

P. WELIN.

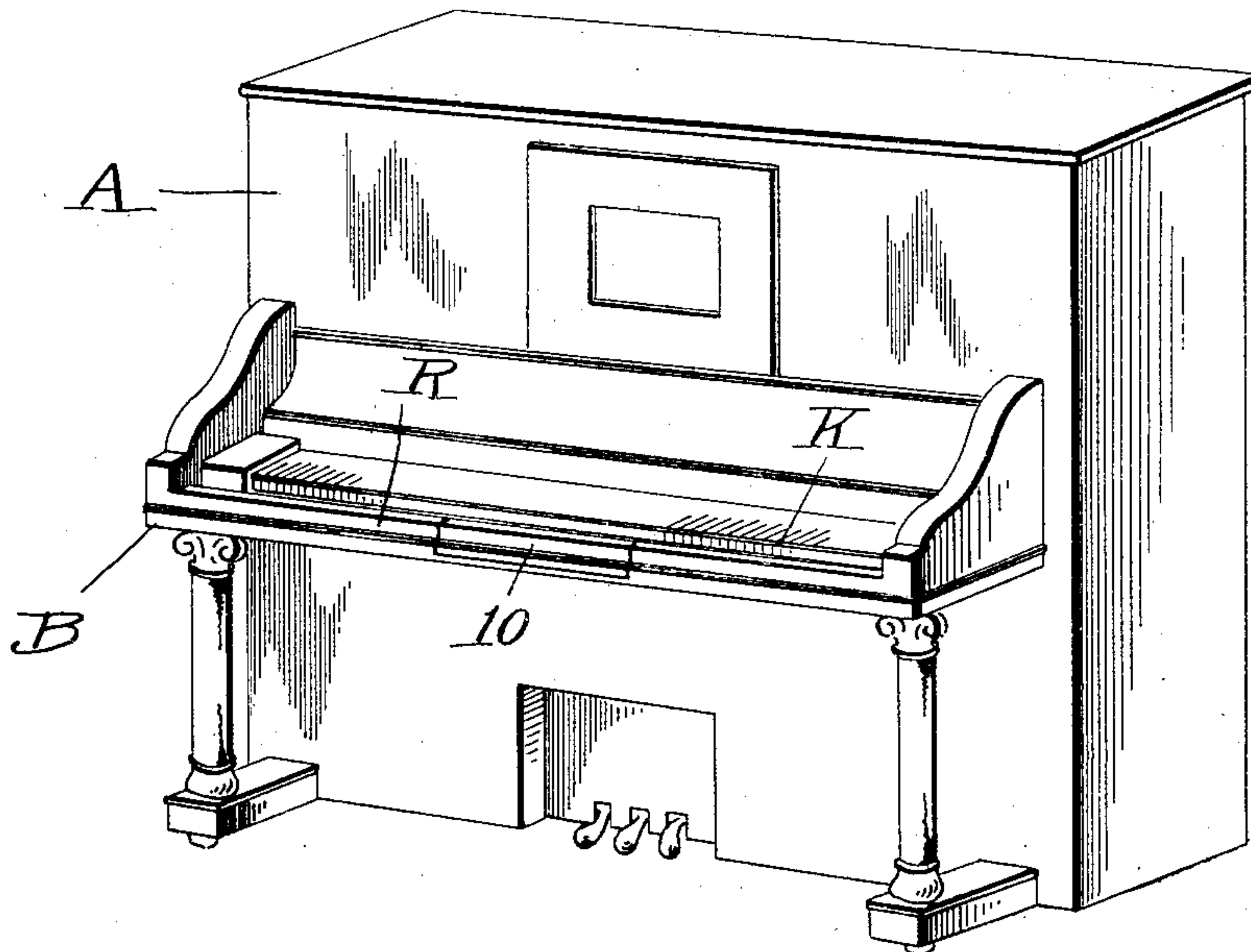
CONTROLLING LEVER AND FALL BOARD FOR AUTOMATIC MUSICAL INSTRUMENTS.

APPLICATION FILED JAN. 14, 1905. RENEWED JUNE 15, 1909.

