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(54) **WAIST MOUNTED HOSE AND CORD PULLER**

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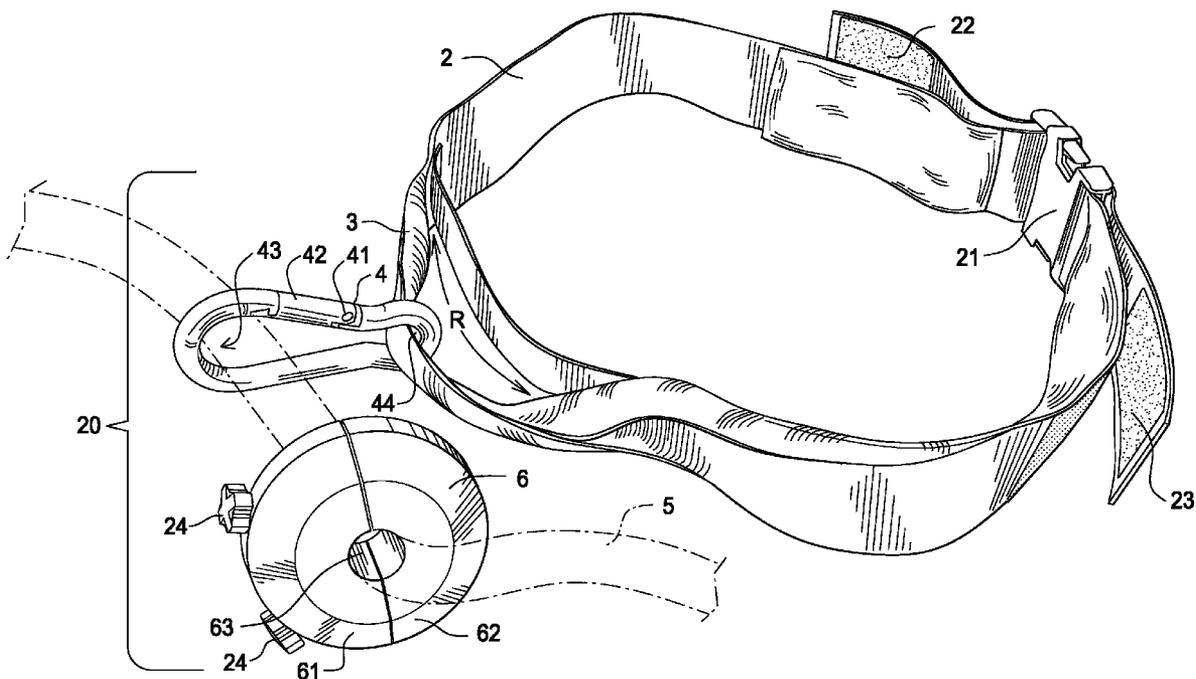
(57) **ABSTRACT**

A fastener is connected to a waist belt. A collar is connected to a hose near its working end. The hose is clipped into the fastener. The collar locks the hose onto the belt to enable the worker to haul the hose around using his hips rather than his arms and back.

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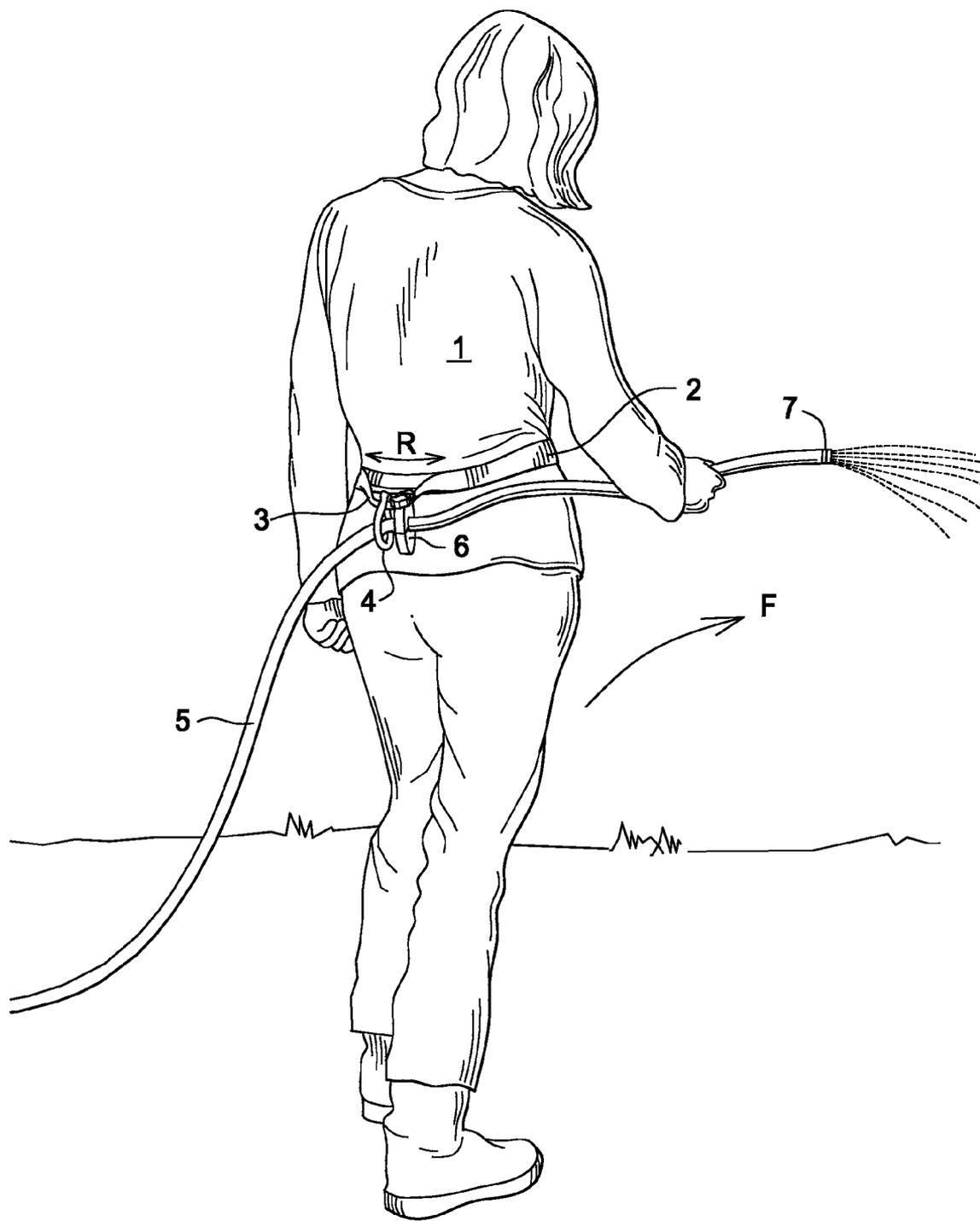


