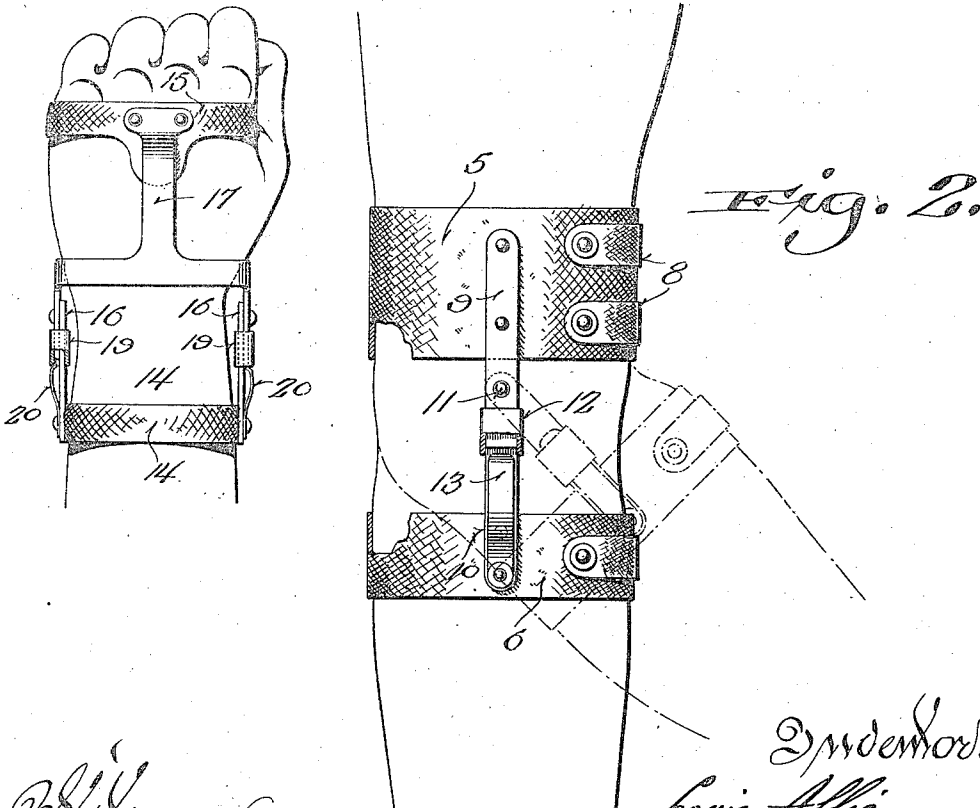
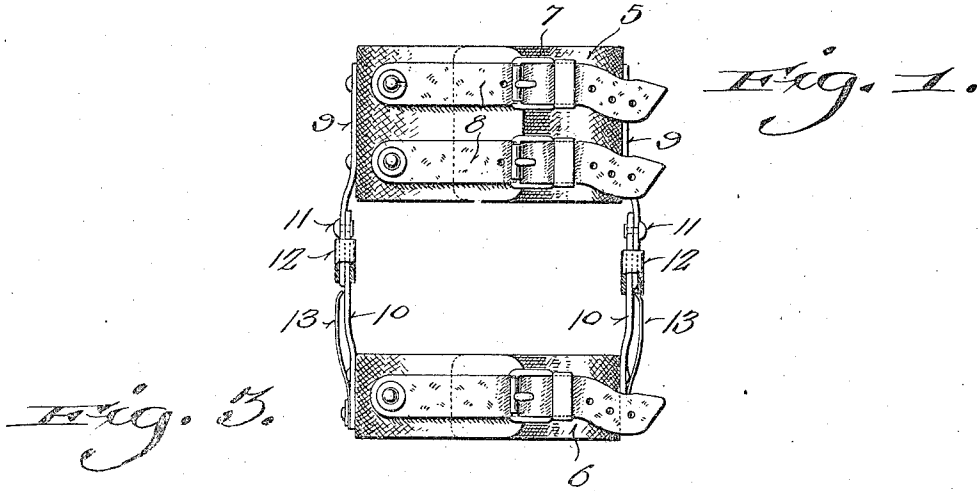


L. ALLIS.
ATHLETIC BRACE FOR LIMBS.
APPLICATION FILED MAR. 28, 1916.

1,226,160.

Patented May 15, 1917.



Witness:
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ATHLETIC BRACE FOR LIMBS.

1,226,160.

Specification of Letters Patent.

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Application filed March 28, 1916. Serial No. 87,208.

To all whom it may concern:

Be it known that I, LOUIS ALLIS, a citizen of the United States, and resident of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented certain new and useful Improvements in Athletic Braces for Limbs; and I do hereby declare that the following is a full, clear, and exact description thereof.

The present invention relates to new and useful improvements in athletic apparatus and is more particularly directed to the provision of a device for holding the portions of a limb against pivotal movement relative to a respective joint.

In various athletic pursuits it has been found desirable, particularly as an aid for persons not sufficiently skilled, to provide means for holding portions of a respective limb against bending in certain movements of the limb. The present device is particularly applicable in connection with the game of golf wherein a bending of the wrist or elbow interferes with a proper stroke under certain conditions, and the device finds use in other games such as base ball and cricket.