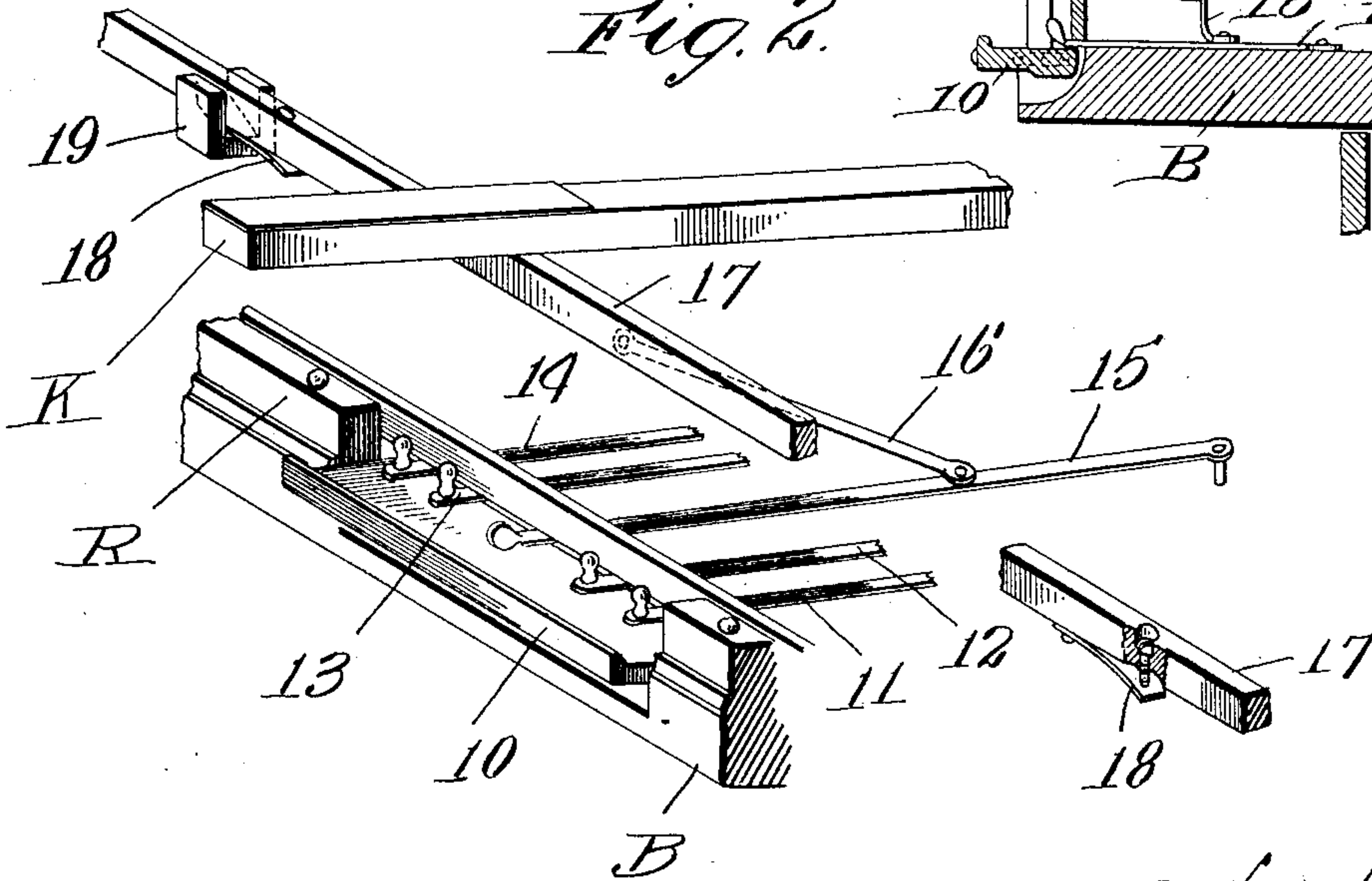
945,886.

Patented Jan. 11, 1910.

