

Feb. 28, 1939.

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2,149,053

GAS RECEPTOR

Filed Dec. 31, 1936

2 Sheets-Sheet 1

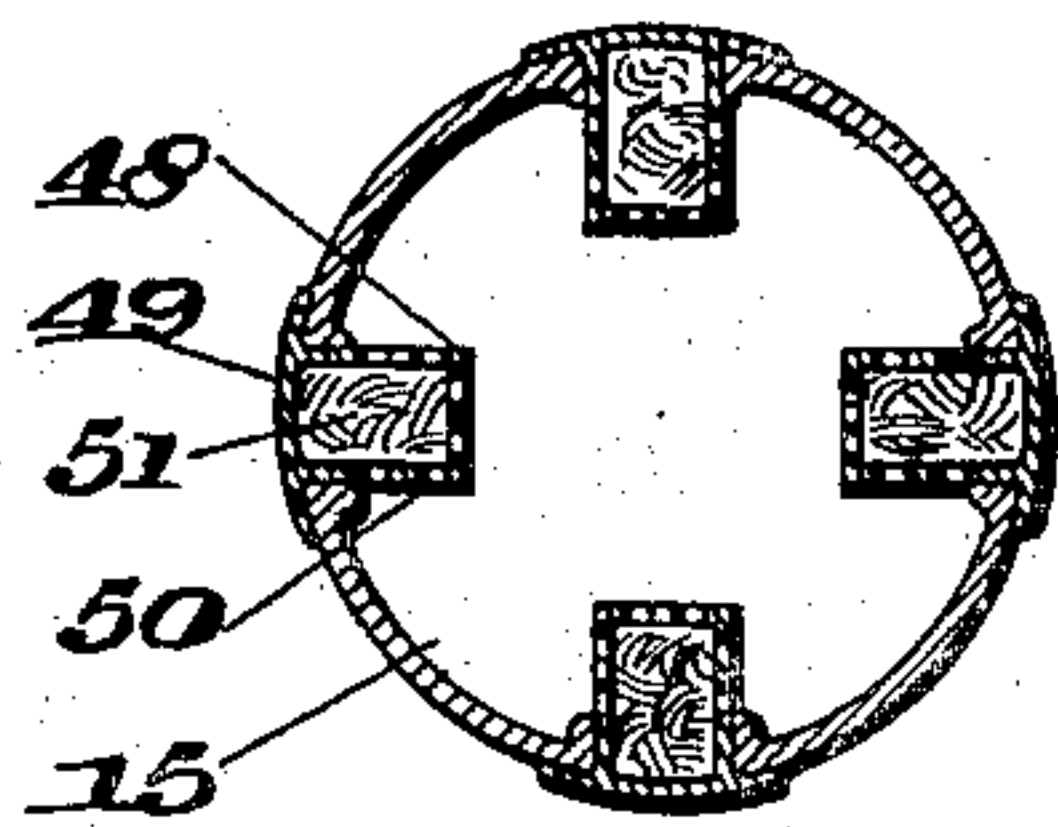
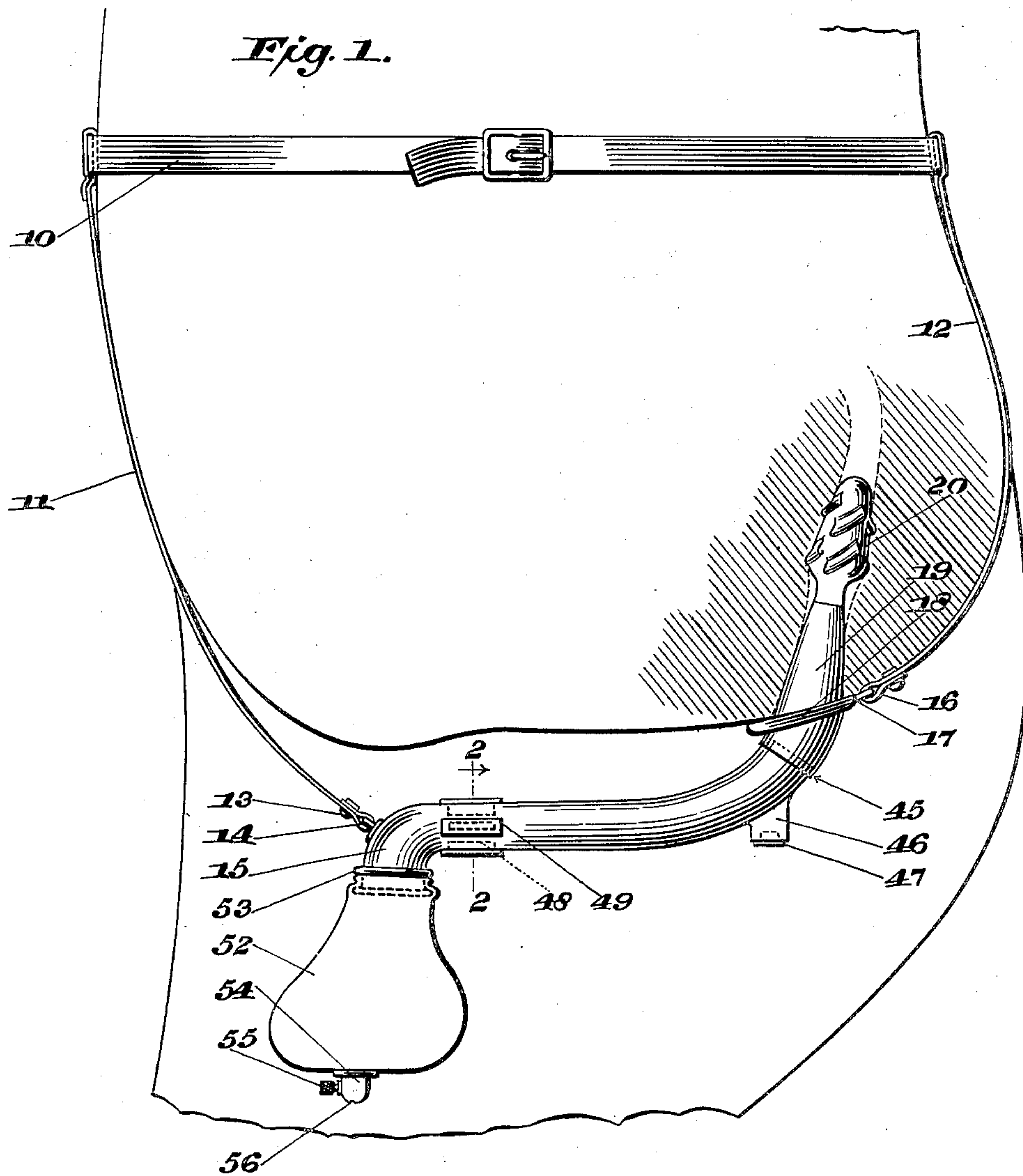


