July 12, 1932. O. A. FRUEHAUF 1,867,258

SURGICAL SPLINT

Filed March 19, 1928

Fig. 2.

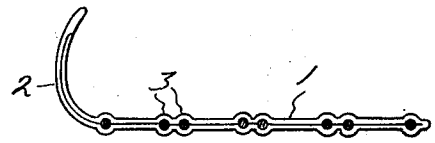


Fig. 1

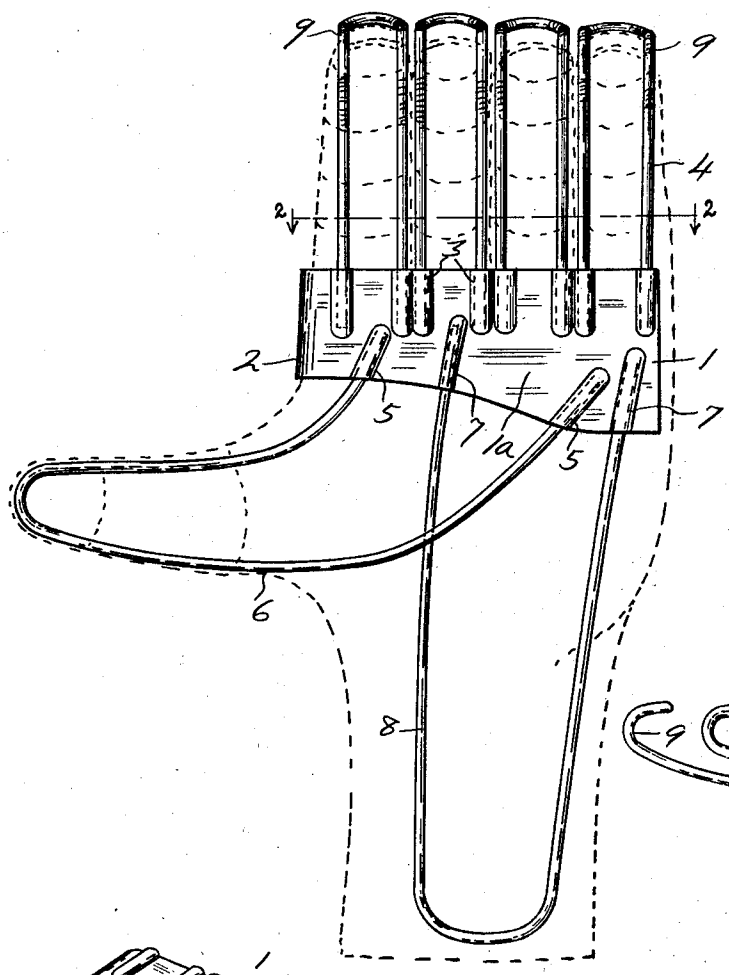
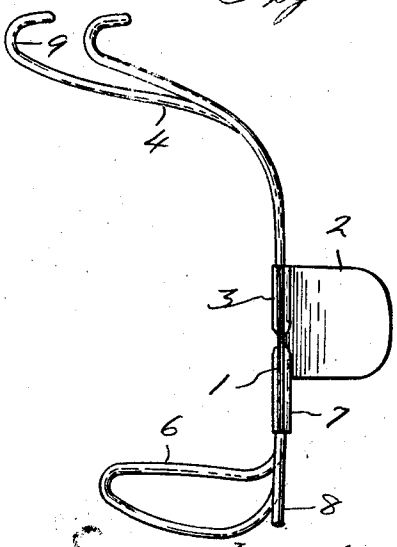


Fig. 3.



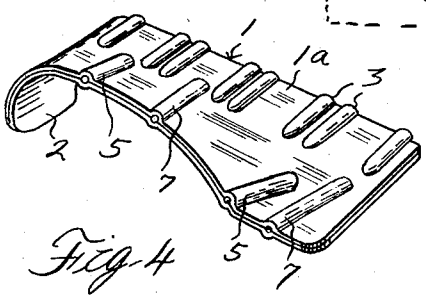


Fig. 4

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UNITED STATES PATENT OFFICE

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SURGICAL SPLINT

Application filed March 19, 1928. Serial No. 262,733.

This invention relates to surgical splints and particularly to splints for use with broken or maimed fingers, thumbs or wrists.