It is the object of the present invention to provide a device which may be attached to the limb of a person to prevent undesired bending thereof and it is further the object to provide such a device which may be rendered inoperative in its holding action without detaching the device from the wearer; so that the wearer may have free movement of the limb when desired, with but little inconvenience.

It is still further an object to provide such a device wherein the portions of a limb may be held in different relative positions.

With the above and other objects and advantages in view, the invention resides more particularly in the novel combination, arrangement and formation of parts more particularly hereinafter described and more particularly pointed out in the appended claims.

In the drawings:

Figure 1 is an elevational view of one form of the present invention adapted for use in connection with the elbow joint of a person's arm.

Fig. 2 is an elevational view of the same form of the invention, looking at another side thereof and showing the device applied.

Fig. 3 is an elevational view of another

form of the invention adapted for use in connection with the wrist joint of a person's arm, and showing the device applied.

Referring now more particularly to the structure of Figs. 1 and 2, there are provided a pair of upper and lower strap members 5 and 6, the ends of which are adapted to overlap when placed about a person's arm and which are provided with buckles 7 and strap sections 8 coacting therewith whereby the strap members may be firmly secured to the arm. At the sides of the joint, the strap 5 is shown as considerably wider than the strap 6 and thus this strap serves the function of the main securing means of the device to the arm, while the strap 6 is more in the nature of a holding means, it being understood that the wider strap would be secured to that side of a joint at which there would be the least muscular play and inasmuch as in connection with an elbow brace there would be less muscular play above the elbow than below the same, the wider strap is disposed at the top. Extending from the strap members are pair of bars 9 and 10 adapted to be diametrically opposed when the strap is operatively disposed about a limb and the end portions of respective straps are pivotally connected at 11 at points adapted to lie within the axis of movement of the joint. The ends of the bars 9 are extended past their pivotal connections and slidable on the bars 10 are locking loops 12 of similar cross-sectional shape and size to the bars 9 and 10 which are adapted to engage over the said extended ends to hold the bars in alinement. For preventing undesired movement of these loops 12, a leaf spring 13 is secured to the outer end of each bar 10 and has its free end portion directed inwardly to yieldingly hold the respective loop in locking position, and to hold the loop in retracted position when the loop is slid over it to thus permit free movement of the joint.

The present structure is also adapted to hold the portions of the limb in substantially right angular relation, as upon retracting the loop and swinging the limb portion to this position the loop may then be pushed inwardly and will lie between the end of the spring and the pivotal connections of the bars, with the extended ends of the bars 9 projecting laterally and held by abutment with the loop.

In Fig. 3 is shown a form of the invention more particularly adapted for stiffening the wrist joint, and this structure comprises the strap 14 adapted for securement to the arm inwardly of the wrist and the strap 15 adapted for securement about the palm of the hand adjacent the finger knuckles. Extending from the strap 14 are bars 16 adapted to lie at the sides of the wrist, and extending from the back portion of the strap 15 is a bar 17 having at its inner end a transverse head portion bent about the back of the hand with its ends extended longitudinally at the sides of the hand for pivotal connection with the bars 16 at points 18 in axial alinement with the axis of movement of the wrist. The bars 16 are provided with locking loops 19 and springs 20 similar to those of the first described structure.

Thus the two embodiments herein shown illustrate the principle of my present invention and it is understood that for use under various specific conditions and in connection with various joints of the body other modifications may be employed without departing in any manner from the spirit of the invention, which is set forth more broadly in the accompanying claims.

I claim:

1. A limb brace comprising a pair of encircling members adapted to be disposed one on each side of the joint of a limb, a pair of pivotally connected links, one being rigidly secured to each member, the pivoted end of one link being extended and adapted to engage the other, a locking loop of a cross sectional size and shape similar to the limb and slidable over the extended end of one and the adjacent portion of the

other, and means for positively holding the loop against shifting on the links.

2. A limb brace comprising a pair of encircling members adapted to be disposed one on each side of the joint of a limb, a pair of pivotally connected links, one being rigidly secured to each member, the pivoted end of one link being extended and adapted to engage the other, a locking loop slidable over said extended end and the adjacent portion of the other links, and a retaining spring fixed on one of the members to engage the locking loop to hold the same against shifting of said links.

3. A limb brace comprising a pair of encircling members adapted to be disposed one on each side of a joint of a limb, a pair of pivotally connected links, one being rigidly secured to each member, the pivoted end of one link being extended and adapted to engage the other, a leaf spring fixed to said other link adjacent its connection with one of the members and adapted to extend longitudinally of the links, the free end of the spring being adjacent the end of said extended portion when the links are disposed longitudinally, and a locking loop slidable over said extended portion and the adjacent part of the other link, said loop being engaged by said spring and held against shifting on said links.

In testimony that I claim the foregoing I have hereunto set my hand at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

LOUIS ALLIS.

Witnesses:

JAMES PORTER, Jr.,
O. F. PIHL, Jr.