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(54) **Flush tank structure particularly for the controlled and differentiated washing of toilet bowls in sanitary fittings and the like.**

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Description

The present invention relates to a flush tank or cistern structure particularly for the controlled and differentiated washing of toilet bowls in sanitary fittings and the like.

Various types of flush cisterns or tanks for cleaning toilet bowls are currently known and used, and are usually constituted by a water container which is connected to the water mains, has automatic means for controlling the supply from the mains to the container and is provided with a duct, defined on the bottom of the container, for discharging the water toward toilet bowls. The duct is connected to a bowl by means of a pipe, and the discharge of water is controlled by means of a plug which can be disengaged by means of lever systems which are actuated manually from the outside every time the toilet bowl is washed.

Cisterns which perform the differentiated washing of toilet bowls are also known; said cisterns have differentiated controls for the discharge of preset amounts of water as a consequence of the use of one or more external controls. Said cisterns constitute a considerable improvement with respect to the preceding ones, said improvement being essentially related to the water saving achieved by rationing the discharge of the water. Also known from DE-A-2,601,282 is a flush tank structure as defined in the precharacterizing part of claim 1.

Devices with discharge controlled by means of multiple controls are currently affected by constructive difficulties and most of all by maintenance difficulties which are indeed related to the constructive difficulties.

Known devices usually have a discharge control structure which has an overflow pipe which is connected directly to the duct of the cistern, and on which two ports are defined at differentiated heights; said ports are opened and closed by means of respective plugs, each of which is actuated by lever systems connected to external manual actuation means.

Other disadvantages are related to the lack of precision in controlling the discharge, or rather the amounts of water discharged, and to the quietness of the system.

The aim of the present invention is to eliminate or substantially reduce the disadvantages described above in known types of cisterns. This aim is according to the invention achieved by providing a flush tank structure as defined in claim 1, preferred embodiments of the invention are defined in the appended dependent claims.

Within the scope of the above aim, an object of the present invention is to provide a flush tank structure which is highly reliable in operation and is much quieter and more precise in discharge con-

trol than currently installed and mounted cisterns.

Not least object of the present invention is to provide a flush tank structure which is relatively easy to manufacture and at competitive costs.

Further characteristics and advantages of the invention will become apparent from the description of a preferred but not exclusive embodiment of a flush tank structure particularly for the controlled and differentiated washing of toilet bowls in sanitary fittings and the like, according to the invention, illustrated only by way of non-limitative example in the accompanying drawings, wherein:

figure 1 is a partially sectional front elevation view of a flush tank structure according to the invention;

figure 2 is a plan view of a lever system for the partial discharge of the water;

figure 3 is a partially sectional front view of the lifting means for partial discharge;

figure 4 is a partially sectional cutout side elevation view of a flush tank structure according to the invention;

figure 5 is a partially sectional front view of the lifting means for complete discharge;

figure 6 is a partially sectional front view of the lifting means for partial discharge, in which the traction element is opening the port;

figure 7 is a partially sectional front view of the lifting means for complete discharge, in which the traction element is opening the port; and

figures 8, 9, 10 and 11 are elevation views of a removable supporting hook which is comprised within the lever system for partial discharge.

With reference to the above figures, a flush tank structure particularly for the controlled and differentiated washing of toilet bowls in sanitary fittings and the like comprises a flush tank or container 1 which has a water inlet 2 adjacent to the upper part thereof which is connected to the water mains, a known automatic means for controlling the inflow of water into the flush tank 1, for example means with a cock controlled by a float (not illustrated), and a port 3 which is defined in the bottom, which is closed by a plug 4, and which is connected to a toilet bowl (not illustrated).

A traction element 5 is inserted in the port 3 and supports the sealing plug 4; the traction element 5 extends upward, passing through a compensation chamber 6, and has, on its free terminal end 7, lifting means which are connected to external actuation means by means of lever systems. The lifting means comprise adjustment means for the complete or partial discharge of the water from the cistern, so as to allow controlled emissions of washing water according to the different requirements. The compensation chamber 6 has, at its base, a plurality of pathways 40 for the unobstructed free flow of water toward the port 3.

The lifting means for partial discharge are constituted by an annular body 8 which is inserted and fixed on the traction element 5, which has means for detachable engagement with the adjustment means. The annular body 8 is connected to a first lever system by means of a first bracket 9.

The first lever system is composed of a support 10 which is fixed on an inner wall of the flush tank 1 and has a plurality of supporting seats 11. A first lever 12 is pivoted on one of the supporting seats 11 and is directly connected to the external actuation means, for example an actuation pushbutton 13 which protrudes from the flush tank 1.

The first lever 12 bears a removable engagement means for a second lever 14 which is pivoted, at an end portion, in another one of the supporting seats 11, which is inserted within the first bracket 9 with its other terminal portion, and which bears guiding means for the removable engagement means.

