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## (54) Spiral hanger

(57) A spiral hanger for bandannas, scarves, stoles, pashminas, handkerchiefs, belts, neckties, and towels comprises a spiral spring which can be fixed to a wall, wardrobe or door and is for domestic and professional use. The spiral spring can have different geometrical shapes, designs and sizes, is made of metal, plasticized metal or plastic and can be combined with brackets.

The spiral spring offers hanging positions which size can be increased or decreased according to the thickness of the items to be suspended. A large amount of bandannas, scarves and other items can be suspended by the spiral hanger which takes up very little space and at the same time allows to get a full picture of the items.

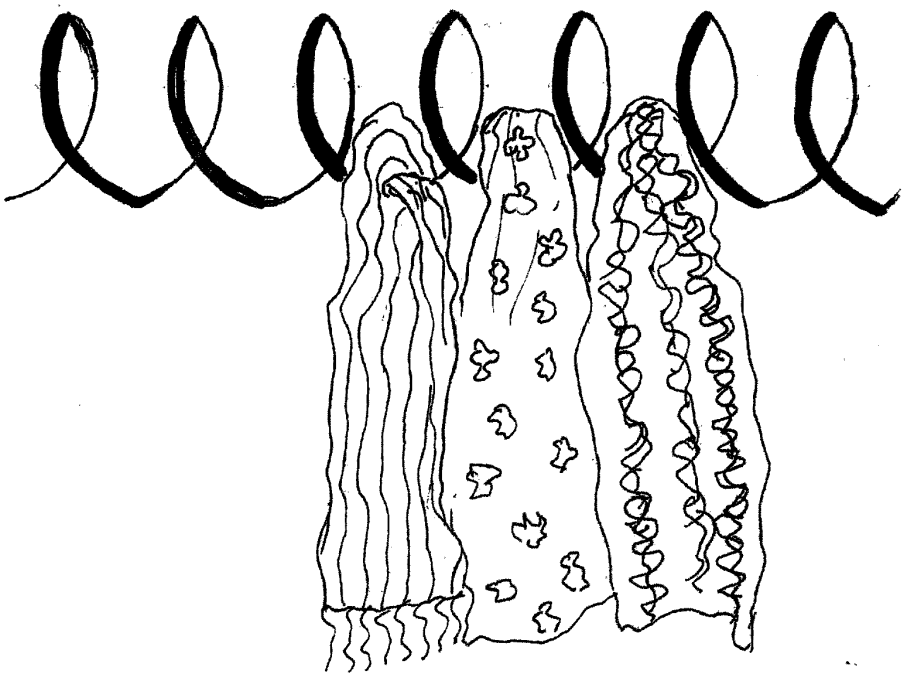

*Figure 2*

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## Description

**[0001]** This bandanna, scarf, stole, pashmina, handkerchief, belt, necktie, towel hanger can be placed inside a wardrobe, on the wall or on the door for domestic use and it can be used as a hat stand or fixed on the wall in the proper size for professional use.

**[0002]** It is made of a >35> turn metal spiral-spring, with length about 5-6 cm in compressed form and up to 1 m in stretched form, of 4-8 eye bolts or two metal discs with loops or two metal discs integrated in the points of the spiral-spring, or alternatively a plain clip. (These are indicative dimensions that can be accordingly adjusted, just like the diameter of the spiral-spring and the thickness of the metal that depend on the item that will be classified on the spiral hanger).

**[0003]** In order to be brief, I will refer only to bandannas and scarves. The kind of spiral mentioned is a spiral coil.

**[0004]** This type of hanger cannot be found on the market. The existing hangers do not have enough space for more than eight bandannas or scarves and their arrangement is difficult, time consuming and requires a lot of space.

**[0005]** Fashion requires from modern women, but also from men, to have many bandannas and scarves in different sizes and with different thickness and therefore creates the need for a practical way of classification that nowadays cannot be fulfilled.

**[0006]** The characteristic of the present invention is that the arrangement positions for scarves are between the cyclical formations of the metal spiral-spring (a spiral in a square shape or in any other geometrical shape is not excluded). As a result, the arrangement and the removal of the bandannas-scarves are very easy, fast and enjoyable.

