

No. 743,486.

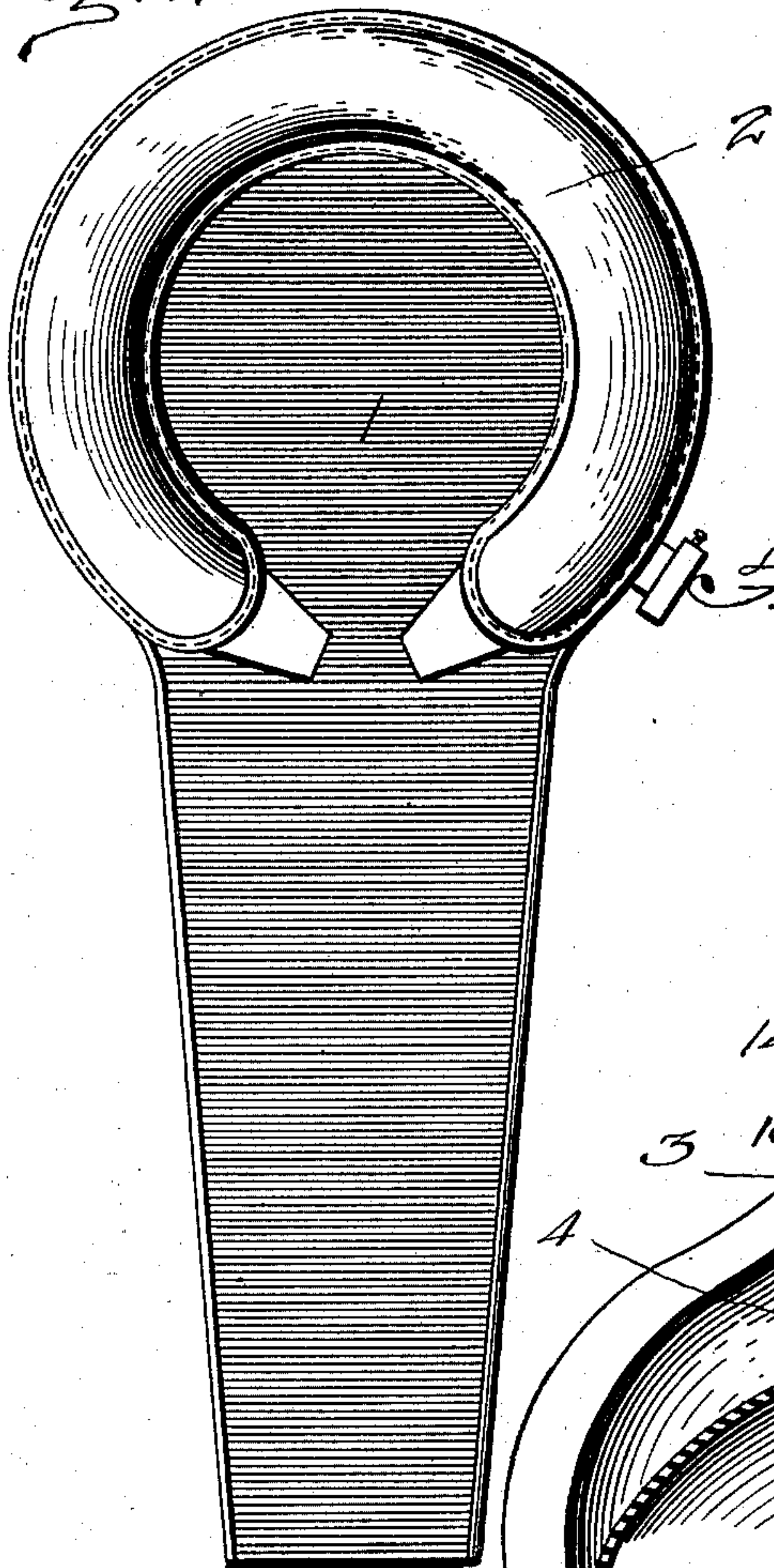
PATENTED NOV. 10, 1903.

