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Description

The present invention pertains to a combination condiment grinder and dispensing device as outlined in the preamble of claim 1.

A combination condiment grinder and dispenser device of this type is known from US-A-4 374 574. The operating and actuating lever arrangement of the known device for combined grinding and dispensing condiment may be operated by one hand, although a wide spreading of the user's fingers is required. The operating and actuating levers are fixedly connected to one another, including an angle therebetween, and being pivotally held in the lever recess of the housing. In the normal, non-actuated position the operating lever extends widely outside the recess while the actuating lever remains within. The actuating lever is connected to a toothed rack which meshes with a pinion gear. The pinion gear is connected to a shaft centrally extending from the top end of the housing through the condiment compartment towards the bottom. The grinding means include a rotatable grinding cone coacting with a fixed skirt. The grinding cone is to be driven by the shaft via a one-way coupling which only allows rotation of the grinding cone when the operating lever is pressed into the recess, while blocking movement of the cone during reversing of the operating lever. The one-way clutch is arranged within the condiment compartment where condiment may enter between the teeth and may block the clutch. In addition, the outwardly extending operating lever may hinder storage of the device, or may be actuated inadvertently.

FR-A-911 245 disclosed a condiment grinder and dispenser device including a serrated drum working against a serrated lever for condiment being ground therebetween. The drum is turned by means of a lever which normally extends away from the housing and will hinder storage or may be operated inadvertently.

AT-A-23 322 discloses a grinding and dispensing device which contains two condiment compartments, one of which is provided with grinding means. The known device is of the rotational type requiring the rotation of two parts of the housing with respect to each other when grinding of condiment is desired. Thus, the known device may not be operated by one hand.

It is therefore an object of the present invention to provide a combination condiment grinder and dispenser device to be easily operated with one hand, without wide spreading of fingers, and containing a grinding mechanism essentially quite simple and designed for long life.

A device for fulfilling this demand is disclosed by the characterizing features of claim 1.

The grinding means of the device of the present invention include a serrated slide member and a block with a shearing surface thereon so that the actuating of the slide member by a pivotable lever does not require any change of the type of motion, so that the slide member may be actuated directly by the lever. The slide member of the present invention may also be arranged for allowing the lever to be fully inserted into the lever recess in both of its positions.

Advantageous developments of the present invention are contained in the dependent claims.

The combination condiment grinder and dispenser device comprises a generally upstanding, asthetically configured body or housing which includes a hand and lever recess portion. The L-shaped lever has an upstanding or generally vertical portion in the recess and an inwardly extending actuator arm. When the user of the condiment device squeezes the housing, the lever is depressed or actuated and the inwardly extending arm forces an element having a grinding surface downwardly against spring pressure. The grinding surface, which functions linearly, cooperates with an angled surface to trap the peppercorns or condiment material to crack it and then force it down for final pulverization so that the ground materials can fall out through a gap at the lower end of the housing. An anti-dribble feature is includes so that upon cessation of grinding no ground particles will continue to fall from the device. An upper chamber in the device is also provided with another condiment such as salt. As adjustment mechanism is provided in the lower end of the housing for adjusting the coarseness of the grind for the peppercorns or other condiment as desired.

Accordingly, it is among the many features of the invention that it is designed to be used and operated with one hand. The device had an adjustability feature to regulate the coarseness of the grind according to the preferences or needs of users. The device also contains a chamber for salt or other desired condiment so that two condiments used in food preparation are in the device and can be dispensed by only one hand. The device is easily and conveniently loaded both with peppercorns and with a supply for condiment for the upper surface. The mechanism for grinding is essentially quite simple and designed for long life and reliability as a commercial and home kitchen and tableware item.

Figure 1 is a perspective view of the condiment dispenser grinder housing showing generally its asthetic appearance from the outside;

Figure 2 is a cutaway view in perspective showing details of the internal mechanism and the condiment compartments and the general manner of function of the device;

Figure 3 is a side elevational view of one-half of the body showing additional details of construction;

Figure 4 is the same view as side elevational view of Figure 3, but with the operating lever pivoted so as to further illustrate the grinding action;

Figure 5 is a top plan view of the housing or body showing the perforated opening for the condiment in the top compartment;

Figure 6 is a bottom plan view of the housing

showing the adjustment mechanism for regulating the coarseness of the condiment grinder;

Figure 7 shows an enlarged cross-sectional view along the line 7–7 of Figure 3 showing details of a large adjustment for coarse grind;

Figure 8 is a similar view as Figure 7 showing the adjustment feature to a finer grind than in Figure 7.

Figures 9 and 11 shown that the grind adjustment feature may be located in the side wall rather than on the bottom;

Figures 10 and 12 shown that the nose of the grinding block is spaces with respect to grinding surface according to type of grind desired;

Figure 13 shows one form of anti-dribble feature in the form of rigid lip;

Figures 14A and 14B show a flexible anti-dribble device; and

Figures 14C and 14D shown a rotatable anti-dribble device.

As will be seen by reference to the drawings, the invention generally designated by the number 10, has an upper end 12, a lower end 14, side surfaces 16, back surface 18 and a front surface 20. The front surface of the housing can be seen to include a lever recess area which begins approximately half-way up the front edge surface 20 and which extends inwardly generally horizontally a short distance and the angles upwardly and rearwardly. The recess is in close proximity to the top surface 12 and is roughly one-half the front to back dimension at its deepest. Recess surface 22 extends inwardly and emerges with surface 24 which angles upwardly and rearwardly. The recess then extends outwardly again as surface 26 near the top surface 12 of the housing or body. It will be appreciated that the surfaces as generally described are not precisely defined by sharp corners or edges. In the interest of artistic and pleasing appearance and comfortable handling, the device is rounded at corners and along edges so that it presents an asthetically pleasing shape and configuration. The description of the recess-defining surfaces are included generally for convenience sake and to aid in description of the device.

As contemplated, the device 10 will be made from two matching halves which will join along a centerline 28 as can be seen in most of the views in the drawings.

The two halves of the housing in effect comprise mirror images of each other except of course for press fit pins and pin receptacles and for the adjusting knob for the grind adjustment on the side. Figures 1–4 will therefore be described. Besides the surfaces 22, 24 and 26 which define the lever and hand recess area in the upper portion of the body of the dispenser, each half of the plastic body includes internal wall structure of a predetermined thickness and predetermined location. While plastic has been specified, wood or light metal may also be used as the body material. The top surface 12 has its wall up to centerline 28 as described above. The two halves of the body include horizontal wall 30 which is located approximately midway down from the top of the body and which horizontal wall 30 also joins with upwardly and rearwardly extending compartment wall 32 which near the top reverse curves forwardly as wall 34 and which finally joins top surface 12 with upwardly extending wall 36. When the two halves are joined together, walls 30, 32, 34 and 36 as well as the outside walls of course are joined together to define condiment chamber 38. Chamber 38 at the top is seen to have rectangular or other shaped opening 40 with perforated slide plate 42 reciprocally movable therein so that compartment 38 can be replenished with condiment or seasoning such as salt when desired.

