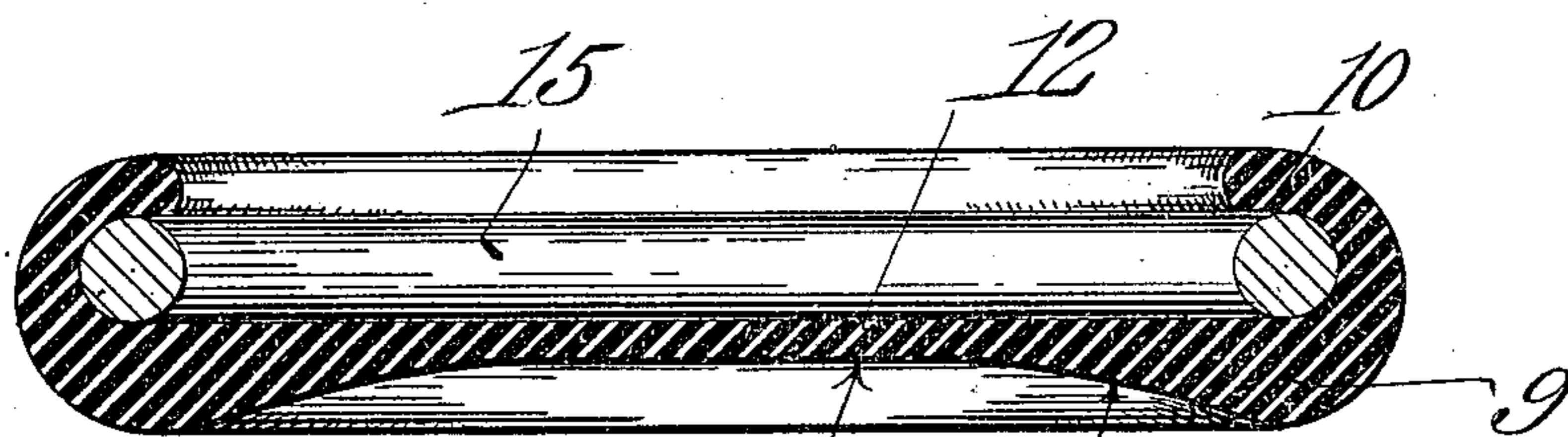
