

J. J. RICHARDS, JR. & M. ANDELMAN.

HYPODERMIC NEEDLE BOX.

APPLICATION FILED OCT. 26, 1917.

1,279,760.

Patented Sept. 24, 1918.

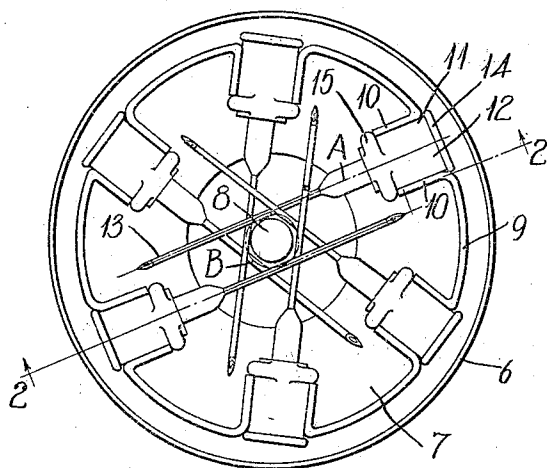


Fig. 1.

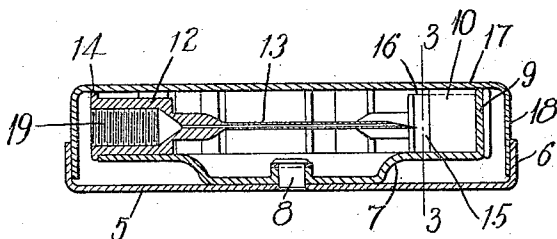


Fig. 2.

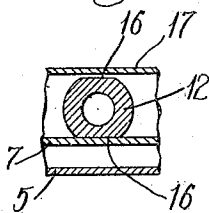


Fig. 3.

Inventors:
John F. Richards, Jr.
Marshall Andelman,
by Charles S. Goring atty

UNITED STATES PATENT OFFICE.

JOHN J. RICHARDS, JR., OF BROOKLINE, AND MARSHALL ANDELMAN, OF CAMBRIDGE, MASSACHUSETTS, ASSIGNORS TO THE RANDALL-FAICHNEY COMPANY, INC., A CORPORATION OF MASSACHUSETTS.

HYPODERMIC-NEEDLE BOX.

1,279,760.

Specification of Letters Patent. Patented Sept. 24, 1918.

Application filed October 26, 1917. Serial No. 198,718.

To all whom it may concern:

Be it known that we, JOHN J. RICHARDS, Jr., a citizen of the United States, residing at Brookline, in the county of Norfolk, and MARSHALL ANDELMAN, a citizen of the United States, residing at Cambridge, in the county of Middlesex, both in the State of Massachusetts, have invented new and useful Improvements in Hypodermic-Needle Boxes, of which the following is a specification.

This invention relates to a hypodermic needle box, the object of the invention being to provide a hypodermic needle box which is particularly adapted to be used by the hospital corps, both on land and sea, and in order that the box may be so adapted it is essential that it should be compact, water-tight and moisture-proof. Furthermore, it is essential that the needles should be held firmly in position in the box and held in such a manner when the cover is removed as to expose the hollow ends of the needle holders so as to enable the physician to attach a syringe to the sterilized needle holder without touching said holder with his fingers.

It is also the object of this invention to provide in the box a carrier for the needles which is rotatable relatively to the box, so that the carrier, by being rotated, will permit easy access to the hollow holders when the physician desires to insert the end of a syringe in said holders without touching them with his fingers.

Referring to the drawings:

Figure 1 is a plan view of our improved hypodermic needle box with the cover removed and with the hypodermic needles and their holders placed in position in the box.

Fig. 2 is a sectional elevation of the same taken on line 2—2 of Fig. 1.

Fig. 3 is a detail transverse section taken on line 3—3 of Fig. 2.

Like numerals refer to like parts throughout the several views of the drawings.

In the drawings, 5 is the base of the box having an annular flange 6 thereon. 7 is a carrier for the needles, said carrier being rotatably mounted upon a stud 8 fast to the base 5. The carrier 7 is provided with a plurality of circumferentially arranged U-shaped ears 9, the legs 10 of said U-shaped ears being located on opposite sides of spaces 11, the median plane A of each of the spaces

11 being tangential to a circle B concentric with the carrier 7. It will be seen that the legs 10 on opposite sides of each of said spaces 11 constitute a pair of upwardly extending projections, one projection of each of said pairs being radial to said carrier and parallel to the other projection of its respective pair.

