

R. F. SCHNEIDER.

CARRIER.

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1,245,805.

Patented Nov. 6, 1917.

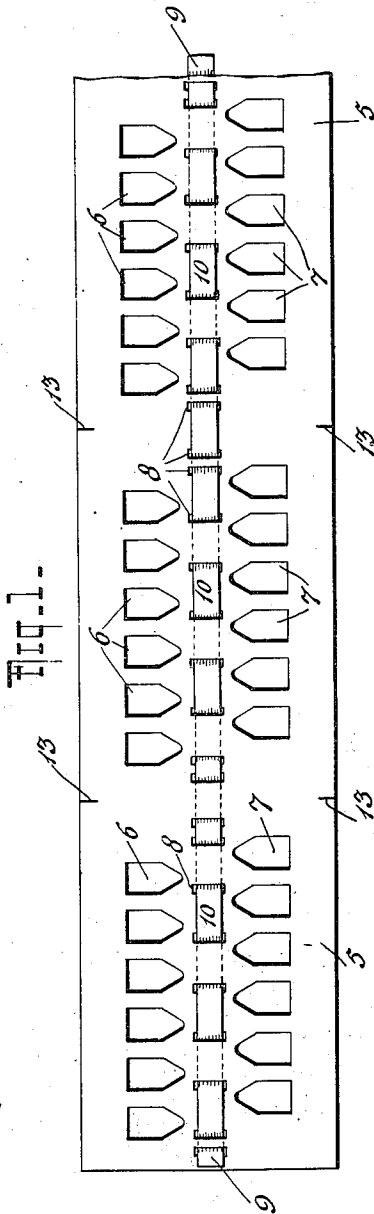


FIG. 1.

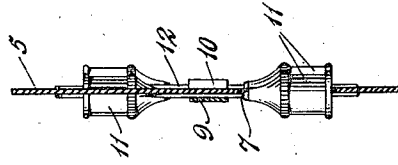
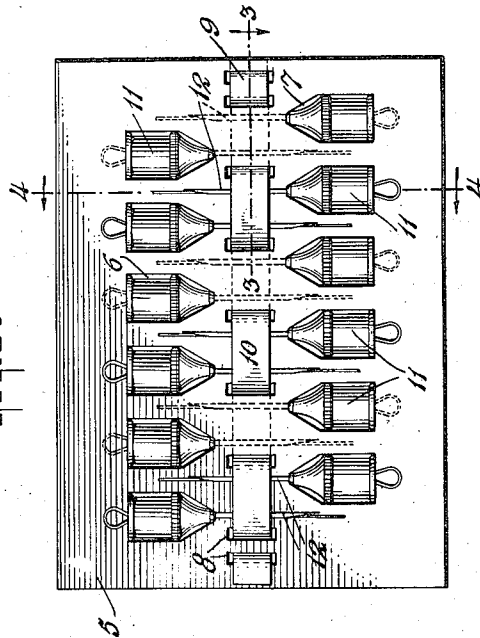


FIG. 4.



FIG. 2.



WITNESSES:

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CARRIER.

1,245,805.

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To all whom it may concern:

Be it known that I, RALPH F. SCHNEIDER, a citizen of the United States, and resident of the borough and county of the Bronx, city and State of New York, have invented a certain new and useful Improvement in Carriers, of which the following is a specification.

My invention relates to carriers and more particularly to carriers for hypodermic needles and the like. In present types of carriers it is necessary, in order to secure the needles in place thereon, to stick said needles through some portion of the material of which the carrier is composed, a proceeding which oftentimes injures the delicate points of such needles, even when the carrier is provided with apertures for the reception of the needles and which generally makes it necessary to provide special means for holding the needles in place, which means are usually difficult of manipulation. The object of my improvement is to overcome these objectionable features by providing a carrier on which the needles may be removably secured in a simple and efficient manner and without the necessity for penetrating any portion of said carrier. My improvement further contemplates constructing the carrier in such a manner as to prevent unintentional removal of the needles therefrom and without requiring the manipulation of any special means to secure this result. My invention will be fully described hereinafter and the features of novelty will be pointed out in the appended claims.

An example of my improvement is shown in the accompanying drawings in which Figure 1 is a face view; Fig. 2 is a similar detail view on an enlarged scale; Fig. 3 is a sectional view on the line 3—3 of Fig. 2 and Fig. 4 is a similar view on the line 4—4 of Fig. 2.