**[0007]** Another characteristic of this hanger is the way that it can be set on the desired surface. The two cyclical points of the spiral-spring are placed vertically to the surface on which the hanger is adjusted, therefore the spiral is in a small distance from the support surface and at the same time all of its arrangement positions are in use. (The parallel to the support surface placement of the hanger is possible with the suitable way of supports.)

**[0008]** The adjustment to the support surface can be accomplished with five (5) different ways.

a) By screwing two or more (>2) eye bolts to the right and the left side of the support surface (same number of eye bolts on each side). The distance between them can be as long as we desire, or measured according to the available space. In order to achieve an effective support, we have to pass the points of the metal spiral-spring into the loops of the eye bolts.

b) By the construction of a disc with loops in its perimeter and with a diameter analogous to the diameter of the spiral. After the points of the metal spiral-spring somehow "screw" to the loops of the discs, the discs will be hanged or fixed to the desired surface.

**[0009]** When we find the analogous distance between the discs, we can achieve effective support.

c) The disc can be integrated to the points of the spiral-spring and then the whole invention can be adjusted. ACCORDION Hanger.

d) The diameter of the spiral-spring can decrease in its two points, so that the diameter concludes in 1-1.5 cm. The points of the spiral-spring will then adjust to the desired surface with a screw or nail with bigger head diameter than the ending diameter of the spiral. Alternatively, it can be adjusted with a plain screw-nail, placed between the spiral and the washer screw.

e) The spiral-spring can be adjusted to a small surface of any material and by any way of support with a conventional hanger, hanged on a vertical surface or in the wardrobe.

**[0010]** Those who do not want to use nails can convert the spiral-spring into a cycle by uniting its two points with the use of a plain clip. The cycle can be hanged in the hanging rail of the wardrobe or the hanging rail can go through the turns of the spiral- spring.

**[0011]** If the hanger is destined for professional use, we can use a spiral-spring with greater force resistance than the one exerted on it. The hanger can be adjusted to the wall with the previous ways or it can be shaped into a hat stand by two ways:

a) The first way is to use the previously mentioned spiral-spring and two support poles of any material (wood or metal).
b) In the second way, the spiral-spring will be of cyclical shape and in its center we will vertically place a pole with three (3) spokes that will be able to turn around. Therefore, the customer will have access to all the bandannas - scarves in the stand.

**[0012]** The spiral-spring is made of metal because apart from its resilience in stretching, it is a hard material that does not bend excessively because of the weight. Plasticized metal or plastic spiral-spring can also be used.

**[0013]** The advantages of this invention are the following:

a) The size of the hanger that can be adjusted according to the space that we have available (space saving).

b) It can be placed in many and different spaces, without losing its usefulness both for domestic and

professional use.

c) It can classify up to >35 bandannas-scarves, occupying only a space of 60 X 12 cm (space saving).

d) The arrangement of the bandannas-scarves can be easily completed because the positions in the spiral-spring are wide in many points (time saving).

e) The removal of a bandanna-scarf is easy and requires only a gentle pulling without needing to move the rest of the items (time saving).

f) Every position among the turns of the spiral-spring can be adjusted to the thickness of the scarf (space and time saving).

g) We can see all the scarves at the same time and we do not have to search for them (time saving).

h) It is made of simple and cheap materials (financial benefit)

i) The spiral-hanger, apart from being practical, contributes to the aesthetics of the space.

**[0014]** The form of the present invention can be fully understood through the help of the following detailed description related to the enclosed designs.

**[0015]** Figure 1 shows a perspective view of the spiral-spring hanger, which consists of a spiral-spring made of metal or plasticized metal or plastic (a), of two metal discs (b) with loops (c) through which we pass the points of the spiral-spring, so that they somehow "lock" with each other. Then we nail or screw the discs of similar material, in the available surface, leaving the desired distance between them and therefore achieving stable support.

**[0016]** Figure 2 shows a part of the spiral-spring hanger (a), where the bandannas-scarves arrangement method is obvious.