The lower portion of the housing, as can be seen from the figures, shows a top wall 50 extending horizontally in from the front edge 20 of the device to approximately two-thirds the way to the rear edge surface 18 of the housing. At the bottom of the housing and recessed upwardly from the lower edge 14 is a bottom wall 52 forming the lower exterior of the device. It will be noted that a ramp wall 54 extending from the front edge downwardly and rearwardly toward the back surface of the device terminates at a point 56 at a distance of slightly halfway past the vertical centerline of the dispenser body. A horizontal dividing wall 58 extends from point 56 generally horizontally forwardly to the front surface 20 as is seen in the drawings. Thus, a vertical spacing is defined between walls 52 and wall 58 for purposes which are now to be described.

Between wall 52 and wall 56 can be seen to be adjustable grinding block 60 which has a tapered ramp surface 62 upper, and lower surfaces which are in close proximity to wall 58 and wall 52 respectively, and a rear surface 64 as well as shearing edge 63. An eccentric shaft is aligned between two openings in the upper and lower walls 58 and 52 such that in one position as shown in Figure 8 the grinding block 60 is moved rearwardly for a fine grind and may be moved toward the front edge 20 when a coarser grind is desired. A simple manipulation of the finger member 66 to turn shaft 68 which in turn moves cam 70 to move the block. Note that the shaft 68 is aligned in the openings in spaces apart walls 52 and 58. As it is turned, the cam moves the block toward or away from a slide member 88.

The mechanism includes the L-shaped lever member number 80 having generally vertical and longer arm 82 which pivots around axis 84 and which has an inwardly extending actuating arm 86. A nose portion on arm 86 engages a movable or slide member 88 having coacting grinding teeth or serrations 90 which coact with the grinder block 60, the angled surface 62 and shearing edge 63 described above. A compression spring 92 is disposed behind the slide member 88 and which slide member has an outwardly or rearwardly extending arm 94 which confines compression spring 92 such that slide bar 88 is always biased upwardly against the pressure exerted by arm 86 of lever 80.

An opening 96 is defined between the two

halves in front wall 20 so that slide cover 98 can be retracted away from the opening and a fresh supply of peppercons of condiment inserted therein into compartment 55. The inwardly extending lever portion 86 is located between compartment wall 30 of the upper compartment and wall 50 of lower compartment 55.

Referring now to Figures 9–12, it will be seen that condiment grinder 10 has the ring adjustment feature mounted on the side wall rather than on the bottom. It will be noted that a shaft connected to the indicator and finger member 104 is offset with respect to eccentric 102 which moves in opening 100 in block 60. Three settings for fine, coarse and medium grinds are provided.

Figures 13 and 14A through 14D illustrate the several forms which a retainer or anti-dribble feature for fines may take. In Figure 13, an elongated lip 106 formed along the bottom end of lever member 88 comprises a solid anti-dribble device to close off the ejection slot.

Figures 14A and 14B include flexible member 108 mounted in any desirable fashion on the bottom ends of member 88. The ejection slot again is closed off to prevent dribbling of fines when the grinder is not in use.

Finally, Figures 14C and 14D illustrate a rotatable member 110, 112 which may have spring 114 to bias part 110 outwardly. The part 112, being integral with 110, closes 110 with respect to the ejection slot when the slide 88 is up. The spring 114 biases the member 110, 112 open when the slide 88 is moves downwardly.

Claims

1. A combination condiment grinder and dispenser device (10), comprising:

a housing adapted to be held and operated by one hand of the user, said housing having a top end (12), a bottom end (14) on which said housing is supported, and a recess portion (22, 24, 26) in which an operating lever (80) is disposed such that said operating lever (80) has an outward first non-operating position and an inward second operating position in which said operating lever is moved by the squeezing action of the user's hand,

a first condiment compartment (55) located in the lower portion of said housing for containing condiment to be ground and including a grinding means (60, 88)

said grinding means (60, 88) comprising a movable part (88) having grinding serrations (90) thereon which coact with a member (60) for forming a grind opening therebetween through which ground condiment is dispensed from said housing,

adjustment means (66, 68, 70, 100, 102, 104) for adjusting the grinding action from fine to coarse, and

actuating lever means (86) connected to said operating lever (80) and effective to cause movement of said movable part (88),characterized in that said recess portion (22, 24, 26) is arranged generally in the upper portion of said housing and defines a reduced housing area in said upper portion for being conveniently gripped by the user's hand, said recess portion including a lever opening therein for receiving said operating lever (80) within said reduced housing area, said condiment compartment (55) being located generally below said upper recess portion (22, 24, 26), said grinding means includes adjustable block means (60) with a shearing surface thereon, and further including a generally reciprocally moving slide member (88) having said grinding serrations (90) thereon which coact with said grinding block (60) for comminuting said condiment, said reciprocally moving slide member (88) including means (92) for biasing said slide member (88) to a rest position, in that said actuating lever means (86) are included within said housing and extending from said operating lever (80) below said lever recess portion (22, 24, 26) and above said lower portion which contains said condiment compartment (55) and into contact with said slide member (88) for forcing said reciprocally moving slide member (88) into operative movement when said operating lever (80) is squeezed by said user's hand, and in that said adjustment means (66, 68, 70, 100, 102, 14) provides movement of said block means (60).

2. The combination condiment grinder and dispenser device according to claim 1 wherein the means for biasing the slide member (88) to a rest position is a compression spring (92).

3. The combination condiment grinder and dispenser device according to claim 1 or 2 wherein the shearing surface (62, 63) of the adjustable grinding block means (60) contains a sloped surface (62), said shearing surface including a flat shelf which extends beyond said sloped surface toward and generally perpendicular to the plan of the grinding serrations of the slide member (88) and terminating in an angled shearing edge (63).

4. The combination condiment grinder and dispenser device according to any of claims 1 to 3 wherein the adjustment means (66, 68, 70, 100, 102, 104) for the grinding block means (60) provides movement of the block (60) in a generally linear reciprocating direction toward and away from the path of movement of the grinding serrations (90) of the slide member (88).

5. The combination condiment grinder and dispenser device according to any of claims 1 to 4 wherein said operating lever (80) has an upper end and a lower end and is pivotally mounted at its lower end for limited movement by the user's hand.

