Nov. 19, 1940. C. T. MARSH 2,222,180

FINGER EXERCISING DEVICE

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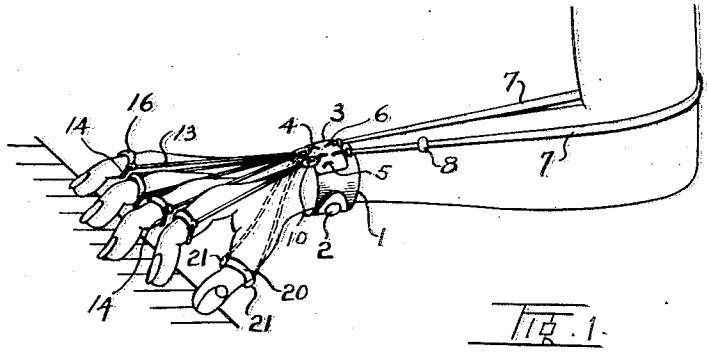
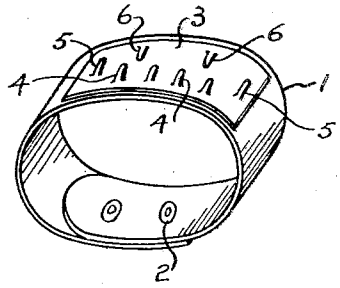


FIG. 1.



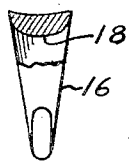


FIG. 3

FIG. 4.

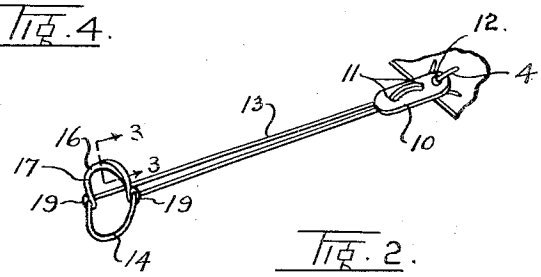


FIG. 2.

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2,222,180

FINGER EXERCISING DEVICE

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2 Claims. (Cl. 84—468)

My invention relates to improvements in finger exercising devices, which are particularly adapted for use by piano students.

The objects of the invention are to provide means which can be conveniently used by students and others for the purpose of strengthening the muscles of the hand and more particularly of the fingers and thumb whereby a firmer touch is developed, and the definiteness and precision of the art much improved and at the same time induce the user to hold his fingers and thumb and also the forearm in the proper position for playing. Further objects are to provide a clip in the place of the ring described in my former patent, which clip is used on all the fingers and which can be made of a few standard sizes to supply the needs of all users from small children to adults with large fingers.

By using this device when practising the instrument it is obvious that a development of the muscles of the thumb, fingers and hands is attained, thus strengthening the touch, extending the range of force control and improving the execution.

The invention consists essentially of a plurality of elastic members extending from the fingers to the wrist and an elastic member extending from the wrist to the elbow, as will be more fully described in the following specification and shown in the accompanying drawing, in which:

Fig. 1 is a general view of the invention as applied to a pianist's hand and forearm.

Fig. 2 is a detail perspective view of a finger clip and tensioning member as applied to one of the fingers.

Fig. 3 is an enlarged sectional view of a typical finger clip taken on the line 3—3 of Figure 2.

Fig. 4 is a perspective view of the preferred form of wrist band.

In the drawing like characters of reference indicate corresponding parts in each figure.

The numeral 1 indicates a wrist strap having a suitable fastening 2 by which it may be adjusted to fit the wearer. Secured to the back of the wrist strap is a plate 3, see Figure 4. The plate 3 is provided with four rearwardly directed hooks 4 adjacent its forward edge, two hooks 5 adjacent its side edges and two hooks 6 adjacent its rear edge, which latter are forwardly directed. Detachably connected to the plate 3 by the two hooks 6 is an elastic band 7 having an adjusting slide 8 by which the length of the band may be set to suit the wearer.

Detachably connected to each of the hooks 4 and 5 is small plate 10, see detail in Figure 2, which plate is provided with three aligned openings 11 and 12. The opening 12 passes over the hook and the openings 11 serve to frictionally hold in adjusted position the ends of an elastic loop 13, which extends from the plate 3 on opposite sides of either a finger or thumb as shown in Figure 1 and form a bight 14 under the finger and between the first and second joint thereof. Connected with opposite sides of each finger loop 13 is a finger clip generally indicated by the numeral 16, see Figures 1, 2 and 3. The finger clips each consist of a substantially semi-circular bow 17 broadened out intermediate its length and rounded on its inner side as at 18 to provide a substantial bearing area, so that the clip will be comfortable to the wearer. At the terminal ends of each clip 16 a pair of small eyes 19 are provided through which the loop 13 freely passes, so that the pull of the loop towards the plate 3 will cause the bight 14 and the clip 16 to comfortably but firmly engage the finger and tend to raise same so that the finger is held in proper playing position.

The loop 13 which is attached to either of the hooks 5 leads to a ring 20 which is provided with spaced eyes 21 through which the bight of the loop passes. This ring 20 is used upon the thumb and the pull of the loop causes the thumb to assume its proper playing position.

The loop 13 attached to the thumb ring 20 passes under the palm of the hand and is connected to the hook 5 on the plate 3 which is closest to the little finger.

By providing the plate 3 with a hook 5 on each of its side edges, the same stamping will suffice for both right and left wrist straps 1.

The use of the exerciser causes an upward and rearward strain on all the fingers and the thumb, which is obviously adjusted by shortening or lengthening the loops 13 by drawing their free ends through the openings 11 of the small plates 10. The arm band 7 which passes around the arm just above the elbow is tensioned as required to counterbalance the collective pull of the elastic loops 13, which are connected through the plate 3 to the fingers and the thumb by the clips 16 and the ring 20. As a player uses his fingers in striking the piano keys he is required to exert sufficient force for his purpose plus the resistance of the elastic loop 13, so that in a short time his finger muscles become strong and finger joints will always assume that correct playing position which it is so difficult to teach to a beginner.

What I claim as my invention is:

1. A finger exercising device comprising in

combination a wrist band and an arm band resiliently connected together, a plurality of elastic loops extending from the wrist band, each loop comprising opposing longitudinal strands and a bight, a substantially semi-circular clip having an eye at each end slidably attached to each loop on opposite sides of the bight whereby said loop is adapted to tighten the clip and the bight of the loop onto a finger of the wearer against rotational slip or longitudinal movement.

2. A finger exercising device comprising in combination a wrist band and an arm band resiliently connected together, a plurality of elastic loops extending from the wrist band, each loop comprising opposing longitudinal strands and a bight, a substantially semi-circular clip adapted to engage the back of a finger joint, said loop slidably engaging said clip and bridging its ends with the bight of the loop to engage the inner side of said finger joint.

CHARLES THOMAS MARSH.