The removable engagement means is constituted by a hook 15 which is mounted so as to rotate angularly on the free end portion of the first lever 12 and is kept in position by means of a snap ring 16.

The guiding means of the second lever 14 are constituted by an inclined segment 17 which rises from the second lever 14 at the hook 15 which is mounted on the first lever 12, so as to facilitate the engagement of said hook 15 with the second lever 14.

The lifting means for complete discharge are constituted by a sliding ring 18 which is inserted on the traction element 5. The ring 18 is connected to a respective second lever system by means of a second bracket 20, and such ring has a bracket-shaped base perimeter within which grip seats 25 for the tabs 19 are defined.

The second lever system is composed of a support 21 which is fixed on an internal wall of the flush tank 1 and which has a plurality of supporting seats 22. A third lever 23 is pivoted on one of said supporting seats 22 and is connected directly to external actuation means, for example an actuation pushbutton 24 which protrudes from the flush tank 1. The free end portion of said third lever 23 is inserted within the second bracket 20.

The adjustment means for partial or complete discharge are constituted by an annular weight 26 which is slidably inserted on the traction element 5 and rests on the chamber 6. The weight 26 has raised engagement portions 27 for detachable engagement means which will be described hereinafter, and an annular containment compartment 28 for water in order to increase its own weight. A plurality of water discharge holes 29 is defined in the lower surface of the annular compartment 28 so as to avoid creating water stagnation regions in the flush tank 1.

tion regions in the flush tank 1.

The detachable engagement means are constituted by levers 30, each of which has, on a terminal portion, an abutment 31 for engaging the annular weight 26 and, on its other terminal portion, an opposite tab 19 engaged by the sliding ring 18 upon its upward movement thereof. The levers 30 are pivoted within the annular body 8 and can perform an angular rotation.

The traction element 5 is constituted by an overflow pipe which, if the water exceeds the overflow level of the flush tank 1, discharges the excess water into the port 3.

The operation of the invention is briefly as follows: in the case of complete discharge, by pressing the pushbutton 24 the third lever 23 is actuated, lifting the ring 18 by means of the second bracket 20. The ring 18 releases the levers 30 from the weight 26 by means of the seats 25, which press the tabs 19 against the traction element 5. The ring 18 thus raises the traction element 5, thus lifting the plug 4 and opening the port 3, from which the water flows out and discharges into the toilet bowl (not illustrated) by gravity.

In case of partial discharge, instead, by acting on the pushbutton 13, the first lever 12 is actuated and, by means of the hook 15, raises the second lever 14. The lifting of the second lever 14 entails the lifting of the traction element 5 by means of the first bracket 9, thus lifting the plug 4 and opening the port 3. The duration of the partial discharge, i.e. the amount of water discharged, is adjusted by the release of the hook 15 from the second lever 14.

The hook 15 unhooks from the second lever 14, since by rotating about the lever 12 it disengages from the lever 14. Once unhooking has occurred, the second lever 14 is free, and the weight 26 causes the immediate closure of the port 3 by means of the plug 4, pushing the traction element 5 downward, due to the greater weight of the weight 26, which can be made of a much heavier material than the traction element, and also due to the water stored in the annular compartment 28.

The holes 29 are required in order to avoid prolonged storing of water within the annular compartment 28.

Where technical features mentioned in any claim are followed by reference signs, those reference signs have been included for the sole purpose of increasing the intelligibility of the claims and accordingly such reference signs do not have any limiting effect on the scope of each element identified by way of example by such reference signs.

Claims

1. Flush tank structure, particularly for the controlled and differentiated washing of toilet bowls in sanitary fittings and the like, comprising

- a flush tank or container (1) having a water inlet (2) arranged adjacent to the upper part, connected to the water mains, and having a discharge port (3) defined in the bottom thereof which is closable by a plug (4),
- automatic means for controlling the feeding of water into said flush tank,
- a traction element (5) supporting said sealing element (4) at one terminal end and defining an overflow pipe, said traction element (5) extending upwardly from said port (3),
- lifting means (8;18) comprising adjustment means (26) provided for complete or partial discharge of water in said tank (1), and being provided on the free terminal end (7) of said traction element (5),
- first and second lever systems (10-17; 21-23) which are respectively connected to external actuation means (13;24) and to said lifting means (8;18) so as to allow controlled discharges of water according to the different requirements by selectively actuating one of said actuation means (13;24), characterized in that said first lever system (10-17) being provided for partial discharge comprises
- a support (10) which is fixed to an inner wall of said flush tank (1), said support (10) having a plurality of supporting seats (11),
- a first lever (12) pivoted on one of said supporting seats (11) of the support (10) and connected with one terminal portion thereof to the respective external actuation means (13) for partial discharge,
- a second lever (14) pivotally supported in another one of the supporting seats (11) of the support (10) and connected with one end thereof to one of said lifting means (8),

