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CA 2433383 A1 2005/01/09

(21) 2 433 383

(12) DEMANDE DE BREVET CANADIEN
CANADIAN PATENT APPLICATION

(13) A1

(22) Date de dépôt/Filing Date: 2003/07/09

(41) Mise à la disp. pub./Open to Public Insp.: 2005/01/09

(51) Cl.Int.^{7}/Int.Cl.^{7} A63J 5/12, A63J 21/00

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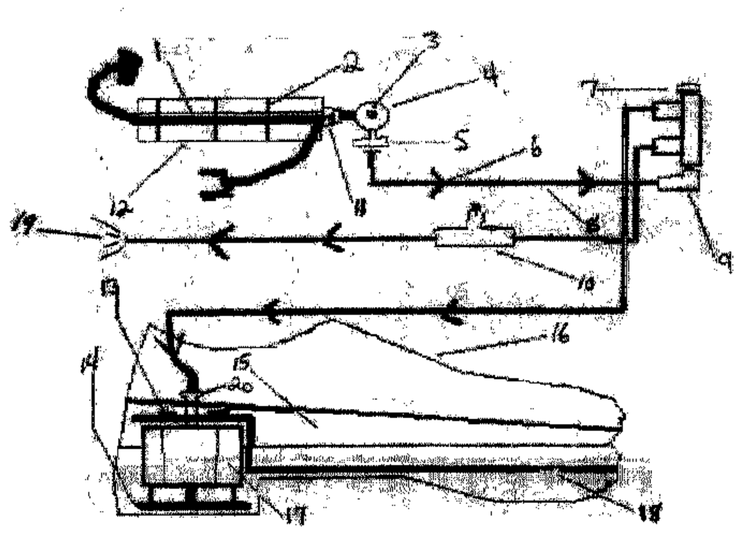
(54) Titre : DISPOSITIF DE LEVITATION
(54) Title: THE HOVERMAN

1- Co2 Tank.
2- Fasteners for securing the Co2 tank to the waist belt.
3- Air pressure adjustment screw (P.S.I - up or down).
4- Regulator.
5- Air speed control valve.
6- Air flow direction.
7- Three way valve switch for controling Co2 pressure to the shoe and up or down movement of the shoe cylinder.
8- 5/32 polyurethane air line.
9- Rotary joint elbow.
10- In line air speed control valve.



11- Air pressure on/off valve.
12- Co2 tank.
13- Air cylinder mounting bolts.
14- Air cylinder platform.
15- 1/2 inch lift inside shoe.
16- Shoe (custom designed).
17- Air cylinder.
18- Metal support mounting plate.
19- Air pressure exit(when three way valve button is released).
20-Air pressure in and out port (part of air/shoe cylinder).

(57) Abrégé/Abstract:
A levitation device for performing illusionary magic. Manually controlled by a three way valve switch concealed in the hand. Extending from the valve and running up the sleeve of the arm are three air lines in which the CO2 passes. One line is the supply line which comes from the CO2 tank that is strapped to the person's waist with a belt and straps, the secondary line or waste line provides for the release of air pressure as the person slowly descends to the ground. The third line leads down the side or back of the person into and down the pant leg eventually connecting to the shoe lift cylinder, which is custom fitted into the heel of the shoe. Activating the three way valve slowly increases the air pressure enabling the shoe cylinder piston shaft and platform to extend out from the heel bottom and downwards towards the ground, lifting the person four to six inches creating an illusionary floating like effect. With the slow release of gas pressure the person slowly descends to the ground.