Fig. 2.

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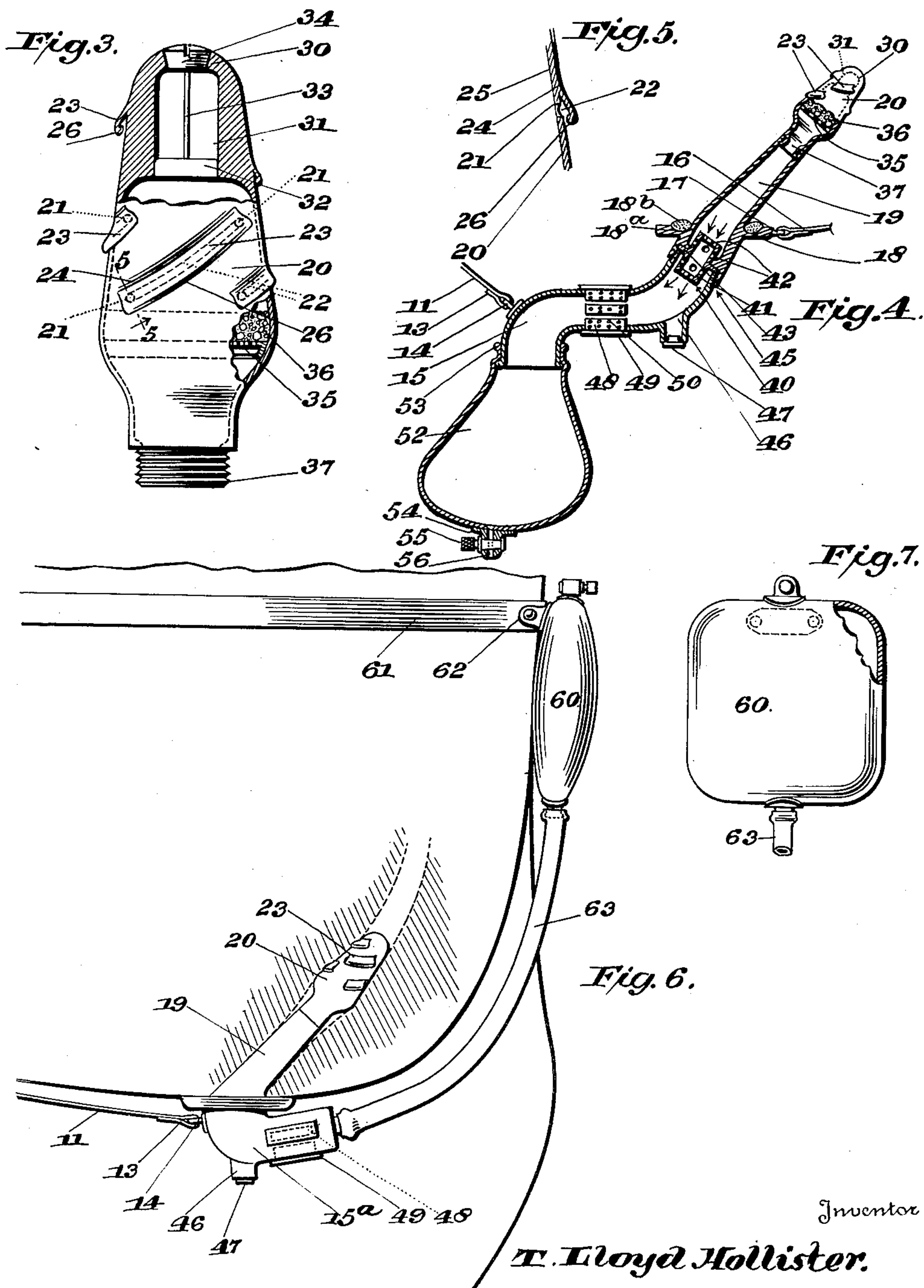
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GAS RECEPTOR