said first lever (12) bearing a removable engagement means (15) for coupling said first lever (12) with a guiding means (17) of said second lever (14) in a detachable manner, said first and second levers (12, 14) being decoupled after full operation of said actuation means (13), said lifting means (8; 18) comprising, for partial discharge, an annular body (8) inserted on said traction element (5) and having means (30,31) for detachable engagement

with said adjustment means (26), said annular body (8) being connected to said second lever (14) of said first lever system (10-17) by means of a first bracket (9), said annular body (8) being adapted for lifting said traction element (5) in order to open said port (3), said removable engagement means being constituted by a hook (15) fitted for angular rotation on a free end portion of said first lever (12), said guiding means (17) being constituted by an inclined segment which rises from said second lever (14) at the location of said hook (15) mounted on said first lever (12), so as to facilitate engagement of said hook (15) to the second lever (14).

2. Flush tank structure according to claim 1, characterized in that said lifting means (8;18) are constituted, for complete discharge, by a ring (18) which can slide on said traction element (5) and is suitable for engaging release tabs (19) of said detachable engagement means (30,31) so as to release said adjustment means (26) and thus lift said traction element (5) so as to open said port (3), said ring (18) being connected to a third lever (23) of said second lever system (21-23) provided for complete discharge by means of a second bracket (20).

3. Flush tank structure according to claim 1, characterized in that said second lever system (21-23) comprises a support (21) which is fixed on an internal wall of said flush tank (1), said support (21) having a plurality of supporting seats (22), said third lever (23) being pivoted on one of said supporting seats (22) and being connected directly to an actuation pushbutton (24) which protrudes from said flush tank (1) and is inserted, with its other free end portion, within said second bracket (20).

4. Flush tank structure according to claim 2, characterized in that the sliding ring (18) has a substantially bracket-shaped lower perimeter within which grip seats (25) for said tabs (19) are defined.

5. Flush tank structure according to claims 1 and 2, 3 or 4, characterized in that said adjustment means (26) are constituted by an annular weight which is slidably inserted on said traction element (5).

6. Flush tank structure according to claims 1, 2, 3 or 4, and 5, characterized in that said weight (26) has raised portions (27) for engagement for said detachable engagement means (30,31) and has an annular water containment com-

partment (28) in order to increase its own weight.

7. Flush tank structure according to claim 6, characterized in that said annular compartment (28) has a plurality of water discharge holes (29) defined on its lower surface so as to avoid creating water stagnation regions in the flush tank. 5
8. Flush tank structure according to claims 1 and 5 or 6, characterized in that said detachable engagement means are constituted by levers (30), each of which has an abutment (31) for engagement to said annular weight (26) and said tab (19) which is opposite to said abutment (31). 10 15
9. Flush tank structure according to claims 1 and 2, 3, 4, 5, 6, 7 or 8 characterized in that said hook (15) is suitable for disengaging from said second lever (14) by rotating about said first lever (12) and is engageable with said second lever (14) by virtue of the action of said inclined segment (17). 20 25

Patentansprüche

1. Spülkastenaufbau, insbesondere für das kontrollierte und unterschiedliche Spülen von Toilettenbecken in Sanitärinstallationen und dergleichen, mit 30
 - einem Spülkasten oder -behälter (1), der einen an den oberen Teil angrenzend angeordneten Wassereinlaß (2) aufweist, welcher mit dem Hauptwasserrohr verbunden ist, und der eine in seinem Boden gebildete Auslaßöffnung (3) aufweist, die durch ein Verschlußteil (4) verschließbar ist, 35
 - automatischen Mitteln zur Steuerung des Zuflusses von Wasser in genannten Spülkasten, 40
 - einem Zugteil (5), das genanntes Dichtteil (4) an einem Ende hält und ein Überlaufrohr bildet, wobei sich genanntes Zugteil (5) von genannter Auslaßöffnung (3) aufwärts erstreckt, 45
 - Hubmitteln (8; 18), die für das vollständige oder teilweise Ablassen von Wasser in genanntem Kasten (1) vorgesehene Anpaßmittel (26) aufweisen und die an dem freien Ende (7) des genannten Zugteiles (5) vorgesehen sind, 50
 - ersten und zweiten Hebelsystemen (10-17; 21-23), die jeweils mit externen Betätigungsmitteln (13, 24) und mit genannten Hubmitteln (8; 18) verbunden sind, 55

um kontrolliertes Ablassen von Wasser entsprechend den unterschiedlichen Anforderungen durch wahlweises Betätigen eines der genannten Betätigungsmittel (13; 24) zu erlauben, **dadurch gekennzeichnet**, daß genanntes erstes Hebelsystem (10-17), das für teilweises Ablassen vorgesehen ist, aufweist