Abstract

A levitation device for performing illusionary magic. Manually controlled by a three way valve switch concealed in the hand. Extending from the valve and running up the sleeve of the arm are three air lines in which the CO2 passes. One line is the supply line which comes from the CO2 tank that is strapped to the person's waist with a belt and straps, the secondary line or waste line provides for the release of air pressure as the person slowly descends to the ground. The third line leads down the side or back of the person into and down the pant leg eventually connecting to the shoe lift cylinder, which is custom fitted into the heel of the shoe. Activating the three way valve switch in the persons hand immediately and slowly increases the air pressure enabling the shoe cylinder piston shaft and platform to extend out from the heel bottom and downwards towards the ground, lifting the person four to six inches creating an illusionary floating like effect. With the slow release of gas pressure the person slowly descends to the ground.

Specification

This invention relates to a manually operative device for creating a levitating illusionary effect.

It is common in all other devices and techniques of this nature to create such an effect through the use of sight, verbal manipulation (misdirection), and trickery. One such device and technique requires the use of a piece of A.B.S pipe attached to a spring loaded reel which clips to the persons belt or pants. The trick here is to get the piece of A.B.S pipe under the heel of their shoe, this can be done by using their weight to flatten the pipe somewhat, then by slowly maneuvering their shoe heel over and onto the top of the pipe, they can create a somewhat hard and time consuming levitation elusion. Imagine all of this without being seen. To perform this elusion requires very good balancing and audience misdirection. It is very hard to do and does not look smooth. These techniques do have disadvantages. I find them to be inefficient, as they do not provide for a real live levitation. These techniques largely depend on body positioning and verbal manipulation (misdirection) which must all play an important roll in creating the effect. If one or more of these natural and physical tools are missing the end result could be a complete disaster.

I have found that these disadvantages may be overcome by creating a manually controlled, mechanical working, levitation device, the strategy behind this concept is that it actually lifts the person upwards off the ground through mechanical means, creating a real levitation

effect, without the use of any trickery such as sight or verbal manipulation (misdirection) which is required by other more conventional techniques. The device comprised of a two and one half inch by nine inch CO2 supply tank, three one eighth inch wide polyurethane lines, a hand held three way valve switch, and a pair of shoes, one containing a small shoe cylinder custom fitted into the heel, is light weight, very adaptable, easily assembled, and is generally fitted and concealed under the person's garments. The device applies a very different and unique technique, in providing the actual lift that is required to complete the levitation effect.

This levitation device more overly called the Hoverman, consists of a manually controlled three way valve switch, drawing 1 fig-7 which when worn is secured to the persons arm just above the wrist using an elastic strap or wrist band, drawing 4 fig-5. The hand held three way valve switch, with a button type, finger controlled, air release valve, allowing for air pressure increase or decrease by the user, drawing I fig-7, has three air lines extending from the back side of the valve. Leading up the user's arm, down the persons back or side and connecting to the pre set air speed control valve, located at the top outlet of the nine ounce refillable CO2 supply tank, drawing 3A fig-6, is the CO2 feeder or supply line, drawing 4 fig-8. The CO2 supply tank which also has a pre set regulator, pressure adjustment, and on and off valve, drawing 3A fig-1,2,3 is strapped to the persons waist belt by three fastener straps, which wrap around the tank and belt, providing a secure fit of the tank to the persons waist, drawing 3B fig-1&2. The shoe line, drawing 4 fig-9 which also originates from the three way

valve switch located on the persons lower arm, extends 3- mostly in the same direction, continuing to extend down past the person's waist and into the lower pant leg, eventually finding its way into the shoe and connecting to the shoe cylinder air pressure in and out port, drawing 1 fig-20 & drawing 2 fig-10. The Shoe cylinder, fitted and concealed in the heel of the shoe, drawing 1 fig-17, consists of a cylindrical piston shaft and platform, drawing 2 fig-6,7,8 which when extended pushes the person upwards creating the lift required. The waste line, drawing 4 fig-10 which extends up the persons arm, and wrapping over the back of the persons shoulder, has an inline air speed control valve which is also manually pre set.