6. The combination condiment grinder and dispenser device according to any of claims 1 to 5 and wherein said upper portion of said housing includes a second condiment compartment (38) which is fillable and dispensable through said top end (12) of said housing.

7. The combination condiment grinder and dispenser device according to any of claims 1 to 6 wherein said adjustment means (66, 68, 70, 100, 102, 104) includes a rotatable eccentric shaft (68, 102) for limited movement of said grinding block

toward and away from said slide member grinding serrations (90).

8. The combination condiment grinder and dispenser device according to any of claims 1 to 7 and wherein means (106, 108, 110) are provided on the bottom of said device (10) for closing of said grind opening when said device (10) is not in use.

Patentansprüche

1. Kombinierte Gewürzmühle und -streuer (10), mit einem durch den Benutzer mit einer Hand zu haltenden und zu betätigenden Gehäuse, wobei das Gehäuse ein oberes Ende (12), ein das Gehäuse unterstützendes Bodenende (14) und ein Ausnehmungsteil (22, 24, 26) aufweist, in dem ein Betätigungshebel (80) derart angeordnet ist, dass der Betätigungshebel (80) eine auswärts gerichtete, erste, unwirksame Position und eine einwärtige, zweite, wirksame Position aufweist, in die der Betätigungshebel durch eine durch die Hand des Benutzers ausgeübte Druckbewegung hineinbewegbar ist,

mit einem im unteren Bereich des Gehäuses zur Aufnahme des zu mahlenden Gewürzes angeordneten und eine Mahlvorrichtung (60, 88) enthaltenden, ersten Gewürzabteil (55),

wobei die Mahlvorrichtung (60, 88) ein bewegbares Teil (88) mit daran angeordneten Mahlzacken (90) aufweist, das mit einem Teil (60) zum Ausbilden einer zwischenliegenden Mahlöffnung zusammenwirkt, durch die das gemahlene Gewürz aus dem Gehäuse ausgegeben wird, mit einer Einstellvorrichtung (66, 80, 70, 100, 102, 104) zum Einstellen des Mahlvorganges von Fein nach Grob, und

mit einer Betätigungshebeleinrichtung (86), die mit dem Betätigungshebel (80) verbunden ist und die Bewegung des beweglichen Teils (88) bewirkt, dadurch gekennzeichnet, dass das Ausnehmungsteil (22, 24, 26) im wesentlichen im oberen Bereich des Gehäuses angeordnet ist und eine verringerte Gehäusefläche in diesem oberen Teil bildet, die bequem durch die Hand des Benutzers ergriffen werden kann, wobei das Ausnehmungsteil eine Hebelöffnung zum Aufnehmen des Betätigungshebels (80) in der verringerten Gehäusefläche aufweist, wobei das Gewürzabteil (55) im wesentlichen unterhalb des oberen Ausnehmungsteils (22, 24, 26) angeordnet ist, wobei die Mahlvorrichtung eine einstellbare Blockeinrichtung (60) aufweist, die mit einer Scheroberfläche versehen ist und weiterhin ein im wesentlichen hin und her bewegbares Gleitteil (88) enthält, das mit den Mahlzacken (90) versehen ist, die mit dem Mahlblock (60) zum Vermahlen des Gewürzes zusammenwirken, wobei das hin und her bewegbare Gleitteil (88) eine Vorspanneinrichtung (92) zum Vorspannen des Gleitteiles (88) in eine Ruhestellung enthält, dass die Betätigungshebeleinrichtung (86) innerhalb des Gehäuses eingeschlossen ist und sich vom Betätigungshebel (80) unterhalb des Hebel-Ausnehmungsteiles (22, 24, 26) und oberhalb des unteren, das Gewürzabteil (55) enthaltenden Bereiches und in Kontakt mit dem Gleitteil (88) erstreckt, um das hin und her bewegbare Gleitteil in eine wirksame Bewegung zu zwingen, wenn der Betätigungshebel (80) durch die Hand des Benutzers gedrückt wird und dass die Einstellvorrichtung (66, 68, 70, 100, 102, 104) eine Bewegung der Blockeinrichtung (60) bewirkt.

2. Kombinierte Gewürzmühle und -streuer nach Anspruch 1, bei der das Vorspannmittel für das Gleitteil (88) in die Ruheposition eine Druckfeder (92) ist.

3. Kombinierte Gewürzmühle und -streuer nach Anspruch 1 oder 2, bei der die Scheroberfläche (62, 63) der einstellbaren Mahlblockeinrichtung (60) eine geneigte Oberfläche (62) enthält, wobei die Scheroberfläche einen flachen Sockel aufweist, der sich jenseits der geneigten Oberfläche gegen und im wesentlichen rechtwinklig zur Ebene der Mahlzacken des Gleitteiles (88) erstreckt und in einer winkligen Scherecke (63) ausläuft.

4. Kombinierte Gewürzmühle und -streuer nach einem der Ansprüche 1 bis 3, wobei die Einstellvorrichtung (66, 68, 70, 100, 102, 104) für die Mahlblockvorrichtung (60) die Bewegung des Blocks (60) in einer im wesentlichen linearen, wechselweisen Bewegung in Richtung zu und weg vom Bewegungsweg der Mahlzacken (90) des Gleitteiles (88) bewirkt.

5. Kombinierte Gewürzmühle und -streuer nach einem der Ansprüche 1 bis 4, wobei der Betätigungshebel (80) ein oberes und ein unteres Ende aufweist und an seinem unteren Ende für eine begrenzte Bewegung durch die Hand des Benutzers schwenkbar befestigt ist.

6. Kombinierte Gewürzmühle und -streuer nach einem der Ansprüche 1 bis 5, wobei der obere Bereich des Gehäuses ein zweites Gewürzabteil (38) aufweist, das durch das obere Ende (12) des Gehäuses zu füllen und zu entleeren ist.

7. Kombinierte Gewürzmühle und -streuer nach einem der Ansprüche 1 bis 6, wobei die Einstellvorrichtung (66, 68, 70, 100, 102, 104) einen drehbaren Exzenterschaft (68, 102) für eine begrenzte Bewegung des Mahlblocks in Richtung auf und weg von den Mahlzacken (90) des Gleitteiles enthält.

8. Kombinierte Gewürzmühle und -streuer nach einem der Ansprüche 1 bis 7, wobei am Boden des Gerätes (10) eine Einrichtung (106, 108, 110) zum Schliessen der Mahlöffnung vorgesehen ist, wenn das Gerät (10) nicht in Gebrauch ist.