- eine Halterung (10), die an einer Innenwand genannten Spülkastens (1) befestigt ist, wobei genannte Halterung (10) eine Mehrzahl von Stützlager (11) aufweist,
- einen ersten Hebel (12), der an einem der genannten Stützlager (11) der Halterung (10) drehbar gelagert und mit seinem einen Endbereich mit den jeweiligen externen Betätigungsmitteln (13) für teilweises Ablassen verbunden ist,
- einen zweiten Hebel (14), der drehbar an einem anderen der Stützlager (11) der Halterung (10) gehalten und mit seinem einen Ende mit einem der genannten Hubmittel (8) verbunden ist,

wobei genannter erster Hebel (12) lösbare Eingriffsmittel (15) zum Kuppeln in lösbarer Weise genannten ersten Hebels (12) mit Führungsmitteln (17) genannten zweiten Hebels (14) trägt, wobei genannte erste und zweite Hebel (12, 14) nach vollständiger Betätigung genannter Betätigungsmittel (13) entkuppelt werden, wobei genannte Hubmittel (8; 18) für teilweises Ablassen einen an genanntem Zugteil (5) eingesetzten ringförmigen Körper (8) aufweisen und Mittel (30, 31) zum lösbaren Eingriff mit genannten Anpaßmitteln (26) aufweisen, wobei genannter ringförmiger Körper (8) mit genanntem zweitem Hebel (14) genannten ersten Hebelsystems (10-17) mittels einer ersten Gabel (9) verbunden ist, wobei genannter ringförmiger Körper (8) zum Anheben genannten Zugteiles (5) geeignet ist, um genannte Auslaßöffnung (3) zu öffnen, wobei genannte lösbare Eingriffsmittel durch einen Haken (15) gebildet sind, der in einem Winkel drehbar an einem freien Endbereich des genannten ersten Hebels (12) angeordnet ist, wobei genannte Führungsmittel (17) durch ein geneigtes Teil gebildet sind, das aus genanntem zweiten Hebel (14) an der Stelle des genannten, an genanntem ersten Hebel (12) befestigten Hakens (15) hervorsteht, um einen Eingriff genannten Hakens (15) mit dem zweiten Hebel (14) zu ermöglichen.

2. Spülkastenaufbau nach Anspruch 1, **dadurch gekennzeichnet**, daß genannte Hubmittel (8; 18) für vollständiges Ablassen durch einen

- Ring (18) gebildet sind, der auf genanntem Zugteil (5) gleiten kann und für einen Eingriff an Auslösevorsprüngen (19) genannter lösbarer Eingriffsmittel (30, 31) geeignet ist, um genannte Anpaßmittel (26) abzukuppeln und auf diese Weise genanntes Zugteil (5) anzuheben, um genannte Auslaßöffnung (3) zu öffnen, wobei genannter Ring (18) mit einem dritten Hebel (23) genannten zweiten Hebelsystems (21-23), das für vollständiges Ablassen vorgesehen ist, mittels einer zweiten Gabel (20) verbunden ist. 5
3. Spülkastenaufbau nach Anspruch 1, **dadurch gekennzeichnet**, daß genanntes zweites Hebelsystem (21-23) eine Halterung (21) aufweist, die an einer Innenwand genannten Spülkastens (1) befestigt ist, wobei genannte Halterung (21) eine Mehrzahl von Stützlagnern (22) aufweist, wobei genannter dritter Hebel (23) drehbar an einem der genannten Stützlager (22) gelagert und direkt mit einem Betätigungsdruckknopf (24), der aus dem Spülkasten (1) herausragt, verbunden und mit seinem anderen freien Endbereich in genannte zweite Gabel (20) eingesetzt ist. 10 15 20 25
4. Spülkastenaufbau nach Anspruch 2, **dadurch gekennzeichnet**, daß der Gleitring (18) einen im wesentlichen gabelförmigen unteren Umfang aufweist, in welchem Greifflächen (25) für genannte Vorsprünge (19) gebildet sind. 30
5. Spülkastenaufbau nach den Ansprüchen 1 und 2, 3 oder 4, **dadurch gekennzeichnet**, daß genannte Anpaßmittel (26) aus einem ringförmigen Gewicht bestehen, das gleitend an genanntem Zugteil (5) eingesetzt ist. 35
6. Spülkastenaufbau nach den Ansprüchen 1, 2, 3 oder 4, und 5, **dadurch gekennzeichnet**, daß genanntes Gewicht erhabene Bereiche (27) zum Eingriff für genannte lösbare Eingriffsmittel (30, 31) aufweist und eine ringförmige abgeteilte Wasseraufnahmekammer (28) zur Erhöhung seines eigenen Gewichts aufweist. 40 45
7. Spülkastenaufbau nach Anspruch 6, **dadurch gekennzeichnet**, daß genannte ringförmige abgeteilte Kammer (28) eine Mehrzahl von an ihrer unteren Fläche gebildeten Wasserablaßöffnungen (29) aufweist, um die Ausbildung von Bereichen, in denen das Wasser steht, in dem Spülkasten zu vermeiden. 50 55
8. Spülkastenaufbau nach den Ansprüchen 1 und 5 oder 6, **dadurch gekennzeichnet**, daß genannte lösbare Eingriffsmittel durch Hebel (30)