The spaces 11 are of proper size to receive the holder 12 of a hypodermic needle 13 and said holders are each provided with a pair of flanges 14 and 15. The flange 15 is of larger diameter than the flange 14 and is flatted off at 16. Said flanges 14 and 15 prevent the holder and its needle from moving longitudinally in the spaces 11. The legs 10 of the U-shaped flanges prevent lateral movement of said holder and a rotary movement of said holder is prevented by a cover 17 which is provided with a flange 18 which fits securely into the flange 6 on the base 5.

The top of the cover, when the box is closed, bears against the upper edges of the ears 9 and also comes into close proximity with the flattened surface 16 of the flanges 15, so that the needle holders 12 are prevented from rotating in the carrier 7.

In using the device the cover is removed and the end of a syringe inserted in the recess 19 which is provided in the outer end of the needle holder 12. This, it will be evident, can be done without touching the needle or its holder with the fingers. The needle and its holder are then removed from the box by lifting the holder out of the space 11 between the legs 10 by means of the syringe and the cover is then replaced upon the box. As the box is held in the hand by the base 5 and flange 6, the carrier 7 may be rotated upon the stud 8 by means of the syringe which projects into one of the holders 12 so as to bring another holder in proper position to have a syringe inserted therein, or, if desired, the carrier may be rotated by means of the ears 9 without touching the needles or their holders.

While it is preferable to have the carrier 7 rotatably mounted upon the base 5, it is evident that the same may be rigidly attached thereto or be made integral therewith without departing from the spirit of this invention, in which case the base 5 and carrier 7 would constitute, in effect, a single piece

and, therefore, applicant does not wish to be understood as limiting his invention to a construction in which the carrier and the base are necessarily formed in two separate pieces.

The cover 17 may be of transparent material to expose the contents of the box for sale and display purposes.

While in the drawings the box and cover are illustrated as of cylindrical form, it is evident that without departing from the spirit of our invention said box and cover may be of other forms, such as square, hexagonal and the like.

Having thus described our invention, what we claim and desire by Letters Patent to secure is:

1. A hypodermic needle box having, in combination, a base, a carrier mounted on said base, a series of circumferentially disposed U-shaped ears projecting upwardly from said carrier with spaces therebetween, each of said spaces adapted to receive the holder of a hypodermic needle, the median planes of each of said spaces being tangential to a circle concentric with said carrier, and a cover inclosing said carrier and fitting onto said base.

2. A hypodermic needle box comprising a base, a carrier mounted on said base, a series of pairs of upwardly extending projections on said carrier with spaces therebetween, one projection of each of said pairs being radial to said carrier and parallel to the other projection of its respective pair, a cover inclosing said carrier and contacting with said base, in combination with a series of hypodermic needle holders, each of said holders adapted to fit into one of said spaces.

3. A hypodermic needle box comprising a base, a carrier mounted on said base, a series of pairs of upwardly extending projections on said carrier with spaces therebetween, one projection of each of said pairs being radial to said carrier and parallel to the other projection of its respective pair, a cover inclosing said carrier and contacting with said

base, in combination with a series of hypodermic needle holders, each of said holders adapted to fit into one of said spaces and having a pair of flanges thereon adapted to abut against said projections.

4. A hypodermic needle box comprising a base, a carrier mounted on said base, a series of pairs of upwardly extending projections on said carrier with spaces therebetween, one projection of each of said pairs being radial to said carrier and parallel to the other projection of its respective pair, a cover inclosing said carrier and contacting with said base, in combination with a series of hypodermic needle holders, each of said holders adapted to fit into one of said spaces and having a pair of flanges thereon adapted to abut against said projections, one of said flanges being of greater diameter than the other, flattened off and adapted to engage said cover, whereby said holder is held in correct position in said carrier.

5. A hypodermic needle box having, in combination, a carrier and a series of circumferentially disposed U-shaped ears projecting upwardly from said carrier with spaces therebetween, each of said spaces adapted to receive the holder of a hypodermic needle, the median planes of each of said spaces being tangential to a circle concentric with said carrier.

6. A hypodermic needle box comprising a carrier and a series of pairs of upwardly extending projections on said carrier with spaces therebetween, one projection of each of said pairs being radial to said carrier and parallel to the other projection of its respective pair.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

JOHN J. RICHARDS, JR.
MARSHALL ANDELMAN.

Witnesses:

ARTHUR M. RICH,
WM. H. FORREST.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."