July 17, 1923.

1,462,056

C. WEST

PACKING AND DELIVERING GRAMOPHONE AND LIKE NEEDLES

Filed Jan. 21, 1922

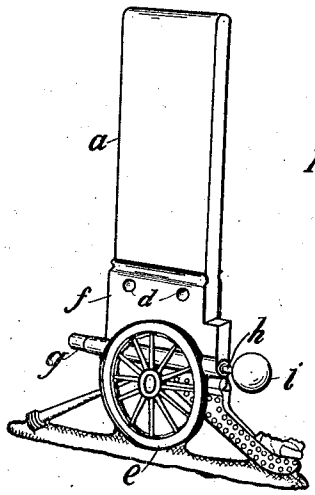


Fig. 1.

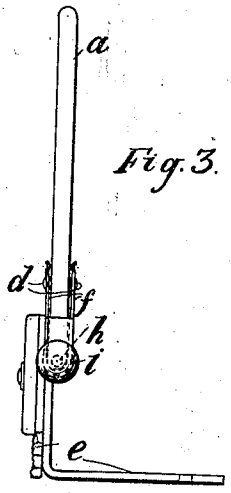


Fig. 3.

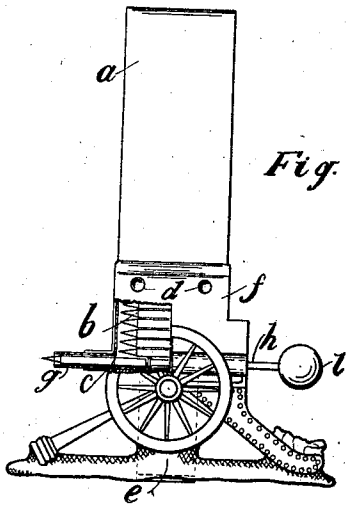


Fig. 2.

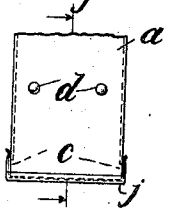


Fig. 4.

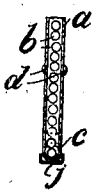


Fig. 5.

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UNITED STATES PATENT OFFICE.

CLIFTON WEST, OF LONDON, ENGLAND.

PACKING AND DELIVERING GRAMOPHONE AND LIKE NEEDLES.

Application filed January 21, 1922. Serial No. 530,964.

To all whom it may concern:

Be it known that I, CLIFTON WEST, a subject of the King of Great Britain, and resident of London, England, have invented certain new and useful Improvements in Packing and Delivering Gramophone and like Needles, of which the following is a specification.

This invention relates to improvements in packing and delivering gramophone and like needles and has for its object to provide a device that serves as a container or magazine for such needles and from which one needle at a time may be ejected ready for use as required. The container or magazine is of such a character as to constitute a refill which can be readily placed in a spring support that is attached to any convenient part of the cabinet of the instrument for example, for which the needles are required, the support being provided with means for ejecting the needles one by one as above described.

In the accompanying drawings the improvements aforesaid are illustrated, in which:—

Figure 1. is a perspective view of the container or magazine supported in an ornamental base or holder.

Figure 2. a front elevation partly in section of the combination.

Figure 3. an end view of the same, and

Figures 4 and 5. respectively partial front elevation and transverse section of the container or magazine that constitutes the refill.

Similar letters of reference relate to like parts in all the figures of the drawings.

On reference to the drawings it will be observed that the container or magazine *a* is made of sheet metal folded in any suitable manner to approximately the length and breadth of the size of the needles *b* which it is intended to contain. This container *a* is provided at its base with holes *c* from one of which the needles *b* are ejected one by one when the container or magazine is placed in position on its support.

The container *a* is also provided with small pips or projections *d* which coincide with similar indents provided on the spring clip of the support as hereinafter described so that the same shall be supported in its correct position relative to the ejector which forms part of the base or support.

In the drawing is illustrated an ornamental base *e* of the configuration of a gun carriage the upper portion carrying a pair of spring clips *f* that constitute the holder for the container or magazine *a* the lower end of the said container fitting between the abutments formed by the removal of the central portion of the gun barrel *g* so that the holes *c* in the container *a* coincide with the bore of the said barrel *g* wherein is mounted the ejector plunger *h* that is operable by the handle *i*. It will be understood that given the fixture *e* attached to any suitable part of the cabinet of the instrument and the container or magazine *a* slipped into position within the spring holder *f* the needles *b* will automatically drop one by one into such a position that by the to and fro movements of the plunger *h* the several needles *b* will be successively ejected from the gun barrel *g*, and upon the container *a* being emptied it can be removed and another one put in its place.

Any suitable form of clip may be employed for temporarily covering up the holes *c* in the container *a* as for example the spring clip *j* as shown in Figures 4 and 5, which can be readily removed before inserting the container within the spring support *f* provided therefor on the base *e*.

What I claim is:—

1. The combination with a fixed support, a holder carried by said fixed support and a reciprocal plunger mounted in said support and operating in the bore of a barrel formed therein of a replaceable magazine comprising a closed container for gramophone needles provided with apertures in its sides, said apertures registering with the said bore when the magazine is placed within the said holder and means for retaining said magazine in its operative position therein for ejection of the needle contents by the aforesaid reciprocal plunger.

2. The combination with a fixed support, a spring holder carried by said fixed support

and a reciprocal plunger mounted in said support and operating in the bore of a barrel formed therein of a replaceable magazine comprising a closed container for gramophone needles provided with apertures in its sides, said apertures registering with the said bore when the magazine is placed within the said spring holder and means for retaining said magazine in its operative position therein for ejection of the needle contents by the aforesaid reciprocal plunger.

In testimony whereof I affix my signature.

CLIFTON WEST.