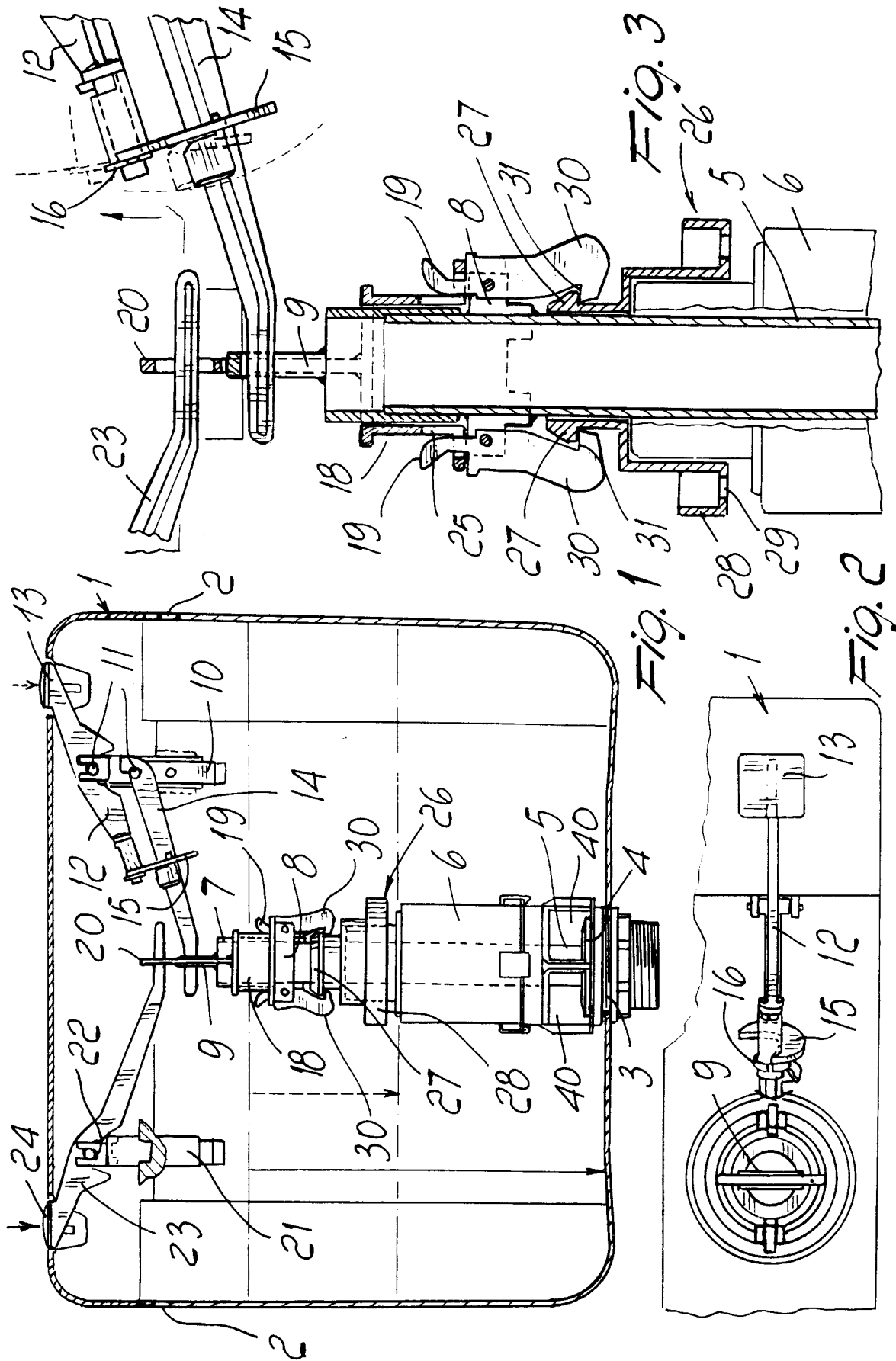
gebildet sind, von denen jeder eine Anlagefläche (31) zum Eingriff an genanntem ringförmigen Gewicht (26) und genannten Vorsprung (19), der gegenüber genannter Anlagefläche (31) angeordnet ist, aufweist.