**[0017]** Figure 3 shows a part of a spiral-spring in square shape.

**[0018]** Figure 4 shows an eye bolt.

**[0019]** Figure 5 shows a metal disc with 4 loops (b, c)

**[0020]** Figure 6 shows a spiral-spring hanger made of a metal, plasticized metal or plastic spiral spring (a) with two discs of same material integrated on its two points (b). By nailing or screwing the metal discs in the available surface and by leaving the desired distance between them, we achieve stable support. (Accordion Hanger)

**[0021]** Figure 7 shows the spiral-spring hanger that can be converted into a cyclical form with a plain clip and be hanged in the hanging rail of the wardrobe.

**[0022]** Figure 8 shows the spiral-spring hanger, hanged on the hanging rail of the wardrobe.

**[0023]** Figure 9 shows the professional spiral-spring hanger with the support poles (hat stand).

**[0024]** Figure 10 shows a spiral-spring hanger with greater force resistance than the one that will be exerted on it, in a geometrical shape and with vertical support poles, ideal for bath towels.

**[0025]** Figure 11 shows the wardrobe places in which a hanger can be adjusted.

**[0026]** Figure 12 shows a rotating spiral-spring hanger in a cyclical shape, fixed on a vertical support pole for professional or domestic use.

**[0027]** Figure 13 shows a spiral-spring hanger with a spiral diameter that decreases in the points and can be fixed on a surface with a screw or a nail with big head diameter.

**[0028]** Figure 14 shows a spiral-spring hanger of classical shape for use on a wall or in a wardrobe.

## Claims

1. The spiral-spring hanger (spiral-hanger) for bandannas, scarves, stoles, pashminas, handkerchiefs, belts, neckties and towels consists of a metal spiral-spring (Figure 1a) with analogous support (b, d, e, f, g) and its characteristic is that the arrangement positions of the bandannas-scarves are created from the cyclical formation of the spiral (a) and the chosen way of support on the desired surface.

2. According to claim 1, the spiral-spring hanger has a spiral-string (a) as a basic element that can be except of cyclical shape, a square or any other geometrical shape and it can be made of metal, plasticized metal or plastic.

3. According to claim 1, the spiral-spring hanger is **characterized by** the vertical support of both points of the spiral on the desired surface (a).

4. According to claims 1 and 3, the spiral-spring hanger is **characterized by** the variety of suitable ways of support. The ways of support are: a) four or more eye bolts (Figure 4), through which the points of the metal spiral-spring pass and the hanger is fixed. b) two discs with analogous perimeter to the perimeter of the spiral. Each disc has loops on its perimeter (Figure 5) through which the points of the metal spiral-spring pass and achieve the support of the hanger.

5. According to claims 1 and 3 the spiral-spring hanger is **characterized by** its support discs that can be integrated to the points of the spiral and achieve support through the adjustment (nailing, screwing) of both discs (Figure 6) to the surface and in the desired distance between them (ACCORDION-HANGER).

6. According to claims 1 and 3, the spiral-spring hanger is **characterized by** the fact that the two points of the spiral can unite with the use of a clip and form a

cyclical shape that can be hanged from the hanging rail of the wardrobe (Figure 7).

**7.** According to claims 1 and 3, the spiral-spring hanger has the characteristic that, regardless the way of support, the spiral itself can be used as a hanger, when it is hanged on the hanging rail of the wardrobe (Figure 8).

**8.** Another characteristic of the spiral-spring hanger is that, according to claims 1 and 3, it can be placed parallel to the desired surface, with the suitable way of support (Figure 10).

**9.** According to claims 1, 2, 3, 4, 5, the spiral-spring hanger is **characterized by** a spiral-spring of greater force resistance than the force exerted on it, and therefore it is suitable for hanging bath towels (Figure 10).

**10.** According to claims 1, 2, 3, 4, 5, the spiral-spring hanger is **characterized by** a spiral-spring of greater force resistance to the force exerted on it, and it can be adjusted on the wall or fixed with two support poles for professional use (Figure 9).

**11.** According to claims 1, 2, 3, 4, 5 and 10, the spiral-spring hanger is **characterized by** a spiral-spring of greater or similar force resistance than the one exerted on it, and by a cyclical shape that can be placed vertically in a pole with the use of three (3) spokes and with an (optional) rotating mechanism. It is suitable for professional use but also for domestic use in a smaller size (Figure 12).

**12.** According to claims 1 and 3, the spiral-spring hanger is **characterized by** the fact that it can be placed on stable surfaces of any size and therefore become a conventional hanger that can be hanged on the wall, in the wardrobe or anywhere we like (Figure 14).

