

Feb. 24, 1953

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2,629,510

COMBINATION OIL FILL AND VENT WALL FITTING

Filed April 10, 1947

2 SHEETS—SHEET 1

Fig. 1.

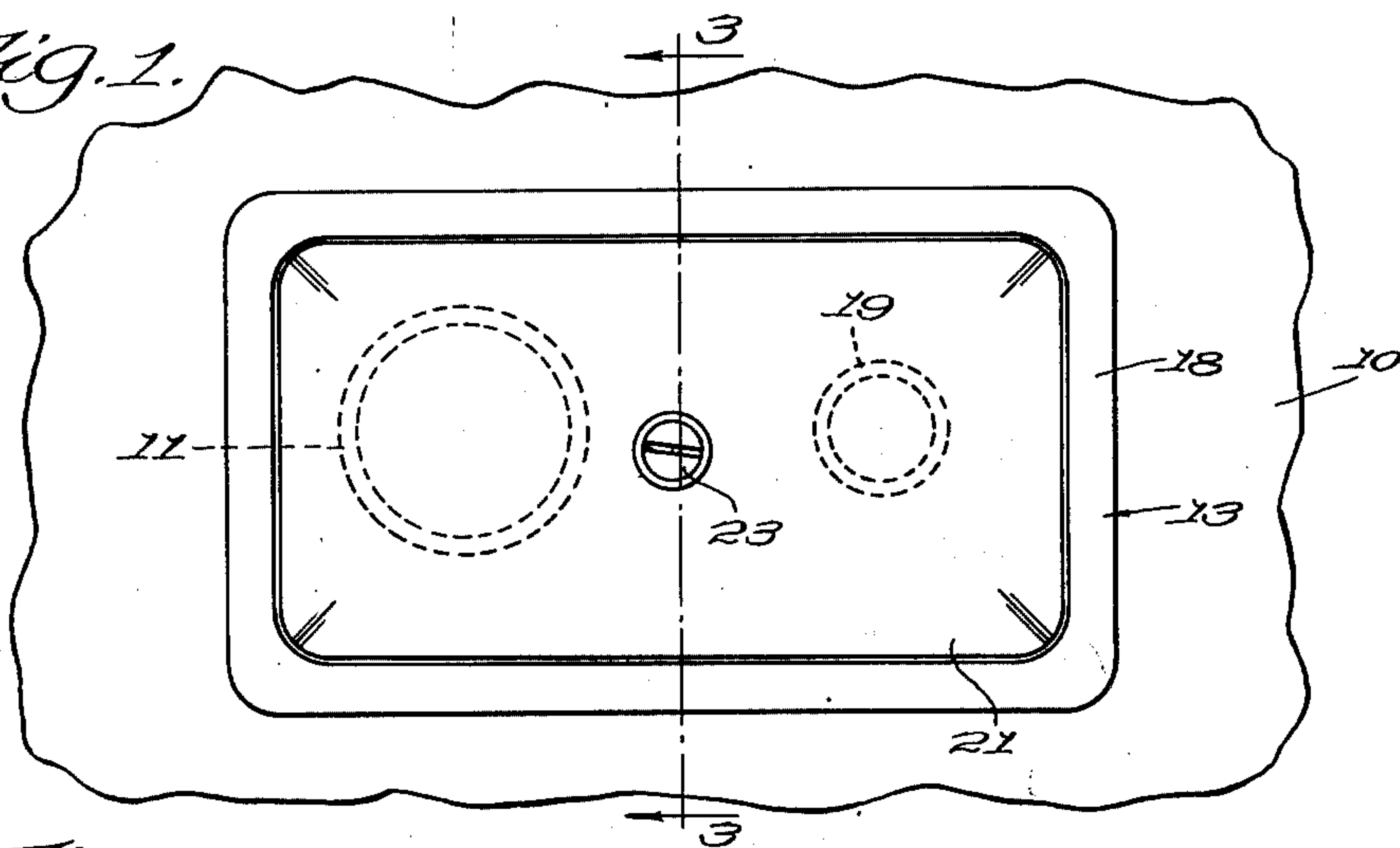


Fig. 2.