FIG.1

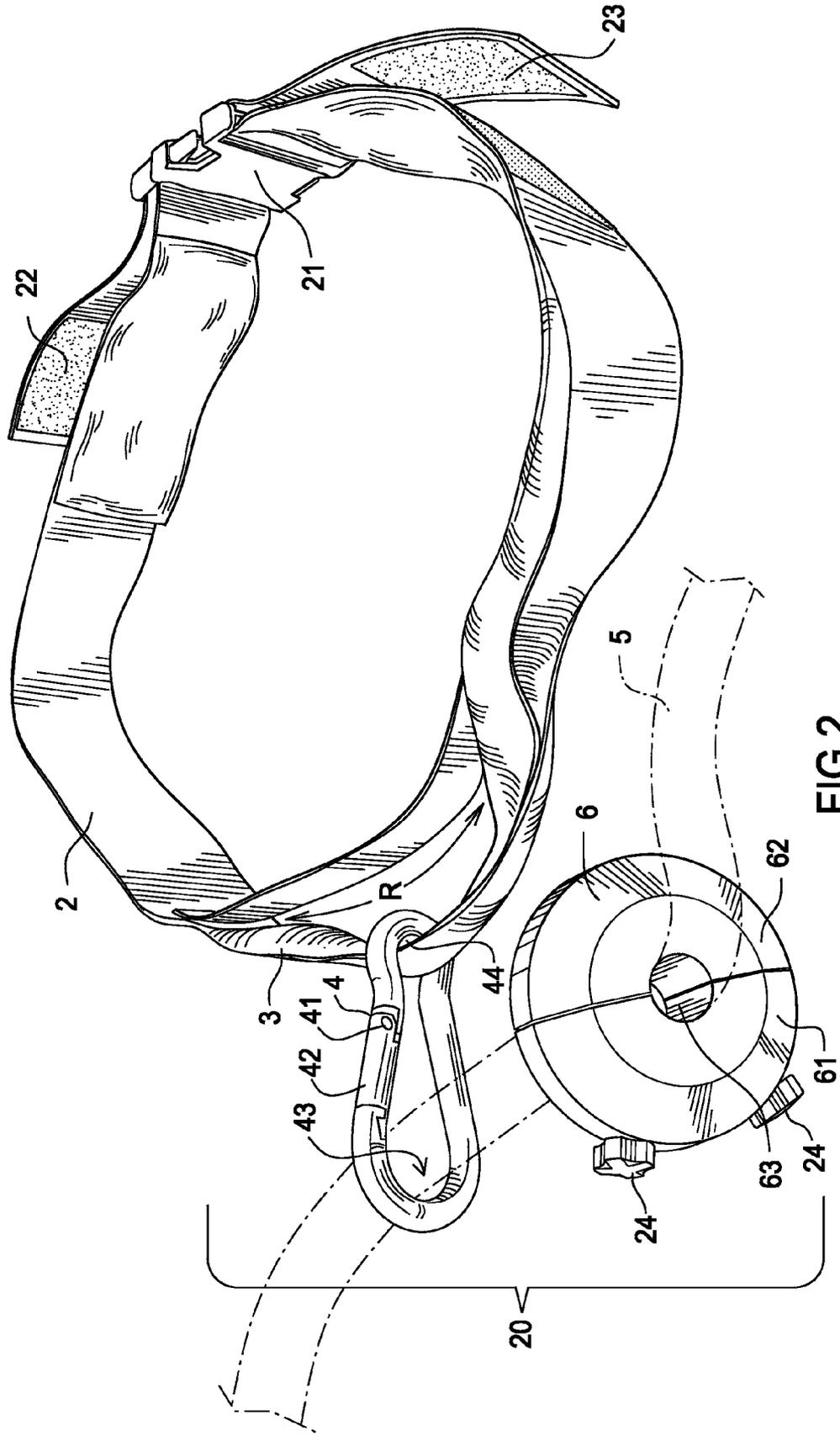


FIG.2

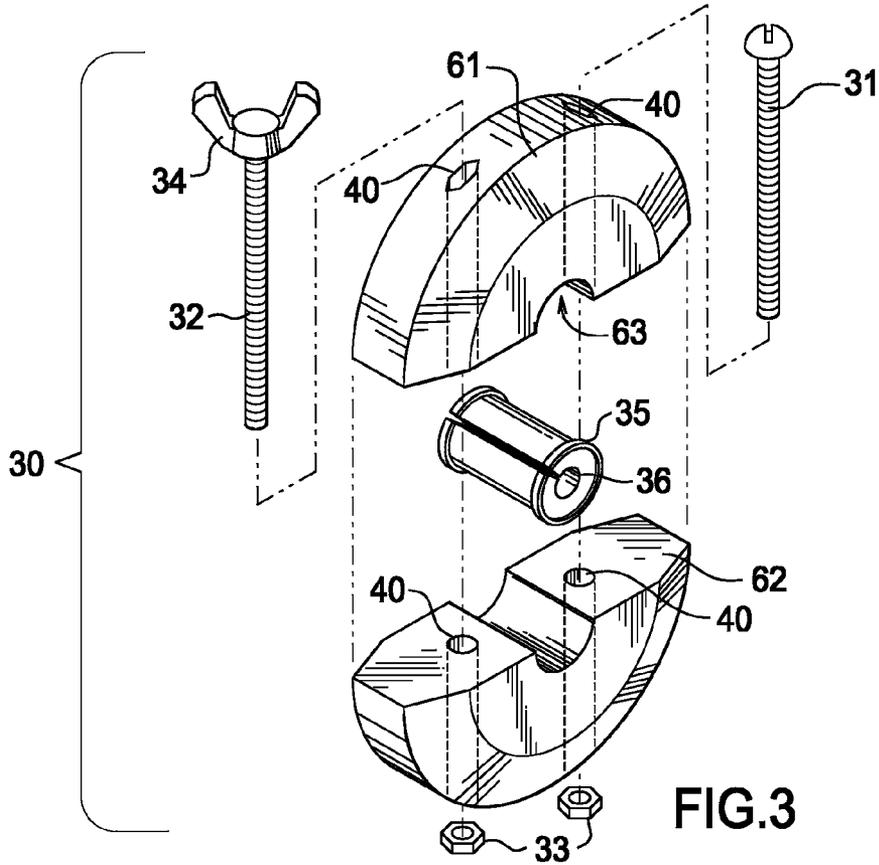


FIG.3

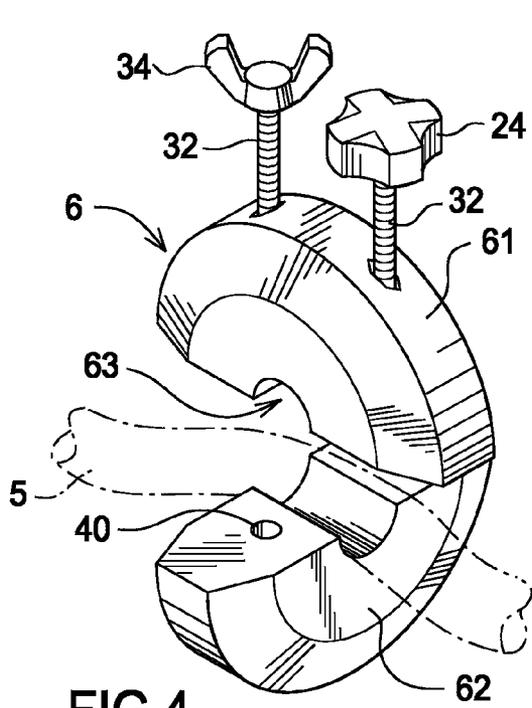


