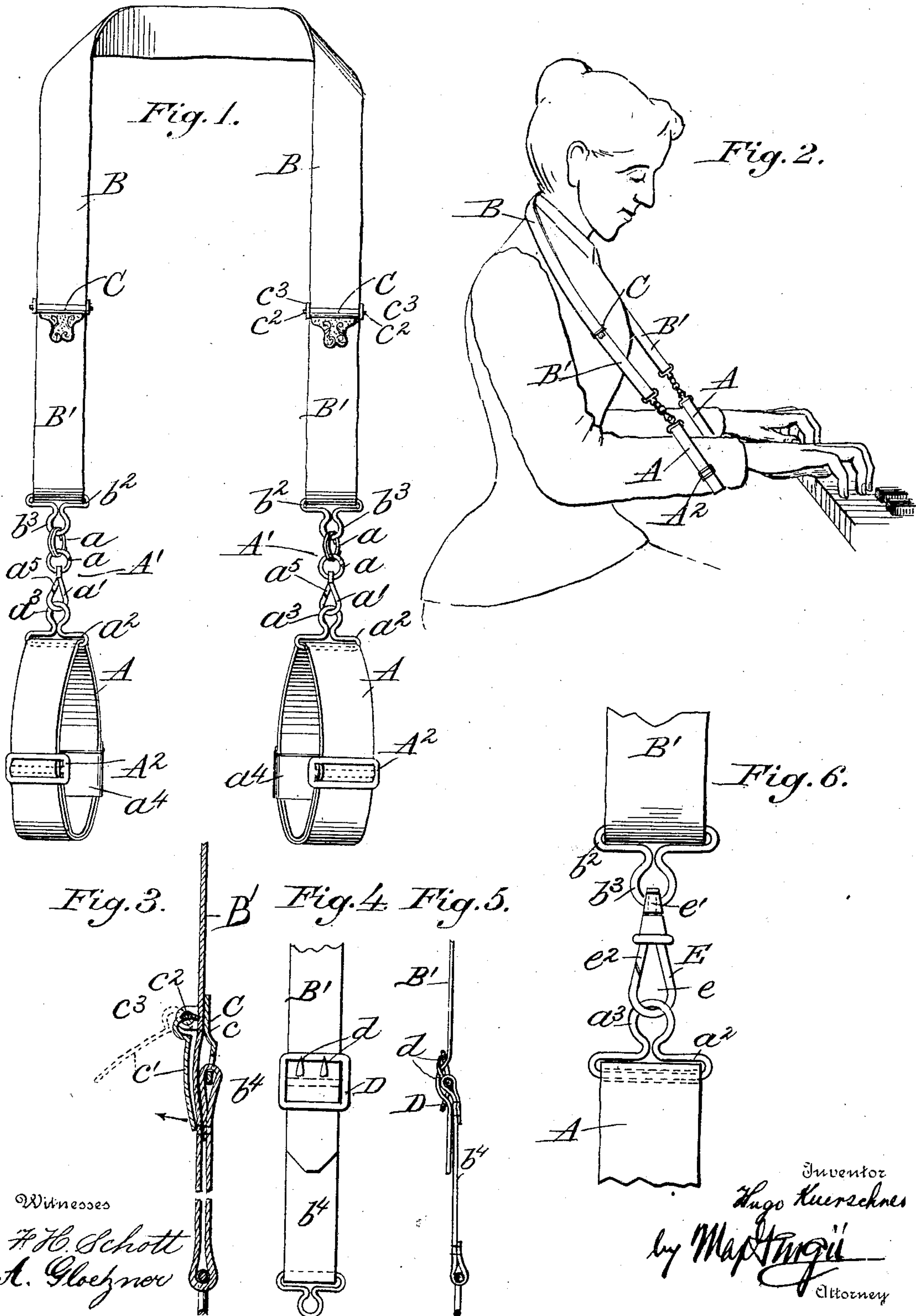


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HAND SUPPORT FOR PIANO PUPILS.

(Application filed Nov. 22, 1898.)

(No Model.)





# UNITED STATES PATENT OFFICE.

HUGO KUERSCHNER, OF WASHINGTON, DISTRICT OF COLUMBIA.

## HAND-SUPPORT FOR PIANO PUPILS.

SPECIFICATION forming part of Letters Patent No. 627,646, dated June 27, 1899.

Application filed November 22, 1898. Serial No. 697,134. (No model.)

