April 11, 1950 H. E. TOWNSEND 2,504,056

PEDAL EXTENSION

Filed April 2, 1947

Fig. 1

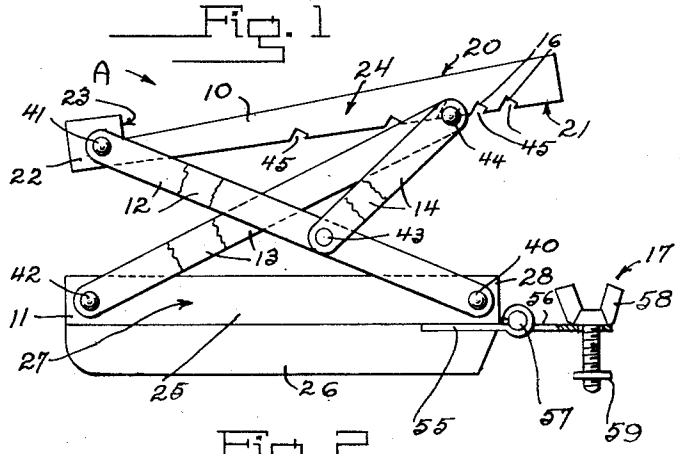


Fig. 3

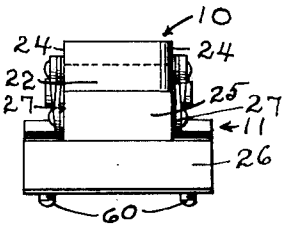


Fig. 2

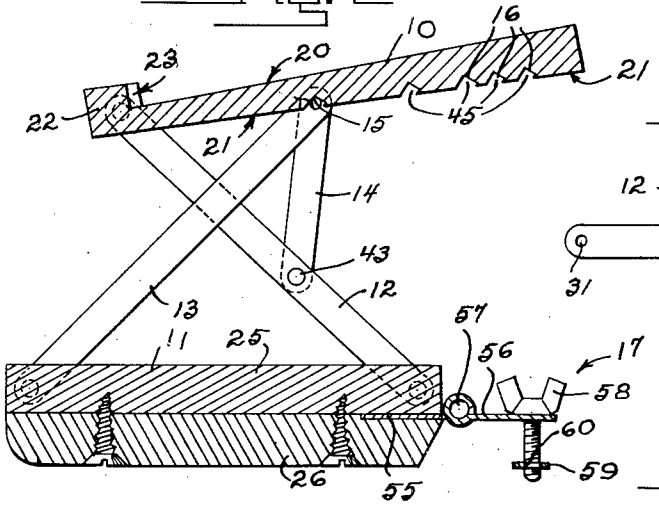


Fig. 4

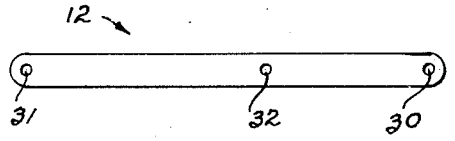


Fig. 5

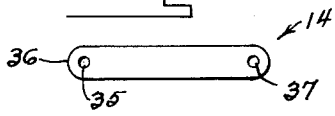


Fig. 6

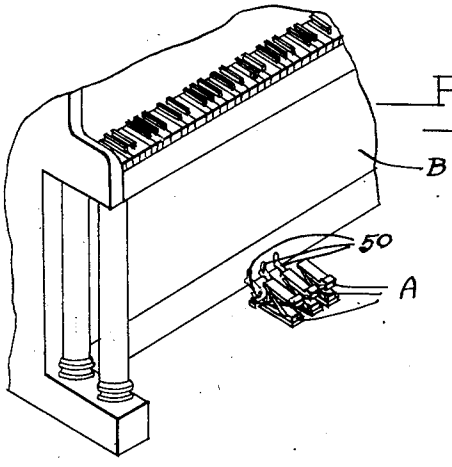
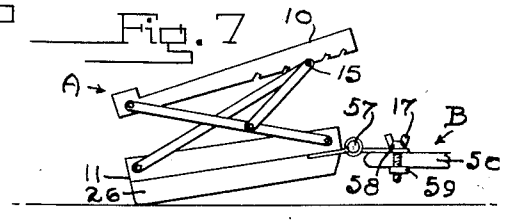


Fig. 7



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PEDAL EXTENSION

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1 Claim. (Cl. 84—230)

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This invention relates to improvements in pedal extensions for pianos and other instruments and apparatus.

