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E. H. TERLINDE
ACCORDIAN KEY HOLDER

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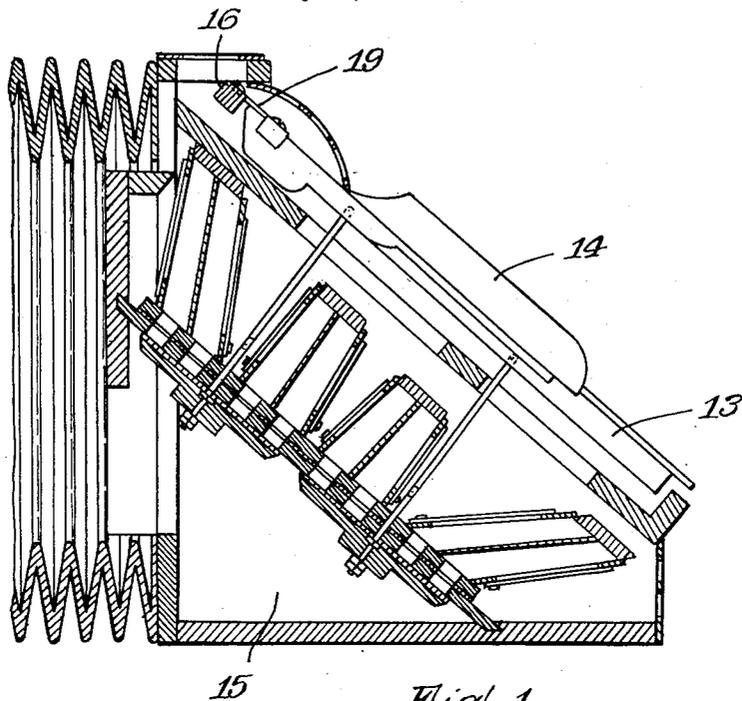


Fig. 1

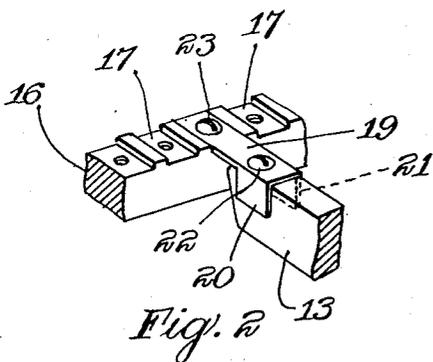


Fig. 2

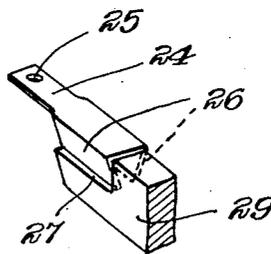


Fig. 3

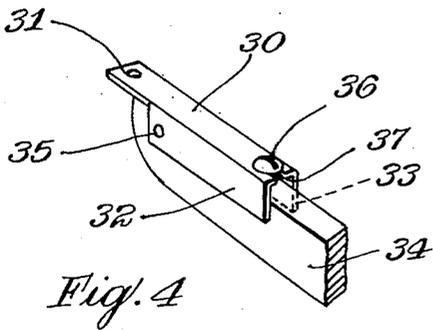


Fig. 4

Edward H. Terlinde
Inventor

By Robert M. Dunning
Attorney

UNITED STATES PATENT OFFICE

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ACCORDION KEY HOLDER

Edward H. Terlinde, St. Paul, Minn.

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4 Claims. (Cl. 84-441)

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My invention relates to an improvement in accordions wherein it is desired to provide an accordion which is simple in construction and in operation.

An object of the present invention is to provide an accordion with keys having a piano action. By the term "piano action," I refer to an arrangement in which the exposed portions of the keys are located at some distance from the pivotal support thereof, so that the keys may be readily operated by a downward pressure anywhere throughout the length of the exposed portions of the keys. As a result the key board is more easily operated.

A further feature of the present invention lies in a novel means of mounting the individual keys. It has been common practice to pivotally support the keys upon a transverse pivot extending through the keys at one end thereof. The keys must fit rather loosely upon the pivot in order to be easily operated. However, any looseness of fit of the keys permits a lateral movement of the key at the free end thereof. This difficulty I obviate by hingedly connecting the keys to a supporting bar by means of a flat spring which permits no side movement thereof. As a result the keys are easy to maintain in proper relative position.

These and other objects and novel features of my invention will be more clearly and fully set forth in the following specification and claims.

In the drawings forming a part of my specification:

Figure 1 is a sectional view through the key board end of an accordion showing the manner in which the keys are mounted thereupon.

Figure 2 is a perspective view of a key mounting showing one means of mounting the keys.

