

No. 872,313.

PATENTED NOV. 26, 1907.

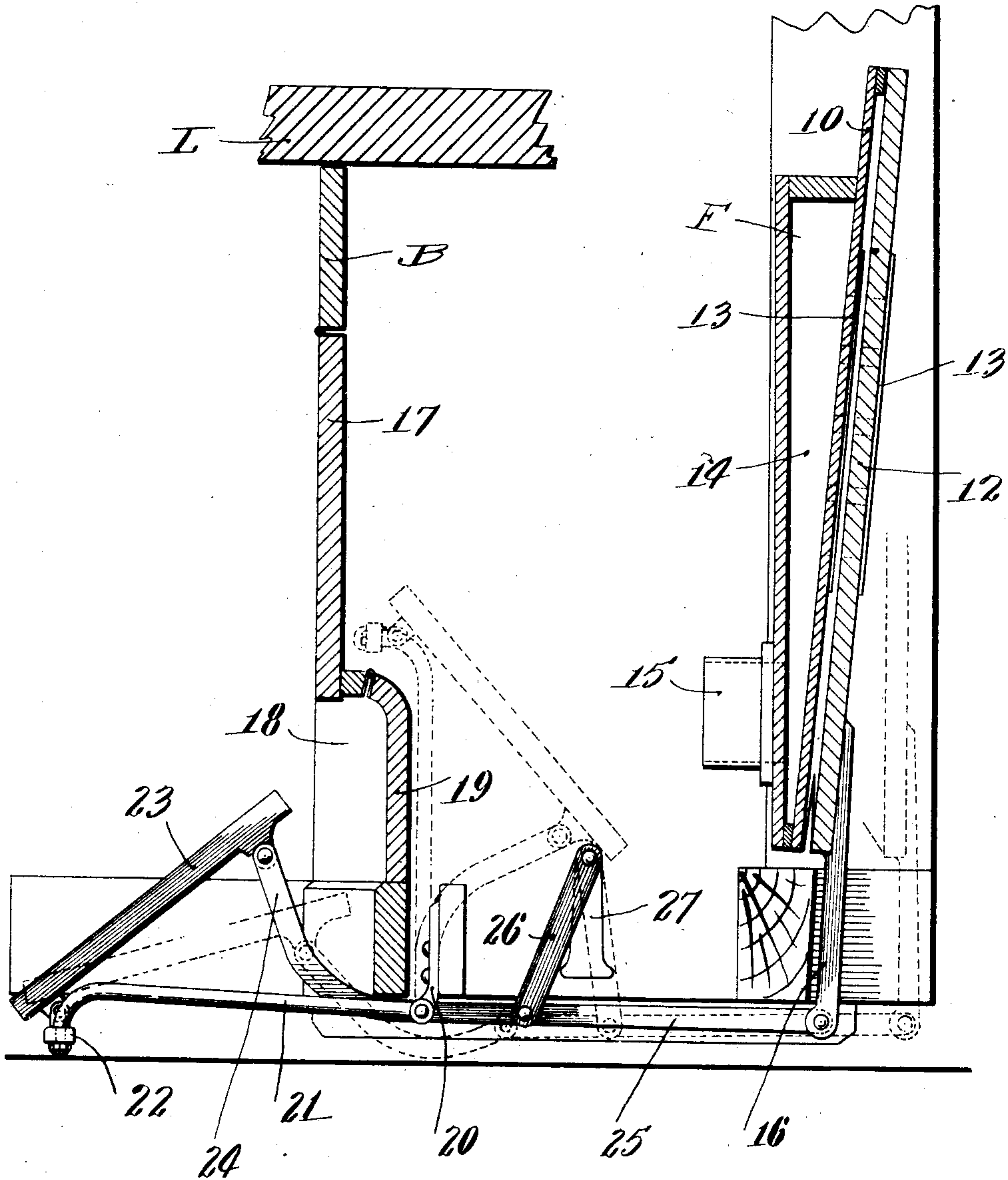
P. WELIN.

AUTOMATIC PLAYING ATTACHMENT FOR MUSICAL INSTRUMENTS.

APPLICATION FILED JUNE 20, 1906.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses:

C. F. Mason

E. M. Allen

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2 SHEETS—SHEET 2.

Fig. 2.