Revendications

1. Dispositif combiné (10) à moulin et distributeur de condiments, comprenant:

un boîtier conçu pour être tenu et manœuvré d'une seule main par l'utilisateur, ledit boîtier ayant une extrémité supérieure (12), une extémité inférieure (14) sur laquelle ledit boîtier repose, et une partie de logement (22, 24, 26) dans laquelle un levier de manœuvre (80) est disposé de façon que ledit levier de manoeuvre (80) prenne une première position de non-manœuvre, vers l'exté-

rieur, et une seconde position de manœuvre vers l'intérieur, dans laquelle ledit levier de manœuvre est amené en étant pressé par la main de l'utilisateur,

un premier compartiment (55) à condiment disposé dans la partie inférieure dudit boîtier pour contenir un condiment devant être moulu et comprenant des moyens de moulinage (60, 88),

lesdits moyens de moulinage (60, 88) comprenant une pièce mobile (88) portant des stries (90) de moulinage qui coopèrent avec un élément (60) pour former entre eux une ouverture de moulinage à travers laquelle le condiment moulu est distribué à partir dudit boîtier,

des moyens de réglage (66, 68, 70, 100, 102, 104) destinés à régler l'action de moulinage d'un moulinage fin à un moulinage grossier, et

des moyens (86) à levier d'actionnement reliés audit levier de manœuvre (80) et ayant pour effet de provoquer un mouvement de ladite pièce mobile (88), caractérisé en ce que

ladite partie à logement (22, 24, 26) est agencée globalement dans la portion supérieure dudit boîtier et définit une zone de boîtier réduite dans ladite portion supérieure pour être commodément prise par la main de l'utilisateur, ladite partie de logement comprenant une ouverture de levier destinée à recevoir ledit levier de manœuver (80) à l'intérieur de ladite zone réduite du boîtier, ledit compartiment (55) à condiment étant situé globalement au-dessous de ladite partie supérieure de logement (22, 24, 26), lesdits moyens de moulinage comprennent un moyen à bloc réglable (60) portant une surface de cisaillage, et comprenant en outre un élément coulissant (88), pouvant exécuter un mouvement alternatif général et portant lesdites stries (90) de moulinage qui coopèrent avec ledit bloc (60) de moulinage pour fragmenter ledit condiment, ledit élément coulissant (88) à mouvement alternatif comprenant des moyens (92) destinés à rappeler ledit élément coulissant (88) vers une position de repos, en ce que lesdits moyens (86) à levier d'actionnement sont incorporés à l'intérieur dudit boîtier et s'étendent à partir dudit levier (80) de manœuvre au-dessous de ladite partie de logement (22, 24, 26) de levier et au-dessus de ladite portion inférieure qui contient ledit compartiment (55) à condiment, jusqu'en contact avec ledit élément coulissant (88) pour amener à force ledit élément coulissant (88) à mouvement alternatif à effectuer un mouvement de travail lorsque ledit levier de manœuvre (80) est pressé par ladite main de l'utilisateur, et en ce que lesdits moyens de réglage (66, 68, 70, 100, 102, 104) produisent un mouvement dudit moyen à bloc (60).

2. Dispositif combiné à moulin et distributeur de condiments selon la revendication 1, dans lequel les moyens de rappel de l'élément coulissant (88) vers une position de repos comprennent un ressort (92) de compression.

3. Dispositif combiné à moulin et distributeur de condiments selon la revendication 1 ou 2, dans lequel la surface (62, 63) de cisaillage du moyen (60) à bloc de moulinage réglabel présente une surface inclinée (62), ladite surface de cisaillage comprenant un rebord plat qui s'étend au-delá de ladite surface inclinée, en direction du, et á peu près perpendiculairement au, plan des stries de moulinage de l'élément coulissant (88), et aboutissant à un bord incliné (63) de cisaillage.

4. Dispositif combiné à moulin et distributeur de condiments selon l'une quelconque des revendications 1 à 3, dans lequel les moyens de réglage (66, 68, 70, 100, 102, 104) pour le moyen (60) à bloc de moulinage produisent un mouvement alternatif du bloc (60) dans une direction globalement linéaire, le rapprochant et l'éloignant du trajet du mouvement des stries (90) de moulinage de l'élément coulissant (88).

5. Dispositif combiné à moulin et distributeur de condiments selon l'une quelconque des revendications 1 à 4, dans lequel ledit levier de manœuvre (80) comporte une extrémité supérieure et une extrémité inférieure et est monté, à son extrémité inférieure, de manière que la main d'un utilisateur puisse le faire pivoter sur un mouvement limité.

6. Dispositif combiné à moulin et distributeur de condiments selon l'une quelconque des revendications 1 à 5, dans lequel ladite partie supérieure dudit boîtier comprend un second compartiment (38) à condiment qui peut être rempli et vidé à travers ladite extrémité supérieure (12) dudit boîtier.

7. Dispositif combiné à moulin et distributeur de condiments selon l'une quelconque des revendications 1 à 6, dans lequel lesdits moyens de réglage (66, 68, 70, 100, 102, 104) comprennent un axe excentrique tournant (68, 102) permettant un mouvement limité rapprochant et éloignant ledit bloc de moulinage desdites stries (90) de moulinage de l'élément coulissant.

8. Dispositif combiné à moulin et distributeur de condiments selon l'une quelconque des revendications 1 à 7, dans lequel des moyens (106, 108, 110) sont prévus sur le fond dudit dispositif (10) pour fermer ladite ouverture de passage de la mouture lorsque ledit dispositif (10) n'est pas utilisé.