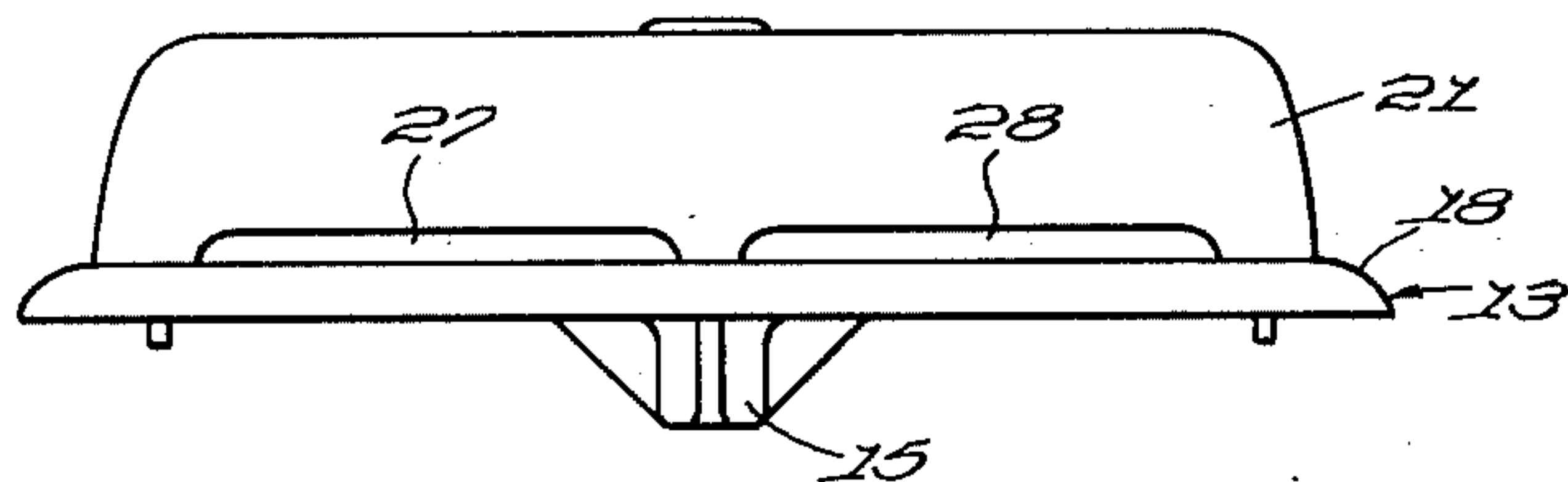
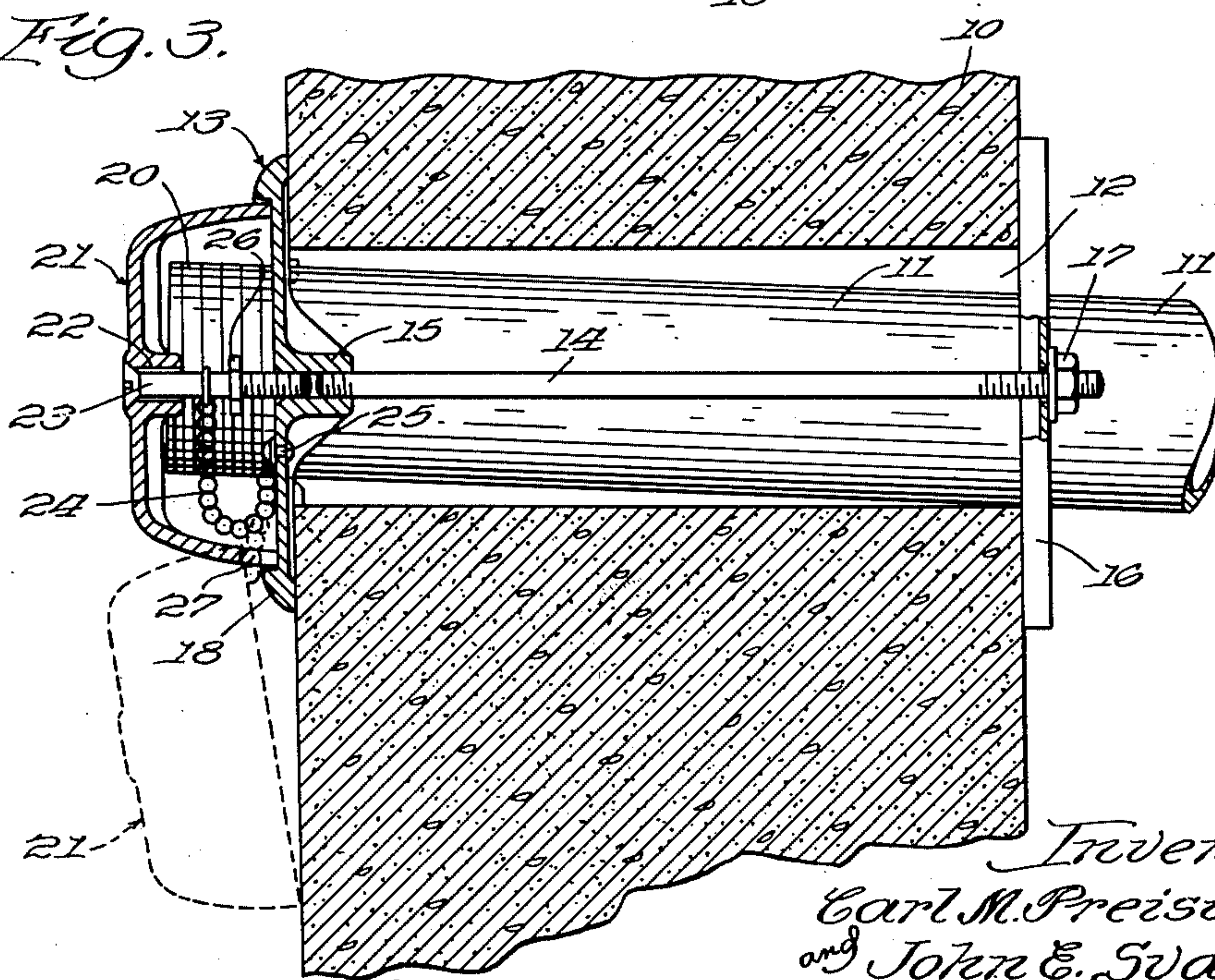