As shown in the drawings the carrier comprises a strip, sheet or body 5 constructed of celluloid or any suitable material which, in the illustrated example, is provided with two substantially parallel rows of apertures 6 and 7 arranged on opposite sides of the longitudinal median line of said strip or body 5. The apertures 6 of the one row are preferably staggered relatively to the apertures 7 of the other row as shown in Figs. 1 and 2. In addition the strip or sheet 5 is provided with an intermediate

row of openings 8 extending along approximately the median line of said strip or body 5 between the rows of apertures 6 and 7 as also shown in Figs. 1 and 2. A flexible tape or ribbon-like member 9 is woven or threaded through said openings 8 so as to form loops 10 alternately at opposite surfaces of the strip or body 5 as illustrated in Fig. 3, said tape or member 9 being composed either of the same material as the body 5 or of some other suitable material as may be desired. Preferably the tape or member 9 should comprise a material which is sufficiently rigid to clearly define the loops 10 and yet is flexible enough to be easily threaded or woven through the openings 8 and which exerts a sufficient friction on the body material to prevent the member 9 from being unintentionally withdrawn from the openings 8. The apertures 6 and 7 are so shaped in the present instance as to accommodate and fit the heads or couplings 11 of the hypodermic needles 12 which themselves extend through the loops 10 and between the body 5 and the ribbon or tape 9. The needles are placed upon the card by simply passing the pointed ends through the loops 10 and continuing this movement until the heads or couplings 11 register with the apertures 6 and 7 into which said heads or couplings may then be placed. In the final position the heads or couplings 11 are located in the apertures 6 and 7 and thus prevent any substantial movement of the needles in the direction of their length while the loops 10 serve to maintain the needles 12 in substantial engagement with the surface of the strip or body 5. In the illustrated arrangement the needles 12 extend through the loops from opposite directions, with a pair of needles projecting in opposite directions in each loop 10 and with alternate pairs of needles located on opposite surfaces of the body or strip 5 as shown best in Fig. 3. As shown in the drawings the apertures 6 and 7 are arranged in groups of six, each group in a row being spaced from the next group in said row so that the strip or body 5 contains separated groups adapted to accommodate a dozen needles as shown in Fig. 1. With this arrangement the strip or body 5 may readily be cut or otherwise divided into sections each of which carries a dozen needles, it being understood that this is only

an example and that the groups may be otherwise arranged and contain more or less than a dozen needles if desired. In order to facilitate the cutting of the strip 5 into sections of approximately even dimensions the said strip may be provided with indications 13 located at opposite edges or with other marks or designations indicating the cutting line. In case the strip or body is to be cut into sections, those openings 8 which are located at the space between adjacent groups of needles may be somewhat closer together than the remaining openings 8 as shown both in Figs. 1 and 2, this arrangement providing an anchorage as it were for the free ends of the member or tape 9 after the strip 5 has been cut into sections and preventing said ends from becoming readily disengaged. It will, of course, be apparent that the carrier instead of being made in the form of a strip as in Fig. 1 and then cut into sections may be initially constructed as individual sections adapted to carry a predetermined number of needles. Furthermore in some instances the strip 5 may remain uncut in which case the rows of apertures 6 and 7 may be continuous and not separated into groups as shown. In addition to this it will be obvious that the strip or body might contain only a single row of apertures, either 6 or 7, adapted to cooperate with the ribbon or tape 9 to hold a single row of needles in place on the carrier.

In whatever form the carrier is made the needles are easily and quickly combined therewith without danger of damaging the points or any other part of the needles and may be easily removed by simply pressing the heads or couplings 11 from the apertures 6 and 7 and then withdrawing the needles 12 from the loops 10 as will be readily apparent. The combination of the needles with the carrier may be accomplished with maximum speed and with little effort by unskilled labor and without interference with the usual protecting wires which are drawn through the bores of the needles. This is in contradistinction to existing carriers in which the said wires can only be inserted after the needles have been attached

to the carrier thus increasing the labor and time involved in the operation.

While I have described my carrier as particularly adapted for hypodermic needles the same may be made equally useful in connection with other articles, the latter whatever they may be being protected by the carrier and being firmly attached thereto and yet being easily removable therefrom. My improved carrier is also capable of being used as a display card. The carrier is easy to construct and thus reduces the cost of manufacture to a minimum without in any way detracting from its efficiency.

Various changes in the specific form shown and described may be made within the scope of the claims without departing from the spirit of my invention.

I claim:

1. A carrier for hypodermic needles comprising a sheet of material provided with a plurality of apertures shaped to accommodate the heads of hypodermic needles and arranged in parallel rows spaced from each other, the apertures in one row being staggered relatively to the apertures in the next adjacent row, and a ribbon like member woven through said sheet, between adjacent rows of apertures and forming loops alternately on opposite surfaces of said sheet arranged to receive the shanks of the needles and hold them in substantial engagement with the opposite surfaces of said sheet, each loop being common to at least two apertures one located in each row.

2. A carrier for hypodermic needles comprising a strip of material, indications thereon for designating where said strip may be cut into sections, each section being provided with groups of apertures arranged in parallel rows and spaced from each other and having a series of openings extending lengthwise of said strip between the rows of apertures, and a ribbon like member threaded through said openings and forming loops alternately on opposite surfaces of said sheet, each loop being common to at least two apertures, one located in each row.

In testimony whereof I have hereunto set my hand.

RALPH F. SCHNEIDER.