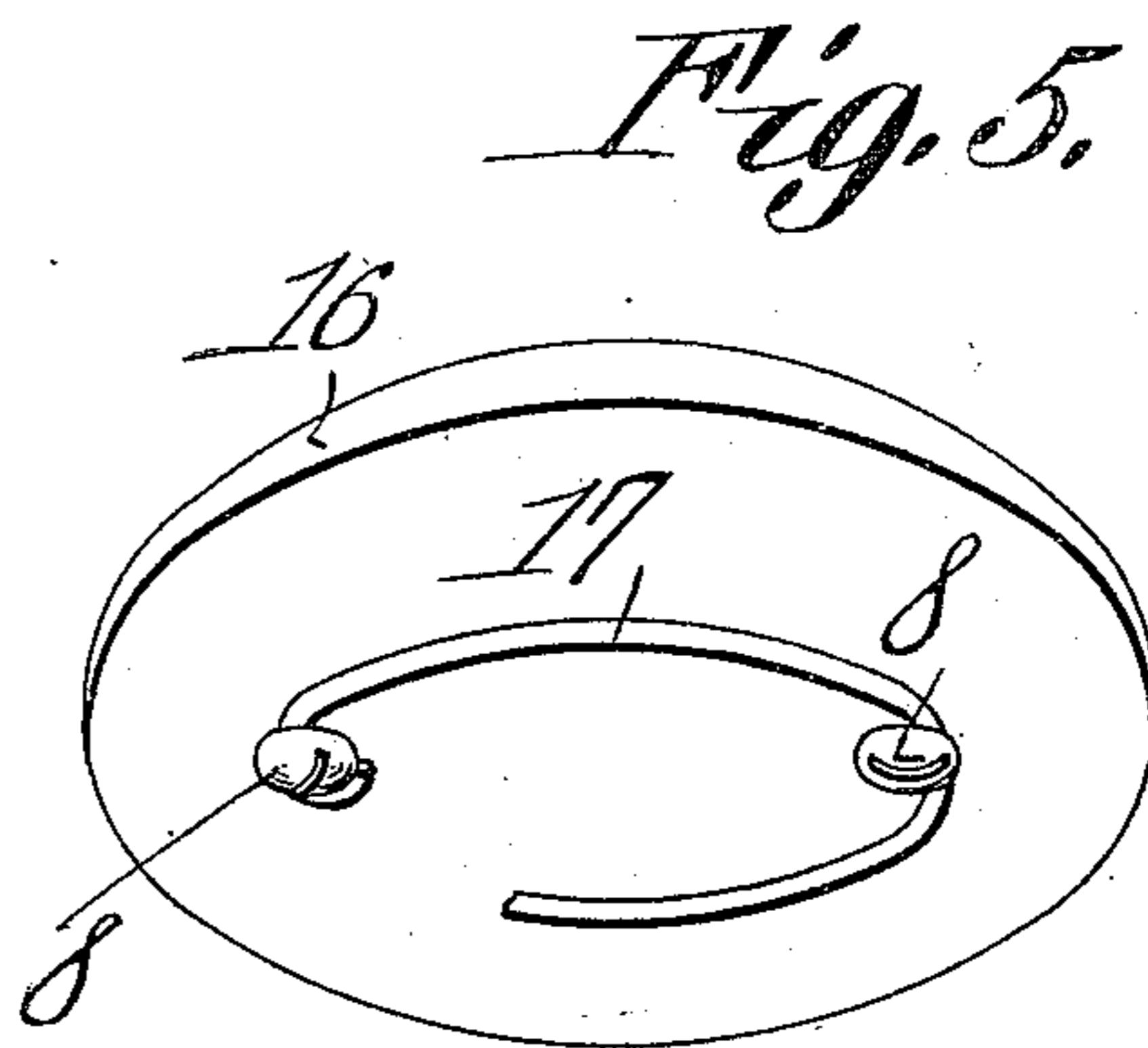
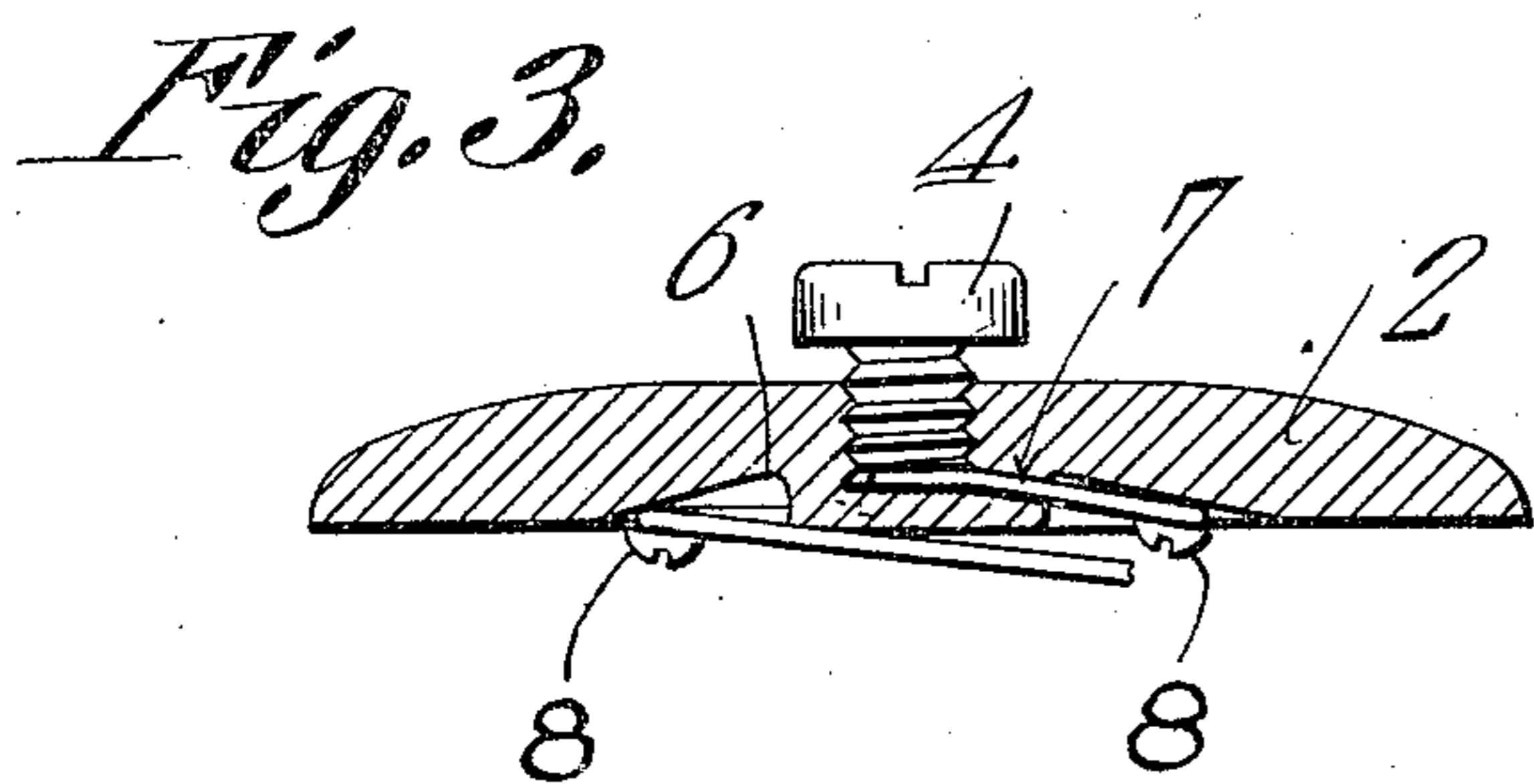