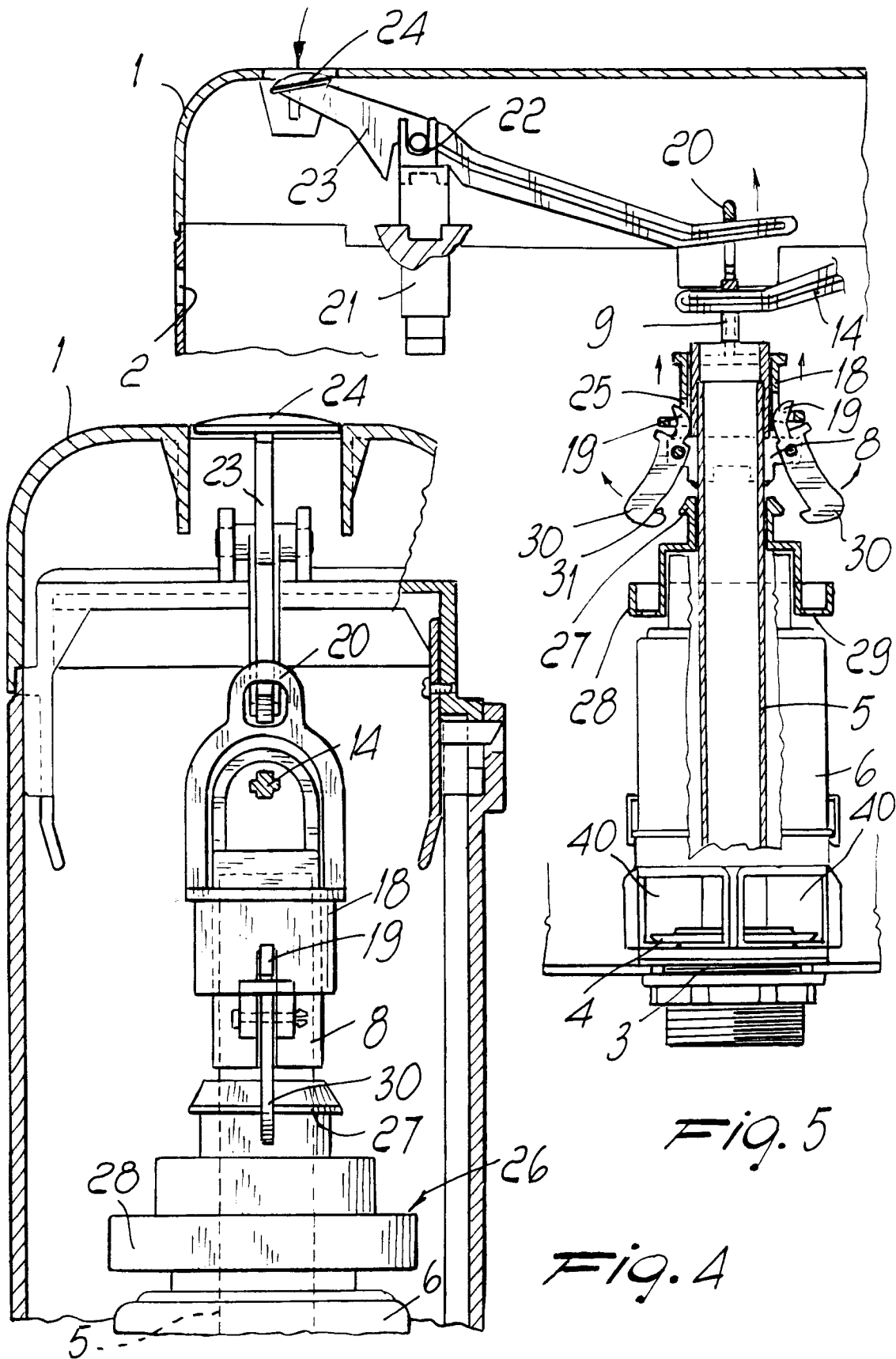
9. Spülkastenaufbau nach den Ansprüchen 1 und 2, 3, 4, 5, 6, 7 oder 8, **dadurch gekennzeichnet**, daß genannter Haken (15) zum Abkuppeln von genanntem zweitem Hebel (14) durch Drehung um genannten ersten Hebel (12) geeignet ist und durch die Wirkung genannten geeigneten Teiles (17) mit genanntem zweiten Hebel (14) in Eingriff bringbar ist.

