cm, in particular in the range from 6 cm to 8 cm, or most particularly can have a value of 7.5 cm.

Particularly ergonomic for handling is an embodiment in which the cutting insert receptacle and the dispensing opening are arranged at opposite ends of the holding part.

In particular, the holding part can be in the form of a tube, wherein one tube opening forms the dispensing opening, while the other tube opening forms the inlet to the cutting insert receptacle.

In particular, it can advantageously be provided that each cutting insert has an, in particular conical, receiving space for inserting food items, on the wall of which a cutting blade is arranged in each case. In addition, the wall of the receiving space preferably has an opening, through which the spiral-shaped ribbon can leave the receiving space.

The cutting blade is preferably arranged so that during a rotary movement – similar to pencil sharpening – a spiral-shaped layer is cut off circumferentially from the end of the rotating food. For this purpose, the cutting edge of the cutting blade can be arranged so that it projects into the receiving space, wherein the parallel distance of the cutting blade from the receiving space wall determines the thickness of the layer to be cut off.

The cutting inserts can differ, in particular in terms of their shape and/or size and/or in terms of the thickness and/or width of the spiral-shaped ribbons that can be cut by them and/or in terms of the number of spiral-shaped ribbons simultaneously resulting during a cutting operation.

In particular, it can be advantageously provided that at least one of the cutting inserts, in particular each of the cutting inserts, can be fixed in a latching manner and/or with a bayonet connection in the cutting insert receptacle, in particular such that it can be detached again without the use of tools. This is preferably the same type of latching connection or bayonet connection that the holding plate has, so that the cutting inserts can be fixed both to the holding plate as well as to the holding part, without additional adapters being required.

According to an independent inventive concept, which can also be implemented separately from the other features of the cutting system according to the invention, layers of different thicknesses can be cut off depending on the direction of rotation. In particular, one or more cutting inserts can be designed in this way. However, it is also possible to implement this inventive concept in other embodiments of a spiral cutter, in particular also in an embodiment which has no interchangeable cutting inserts.

A device designed in this way, in particular a cutting system designed in this way, has the very special advantage that the user can decide individually by selecting the direction of rotation alone whether he wants to cut the food items into thin or thick spiral-shaped ribbons. On the other hand, this solution has the particular advantage that particularly brittle or fragile foods, for which the ribbons tend to break if they are cut too thinly, can alternatively be cut into thicker spiral-shaped ribbons without a changeover being

necessary. Conversely, foods that are not suitable for cutting into thick spiral-shaped ribbons can selectively be cut into thin spiral-shaped ribbons. In short: Such an embodiment allows, in particular, the cutting thickness to be quickly and efficiently matched to the respective food.

In particular, it can be advantageous that the cutting insert cuts off a layer of a first thickness from a food item rotating clockwise in the receiving space, and that the cutting insert cuts off a layer of a second thickness, which differs from the first thickness, from a food item rotating counter-clockwise in the receiving space.

The cutting into spiral-shaped ribbons with different layer thicknesses, in particular depending on the direction of rotation, can be realised for example through the use of a pendular blade which has two cutting edges. In this case, in particular, one cutting edge can be used for cutting into thin spiral-shaped ribbons while the other cutting edge is used for cutting into thick spiral-shaped ribbons.

In particular, the pendular blade can for example be arranged such that, for the first cutting edge, during a clockwise rotation of the food item, a first distance is set from the wall of the receiving space, while, for a counter-clockwise rotation of the food item, a second distance of the cutting edge from the receiving space is set, wherein the first distance is different from the second distance. In particular, the cutting blades can be orientated parallel to one another and/or opposed to one another depending on the orientation of the cutting edges. In an advantageous embodiment, the pendular blade is suspended such that, during a clockwise rotation of the food item, the first cutting edge automatically rotates into the receiving space, while the second cutting edge is rotated out of the receiving space, and such that, by contrast, during a counter-clockwise rotation of the food item, the second cutting edge automatically rotates into the receiving space, while the first cutting edge is rotated out of the receiving space.

In an advantageous manner, in particular, the cutting insert can have a pendular blade comprising two cutting edges, each of which – in particular automatically – cuts the food item depending on the direction of rotation of the food item to be comminuted.

In a particular embodiment, at least one of the cutting inserts is designed so as to simultaneously cut off a plurality of spiral-shaped ribbons from a food item. In this way, vegetables can advantageously be cut into vegetable noodles, for example, courgette noodles. The cutting insert can have, in particular, a cutting device which splits the layer to be cut off, or the layer that has already been cut off, into a plurality of mutually parallel strips. Alternatively or additionally, the cutting insert can have a cutting blade that cuts off a layer from the item to be cut, and a cutting device having further cutting blades arranged

perpendicular to the cutting blade. The further cutting blades can serve to split the layer to be cut off or the already cut-off layer into a plurality of parallel strips.

As already mentioned, the cutting inserts can differ from one another with regard to different parameters, which makes it possible to optionally cut differently shaped spiral-shaped ribbons. For example, one of the cutting inserts can have a different size than another of the cutting inserts. Alternatively or additionally, it can also be provided that the receiving space of one of the cutting inserts has a different cone angle than the receiving space of another of the cutting inserts and/or that the receiving space of one of the cutting inserts has a different size than the receiving space of another of the cutting inserts. It is – alternatively or additionally – also advantageously possible that the receiving space of one of the cutting inserts has a different insertion depth than the receiving space of another of the cutting inserts and/or that the receiving space of one of the cutting inserts has a different width than the receiving space of another of the cutting inserts.

In a particularly advantageous embodiment, the cutting system has a holder for items to be cut. The holder for items to be cut is designed so that can be connected in a rotationally fixed manner with the food item to be cut. For this purpose, the holder for items to be cut can, for example, have a plurality of spikes that are pressed into the food item.

The use of a holder for items to be cut has the particular advantage that the user has better control over the item to be cut. This is particularly so if the item to be cut is moist or has a small diameter, or if it is hard to grip with the hand for other reasons.

The holder for items to be cut can advantageously have a diameter that is larger than the diameter of the receiving space of the cutting inserts to be used. In this way, it is advantageously achieved that the user, because of the larger lever, can apply a particularly high torque on the food item to be cut. This is particularly so if the food item itself has a small diameter.