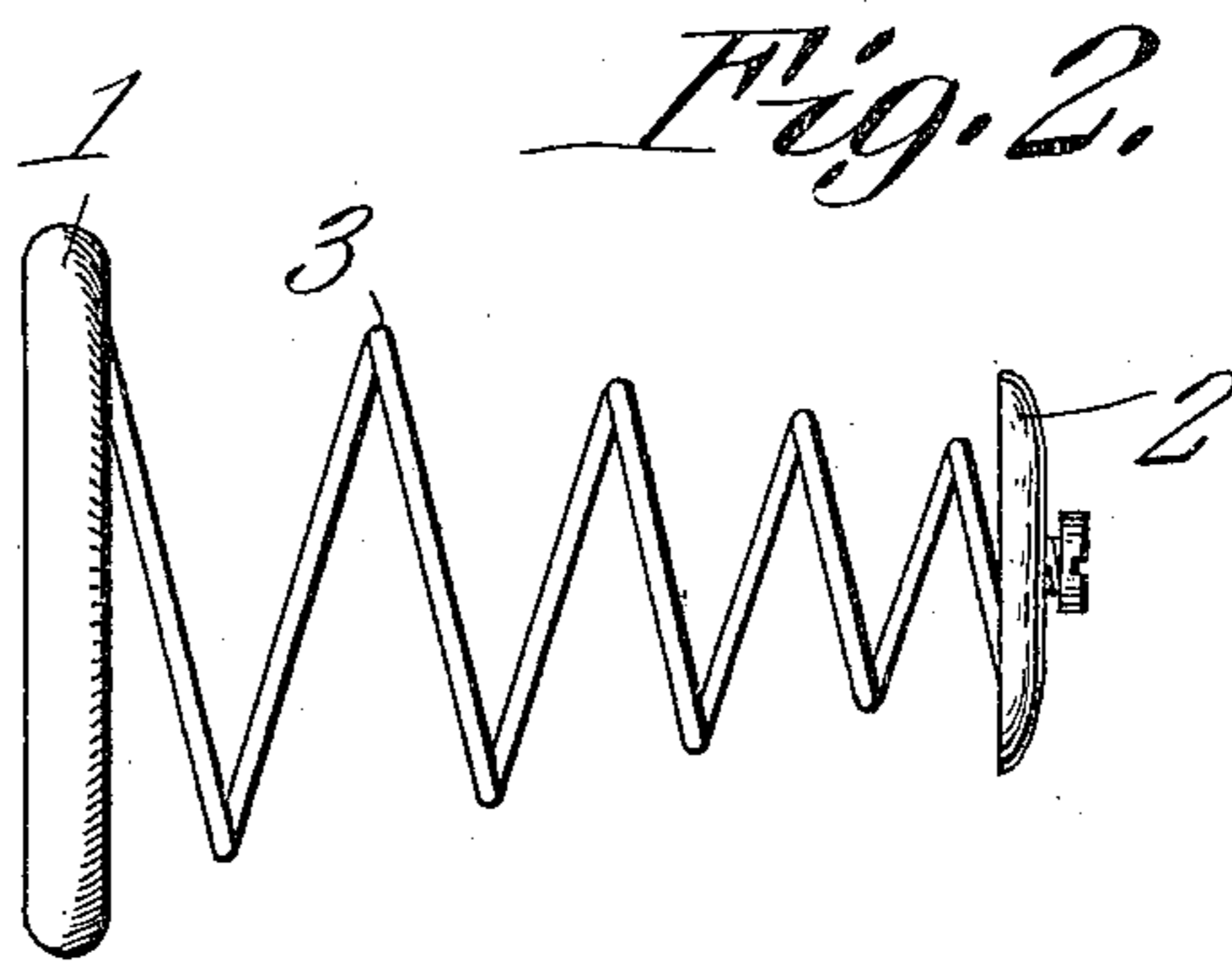
