May 1, 1945. C. O. DORAU 2,375,088

HAIR SPRING CONTAINER

Filed Nov. 8, 1943

Fig. 1.

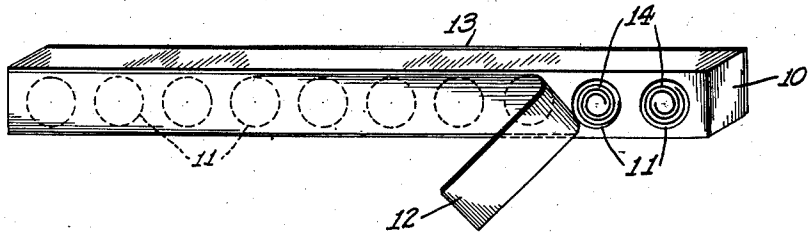


Fig. 2.

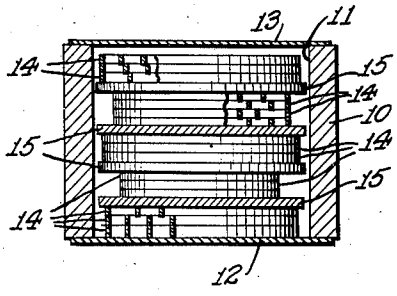
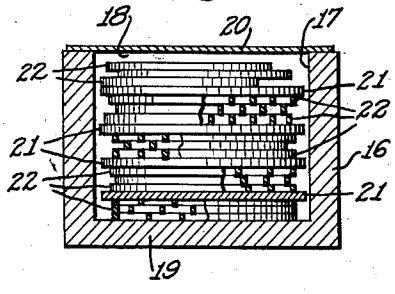


Fig. 3.



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HAIRSPRING CONTAINER

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3 Claims. (Cl. 206—70)

This invention relates to containers for fragile articles, and more particularly to a container for a plurality of loose flat coiled hair springs for watches or other instruments, which container is adapted to house said springs during shipment or storage so as to prevent them from becoming distorted, bent, or otherwise injured.

One object of this invention is to provide a container of the above nature, comprising a block of solid material having a series of circular holes or sockets located therein, each of which sockets is adapted to receive a plurality of springs or other articles which may be separated by washers to prevent said springs from sticking together.

A further object is to provide a hair spring container or package of the above nature, in which all of the sockets on each side of the block are covered by a detachable adhesive strip which may be torn off from the successive sockets when the springs are needed for insertion into the watches or other instruments.

A further object is to provide a spring container of the above nature which will be simple in construction, inexpensive to manufacture, easy to install and manipulate, compact, ornamental in appearance, and very efficient and durable in use.

With these and other objects in view, there have been illustrated on the accompanying drawing two forms in which the invention may conveniently be embodied in practice.

In the drawing,

Fig. 1 represents a perspective view of a container block, embodying the present invention, as it appears with the adhesive tape torn from the tops of two of the spring-holding sockets.

Fig. 2 is a sectional view of the block, taken through one of the sockets, and showing the arrangement of coiled springs in groups, with separating washers between said groups, and with adhesive cover tapes provided on both the top and bottom of said socket.

Fig. 3 is a sectional view taken through a socket of a modified form of spring container block, which is made from molded plastic material and is provided with an integral closed bottom, the open top of the socket being covered by an adhesive tape.

Referring now to the drawing in which like reference numerals denote corresponding parts throughout the several views, the numeral 10 indicates a rectangular block of wood, or other suitable material, having a series of circular apertures 11 passing through it from top to bottom forming sockets for receiving flat hair springs 14 which are generally coiled in spiral shape for use in watches, electrical control instruments, oil gauges, speedometers, etc. The tops and bottoms of the apertures 11 are covered by adhesive tape strips 12 and 13 respectively, which strips may be torn away from the block 10 to uncover the sockets successively, as the springs are needed for insertion in the watches or other instruments.

In order to separate the groups of springs when located in the sockets, to prevent them from sticking together, provision is made of a plurality of circular thin paper washers or disks 15, as clearly shown in Fig. 2.

Operation

In operation, when it is desired to remove the springs 14 from one of the sockets, it will be only necessary to tear the adhesive tape strip 12 from the top of the container block 10 far enough to uncover the particular socket needed.

While the container or package of this invention has been herein disclosed as filled with flat hair springs made from plain wire coiled into spiral shape, it will be understood that it is within the spirit and scope of the present invention to receive coiled springs of other types including those having central bushings projecting out of the plane of the spiral wires. The container may also be used to house any other desired objects.

Modified form

In the modified form of the invention shown in Fig. 3, a block 16 of molded plastic material is disclosed, which is provided with sockets 17 open only at their tops 18 and having closed bottom walls 19 integral with the block 16. A single detachable top adhesive strip 20 is also employed, which is identical with the two adhesive strips 12, 13 of the first form of the invention.

Separating disks 21 of paper, or other suitable material, are located between the groups of flat coiled springs 22, as clearly shown on the drawing.

The material from which the coiled springs are made does not form a part of the present invention, but such springs are generally made of phosphor-bronze, beryllium, steel, and other suitable metals. The size of the container also is not a part of the invention and it may be of any length and height, with the socket holes approximately the same diameter of the springs, to permit packing them in flat layers so that they will not shift about or become tangled or distorted in shipment or handling.

While there have been disclosed in this specification two forms in which the invention may be embodied, it is to be understood that these forms are shown for the purpose of illustration only, and that the invention is not to be limited to the specific disclosures but may be modified and embodied in various other forms without departing from its spirit. In short the invention includes all the modifications and embodiments coming within the scope of the following claims.

Having thus fully described the invention, what is claimed as new, and for which it is desired to secure Letters Patent, is:

1. A package comprising a solid block of elongated rectangular shape having a row of circular sockets passing therethrough, and a plurality of flat coiled springs arranged in said sockets in groups, said groups being separated by flat washer disks, the tops and bottoms of said sockets being covered by adhesive tape strips which may be torn off as desired.

2. A package comprising a solid block having a plurality of circular sockets passing into said block from one side thereof, and a plurality of flat disk-shaped articles arranged in groups in each socket, spacing washers between said groups, said sockets being closed at the bottom, the tops of said sockets being covered by an adhesive tape strip which may be torn from said block to permit removal of said articles as desired.

3. A package comprising a solid block having a plurality of circular sockets, and a plurality of flat coiled springs loosely fitting within and arranged in said sockets in groups, said groups being separated by flat washer disks, one side of said sockets being covered by an adhesive tape strip which may be torn off from said block to permit removal of the springs from any desired socket.

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