In performing the levitation and for the user to acquire the lift position, activation of the CO2 supply line is required, drawing 4 fig-8. Maneuvering the button like lever on the three way valve switch in an upward position slowly opens the shoe line and supply line and closes the waste line simultaneously allowing or forcing the air flow pressure down the shoe line and into the shoe cylinder, Drawing 1. Once in the cylinder the air pressure one hundred and thirty five P.S.I slowly forces the cylinder piston shaft and platform out from the bottom of the shoe heel, which results in producing the lift, drawing 2 fig-6,7.

In performing the levitation and for the user to acquire the down position the operation works in reverse. Deactivation of the CO2 supply line is required, drawing 4 fig-8. Maneuvering the button like lever on the three way valve switch in a downward position, slowly closes the supply line and opens the waste line simultaneously,

allowing the air flow pressure in the shoe line to decrease by redirecting and exiting out the waste line, 3- there is a pre set in line air speed control valve on the waste line to allow for slow air line pressure decrease, drawing 1. As the air pressure in the shoe cylinder slowly decreases, the cylinder piston shaft relinquishes its position, to attain its normal position back inside the shoe cylinder, which results in complete descent.

5 Drawings

Drawing 1 – Main drawing complete.

Drawing 2 – Shoe cylinder assembly.

Drawing 3 – A – CO2 tank assembly.
B – Waist belt and strap assembly.

Drawing 4 – Complete device is shown and how it should be worn with all attachments assembled.

Claims

The embodiments of the invention in which an exclusive property or privilege is claimed, are as follows.

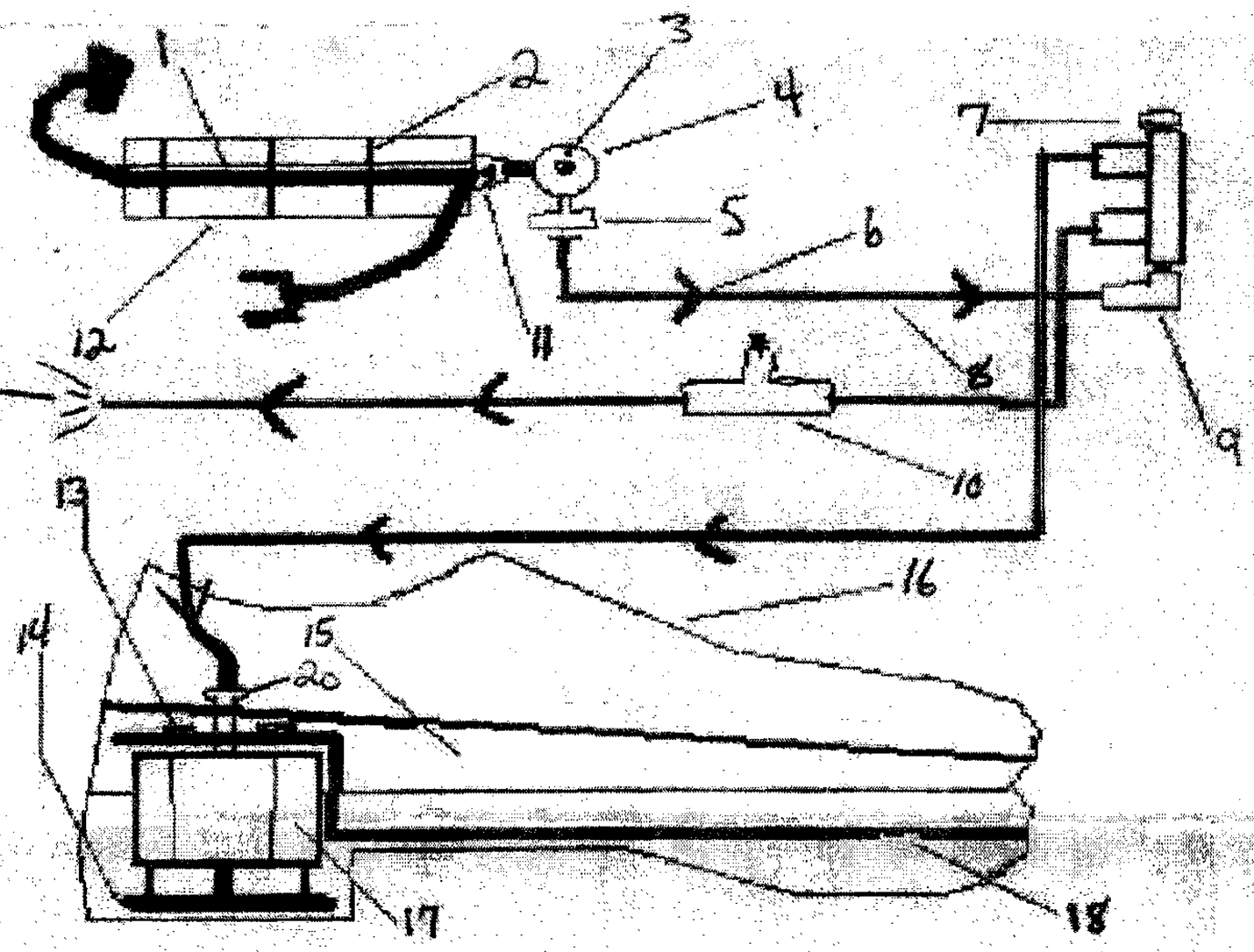
1-A manually operable levitation device for conveniently creating, actual levitation effect. Comprising a modified shoe, and cylinder with a movable protruding piston shaft and adapted platform, to provide upward lifting motion. With air pressure line securely attached.