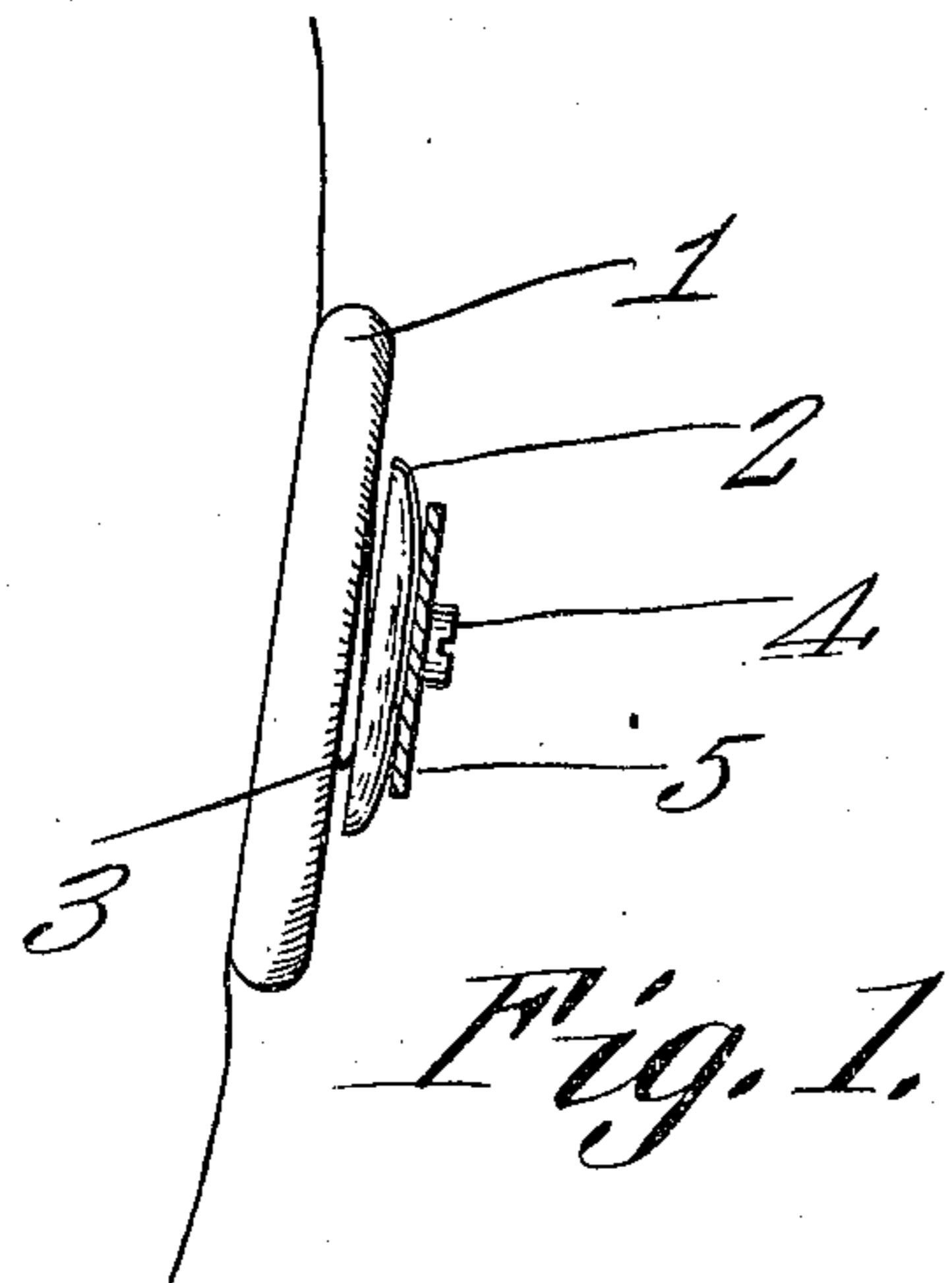