Fig. 3.



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2 SHEETS—SHEET 2

Fig. 4.

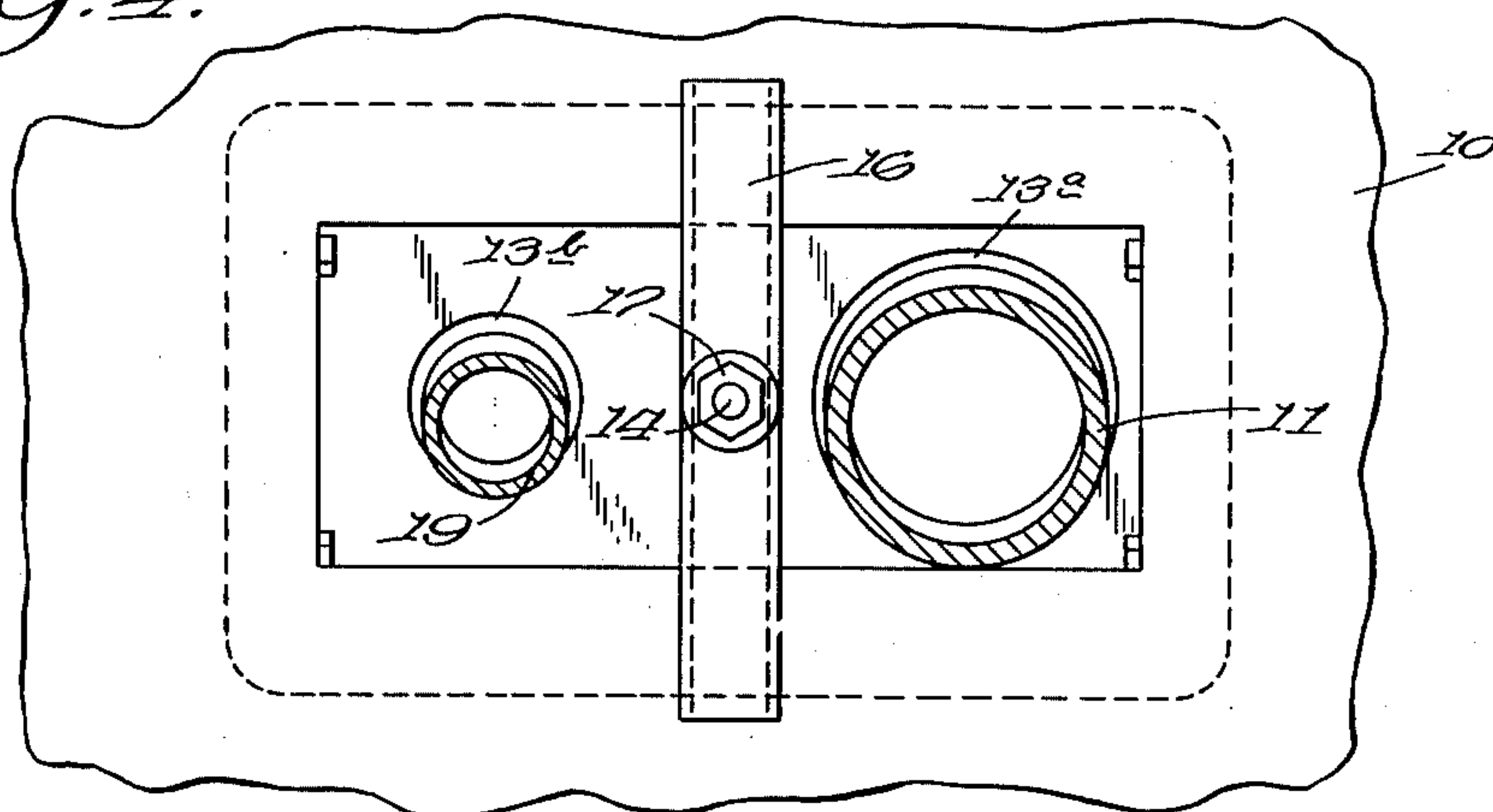


Fig. 5.

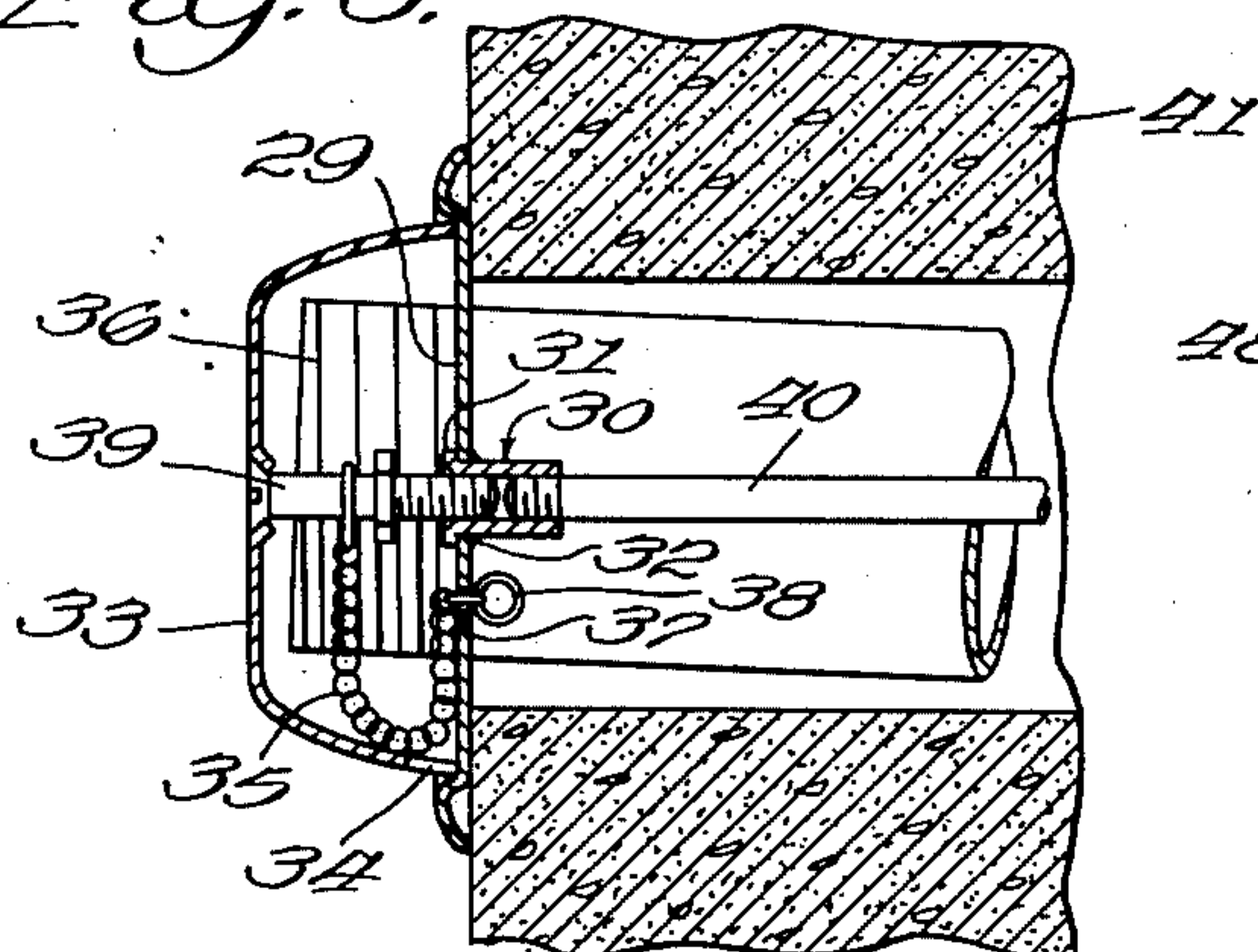


Fig. 7.

