March 16, 1926. 1,577,077

H. RAY

WEIGHT DEVICE FOR USE BY PIANISTS AND THE LIKE

Filed June 13, 1923

Fig. 1

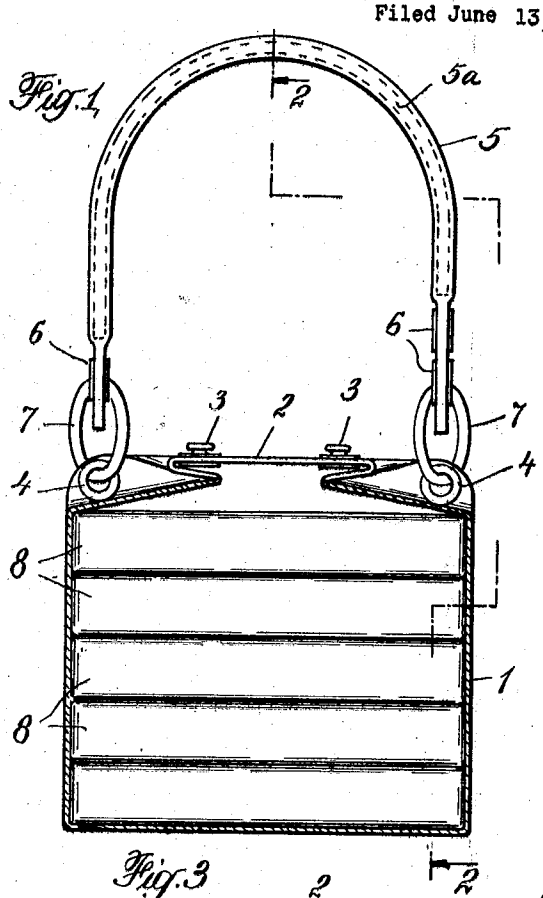


Fig. 2

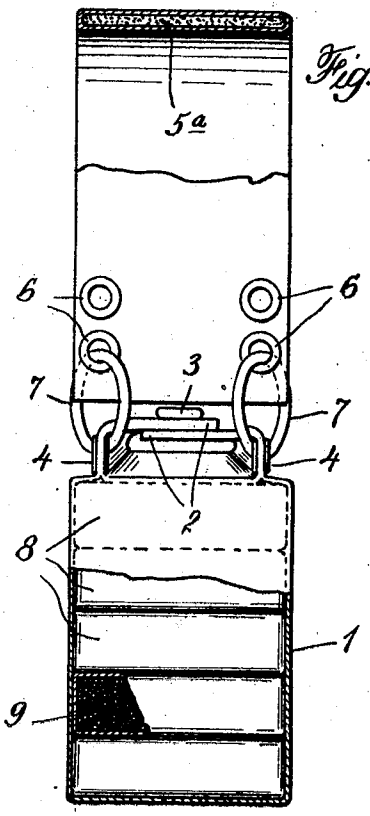


Fig. 3

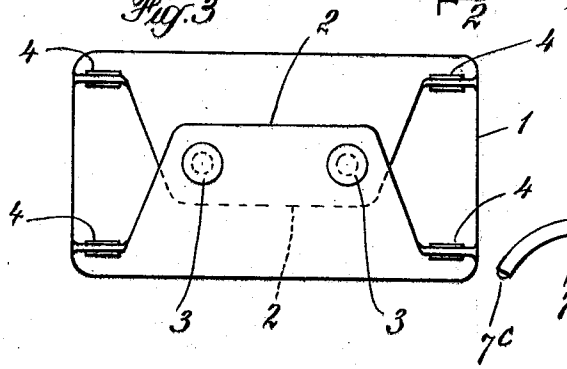
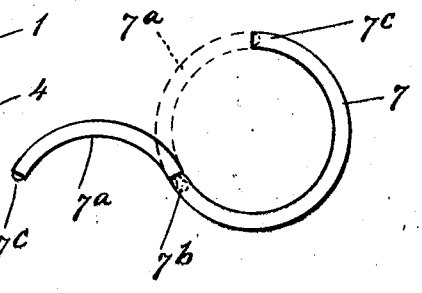


Fig. 4



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UNITED STATES PATENT OFFICE.

