C. H. SHAW.

PHONOGRAPH NEEDLE CONTAINER.

APPLICATION FILED APR. 11, 1917.

1,286,809. Patented Dec. 3, 1918.

Fig. 1,

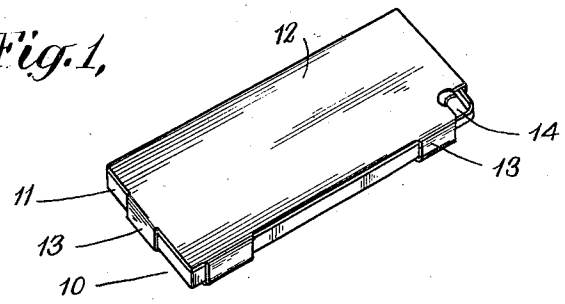


Fig. 2,

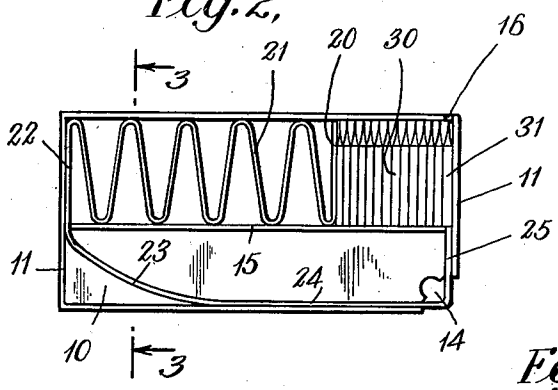


Fig. 3,

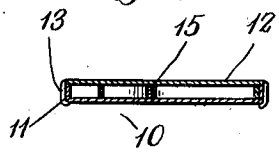


Fig. 4,

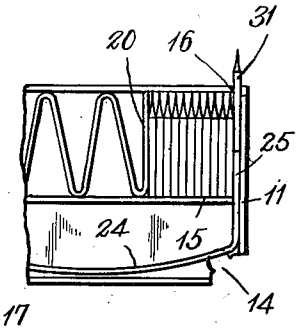
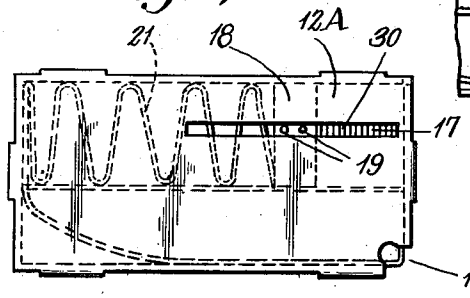


Fig. 5,



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PHONOGRAPH-NEEDLE CONTAINER.

1,286,809. Specification of Letters Patent. Patented Dec. 3, 1918.

Application filed April 11, 1917. Serial No. 161,264.

To all whom it may concern:

Be it known that I, CHARLES H. SHAW, a citizen of the United States of America, and a resident of Babylon, Suffolk county, and State of New York, have invented certain new and useful Improvements in Phonograph-Needle Containers, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof.

My invention relates to new and useful improvements in phonograph needle containers and its object is to provide a simple structure for this purpose, by means of which needles of this character may be held in a convenient form and from which they may be delivered one at a time, when desired.

In order that my invention may be thoroughly understood, I will now proceed to describe the same in the following specification, and then point out the novel features thereof in appended claims.

Referring to the drawings:

Figure 1 is a perspective view of a phonograph needle container made according to and embodying my invention.

Fig. 2 is a plan view of the same structure, with the cover thereof removed.

Fig. 3 is a sectional end elevation of the device, the section being taken on the line 3—3 of Fig. 2.

Fig. 4 is a plan view of the end portion of the device with the cover removed and with certain parts of the mechanism removed to show the method of operation.

Fig. 5 is a plan view of a modified form of structure which also embodies this invention.

Like characters of reference designate corresponding parts in all the figures.

10 designates a rectangular box with narrow upturned flanges 11; 12 is a cover which fits over this box and which is provided with fingers 13, bent down over the flanges 11 and under the box to thereby affix the cover to the box. One corner of the box and of the cover is cut away as shown at 14.