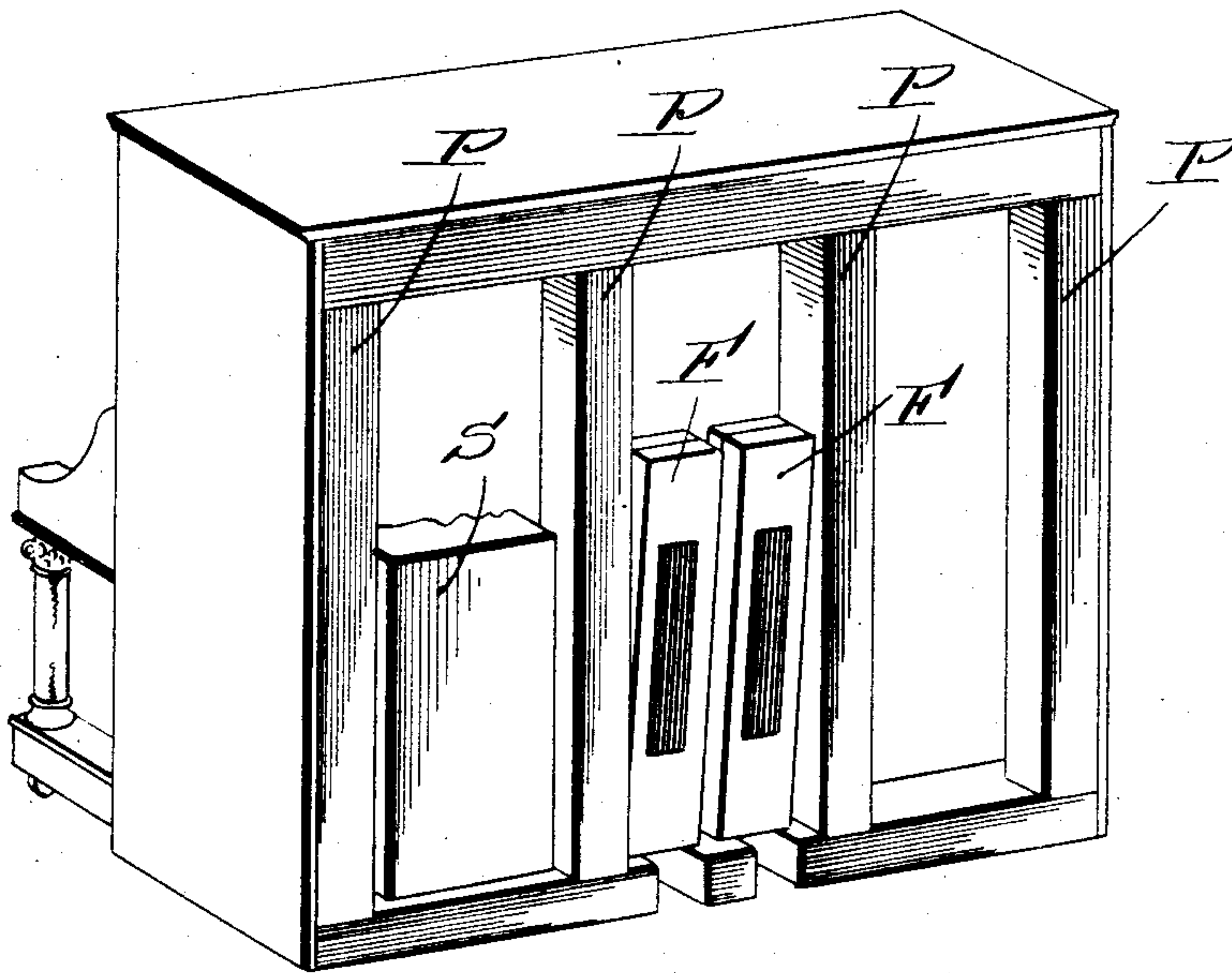
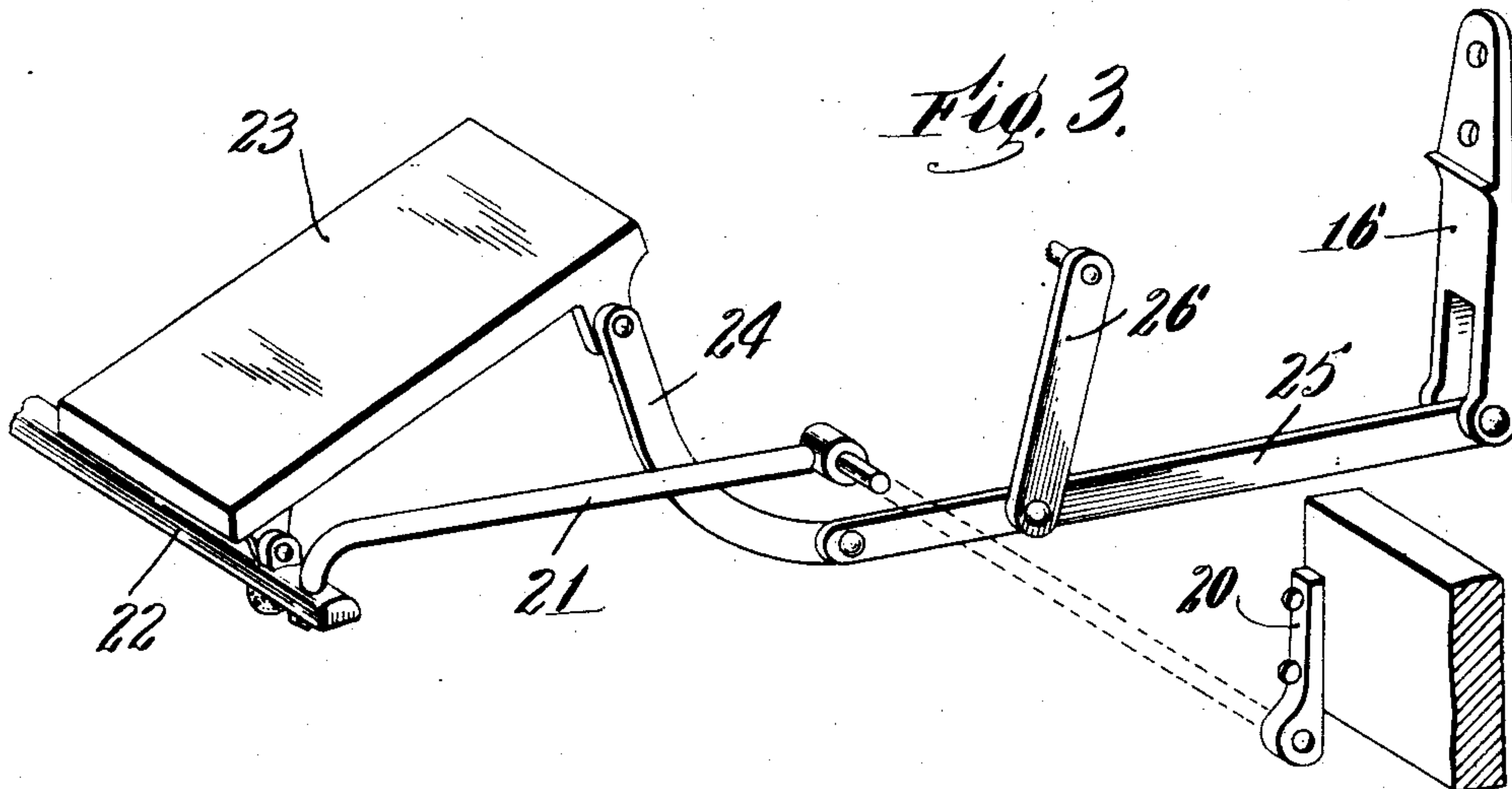