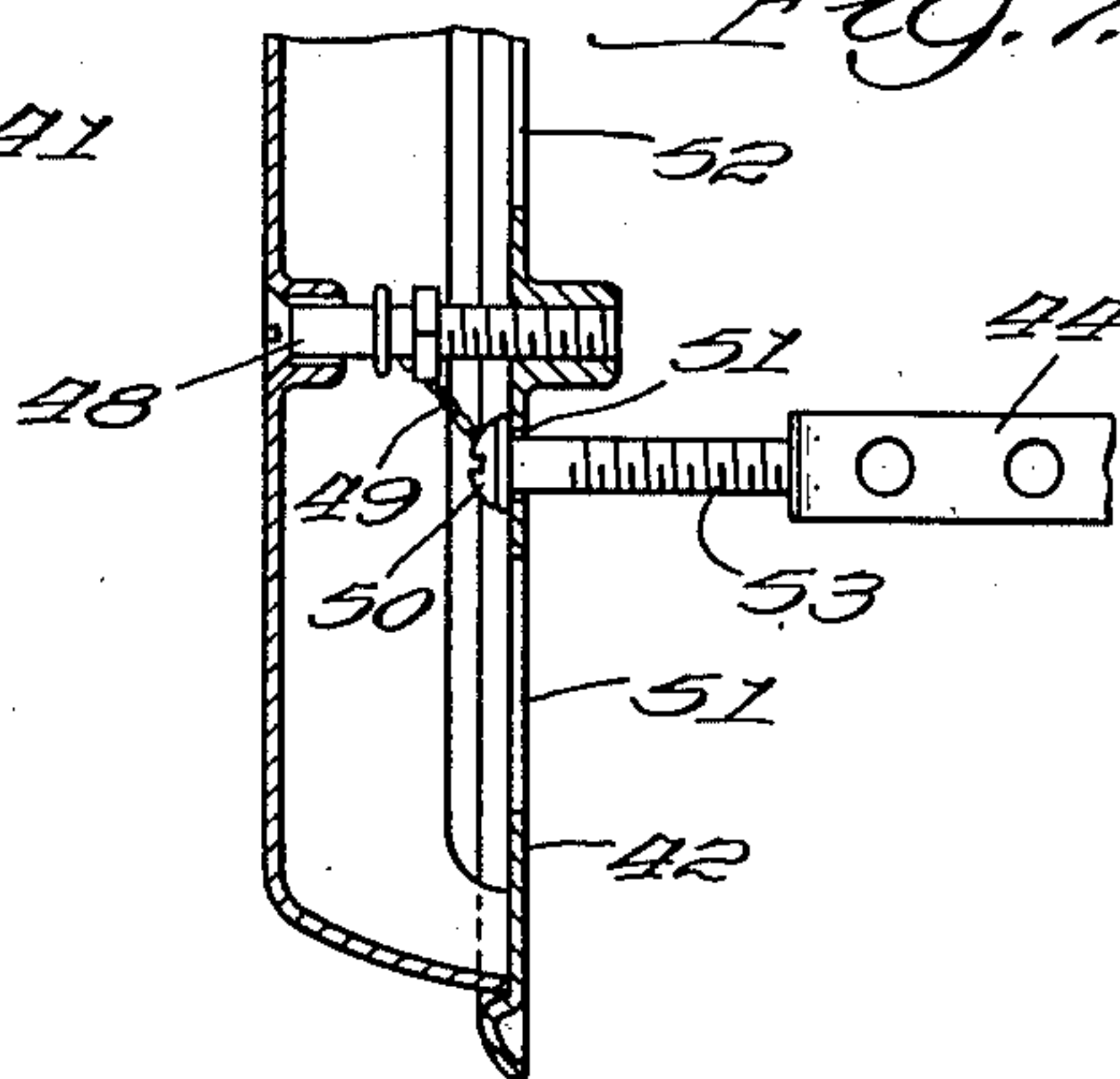
