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(54) **Device for connecting a pipe network located in a roadway, and method for use of this device**

Vorrichtung zum Verbinden eines Rohrnetzes in einer Fahrbahn und Anwendungsverfahren

Dispositif pour raccorder un réseau de conduites dans une chaussée et procédé d'utilisation

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Description

[0001] The invention relates to a device for connecting a network of pipes to a distribution conduit, comprising an assembly of a container with upright walls and a cover fitting thereon, provided with at least two openings through which an outer end of a pipe of the pipe network can be fed in each case in order to connect this outer end to a distribution pipe which can be received in the container, wherein for each distribution pipe at least one distribution opening is arranged in the assembly which can be connected to the outer end of the distribution pipe.

[0002] Water is for instance carried through such a pipe network to control the temperature of the road. In this manner icing on the roads can be prevented, for instance in winter, while the road surface can be cooled in the summer in order to reduce wear of the road surface. Such a pipe network must be connected to the main conduit, and a device as described in the first paragraph is used for this purpose.

[0003] Such a device is known in the form of a container with cover manufactured in concrete. Arranged in this container are holes through which are placed the pipes of the pipe network for connecting. These pipes are then connected to a distribution conduit present in this container. The drawback of such a device is that the placing of pipes through the holes in the container cannot always be carried out in convenient manner. Furthermore, these containers are very heavy and as a result can only be placed in position using cranes.

[0004] The object of the present invention is to propose a device for connecting a pipe network which is simple and can be constructed rapidly.

[0005] The invention is distinguished for this purpose in that recesses are arranged at the position of the connection between the upright walls and the cover.

[0006] Arranging of the recesses at the position of the connection between the upright walls and the cover ensures that the pipe ends can be readily guided into the container, since sufficient clearance is possible. When a pipe end protrudes for instance slightly obliquely through the opening, there is sufficient clearance to realize the connection to the distribution pipe.

[0007] According to a first variant of the invention, there are arranged in the assembly at least two distribution openings which can be connected to respectively an outer end of a distribution inlet pipe and an outer end of a distribution outlet pipe.

[0008] In this manner both the inlet ends and the outlet ends of a pipe can be connected via a recess to respectively the inlet and outlet distribution pipes and only one container is required for both the inlet and outlet connections.

[0009] According to a second variant of the invention, for each distribution pipe two distribution openings are arranged in two opposite walls of the container, which openings can be connected to both outer ends of a distribution pipe.

[0010] Such a construction allows different containers to be coupled to each other, wherein the distribution pipes are connected.

[0011] The assembly of container and the cover are preferably manufactured from plastic, for instance polyethylene. The assembly can for instance be manufactured integrally by rotation moulding, whereafter the assembly is sawn in two to obtain the cover and the container, and can then optionally be finished by a milling operation.

[0012] According to a further developed embodiment of the invention, at least one upright wall is provided on its upper edge with a substantially horizontal flange in which semicircular channels are arranged, which channels co-act with semicircular channels arranged in the lower edge of the cover to form a channel-shaped recess. The channel-shaped recesses preferably have a cross-section which is greater than that of a jacket through which the outer end of a pipe of the pipe network can be fed.

[0013] Such a construction is easy to manufacture by rotation moulding and provides sufficient clearance during arranging of the pipes through the recesses.

[0014] In addition, the cover is preferably given a profiled form so that it could absorb a great pressure.

[0015] The middle part of the cover is preferably given an elevated form, so that sufficient space is provided for coupling of the pipe end to the distribution pipe.

[0016] An even further developed embodiment of the invention is characterized in that spacers are arranged between two opposite upright walls of the container to hold two opposite upright walls at constant distance.

[0017] These supporting elements ensure that the walls do not bend toward each other when the container is placed in the ground, which would make the later placing of the cover more difficult.

[0018] The invention also relates to a method for connecting a network of pipes located in a roadway to a distribution conduit, wherein

- a container is placed in the ground adjacently of the roadway;
- one or more distribution pipes of the distribution conduit are placed in the container and connected to corresponding distribution openings arranged in the container.

[0019] The method is distinguished in that

- a pipe end of each pipe of the pipe network for connecting is carried along recesses arranged in the upper edge of the container;
- which outer ends are then brought to size;
- and are connected via an appropriate coupling to the corresponding distribution pipe;
- whereafter the container is closed with a cover.

[0020] The bringing to size entails for instance the pipe

being sawn off substantially perpendicularly above the connecting point to the distribution pipe, which is for instance a tap. The appropriate coupling can for instance consist of a 90° coupling with which a substantially horizontal pipe is guided to the connecting point on the distribution pipe.

[0021] Jackets are preferably arranged in the ground between the roadway and the container for guiding in each case a pipe of the pipe network, which jacket is selected to fit through the recesses between the upper edge of the container and the cover.

[0022] This jacket forms a protection for the pipe and, because the jacket is selected to fit through the recesses between the upper edge of the container and the cover, it largely prevents the penetration of undesired dirt or other matter into the container.

[0023] According to a further embodiment of the method according to the invention, a number of containers is selected in accordance with the number of pipe ends for connecting, wherein an upright wall of a first container provided with one or more distribution openings is placed opposite an upright wall of a subsequent selected container provided with one or more distribution openings, and the corresponding one or more distribution openings are coupled to each other, which steps are repeated until all selected containers are coupled to each other.

[0024] Assuming that a standard container is used with eight recesses for the purpose of connecting respectively four outlet and four inlet pipe ends, and it is desired to connect twelve outlet and twelve inlet pipe ends, then three standard containers will therefore be selected.

[0025] According to a preferred embodiment of the method according to the invention, an appropriate number of distribution pipes is provided on their outer end with a socket such that a socket end of a distribution pipe lies opposite a pipe end of the distribution pipe for coupling thereto, and that the corresponding distribution pipes are coupled to each other by sliding the socket end over the pipe end. This results in a rapid and simple construction of the distribution station, since no extra connecting pieces are required to couple the different distribution pipes to each other.

[0026] Finally, according to the method of the invention an outer end of the distribution pipe or of the assembly of mutually coupled distribution pipes can be connected to a main pipe via an appropriate connecting piece and closed at the other end using a stopper.

