Dec. 26, 1950 W. J. O'NEILL, JR 2,535,594

PIERCING DEVICE FOR NIPPLES

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Fig. 1.

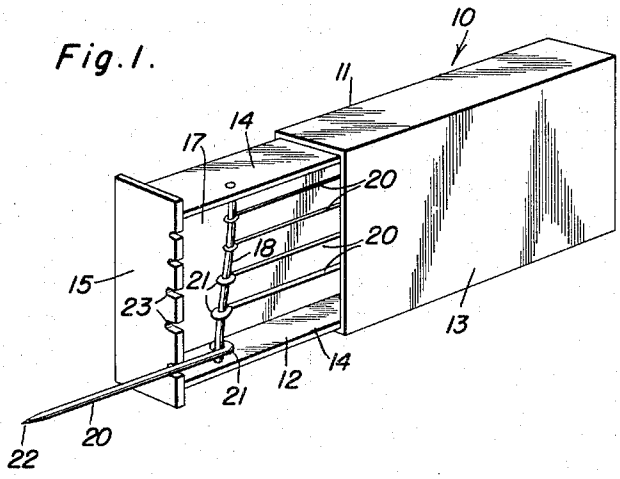


Fig. 2.

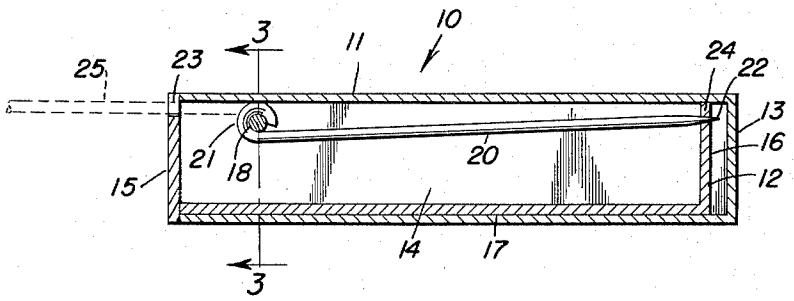
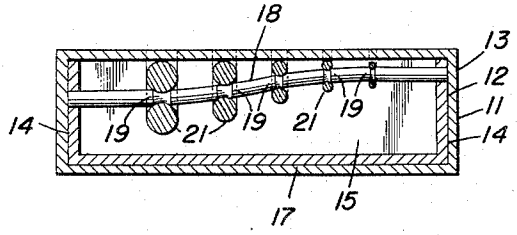


Fig. 3



Inventor

William J. O'Neill, Jr

By Clarence A. O'Brien and Harvey B. Jacobson

Attorneys

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PIERCING DEVICE FOR NIPPLES

William J. O'Neill, Jr., Lake Forest, Ill.

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4 Claims. (Cl. 164—119)

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This invention relates to new and useful improvements and structural refinements in piercing devices for nipples, and the principal object of the invention is to provide a device of the character herein described, such as may be conveniently and effectively employed for the formation or enlargement of apertures in nursing nipples.

A further object of the invention is to provide a piercing device which includes in its construction a plurality of needles of different diameters, so as to facilitate the formation or enlargement of apertures of different sizes.

Another object of the invention is to provide a piercing device for nipples wherein the needles are protected by a cover when the device is not in use, so as to prevent the possibility of injury to persons who may be handling the same.

An additional object of the invention is to provide a piercing device for nipples which is simple in construction, which will not easily become damaged, and which will readily lend itself to economical manufacture.

A still further object of the invention is to provide a piercing device for nipples which is otherwise well-adapted for the purpose for which it is intended.

With the above more important objects in view, and such other objects as may become apparent as this specification proceeds, the invention consists essentially of the arrangement and construction of parts as illustrated in the accompanying drawings, in which:

Figure 1 is a perspective view of the invention with the cover thereof in an open position and showing one of the piercing needles in readiness for use;

Figure 2 is a cross-sectional view of the invention in a closed position, and

Figure 3 is a cross-sectional view, taken substantially in the plane of the line 3—3 in Figure 2.

Like characters of reference are employed to designate like parts in the specification and throughout the several views.