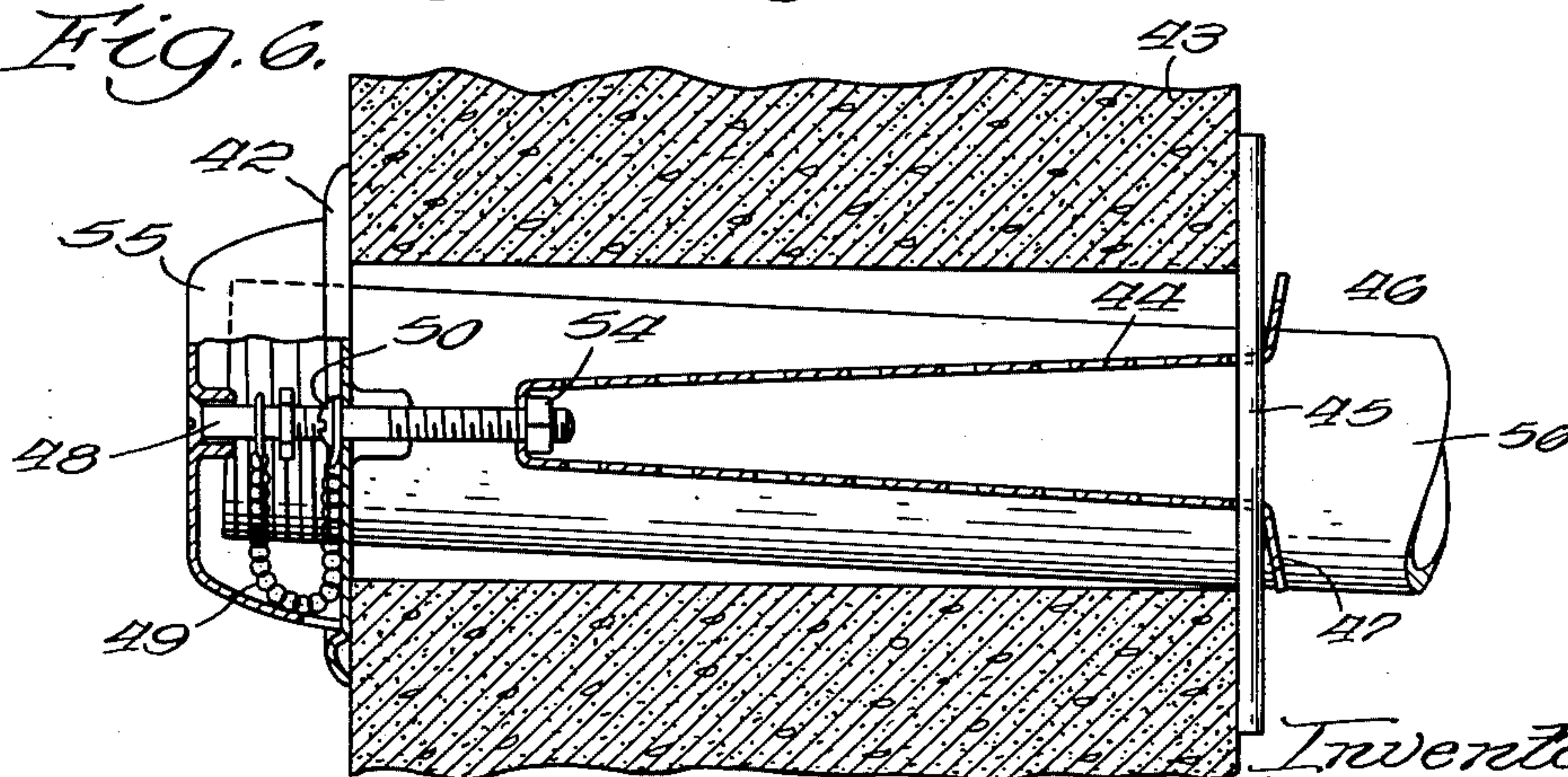


