

No. 774,650.

PATENTED NOV. 8, 1904.

E. DENEGRÉ.
SPRING CUSHION.

APPLICATION FILED DEC. 5, 1903.

NO MODEL.

Fig. 1.

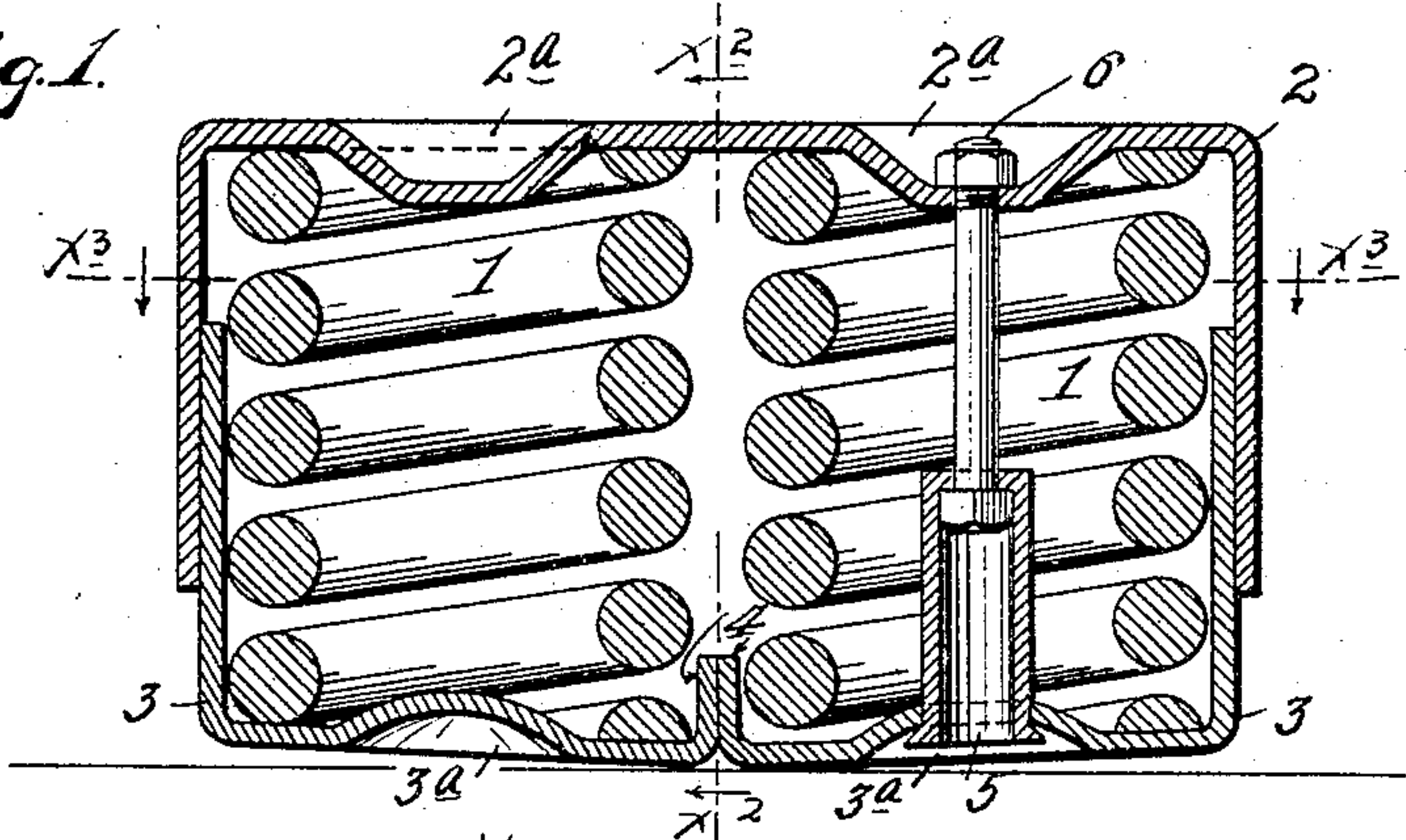


Fig. 2.