[0027] The connection to the main pipe can for instance take place by means of a pipe bend having on one side a socket with flange and on the other side a pipe. The socket can be pushed over the distribution pipe end, while the other side of the pipe bend can be connected to the main pipe via a tension-proof socket.

[0028] The invention will be further elucidated on the basis of the figure description hereinbelow and the annexed drawing, in which a non-limitative embodiment of the invention is discussed. In the drawing:

Figure 1 shows a schematic cross-section of an embodiment of the device according to the invention together with the pipe network arranged in the roadway;

Figure 2 shows a schematic top view of an embodiment of the device according to the invention and the pipe network present in the roadway;

Figure 3 shows a perspective view of an embodiment of the device according to the invention;

Figure 4 shows a top view of an embodiment of the container of the device according to the invention in which are arranged a distribution inlet pipe and a distribution outlet pipe;

Figure 5 shows a front view of an embodiment of the container of the device according to the invention;

Figure 6 shows a side view of an embodiment of the container of the device according to the invention;

Figure 7 shows a top view of an embodiment of the cover of the device according to the invention;

Figure 8 shows a side view of an embodiment of the cover of the device according to the invention;

Figure 9 shows a stopper for closing a distribution pipe for use in an embodiment of the method according to the invention;

Figure 10 shows a pipe bend for connecting the distribution pipe to the main pipe.

[0029] Figure 1 shows a roadway 5 in which a pipe network 3 is accommodated. The road is laid on a bed 6 through which protrudes a jacket 2 leading to container 1 of the device according to the invention. The pipes for connecting are guided inside container 1 by means of jacket 2.

[0030] Between roadway 5 and verge 4 there is typically situated an adjusting stone 8 and a curb 7. Container 1 is normally arranged about 0.75 m under the ground.

[0031] Container 1 with upright walls 15 is closed by a cover 13. At the position of the connection between upright walls 15 and cover 13 are arranged recesses 14, through which is placed the outer end 12 of pipe 3. This end 12 of pipe 3 is connected via a 90° coupling to a tap 23 mounted on distribution conduit 10.

[0032] Distribution conduit 10 provides the supply of water to pipe network 3, as shown in figure 2. The inlet distribution pipe 10 is for instance provided with three connecting points 9 to which a pipe end 12 of the pipe network is connected in each case.

[0033] A typical pattern of the pipe network is shown in figure 2. The water supplied to the pipe network must then be drained again by means of an outlet distribution pipe 11. This distribution pipe is likewise provided with three connecting points 9' to which the outer ends 12' of pipe 3 are connected.

[0034] Figure 3 shows a perspective view of an embodiment of the device according to the invention. The assembly consists of a container 1 and a cover 13. For each distribution pipe there are two distribution openings 16, 16' arranged in two opposite walls 15 of container 1.

Distribution opening 16 is suitable for receiving a pipe end of the distribution pipe, while distribution opening 16' is suitable for receiving the socket end of the distribution pipe. This embodiment is particularly convenient when different containers must be coupled to each other, since a socket end 16' can be coupled in simple manner to a pipe end of a distribution pipe. Container 1 is provided along both sides on its upper edge with a substantially horizontal flange 17 in which semicircular channels 18 are arranged. These channels co-act with the semicircular channels 19 arranged in the lower edge of cover 13, so that a channel-shaped recess is formed when the cover is placed on the container. Cover 13 takes a profiled form and the middle part 20 thereof is given an elevated form to provide sufficient space for connecting pipe ends 12, 12' to distribution pipe 10, 11.

[0035] The distribution openings 16, 16' arranged in the upright side walls 15 of container 1 are shown in detail in figure 6.

[0036] Figure 4 shows a top view of an embodiment of the device according to the invention in which the inlet and outlet distribution pipes 10 and 11 are arranged. The socket end 24 of inlet distribution pipe 10 is connected to distribution opening 16, while the pipe end of inlet distribution pipe 10 protrudes from the distribution opening 16. The distribution outlet pipe 11 is placed in similar manner in container 1, although in reverse direction.

[0037] The front view shown in figure 5 clearly shows the semicircular shape of semicircular channels 18 arranged in the flange on the upper edge of container 1.

[0038] As shown in figure 4, two spacers 21 are arranged between two upright walls 15. These support elements prevent a deformation of the walls when container 1 is placed in the ground, so that cover 13 can be placed without problems in container 1.

[0039] Figures 7 and 8 respectively show a top and side view of an embodiment of cover 13. In this embodiment variant eight semicircular channels 19 are arranged in the lower edge of cover 13. The radius of the semicircular channels 18 and 19 is preferably larger than the radius of jacket 2, so that during fitting of a pipe of the pipe network there is sufficient clearance to realize the connection to the distribution pipe. Cover 13 is mounted on container 1 via screws through holes 28 in the cover.

[0040] If use is made of the embodiment of the device according to the invention shown in figure 3 to construct a distribution box, consisting for instance of three assemblies of container 1 and cover 13, one outer end of the assembly of the three mutually coupled distribution pipes 10, 11 will have to be connected in each case to a main pipe, and the other outer end will have to be closed. Closing can for instance take place using the stopper 26 shown figure 9. Such a stopper 26 can be fixed with tensile strength to the side wall using bolts, for instance by means of press-in nuts.

[0041] Supply to the distribution pipe can for instance take place by means of a pipe bend 27 with a socket 29

with flange on one side and a pipe on the other side, as shown in figure 10. The socket end 29 is pushed over the pipe ends of distribution pipe 10, 11 and fixed with bolts to the side of container 1. The pipe end of pipe bend 27 can be connected to the main pipe, for instance by means of a tensively strong socket.

[0042] Mutual coupling of a number of containers 1 can take place by placing pipe ends 25 into sockets 24 and mutually connecting containers 1 by means of a stainless bolt.

[0043] The embodiment variant of the device according to the invention shown in figure 4 can be manufactured from polyethylene by rotation moulding and weighs, for instance with distribution pipes, about 32 kg with cover and about 25 kg without cover. This light embodiment has the advantage that one man can construct the distribution station easily and quickly. Despite the light weight, this embodiment variant can still effectively withstand a high earth pressure, among other reasons because of the additional pressure-absorbing beams 30 welded on the inside of the container.