HUSTON RAY, OF NEW YORK, N. Y.

WEIGHT DEVICE FOR USE BY PIANISTS AND THE LIKE.

Application filed June 13, 1923. Serial No. 645,107.

To all whom it may concern:

Be it known that I, HUSTON RAY, a citizen of the United States, and resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Weight Devices for Use by Pianists and the like, of which the following is a specification.

My present invention consists of improvements in weight-sets or devices for use by pianists and the like for strengthening and imparting flexibility to their fingers, hands, wrists, etc., and for improving their touch and tone production. The more specific objects and advantages of my improvements will appear from an understanding of the following description of one of the preferred embodiments of my invention in connection with the drawings.

In these, Fig. 1 is a front elevation, partly in section, of a weight-set embodying my present improvements; Fig. 2 is a vertical cross-sectional view, partly in elevation, on the line 2—2 in Fig. 1 looking in the direction of the arrows; Fig. 3 is a top plan view of the weight bag of said set detached from its wrist-band or bail; and Fig. 4 is a detail view on an enlarged scale of one of the rings for connecting the bag to the bail.

Describing now my improvements by reference to the devices of the drawings illustrating the embodiment thereof which at present I prefer, 1 is a bag of rectangular horizontal cross-section made preferably of thin, soft, flexible leather, said bag being openable at the top where it is provided with overlapping flaps 2 which are adapted where they overlap to be releasably united by the snap fasteners 3.

At or near its upper corners, the bag is provided with eyelets 4 for suspending it under the wrist of the pianist from a band or bail 5 (described later in detail) extending over the top of the wrist.

The purpose of the bag 1 is to receive a plurality of weights, of which any number up to all can be used depending upon the increasing strength of the fingers, hands and wrists of the pianist in the course of his exercise and practice with the device. Of course, each of the wrists of the pianist will have its own wrist-band and weight bag suspended therefrom.

The weights consist of separate sacks 8 of lead shot 9, said sacks being insertable and removable from the bag 1 independently of one another. In the illustrated bag 1 there are shown five of these sacks piled on top of one another. For this purpose, the filled sacks are more or less thin and flat with their horizontal cross-section of the size and shape adapted to fill or fit loosely the horizontal cross-section of the bag so as to be readily removable and insertable.

A pianist beginning to use the weight sets for improving touch and technique and for imparting strength and flexibility, etc., will start with only one or two weight sacks 8 in each bag; and as strength and proficiency develop will gradually add further weight sacks until the maximum number is attained suited to the requirements of the particular case.

The wrist-band or bail 5 suspends the bag from the wrist with its long side extending transversely underneath the wrist; and said bail from one end to the other will be about ten inches long and about one and one-half to two inches wide, and will preferably consist in effect of a flattened tube (as best shown in Fig. 2) of thin, soft, flexible leather containing a strip of felt or other soft material 5^a, said flattened tube having its ends closed by stitching or otherwise and further having each of said ends provided with a pair of eyelets 6—6 or a series of pairs.

The eyelets 4 at the upper corners of the bag 1 are connected to four of the eyelets 6 on the wrist-bail 5 by means of four rings 7. Fig. 4 shows one of these rings on an enlarged scale, from which it will be noted that each ring has a part thereof 7^a which at one end has a swivel connection 7^b with the main part of the ring and is provided at its other end with a projection 7^c adapted to snap releasably into a corresponding socket in the main part of the ring to complete said ring. Thus, the ring 7 can be readily linked through the aforesaid eyelets 4 and 6 after opening the swiveling part 7^a; and thereafter said part 7^a can be closed. In this way the bag can be suspended from any desired set of eyelets 6 of the wrist-bail 5 to adjust it in size to suit the wrist of the given person. The weight-bag 1 always hangs loosely and freely from the wrist and the device in no way tightly

encircles or confines the wrist, the proper adjustment being one in which the hand can be easily slipped in and out through the bail. I can substitute the rings 7 by short pieces of cord passed through the eyelets and their free ends tied together.