The holder for items to be cut can advantageously be substantially in the form of a disc, in particular in the form of a circular disc. In a disc-shaped embodiment, the spikes can be arranged projecting, in particular perpendicular, from the circular disc.

In a particularly advantageous embodiment, the holder for items to be cut is designed as a cover for the dispensing opening. In particular, it can be advantageous that the holder for items to be cut can be fixed by means of a latching connection and/or by means of a bayonet connection to the holding part, in particular so that it can be detached again without the use of tools. Thus, in particular, the holder for items to be cut can be designed as a cover in a manner that completely covers the dispensing opening when it is fixed to the holding part.

In a particular embodiment, the holding part has an external thread in the region of the dispensing opening, which is designed so as to engage with an internal thread of the holder for items to be cut that is used as a cover.

In an analogous manner, the holding part can also alternatively have an external thread in the region of the cutting insert receptacle, which interacts with an internal thread of the cutting insert, in order to fix the cutting insert in the cutting insert receptacle, in particular such that it can be detached again without the use of tools.

In a particularly advantageous embodiment, the holding part has two identical openings, which are so designed that each of the openings functions either as a dispensing opening or as an opening for inserting a cutting insert. In such an embodiment, it can be advantageous that the holding part has the same external thread in the openings, so that an attachment of a cutting insert or of the holder for items to be cut is possible in the region of each of the openings.

Of course, it is alternatively also possible that the holding part has an internal thread for fixing the cutting insert and/or the holder for items to be cut, while the cutting insert and/or holder for items to be cut has an external thread.

Instead of an, in particular bayonet, threaded connection, alternatively or additionally a latching connection and/or a plug-in connection can be provided.

Particularly advantageous is a food processing system that has a cutting system according to the invention and a punch that can be inserted into the holding part, in particular positively, instead of a cutting insert, as well as a cutting disc that can be fixed to the holding part, in particular such that it can be detached again without the use of tools. Such a food processing system has the particular advantage that it can be used either to cut food into spiral-shaped ribbons or as a grater.

In a special embodiment, the cutting disc can be fixed in the area of the dispensing opening on the holding part, in particular such that it can be detached again without the use of tools. The cutting disc is preferably fixed to the dispensing opening in such a way that it completely covers the entire dispensing opening.

The cutting disc can be fixed on the holding part, in particular in a rotationally fixed manner, for example by means of a latching connection or by means of a bayonet connection or a plug-in connection. For example, the holding part can have an external thread which interacts with a union nut which has an internal thread, the cutting disc to be used in each case being clamped between the end face of the holding part and the union nut. In particular, there can be recesses and projections in the cutting disc and the holding part, which prevent the cutting disc from rotating relative to the holding part during

the grater-like cutting process.

In a particularly advantageous embodiment, the cutting disc can be fixed on the holding part by means of a latching connection or by means of a bayonet connection or by means of a plug-in connection, which is constructed identically to a latching connection or a bayonet connection or a plug-in connection by means of which one of the cutting inserts and/or a holder for items to be cut can be fixed on the holding part. In this way, it is possible to quickly and efficiently exchange the different components for one another.

In an advantageous embodiment, the punch can be inserted into the holding part through a receiving opening of the cutting insert receptacle and rotated in the holding part. The stamp has at least one entrainment element which ensures that a rotational movement of the stamp inserted into the holding part is transmitted to the food product previously inserted into the holding part, which ultimately leads to a relative movement of the food item relative to the cutting disc connected to the holding part in a rotationally fixed manner. With the help of the stamp, the food item to be grated can be rotated relative to the cutting disc and pressed against the cutting disc at the same time. The entrainment element can for example be designed as a projection or as a groove or a protruding tip. In particular, the entrainment element can be designed as a groove running radially through the centre, in particular with a V-shaped cross section. It is also possible for the stamp to have a plurality of, in particular a plurality of different, entrainment elements.

In a particularly advantageous embodiment, the food processing system has a plurality of different cutting discs, one of which can be fixed in a working position on the holding part. Such a design has the advantage that the user can select and use the cutting disc that is suitable for the current application.

In particular, the stamp can advantageously be designed as a storage container for a plurality of, in particular a plurality of different, cutting discs. Such a design has the particular advantage that the risk of losing cutting discs is reduced.

The inventive object is illustrated, schematically and by way of example, in the drawing and will be described with reference to the figures, wherein the same or equivalent elements are usually provided with the same reference sign. In the drawings:

Fig. 1 shows an exemplary embodiment of a cutting system according to the invention,

Fig. 2 shows the cutting system with the inserted cutting insert,

Fig. 3 shows a first exemplary embodiment of a cutting insert in the plan view,

Fig. 4 shows the first exemplary embodiment of a cutting insert in a side view,

Fig. 5 shows the first exemplary embodiment of a cutting insert in a perspective

representation,

Fig. 6 shows a second exemplary embodiment of a cutting insert in a perspective representation;

Fig. 7 shows a third exemplary embodiment of a cutting insert in a perspective representation,

Fig. 8 shows a fourth exemplary embodiment of a cutting insert in a perspective illustration.

Figure 1 shows a detailed view of a cutting system according to the invention. The cutting system comprises a holding part 1 which provides a cutting insert receptacle 2. A cutting insert 3, as illustrated in Figures 3 to 8 for example, can be inserted in the cutting insert receptacle 2. To this end, the holding part 1, which has a substantially circular-cylindrical form, has an external thread 4 on its end, which engages with an internal thread 5 of one of the cutting inserts 3. The user can freely choose which of a plurality of cutting inserts 3 he wishes to use and thus has the possibility, for example, to cut different widths and/or different thicknesses of spiral-shaped ribbons, and/or select the cutting insert 3 according to the size or the nature of the food item to be cut.

At the opposite end of the cutting insert receptacle 2, the holding part 1 has a dispensing opening 6 (see in particular Figures 2 and 9), which can be closed by means of a holder for items to be cut 7, which is additionally also designed as a cover for the dispensing opening.

As shown in Figure 2, the holding part 1 also has an bayonet-like external thread 4 in the region of its dispensing opening 6, which interacts with a bayonet-like internal thread 5 of the holder for items to be cut 7, if the holder for items to be cut 7 is placed on the dispensing opening 6.