FIG.4

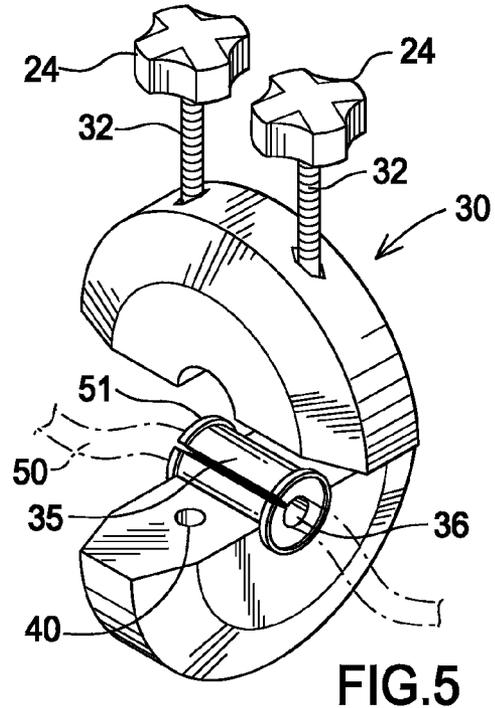
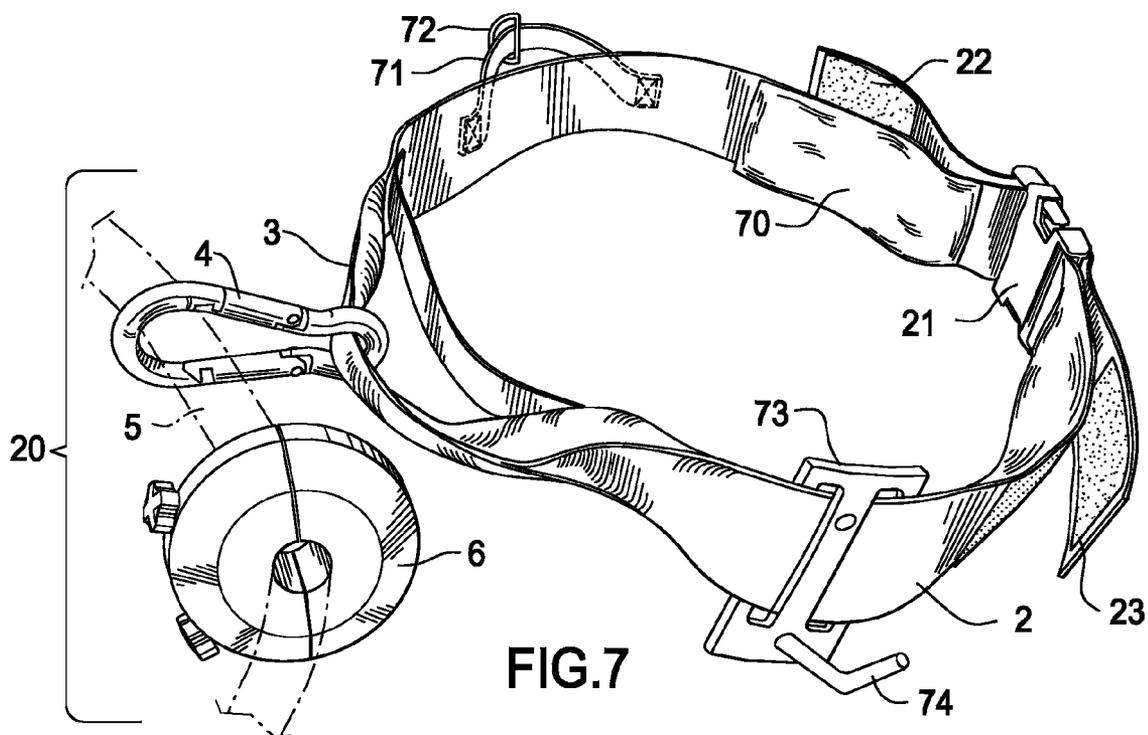
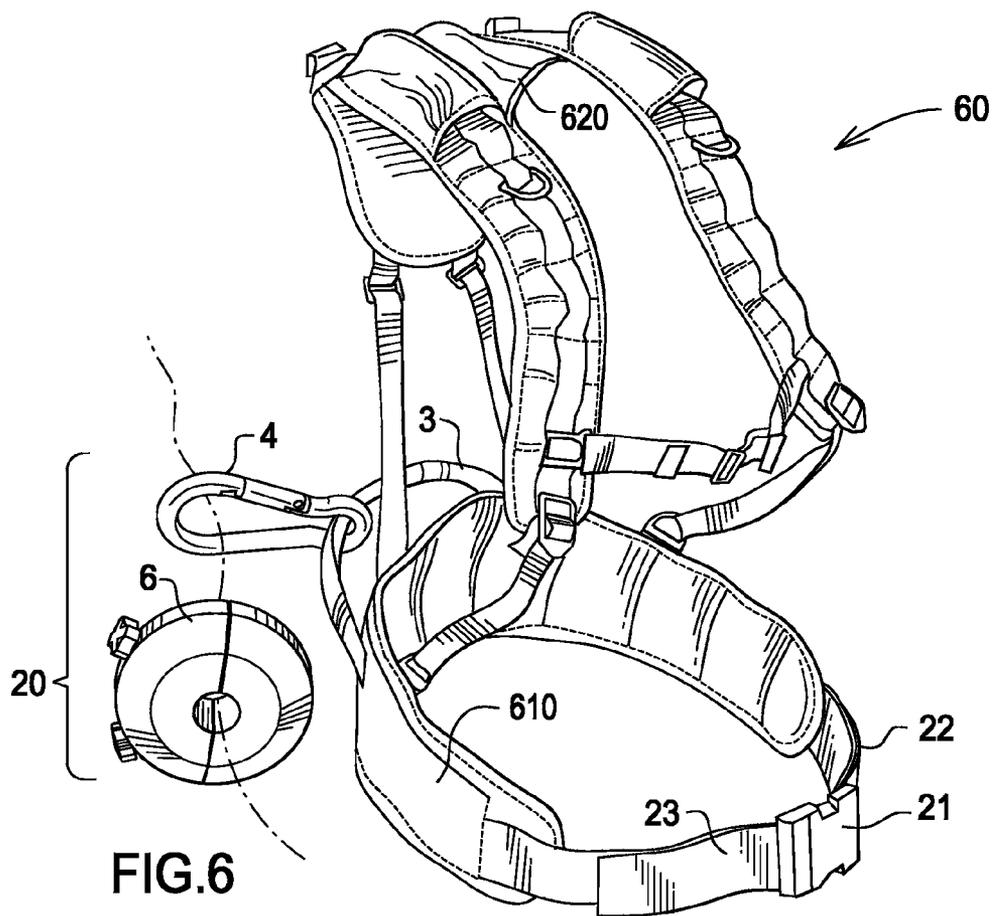