2-A device as defined in claim one, in which the shoe is modified to allow for proper and secure attachment of the shoe cylinder to the inside of the shoe heel, allowing free movement of the shoe cylinder piston shaft and platform.

3-A device as defined in claim one or two in which the shoe cylinder, necessitates no less than one hundred and thirty five P.S.I to become activated, providing the amount of lift required. A levitation device in which the air pressure, supplied by an air tank and manually controlled, is distributed with the use of air pressure lines. A device in which all relating amenities when assembled and fitted provide for real effects, unlimited use and satisfying results.

1- Co2 Tank.
2- Fasteners for securing the Co2 tank to the waist belt.
3- Air pressure adjustment screw (P.S.I - up or down).
4- Regulator.
5- Air speed control valve.
6- Air flow direction.
7- Three way valve switch for controling Co2 pressure to the shoe and up or down movement of the shoe cylinder.
8- 5/32 polyurethane air line.
9- Rotary joint elbow.
10- In line air speed control valve.

Drawing - 1

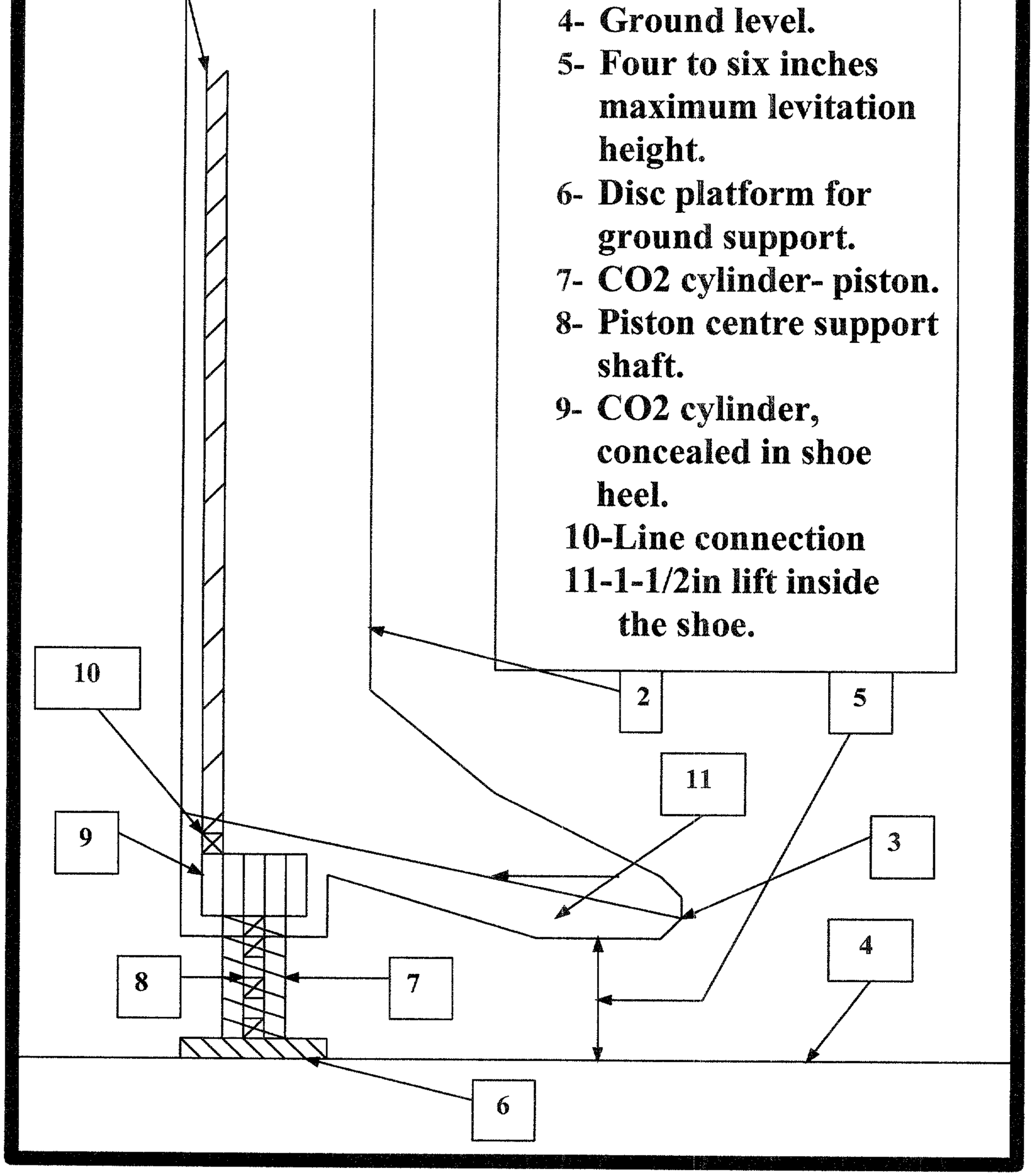


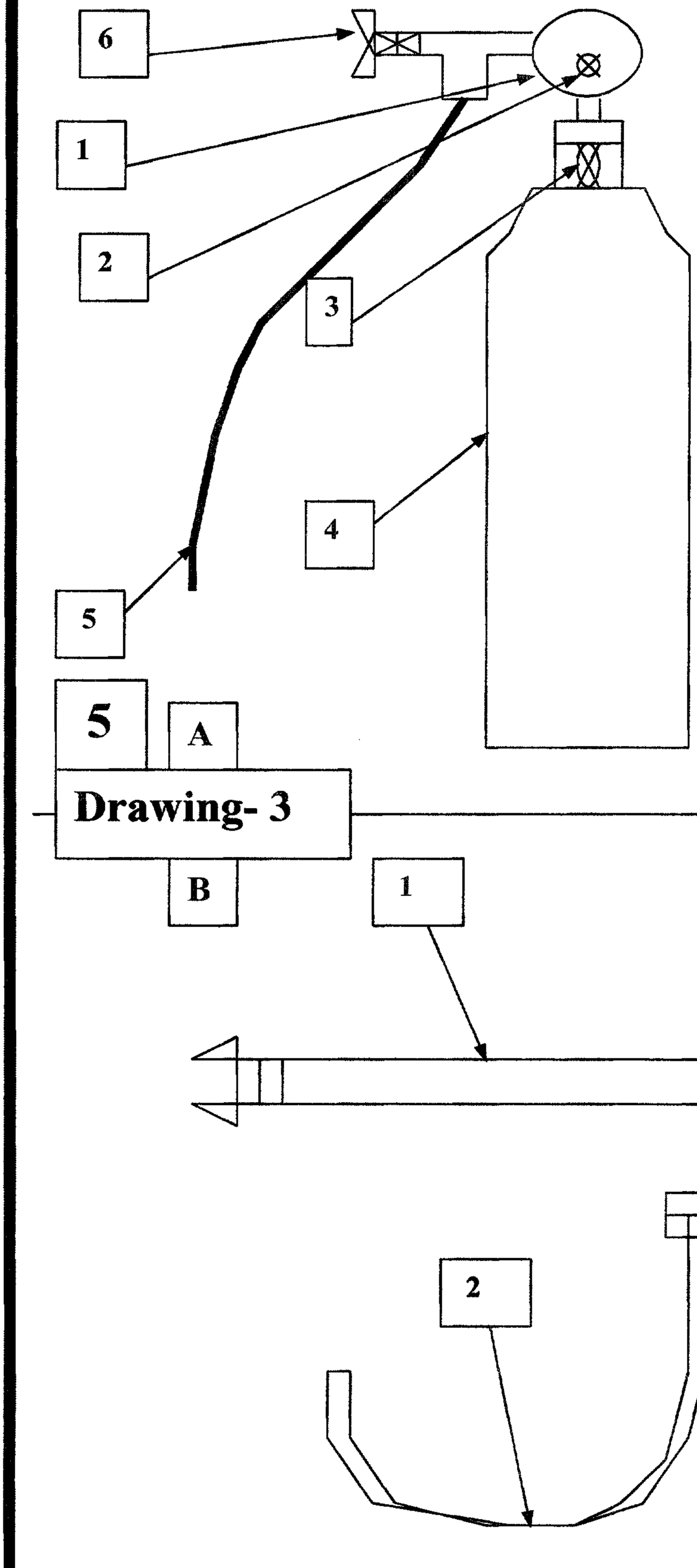
11- Air pressure on/off valve.
12- Co2 tank.
13- Air cylinder mounting bolts.
14- Air cylinder platform.
15- 1/2 inch lift inside shoe.
16- Shoe (custom designed).
17- Air cylinder.
18- Metal support mounting plate.
19- Air pressure exit(when three way valve butten is released).
20-Air pressure in and out port (part of air/shoe cylinder).

5

Drawing- 2

1- 1/8 inch C02 line concealed under pants.
2- Pant leg.
3- Toes angled to create illusion.
4- Ground level.
5- Four to six inches maximum levitation height.
6- Disc platform for ground support.
7- CO2 cylinder- piston.
8- Piston centre support shaft.
9- CO2 cylinder, concealed in shoe heel.
10-Line connection
11-1-1/2in lift inside the shoe.

