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2,369,210

WRIST SUPPORTER

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Fig. 1.

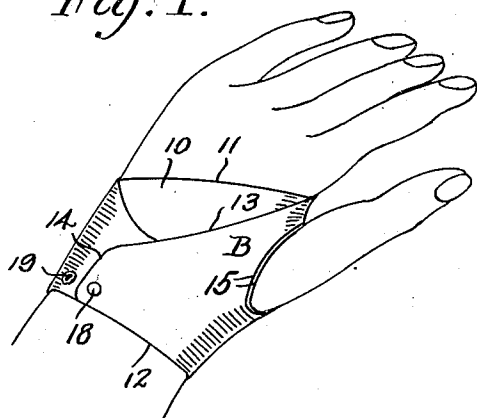


Fig. 2.

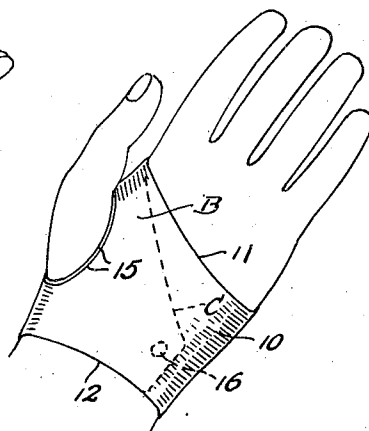


Fig. 3.

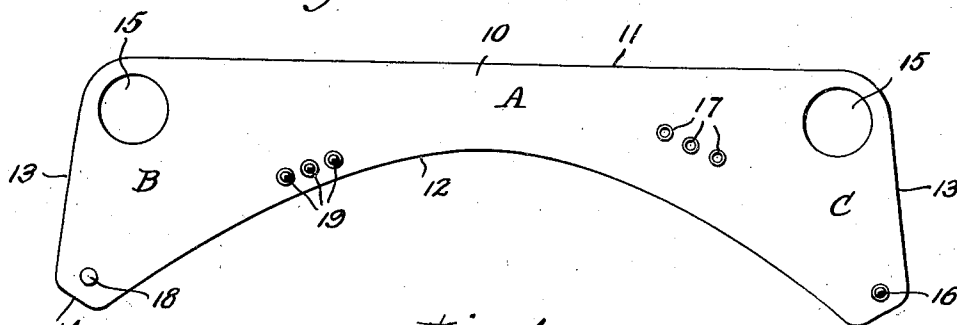
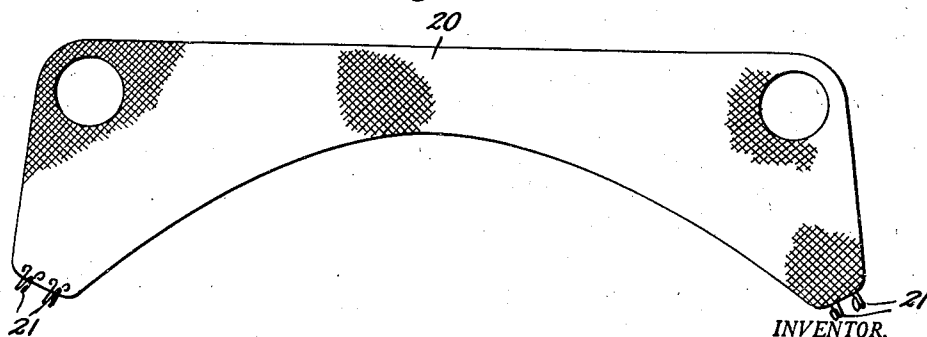


Fig. 4.



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WRIST SUPPORTER

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4 Claims. (Cl. 2-16)

This invention relates to anatomical supporters and has particular reference to an improved wrist supporter which is so constructed and arranged when applied as to effectively support not only the wrist bones but also the bones of the regions of the forearm and forehand adjacent thereto.

It is essential that the proper support and correct binding of the wrist should include means which not only covers and impinges upon the wrist alone but which also covers and impinges upon the regions of the forearm and forehand adjacent thereto in order to be effective for the purpose of reinforcing and binding the wrist so as to prevent strains causing injury thereto or for treating fractures or dislocations of one or more of the wrist bones and the swelling incident thereto. The present invention therefore comprehends an improved wrist supporter which embodies a strip of material constructed and applied in such a manner as to provide a binding which extends completely around the regions to be reinforced or treated a multiple number of times and provided with complementary thumb engaging portions which locate and insure retention of the supporter in proper position against accidental and unintentional slippage and displacement.

More particularly the invention is directed to an improved wrist supporter fashioned so as to provide a contour whereby the upper and lower edges thereof intimately fit around the regions of the forearm and forehand adjacent to the wrist to thereby insure proper binding, support and reinforcement of the designated regions throughout the area covered by the supporter.

As a still further object, the invention resides in the provision of a supporter of the character set forth which is comparatively simple in its construction and mode of use, which may be economically produced and which is highly efficient for its intended purpose.

With the above enumerated and other objects in view, the invention is set forth in greater detail in the following specification, particularly pointed out in the appended claims and illustrated in the accompanying drawing, in which:

Fig. 1 is a perspective view illustrating the improved wrist supporter in applied position as observed from the back of the hand.

Fig. 2 is a similar view as observed from the front of the hand.

Fig. 3 is a plan view of the supporter shown in Figs. 1 and 2, showing the same removed from the hand.

Fig. 4 is similar view of a modified form of wrist supporter.