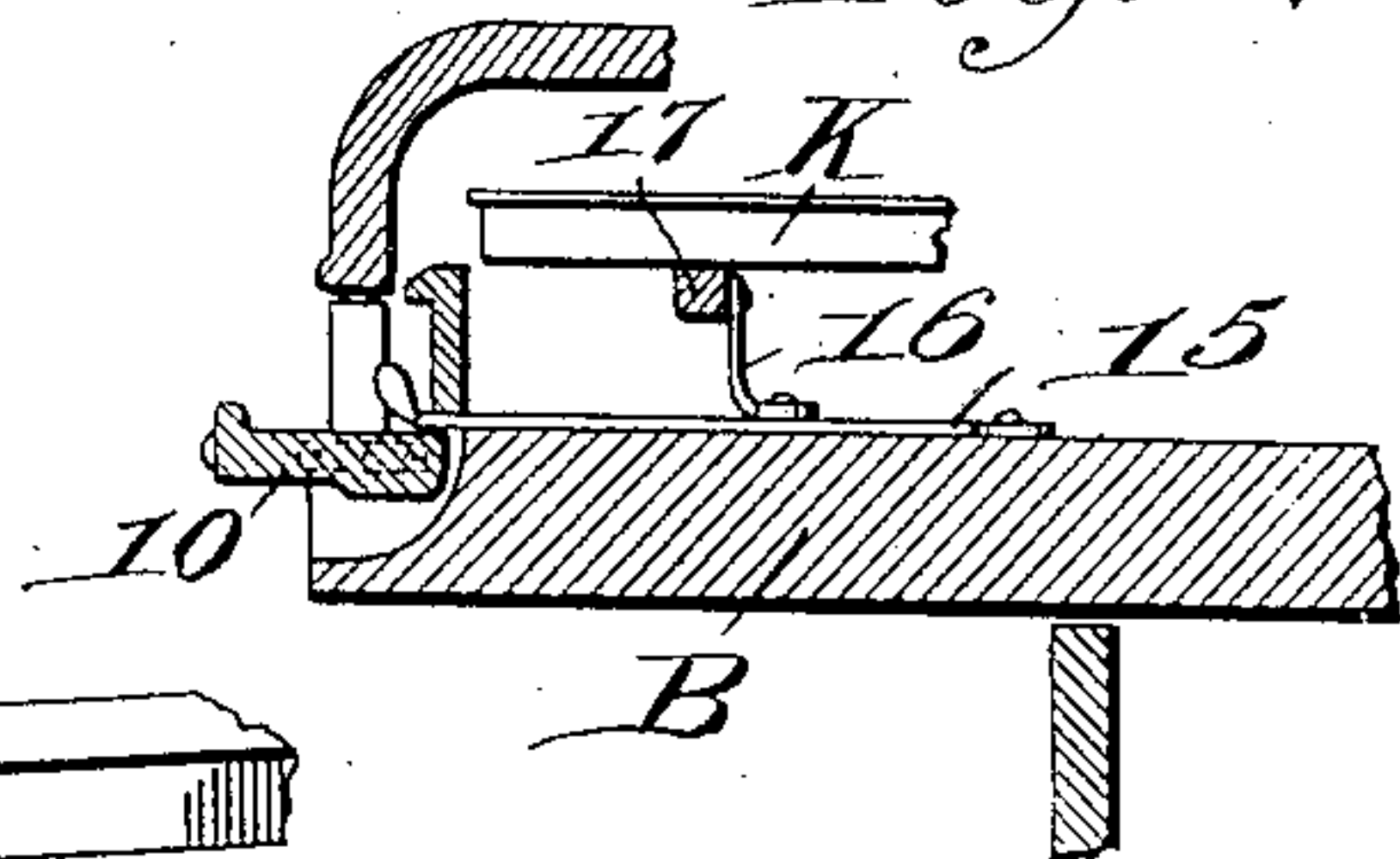
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses:  
C. F. Mason.  
E. M. Allen.

Inventor:  
Peter Welin.  
By his Attorneys  
Southgate & Southgate



# UNITED STATES PATENT OFFICE.

PETER WELIN, OF NEWCASTLE, INDIANA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO  
KRELL AUTO-GRAND PIANO CO. OF AMERICA, OF CONNERSVILLE, INDIANA, A COR-  
PORATION OF INDIANA.

CONTROLLING-LEVER AND FALL-BOARD FOR AUTOMATIC MUSICAL INSTRUMENTS.

945,886.

Specification of Letters Patent.

Patented Jan. 11, 1910.

Application filed January 14, 1905, Serial No. 241,020. Renewed June 15, 1909. Serial No. 502,329.

*To all whom it may concern:*

Be it known that I, PETER WELIN, a citizen of the United States, residing at Newcastle, in the county of Henry and State of Indiana, have invented new and useful Controlling-Levers and Fall-Boards for Automatic Musical Instruments, of which the following is a specification.