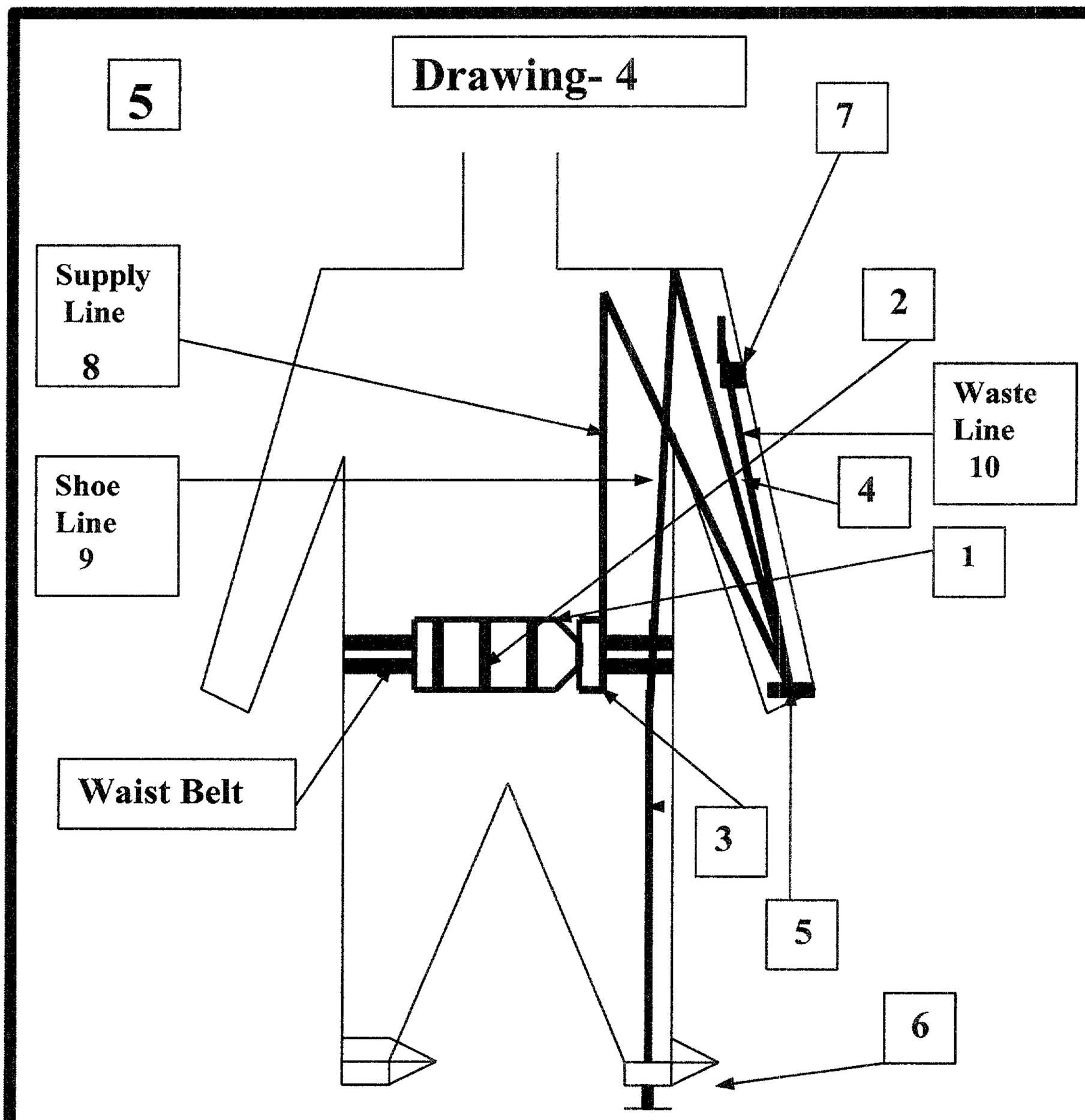




1- **Regulator.**
2- **Pressure adjustment valve.**
3- **Pressure on/off valve.**
4- **Nine ounce CO2 tank. (Size 9x21/2 in)**
5- **1/8 inch CO2 line.**
6- **CO2 pressure flow speed control manual valve, to adjust speed of levitation.**

1- **Leather belt for securing CO2 tank to waist.**
2- **Approx- three nylon fastener straps for securing CO2 tank to belt.**

Drawing- 4



1- CO2 tank.
2- Fastener straps for securing tank to waist belt.
3- Air speed control valve.
4- Polyurethane waste line, extending from the valve switch, up the arm and over the shoulder.
5- Three way valve switch for manual control of up and down movement of cylinder.
6- CO2 cylinder piston shaft, extend-from shoe.
7- In line air speed control valve.