FIG.5



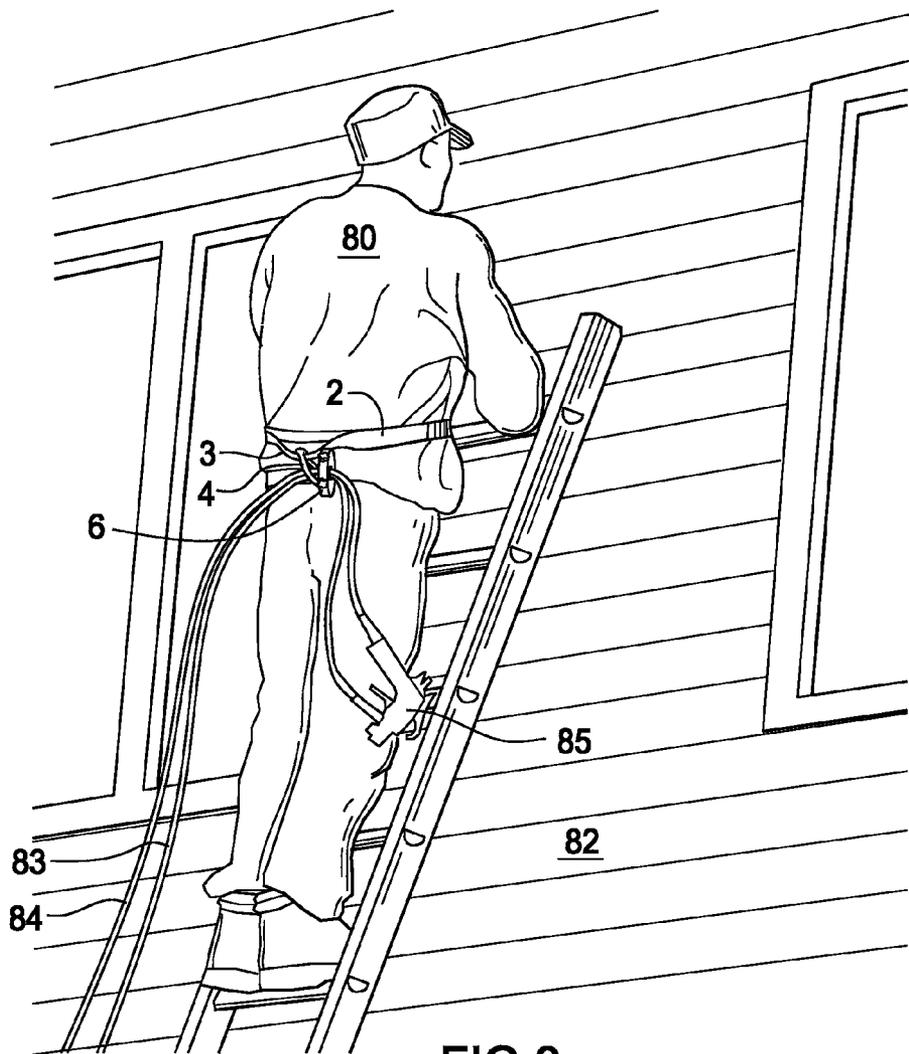


FIG. 8

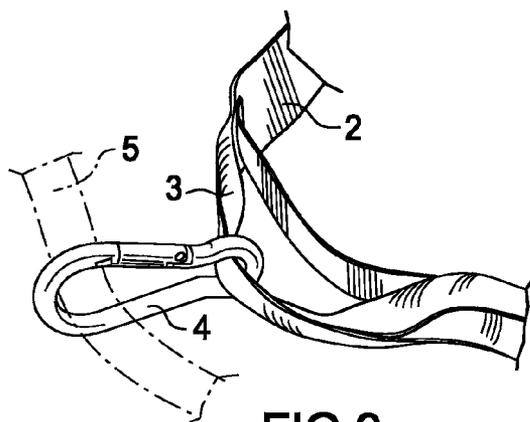


FIG. 9

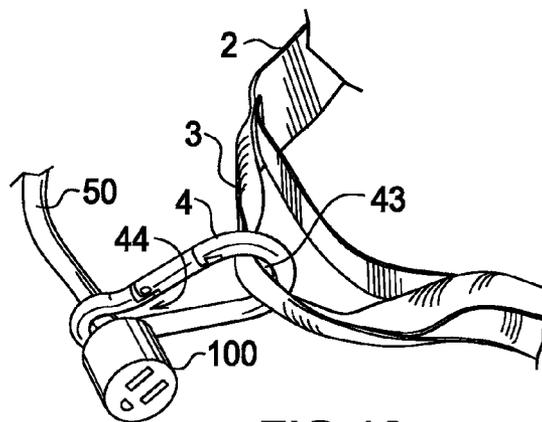


FIG. 10