The ability to fasten the holder for items to be cut 7 on the dispensing opening 6 can have the particular advantage that the holder for items to be cut 7 can be stored directly on the holding part 1 and cannot be accidentally lost during storage of the food chopping system. The holder for items to be cut 7 has perpendicular protruding spikes 8, which are designed to be axially inserted into the food item to be processed, so that the food item can be safely and reliably rotated in the receiving space 9 of the cutting insert 3 by means of the holder for items to be cut 7.

Figure 3 shows a first exemplary embodiment of a cutting insert 3 in a top view in the axial direction. The cutting insert 3 has a conical receiving space 9, into which a food item, such as the tip of a cucumber, a carrot or a radish for example, can be introduced. A cutting blade 10 projects into the receiving space 9, which simultaneously cuts off a

plurality of spiral-shaped ribbons from the food item rotating in the receiving space 9. The simultaneous cutting off of a plurality of spiral-shaped ribbons is achieved in that the cutting insert 3 comprises further cutting blades 11 which likewise project into the receiving space 9 and are arranged perpendicular to the cutting blade 10. These further cutting blades 11 act as a juliennening knife, which cuts the layer to be cut off into a plurality of strips by means of the cutting blade 10.

Figure 4 shows a side view of the cutting insert 3 already illustrated in Figure 9. It can be seen that the cutting insert 3 has a handle portion 12, on which the cutting insert 3 can be held for inserting into the cutting part holder 2 of a holding part 1. After the cutting insert 3 has been inserted, it is preferably held in a rotationally fixed manner in the holding part 1. The cutting insert 3 has a slot opening 13 in the region of the cutting blade 10 and the further cutting blades 11, through which the spiral-shaped ribbons can leave the receiving space 9.

Figure 5 shows a perspective view of the cutting insert 3 already illustrated in Figures 3 and 4. The cutting insert 3 has a circumferential collar in the region of its handle portion 12, with a bayonet-like internal thread 5 that is designed to interact with one of the external threads 4 of the holding part 1.

Figure 6 shows a second exemplary embodiment of a cutting insert 3, which differs from the exemplary embodiment illustrated in Figures 3 to 5 in that the separation of the cutting blades 11 from one another is greater so that, in use, this cutting insert produces wider spiral-shaped ribbons. In terms of the handle part 12 and in terms of the bayonet-like internal thread 5, the cutting insert 3 illustrated in Figure 6 is constructed identically to the cutting insert shown in Figures 3 to 5, which ensures that the user can fix and then release again the different cutting inserts 3 in an identical way on the holding part 1.

Figure 7 shows a third exemplary embodiment of a cutting insert 3, which has no further cutting blades 11 (juliennening knife). During use of this third exemplary embodiment of a cutting insert 3, particularly wide spiral-shaped ribbons are cut.

Figure 8 shows a fourth exemplary embodiment of a cutting insert 3, which has a receiving space 9 with small inlet diameter and reduced cone angle. This cutting insert 3 can be used in particular for cutting off a large number of spiral-shaped ribbons simultaneously from a food with a thin diameter.

List of reference numbers:

- 1 Holding part
- 2 Cutting insert receptacle
- 3 Cutting insert
- 4 External thread
- 5 Internal thread
- 6 Dispensing opening
- 7 Holder for items to be cut
- 8 Spikes
- 9 Receiving space
- 10 Cutting blade
- 11 Further cutting blades
- 12 Handle portion
- 13 Slot opening
- 14 Stamp
- 15 Cutting disc
- 16 Cap nut
- 17 Cover
- 18 Stamp cover

SKÆRESYSTEM TIL SKÆRING AF FRUGT ELLER GRØNTSAGER I
SPIRALFORMEDE GUIRLANDER

Patentkrav

1. Skæresystem til skæring af frugt eller grøntsager i spiralformede guirlander, kendetegnet ved, at skæresystemet har flere forskellige skæreindsatser (3) og en holdedel (1) med en skæreindsatsholder (2) og med en udførselsåbning (6) til udførsel af de spiralformede guirlander, hvor hver skæreindsats (3) har et skæreblad (10), der skærer et lag af skærematerialet, og et navnlig konisk indføringskammer (9) til indføring af fødevarematerialet, i hvilket fødevarematerialet kan roteres, og hvor der i skæreindsatsholderen (2) efter valg kan fastgøres en af skæreindsatserne (3), navnlig således, at den kan aftages igen uden værktøj.

2. Skæresystem ifølge krav 1, kendetegnet ved, at

- a. holdedelen (1) har en håndtagsektion (12) og/eller, at
- b. holdedelen (1) er udformet til at blive holdt i den ene hånd, navnlig udelukkende i den ene hånd, og/eller at
- c. holdedelen (1) er udformet til udelukkende at blive holdt i den ene hånd under brug, således at brugeren med sin anden hånd kan rotere skærematerialet i forhold til skæreindsatsen (3).

3. Skæresystem ifølge krav 1 eller 2, kendetegnet ved, at

- a. holdedelen (1) er udformet som en cirkulær cylinder, og/eller at
- b. holdedelen (1) er udformet langstrakt, og/eller at
- c. holdedelen (1) er udformet rørformet, og/eller at
- d. skæreindsatsholderen (2) og udførselsåbningen (6) er anbragt i modsatte ender af holdedelen (1).

4. Skæresystem ifølge et af kravene 1 til 3, kendetegnet ved, at

- a. der på væggen i hvert indføringskammer (9) i skæreindsatserne (3) er anbragt et skæreblad (10), eller at
- b. der er anbragt et skæreblad (10) på væggen af hvert indføringskammer (9) af skæreindsatserne (3), hvor en skærekant på skærebladet (10) rager ind i indføringskammeret (9) og/eller, at skærebladet (10) er anbragt således, at det afskærer

et lag af et fødevaremateriale, der roterer i indføringskammeret (9).

5. Skæresystem ifølge et af kravene 1 til 4, kendetegnet ved, at mindst én skæreindsats (3) er udformet således, at den afskærer et lag af en første tykkelse fra et fødevaremateriale, der roterer med uret i indføringskammeret (9), og at den afskærer et lag af en anden tykkelse, som er forskellig fra den første tykkelse, fra et fødevaremateriale, der roterer mod uret i indføringskammeret (9).