*To all whom it may concern:*

Be it known that I, HUGO KUERSCHNER, a citizen of the United States, residing at Washington, District of Columbia, have invented certain new and useful Improvements in Hand-Supports for Piano Pupils; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to devices for supporting the arms or wrists of piano pupils while playing.

The object of the invention is to provide an arm or wrist support which, while sustaining the arm and wrist in the correct position for fingering the keys of the piano, will be yielding to a sufficient extent to permit the hand to conveniently reach all the octaves of the keyboard and will also permit of the hands occupying the correct lateral position with regard to the keys at the two extremes of the keyboard.

The object is, moreover, to provide a support which may be carried about conveniently and which will not necessitate attachment to the piano directly.

With these objects in view my invention consists, essentially, in a pair of wrist-supports, preferably in the form of wristbands, which are secured, preferably in a removable manner, to pendent supports, which in turn receive their support from the person of the player or piano pupil. These pendent supports are preferably in the shape of a shoulder band, strap, or cord or equivalent device, which passes around the neck and over the shoulders of the player and reaches down to the wristbands or wrist-supports. The connection between the wristband and the pendent support is such as to allow the wristbands to swing or rotate freely around a substantially vertical axis, and, moreover, this connection is so arranged as to enable the wristbands to be readily detached from the pendent supports during intervals of rest.

My invention, moreover, consists in such features, devices, and combination of parts as will be hereinafter set forth, and pointed out in the claims.

In the drawings forming part of this speci-

fication, Figure 1 represents a front view of an arm-support embodying what I consider the preferable form of carrying out my invention. Fig. 2 is a perspective view showing the arm-support in operative position. Fig. 3 is a detail view, in vertical longitudinal section, of the length-adjusting device for the pendent supports. Figs. 4 and 5 represent detail views, in front elevation and vertical longitudinal section, of a modified form of length-adjusting device for the pendent supports; and Fig. 6, a modified form of removable connecting device between the wristband and pendent support.

By referring to Figs. 1 and 2 in the drawings it will be noted that the arm-support embodying my invention consists of a pair of wrist-supports A A, preferably in the form of wristbands, as shown, which are suspended from a pair of pendent supports B' B', which in the present case constitute the ends of a shoulder band or strap B, which shoulder band or strap, as shown in Fig. 2, passes around the rear portion of the neck of the wearer and down over the shoulders. The wristbands A A are secured to the ends of the pendent supports B' B' by a swinging rotatable joint—that is to say, a connection which will permit the wristbands to swing horizontally and also to yield vertically in all directions. This connection is also so constituted as to make the wristbands removable from the pendent supports B' B'. One form of this swinging rotatable joint is illustrated in Figs. 1 and 2, and it consists in a number of rings or links a a'. The lower links a' are connected to the wristbands A by engaging eyes a<sup>3</sup>, forming part of tabs or loops a<sup>2</sup>, through which the wristbands A pass, as clearly shown in the drawings, the said tabs being flattened at their lower portions to form narrow slots for the passage of said wristbands. The upper links a of the swinging rotatable joints A' engage the eyes b<sup>3</sup> of similar tabs b<sup>2</sup>, which also have elongated and narrow slots at their upper portions for the passage of the pendent supports B'.

In Fig. 6 I have shown a modified form of swinging rotatable connection which consists in interposing between the tabs a<sup>2</sup> and b<sup>2</sup> a link E, whose loop e engages the eye a<sup>3</sup> of the



tab  $a^2$ , and whose upper portion is swiveled to the tab  $b^2$  at  $e'$  in any desired or convenient way.

The wristbands A are made removable from the pendent supports B' in any suitable or preferred way. In the present instance I have carried this removability into effect by making the lower links  $a'$  in Fig. 1 and  $e'$  in Fig. 6 in the shape of snap-hooks, the tongues  $a^5$  or  $e^2$  of which will readily yield to pressure from the outside when it is desired to put the wristbands into position or to remove them from the pendent supports. These snap-hooks being so well known it is not necessary to enter into any further description of the same.

The wristbands A may be made adjustable in diameter to accommodate the arms and wrists of different sizes in any convenient or suitable way, as will be readily understood. The manner in which such adjustment is effected in the present instance consists in attaching one end of the wristbands A to buckles  $A^2$  and passing the other ends through said buckles in a manner well known and readily understood. The ends of the wristbands may be passed under slidable strap-guards  $a^4$ , if desired.