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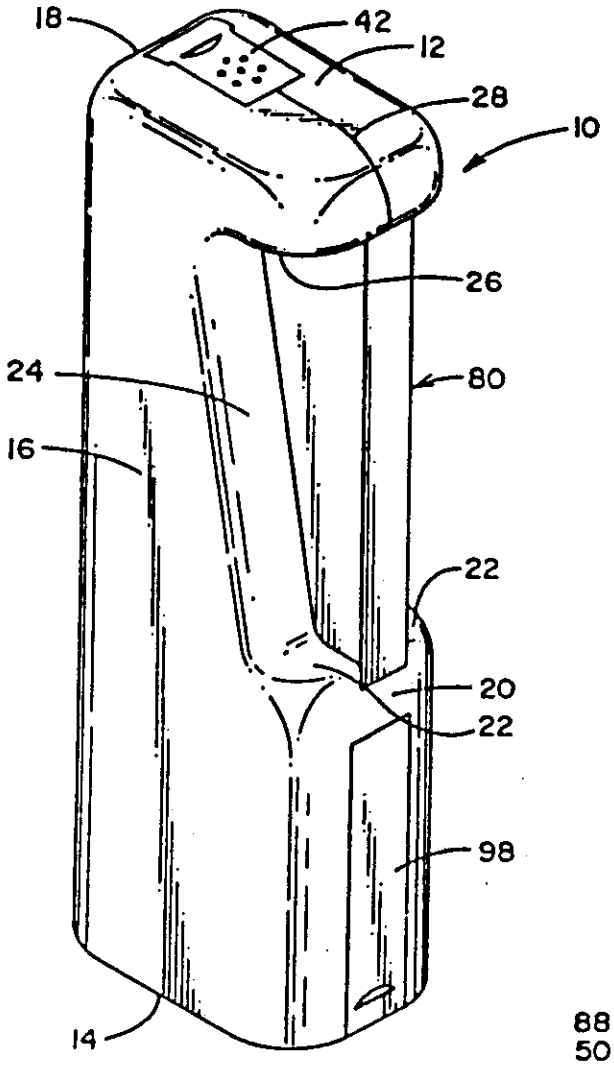
FIG. 1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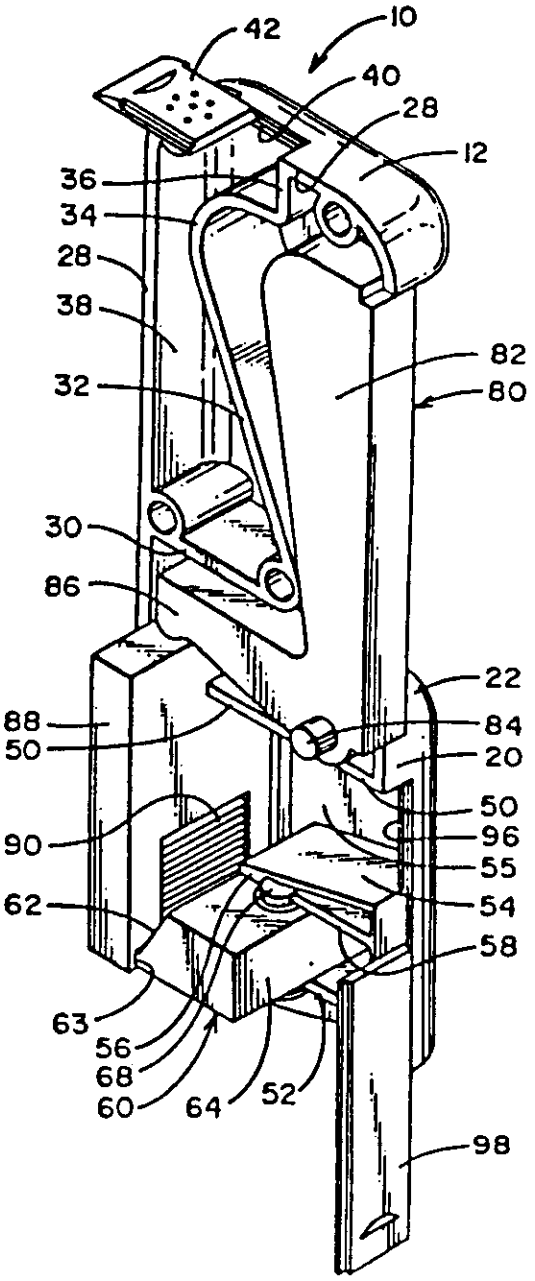
42
12
28
10
26
24
80
16
22
20
22
98
14

FIG. 2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56
68
60
64
52
98

FIG. 3

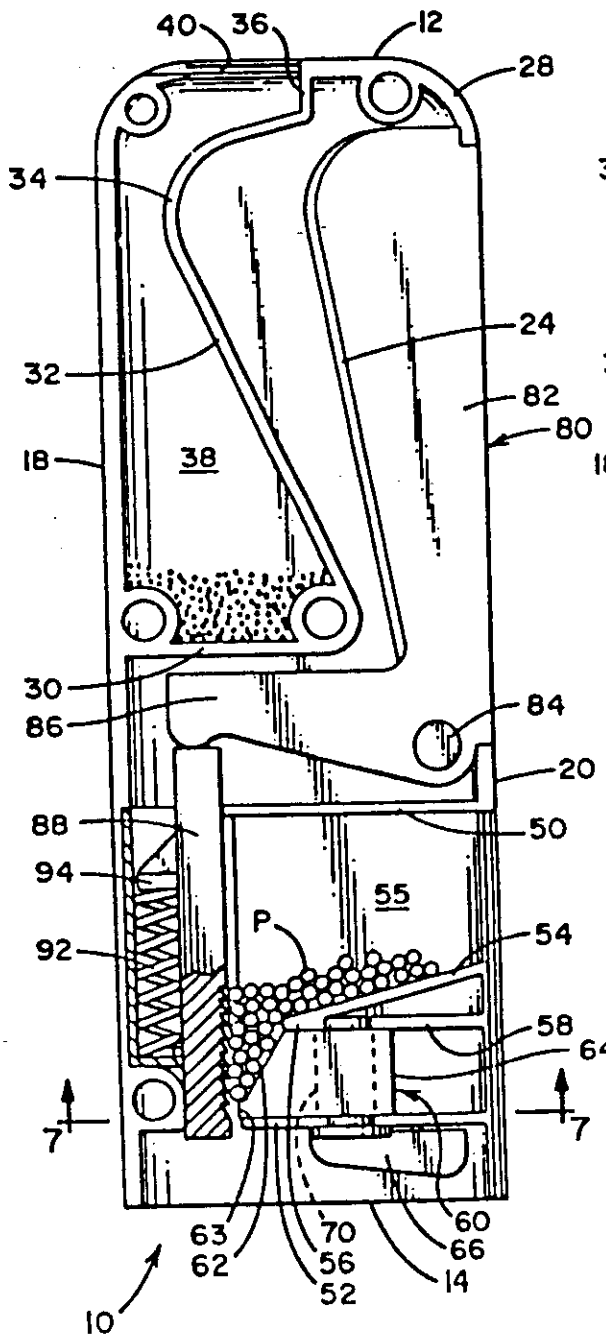
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FIG. 4