6. Skæresystem ifølge et af kravene 1 til 5, kendetegnet ved, at

- a. mindst én skæreindsats (3) har et pendulblad med to skærekanter, og/eller at
- b. mindst én skæreindsats (3) har et pendulblad med to skærekanter til forskellige skæretykkelser, og/eller at
- c. mindst én skæreindsats (3) har et pendulblad med to skærekanter, af hvilke i hvert enkelt tilfælde den ene, navnlig automatisk, skærer ind i fødevaremateriale af afhængigt af rotationsretningen af fødevaremateriale, der skal findeles.

7. Skæresystem ifølge et af kravene 1 til 6, kendetegnet ved, at

- a. mindst én skæreindsats (3) er udformet til samtidig at afskære flere spiralformede guirlander fra et fødevaremateriale, og/eller at
- b. mindst én skæreindsats (3) har en skæreanordning, der udskærer laget, der skal afskæres, eller det allerede afskårne lag i flere med hinanden parallelle strimler, og/eller at
- c. mindst én skæreindsats (3) har en skæreanordning, som har yderligere skæreblade (11) anbragt vinkelret på skærebladet (10).

8. Skæresystem ifølge et af kravene 1 til 7, kendetegnet ved, at

- a. en af skæreindsatserne (3) har en anden størrelse end en anden af skæreindsatserne (3), og/eller at
- b. indføringskammeret (9) på en af skæreindsatserne (3) har en anden keglevinkel end indføringskammeret (9) på en anden af skæreindsatserne (3) og/eller, at
- c. indføringskammeret (9) på en af skæreindsatserne (3) har en anden størrelse end indføringskammeret (9) på en anden af skæreindsatserne (3), og/eller at
- d. indføringskammeret (9) på en af skæreindsatserne (3) har en anden indføringsdybde end indføringskammeret (9) på en anden af skæreindsatserne (3), og/eller at

e. indføringskammeret (9) på en af skæreindsatserne (3) har en anden bredde end indføringskammeret (9) på en anden af skæreindsatserne (3).

9. Skæresystem ifølge et af kravene 1 til 8, kendetegnet ved, at hver skæreindsats (3) kan fastgøres ved hjælp af en låseklikforbindelse og/eller med en bajonetforbindelse eller en stikforbindelse på holdedelen (1), navnlig således, at den kan aftages igen uden værktøj.

10. Skæresystem ifølge et af kravene 1 til 9, kendetegnet ved

- a. en skærematerialeholder (7) eller ved
- b. en skærematerialeholder (7), som i det væsentlige er skiveformet, navnlig cirkulært skiveformet, og/eller at skærematerialeholderen (7) har pigge (8).

11. Skæresystem ifølge krav 10, kendetegnet ved, at

- a. skærematerialeholderen (7) er udformet som et dæksel til udførselsåbningen (6) og/eller, at
- b. skærematerialeholderen (7) kan fastgøres ved hjælp af en låseklikforbindelse eller ved hjælp af en bajonetforbindelse eller ved hjælp af en stikforbindelse på holdedelen (1), navnlig således, at den kan aftages igen uden værktøj og/eller, at
- c. skærematerialeholderen (7) kan fastgøres således ved hjælp af en låseforbindelse eller ved hjælp af en bajonetforbindelse eller ved hjælp af en stikforbindelse, at den fuldstændigt tildækker udførselsåbningen på holdedelen (1), navnlig således, at den kan aftages igen uden værktøj, og/eller at
- d. skærematerialeholderen (7) kan fastgøres til holdedelen (1) ved hjælp af en låseforbindelse eller ved hjælp af en bajonetforbindelse eller ved hjælp af en stikforbindelse, der er opbygget identisk med en låseklikforbindelse eller en bajonetforbindelse eller en stikforbindelse, med hvilken en skæreindsats kan fastgøres til holdedelen (1).