Fig. 6.



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COMBINATION OIL FILL AND VENT WALL FITTING

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2 Claims. (Cl. 220—3.3)

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This invention relates to a new and improved combination oil fill and vent wall fitting for use in conjunction with fuel oil storage tanks.

Another important object of this invention relates to a single removable cover for oil fill and vent terminals.

A further object of this invention is to provide a fitting for attachment to the outside of a building wall and adapted to receive a plurality of pipe terminals.

A still further object of this invention is the provision of an escutcheon plate fixedly held against an outer wall surface and receiving there-through oil fill and vent pipes extending from the interior of the wall, and a removable cover co-operating with the escutcheon plate for concealing the oil fill and vent pipes.

Another and still further important object of this invention is to provide a wall fitting for oil fill and vent pipes wherein an escutcheon is held against the outer wall by a means passing through to the inner surface of the wall and in combination therewith a cover shiftable through a predetermined range of movement from a position covering oil fill and vent pipes terminating at the escutcheon to a position leaving the oil fill and vent pipes uncovered.

Other and further important objects of this invention will become apparent from the disclosures in the following specification and accompanying drawings, in which:

Figure 1 is a front elevational view of the combination oil fill and vent fitting of this invention.

Figure 2 is a bottom view of the device as shown in Figure 1.

Figure 3 is a sectional view taken on the line 3—3 of Figure 1.

Figure 4 is a rear view of the device as shown in Figures 1 and 3.

Figure 5 is a sectional view similar to Figure 3 showing a modified form of fitting.

Figure 6 is another transverse sectional view similar to Figures 3 and 5 and showing still another modification of the fitting construction.

Figure 7 is a transverse sectional view looking down through the modified fitting of Figure 6.

As shown in the drawings:

The reference numeral 10 indicates generally a building wall through which oil fill and vent pipes are adapted to pass. As best shown in Figure 3 an oil fill pipe 11 is shown passing through an enlarged opening 12 in the wall 10. An escutcheon or wall plate 13 is fitted against the non-depressed outer surface of the wall 10 and is held in fixed position thereagainst by means of a long bolt or the like 14. The escutcheon plate 13 is provided with an inwardly extending shank or large boss 15 which is internally threaded for reception of one end of the bolt member 14. A cross-bar or tie strap 16 spans

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the opening 12 on the inner surface of the wall 10 and receives the other end of the bolt 14. A nut 17 is adapted to engage the bolt 14 and draw the tie strap 16 and the escutcheon plate 13 firmly against the inner and outer surfaces of the building wall. It should be understood that in order to accommodate various sizes of building walls the bolt 14 may be lengthened or shortened as is necessary. The pipe receiving fixture is located on the outer surface of the wall but the attaching means passes entirely through the wall to the inner surface.

The escutcheon plate 13 is provided with a raised rim 18 and has two adjacent openings 13^a and 13^b through which the oil fill pipe 11 and a vent pipe 19 freely pass. The openings 13^a and 13^b are of sufficiently large diameter to permit the easy passage of the oil fill and vent pipes without serious aligning problems. The pipe terminals extend through the openings in the escutcheon plate as shown in Figure 3 by the threaded end 20 of the fill pipe 11.

An outer cover or housing 21 is adapted to co-operatively engage and complement the wall escutcheon. The cover 21 fits within the raised rim 18 to fully conceal the pipe terminals. The cover 21 is provided with a central opening 22 through which a screw or bolt 23 passes and threadedly engages with the internally threaded shank 15 of the escutcheon plate. Upon removing the screw 23 the cover 21 may be removed from its position over the pipe terminals and thereupon a fill hose may be attached to the threaded terminal 20 without interference.

In order that the cover 21 may not be lost or otherwise damaged when filling is taking place, a chain 24 fastened to the escutcheon plate at 25 and to the screw 23 limits the removal of the cover to a position as shown in the dashed lines in Figure 3. The screw 23 is prevented from complete withdrawal from the cover 21 by means of a collar 26 either in the form of a nut or a pressed fit washer.

The purpose of a vent pipe is to permit escape of fumes from a fuel oil storage tank and also to prevent pressure from building up within such a tank. Therefore, the opening of the vent pipe cannot be covered without supplying sufficient area opening to permit full venting. Slots 27 and 28 are provided along the bottom of the cover 21 with cross-sectional area of opening greater than the cross-sectional area of the vent pipe 19.

In operation the device is arranged as shown in Figures 1, 2 and 3. When it is desired to refill the fuel tank an attendant loosens the screw or bolt 23 from its threaded engagement with the internally threaded boss or shank 15. This permits the cover 21 to be moved from its position over the ends of the pipes 11 and 19. The chain 24 holds the cover in its position as shown in

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dashed lines in Figure 3, whereupon the attendant may couple his hose to the threaded end 20 of the fill pipe 11 or insert a nozzle into the pipe 11 and commence filling of a fuel oil storage tank. Immediately upon completion of the filling, the hose coupling is removed and the fitting cover 21 moved upwardly to its original position. The screw 23 is turned into engagement with the internal threads of the shank 15. The cover thus provides a neat appearing fixture and prevents tampering with the fill and vent pipes by children or the like. The screw 23 and the tie rod 14 are in axial alinement thus utilizing the single bushing or shank 15 for threadedly engaging both elements. The bushing 15 for receiving both the screw and the tie rod is centrally located so that the entire fitting is substantially balanced.