[0044] The connecting points on distribution pipe 9, 9' are preferably provided with a tap, which can be closed if the connecting point is not in use. In this case the distribution openings in the side wall of the container can be filled with polyethylene plugs.

[0045] The invention is not limited to the above described embodiments of the invention, but is defined by the scope of protection of the following claims.

Claims

1. Device for connecting a network of pipes (3) to a distribution conduit (10,11), comprising an assembly of a container (1) with upright walls (15) and a cover (13) fitting thereon, provided with at least two openings (14) through which an outer end (12) of a pipe (3) of the pipe network can be fed in each case in order to connect this outer end (12) to a distribution pipe (10) which can be received in the container, wherein for each distribution pipe (10) at least one distribution opening (16) is arranged in the assembly which can be connected to the outer end of the distribution pipe (10), **characterized in that** recesses (14) are arranged at the position of the connection between the upright walls (15) and the cover (13).
2. Device as claimed in claim 1, **characterized in that** there are arranged in the assembly at least two distribution openings (16) which can be connected to respectively an outer end of a distribution inlet pipe (10) and an outer end of a distribution outlet pipe (11).
3. Device as claimed in either of the foregoing claims, **characterized in that** for each distribution pipe two distribution openings (16, 16') are arranged in two opposite walls of the container, which openings can

be connected to both outer ends of a distribution pipe (10).

4. Device as claimed in any of the foregoing claims, **characterized in that** the container (1) and the cover (13) are manufactured from a rigid plastic.
5. Device as claimed in any of the foregoing claims, **characterized in that** at least one upright wall is provided on its upper edge with a substantially horizontal flange (17) in which semicircular channels (18) are arranged, which channels co-act with semicircular channels (19) arranged in the lower edge of the cover (13) to form a channel-shaped recess.
6. Device as claimed in claim 5, **characterized in that** the channel-shaped recess has a cross-section which is greater than that of a jacket (2) through which the outer end of a pipe of the pipe network can be fed.
7. Device as claimed in any of the foregoing claims, **characterized in that** the middle part (20) of the cover (13) is given an elevated form.
8. Device as claimed in any of the foregoing claims, **characterized in that** spacers (21) are arranged between two opposite upright walls (15) of the container to hold two opposite upright walls (15) at constant distance.
9. Method for connecting a network of pipes (3) located in a roadway (5) to a distribution conduit (10,11), wherein

- a container (1) is placed in the ground adjacently of the roadway;
- one or more distribution pipes (10, 11) of the distribution conduit are placed in the container (1) and connected to corresponding distribution openings (16, 16') arranged in the container (1), **characterized in that**
- a pipe end (12, 12') of each pipe of the pipe network for connecting is carried along recesses (18) arranged in the upper edge of the container;
- which outer ends (12, 12') are then brought to size;
- and are connected via an appropriate coupling (22) to the corresponding distribution pipe (10, 11);
- whereafter the container (1) is closed with a cover (13).

10. Method as claimed in claim 9, **characterized in that** a jacket (2) is arranged in the ground between the roadway and the container (1) for guiding a pipe (3) of the pipe network, which jacket (2) is selected to fit through the recesses between the upper edge of

the container (1) and the cover (13).

11. Method as claimed in claim 9 or 10, **characterized in that** a number of containers (1) is selected in accordance with the number of pipe ends for connecting, wherein an upright wall (15) of a first container (1) provided with one or more distribution openings (16, 16') is placed opposite an upright wall of a subsequent selected container (1) provided with one or more distribution openings (16', 16), and the corresponding one or more distribution openings (16, 16') are coupled to each other, which steps are repeated until all selected containers (1) are coupled to each other.
12. Method as claimed in claim 11, **characterized in that** an appropriate number of distribution pipes (10, 11) is provided on their outer end with a socket such that a socket end (24) of a distribution pipe lies opposite a pipe end (25) of the distribution pipe (10, 11) for coupling thereto, and that the corresponding distribution pipes (10, 11) are coupled to each other by sliding the socket end (24) over the pipe end (25).
13. Method as claimed in any of the claims 9-12, **characterized in that** an outer end of the distribution pipe (10, 11) or of the assembly of mutually coupled distribution pipes (10, 11) is connected to a main pipe via an appropriate connecting piece (27), and that the other end is closed using a stopper (26).

Patentansprüche

1. Vorrichtung zum Verbinden eines Rohrnetzes (3) mit einer Verteilerleitung (10, 11), mit einer Baugruppe bestehend aus einem Behälter (1) mit aufrechten Wänden (15) und einer daran angebrachten Abdeckung (13), die mit zumindest zwei Öffnungen (14) versehen ist, durch die jeweils ein äußeres Ende (12) eines Rohres (3) des Rohrnetzes zugeführt werden kann, um dieses äußere Ende (12) mit einem Verteilerrohr (10) zu verbinden, das in dem Behälter aufgenommen werden kann, wobei für jedes Verteilerrohr (10) zumindest eine Verteileröffnung (16) in der Baugruppe angeordnet ist, die mit dem äußeren Ende des Verteilerrohres (10) verbunden werden kann, **dadurch gekennzeichnet, dass** Aussparungen (14) an der Position der Verbindung zwischen den aufrechten Wänden (15) und der Abdeckung (13) angeordnet sind.
2. Vorrichtung gemäß Anspruch 1, **dadurch gekennzeichnet, dass** in der Baugruppe zumindest zwei Verteileröffnungen (16) angeordnet sind, die mit einem äußeren Ende eines Verteilereinlassrohres (10) bzw. einem äußeren Ende eines Verteilerauslassrohres (11) verbunden werden können.