An object of the invention is to provide a splint for use with a broken or otherwise injured finger, thumb or wrist comprising a support engageable with the palm of the injured hand and a plurality of splint members selectively attachable to said support and proportioned and fashioned to conform to the respective digits or to the injured wrist.

A further object is to provide a surgical splint comprising a sheet-metal supporting plate engageable with the palm of an injured hand and further comprising a plurality of splints formed of wire curved and proportioned to conform to the respective fingers and thumb of such hand.

A still further object is to provide a finger splint having a terminally curved portion adapted to overlie and protect the nail of an injured thumb or finger.

Still another object is to provide a surgical splint comprising a plate engageable with the palm of a hand and hooked at one edge to laterally engage said hand and further comprising a plurality of splint members selectively attachable to said plate.

These and various other objects, the invention attains by the construction hereinafter described and illustrated in the accompanying drawing, wherein:

Fig. 1 is a view in front elevation of the herein described device showing the support thereof carrying all of the selectively attachable splint members and indicating the relation to said device of the hand and wrist to which it is applied.

Fig. 2 is an edge view of the supporting plate of the device, showing the splint members in section taken on the line 2—2 of Fig. 1.

Fig. 3 is a side view of the complete device.

Fig. 4 perspectively illustrates the supporting plate

In these views reference character 1 designates a support consisting of a plate engageable with the palm of the hand and formed by two sheets of metal secured face to face by spot welding or other suitable means, the rear edge of said plate being curved as indicated at 1a to conform to the ball of the hand as best seen in Fig. 1. It is preferred to hook one extremity of the plate 1 as indicated at 2 for engagement with the thumbed edge of the hand to assist in holding said plate properly positioned. The forward edge of said plate is formed with a plurality of sockets 3 produced preferably by spacing apart at suitable points the component sheet metal elements of said plate. The sockets 3 are paired as is best seen in Fig. 1 for detachable engagement by the supporting extremities of wire splint-forming members 4 of which four are provided, respectively conforming in shape and size to the fingers of a hand. The rear edge of the plate 1 is also formed with a pair of sockets 5, in which are removable insertable the corresponding extremities of a splint member 6 formed of wire and proportioned and fashioned to form a thumb support. The plate 1 is also formed with a pair of sockets 7 opening at its rear edge which are adapted to removably receive the corresponding ends of a relatively long wire splint member 8, proportioned and fashioned to extend along the wrist of the hand engaged by plate 1 to support and reinforce such wrist.

The splint members 4 are preferably return-bent at their free ends as indicated at 9, to overlie and protect the nails of the fingers engaging said members.

In the use of the described device there is applied to plate 1 only that splint member which conforms to the injured finger, thumb or wrist, or several of such members may be applied in case the injury extends to more than one part.

It is to be understood that the injured finger, thumb or wrist, together with the splint member engaging the same will be wrapped in bandages as will likewise be true of the palm of the injured hand so that the entire device will be securely held by such bandages in its proper position of use.

The device will be made in various sizes suitable for application to differently proportioned hands and right and left-hand devices will be provided to conform to the right and left hands.

The described device secures the important

advantage of permitting any injured one of the digits of a hand to be properly supported and protected while leaving the remaining digits entirely free for use. Thus, a person suffering from an injured thumb or finger is still permitted by this device to have sufficient use of the damaged hand to ordinarily permit continuance of his or her duties.

While it will be apparent that the illustrated embodiment of my invention herein disclosed is well calculated to adequately fulfill the objects and advantages primarily stated, it is to be understood that the invention is susceptible to variation, modification and change within the spirit and scope of the subjoined claims.

What I claim is

1. A surgical splint comprising a supporting plate engageable with the palm of an injured hand and formed with sockets opening at its front and rear edges, a plurality of finger splint members selectively detachably engageable with the sockets opening at the front edge of said plate, and splint members for engagement with the wrist and thumb of said hand selectively detachably engageable with the sockets opening at the rear edge of said plate, said thumb-engaging splint member being laterally bent.

2. A surgical appliance comprising a sheet-metal plate proportioned to fit the palm of a hand, the length of said plate being less than its width, a plurality of finger splints detachably engageable with said plate at its front edge, a wrist splint rearwardly projecting from and detachably engaging the rear edge of said plates and a thumb splint detachably engaging the rear edge of said plate and having a portion overlapping said wrist splint.

In witness whereof I hereunto set my hand.

OSCAR A. FRUEHAUF.