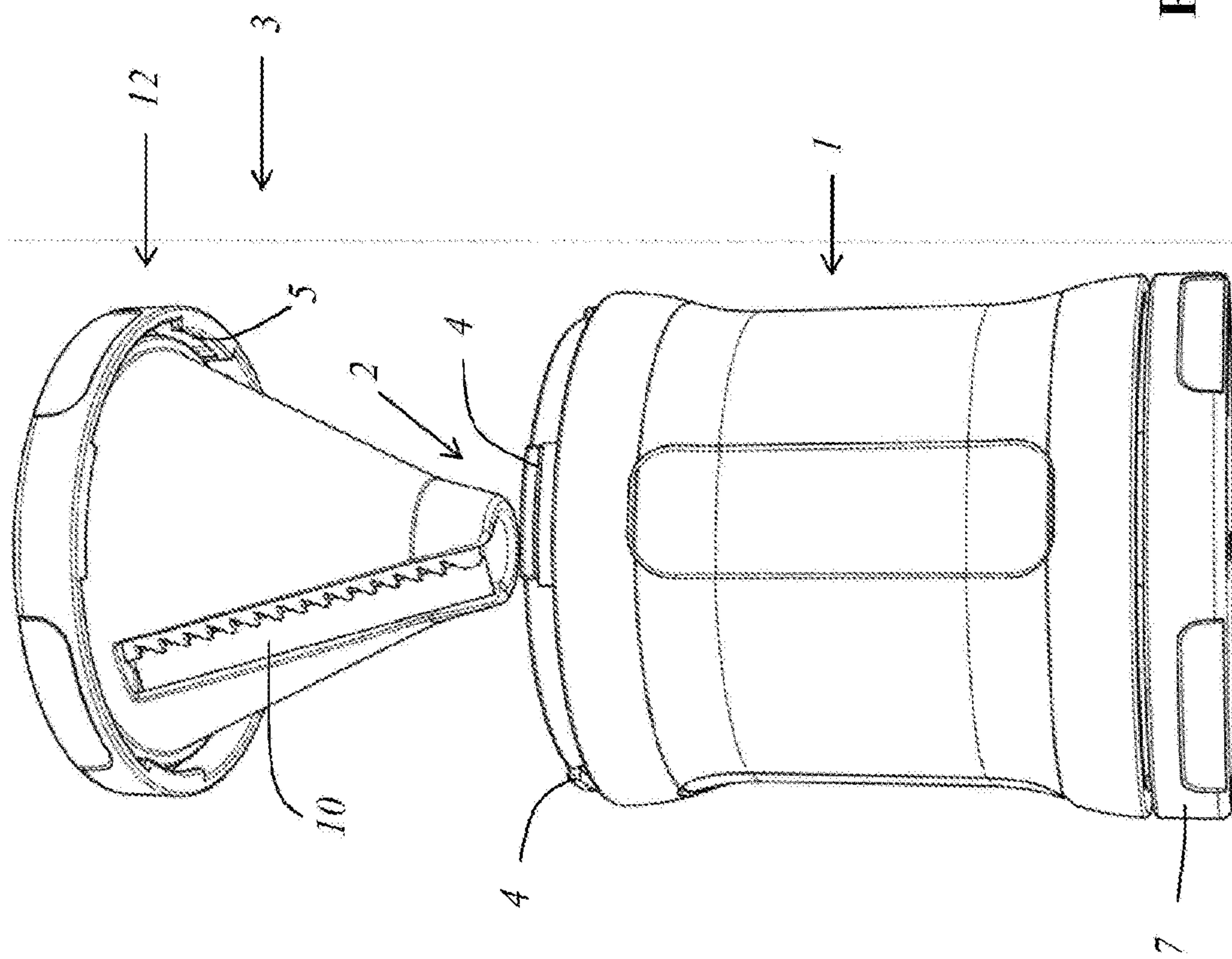
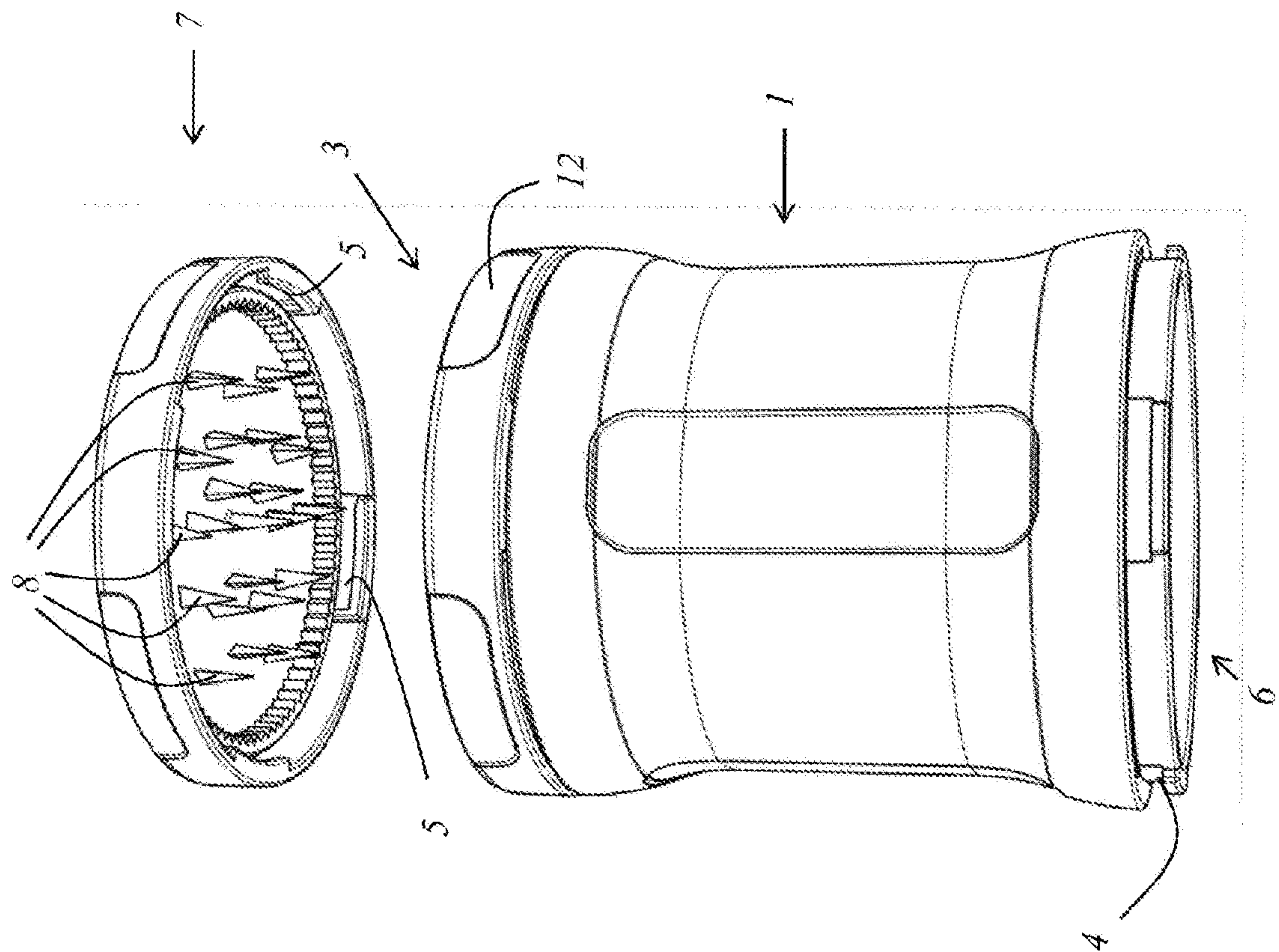