**13.** According to claims 1 and 3, the spiral-spring hanger has the characteristic that the diameter of the spring can gradually decrease towards its points, until it is adjustable to the desired surface with the use of a screw or a nail with bigger head diameter than the ending diameter of the spiral, or with the use of a classic screw-nail by placing a washer between the spiral and the screw (Figure 13).

Figure 2

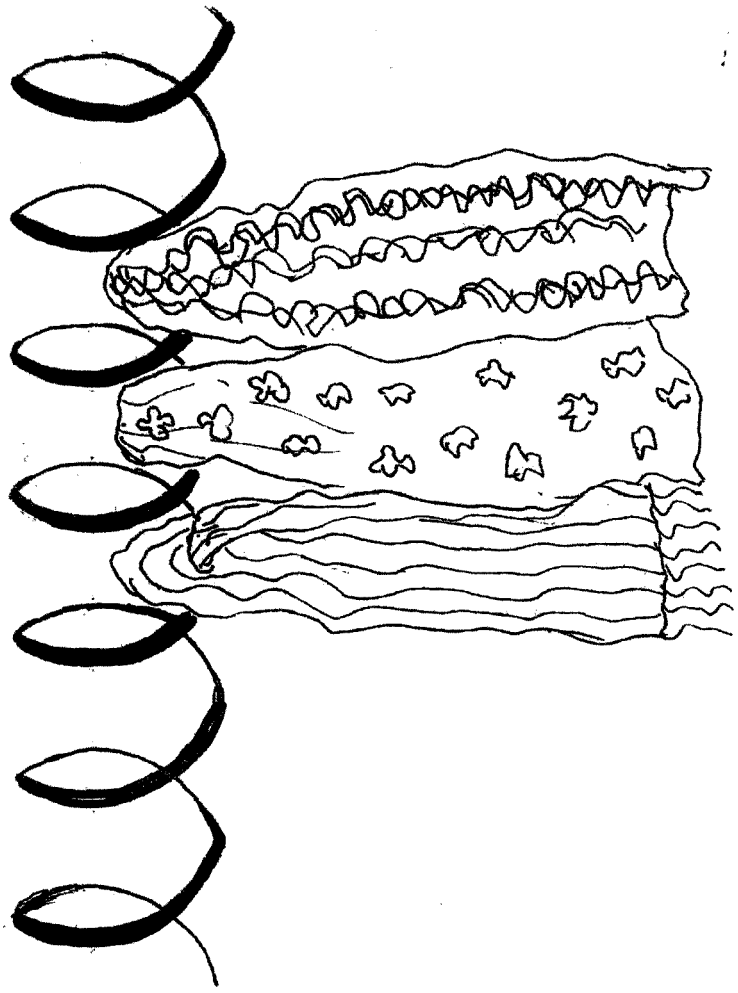
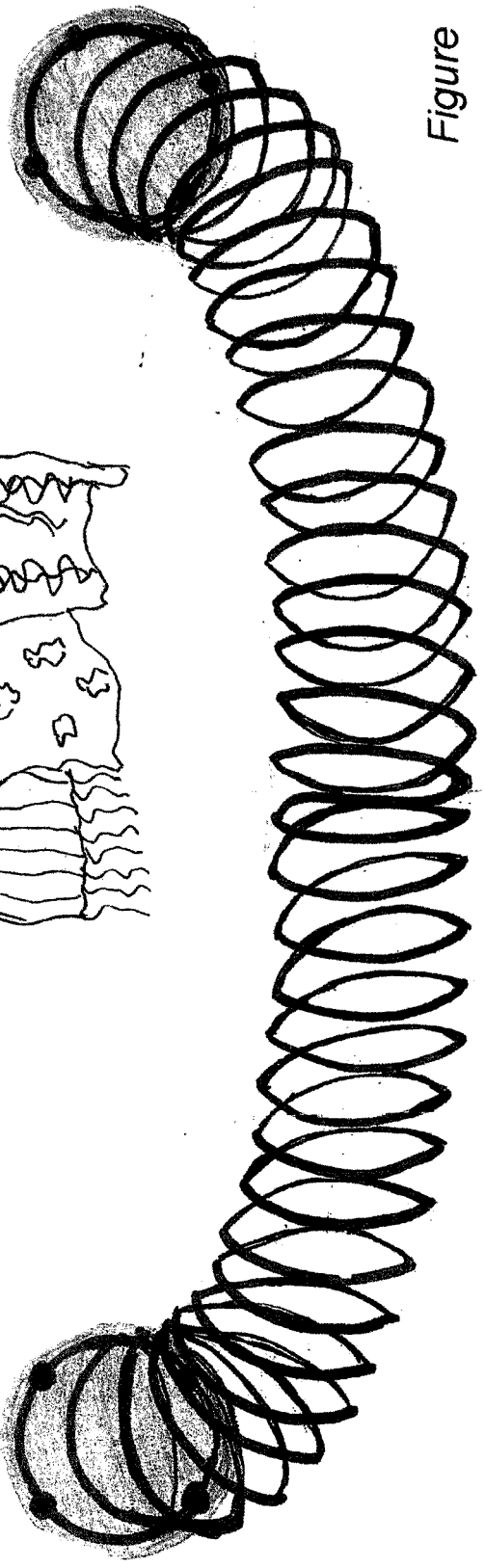