The length of the pendent supports B' may be made adjustable in any desired way. In Figs. 1 and 3 I have shown one such method of making them adjustable, which consists in attaching the lower ends  $b^4$  of the pendent supports B' to a clamp-buckle C, which may be of any suitable or convenient form and which in the present instance consists of a bed-plate  $c$ , in front of which is pivoted a clamp-lever  $c'$ , the pivots of said clamp-lever  $c^2$  passing through ears  $c^3$ , extending outward from the bed-plate  $c$ . This is a well-known form of construction and its use will be readily understood. When it is desired to lengthen or shorten the pendent supports, the buckle is released by raising the clamp-lever  $c'$  into the open position indicated in dotted lines in Fig. 3, when the part of the pendent support B' which passes through between the clamp-lever and the bed-plate  $c$  can be drawn up or down, as the case may require, and then locked in the desired position by pressing the clamp-lever  $c'$  down in the position shown in full lines in Fig. 3.

Another modified form of adjusting the length of the pendent supports B' B' is shown in Figs. 4 and 5. As there shown, the free end of the pendent support B' passes through the loops of an ordinary buckle D, attached to the lower section  $b^4$  of said pendent support, and is held in any position of adjustment by the spurs  $d$ . The use of this buckle is so well known as to require no further explanation.

It is manifest that any device for adjusting the length of the pendent supports B' B' will answer the purpose of my invention, and it is therefore to be understood that the same is not confined to the forms herein shown in exemplification of my said invention, which, so

far as this feature is concerned, essentially consists in the pendent supports adjustable in length in any way whatsoever.

The operation and use of the arm-support embodying my invention is apparent from the foregoing. When it is desired to use the same, the shoulder band or strap is placed in position around the neck and over the shoulders of the pupil, as indicated in Fig. 2, and the hands are passed through the wristbands until the same occupy a position around the wrist or any other desired part of the forearm of the pupil. By this means the forearm and wrist will be held in the proper position for fingering the piano and sufficient freedom will be given the player to conveniently reach all the parts of the keyboard and to hold the hands and wrists in a correct position at all points of said keyboard. A correct position can thereby soon be acquired without cramping the pupil or causing undue fatigue. The lengths of the pendent supports may be readily adjusted in the way indicated above. In order to release the arms of the pupil when a pause occurs in the course of the lesson or for any other reason, the wristbands may be readily removed from the pendent supports by pressing the tongues  $a^5$  or  $e^2$  of the snap-hooks  $a'$  or  $e$  inwardly and lifting the eyes  $a^3$  out of engagement with the same. The wristbands may be readily replaced when it is desired to resume playing or for any reason in a manner that will be readily understood.

It will be seen that an arm-support embodying my invention embodies the advantages of occupying a very small amount of space. It may be folded up and carried without inconvenience. It, moreover, does not necessitate attachment to the piano, whereby the latter is rendered unsightly. Finally, what I consider the most important advantage of the invention is the fact that while it maintains the hands and wrists in the exact and proper position for playing it allows perfect freedom of movement and in no way cramps the arms, wrists, or fingers of the player, no matter what portion of the keyboard the finger may occupy.

What I claim, and desire to secure by Letters Patent of the United States, is—

1. An arm-support for piano pupils, the same comprising a strap or band freely movable about the shoulders of the pupil and having pendent portions for supporting the arms, and wristbands suspended from said pendent portions.

2. An arm-support for piano pupils, the same comprising pendent portions to hang loosely from the body of the pupil, wristbands, and swinging rotatable connections between said pendent portions and the wristbands.

3. An arm-support for piano pupils, the same comprising pendent portions provided with detachable wristbands connected therewith by swinging rotatable connections.

4. An arm-support for piano pupils, the same comprising a strap or band freely mov-



able about the shoulders of the pupil, pendent portions attached thereto which are adjustable in length, and wristbands attached to said pendent portions which are adjustable  
5 in diameter.

5. An arm-support for piano pupils, the same comprising a strap or band freely movable about the shoulders of the pupil, swinging pendent portions adjustable in length and  
10 attached to the ends of said strap or band,

wristbands which are adjustable in diameter, and swinging rotatable connections between said wristbands and said pendent portions.

In testimony whereof I affix my signature in presence of two witnesses.

HUGO KUERSCHNER.

Witnesses:

ANTON A. GLOETZNER,  
BERTHA L. DANA.