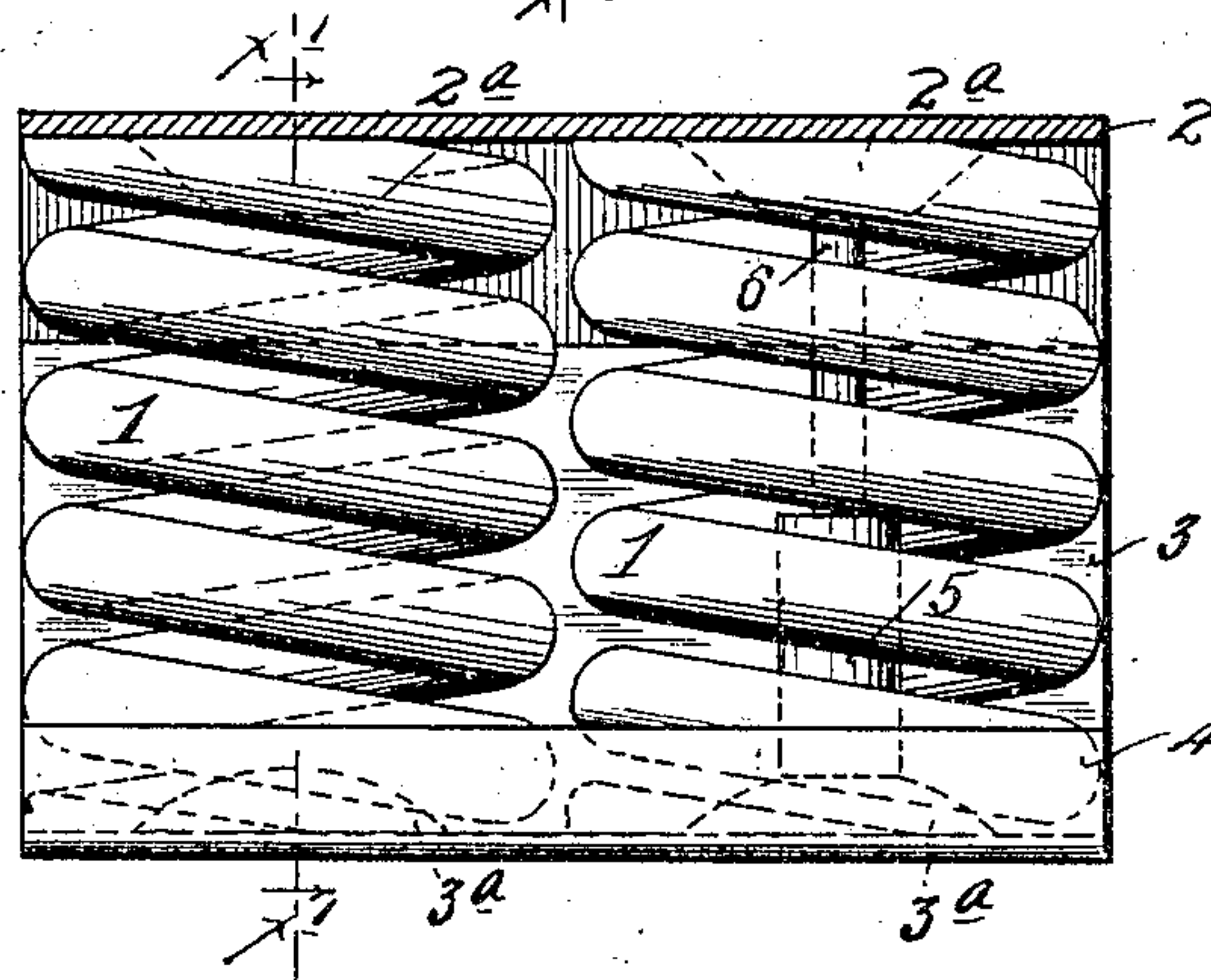
