

Kinnard & Dreher,

Reed Organ,

N^o 47,110.

Patented Apr. 4, 1865.

Fig: 1.

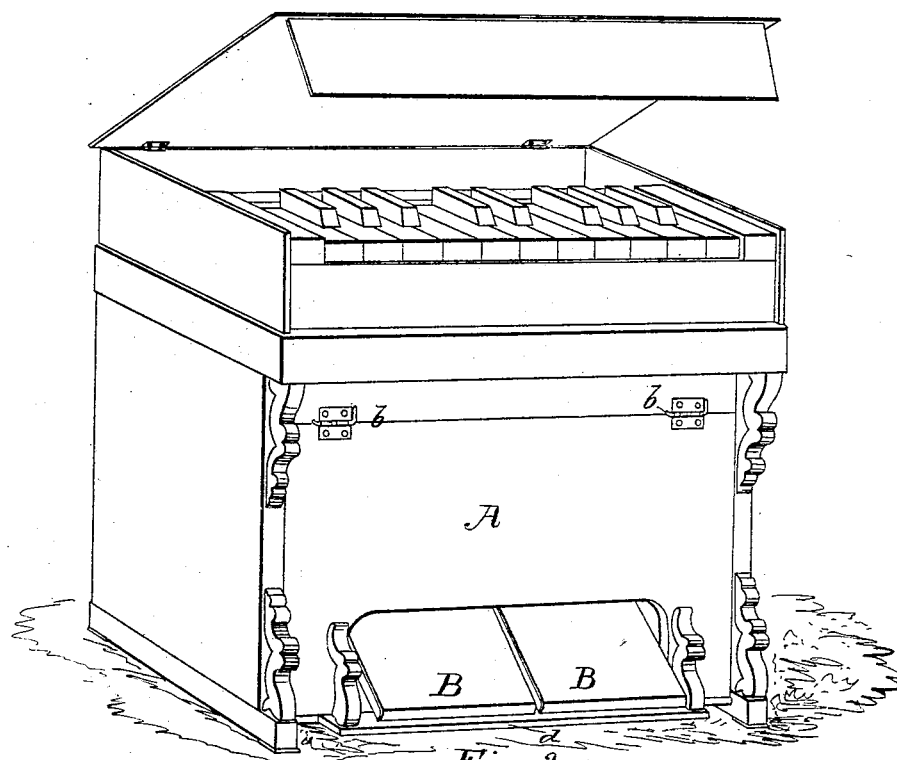
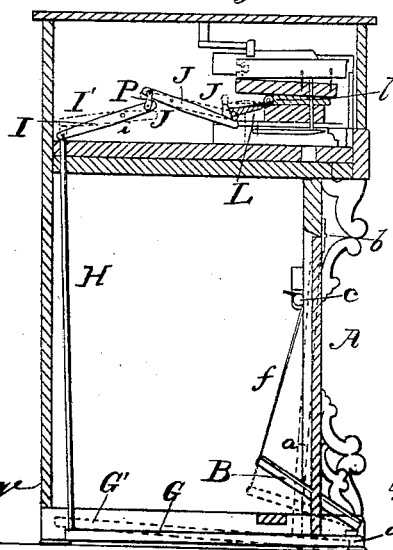


Fig: 2.



Witnesses;
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UNITED STATES PATENT OFFICE.

WILLIAM J. KINNARD AND BAPTIST DREHER, OF CLEVELAND, OHIO.

IMPROVEMENT IN MELODEONS.

Specification forming part of Letters Patent No. 47,110, dated April 4, 1865.

To all whom it may concern:

Be it known that we, W. J. KINNARD and B. DREHER, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Melodeons; and we do hereby declare that the following is a full and complete description of the construction and operation of the same, reference being had to accompanying drawings, making a part of this specification, in which—

Figure 1 is a perspective view of the melodeon. Fig. 2 is a vertical section.

Like letters of reference refer to like parts in the two views.

Our improvement relates to a new mode of producing the swell in melodeons and reed-organs by means of a swing door or pannel, to which the treadles are connected, and by means of which the swell can be operated simultaneously with blowing the bellows, and without moving the feet from the treadles.

Fig. 1 represents the general outline of a melodeon that can be constructed with the usual appendages of keys, reeds, bellows, &c., and to which is connected our improvement for operating the swell, as hereinafter described. To the front is swung or pivoted by means of hinges *b b* a pannel or door, *A*, forming a part of the front of the case. Projecting from this door, at the lower end, is a platform, *d*, to which the outer edges of the treadles *B B* are pivoted, and to the inside edges are attached cords *f*, as shown in Fig. 2, that pass over pulleys *e*, and are connected with the bellows, which are operated by the treadles in the ordinary manner. To the lower end of the door, at one side, is secured an arm, *G*, to the back end of which is attached a connecting-rod, *H*, that extends up through the frame, and is pivoted to one end of a lever, *I*, the lever being hung at *i* to the side of the frame or case. The other end of this lever is connected by a link, *p*, to the end of another lever, *J*, which is pivoted at *j* to the slide of

the frame, the other end being attached to the swell *L*, that extends the whole length of the keys. This swell is operated, raised, or lowered, producing the desired effect, by means of the levers *I J*, rod *H*, and arms *G* by pressing slightly on the treadles with the back part of the foot or heel, moving the door inward, as indicated by the dotted lines *a*, which causes the arm *G* to be in the position indicated at *G'*, that moves the rod *H* upward, causing the levers *I* and *J* to take the position indicated by the dotted lines *I' J'*, elevating the swell, which is lowered when the pressure is removed by a spring, *l*. In this way the swell is raised or lowered more or less, producing a crescendo or diminuendo as may be required; and this can be done simultaneously with operating the bellows and without changing the position of the feet by simply pressing more with the back part of the foot or heel on the treadles than with the toe, thus greatly facilitating the means by which the swell is produced; and this arrangement can be made to operate two or more swells with the same ease that it does one.

The joint or hinges *b b* can be on the inside or any place where the door will be allowed to move in the desired manner, as described.

What we claim as our improvement, and desire to secure by Letters Patent, is—

1. Hanging the door or pannel to the case, in combination with the treadles, substantially as and for the purpose described.
2. The arm *G* and rod *H*, in combination with the levers *I J* and swell, substantially as and for the purpose described.
3. The hinged pannel *A* and treadles *B*, in combination with arms *G*, rod *H*, and levers *I J*, substantially as and for the purpose described.

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BAPTIST DREHER.

Witnesses:

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