3. Vorrichtung gemäß einem der vorangehenden Ansprüche, **dadurch gekennzeichnet, dass** für jedes Verteilerrohr zwei Verteileröffnungen (16, 16') in zwei gegenüberliegenden Wänden des Behälters angeordnet sind, wobei die Öffnungen mit beiden äußeren Enden eines Verteilerrohres (10) verbunden werden können. 5
4. Vorrichtung gemäß einem der vorangehenden Ansprüche, **dadurch gekennzeichnet, dass** der Behälter (1) und die Abdeckung (13) aus steifem Kunststoff hergestellt sind. 10
5. Vorrichtung gemäß einem der vorangehenden Ansprüche, **dadurch gekennzeichnet, dass** zumindest eine aufrechte Wand an seiner oberen Kante mit einem im Wesentlichen horizontalen Flansch (17) versehen ist, in dem halbrunde Kanäle (18) angeordnet sind, wobei die Kanäle mit halbrunden Kanälen (19) zusammenwirken, die in der unteren Kante der Abdeckung (13) angeordnet sind, um eine kanalförmige Aussparung zu bilden. 15
6. Vorrichtung gemäß Anspruch 5, **dadurch gekennzeichnet, dass** die kanalförmige Aussparung einen Querschnitt aufweist, der größer ist als jener einer Ummantelung (2), durch die das äußere Ende eines Rohres des Rohrnetzes zugeführt werden kann. 20
7. Vorrichtung gemäß einem der vorangehenden Ansprüche, **dadurch gekennzeichnet, dass** der mittlere Teil (20) der Abdeckung (13) eine erhabene Form hat. 25
8. Vorrichtung gemäß einem der vorangehenden Ansprüche, **dadurch gekennzeichnet, dass** Abstandsstücke (21) zwischen zwei gegenüberliegenden aufrechten Wänden (15) des Behälters angeordnet sind, um die beiden gegenüberliegenden aufrechten Wände (15) in einem konstanten Abstand zu halten. 30
9. Verfahren zum Verbinden eines Rohrnetzes (3), das sich in einer Fahrbahn (5) befindet, mit einer Verteilerleitung (10, 11), wobei 35
- ein Behälter (1) in den Boden angrenzend an der Fahrbahn platziert wird;
 - ein oder mehrere Verteilerrohre (10, 11) der Verteilerleitung in den Behälter (1) platziert und mit entsprechenden Verteileröffnungen (16, 16') verbunden werden, die in dem Behälter (1) angeordnet sind, **dadurch gekennzeichnet, dass** 40
 - ein Rohrende (12, 12') von jedem Rohr des Rohrnetzes zum Verbinden entlang Aussparungen (18) geführt wird, die in der oberen Kante des Behälters angeordnet sind; 45
 - wobei die äußeren Enden (12, 12') dann auf Größe gebracht werden;
 - und dann über eine geeignete Kopplung (22) mit dem entsprechenden Verteilerrohr (10, 11) verbunden werden;
 - wonach der Behälter (1) durch eine Abdeckung (13) geschlossen wird.
10. Verfahren gemäß Anspruch 9, **dadurch gekennzeichnet, dass** eine Ummantelung (2) in den Boden zwischen der Fahrbahn und dem Behälter (1) zum Führen eines Rohres (3) des Rohrnetzes angeordnet wird, wobei die Ummantelung (2) so ausgewählt wird, dass sie durch die Aussparungen zwischen der oberen Kante des Behälters (1) und der Abdeckung (13) passt. 50
11. Verfahren gemäß Anspruch 9 oder 10, **dadurch gekennzeichnet, dass** eine Anzahl Behälter (1) gemäß der Anzahl Rohrenden zum Verbinden ausgewählt wird, wobei eine aufrechte Wand (15) eines ersten Behälters (1), die mit einer oder mehreren Verteileröffnungen (16, 16') versehen ist, gegenüber einer aufrechten Wand eines nachfolgend ausgewählten Behälters (1) platziert wird, der mit einer oder mehreren Verteileröffnungen (16', 16) versehen ist, und die entsprechende eine oder die entsprechenden mehreren Verteileröffnungen (16, 16') aneinander gekoppelt werden, wobei die Schritte wiederholt werden, bis alle ausgewählten Behälter (1) aneinander gekoppelt sind. 55
12. Verfahren gemäß Anspruch 11, **dadurch gekennzeichnet, dass** eine geeignete Anzahl Verteilerrohre (10, 11) an deren äußeren Ende mit einer Fassung derart versehen ist, dass ein Fassungsende (24) eines Verteilerrohres gegenüber einem Rohrende (25) des Verteilerrohres (10, 11) liegt, um es daran zu koppeln, und dass die entsprechenden Verteilerrohre (10, 11) aneinander gekoppelt werden, indem das Fassungsende (24) über das Rohrende (25) geschoben wird.
13. Verfahren gemäß einem der Ansprüche 9 bis 12, **dadurch gekennzeichnet, dass** ein äußeres Ende des Verteilerrohres (10, 11) oder der Baugruppe der aneinander gekoppelten Verteilerrohre (10, 11) mit einem Hauptrohr über ein geeignetes Verbindungsstück (27) verbunden wird, und dass das andere Ende unter Verwendung eines Stoppers (26) geschlossen wird.

Revendications

1. Dispositif destiné à raccorder un réseau de tuyaux (3) à un conduit de distribution (10, 11), comprenant un ensemble d'un récipient (1) muni de parois verti-

