

Sept. 16, 1947.

C. W. BROOKS

2,427,546

INFLATED TRUSS PAD

Filed March 28, 1946

Fig. 1

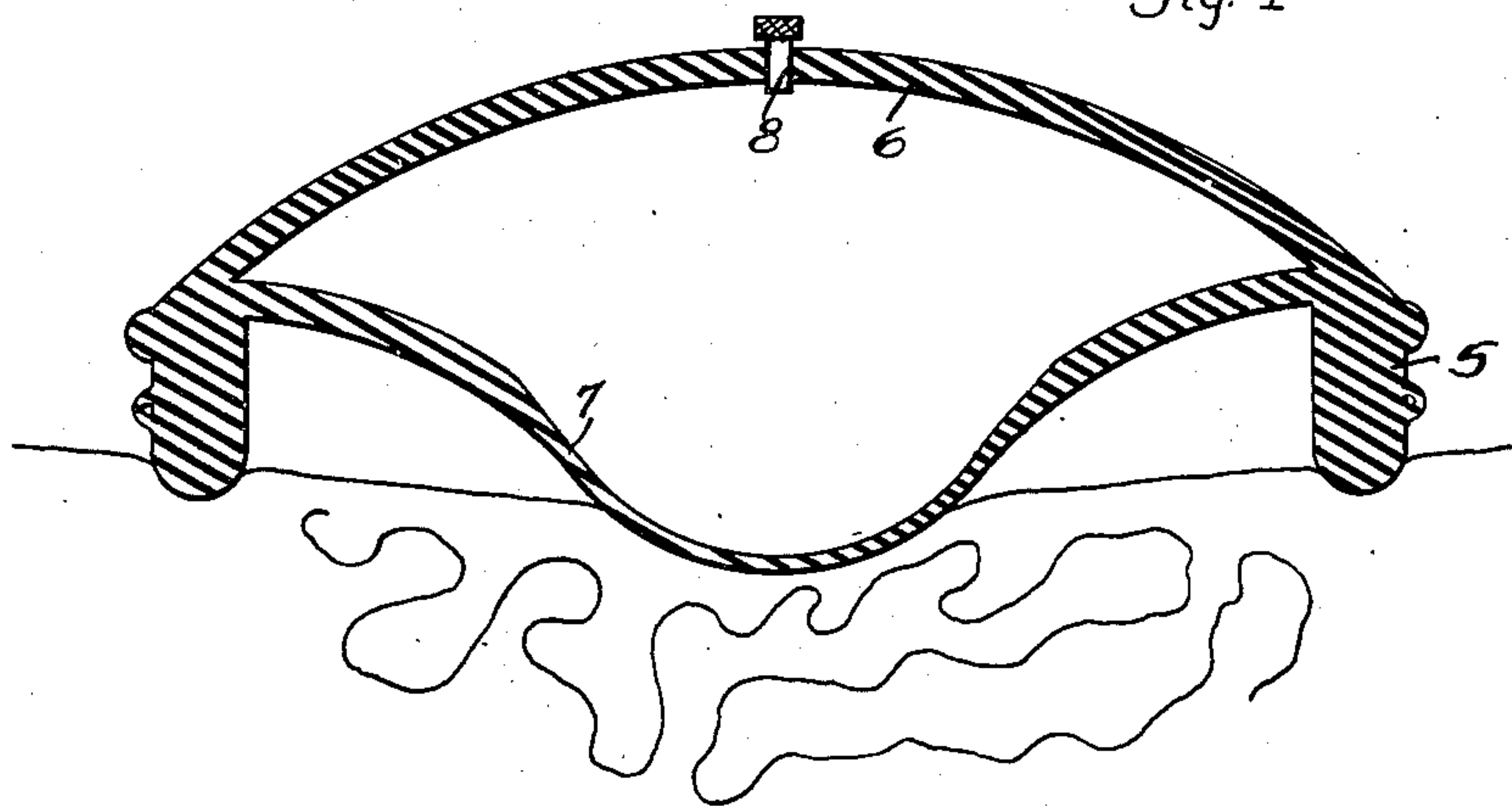
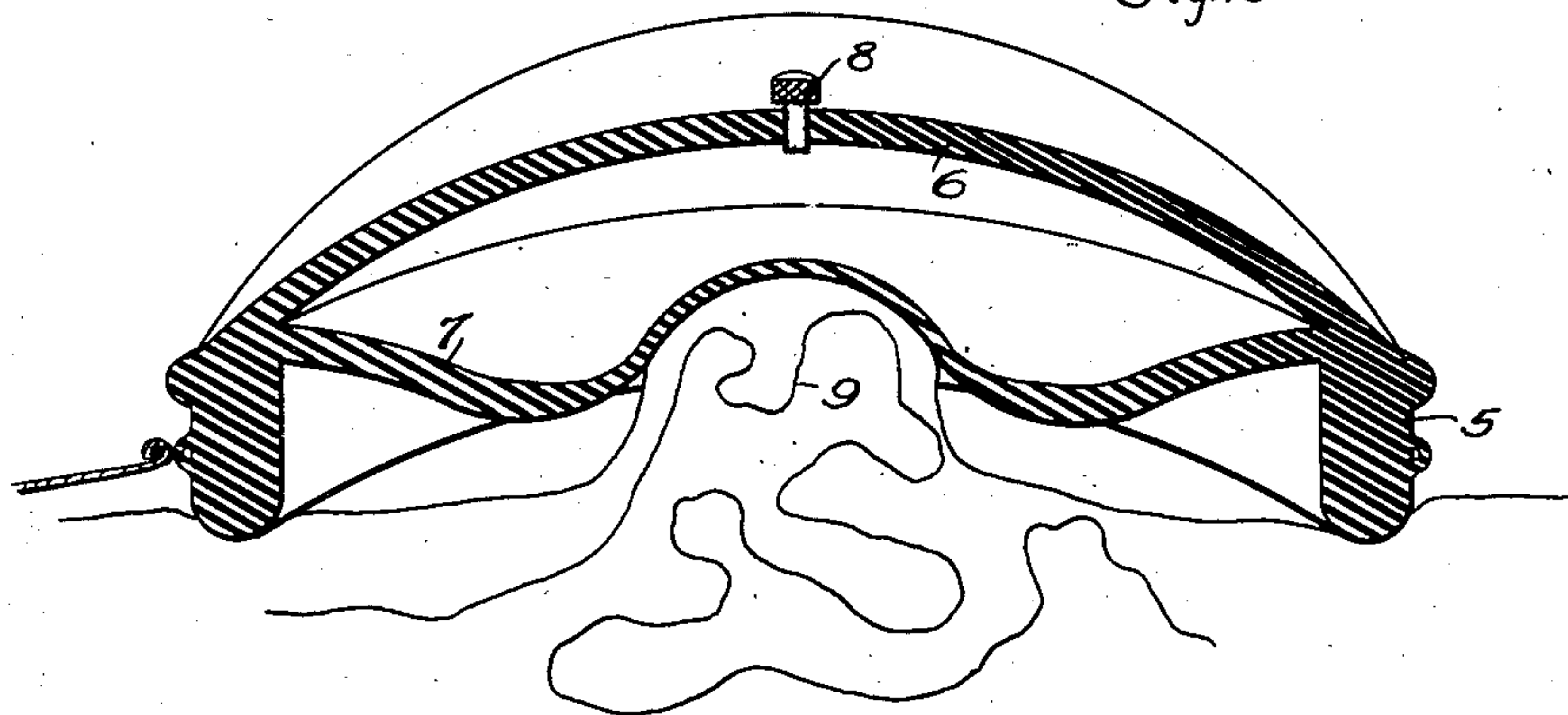