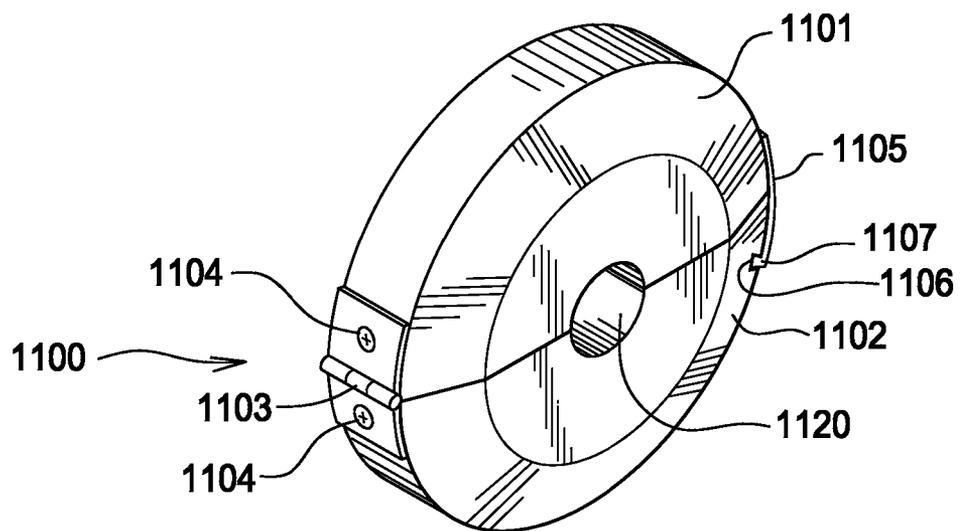


FIG.11

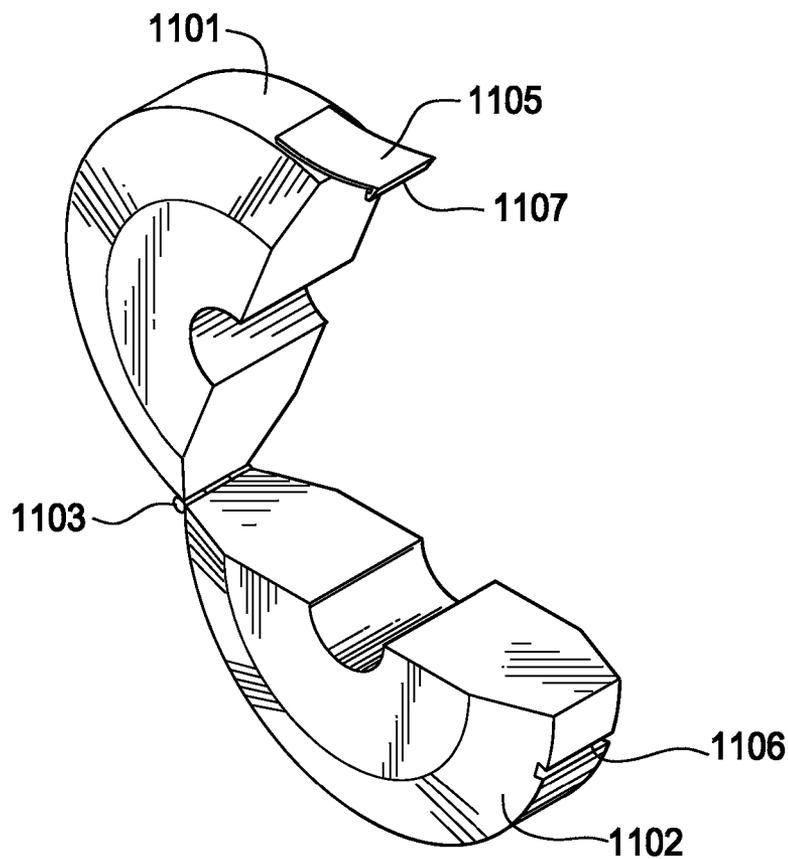
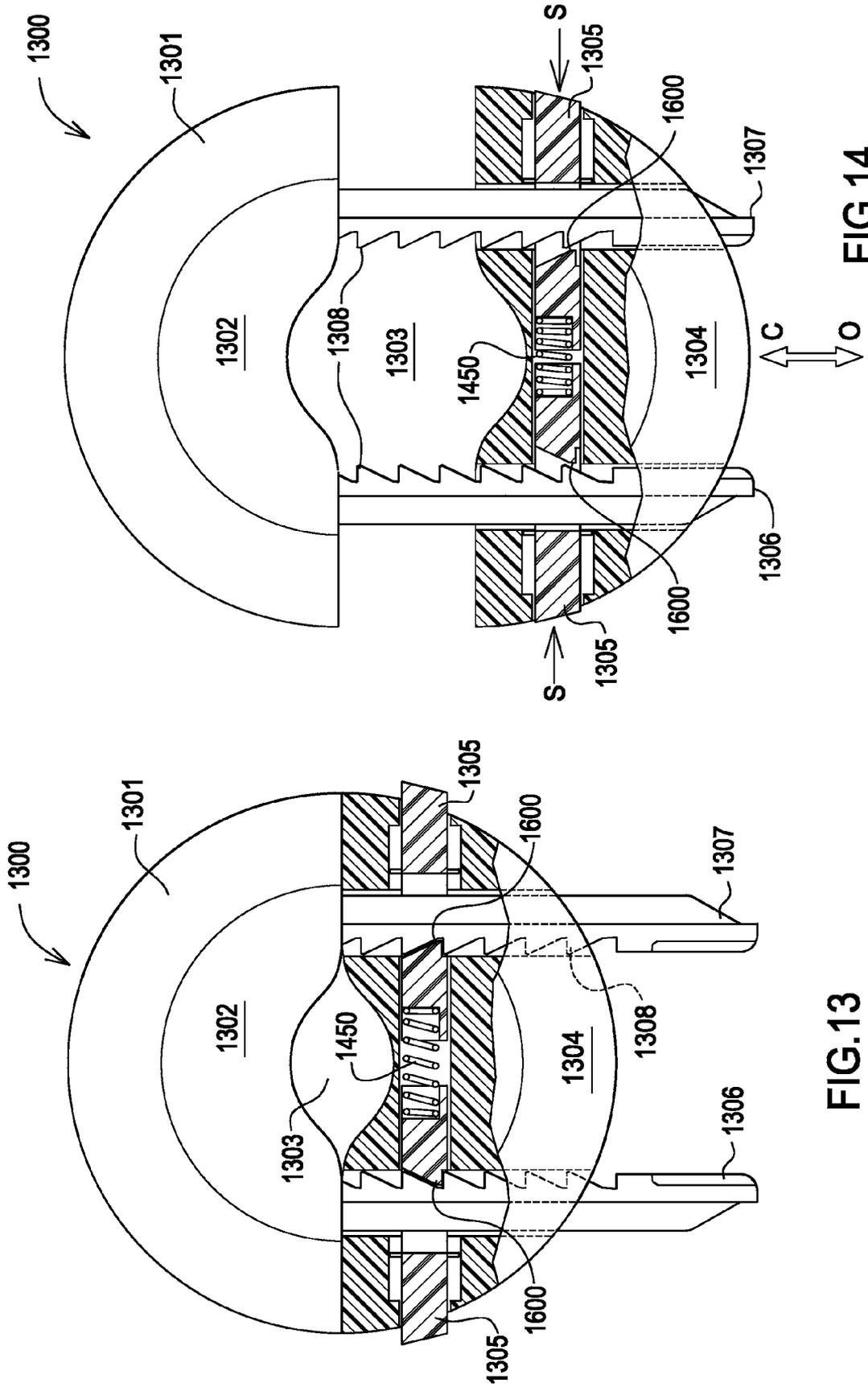
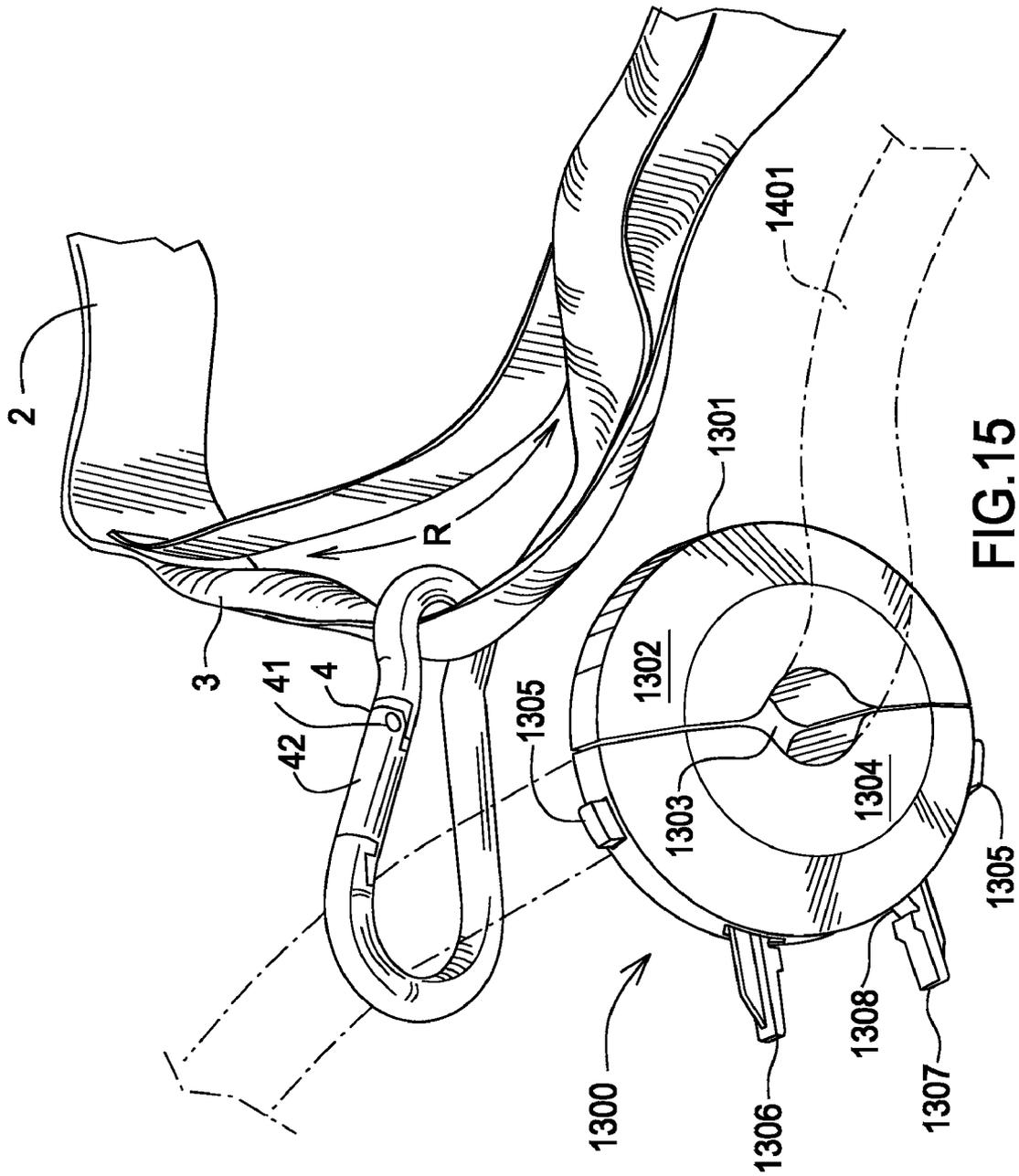