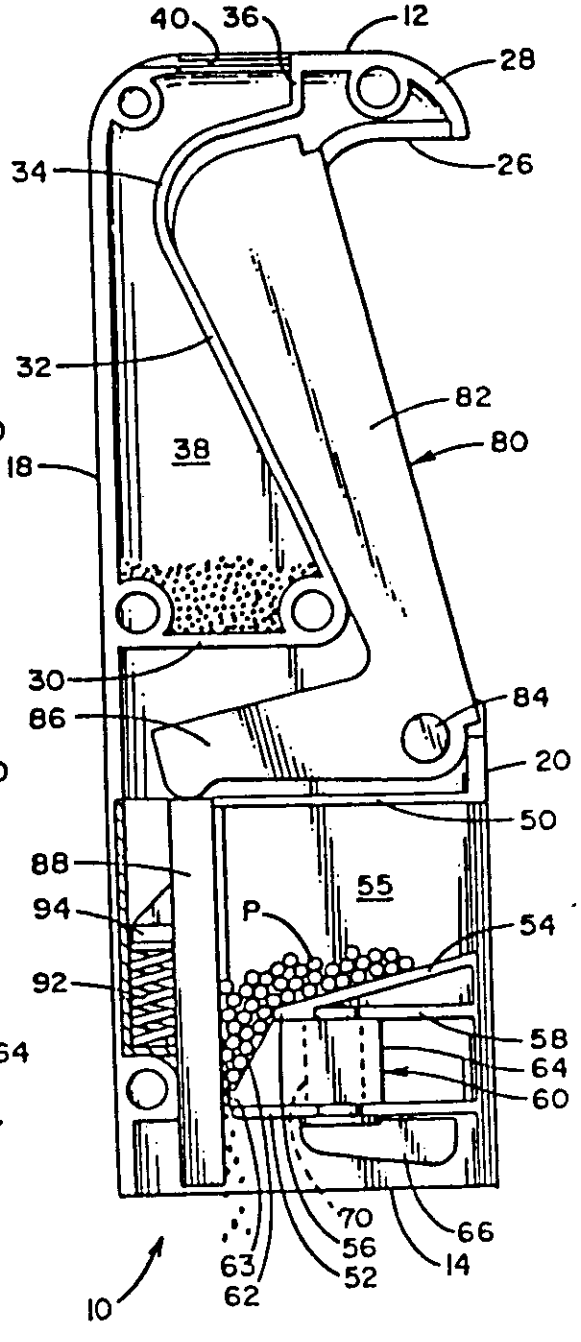
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FIG. 5