- cales (15) et d'un couvercle (13) pouvant être adapté sur celui-ci, doté d'au moins deux ouvertures (14) à travers lesquelles une extrémité extérieure (12) d'un tuyau (3) du réseau de tuyaux peut être alimentée dans chaque cas afin de raccorder cette extrémité extérieure (12) à un tuyau de distribution (10) qui peut être accueilli dans le récipient, dans lequel pour chaque tuyau de distribution (10) au moins une ouverture de distribution (16) est agencée dans l'ensemble qui peut être raccordé à l'extrémité extérieure du tuyau de distribution (10), **caractérisé en ce que** des encastrements (14) sont agencés à la position du raccordement entre les parois verticales (15) et le couvercle (13).
2. Dispositif selon la revendication 1, **caractérisé en ce que** l'ensemble comprend au moins deux ouvertures de distribution (16) qui peuvent être raccordées, respectivement, à une extrémité extérieure d'un tuyau d'entrée de distribution (10) et une extrémité extérieure d'un tuyau de sortie de distribution (11).
3. Dispositif selon l'une quelconque des revendications précédentes, **caractérisé en ce que** pour chaque tuyau de distribution, deux ouvertures de distribution (16, 16') sont agencées dans deux parois opposées du récipient, lesdites ouvertures pouvant être raccordées aux deux extrémités extérieures d'un tuyau de distribution (10).
4. Dispositif selon l'une quelconque des revendications précédentes, **caractérisé en ce que** le récipient (1) et le couvercle (13) sont fabriqués à partir de plastique rigide.
5. Dispositif selon l'une quelconque des revendications précédentes, **caractérisé en ce qu'**au moins une paroi verticale est dotée sur son bord supérieur d'une bride sensiblement horizontale (17) dans laquelle des canaux semi-circulaires (18) sont agencés, lesdits canaux coagissant avec les canaux semi-circulaires (19) agencés dans le bord inférieur du couvercle (13) pour former un encastrement en forme de canal.
6. Dispositif selon la revendication 5, **caractérisé en ce que** l'encastrement en forme de canal a une section transversale supérieure à celle d'une chemise (2) à travers laquelle l'extrémité extérieure d'un tuyau du réseau de tuyaux peut être alimentée.
7. Dispositif selon l'une quelconque des revendications précédentes, **caractérisé en ce que** la partie centrale (20) du couvercle (13) est de forme élevée.
8. Dispositif selon l'une quelconque des revendications précédentes, **caractérisé en ce que** des entretoises (21) sont agencées entre deux parois verticales opposées (15) du récipient pour maintenir deux parois verticales opposées (15) à une distance constante.
9. Procédé destiné au raccordement d'un réseau de tuyaux (3) situé dans une chaussée (5) d'une conduite de distribution (10, 11), dans lequel :
- un récipient (1) est placé dans le sol de façon adjacente à la chaussée ;
 - un ou plusieurs tuyaux de distribution (10, 11) du conduit de distribution sont placés dans le récipient (1) et connectés aux ouvertures de distribution (16, 16') correspondantes agencées dans le récipient (1), **caractérisé en ce que** :
 - une extrémité de tuyau (12, 12') de chaque tuyau du réseau de tuyaux pour le raccordement est supportée le long des encastrements (18) agencés dans le bord supérieur du récipient ;
 - lesdites extrémités extérieures (12, 12') sont alors amenées à la dimension ; et
 - sont raccordées par un couplage (22) approprié au tuyau de distribution (10, 11) correspondant ;
 - après quoi le récipient (1) est fermé avec un couvercle (13).
10. Procédé selon la revendication 9, **caractérisé en ce qu'**une chemise (2) est agencée dans le sol entre la chaussée et le récipient (1) de manière à guider un tuyau (3) du réseau de tuyaux, ladite chemise (2) étant sélectionnée pour s'adapter à travers les encastrements entre le bord supérieur du récipient (1) et le couvercle (13).
11. Procédé selon la revendication 9 ou 10, **caractérisé en ce qu'**un nombre de récipients (1) est sélectionné selon le nombre d'extrémités de tuyaux pour le raccordement, dans lequel une paroi verticale (15) d'un premier récipient (1) doté d'une ou de plusieurs ouvertures de distribution (16, 16') est placée à l'opposé d'une paroi verticale d'un récipient (1) sélectionné successif doté d'une ou de plusieurs ouvertures de distribution (16, 16'), et les ouvertures de distribution correspondantes au nombre d'un ou plus sont couplées l'une à l'autre, lesdites étapes étant répétées jusqu'à ce que tous les récipients sélectionnés (1) soient couplés l'un à l'autre.
12. Procédé selon la revendication 11, **caractérisé en ce qu'**un nombre approprié de tuyaux de distribution (10, 11) est doté sur leur extrémité extérieure d'une douille de telle sorte qu'une extrémité de douille (24) d'un tuyau de distribution repose à l'opposé d'une extrémité de tuyau (25) du tuyau de distribution (10, 11) pour le couplage avec cellé-ci, et **en ce que** les tuyaux de distribution (10, 11) correspondants sont

couplés l'un à l'autre par coulissement de l'extrémité de la douille (24) sur l'extrémité du tuyau (25).

- 13.** Procédé selon l'une quelconque des revendications 9 à 12, **caractérisé en ce qu'**une extrémité extérieure du tuyau de distribution (10, 11) ou de l'ensemble de tuyaux de distribution (10, 11) mutuellement couplés est connectée à un tuyau principal par une pièce de raccordement (27) appropriée, et **en ce que** l'autre extrémité est fermée en utilisant un bouchon (26). 5 10