FIG.12





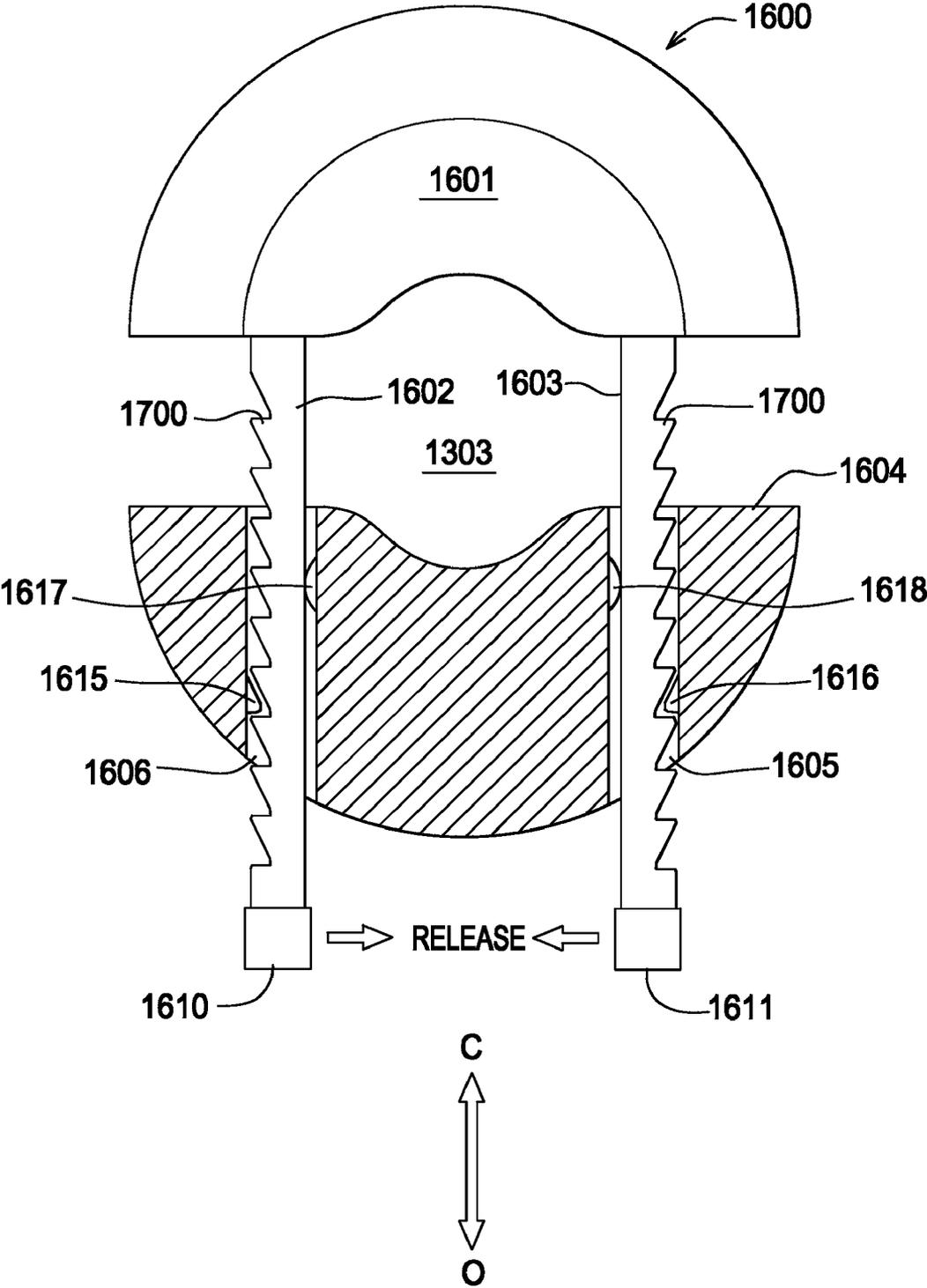


FIG.16

WAIST MOUNTED HOSE AND CORD PULLER

CROSS REFERENCE APPLICATIONS

[0001] This application is a non-provisional application claiming the benefits of provisional application No. 61/077, 280 filed Jul. 1, 2008.

FIELD OF INVENTION

[0002] The present invention relates to attaching an end of a hose to a worker's belt in order to drag the hose to a new location.

BACKGROUND OF THE INVENTION

[0003] The closet known prior art is U.S. Pat. No. 2,388, 811 (1945) to Zatko. A welder wears a utility belt. The utility belt has a ring fastened to it. The welder's electric cord is cinched with a tether that includes a snap hook. The snap hook is fastened to the ring on the belt. The welder can drag his cord behind him. Zatko is addressing the convenience of controlling the cord and its electric clamp during the welding operation as he shows in FIG. 1. He does not address the need to drag a cord or hose long distances, with the cord or hose securely attached to the worker's waist at the base of the worker's spine.

[0004] What is needed in the art is a secure and removable fastening means for a cord or hose end to attach to a worker's belt at the base of his spine to enable dragging a rather cumbersome load across a yard or the like.

[0005] The present invention solves this long sought need with a work belt having a D ring fastened at the rear/center of the belt. A collar is fastened to the cord/hose end. The cord/hose is snapped into the D ring thereby attaching the collar above the D ring. The worker can apply a strong pressure using his hips to drag the cord/hose from the base of his back.

SUMMARY OF THE INVENTION

[0006] The main aspect of the present invention is to provide a work belt with a clip and a hose/cord with a collar that slips over the clip to enable pulling the hose/cord via the work belt.

[0007] Another aspect of the present invention is to provide a multi-diameter fitting for the collar.

[0008] Another aspect is to provide a shoulder strap option for the waist belt.

[0009] Another aspect is to provide a multi-purpose work belt with the pulling ring attached.

[0010] Other aspects of this invention will appear from the following description and appended claims, reference being made to the accompanying drawings forming a part of this specification wherein like reference characters designate corresponding parts in the several views.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] FIG. 1 is a rear perspective view of a lady using the invention to water the lawn.

[0012] FIG. 2 is a top perspective view of the preferred embodiment.

[0013] FIG. 3 is an exploded view of the collar.

[0014] FIG. 4 is a perspective view of the collar being attached to a hose.

[0015] FIG. 5 is a perspective view of an alternative collar having a reducer to accommodate narrow cords or hoses.

[0016] FIG. 6 is a side perspective view of an alternative embodiment shoulder harness version.

[0017] FIG. 7 is a top perspective view of a work belt with a holster and other clips.

[0018] FIG. 8 is a rear perspective view of the preferred embodiment used with an air hose for a paint gun.