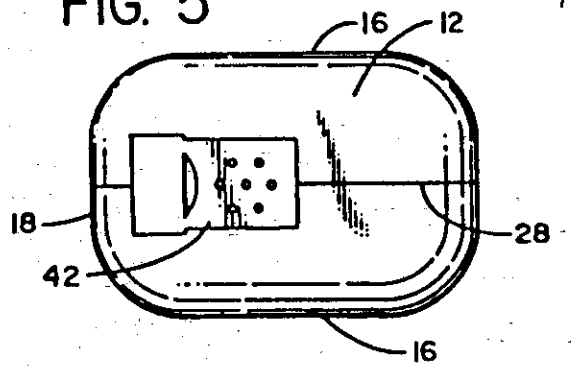

FIG. 6

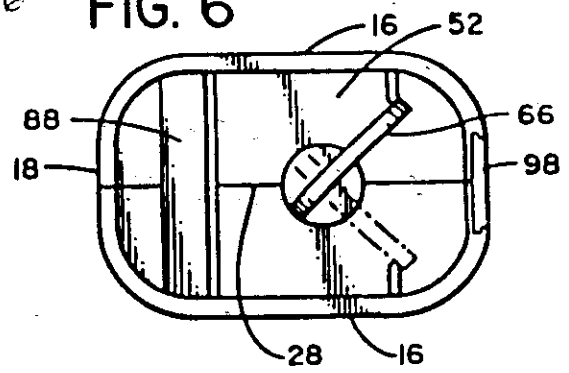

FIG. 7

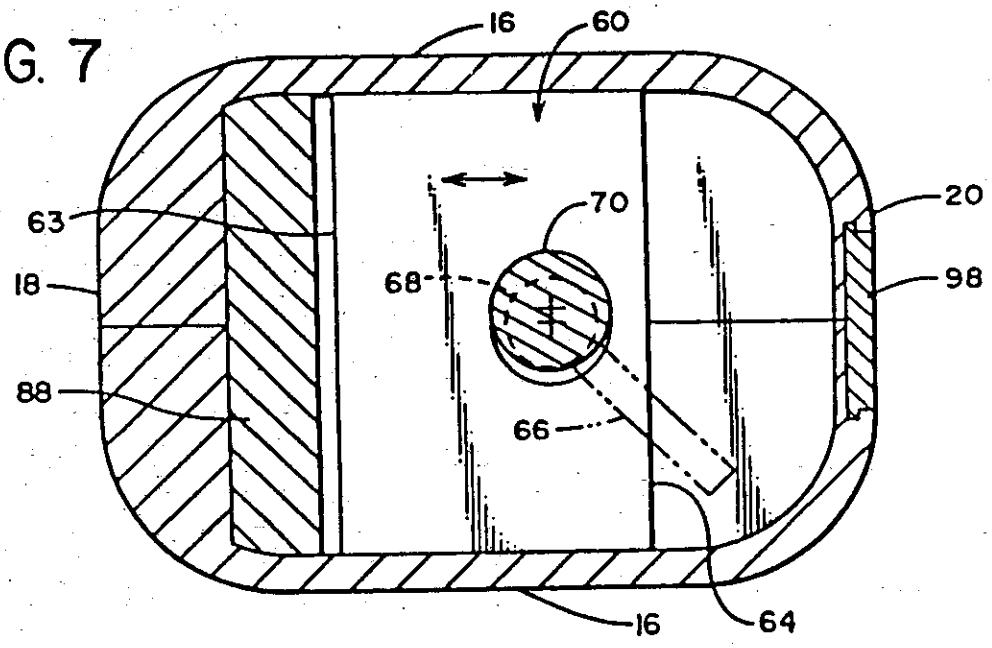

FIG. 8

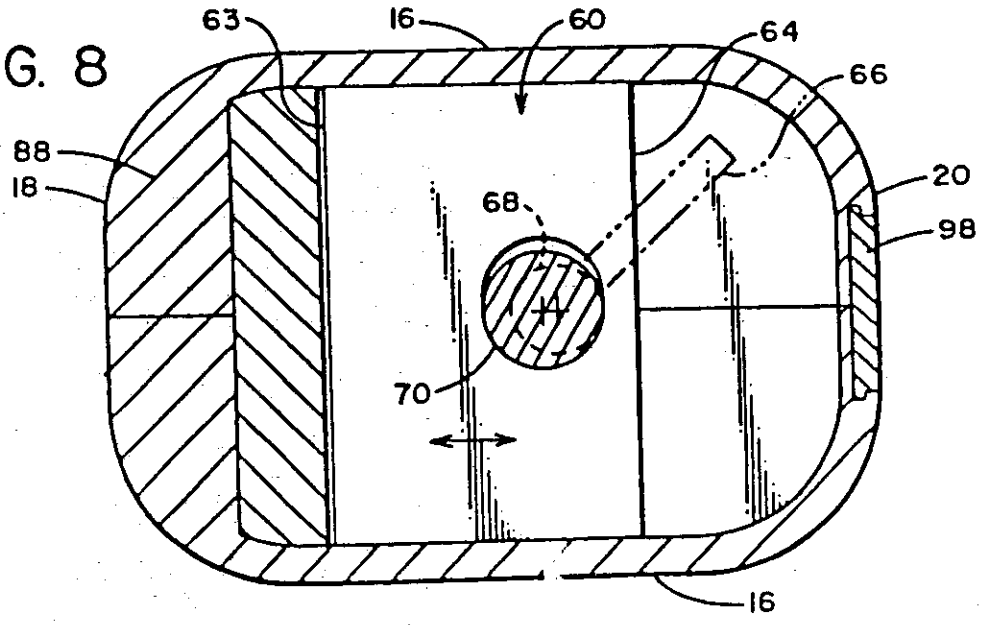

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FIG. 9

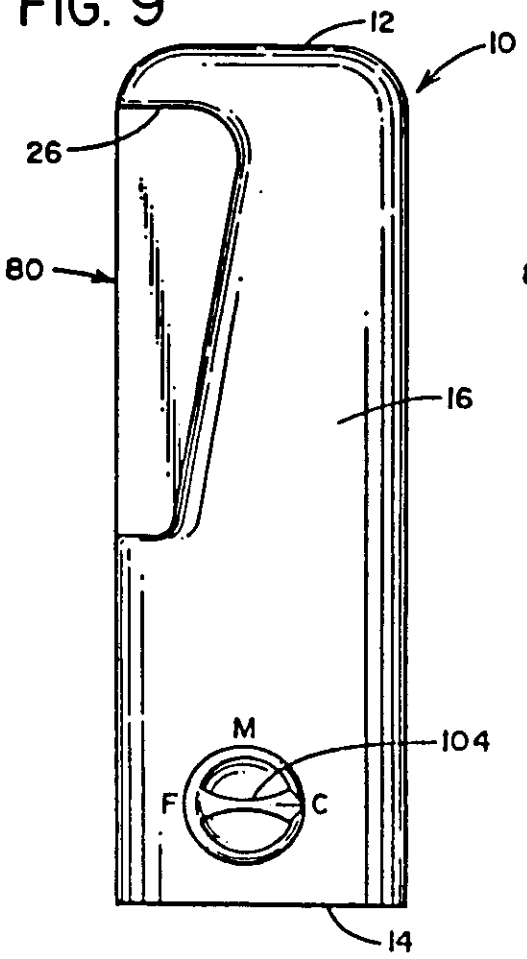

FIG. 11

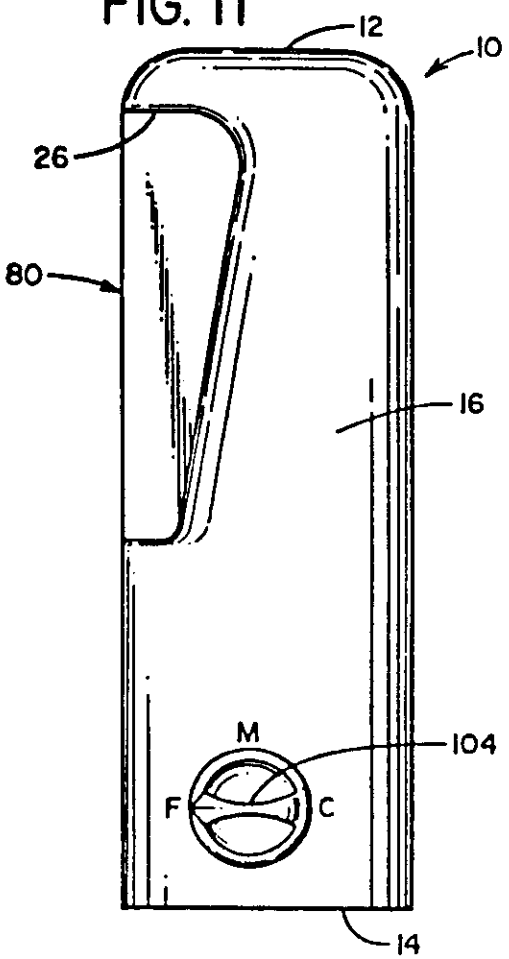

FIG. 10

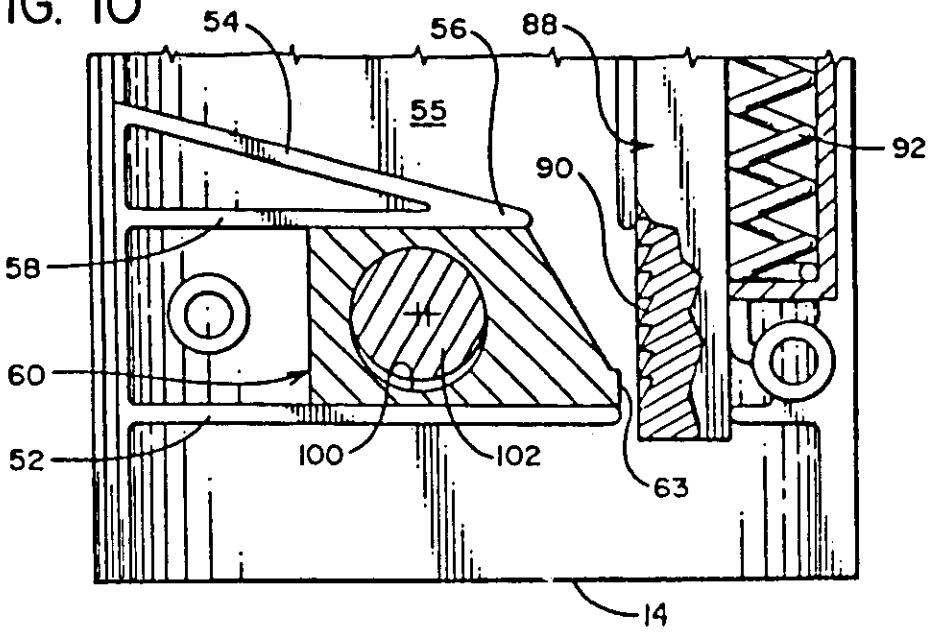

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FIG. 12

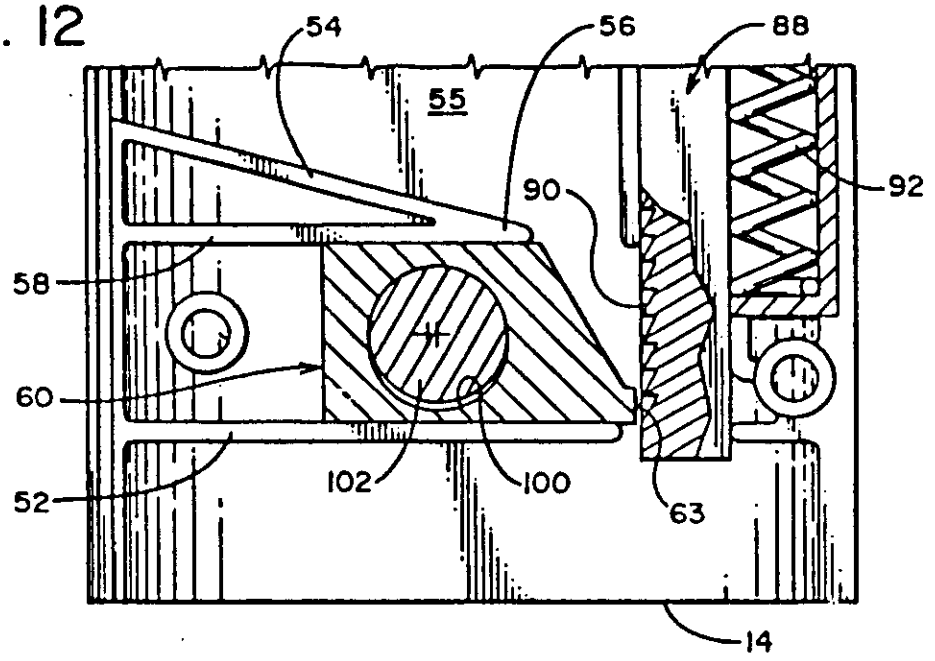