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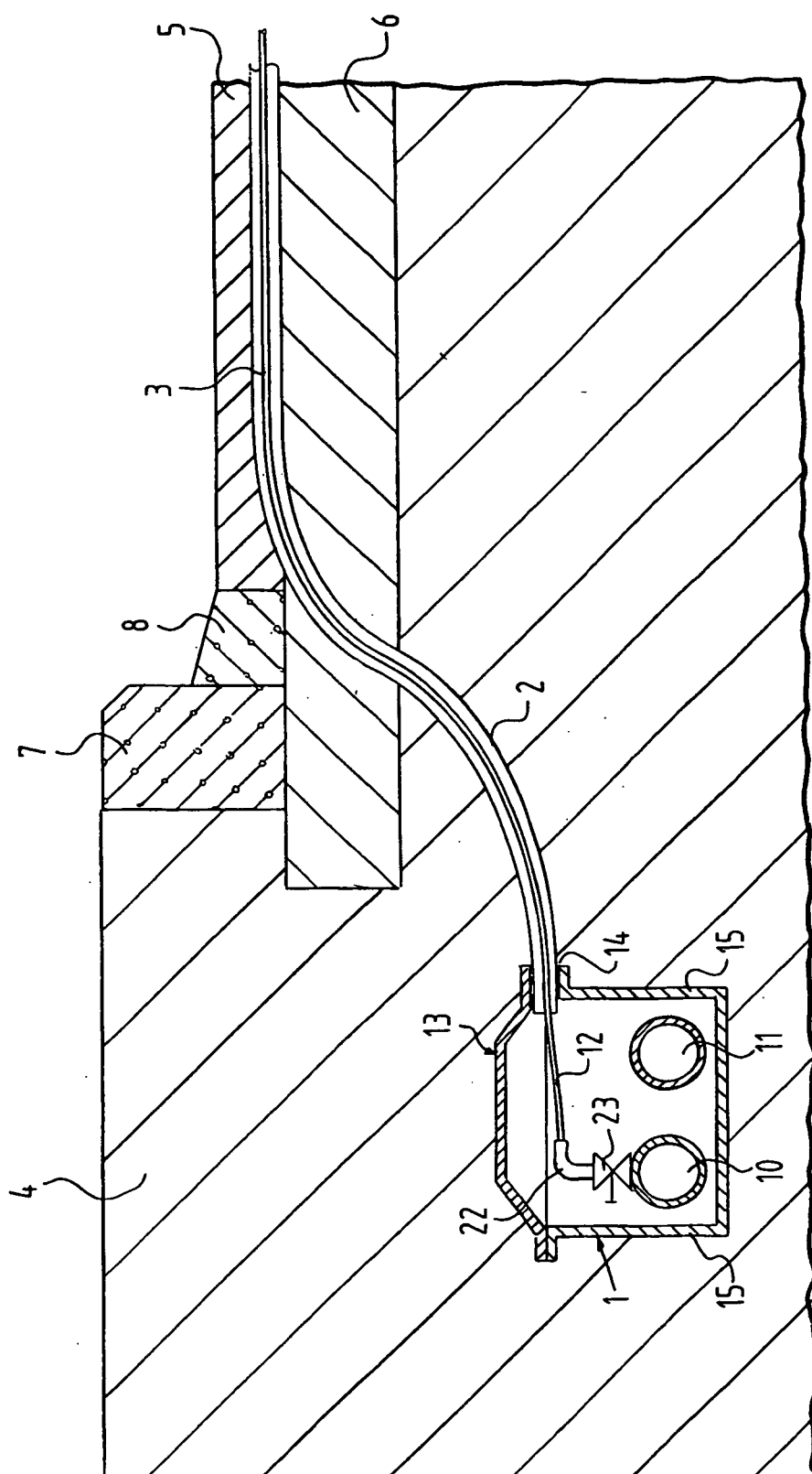
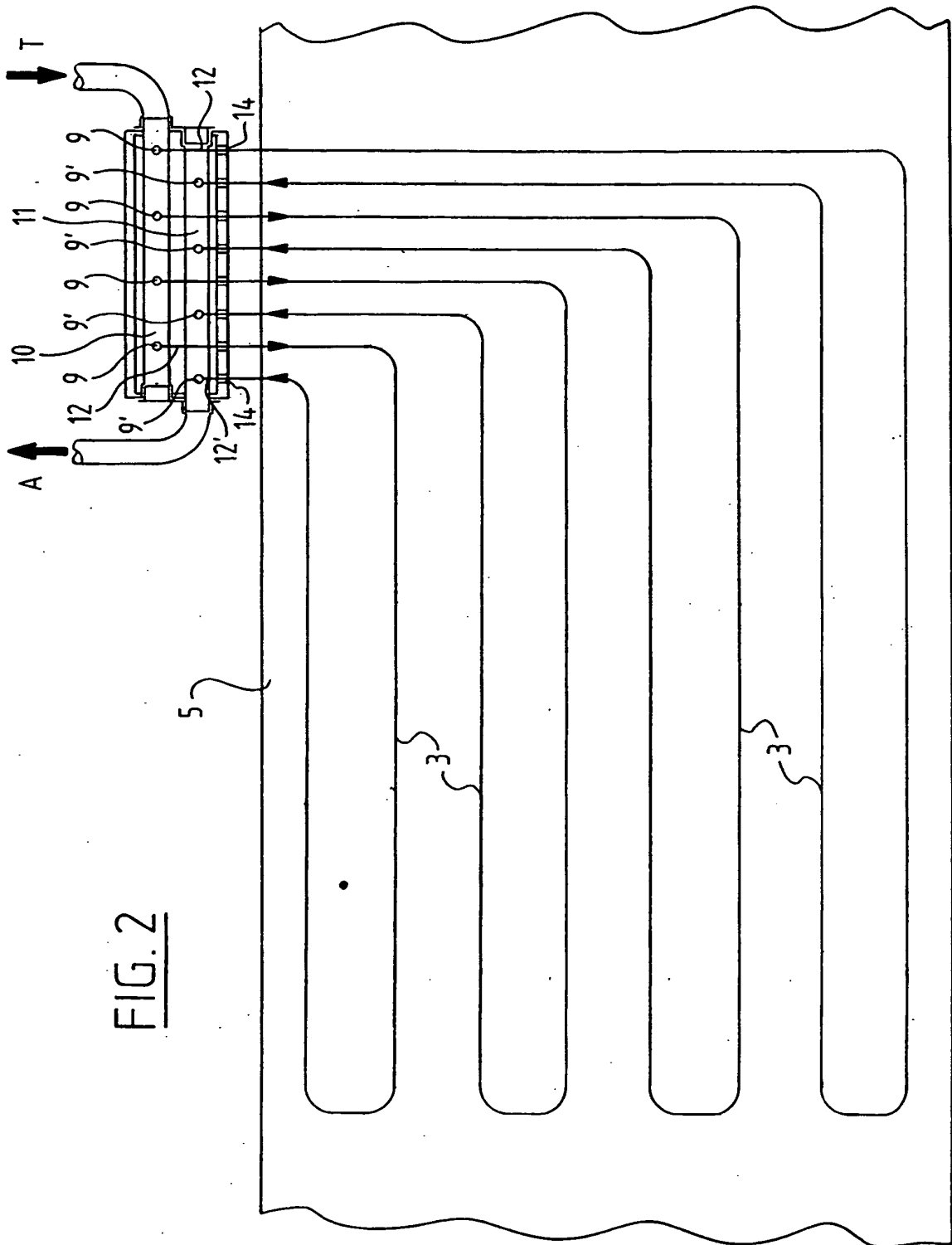