This invention relates to that class of automatic pianos in which the automatic playing mechanisms are housed within the piano casings.

The especial objects of this invention are to provide a simple and efficient key-lock for locking the piano keys while the instrument is being played automatically and to provide for housing the controlling levers in the piano casing so that said levers will be concealed when the piano is to be played upon manually.

To these ends, this invention consists of the parts and combinations of parts as hereinafter described and more particularly pointed out in the claims at the end of this specification.

So far as the covering of the levers is concerned, I have shown and claimed herein a construction illustrated and originally claimed in my Patent No. 825,874, dated July 10, 1906 and filed July 20, 1904.

In the accompanying drawing, Figure 1 is a perspective view of a piano constructed according to this invention, Fig. 2 is a detail perspective view showing the fall-board turned down to permit access to the controlling levers, and Fig. 3 is a transverse sectional view of the same.

One particular object of the invention set forth in my above mentioned patent was to provide an improved piano casing for an automatic piano in which the automatic playing devices are so housed as to be entirely concealed, except at such times as the piano is to be played automatically. To accomplish this purpose, I employed a fall-board which could be turned up to cover and conceal the controlling levers, except at times when it was desired to use them. The controlling levers were located between the piano keys and the key-board ledge, and the fall-board therefor preferably formed part of the key-board rail when it is up in closed position.

A particular object of this invention is

to lock the keys when the piano is to be played automatically.

Referring to the accompanying drawing and in detail, A designates the piano casing having the usual key-board ledge B which carries the key-board rail R, and above which are the usual piano keys K. Set into and forming part of the key-board rail R, when in closed or normal position, is a pivoted section or fall-board 10 which conceals the controlling levers.

The controlling levers, as illustrated most clearly in Fig. 2, are located between the piano keys and the key-board ledge, the forward ends of the levers having handles or knobs to be worked by the operator.

When the fall-board is open, as shown in Fig. 2, it forms, in effect, a hand-rest which supports the hand of the operator while shifting or moving the controlling levers laterally.

The controlling levers, as herein illustrated, include the re-winding lever 11, a tempo lever 12, a pedal lever 13, and a modulating lever 14, together with a central key-locking lever 15. The key-locking lever is connected by a link 16 to a sliding rail 17 having wedges or cams 18 which run in guides 19. By means of these connections, when the rail 17 is shifted in one direction, it will be raised and will lock the keys up in their normal position so that they will be held stationary during the automatic playing of the instruments and when the rail 17 is shifted in the opposite direction, it will be lowered permitting the keys to be played upon.

I am aware that numerous changes may be made in practicing this invention by those who are skilled in the art without departing from the scope thereof as expressed in the claims. I do not wish, therefore, to be limited to the construction I have herein shown and described, but

What I do claim and desire to secure by Letters Patent of the United States is:—

1. In an automatic piano, the combination with keys, a keyboard ledge, and a key-locking device having a controlling lever located between the keys and the keyboard ledge, of means for concealing said lever.

2. In an automatic piano, the combination with keys, a keyboard ledge, and a key-locking device having a controlling lever

located between the piano keys and the key-board ledge of the piano, of a movable fall-board normally forming part of the key-board rail for concealing the end of the  
5 lever.

3. An automatic piano having keys, a key-board ledge, a key-locking device, comprising a movable member, and a lever for operating the same located between the piano  
10 keys and the key-board ledge of the piano.

4. In an automatic piano, the combination with the keys of a longitudinally movable key-locking rail therefor, and a lever swinging on a vertical pivot connected with  
15 said rail for reciprocating and raising it, said lever being located between the keys and the key board ledge of the piano.

5. In an automatic piano, the combination with the piano keys of a longitudinally

movable locking rail adapted to engage the  
20 keys, said rail having cams or wedge sections thereon, guides for the rail for receiving said cams or wedge sections, a link connected with the rail, and a lever connected  
25 with the link and swinging in a plane parallel with the rail for moving the rail longitudinally whereby the cams or wedge sections will move the rail vertically to  
30 bring it into operative or inoperative position.

In testimony whereof I have hereunto set my hand, in the presence of two subscribing witnesses.

PETER WELIN.

Witnesses:

PHILIP W. SOUTHGATE,  
MARY E. REGAN.