[0019] FIG. 9 is a top perspective view of the D ring in use.

[0020] FIG. 10 is the same view as FIG. 9 with the D ring reversed for use with an extension cord.

[0021] FIG. 11 is a side perspective view of a collar embodiment with a hinge.

[0022] FIG. 12 is a top perspective view of the FIG. 11 embodiment with the collar open.

[0023] FIG. 13 is a partial cutaway view of an alternate embodiment collar.

[0024] FIG. 14 is the same view as FIG. 13 with the collar.

[0025] FIG. 15 is a perspective view of the FIG. 13 embodiment in use.

[0026] FIG. 16 is a partial cutaway view of an alternate embodiment collar.

[0027] Before explaining the disclosed embodiment of the present invention in detail, it is to be understood that the invention is not limited in its application to the details of the particular arrangement shown, since the invention is capable of other embodiments. Also, the terminology used herein is for the purpose of description and not of limitation.

DETAILED DESCRIPTION OF THE DRAWINGS

[0028] Referring first to FIG. 1 the worker 1 is wearing a belt 2 that includes a retaining strap 3. The retaining strap 3 provides a short runway R for a clip on fastener 4 (a D ring is preferred).

[0029] The garden hose 5 has been fitted with a collar 6 near its working end 7. When the worker walks forward in direction F the hose 5 is dragged behind her by means of the collar 6 wedging against the fastener 4. The runway R provides for a limited angular torque behind the worker 1 as she changes direction. This system allows the worker to use her legs instead of her arms to drag a heavy hose the entire length of the hose 5 even when the hose 5 is full of water as shown. Small fire hoses can be moved by firemen in this same manner.

[0030] Referring next to FIG. 2 the entire waist drag system is labeled 20. The belt 2 preferably has a buckle 21 that accommodates hook and loop ends 22, 23. Each end 22, can come off the buckle 21 to slip on various tool holsters as seen in FIG. 7.

[0031] The fastener 4 is a D ring type having a narrowed inner end 44 and an opposing wide inner end 43. A hinge 41 is spring loaded to keep the gate 42 closed.

[0032] The collar 6 has halves 61, 62 joined by at least one bolt (not shown) with a screw handle(s) 24 to tighten the halves 61, 62 together. The diameter of the hole 63 is slightly smaller than the diameter of the hose 5 so the collar 6 doesn't slip on the hose 5 after installation.

[0033] Referring next to FIG. 3 the collar assembly 30 consists of halves 61, 62 held together by bolts 31, 32 with nuts 33. A wing style handle 34 or knob 24 (FIG. 2) is optional. The spacer 35 fits in hole 63 to provide a smaller hole 36 suited for extension cords or small air hoses.

[0034] FIG. 4 shows the hose 5 being placed in hole 63. Bolt 32 has not yet been placed in hole 40 for tightening

halves **61**, **62** together. Design choice could use hole **40** as a threaded nut to eliminate nuts **33** of FIG. 3.

[0035] In FIG. 5 the spacer **35** has had extension cord **50** slipped in slot **51** into hole **36**. By tightening knob **24** the extension cord **50** is locked into collar assembly **30**.