Fig. 1

Fig. 2



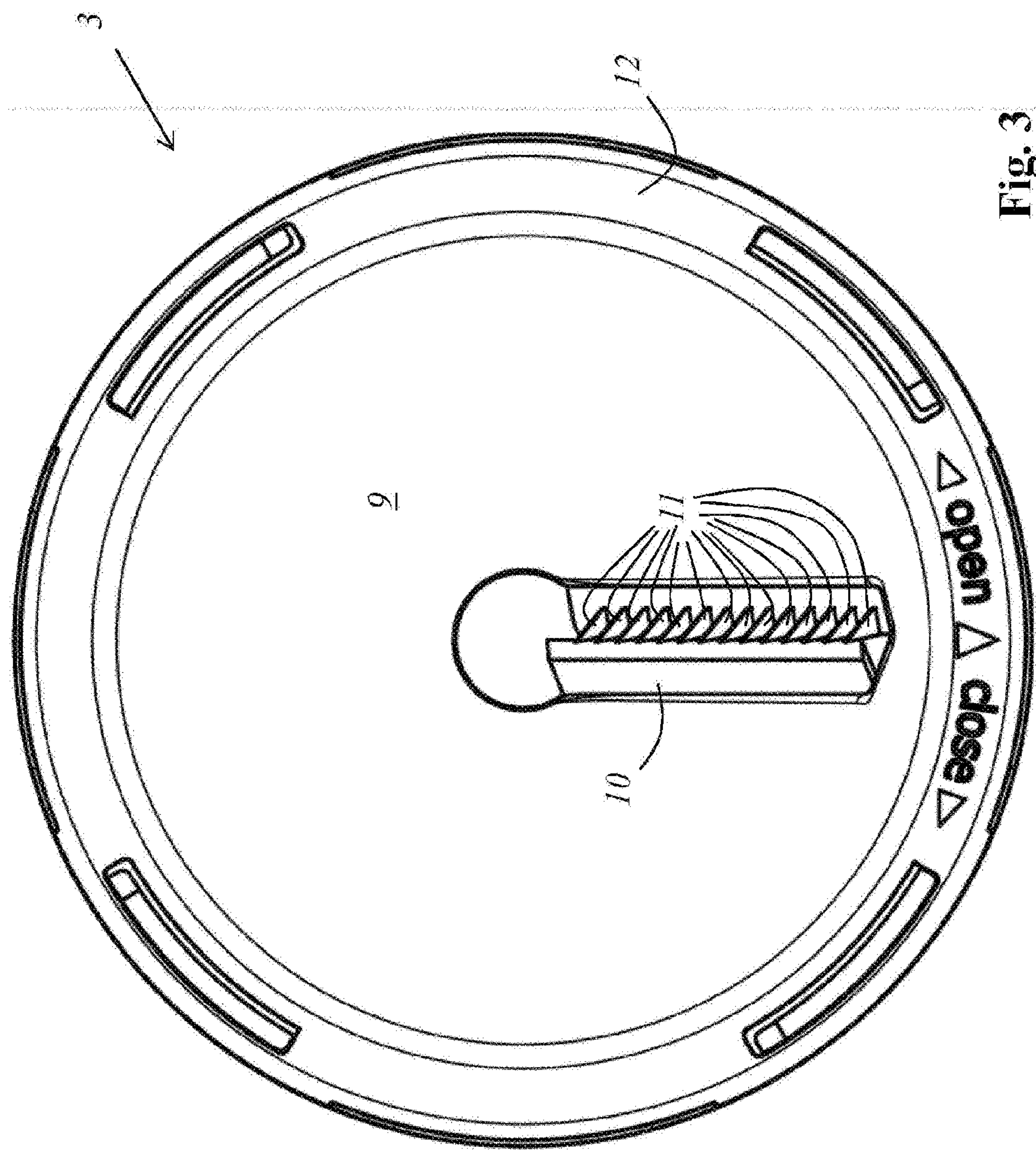


Fig. 3

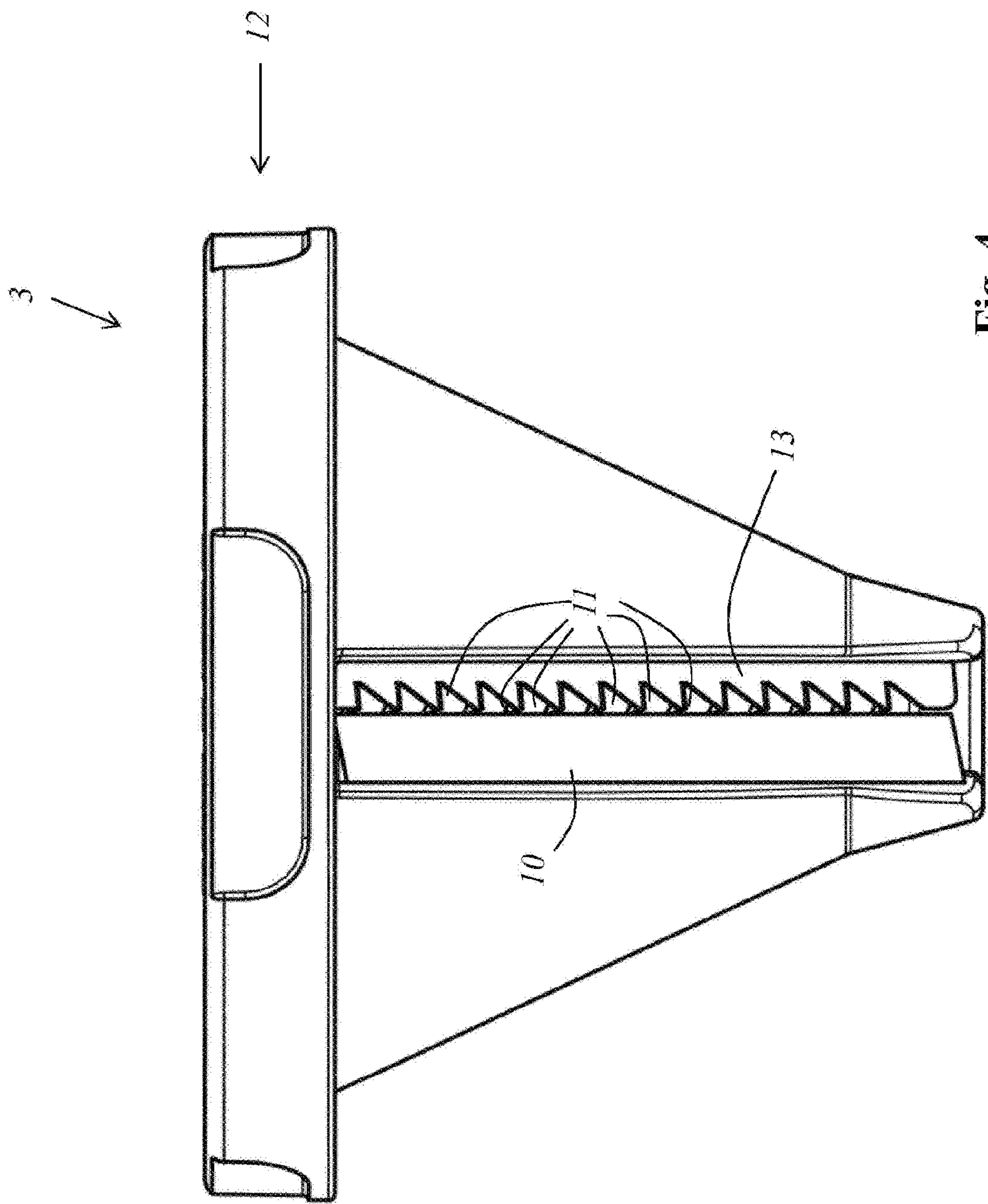