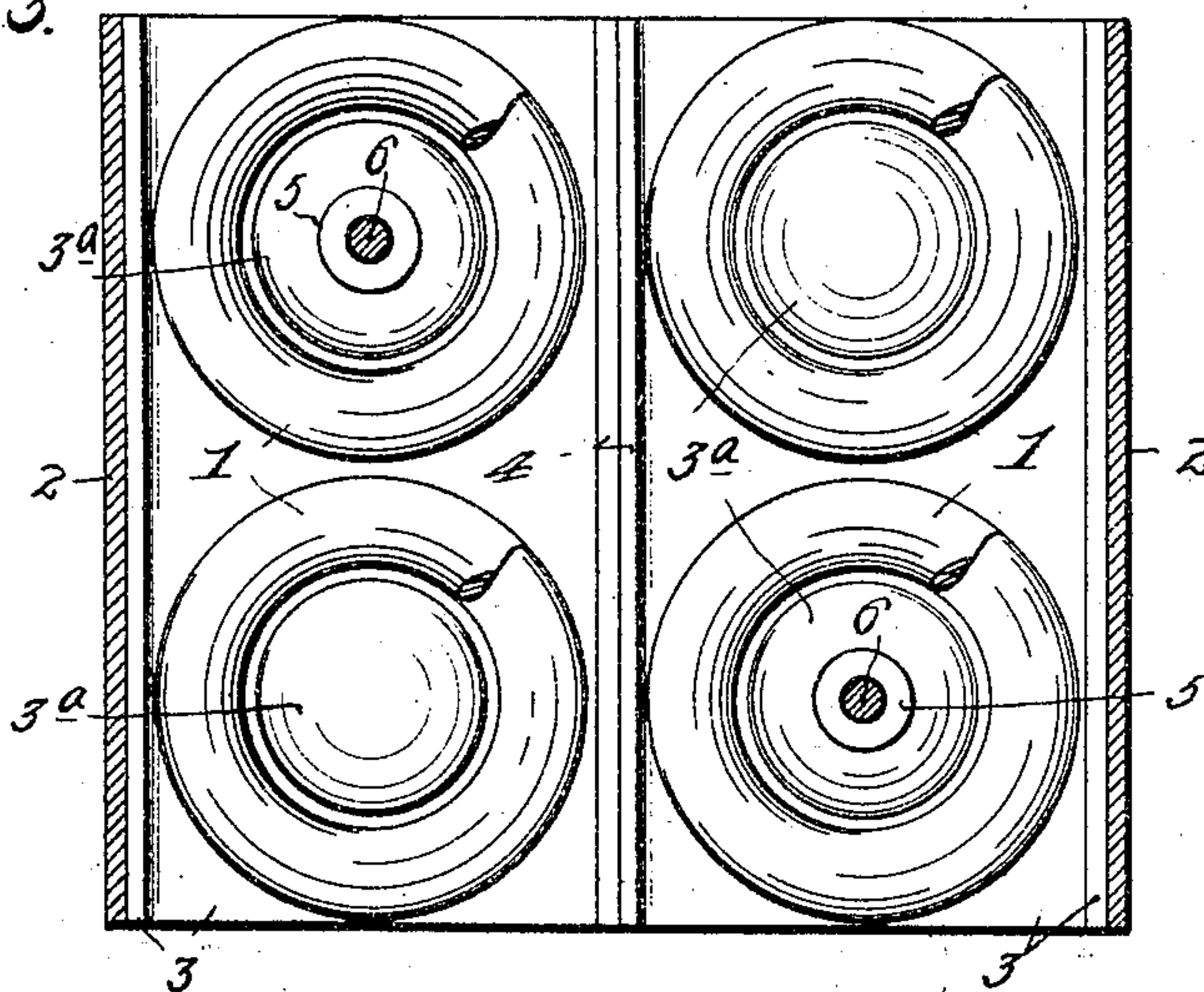


