

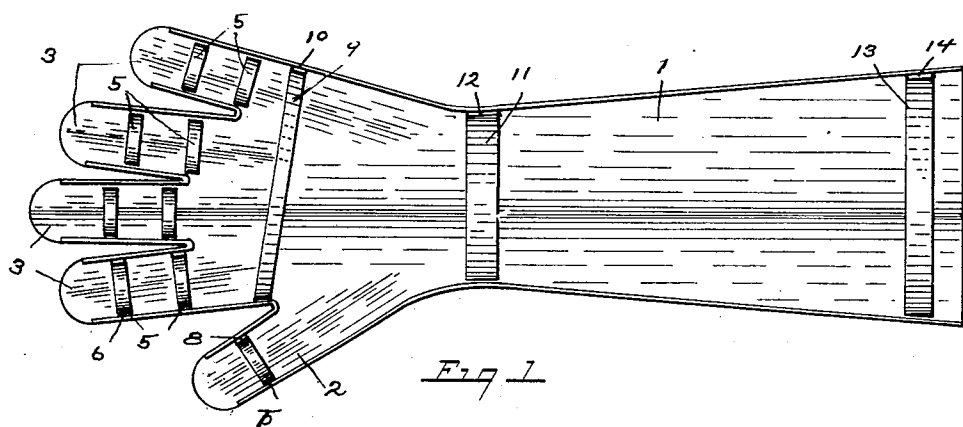
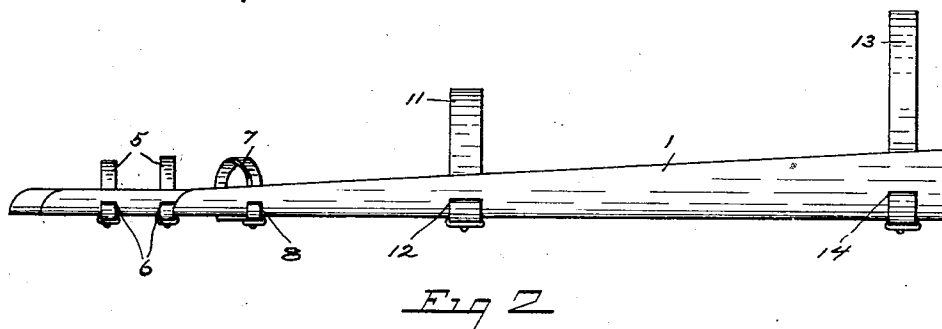
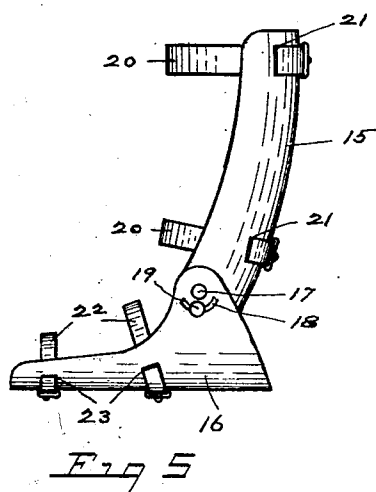
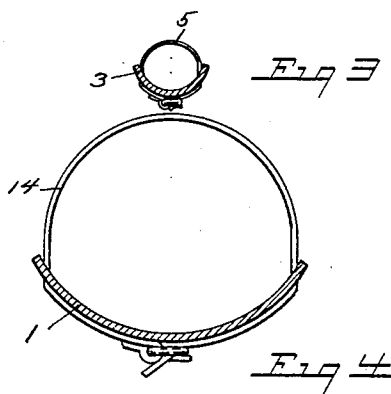
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S. M. FREILEWEH

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ORTHOPEDIC DEVICE

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SUSANNAH M. FREILEWEH.

INVENTOR

BY *John J. Thompson*
ATTORNEY

UNITED STATES PATENT OFFICE.

SUSANNAH M. FREILEWEH, OF POUGHKEEPSIE, NEW YORK.