G. W. ARNOLD.
TRUSS PAD.
APPLICATION FILED SEPT. 17, 1909.

960,481.

Patented June 7, 1910.



Witnesses

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GEORGE W. ARNOLD, OF GIRARD, OHIO.

TRUSS-PAD.

960,481.

Specification of Letters Patent.

Patented June 7, 1910.

Application filed September 17, 1909. Serial No. 518,229.

To all whom it may concern:

Be it known that I, GEORGE W. ARNOLD, a citizen of the United States, residing at Girard, in the county of Trumbull and State of Ohio, have invented a new and useful Truss-Pad, of which the following is a specification.

The objects of the invention are, generally, the provision in a merchantable form, of a device of the above-mentioned class, which shall be inexpensive to manufacture, facile in operation, and devoid of complicated parts; specifically, the provision of a truss pad of novel and improved construction; and of novel means for connecting the truss pad, yieldingly, with a truss; other and further objects being made manifest hereinafter as the description of the invention progresses.

The invention consists in the novel construction and arrangement of parts hereinafter described, delineated in the accompanying drawings, and particularly pointed out in that portion of this instrument wherein patentable novelty is claimed, it being understood, that, within the scope of what hereinafter thus is claimed, divers changes in the form, proportions, size, and minor details of the structure may be made, without departing from the spirit or sacrificing any of the advantages of the invention.

Similar numerals of reference are employed to denote corresponding parts throughout the several figures of the drawings.

In the accompanying drawings, Figure 1 shows in side elevation, my invention assembled, the spring being compressed, and the invention being operative to exercise its functions; Fig. 2 is a side elevation of the device, the spring being extended; Fig. 3 is a transverse section of the retaining member, parts being shown in elevation; Fig. 4 is a transverse section of the truss pad proper, the adjacent convolution of the spring wherewith the truss pad is assembled, being shown in elevation; and Fig. 5 is a perspective of a modified form of retaining member, the modification consisting in altering slightly, the connection between the spring and the retaining member.

In the following description, that portion of the device which is disposed toward the body of the wearer will be denominated the

"inner" portion, other terms being selected accordingly.