Figure 1



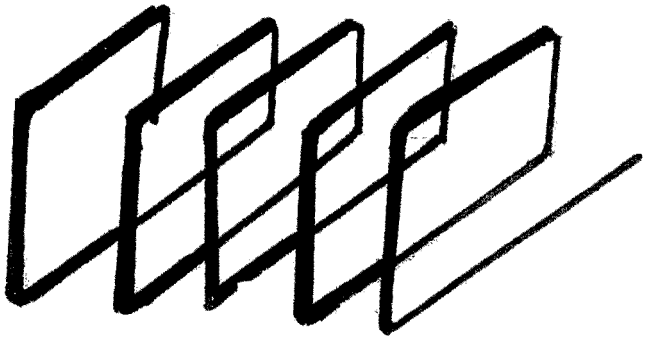


Figure 3

Figure 4

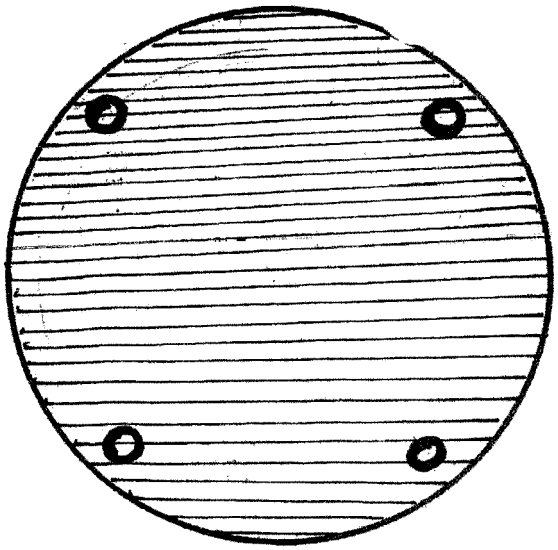


Figure 5

Figure 6