1- Co2 Tank.
2- Fasteners for securing the Co2 tank to the waist belt.
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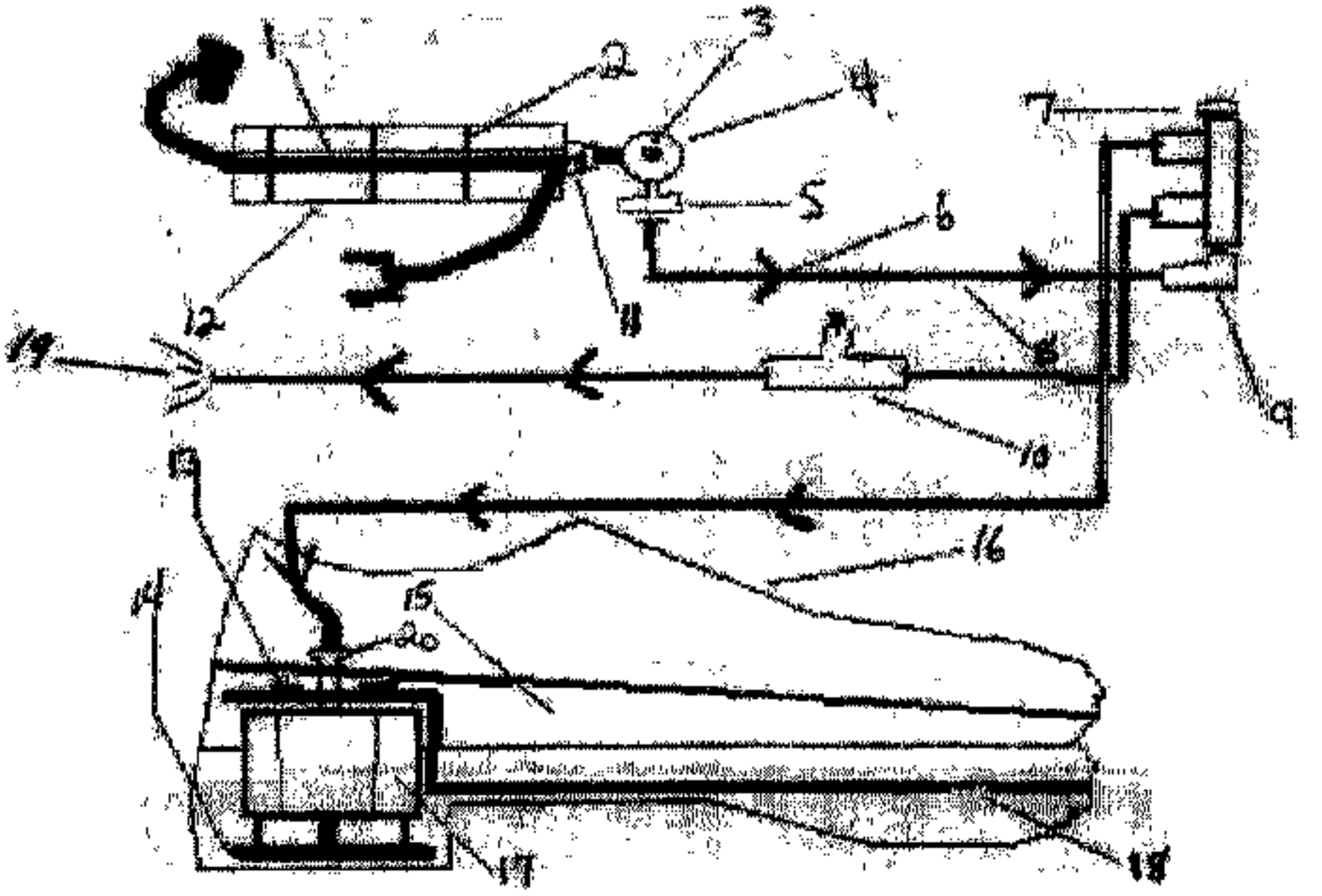

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