

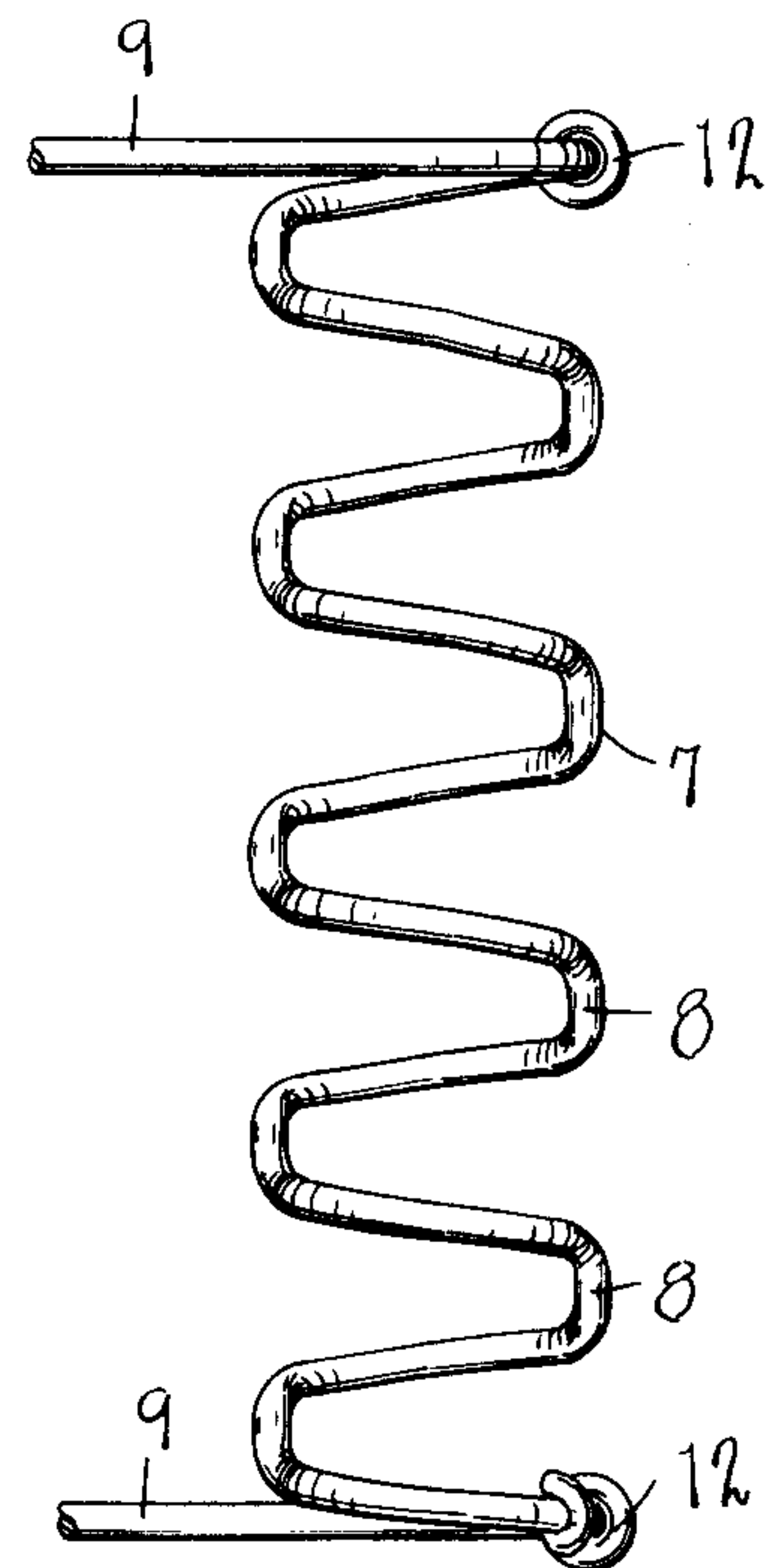
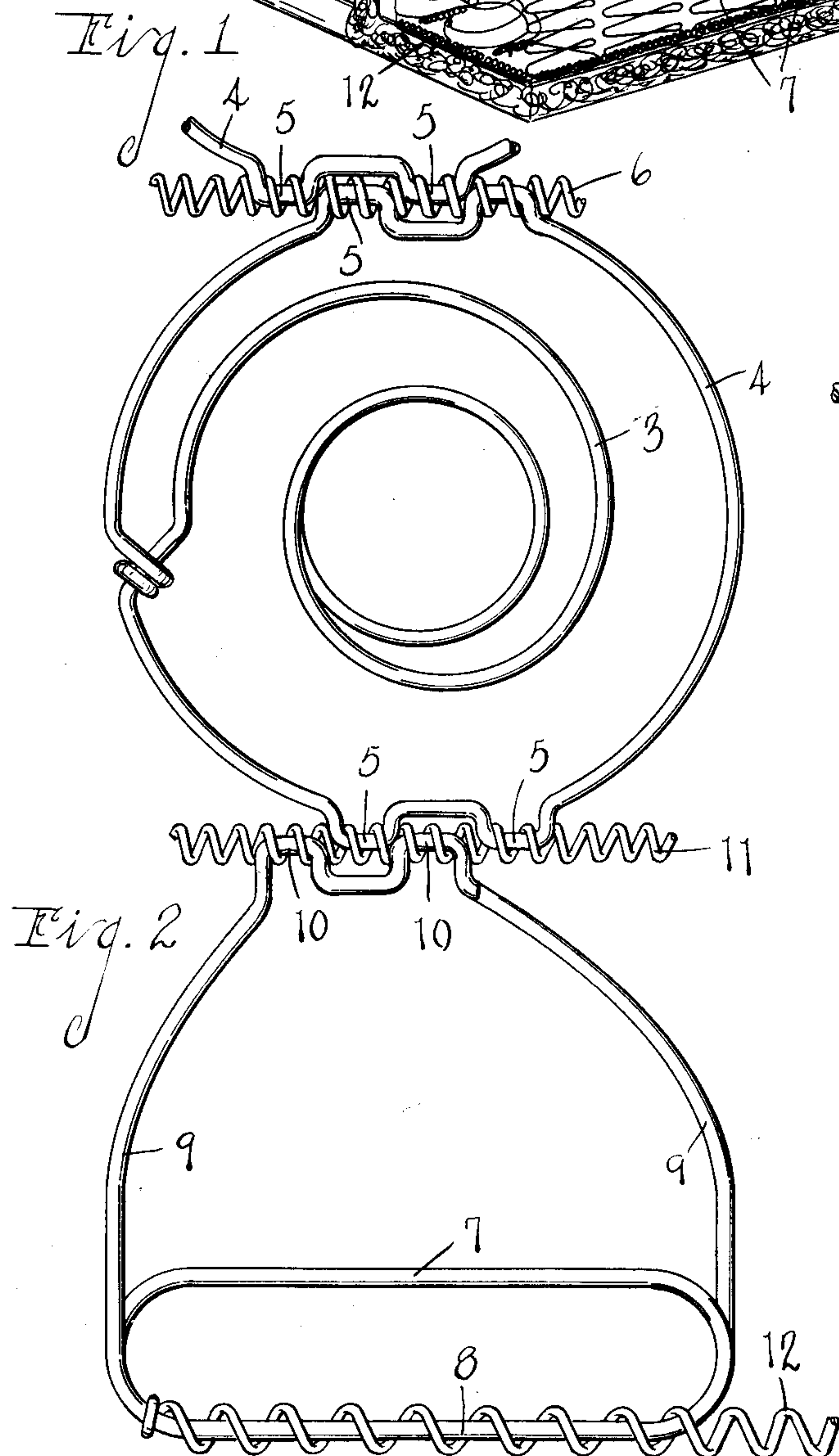