figure 7

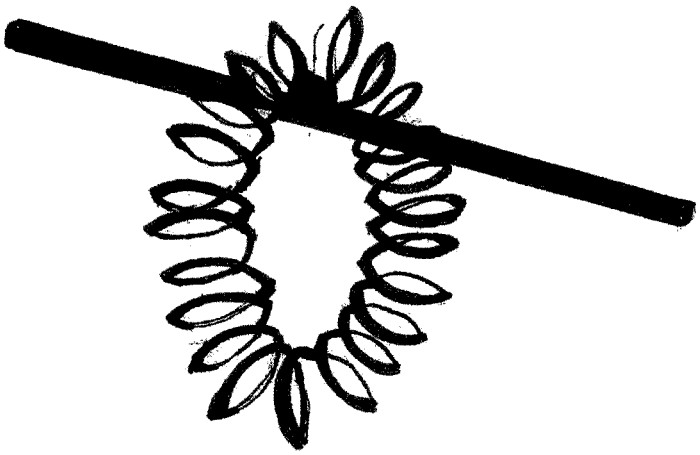


Figure 8

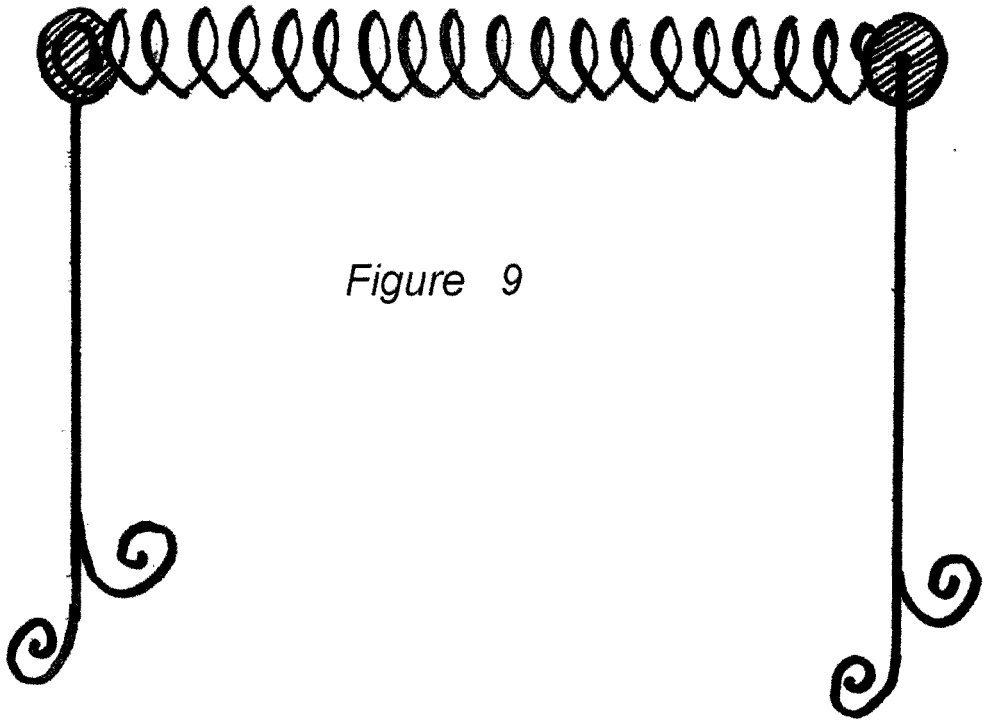
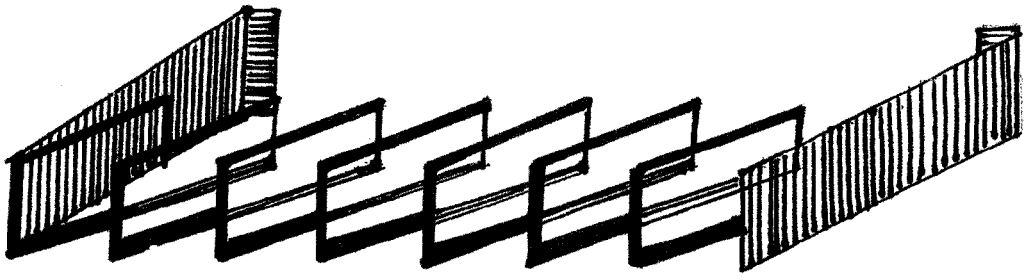