The invention consists, primarily, in a pad 1, a supporting member 2, and a compression spring 3, the extremities of which are assembled with the pad 1 and with the supporting member 2. The spring 3 is coiled, and conoidal in form, the smaller end thereof being assembled with the supporting member 2, and the larger end thereof being assembled with the truss pad 1. By this construction, when, as shown in Fig. 1, the device is in use, the convolutions of the spring are adapted to nest within one another. The device is thus disposed in compact form and, owing to the fact that the convolutions of the spring 3 are thus nested, lateral movement of the truss pad upon the rupture is rendered unlikely.

The inner face of the supporting member 2 is provided with a threaded, axial opening, adapted to receive a screw 4 whereby the device may be assembled with an arm 5, or other portion of the truss. The smaller end of the spring 3 may be assembled with the supporting member 2 in a variety of ways; in Fig. 3 I have provided the inner face of the supporting member 2 with an annular seat 6 which is adapted to receive the final convolution of the spring, there being a channel 7, inclined slightly toward the outer face of the supporting member 2 and communicating with the opening in which the screw 4 is mounted. The extremity of the spring 3 is adapted to be inserted in the channel 7, to extend beneath the screw 4, and when so mounted, the screw 4 serves at once as a means for assembling the device with a truss, and for binding the extremity of the spring 3 within the supporting member 2. Mounted in the inner face of the supporting member 2 are screws 8, preferably diametrically disposed, the heads of which are adapted to engage the final convolution of the spring to bind the same in place upon the inner face of the supporting member 2. A wide latitude is desired in the means whereby the spring is assembled with the supporting member, and it is obvious that the supporting member may take the form shown in Fig. 5, and there denoted by the numeral 16, the end of the spring 17 being coiled or bent about one of the screws 8.

Passing now to a detailed description of

the truss pad proper, and referring particularly to Fig. 4, it will be seen that the pad comprises an annular portion 9, the periphery of which is overbent to form a flange 10, adapted to extend to the rear of the adjacent convolution 15 of the spring, the flange 10 being prolonged to extend within the convolution 15, past the axis of said convolution. By this construction, the truss pad may be securely held upon the larger end of the spring. The annular portion 9 of the truss pad is rigid, and its inner face 11 is inclined toward the center of the pad. The central portion of the truss pad is occupied by a yieldable diaphragm 12, the inner face 14 of which is adapted to bear directly against the rupture. The diaphragm and the annular portion are fashioned integrally, both being preferably constructed from rubber or like resilient substance, the diaphragm portion 12 being yieldable, while the annular portion 9 is so treated in the process of manufacture, that the same will be rigid and unyielding.

The rigid annular portion 9 is adapted to surround the rupture and to hold the same securely in place, the inclined inner face 11 of the portion 9 serving to actuate the rupture toward the center of the pad, thereby preventing the rupture from working outwardly, beyond the compressive effort of the device. The inner face 14 of the diaphragm 12, is adapted to exert even, though yielding pressure upon the central portion of the rupture, the diaphragm yielding slightly under extreme physical efforts on the part of the wearer, yet at all times

serving to force the rupture within the abdominal wall, without chafing or annoying the wearer.

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

1. A truss pad consisting of a rigid annular portion having its inner face inclined toward the center of the pad, the central portion of the pad consisting of a yieldable diaphragm fashioned integrally with the annular portion; and a coiled spring for actuating the pad, the periphery of the annular portion of the pad being overbent to form a flange to extend to the rear of the adjacent convolution of the spring beyond the axis of said convolution.

2. A device of the class described comprising a truss pad; a supporting member; and a coiled spring connecting the truss pad with the supporting member; the supporting member being provided in one of its faces with a threaded aperture, and in the other of its faces with an inclined channel communicating with the aperture and arranged to receive one end of the spring; and a threaded member arranged to be mounted in the aperture to engage the end of the spring, and to serve as a means for assembling the device with a truss.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

GEORGE W. ARNOLD.

Witnesses:

THOS. EVANS,
SAMUEL MILES.