ORTHOPEDIC DEVICE.

Application filed November 9, 1926. Serial No. 147,338.

This invention relates to an orthopedic device of that class which is used in the treatment of contractions and deformities of the limbs, feet or hands.

In the treatment of contracted or deformed hands, etc., by manipulation and massage to straighten and replace the parts into their normal position, it has often been found, as the effects are slow, that it is very important to retain the full benefit of each treatment and not let the part go back to its misshaped condition.

To accomplish this, is the object of the present invention which is to provide a device in the shape of a form, within which the hand and arm, or foot and leg, may rest, and be secured during the treatment or longer if so desired.

Another object of the invention, is to provide a form composed of metal, fibre, or other suitable material, which is so formed or shaped as to conform to the correct contour of the limb, and the fingers or toes, and be provided with means such as straps, by which, as the deformity is corrected and the part manipulated towards its correct shape, it can be retained in place by the straps or other suitable means, and thus prevented from going back to its misshapen state.

With these and other objects in view, my invention consists in certain construction and combination of parts as will hereinafter be fully described and claimed, and illustrated in the accompanying drawings, which form a part hereof, and in which like figures of reference refer to corresponding parts in all of the views, but it is fully understood that slight changes may be made without departing from the spirit of the invention.

In the drawings:—

Figure 1 is a top plan view of the device as constructed for the hand and arm.

Figure 2 is a side elevation of the same.

Figure 3 is a cross sectional view of one of the finger forms.

Figure 4 is a cross sectional view of the arm portion.

Figure 5 is a side elevation, showing the device as constructed for the foot and leg.

Referring to the drawings, and particularly to Figures 1 and 2, the device comprises a form made from metal or other suitable material, and having a body portion 1, shaped to

conform to the arm, a thumb portion shaped to conform to the thumb, and finger portions 3, shaped to conform to the fingers when the hand is spread.

As will be seen by reference to Figures 3 and 4 the forms are curved or U-shaped in cross section, and it is intended that in use they be padded with cotton or other suitable material, and built up to conform to the shape of the finger or hand that is to rest upon it.

Also if found desirable, the form, in place of having a straight bottom as shown, may be formed to more fully fit the contour of the limb.

For retaining the fingers, thumb and arm in place, as they become shaped by the manipulation of the operator, there are provided adjacent to each joint of the fingers a strap 5, which is mounted in slots 6 formed in the portions 3, the strap 7 for the thumb, mounted in the slots 8, and the strap 9 for the knuckles, mounted in the slots 10.

While for the wrist is provided the strap 11 in the slots 12, and for the arm the strap 13 in the slots 14, and other straps may be located as desired for the joints.

Referring to Figure 5, the device as constructed for the foot and leg, comprises the leg portion 15, which is shaped to the leg, and the foot portion 16, shaped to the foot, and hinged to the leg portion at 17, and supplied with a radial slot 18 and locking bolt 19, so that the angle of the foot with respect to the leg can be changed at will, and locked in the predetermined position.

There are also provided the straps 20 for the leg, which are mounted in the slots 21, and the straps 22 for the foot, mounted in the slots 23.

And as for the hand and arm, the shape of the device may be made to conform to any special condition that is required, such as having the fingers bend or otherwise shaped for special cases.

In the use of the device, it will be seen that as the fingers, etc. are worked into their proper state and shape, that they are retained by the straps in that position, and as each finger is worked over, it is held, and so on till all have been treated, while without the device by the time that the last finger is reached, the first has lost the benefit of the treatment by not being held in place.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent, is:

In an orthopedic device of the class described, and in combination with a form, 5 shaped to the forearm, hand and fingers, and curved in cross section, and formed with slots

adjacent to the edges, of a series of straps mounted in said slots and adapted to pass over the individual joints of each separate finger 10 and thumb of the hand.

In testimony whereof I hereunto affix my signature.

SUSANNAH M. FREILEWEH.