As heretofore indicated, I prefer to use metal shot in the sacks 8 or other small metal pieces, sand, pebbles or equivalent subdivided weight material.

Some of the advantages of my improvements are the following:

The use of subdivided weight material, such as lead shot, is an advantage over solid weights in that the sacks and bag containing same if stuck against the casing of the piano will not mar it, whereas a solid, unyielding weight will do so.

The weight sets are intentionally made to hang loosely under the wrists to permit full wrist freedom and to allow the wrist or forearm to swing or shift up and down the keyboard as may be desired in arpeggio or similar passages.

For the same reason, the weight-bags are made rectangular in horizontal section with their long direction located transversely under the wrist and with their short direction located lengthwise relatively to the forearm and fingers.

The comparatively narrow wrist-band or bail 5 is also an improvement as it allows the hand and forearm to flex freely at the wrist, whereas a wide or extended wrist-band prevents ease and freedom of wrist movement.

Moreover, my device does not in any way confine the cords and muscles on the underside of the wrist for controlling the fingers.

Further, the narrow width of the bail 5 permits it to be placed directly over the wrist joint which is the proper place for it, with the weight set supported directly from the wrist joint. Further, the slight bend in the wrist joint makes the bail stay in that position while playing.

Altogether, my aforesaid improved weight sets are highly useful to the pianist to develop strength and impart flexibility to the fingers, hands, wrist and forearms and the joints in and between these members; to create a smooth, even, firm technique; and to improve the touch and tone production.

Of course, it is possible that minor changes and modifications may be made in the aforesaid practical embodiment of my present improvements which will nevertheless still be within the spirit of the foregoing description and within the meaning and spirit of the annexed claims and which modifications as such are accordingly intended to be covered thereby.

What I claim is:

1. In a weight device for use by pianists and the like, the combination of a bail adapted to bear on top of the wrist with a bag suspended therefrom under the wrist, said bag being rectangular in horizontal section with its long dimension located transversely under the wrist, and with its short dimension located lengthwise relatively to the forearm and fingers, said short dimension being substantially the same as the width of said bail, which in turn is substantially equal to the length of the average human wrist; and weight material in said bag.

2. In a weight device for use by pianists and the like, the combination of a bail adapted to bear on top of the wrist with a bag of soft flexible material suspended therefrom under the wrist, and a series of independent weights in said bag, each having substantially the same horizontal cross section as the bag and adapted to be contained in said bag stacked on top of one another.

3. In a weight device for use by pianists and the like, the combination of a bail adapted to bear on top of the wrist with a bag of soft flexible material suspended therefrom under the wrist, and a plurality of independent sacks of subdivided weight material in said bag.

4. In a weight device for use by pianists and the like, the combination of a bail adapted to bear on top of the wrist with a bag of soft flexible material openable at the top suspended from said bail under the wrist; and a plurality of independent sacks of subdivided weight material receivable into said bag on top of one another.

5. In a weight device for use by pianists and the like, the combination of a bail adapted to bear on top of the wrist, a bag of soft flexible material suspended therefrom under the wrist, and weight material in said bag, said bag having a rectangular horizontal cross-section with its long axis extending transversely under the wrist and with its short axis extending lengthwise thereof.

6. In a weight device for use by pianists and the like, the combination of a narrow bail adapted to bear on top of the wrist, and weight means suspended therefrom under the wrist without confining the underside of the wrist, said weight means lengthwise of the wrist having substantially the same dimension as the width of the bail.

Signed at New York, in the county of New York and State of New York, this 8th day of June A. D. 1923.

HUSTON RAY.