Referring now to the accompanying drawings in detail, the invention consists of a piercing device for nipples designated generally by the reference character 10, the same embodying in its construction a box-like container 11 consisting of a rectangular frame or drawer 12 and a slidable receptacle or cover 13.

It will be observed that the frame 12 includes a pair of spaced parallel side walls 14, a pair of end walls 15, 16 and a bottom 17. On the other hand, the cover 13 is open at one end and closed

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at its other end, matters being so arranged that the frame 12 may be slid into and withdrawn from the cover through the open end of the latter, as will be clearly apparent.

An arcuate cross rod 18 extends transversely of the frame 12 and is secured at the ends thereof in the side walls 14 of the frame, the rod 18 being provided with a series of annular grooves 19, as is best shown in Figure 3. A plurality of piercing needles 20 are rotatably mounted on the cross rod 18, these needles being similar in construction and each being provided at one end thereof with an integrally formed eye 21 which engages one of the grooves 19. In this manner, the several needles are rotatably mounted upon the cross rod, yet are retained in spaced parallel relationship.

The needles 20 are of substantially the same length and the free ends thereof terminate in pointed extremities 22. Finally, it will be observed that the edge portions of the frame end walls 15, 16 are formed with a series of notches or seats 23, 24 respectively, the notches in each end wall progressively increasing in depth, so to speak, more or less in accordance with the contour of the longitudinal axis of the cross rod 18 which has the end portions thereof disposed at relatively different levels.

The notches 23, 24 are adapted to receive the pointed end portions of the needles 20 in a selective manner, that is to say, when the frame 12 is disposed within the cover 13, the several needles 20 engage the respective notches 24 in the end wall 16, as illustrated in Figure 2.

When it is desired to employ the invention for piercing or enlarging an aperture in a nursing nipple, the frame 12 may be withdrawn from the cover 13 and one of the needles 20 may be rotated about the cross rod 18 so that an intermediate portion of the needle is brought in engagement with one of the notches 23 in the end wall 15. The frame 12 may then be slid into the cover 13 while the needle is in its projected position (shown in Figure 1 or at 25 in Figure 2) whereupon the piercing or enlarging operation may be undertaken. It is to be particularly noted in this connection that the cover 13 performs a double function, namely, that of retaining the remaining needles in their retracted position while the projected needle is being used, and secondly, the cover functions as a convenient handle for the device as a whole, while the piercing or enlarging operation is being effected.

Needless to say, the several needles 20 are of different diameters to facilitate formation or en-

largement of apertures of different sizes, and the bent configuration of the cross rod 18 is, of course primarily intended to facilitate compact accommodation of the several, differently sized needles in the container or housing 11 when the cover 13 is in its closed position.

It is believed that the advantages and use of the invention will be clearly apparent from the foregoing disclosure and accordingly, further description thereof at this point is deemed unnecessary.

While in the foregoing there has been shown and described the preferred embodiment of this invention it is to be understood that minor changes in the details of construction, combination and arrangement of parts may be resorted to without departing from the spirit and scope of the invention as claimed.

I claim:

1. In a nipple piercing device, the combination of an elongated receptacle including a top wall and having an open end, a drawer slidable in said receptacle through the open end thereof and including an outer end wall which constitutes a closure for said open end when the drawer is slid inwardly, a transversely extending rod provided in said drawer adjacent said end wall, and a set of piercing needles independently rotatable on said rod and swingable from an inoperative position in the drawer to an operative position wherein they project outwardly therefrom beyond said end wall, the upper edge portion of said outer end wall being provided with a set of notches constituting seats for intermediate portions of the respective needles when the latter are in their projected positions.

2. The device as defined in claim 1 wherein said top wall extends above projected needles when the drawer is slid into said receptacle, whereby the projected needles are retained in the respective seats.

3. The device as defined in claim 1 wherein said drawer includes an inner end wall provided in its upper edge portion with a set of notches constituting seats for free end portions of the respective needles when the latter are in their inoperative positions.

4. The device as defined in claim 1 wherein said rod is provided with a set of longitudinally spaced annular grooves, said needles being provided at one end thereof with circular eyes rotatable in said grooves, whereby the needles are retained in a spaced relation on said rod.

WILLIAM J. O'NEILL, JR.

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The following references are of record in the file of this patent:

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