An important object of the invention is to provide an adjustable pedal extension for piano pedals or the like, whereby players, such as children, may be able to operate the pedals after the extensions have been adjusted to the proper height for the convenient manipulation thereof by the player. For example, in a junior piano recital, where a number of children of various ages may play a single piano, one after another, the novel pedal extension herein described may be adjusted and readjusted so as to provide a pedal height, proper for each one of the children.

Another important object is to provide such a pedal extension which may be very quickly adjusted to the proper height and the adjusting means is so readily manipulated that children may make the adjustments or the adjustments may be made, even when the foot is upon the pedal extension.

Other objects and advantages of the invention will be apparent during the course of the following detailed description of the invention, taken in connection with the accompanying drawing, and in which drawing:

Figure 1 is a side elevation of the novel pedal extension in one adjusted position.

Figure 2 is a vertical longitudinal section of the new pedal extension, in an adjusted position differing from that in Figure 1.

Figure 3 is a heel-end or forward end view thereof with the extension collapsed.

Figures 4 and 5 are plan views of a link member and a brace respectively forming parts of the novel pedal extension.

Figure 6 is a perspective view of a portion of a piano upon the pedals of which three of the novel extensions are mounted.

Figure 7 is a side elevation on a somewhat reduced scale, of the extension showing its association with a pedal.

In the drawing, wherein for the purpose of illustration is shown a preferred embodiment of the invention and wherein similar reference characters designate corresponding parts throughout the several views, the letter A designates the novel pedal extension and B a musical instrument to the pedals of which it is attached or mounted.

The novel pedal extension A comprises an upper, foot-contacting member 10, a lower, pedal-attached member 11, cross links 12 and 13 pivotally carried by these members 10 and 11, a pair of braces 14 pivotally carried by the two links 12,

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a connection member 15 connecting the free ends of the braces and cooperating with a series of spaced-apart means 15 carried by the member 10 to receive the connection member 14 for vertical adjusting the member 10 with respect to the member 11. There is also provided means 17 to detachably secure the member 11 to a pedal.

Referring mainly to Figures 1, 2 and 3, it will be seen that the upper foot-contacting member 10 may be an elongated section of suitable material, as wood or metal, having an upper face 20, a lower face 21, with the planes of the faces diverging toward the heel end 22 of the member 10, and a heel stop 23 extending upwardly from the face 21 at the heel end 22. The member 10 has substantially parallel side faces 24.

The lower pedal-attached and pedal-supported member 11 is, as may be seen in Figures 1, 2 and 3, also an elongated section, which may be of wood, metal, or combinations thereof, somewhat inverted T-shaped in transverse sections, so that there is an upper portion 25 of lesser width than a lower portion 26. Preferably, the width of the portion 25 is substantially the same width as that of the member 10. The portion 25 has substantially parallel side faces 27 and a rearward end 28.

One of the two cross links 12 is shown in Figure 4 and may be a flat, rigid length of suitable metal, provided with pivot pin-receiving openings 30 and 31 adjacent each end and a pivot pin-receiving opening 32 intermediate these ends, being nearer one end than the other.

The links 13 are preferably like the links 12 except that they are not provided with the openings 32.

In Figure 5 is shown one of the two braces 14. Each is preferably a short length of suitable metal, provided with a pivot pin-receiving opening 35 adjacent one end 36, this being the normally lowermost end, and a connection member-receiving opening 37 adjacent its other end.

As may be seen in Figures 1 and 2, a cross link 12 is pivoted, as by a suitable pivot pin 40, extending through the opening 30 to the portion 25 at each face 27 adjacent the rearward end 28 of the portion 25. Each cross link 12 is also pivoted to the member 10 at the heel end 22 and faces 24 as by pivots 41.

The links 13 are each pivoted at one end of each to the portion 25 at its end opposite the end 28, as by pivots 42, and extend upwardly, crossing the links 12, and are pivotally connected with the braces 14 as will next be described.