Revendications

1. Structure de réservoir de chasse d'eau, en particulier pour le nettoyage contrôlé et différencié des cuvettes de WC dans des installations sanitaires et analogues, comprenant :
- un réservoir ou récipient de chasse d'eau (1) ayant une entrée d'eau (2) placée à côté de la partie supérieure, reliée au réseau de distribution d'eau, et ayant un orifice de sortie (3) formé dans sa partie inférieure, susceptible d'être fermé par un clapet (4) ;
 - des moyens automatiques pour commander l'arrivée d'eau dans ledit réservoir ;
 - un élément de traction (5) supportant le clapet (4) à une extrémité et définissant une conduite de trop-plein, ledit élément de traction (5) s'étendant vers le haut depuis ledit orifice (3) ;
 - des moyens de soulèvement (8 ; 18) équipés de moyens de réglage (26) prévus pour vider complètement ou partiellement l'eau dudit réservoir (1) et installés à l'extrémité libre (7) dudit élément de traction (5) ;
 - un premier et un second systèmes de leviers (10-17 ; 21-23) respectivement reliés à des moyens externes de déclenchement (13 ; 24) et auxdits moyens de soulèvement afin de permettre de vider l'eau (8 ; 18) selon différentes exigences en actionnant sélectivement l'un desdits moyens de déclenchement (13 ; 24), caractérisés en ce que ledit premier système de leviers (10-27) destiné à un vidage partiel comprend :
 - un support (10) fixé à une paroi intérieure dudit réservoir de chasse d'eau (1), ledit support (10) présentant une pluralité de sièges (11) ;

- un premier levier (12) monté à pivotement par rapport à l'un desdits sièges (11) du support (10) et relié par une de ses parties terminales aux moyens d'actionnement extérieurs respectifs (13) pour un vidage partiel ; 5
- un second levier (14) supporté à pivotement sur un autre des sièges (11) du support (10) et relié par une de ses extrémités à l'un desdits moyens de soulèvement (8), ledit premier levier (12) portant des moyens de prise démontable (15) pour accoupler ledit premier levier (12) avec des moyens de guidage (17) dudit second levier (14) de manière amovible, lesdits premier et second leviers (12, 14) étant découplés après l'opération complète desdits moyens d'actionnement (13), lesdits moyens de soulèvement (8 ; 18) comprenant, pour un vidage partiel, un élément annulaire (8) placé sur ledit élément de traction (5) et comportant des moyens (30, 31) de prise démontables avec lesdits moyens de réglage (26), ledit élément annulaire (8) étant relié audit second levier (14) dudit premier système de leviers (10-17) grâce à une première console (9), ledit élément annulaire (8) étant capable de soulever ledit élément de traction (5) afin d'ouvrir ledit orifice (3), lesdits moyens de prise démontables comprenant un crochet (15) installé en vue d'une rotation angulaire sur une partie d'extrémité libre dudit premier levier (12), lesdits moyens de guidage (17) étant formés par un segment incliné qui s'élève par rapport au second levier (14) à l'emplacement dudit crochet (15), monté sur ledit premier levier (12), afin de faciliter la mise en prise dudit crochet (15) avec le second levier (14). 10 15 20 25 30 35 40
- 2. Structure de réservoir de chasse d'eau selon la revendication 1, caractérisée en ce que lesdits moyens de soulèvement (8 ; 18) sont constitués, pour un vidage complet, par un anneau (18) qui peut glisser sur ledit élément de traction (5) et qui peut venir en prise avec des taquets de dégagement (19) desdits moyens de prise démontables (30, 31) de manière à dégager lesdits moyens de réglage (26) et à soulever ainsi ledit élément de traction (5) afin d'ouvrir ledit orifice (3), ledit anneau (18) étant relié à un troisième levier (23) dudit second système de leviers (21-23) destiné à un vidage complet, par une seconde console (20). 45 50 55
- 3. Structure de réservoir de chasse d'eau selon la revendication 1, caractérisée en ce que ledit second système de leviers (21-23) comporte un support (21) qui est fixé sur une paroi interne dudit réservoir de chasse d'eau (1), ledit support (21) ayant une pluralité de sièges (22), ledit troisième levier (23) étant monté à pivotement sur un de ces sièges (22) et étant directement relié à un bouton poussoir de déclenchement (24) qui fait saillie dudit réservoir de chasse d'eau (1) et qui est introduit, par son autre partie d'extrémité libre, dans ladite seconde console (20). 4.
- 4. Structure de réservoir de chasse d'eau selon la revendication 2, caractérisée en ce que l'anneau coulissant (18) présente un périmètre inférieur sensiblement en forme de console dans laquelle des sièges de prise (25) sont ménagés pour lesdits taquets (19). 5.
- 5. Structure de réservoir de chasse d'eau selon les revendications 1 et 2, 3 ou 4, caractérisée en ce que lesdits moyens de réglage (26) sont formés par un poids annulaire qui est introduit à coulissement sur ledit élément de traction (5). 6.
- 6. Structure de réservoir de chasse d'eau selon les revendications 1, 2, 3 ou 4 et 5, caractérisée en ce que ledit poids (26) comprend des parties surélevées (27) pour venir en prise avec lesdits moyens de prise démontables (30, 31) et comporte un compartiment (28) annulaire de retenue d'eau pour augmenter son propre poids. 7.
- 7. Structure de réservoir de chasse d'eau selon la revendication 6, caractérisée en ce que ledit compartiment annulaire (28) présente une pluralité d'orifices de sortie d'eau (29) ménagés sur sa surface inférieure afin d'éviter de créer des régions de stagnation d'eau dans le réservoir. 8.
- 8. Structure de réservoir de chasse d'eau selon l'une des revendications 1 et 5 ou 6, caractérisée en ce que lesdits moyens de prise démontables sont formés par des leviers (30), dont chacun porte une butée (31) pour venir en prise avec ledit poids annulaire (26) et ledit taquet (19) qui se trouve en face de ladite butée (31). 9.
- 9. Structure de réservoir de chasse d'eau selon les revendications 1 et 2, 3, 4, 5, 6, 7 ou 8, caractérisée en ce que ledit crochet (15) qui peut se dégager dudit second levier (14) en tournant autour dudit premier levier (12), peut venir en prise avec ledit second levier (14) du fait de l'action dudit segment incliné (17).