FIG. 1



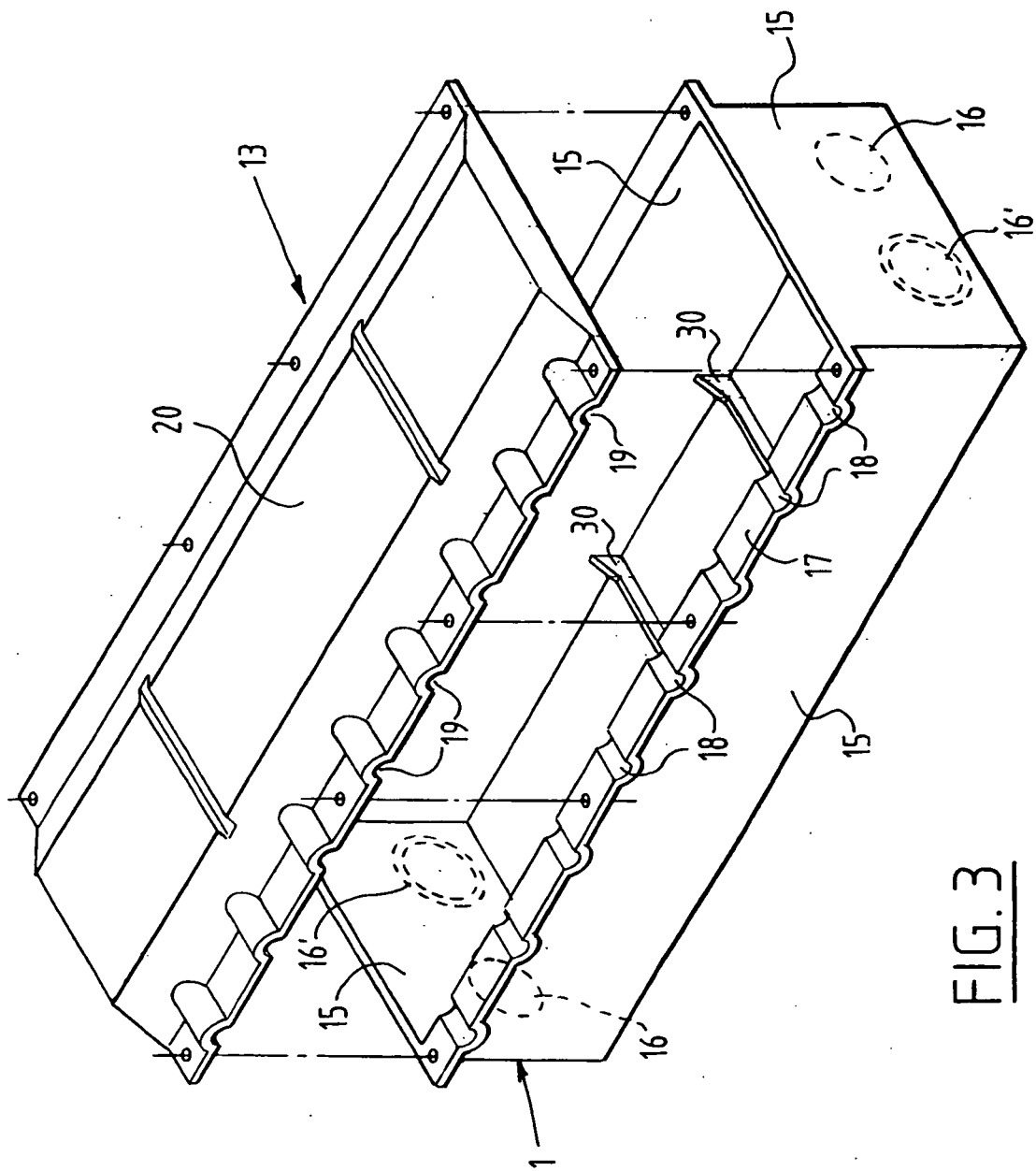


FIG. 3

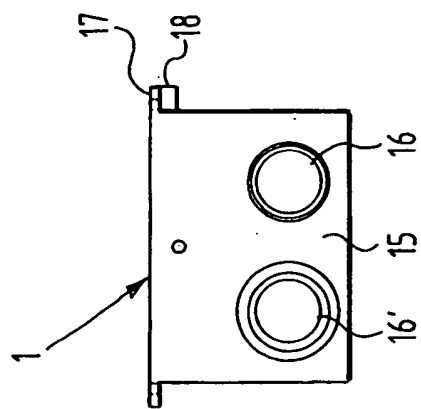
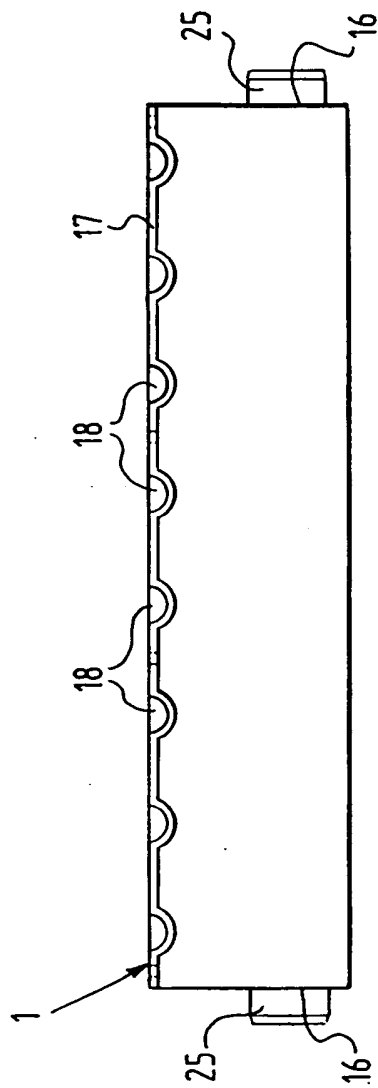
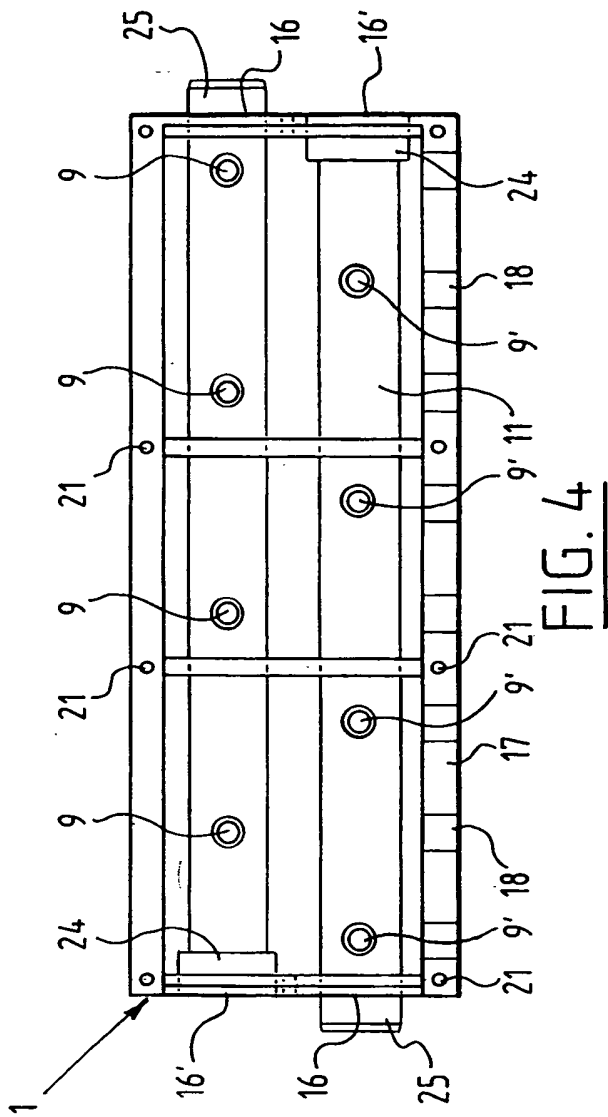