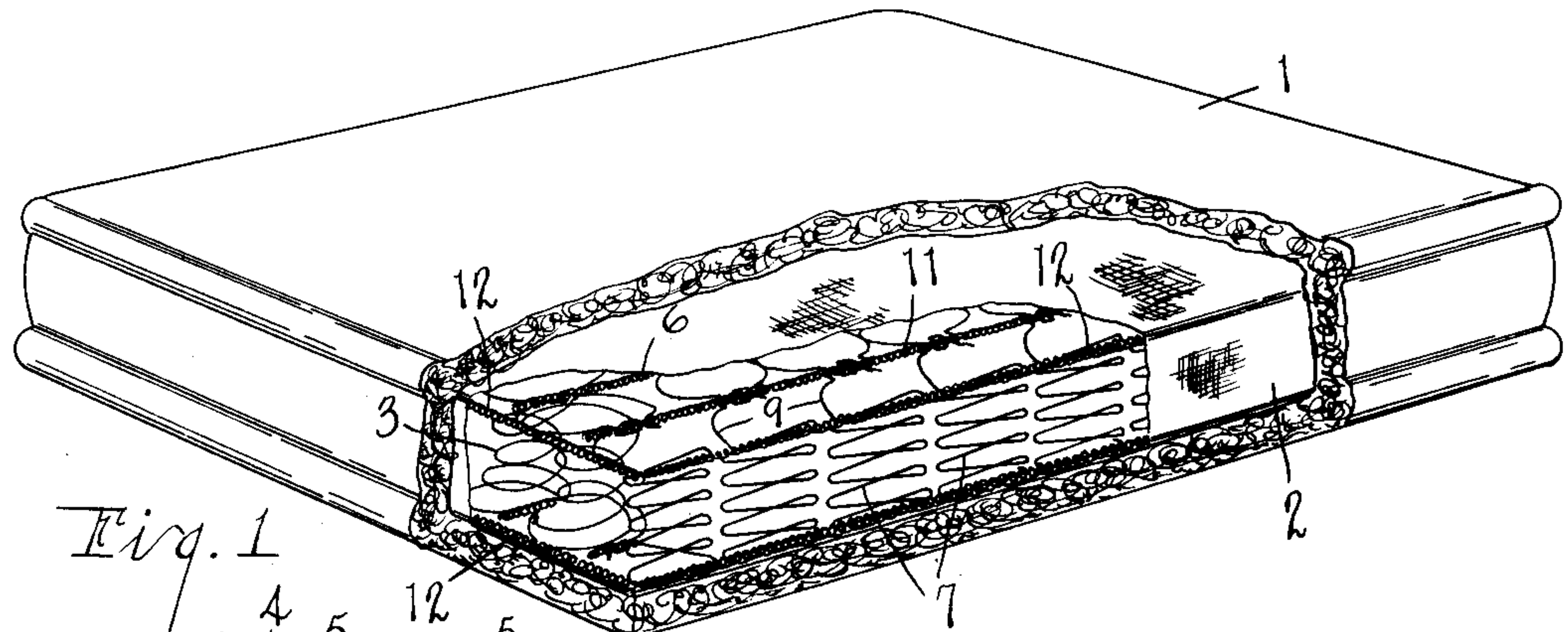
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SPRING ASSEMBLY FOR MATTRESSES AND THE LIKE