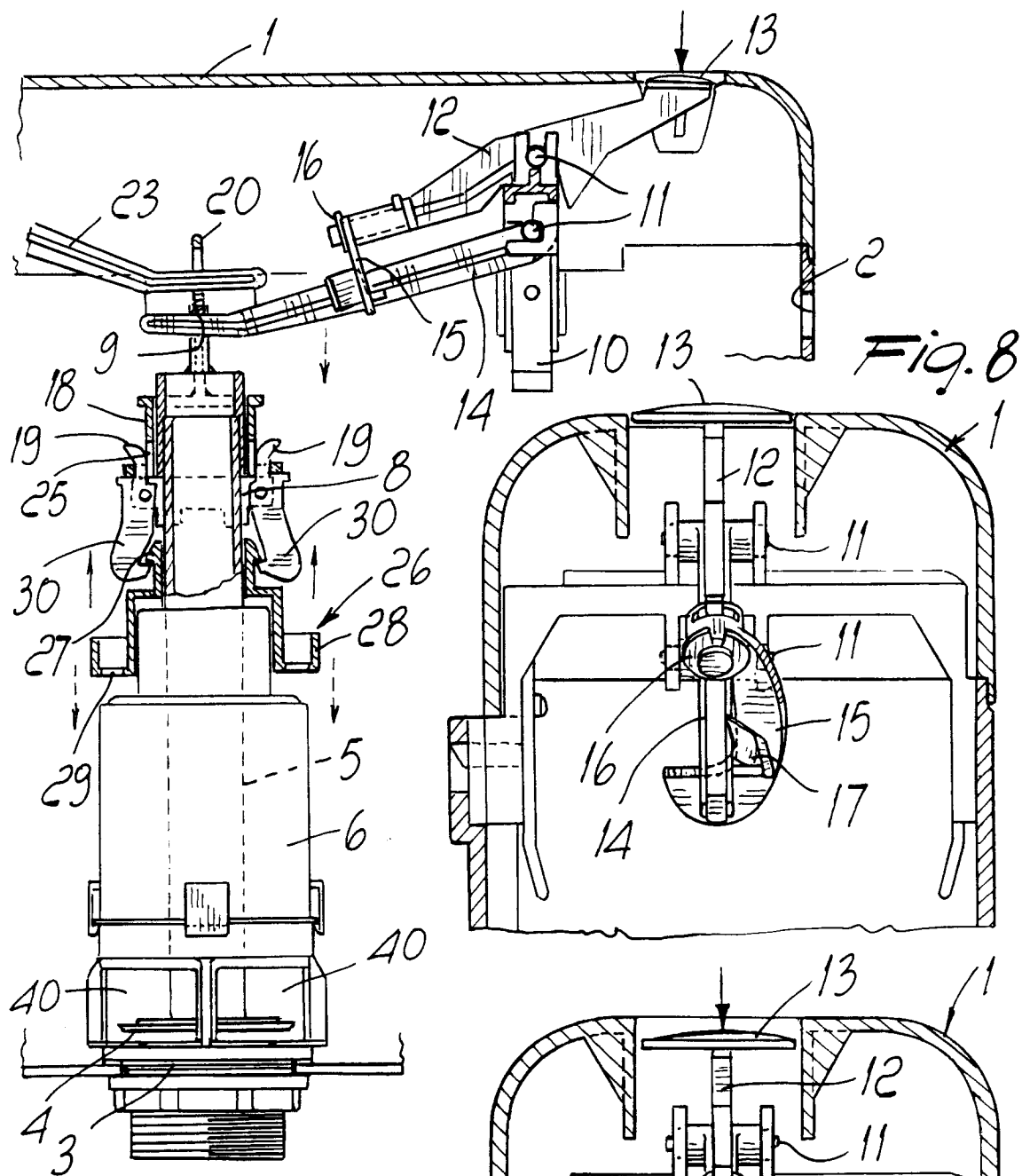


Fig. 6

Fig. 9