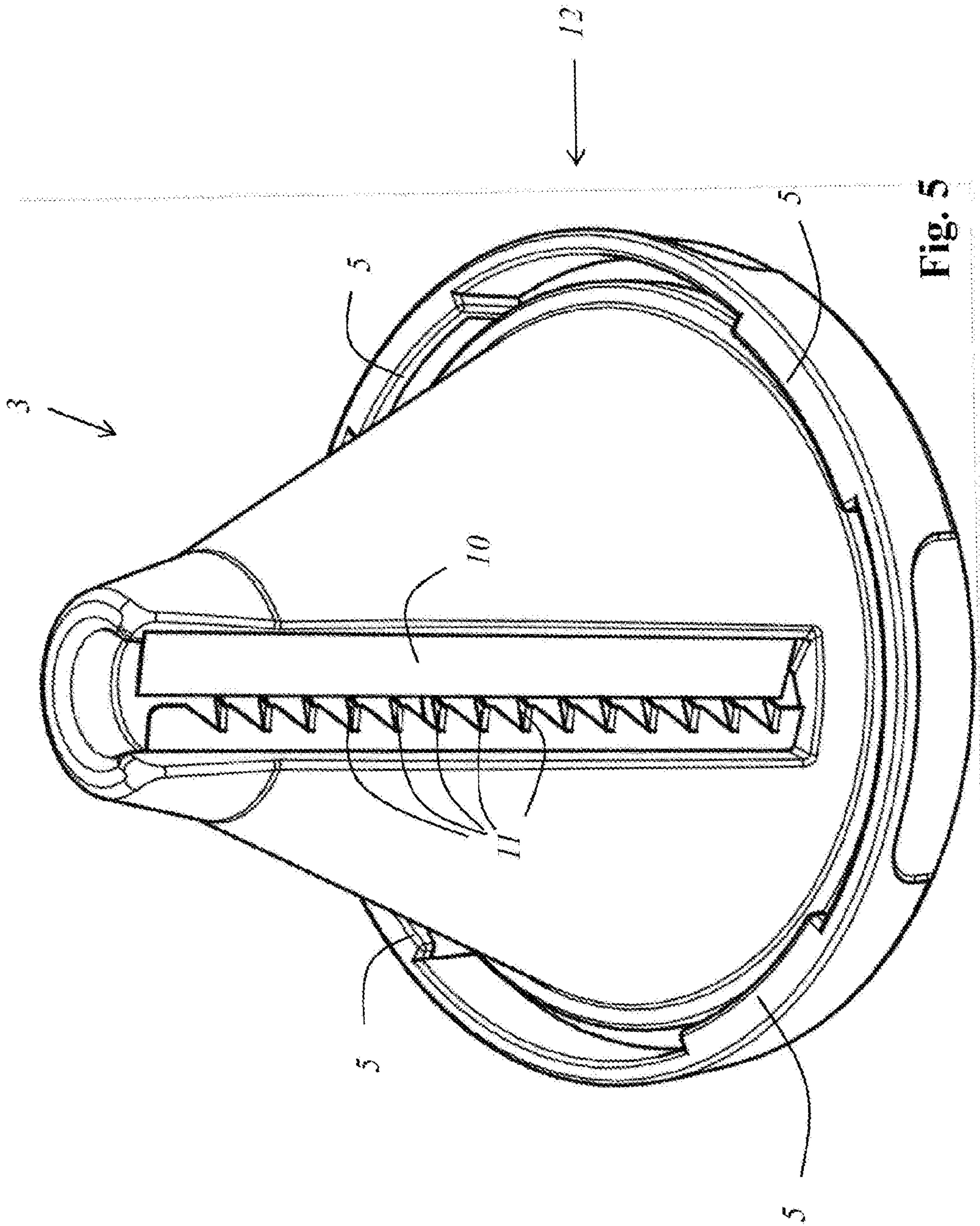
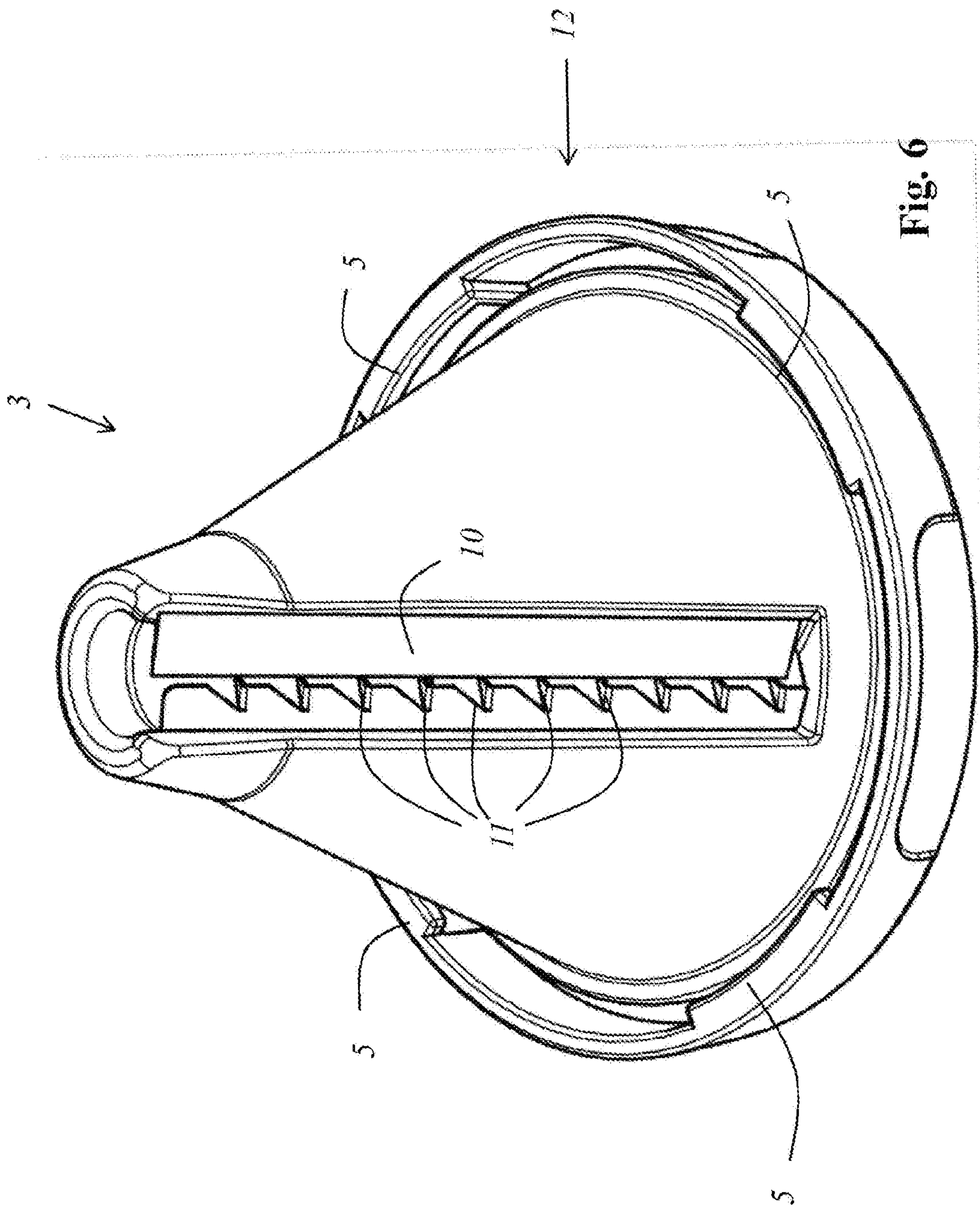