Fig. 3.



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UNITED STATES PATENT OFFICE.

PETER WELIN, OF NEWCASTLE, INDIANA, ASSIGNOR TO ALBERT KRELL, OF NEWCASTLE, INDIANA.

AUTOMATIC PLAYING ATTACHMENT FOR MUSICAL INSTRUMENTS.

No. 872,313.

Specification of Letters Patent.

Patented Nov. 26, 1907.

Original application filed July 20, 1904, Serial No. 217,347. Divided and this application filed June 20, 1906. Serial No. 322,506.

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 a new and useful Automatic Playing Attachment for Musical Instruments, of which the following is a specification.

This application is a division of my Patent No. 825,784, granted July 10, 1906 on application filed July 20, 1904 for an automatic playing attachment for musical instruments.

This invention relates to that class of automatic playing attachments which are housed within the casing of the pianos to which they are applied.

The especial object of this invention is to combine the pedals, storer, and feeding appliances which supply power with the piano casing in a strong, compact and convenient arrangement which will permit said parts to be entirely inclosed when the piano is to be played manually, and while at the same time said parts will occupy comparatively little room within the casing itself.

A further object of the invention is to provide a construction and location of parts of such a nature that comparatively large feeders or bellows may be used, and to arrange them in such a way that the feeders will leave the lower part of the case below the piano keys entirely unobstructed.