Fig. 3.



Witnesses,

H. D. Kilgore

A. H. Opsahl

Inventor,

Edward Denegre,

By his Attorneys.

Williamson & Merchant

UNITED STATES PATENT OFFICE.

EDWARD DENEGRÉ, OF CHICAGO, ILLINOIS, ASSIGNOR TO McCORD & COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF NEW JERSEY.

SPRING-CUSHION.

SPECIFICATION forming part of Letters Patent No. 774,650, dated November 8, 1904.

Application filed December 5, 1903. Serial No. 183,846. (No model.)

To all whom it may concern:

Be it known that I, EDWARD DENEGRÉ, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Spring-Cushions; and I do hereby 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.

My present invention relates to spring-cushions of the general character disclosed and claimed in the prior patent to A. C. McCord, No. 709,998, of September 30, 1902, and has for its object to improve the same in the several particulars hereinafter noted.

My present invention is illustrated in the accompanying drawings, wherein like characters indicate like parts throughout the several views.

Figure 1 is a vertical section taken through a spring-cushion embodying my invention, said section being taken on the line $x'x'$ of Fig. 2. Fig. 2 is a transverse vertical section through the cushion on the line x^2x^2 of Fig. 1, and Fig. 3 is a horizontal section through the cushion on the line x^3x^3 of Fig. 1.

The coiled springs 1, of which, as shown, there are four, are compressed between a spring cap-plate 2 and the sections of a lower divided or base plate 3. The cap-plate 2 has downturned ends that frictionally engage with the outer surfaces of the upturned outer ends of the sections of the divided base 3. The inner ends of the base-sections are turned upward a short distance to form engaging stop-flanges 4. The separating movements of the sections of the base-plate 3 with respect to the cap-plate 2 are limited by telescoping stop connections conveniently afforded by sleeves 5 and cooperating nutted bolts 6.

The cap-plate 2 is depressed at 2^a to form bosses that hold the upper ends of the spring in proper relative position, and the base-sections 3 are likewise bulged upward at 3^a, so as to afford bosses which hold the lower ends of the spring in proper relative positions. As shown, there is but one telescoping stop

connection for each section of the base-plate 3. The lower ends of the sleeves 5 are upset or flared to prevent them from being drawn through their seats in the bulged portions 3^a of the base-sections 3. The bolts 6 work through perforations in diagonally opposite depressions 2^a of the cap-plate 2, and their nuts lie within the said depression.

The upper surface of the cap-plate 2 is approximately flat, while the lower surface of the divided base-plate 3 normally deviates from a straight line or plain surface in such manner that the inner extremities of the sections thereof adjacent to the stop-flanges 4 serve as fulcrums upon which the base-plate sections are sprung or locked under extreme pressure applied thereto from the springs.

As is evident, the tension of the springs 1 tends to maintain the frictional contact between the engaging ends of the cap-plate 2 and base-plate sections 3, and it is further evident that the greater the downward pressure on the outer portions of the said base-sections the greater will be the frictional pressure between the engaging parts of the members 2 and 3.

It will be noted that the two locking-sections of the divided base-plate 3 are acted on independently by different springs. The base-plate 3 being divided at its central portion, the sections thereof are free to rock without requiring the said base-plate to be sprung at its central portion. In short, the sections of the base-plate being entirely severed are capable of independent movements to maintain their frictional engagement with the prongs of the cap-plate 2. Furthermore, the sections of the spring base-plate may be removed independently from working positions and may be independently applied in working positions.

It will of course be understood that the device described is capable of some modification as to its details of construction and arrangement of parts within the scope of my invention as herein set forth and claimed.

What I claim, and desire to secure by Letters Patent of the United States, is as follows:

1. In a spring-cushion, the combination with

a cap-plate and a cooperating base-plate, the latter being made up of a pair of separate and distinct rocking sections having frictional engagement with said cap-plate, of separate and
5 distinct springs compressed between said cap-plate and the respective sections of said base-plate, the tension of said springs maintaining the said frictional engagements, substantially as described.

10 2. In a spring-cushion, the combination with a spring cap-plate 2 having its ends bent at approximately a right angle to its body portion, of the spring base-plate 3 made up of the separate and distinct rocking sections having, at
15 their inner extremities, the stop-flanges, 4 and having their outer extremities bent for engagement with the ends of the said cap-plate 2, the coiled springs 1 compressed between said cap-plate and the said base-sections, said
20 springs maintaining the frictional engagement noted, and means for limiting the separating movements of said spring-cap and spring base-

plate, with respect to each other, substantially as described.

3. In a spring-cushion, the combination with 25 a cap-plate and a cooperating base-plate, the latter being made up of a pair of separate and distinct rocking sections, which, at their inner portions abut to afford a base of reaction, the one for the other, and at their outer por- 30 tions have frictional engagement with said cap-plate, of separate and distinct springs compressed between the said cap-plate and the respective sections of said base-plate and tending to maintain the frictional engage- 35 ments between said plates, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD DENEGRÉ

Witnesses:

JAMES D. DENEGRÉ,
MORRILL DUNN.