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# UNITED STATES PATENT OFFICE

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SPRING ASSEMBLY FOR MATTRESSES AND THE LIKE

Application filed January 7, 1932. Serial No. 585,211.

The main objects of this invention are:

First, to provide a spring assembly or spring filler unit for mattresses, pillows and the like which is very resilient and at the same time the springs are effectively supported in upright position, and also one in which the sides of the covering are effectively supported and prevented from sagging or buckling between or becoming interlocked with the side border springs of the unit.

Second, to provide a unit of this character in which the edges are formed so that they are somewhat stiffer than the center or body portion of the unit.

Third, to provide a spring assembly of this character which can be readily adjusted in width to meet the particular requirements of the mattress maker without varying the number of rows of springs or changing the diameters of the springs.

Objects pertaining to details and economies of my invention will definitely appear from the description to follow. The invention is defined and pointed out in the claims.

A structure which embodies the features of my invention is clearly illustrated in the accompanying drawing, in which:

Fig. 1 is a perspective view of a mattress embodying my filler unit or spring assembly with the upholstery thereof partially broken away.

Fig. 2 is an enlarged fragmentary view illustrating the relation of the border springs to the body springs and the connections to these parts.

Fig. 3 is a fragmentary elevation of one of the border springs.

In the embodiment of my invention illustrated the mattress comprises the upholstery or covering 1 which is provided with a suitable filler shown conventionally, and the casing 2 of fabric designed to house the spring assembly and to be inserted therewith into the upholstery.

My improved assembly in the embodiment

illustrated comprises a plurality of body springs 3 of the spiral or helically coiled type having the end coils 4 thereof provided with offsets 5 on opposite sides. The structure illustrated has pairs of these offsets.

The body springs are arranged in rows with the offsets of adjacent springs in alternating relation so as to bring the bights of the offsets in alinement. The body springs are connected by helical tie members 6 which embrace or encircle these alined offsets, the engagement being effected by rotating the tie members. This provides a very resilient connection for the body springs and at the same time allows the springs to yield freely.

The border springs 7 are of the helical or spiral type, the coils thereof being elongated and relatively narrow and having substantially straight outer reaches 8. The end coils of these border springs are provided with inwardly projecting arms 9 which terminate in offsets 10 corresponding to the offsets 5 of the body springs and arranged in alined relation therewith to receive the helical tie members 11 which correspond to the tie members 6.

The border tie members 12 encircle the outer reaches of the end coils of the border springs.

With this arrangement the several springs of the assembly are effectively supported and at the same time the unit is very flexible. The outer or border springs provide a substantially continuous grid-like support for the edge of the covering as the ends of the springs may be arranged quite close together and their outer reaches lie in substantially the same plane.

By thus forming the border springs they may be readily somewhat stiffer than the body springs which is a desirable feature.

Another advantage of the construction is that the length of the arms 9 can be easily varied providing a spring unit of the desired width without the necessity for changing the



diameters of the body springs, providing special filler springs, or other means resorted to in the production of mattress and cushion filler units.

5 I have illustrated and described my improvements as embodied in a mattress assembly or filler unit. I have not attempted to illustrate the parts in their relative proportions and the parts in Fig. 1 are conventionalized. My invention is readily adapted  
10 for a variety of uses which I have not attempted to illustrate and describe as it is believed that this disclosure will enable those skilled in the art to embody or adapt the same  
15 as may be desired.

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

20 1. A spring assembly for mattresses and the like comprising spiral body springs arranged in rows and having oppositely disposed offsets in their terminal coils, helical tie members encircling the offsets of adjacent  
25 rows of said body springs, spiral border springs having elongated and relatively narrow coils disposed in alined parallel relation to the side of the assembly and with the ends of the coils in close proximity providing a  
30 substantially continuous covering supporting surface, the end coils of said border springs terminating in inwardly converging arms having offsets at the ends thereof disposed adjacent the offsets of the adjacent row of  
35 body springs, helical tie members encircling the offsets of said arms and adjacent body springs, and helical border tie members encircling the outer reaches of the end coils of the border springs.

40 2. A spring assembly comprising spiral border springs having elongated and relatively narrow coils disposed in alined parallel relation to the side of the assembly and with the ends of the coils in close proximity providing a substantially continuous covering supporting means, the end coils of said  
45 border springs terminating in inwardly projecting arms having offsets therein, a row of body springs having offsets in the end coils thereof disposed adjacent the offsets of said  
50 arms, helical tie members encircling the offsets of said arms and adjacent body springs, and helical border tie members encircling the outer reaches of the end coils of the border springs.

55 3. A spring assembly for mattresses and the like comprising spiral body springs arranged in rows and having oppositely disposed offsets in their terminal coils, helical tie members encircling the offsets of adjacent  
60 rows of said body springs, spiral border springs having elongated and relatively narrow coils disposed in alined parallel relation to the side of the assembly and with the ends of the coils in close proximity providing a  
65 substantially continuous covering support-

ing surface, the end coils of the border springs terminating in inwardly projecting extensions having offsets disposed adjacent the offsets of the adjacent row of body springs, helical tie members encircling the  
70 offsets of said inwardly projecting extensions and adjacent body springs, and helical tie members encircling the outer reaches of the end coils of the border springs.

In witness whereof I have hereunto set my  
75 hand.

LAWRENCE H. HEUER.

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