Inside of the box is a rib 15 which extends longitudinally through the box but does not meet the end flanges 11.

Inside of the box is a spring, one end of which is designated by 20 and is bent to assume a position parallel with the end flanges 11. Back of this end of the spring the latter is bent in a zigzag manner as shown at 21. 22 is another portion of the spring which is substantially parallel with the portion 20. A part of this portion 22 extends between the end of rib 15 and one of the end flanges. The spring is then carried down as shown at 23 to one of the side flanges along which it extends as at 24. The other end of this spring is bent at right angles as at 25 to lie inside of the end flange 11 and is so arranged as to extend up to and fill the space between the rib 15 and the end flange.

The phonograph needles 30 are placed in this receptacle in parallel relation between one of the end flanges 11 and the part 20 of the spring. One of these needles 31 lies directly against the end flange 11 against which it is pressed by the action of the spring. The lower end of the needle 31 will be directly over the portion 25 of the spring, and opposite the other end of this needle 31 is an opening 16 in one of the side flanges of the box.

When the needles are held within this device in the manner described, they may be removed therefrom by pressing with the thumb or finger against the outer end of the portion 24 of the spring, thus raising the part 25 through the space between the rib 15 and the end flange 11. This will result in the needle 31 being forced out through opening 16 as shown in Fig. 4, so that it may be readily grasped and removed from the container. As soon as the needle is removed and the part 25 of the spring retracted to its former position, the resiliency of the zigzag portion 21 of the spring will cause the other needles to be pressed forward until the next needle will be pressed against the end flange 11.

In the structure shown and described the only part of the spring which is controllable by hand is that part which projects through the cutaway corner 14. In Fig. 5, however, I have shown the cover 12^A provided with a slot 17 and a follower 18 adjacent or affixed to the inner end of the zigzag portion 21 of the spring. On this follower are pins 19 which project through the slot 17.

This arrangement has the advantage of providing means for showing the needles 30 through the slot, so that one may see whether or not the container is empty. The pins 19 serve to guide the follower 18 in such a way that its inner edge will remain at all times parallel with the adjacent end flange 11 and also provide means for manu-

ally moving the follower 18 back against the action of the spring in reloading the container.

Having shown and described my invention, what I desire to claim is:

1. A container for phonograph needles comprising a thin receptacle, adapted to receive a plurality of phonograph needles in a parallel row, said receptacle being constructed with an opening in alinement with one of said needles, a spring having one of its ends arranged to press transversely against said needles and to move the row of needles to position one of the needles opposite the opening, the other end of said spring forming a retracted plunger in alinement with the needle opposite said opening, and means for moving the plunger end of the spring manually to move said needle through the opening.

2. A container for phonograph needles comprising a thin receptacle having a rib parallel with one of its sides but shorter than the receptacle to form a space between one of its ends and the adjacent end of the receptacle, said receptacle being constructed with an opening through its side in alinement with said space, a spring having one of its ends arranged to press transversely a row of phonograph needles above said rib to position one of said needles between said opening and said space, the other end of said spring forming a retracted plunger having its end in said space, and means for moving the plunger end of the spring manually to move the positioned needle through said opening.

3. A container for phonograph needles comprising a thin rectangular receptacle having a rib parallel with one of its sides but shorter than the receptacle to form spaces between its ends and the ends of the receptacle, a spring in said receptacle having above the rib a zigzag portion and an end portion parallel with the end of the receptacle, another portion extending through one of said spaces below the rib to one corner of the receptacle and bent at right angles to lie against the inner surface of the end of the receptacle and terminating in the other space to form a retracted plunger, said end portion of the spring being arranged to press transversely a row of phonograph needles and to position one of said needles against the inner surface of the end of the receptacle, said receptacle being constructed with an opening in alinement with said plunger, and the corner at which the spring is bent at right angles being cut away to provide means for pushing said termination of the spring inward to thereby force the positioned needle through the opening.

In witness whereof, I have hereunto set my hand.

CHARLES H. SHAW.