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Application December 31, 1936, Serial No. 118,662

4 Claims. (Cl. 128—283)

This invention relates to a device for receiving and storing gas formed by the digestion of foods.

An object of the invention is the provision of a device for collecting and storing gas formed in the alimentary tract of the body and for absorbing liquids from the gases.

Another object of the invention is the provision of a device for collecting and storing gas formed in the digestive tract, said device being removably suspended from the body and provided with a nipple having shielded perforations to permit gases to enter a storage chamber.

A further object of the invention is the provision of a device for taking care of the excess gas under pressure in the alimentary tract whereby strains are relieved.

A still further object of the invention is the provision of a device having a perforated nipple adapted to be received by one end of the alimentary tract through which gas is adapted to pass for storage in a chamber remote from the nipple, the perforations in the nipple being shielded to prevent clogging thereof with a muffler between the nipple and the storage for baffling the gases when under pressure.

This invention will be best understood from a consideration of the following detailed description, in view of the accompanying drawings forming a part of the specification; nevertheless, it is to be understood that the invention is not confined to the disclosure, being susceptible to such changes and modifications as define no material departure from the salient features of the invention as expressed in the appended claims.

In the drawings:

Figure 1 is a side view in elevation of my gas release shown in position,

Figure 2 is a vertical section taken along the line 2—2 of Figure 1,

Figure 3 is an elevation of the nipple showing an enlarged view,

Figure 4 is a view in elevation and partly in section of the gas release,

Figure 5 is a transverse section taken along the line 5—5 of Figure 3,

Figure 6 is a view in elevation of a modified form of the gas release, and

Figure 7 is a front view in elevation of the gas chamber used in Fig. 6.

Referring more particularly to the drawings, 10 designates a strap or belt adapted to embrace the waist of the body and from which depend straps 11 and 12. The lower end of the strap 11 is provided with a loop 13 adapted to receive an eye 14 secured in any approved manner to an

intermediate portion of a conduit or tube 15. The strap 12 is provided with a loop 16 adapted to receive an eye 17 projecting from a collar or flange 18 secured to or formed integrally with the upper portion 19 of the tube 45.

At the upper free end portion 19 of the tube 15 is formed a nipple 20 adapted to be received at the lower end of the alimentary tract. This nipple is shown more particularly in Fig. 3 as tapered and provided with a plurality of perforations 21 at the end of grooves 22 and an elongated lip 23 formed integrally with the nipple covers the groove and likewise the perforation 21. The lip 23 is shown more particularly in Fig. 5 and extends not only over the groove 22 but also over the perforation 21 and the outer wall of the lip merges into the wall 25 of the nipple 20 in order to eliminate any projecting edges. The free edge of the lip, as shown at 26, is curved inwardly and rounded at the edge to eliminate likewise any sharp projections.