Figure 9

Figure 10



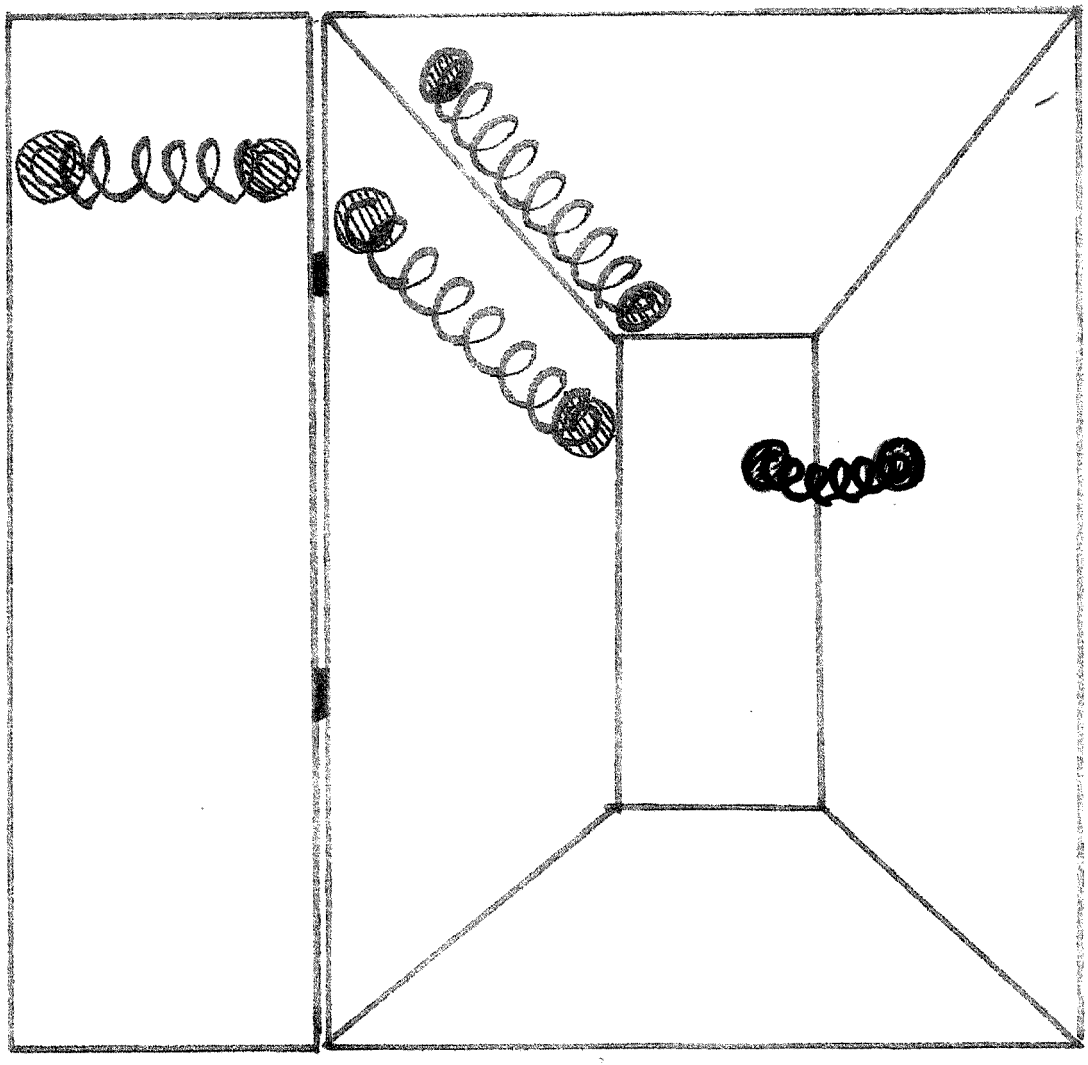


*Figure 11*

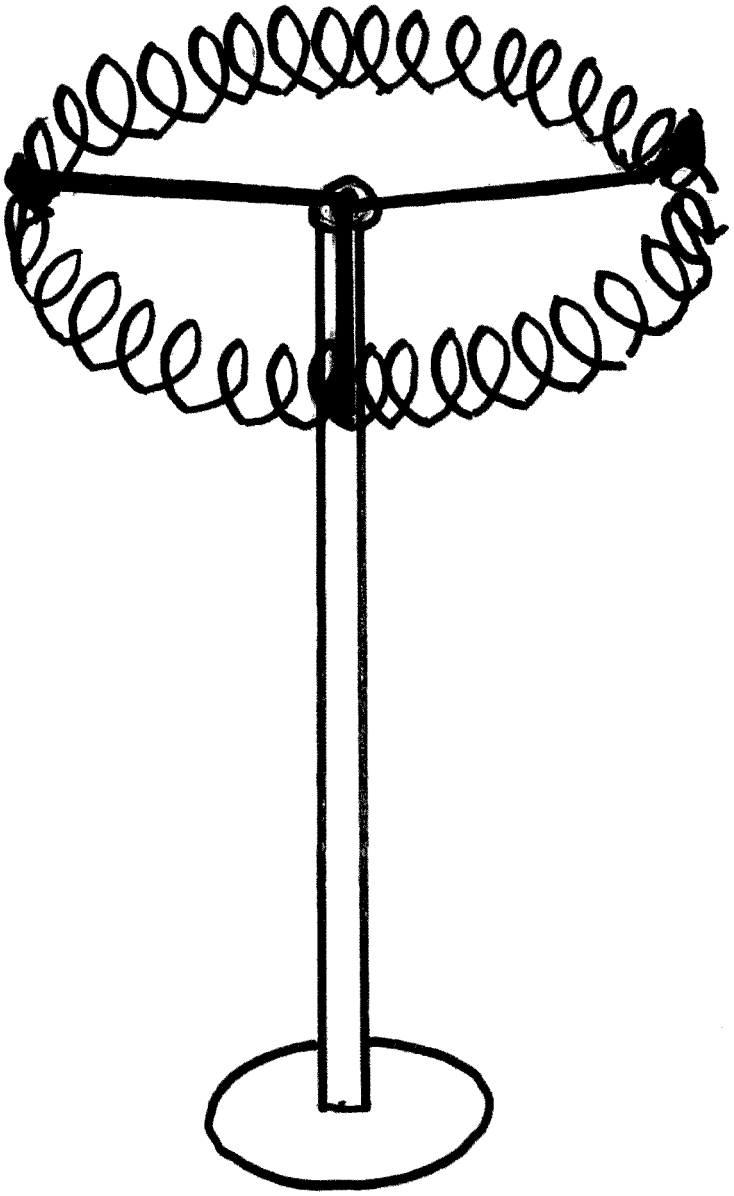


*Figure 12*

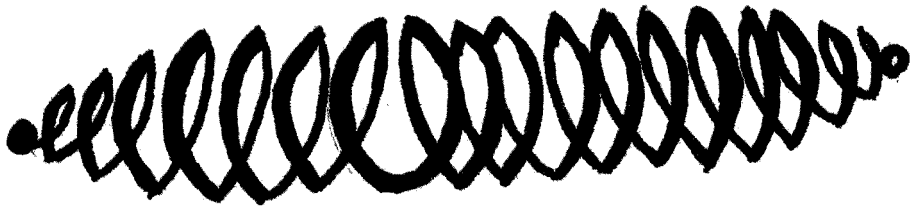


Figure 13

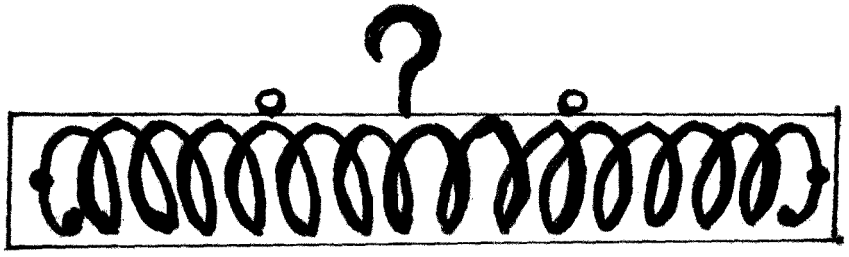


Figure 14

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# EUROPEAN SEARCH REPORT

Application Number
EP 13 38 6012

## DOCUMENTS CONSIDERED TO BE RELEVANT

| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (IPC) |
|---|---|---|---|
| X<br>Y | US 2 080 805 A (BREY)<br>18 May 1937 (1937-05-18)<br>* figures * | 1-3,7-10<br>4,5 | INV.<br>A47G25/74<br>A47G25/06 |
| Y | US 4 930 182 A (EICHENBERGER)<br>5 June 1990 (1990-06-05)<br>* figure 2 * | 4 | ADD.<br>F16F1/12 |
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| Y | AU 20003 83 A (HENRY)<br>12 April 1984 (1984-04-12)<br>* figure 1 * | 5 | |
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The present search report has been drawn up for all claims

| Place of search | Date of completion of the search | Examiner |
|---|---|---|
| The Hague | 11 June 2013 | Beugeling, Leo |

CATEGORY OF CITED DOCUMENTS

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## ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 13 38 6012

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11-06-2013

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82