G. H. GILMORE.  
SURGICAL PAD.

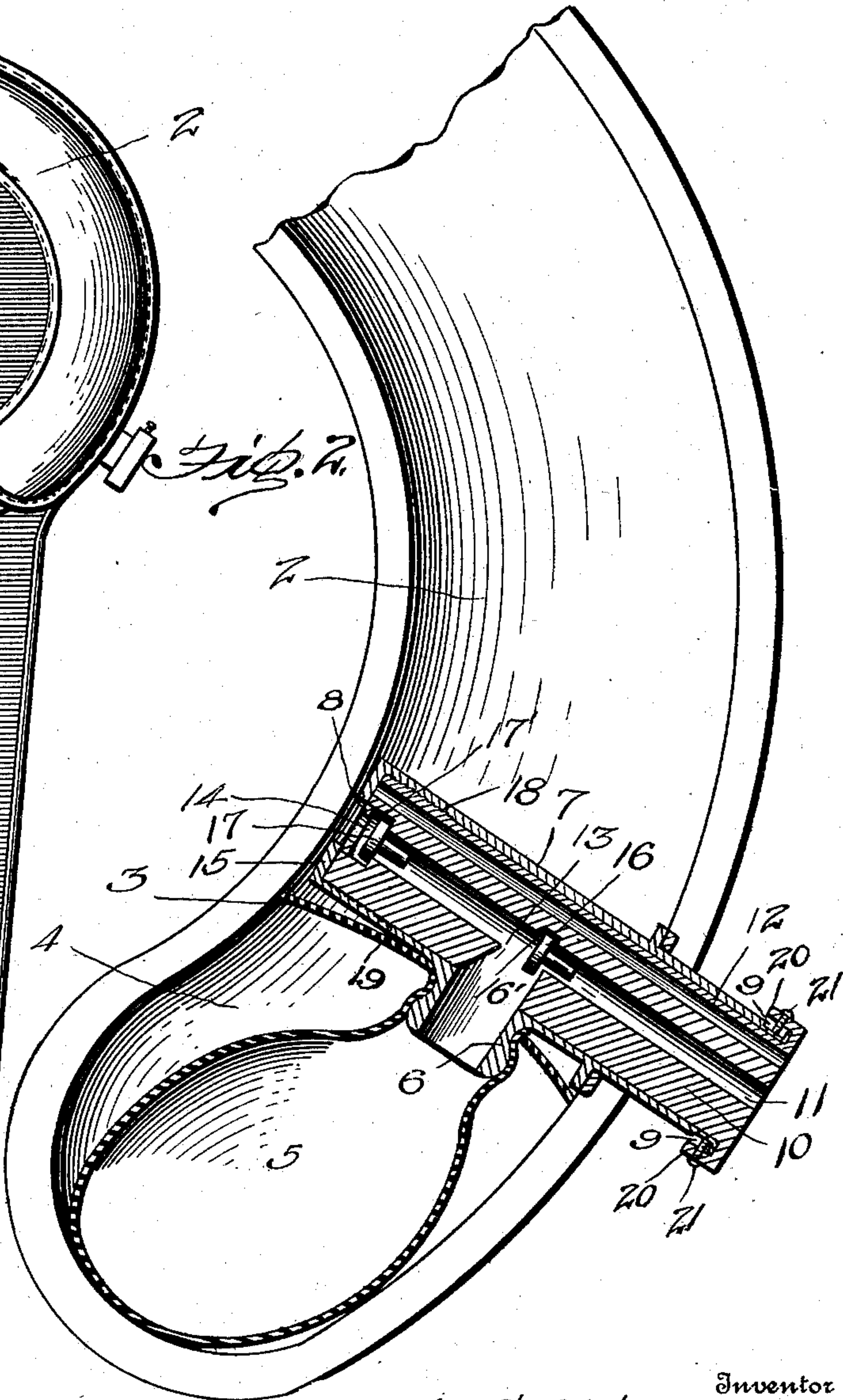
APPLICATION FILED NOV. 3, 1902.

NO MODEL.

*Fig. 1.*



*Fig. 2.*



Witnesses  
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# UNITED STATES PATENT OFFICE.

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## SURGICAL PAD.

SPECIFICATION forming part of Letters Patent No. 743,486, dated November 10, 1903.

Application filed November 3, 1902. Serial No. 129,906. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE H. GILMORE, a citizen of the United States, residing at Murray, in the county of Cass and State of Nebraska, have invented certain new and useful Improvements in Surgical Pads; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improved pad designed for obstetrical and other surgical work. Its object is to provide a pad which embodies as part thereof means for inflating and deflating the rim or seat portion of the pad, such means being arranged within the rim portion in such manner as to be concealed from injury and avoid interference with the free handling of the pad and the construction being such as to afford a convenient means of inflating the pad whenever required.

The invention consists of the features of construction hereinafter fully described and claimed, and is shown in the accompanying drawings, in which—

Figure 1 is a top plan view of a surgical pad embodying my invention. Fig. 2 is an enlarged detail section, showing the construction and arrangement of the bulb-and-valve mechanism.