Fig. 2



INVENTOR.

BY C. W. Brooks,

Samuel Herrick

UNITED STATES PATENT OFFICE

2,427,546

INFLATED TRUSS PAD

Charles W. Brooks, Oklahoma City, Okla.

Application March 28, 1946, Serial No. 657,811

1 Claim. (Cl. 128—118)

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The object of the present invention is to provide an improved truss or hernia pad. The invention will be best understood by a consideration of the accompanying drawings, wherein:

Figure 1 is a vertical sectional view, illustrating the action of the pad when the hernia is not under abnormal internal pressure, and,

Figure 2 is a sectional perspective, illustrating the action of the pad when the hernia is under abnormal internal pressure.

Like numerals designate corresponding parts in all of the figures of the drawing.

An important object of the present invention is to provide a supporting device for the abdominal walls which will cover a much greater area than is common in devices of this kind. In other words, instead of merely providing a plug to closely conform to the area of the orifice in the abdominal wall, this device covers a considerable area of the abdominal wall and supports it in such manner as to yield to fit the conditions which may exist at any given moment.

The device of the invention comprises an annular member 5, which may be of rubber of such thickness as to render it relatively stiff. This ring is spanned by two flexible and more or less elastic diaphragms, the outer diaphragm being indicated at 6, and the inner diaphragm being indicated at 7. The inner diaphragm is preferably made thinner at its central portion than at its outer portion. The structure as a whole may be held in place in any of the ways commonly employed for holding trusses in place, such as belts, body embracing clips, or the like.

The ring 5 is made stout enough and with enough firmness that when applied with slight pressure to the surface of the abdomen, the area confined therein will have a tendency to draw the underlying muscles and tissues toward the abdominal orifice and thus assist nature in healing it. The ring 5 with the two diaphragms comprises a cup-like member that is inverted over the wound, yet each diaphragm functions independently of the other, and together they constitute a pneumatic bulb, the outer diaphragm being provided with an inflation valve 8, through which air may be injected into the space between the two diaphragms. When by exertion, or other internal pressure, there is a tendency for the intestines 9 to be forced outwardly through the abdominal opening or rent, the inflated bulb gently gives way and recedes, providing space for the hernia to "breathe," until the pressure from with-

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in has subsided. The pressure exerted against the abdominal wall by the rim of the inverted cup is always greater than the pressure exerted by the elastic inflated diaphragms. When the internal pressure has subsided, the pneumatic pressure, together with the contracting diaphragms, gently replace the intestines to normal position.

The graduation of the inner diaphragm from a condition of relative thinness, at its center, to a thicker outer portion, causes this inner diaphragm to form the shape of a nipple to thereby more easily conform to the shape of the hernia. Further, by making the inner diaphragm, in part, thinner, and consequently more yieldable than the outer diaphragm, this inner diaphragm yields first to the tendency of the intestines to move outwardly, and thus the application of pressure is rendered very gentle and gradual. The other diaphragm yields more slowly and only as the internal pressure within the body becomes more acute.

It is to be understood that the invention is not limited to the precise construction set forth, but that it includes within its purview, whatever changes fairly come within either the terms or the spirit of the appended claim.

Having described my invention, what I claim is:

A pad of the character described comprising a ring-like rim of rubber or equivalent soft material having a rounded inner edge adapted to fit against the flesh of the wearer, and a pair of flexible air tight diaphragms integral with said ring and spanning the space embraced by said ring, the outermost of said diaphragms being of arch formation and relatively stiff, and the inner of said diaphragms being much thinner at its central portion than around its outer portions, and means for introducing air pressure between said diaphragms.

CHARLES W. BROOKS.

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