Referring to the drawing by characters of reference, the supporter consists of sheet material such as leather, fabric, or any equivalent flexible stock which is cut or otherwise formed to provide an elongated binding strip 10 having a straight linear upper edge 11, a concave lower edge 12 and downwardly divergent opposite end edges 13 respectively joined to the lower edge 12 by inwardly directed edge portions 14. Thumb receiving openings 15 are formed in the strip 10 adjacent the juncture of the opposite end edges 13 with the upper edge 11.

This provides a binding strip having a relatively narrow intermediate portion A increasing in width outwardly and merging into opposite terminal portions C of greater width than the intermediate portion and which terminal portions are provided with the said thumb receiving openings 15.

In the form of the invention shown in Figs. 1, 2 and 3 of the drawing, the binding strip 10 is formed of an inelastic material and in this instance the same is retained in applied position by snap fasteners or equivalent securing means. As illustrated in Fig. 3, the binding strip which is designed for the left hand has its terminal portion C provided with a forwardly facing stud fastener element 16 at the lower end thereof adjacent the edge portion 14, while the strip is formed with one or more forwardly facing socket elements 17, three being shown in the embodiment disclosed to allow for limited adjustment. The other terminal portion B is provided with a rearwardly facing stud fastener element 18 at the lower end thereof adjacent the edge portion 14, while spaced therefrom toward the intermediate portion A of the strip are one or more rearwardly facing complementary socket elements 19.

In use, the binding strip 10 is applied to the left hand as shown in Figures 1 and 2 in the following manner. The thumb of the left hand is inserted through the opening 15 of the terminal portion C from the rear of the strip 10 which is then wrapped around the wrist to the left over the back of the forehand and forearm, thence across the palm and over the terminal portion C engaging one of the socket elements 17 with the stud element 18, then around the back of the hand and again across the palm. This brings the other thumb opening 15 in the terminal portion B in a position to engage over the thumb and in registry with the first mentioned thumb

opening. After engagement of said opening over the thumb, the remaining lower end of the terminal portion B extends over the back of the hand and the stud element 16 is engaged with the appropriate socket element 19, to retain the binding strip in applied position.

By means of the construction and arrangement thus described, it will be observed that the binding strip is of such a length as to extend around the wrist a multiple number of times and of such a width as to not only cover the wrist but also the adjacent regions of the forearm and forehead which is essential to the proper reinforcement of the wrist bones or treatment of the same as a result of fracture, sprain or other injury thereto. It has also been found, by forming the upper edge as a straight line, the lower edge concave and the end edges diverging downwardly, the upper and lower edges conform to and intimately engage with the forearm and the forehead, causing the binding strip to lie smoothly and effectively throughout its length and width. The registering thumb openings engaging over the thumb insures the proper location of the binding strip and prevents any possibility of accidental or unintentional movement of the same longitudinally with reference to the wrist. The lower ends of the terminal portions B and C also extend parallel with and fit smoothly against the adjacent portions of the binding strip.

In the modified form of the invention shown in Fig. 4 of the drawing, the binding strip 20 is illustrated as constructed of an elastic woven or textile material but is otherwise precisely the same in contour and is applied and functions in the same manner as in the previous form. In this instance however, the retaining means consists of hook elements 21 provided at the lower ends of the opposite terminals of the binding strip and said hook elements are adapted to be engaged in the mesh of the material. The elasticity of the binding strip and the fact that the hooks may be engaged at practically any point desired, permits of the use of the support on hands which widely vary in size while permitting considerable variation in the pressure applied to the wrist.

What is claimed is:

1. A wrist supporter fashioned from a strip of flexible material having a relatively narrow intermediate portion and terminal portions of greater width than the intermediate portion and

of length to extend completely around the wrist a multiple number of times so as to cover the wrist and the regions of the forearm and forehead adjacent to the wrist, said strip having openings adjacent the opposite terminal portions thereof adapted to be disposed in registry and to receive the thumb for locating and retaining the strip in juxtaposition to the regions to be supported.

2. In a wrist supporter, a binding strip of flexible material having a straight linear upper edge, a concave lower edge and downwardly diverging end edges defining an intermediate portion and terminal portions of greater width than the intermediate portion, said terminal portions having thumb receiving openings adapted to register with each other and engage over the thumb when the binding strip is wrapped about the wrist so as to locate and retain the strip located with reference to the wrist.

3. In a wrist supporter, a binding strip constructed of a flexible elastic textile material fashioned to provide a relatively narrow intermediate portion of gradually increasing widths and merging into terminal portions of greater width than said intermediate portion, said terminal portions having openings adapted to be registered with each other and engaged over the thumb when the binding strip is wrapped about the wrist, and hook elements carried by said terminal portions adapted to be engaged with the mesh of the adjacent portions of the strip for securing the same in applied position.

4. In a wrist supporter, a binding strip of flexible material having a straight linear upper edge, a concave lower edge, downwardly divergent end edges and inwardly directed end edge portions joining the end edges with the concave lower edge to define an intermediate portion of relatively narrow width and terminal portions of greater width than the intermediate portion, said terminal portions having thumb receiving openings located respectively adjacent the upper edge and the opposite end edges adapted to be disposed in registry for receiving the thumb when the binding strip is wrapped about the wrist, inter-engageable means adjacent the end edge portions and complementary means on the strip adjacent the terminal portions adapted to be engaged for securing the strip in applied position.

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