1 represents the base or body of the pad, and 2 its inflatable rim. In accordance with my invention the rim 2 is divided at one end by a partition 3 to form a chamber 4, in which is disposed an inflating-bulb 5. This bulb is connected to a nipple 6 on a valve-casing 7, which extends at one end into the main chamber of the rim and projects at its opposite end to the exterior. At its inner end this casing 7 is provided with a perforate head 8 and at its outer end is fully open and formed with an annular groove 9. In the casing is arranged a valve body or plug 10, provided with longitudinal inlet and exhaust passages 11 and 12, the latter extending continuously through said plug and the former communicating intermediately with a lateral passage 13, connecting with the nipple 6, and at its inner end with a chamber 14, containing a perforated head 15. A check-valve 16 works in the passage 11, near the passage 13, and opens inwardly to allow air to pass into the

bulb and then closes outwardly against its seat 16' to allow air to pass into the rim, but to prevent its return back through said passage 13 to the atmosphere. A second check-valve 17 opens into the chamber 14 to allow the air under pressure from the bulb to pass into the rim and closes against its seat 17' to prevent the escape of air therefrom through the passage 13.

As shown, the inner end of the plug 10 is provided with screw-threads 18 to engage screw-threads 19 on the interior of the casing, such screw-threaded connection allowing the plug to have a limited rotary movement in the casing without disconnection therefrom, and at its outer end the plug is formed with an inturned flange 20, projecting over upon the outer end of the casing and carrying a set-screw 21, projecting into the groove 9. This groove is of such width as to permit the set-screw to move therein in a direction longitudinally of the casing to provide for the limited rotary movement of the plug, the latter being held against further movement by adjusting said set-screw to bear upon the bottom wall of the groove, as will be readily understood. The opening movement of the valve 17 is limited by the head 15, and the head 8 of the casing 7 closes the passage 12 when the plug 10 is adjusted to the limit of its inward movement.

In operation, assuming that the passage 12 is closed, it will be clear that upon compressing and relaxing the walls of the chamber 4 the bulb 5 contained therein will be compressed and relaxed in like manner and will draw air in through the passage 11 and force the same into the rim, thus inflating the latter, escape of the confined air being prevented by the valves 16 and 17 and the closure of the passage 12 by the head 8. In thus supplying the rim with air the relaxation of the bulb after compression will draw air from without into the passage 11, the valve 16 opening under the pressure produced to allow this air to pass into the bulb and then closing upon a subsequent compression of the bulb to cause the air to pass by the valve 17 and through the head 15, said valve 17 then closing under the confined pressure to prevent the air in the rim from escaping by a reverse flow through passage 11. When it is



desired to deflate the rim, the plug 10 is turned a prescribed distance to the left to form a space between the head 8 and inner end of the passage 12, whereupon the confined air 5 will exhaust to the atmosphere through said passage. By again screwing up the plug the passage 12 may be closed, thus resetting the parts for inflation. The set-screw 21 may be 10 ment in either of its two aforedescribed adjusted positions. The valve-casing may be secured to the wall of the rim in any approved manner.

From the foregoing description, taken in 15 connection with the accompanying drawings, the construction and mode of operation of the invention will be readily understood, and it will be seen that a simple and convenient means of inflating the rim is provided, and 20 its manifold advantages will be readily appreciated.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the prin- 25 ciple or sacrificing any of the advantages of this invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

30 1. A surgical pad having an inflatable rim partitioned at one end to form a chamber, and inflating means including a bulb inclosed in said chamber, substantially as described.

2. A surgical pad having an inflatable rim, 35 a bulb inclosed therein, and a valve-casing provided with a supply-passage communicating with the bulb and provided with check-valves, and an exhaust-passage, and means for closing said exhaust-passage, substan- 40 tially as set forth.

3. A surgical pad having an inflatable rim, a bulb inclosed therein, a valve-casing ex-

tending into the rim, and a rotary plug with- in the casing provided with a check-valve sup- ply-passage, and an exhaust-passage adapted 45 to be opened and closed by a rotary movement of the plug within the casing, substantially as shown and described.

4. A surgical pad having an inflatable rim, and an inflating device contained therein and 50 adapted to be operated by direct manual compression of the rim, said device having a valved inlet-passage, a discharge-passage, and means for opening or closing said dis- charge-passage at will, substantially as de- 55 scribed.

5. A surgical pad having an inflatable rim, a bulb therein, a valve-casing extending through the side of the rim and connected to the bulb, and a valve mechanism in said cas- 60 ing provided with means for controlling the inlet of air into the bulb and thence into the rim, and controlling the exhaust from the rim to the atmosphere, substantially as described.

6. A surgical pad having an inflatable rim, 65 a bulb therein, a valve-casing extending through the side of the rim and having a port communicating with the bulb and a second port communicating with the rim, and a valve in said casing having a valved inlet-passage 70 for admitting air through the first-named port into the bulb, and thence through both ports into the rim, and also having an exhaust-pas- sage and adjustable to bring said passage into and out of communication with the said second 75 port, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing wit- nesses.

GEORGE H. GILMORE.

Witnesses:

G. H. MANNERS,  
CHAS. S. STONE.