As will be seen from Figs. 1, 3 and 4 a number of perforations are provided along the nipple but below the outer free end 30 thereof to permit gas to pass from the exterior of the nipple to the interior.

As shown more particularly in Figs. 3 and 4 the interior of the nipple has a cylindrical chamber 31 in which is slidably mounted a plunger 32 connected to a handle 33, and the outer free end of the handle is secured to a stopper or cap 34 which is rounded at its outer surface to conform to the curvature of the free end 30 of the nipple. It will be noted that the perforations 21 in the side walls of the nipple are located below the lower limit of movement of the plunger 32 so that said plunger will not close any of the passages when the plunger is disposed in an inoperative position as shown in Fig. 3. Reciprocation of the plunger after the stopper 34 has been removed will force air or gas or liquid through the perforations 21 and beyond the lips 23 and remove foreign matter which would tend to obstruct the passages. In the lower end of the nipple is located a screen or grid 35 for supporting a sponge 36 which is adapted to absorb liquids that may enter the perforations 21. The inner end of the nipple is threaded as shown at 37 and is screwed into the free upper end 19 of the tube 15 so that the hollow chamber in the nipple 20 is in communication with the tube 15.

The flange or collar 18 limits the inward movement of the nipple within the alimentary tract and engages the exterior of the body.

A muffler, generally designated by the numeral 55

40, is shown disposed within the tube 15 below the collar 18 and connects with a casing 41 having a plurality of perforations 42 in its side, top and bottom walls to permit the gas to pass into the perforations and out thereof into the lower end of the tube 15. An annular flange 43 connects the member 40 with the inner wall of the tube 15. This muffler may be made independently of the tube and threaded into it or it may be made in one piece with said tube.

The lower main body 15 of the tube is threaded into the upper portion 18 as shown at 45.

A trap 46 is located within the main body 15 and is provided with a valve or closure 47 for draining the main body when desired.

Below the trap 46 is disposed a plurality of perforated containers 48 and the outer walls of these containers are provided with flanges 49 which extend over the outer wall of the main body 15 for holding the containers in position. These containers run lengthwise of the main body 15, and are provided with perforations 50 to permit the discharge of perfume which is shown at 51 housed within the container 48. A perforation may be disposed also in the flange or closure 49 to permit the perfume to escape to the exterior.

A bag or container 52 is removably secured at 53 to the lower end of the main body 15 and this bag has an interior chamber for storing gas which can be released through the valve casing 54 controlled by a valve 55. The valve casing has an outlet passage 56 for the release of gas in the chamber within the bag 52.

The device is supported in position as shown by means of the straps 10, 11 and 12.

A modified form of the device is shown in Figs. 6 and 7 but the modification consists only in the disposition of the bag or container 60 since the said bag is connected directly to a strap 61 by means of ears 62 at the rear, side or front of the body, so that whatever description has been applied to the various parts for Figs. 1 to 5, inclusive, are also applied to the parts shown in Figs.

6 and 7 with the exception that a tube 63 is employed for connecting the bag 60 with the main body portion 15a. In other words the construction shown in Figs. 6 and 7 is identical with that shown in Figs. 1 to 5 but for the tube 63 which provides an extension for elevating the chamber or bag 60.

I claim:

1. A gas release comprising a member having a chamber for storing gas, a nipple provided with perforations and a tube connecting the nipple with the chamber, means within the tube for muffling the gases before said gases pass to the chamber, and means for supporting the gas release upon a body.

2. A gas release comprising a member having a chamber for storing gas, a nipple provided with perforations and a tube connecting the nipple with the chamber, means within the tube for muffling the gases before said gases pass to the chamber, means for supporting the gas release upon a body, and lips overhanging the perforations to prevent closing said perforations when the nipple has been inserted.

3. A gas release comprising a member having a chamber for storing gas, a nipple provided with perforations and a tube connecting the nipple with the chamber, means within the tube for muffling the gases before said gases pass to the chamber, means for supporting the gas release upon a body, and an absorption medium between the muffling means and the free end of the nipple.

4. A gas release comprising a member having a chamber for storing gas, a nipple provided with perforations to permit gas to enter the nipple, a tube connecting the nipple with the chamber, a harness for supporting the gas release on the body of the wearer, a shielding means to protect the perforations against stoppage, and a muffling means located in the tube between the nipple and the chamber.

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