In the accompanying two sheets of drawings, Figure 1 is a sectional view of sufficient parts of a piano casing to illustrate the application of my invention thereto, Fig. 2 is a rear perspective view of the same, and Fig. 3 is a fragmentary perspective view of one of the folding pedals, and connections therefrom.

In equipping a piano case with power supplying attachments for actuating the automatic playing device, I employ vertical feeders which are arranged between the rear posts or uprights and preferably in the panel between two center posts of a piano casing. The air reservoir or collapsible storer from which the air is exhausted by the feeders is also located in the space between two of the uprights or posts of the piano casing.

The feeders are operated from folding treadles and these folding treadles are preferably arranged so that the pivots of the operating links are normally in line with the pivots of the supporting frame and this con-

struction is adopted so that the pedals may be turned back into the piano casing without shifting or straining any parts; that is to say, the pedals occupy the same relative angular position with respect to their supporting frame when turned back into the piano casing as when swung forward in position to be operated.

Referring to the accompanying drawings and in detail, a piano casing equipped according to this invention, and as illustrated in Fig. 2, comprises four main posts or uprights P. Located in a panel at one side of the feeders F is the air reservoir or collapsible storer S from which the air is exhausted by the feeders F.

As shown most clearly in Fig. 1, each of the feeders F comprises a stationary board 10 with the swinging board 12 pivoted thereto. The boards 10 and 12 are provided with the usual valves 13 and both feeders will exhaust air from the air channel 14. Extending in from the air channel 14 is a pipe or passage 15 which may be connected, for example by a piece of flexible hose with the storer S before referred to. By means of this construction it will be seen that I am enabled to use comparatively large feeders or bellows and that by arranging these feeders vertically in a piano between the posts and the piano casing the feeders will leave the lower part of the casing below the piano keys entirely unobstructed.

The piano casing as usual has a key-board ledge or board L, extending down from which is a front board B. The lower part 17 of the front board B is hinged and is provided with an arch or alcove 18 having the rear panel or board 19 thereof hinged so that by raising the sections 17 and 19 the pedals can be folded back into the casing as hereinafter described. Supports 20 are secured to one of the rails of the piano casing and extending from the supports 20 are arms 21 which are connected by a front piece 22. Extending up from the front piece 22 and pivotally connected therewith are the pedals or foot pieces 23. Near its upper end, each of the pedals 23 is connected to a swinging link 25 which is pivoted at its rear end to an arm 16 extending down from a movable board 12 of one of the feeders. The swinging link 25 is supported by a link 26 from a support 27. In this construction, it will be noted that the axes of the pivots of the side arms 21 are in

line with the axis of the pivotal connection of the links 24 with the swinging links 25 when the parts are in normal position as indicated in full lines and I regard this as a desirable arrangement, because by means of this construction, the pedals may be folded back into the inside of the piano case, as shown by dotted lines, without changing the relative angular relation of the pedals 23 with respect to the side arms, 21.

I am aware that changes may be made in applying my invention to piano cases of different styles and proportions.

I am also aware that while I have shown a particular form in which my invention may practically be embodied, yet many modifications may be made therein by any person skilled in the art without departing from the spirit of my invention as expressed in the claims.

I do not wish, therefore, to be limited to the exact construction I have herein shown and described, but

What I do claim and desire to secure by Letters-Patent is:—

1. The combination of a casing for a musical instrument, having vertical posts or uprights, vertical feeders, and a vertical storer or air reservoir, said feeders and storer being located in panels between said posts or uprights.

2. The combination of a casing for a musical instrument, having rear posts or up-

rights, substantially vertical feeders located between said posts or uprights, and means for operating said feeders.

3. The combination of a piano casing having rear posts or up-rights, substantially vertical feeders located between said posts or up-rights, and means for operating said feeders, said means being foldable within the casing.

4. The combination of a piano casing having rear posts or uprights, feeders for supplying power for automatic playing attachments located in one of the panels between the posts or uprights and a storer or air reservoir located in another one of the panels between the posts or uprights.

5. The combination of a piano casing having rear posts or uprights and feeders for supplying power for automatic playing attachments, said feeders being located in a panel between two of the posts or uprights.

6. The combination of a piano casing, having four rear posts or uprights, and feeders located in the panel between the center posts or uprights.

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

PETER WELIN.

Witnesses:

HERB. H. EVANS,
A. W. HAMMER.