[0036] Referring next to FIG. 6 shoulder/belt assembly **600** consists of a belt **610** with a strap **3** to hold fastener **4** as in FIG. 2. Shoulder straps **620** can assist a fireman to haul a heavy hose (not shown).

[0037] Referring next to FIG. 7 the utility belt **70** has an additional ring fastener **72** fastened by a strap **71**. A holster **73** is threaded thru end **23** before the buckle **21** is attached. Thus, a tool such as a spray gun could be hung from hook **74**.

[0038] Referring next to FIG. 8 the painter **80** is standing on a ladder to paint the house **82**. The belt **2** and collar assembly **30** is supporting hoses **83**, **84** which are connected to spray gun **85**. The painter **80** could use the holster **73** of FIG. 7 to aid his control of equipment.

[0039] In FIG. 9 the hose **5** rests in the wider space **43** of fastener **4**. But in FIG. 10 no collar is needed for extension cord **50**. The fastener uses the wider space **43** to lock onto the strap **3**. The narrow space **44** serves to wedge the female cord receptacle **100** therein.

[0040] Thus, a gardener can haul the hedge clipper extension cord **50** all over the lawn. No collar need be attached to the extension cord.

[0041] Referring next to FIGS. 11, 12 a collar **1100** has the central hole **1120** which could be fitted with the spacer **35** of FIG. 3. The halves **1101**, **1102**.

[0042] A lock means **1105** consists of the flap **1105** connects to half **1101** with its tongue **1107** which snaps into the groove **1106** of half **1102**. Not shown are many design equivalents including handles **24** with bolts and/or various equivalent locks. The hinge helps the user to quickly attach the hose without dropping parts on the ground.

[0043] Referring next to FIGS. 13, 14 **15** a sliding collar **1300** consists of a U shaped base **1301** having a semi-circular head **1302** and legs **1306**, **1307**. Each leg **1306**, **1307** has teeth **1308** on which slides the sliding collar half **1304**. Spring loaded release buttons **1305** can be squeezed to release the collar half **1304** from teeth **1308**, thereby forming the hole **1303**. Hole **1303** clasps the hose **1401** with arrows open O and close C indicating the movement of collar half **1304**. The spring **1450** biases the release buttons **1305** outbound. Arrows S for squeeze in FIG. 14 show the release buttons **1305** pushed inward to release collar teeth **1600** from base teeth **1308** to enable moving the collar half **1304**.

[0044] In FIG. 16 a hose clamp **1600** has fixed half **1601** with legs **1602**, **1603** that slide in channels **1606**, **1605** in moving half **1604**. A hole **1303** is formed like the hole **1303** in the embodiment shown in FIG. 13. Channels **1605**, **1606** have nubs **1617**, **1618** serving as pivot points when handles **1610**, **1611** are squeezed into each other to the release mode shown by the arrows Release. In the Release mode teeth **1615**, **1616** allowing the moving half **1604** to move in either the open or closed position shown by arrows O and C. The locked position shown has the locking teeth **1615**, **1616** locked into teeth **1700** at a desired position via the straight shapes of legs **1602**, **1603**.

[0045] Although the present invention has been described with reference to preferred embodiments, numerous modifications and variations can be made and still the result will come within the scope of the invention. No limitation with respect to the specific embodiments disclosed herein is

intended or should be inferred. Each apparatus embodiment described herein has numerous equivalents.

I claim:

1. A waist drag system comprising:

a belt having a rear/center section;

said rear/center section mountable against a base of a user's back;

a fastener ring attached to the rear/center section;

a collar having two halves forming an adjustable diameter center mounting hole for a hose or cord;

a fastening means functioning to tighten the collar halves together around the hose or cord; and

wherein the collar having the hose or cord tightened in the center mounting hole wedges against the fastener ring, thereby enabling the user to drag the hose or cord behind him using his waist.

2. The apparatus of claim 1, wherein the rear/center section of the belt further comprises a retaining strap on which the fastener ring slides.

3. The apparatus of claim 2, wherein the fastener ring further comprises a D ring with a narrowed inner end slidable in the retaining strap, and an opposing wider end upon which the collar is wedged, and further having a spring loaded hinged gate to enable attaching/detaching from the retaining strap.

4. The apparatus of claim 3, wherein the belt further comprises a buckle that accommodates a first and a second look and loop end, wherein accessories can be threaded onto the first and second end before the buckle is attached to the first and the second end.

5. The apparatus of claim 1, wherein the fastening means further comprises a bolt having a screw handle to tighten the halves together using a nut.

6. The apparatus of claim 5, wherein the center mounting hole further comprises a spacer having a center hole and a longitudinal slot suited to receive an extension cord.

7. The apparatus of claim 1 further comprising a shoulder harness connected to the belt to assist in hauling a heavy hose in the collar.

8. The apparatus of claim 4, wherein the belt further comprises a holster with a look suited to support a tool.

9. The apparatus of claim 1, wherein the fastening means further comprises a flap having a tongue fitting into a groove which is opposite a hinge adjoining the two halves.

10. A waist drag system comprising:

a belt means functioning to support a rear/center section against a base of a user's back;

a fastener means attached to the rear/center section functioning to wedge a retaining collar means thereto;

said retaining collar means functioning to affix to an end of a hose/cord; and

wherein said retaining collar and hose/cord are dragged directly behind the user as the user walks forward.

11. The apparatus of claim 9, wherein the fastener means further comprises a D ring with a narrowed inner end fastened to the belt means.

12. The apparatus of claim 11, wherein the retaining collar further comprises a pair of collar halves forming a center hole.

13. The apparatus of claim 12, wherein the belt means further comprises a retaining strap attached to the rear center section which supports the D ring.

14. The apparatus of claim 10, wherein the retaining collar means further comprises a U shaped base having two legs with teeth, a sliding collar half releasably mounted across the

two legs, and the sliding collar half having a pair of spring loaded buttons releasably locking on the teeth.

15. The apparatus of claim 10, wherein the retaining collar means further comprises a U shaped base having two legs with teeth, a sliding collar half releasably mounted across the two legs, and the sliding collar half having a locking tooth in each of its channels that receive the legs, wherein squeezing a handle at each leg end toward one another releases the locking tooth to enable moving the sliding collar half to a desired position.

16. A method to drag a hose, said method comprising the steps of:

attaching a belt around a user's waist;
forming a retaining strap on the belt at a rear/center section thereof,
attaching a D ring to the retaining strap using a narrowed end of the D ring to slide on the retaining strap;
attaching a collar to a working end of a hose;
snapping the hose into the D ring with the collar and working end on one side of the D ring; and
having the user walk forward thereby wedging the collar against the D ring and dragging the hose directly behind the user.

* * * * *