The braces 14 are pivoted, at one end of each as

by pivot pins 43 extending through the openings 32 in the links 12 and then extend so that their openings 37 and the openings 31 in the links 13 will receive the connection member 15 which not only joins the braces 14 together but also functions as a pivot between the braces 14 and links 13. Any suitable means may be provided to prevent longitudinal shifting of the member 15, as by heads 44 upon the ends thereof.

It is now apparent that the cross links 12 and 13 may take positions such as those shown in Figures 1 and 2 or may take positions as are apparent in Figure 3.

As may be seen in Figures 1 and 2, there is provided a plurality of spaced apart, transversely-extending slots 45 in the member 10, extending upwardly from its lower face 21. These slots 45 are constructed and arranged to receive the connection member 15 and permit the member 10 to maintain various adjusted (elevated) positions with respect to the member 11. The walls of the slots 45 constitute the means 16. It will be seen in Figures 1 and 2 that these slots 45 form angles other than a right angle with the face 21.

In order to secure the novel pedal extension A to a pedal 50 of an instrument or apparatus such as the musical instrument (piano) B, there is provided the means 17 shown mostly in Figures 1 and 2. This preferably comprises a hinge member having leaves 55 and 56 joined by a pintle or pivot 57 with one leaf 55 secured to the member 11 and the other leaf 56 carrying a suitable number of thumb screws 58 extending through the leaf 56 and provided with a flat bar 59 having a screw-threaded opening 60 for each thumb screw 58. This bar 59 is constructed and arranged to contact the under side of a pedal 50, at adjacent the part thereof which is most removed from the instrument or apparatus, and the leaf 56 bearing against the upper side of the same pedal 50 being forced into engagement therewith by the thumb screw 58. The hinge connection provided permits the extension to take the position shown in Figure 7, whereby the musician's foot will take the natural position it assumes when operating a pedal.

It is now apparent that, when attached to a pedal, the extension may be manipulated to raise or lower the member 10 so that it will be nearest the pedal 50, as is obvious in Figure 3, raised somewhat therefrom, as in Figure 1 or raised considerably therefrom, as in Figure 2. In order to raise or lower the member 10 all the operator need do is to place his thumb and index finger upon the heads 44 and move the hand upwardly, whereupon the links, braces, connection member and member 10 will move upwardly. When adjusted properly, if the connection rod then is extended into the adjacent slot 45, the extension A will remain in the adjusted position. By swinging

the member 10 on its pivotal connections 41, so that the connection member 15 will clear the slots 45, and press down on the linkage at the heads 44, the member 10 may be lowered to a collapsed condition whereby a compact, small assembly is provided, for packing, transportation or the like. Of course, one extension, or several of them may be employed as desired.

Various changes may be made in the form of the invention herein shown and described without departing from the spirit of the invention or the scope of the claim.

What is claimed is:

In a pedal extension, a foot-contacting member having a heel end portion and a lower face; a pedal-supported member below the foot-contacting member; two spaced-apart pairs of cross links, facing each other at opposite sides of said extension, each link having an upper end portion, an intermediate portion and a lower end portion, and each link being pivotally secured to the pedal-supporting member at their lower end portions, and the first link of each pair being pivotally secured to said heel portion; a brace for each of said pairs, with each brace having an upper end portion and a lower end portion and with one brace being pivotally secured to the first link of one pair of links at the intermediate portion of said first link, and the other brace being pivotally secured to the first link of the other pair of links at the intermediate portion of the last-named first link; a connection member pivotally connecting together the upper end portions of the second link of each pair with the upper end portions of the braces, said connection member having an intermediate portion extending transversely of and below said lower face; means to detachably secure said pedal-supported member to a pedal; and a series of spaced-apart means carried by said foot-contacting member at said lower face to receive the intermediate portion of said connection member.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
362,539	Robinson	May 10, 1887
407,005	Foster	July 16, 1889
789,813	Longley	May 16, 1906
1,918,510	Woodall	July 18, 1933

FOREIGN PATENTS

Number	Country	Date
336,827	France	Jan. 28, 1904