Fig. 4





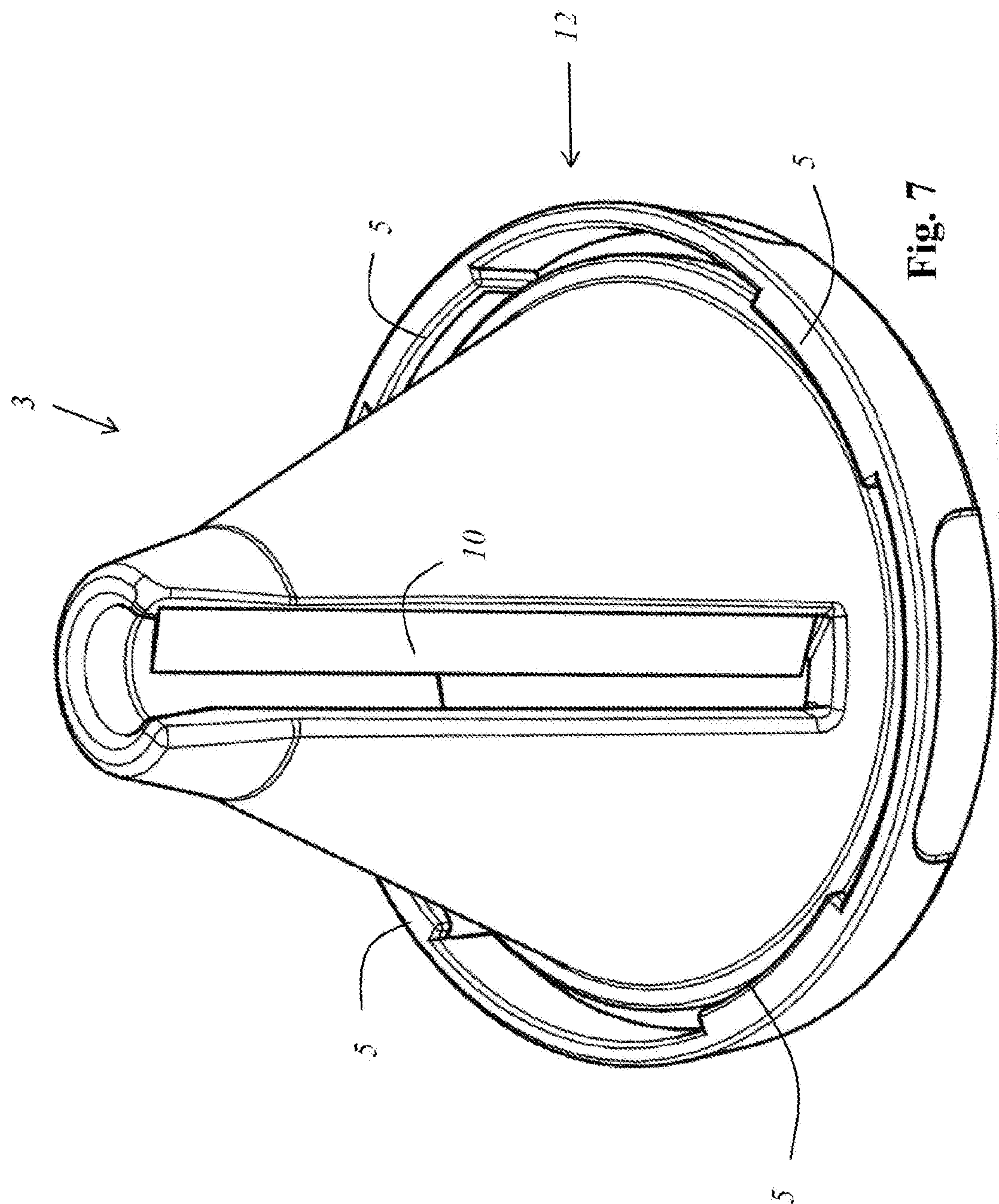


Fig. 7