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FIG. 13

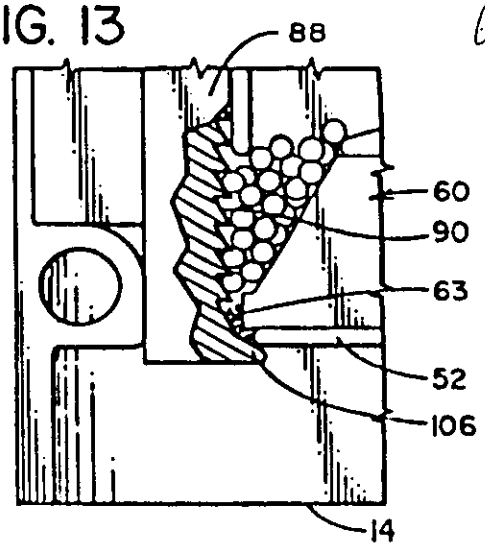


FIG. 14A

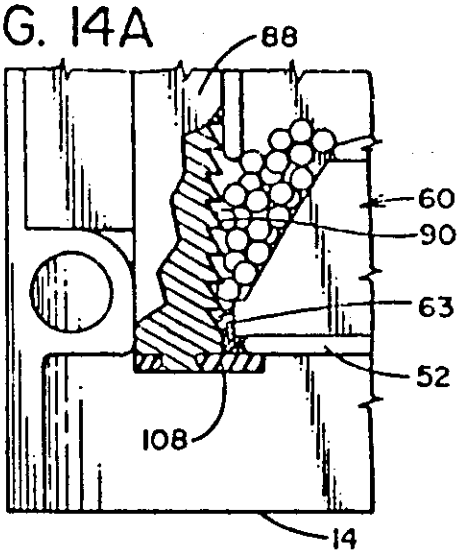


FIG. 14B

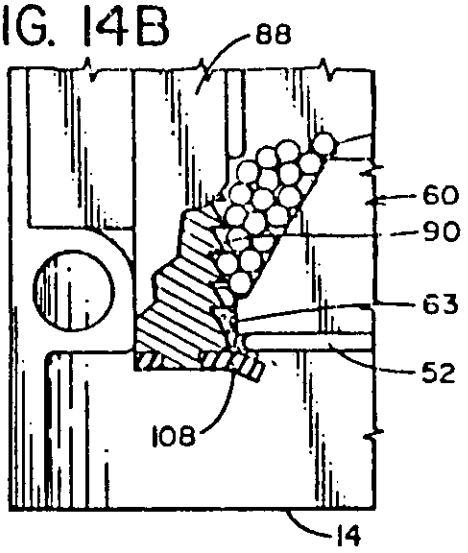


FIG. 14C

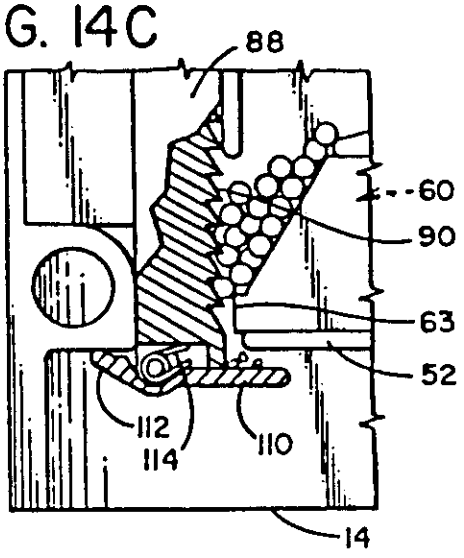
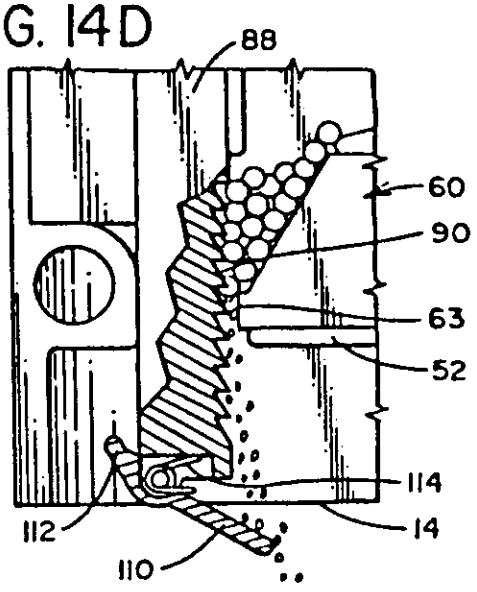


FIG. 14D



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Designated States BE CH DE FR GB IT LI LU NL SE AT

Title COMBINATION CONDIMENT GRINDER AND DISPENSER

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