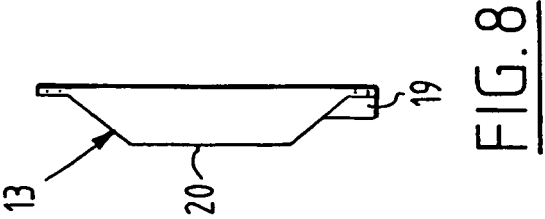
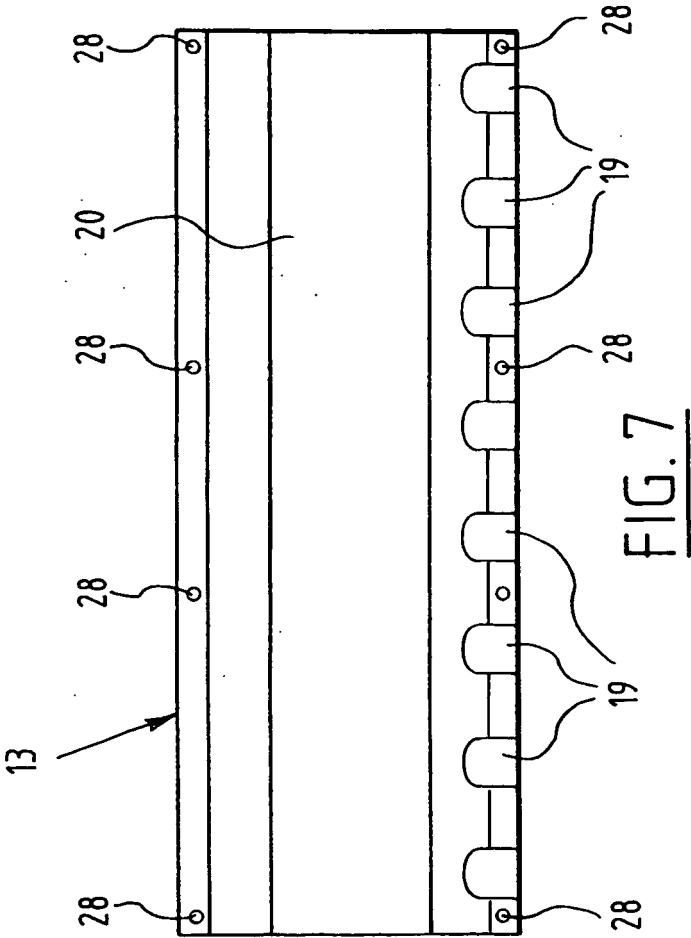


FIG. 5

FIG. 6



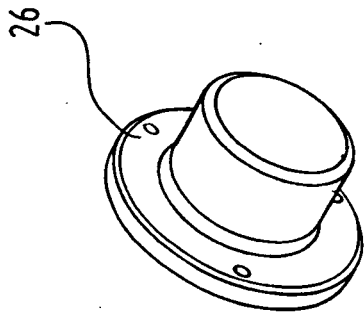


FIG. 9

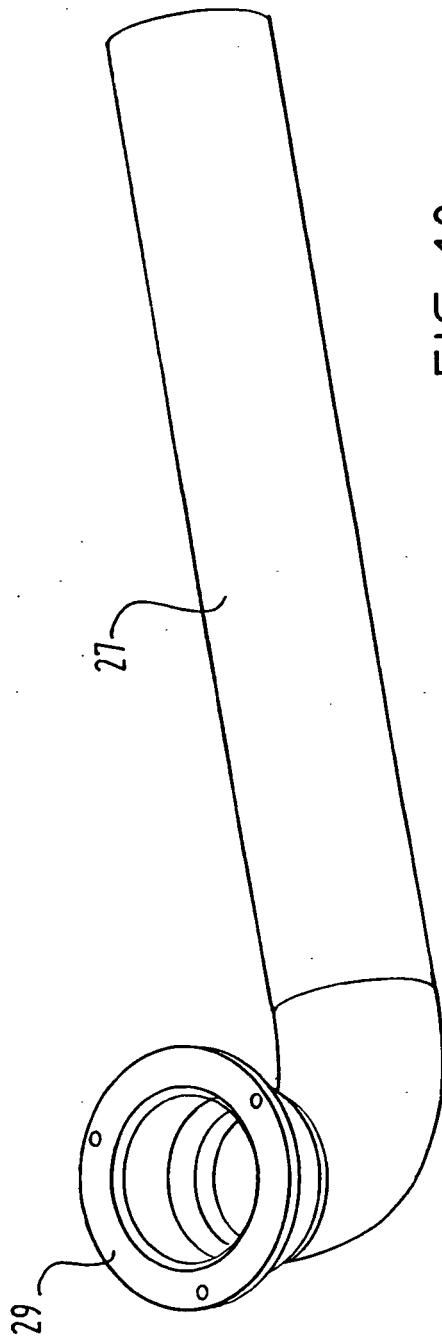


FIG. 10