As best shown in Figure 4, the tie strap 16 is in the form of a channel with the legs thereof resting against the building wall. Figures 3 and 4 both show that the pipes 11 and 19 are slightly inclined downwardly and rearwardly from a high point at the outside of the building wall. This insures that the oil delivery to the pipe 11 will not rest in the pipe but will flow into the storage tank.

Figure 5 shows a slightly modified construction wherein the escutcheon 29 is not provided with an integral shank but has a central opening therein through which a bushing 30 having an annular shoulder 31 is positioned. This bushing 31 is welded as shown at 32 to the plate 29 and thus is integral therewith in the same manner as the shank 15 shown in Figure 3. The construction as shown in Figure 5 is more readily adaptable to sheet metal stamping and thus differs from the device as shown in Figure 1 which shows a casting or die cast construction. An outer cover 33 is provided on the device of Figure 5 which corresponds in shape to the cover 21 of Figures 1 to 3, inclusive. This cover has a vent opening 34 in the bottom thereof similar to the slotted openings 27 and 28 in the cover 21. A chain 35 performs the same function as the chain 24 in limiting the movement of the cover 33 from its position over the vent pipe, not shown, and the fill pipe as shown at 36. The chain is anchored through a small opening 37 in the back plate 29 and a large ring 38 maintains the chain in position. In order to fill the storage tank fed by the pipe 36, the fitting cover 33 is removed by loosening the screw 39 and fastening the delivery truck hose coupling to the end of the fill pipe 36. A tie rod 40 holds the escutcheon plate 29 fixedly against the outer surface of a building wall 41 similar to the tie rod 14 shown in Figure 3.

Figures 6 and 7 show a still further modified construction of the oil fill and vent fitting. This modified construction differs in the method of fastening the fall plate 42 to the rear surface of the building wall 43. Instead of employing tie rods, such as 14 and 40 shown in Figures 3 and 5, a perforated tie strap 44 is adapted to engage the cross bar 45 at the rear thereof by bending the legs 46 and 47 of the tie strap 44 through openings in the cross bar or channel 45. This tie strap 44 is not in axial alinement with the screw 48, such as are the tie rods 14 and 41 with the screws 23 and 39 respectively, but rather is offset laterally therefrom and provides an anchor for the chain 49 by means of a screw head 50 passing through an opening 51 in the escutcheon 42. This escutcheon or back plate 42 is also equipped with a vent pipe opening 51 and a fill pipe opening 52. The screw 53 having the head 50 holds the

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tie strap 44 by means of a nut 54 as best shown in Figure 6. A cover or housing 55 conceals the terminal endings of the vent pipe, not shown, and the fill pipe 56. Loosening of the screw 48 permits removal of the cover 55 whereupon an attendant may supply fuel oil or other fluid to the pipe 56.

Numerous details of construction may be varied throughout a wide range without departing from the principles disclosed herein, and we therefore do not propose limiting the patent granted hereon otherwise than as necessitated by the appended claims.

What is claimed is:

1. In a combined oil fill pipe and vent pipe wall fitting comprising a plate adapted to be positioned against the outer non-depressed surface of the wall, said plate having adjacent openings therein for the passage of oil fill and vent pipes, said openings being larger in diameter than the oil fill and vent pipes for the purpose of loosely receiving said pipes, means for holding said plate in fixed position against said wall, said means including a bolt extending fully through said wall and engaging said plate, a cross member spanning the opening for the pipes on the inner surface of said wall, means for adjustably fastening said bolt to said cross member, a cover housing the ends of said pipes and having an opening therein for venting, and means for removably attaching said cover to said plate, said last named means including a bolt in axial alignment with said bolt extending through the wall.

2. A building wall fitting for adjacent pipes passing through an opening in said wall, comprising a wall plate for the outer non-depressed surface of said wall, said plate having large openings therein for the easy passage of the terminal endings of said adjacent pipes, said wall plate having an internally threaded bushing positioned substantially centrally thereof, a cross bar spanning the wall opening on the inner surface of the wall, bolt means engaging the internally threaded bushing and said cross bar for holding the wall plate and cross bar firmly against the outer and inner surfaces of the wall, a housing for covering the terminal endings of said pipes and complementing said wall plate in concealing said pipes, and bolt means extending through said housing and engaging the internally threaded bushing of said wall plate for removably holding the housing to said wall plate.

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