Figure 3 is a modified form of key mounting from that illustrated in Figure 2.

Fig. 4 is another modified form of key mounting from that illustrated in Figures 2 and 3.

The accordion A includes a bellows connected at one end to the base sound chamber or wind box and having its other end connected to the key board sound chamber or wind box. It is with this key board sound chamber end that the particular application is involved.

The keys 13 and 14 are supported as best illustrated in Figure 2 of the drawings. A bar 16 extends transversely of the sound chamber, as illustrated in Figure 1 and is terminally supported by the end panels 15. This bar 16 is provided with notches 17 therein. These notches 17 receive spring fingers 19 having parallel flanges 20 and

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21 extending therefrom. A screw or bolt 22 secures the spring strip 19 to the end of the key 13 or 14, the flanges 20 and 21 preventing lateral movement of the key. As the spring fingers 19 fit tightly within the notches 17 no transverse movement of the fingers with respect to the bar 16 is permitted. Bolts 23 extend through the spring fingers 19 and anchor these fingers to the bar 16.

It will be noted that the spring fingers 19 tend to hold the keys elevated and in proper position. However, no pivotal connection is provided and as a result no transverse movement of the keys is permitted.

In Figure 3 of the drawings I disclose a connection of a modified form of construction. The spring finger 24 illustrated in Figure 3 is provided with an aperture 25 for reception of a bolt 23 to secure the finger 24 to the bar 16. The spring 24 is provided with converging flanges 26 which engage in suitable wedge shaped notches 27 in the ends of the keys 29. Thus a dove tail connection between the key and the spring 24 is provided which has the advantages of the construction shown in Figure 2, but requires no bolt or screw 22. The key is engaged frictionally by the spring finger, or may be held in any suitable way.

If an adjustment between the spring finger and the corresponding key is desired, the construction shown in Figure 4 may be used. The spring finger 30 is provided with an aperture 31 therein to accommodate the bolt 23. Opposed flanges 32 and 33 are provided on the finger to overlie opposite sides of the key 34. A pivot 35 extends through the flanges 32 and 33 and through the key to permit limited pivotal movement between the spring finger 30 and the key. Pivotal movement of the key 34 about the pivot 35 is limited by the head of the screw 36.

A slot 37 is provided in the spring finger 30 for accommodation of a screw 36. By adjustment of the screw 36 the space between the slotted end of the finger 30 and the key may be regulated to provide a desired adjustment.

Each of the keys 13 and 14 is supported by flat spring means 19 secured at 22 to the key and secured at 23 to a supporting bar 16. Thus the keys may flex downwardly, but at the same time can not move laterally.

An apertured chamber wall is provided beneath the keys 13 and 14 so as to form a base for the keys. Suitable grills permit the sound to readily leave the sound chamber.

It will be noted that with the valve construction illustrated in the accordion B, the valves

move normally to the surface of the valve plate so that all of the apertures therein are closed simultaneously by any of the valves. Furthermore all of the valves are opened an equal distance, thereby permitting an equal amount of air to pass through each passage of the reed blocks.

In the usual type of accordion it is common practice to have the reed blocks extend into the bellows, as the bellows structure is of some thickness, even when collapsed. In order to shorten the total length of the accordion, it will be noted that a portion of the sound chamber extends into the bellows and that the extreme ends of the bellows are inset somewhat from the wall base panel of the sound chamber. This applies both to the accordion construction A and the structure B.

In accordance with the patent statutes, I have described the principles of construction and operation of my accordion, and while I have endeavored to set forth the best embodiments thereof, I desire to have it understood that obvious changes may be made within the scope of the following claims without departing from the spirit of my invention.

I claim:

1. A key mounting for use with a series of keys comprising a support having spaced parallel notches therein, flat spring means secured to said keys to project from an end thereof, said flat spring means being of substantially equal width to said notches, and being engaged in said notches to hold said keys in parallel relationship.

2. A key mounting for use in combination with keys including a key support, flat spring means connected to said support and projecting therefrom, means securing said keys to the project-

ing ends of said spring means, and shoulder means on said support for engaging opposite side edges of said spring means to hold said keys in parallel relationship.

3. A key support including flat spring means having a channel shaped end designed to embrace a key end and to prevent relative rotation thereof, means adjustably connecting said channel shaped end to a key, and a support to which said flat spring means is secured.

4. A key support including a key supporting member, a series of flat springs connected to said supporting member in parallel relationship, a channel shaped projecting end on said flat spring, pivot means connecting the sides of said channel shaped end to a key, and adjusting means extending through the base of the channel and adjustably holding said key in adjusted relation thereto.

EDWARD H. TERLINDE.

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