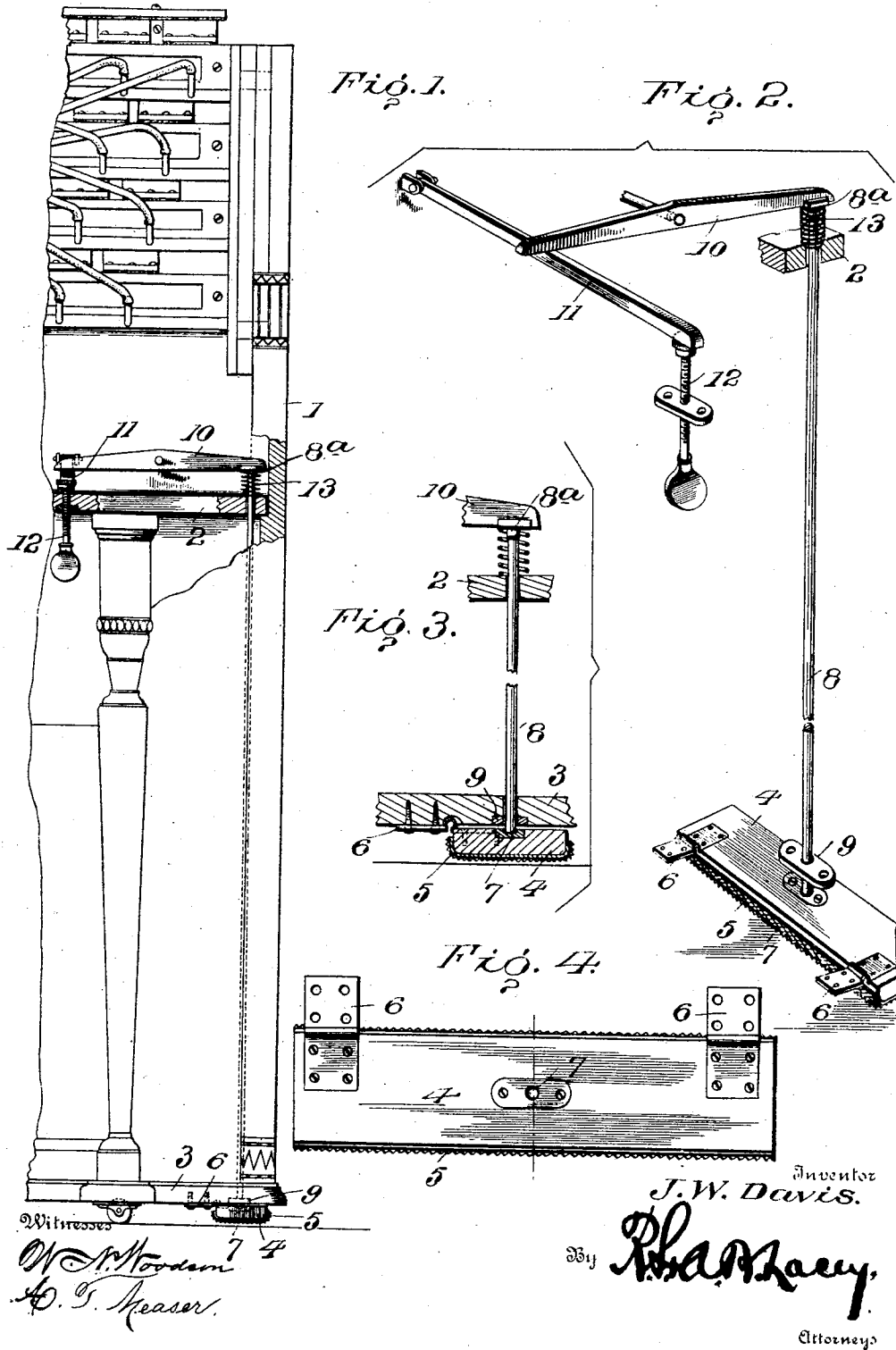


No. 863,701.

PATENTED AUG. 20, 1907.

J. W. DAVIS.  
FRICTION PAD FOR AUTOMATIC PLAYERS.  
APPLICATION FILED SEPT. 25, 1906.



# UNITED STATES PATENT OFFICE.

JOHN W. DAVIS, OF PULASKI, TENNESSEE, ASSIGNOR, BY MESNE ASSIGNMENTS, TO THE DAVIS PIANO PLAYER COMPANY, OF PULASKI, TENNESSEE, A CORPORATION OF TENNESSEE.

## FRICITION-PAD FOR AUTOMATIC PLAYERS.

No. 863,701.

Specification of Letters Patent.

Patented Aug. 20, 1907.

Application filed September 25, 1906. Serial No. 336,162.

*To all whom it may concern:*

Be it known that I, JOHN W. DAVIS, a citizen of the United States, residing at Pulaski, in the county of Giles and State of Tennessee, have invented certain  
5 new and useful Improvements in Friction-Pads for Automatic Players, of which the following is a specification.

Automatic piano players of the type designed to be detachably coupled to the musical instrument and play  
10 directly upon the key-board thereof, are now ordinarily and commercially constructed with casters upon which they are mounted, the casters extending transversely so that the attachment or automatic player has a rolling movement parallel with the plane of the key-board.  
15 I have found by experiment and actual experience that these attachments, being almost universally actuated by a bellows operated by the feet of the person controlling the device, have a tendency to creep or move side-  
20 wise on the floor, even though they are attached to the case of the instrument in as secure a manner as possible, this independent movement of the player resulting from the vibration caused by the actuation of the pedals to supply the bellows with air.

It is the object of my present invention to avoid this  
25 relative or independent movement of the automatic playing attachment by means of an improved construction of floor pad which is designed to frictionally engage the floor so that an automatic playing attachment embodying my improvement will not only be secured to  
30 the case of the instrument that it is playing, but will also be rigidly held as against movement by direct engagement with the floor on which it is resting.

With this primary object in view, the invention consists in certain constructions, arrangements and combinations of the parts hereinafter fully described and  
35 particularly pointed out in the appended claims.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a front elevation of one end of an automatic key-board player with my invention embodied therein, parts being partially broken away for the sake of clear-  
45 ness; Fig. 2 is a perspective view of the parts of my improved friction pad; Fig. 3 is a detail sectional view thereof; and, Fig. 4 is a detail top plan view of the hinged leaf or block which constitutes the pad proper.

Corresponding and like parts are referred to in the  
50 following description and indicated in all the views of the drawings by the same reference characters.

Referring to the drawing, the numeral 1 designates

one standard or vertical side bar of the case of an automatic piano player, 2 the main base board thereof, above which appears the pneumatics, and 3 the bottom board 55 which is directly mounted upon casters, as shown.

4 designates a block or leaf, the opposite edges of which are slightly beveled as shown best in Fig. 3 and the outer surface of which is preferably covered with corrugated rubber 5 or similar anti-slipping material, 60 secured to the block or leaf in any desired manner. This leaf 4 is secured underneath the bottom board 3 of the case of the automatic player by means of spring hinges 6 of any desired construction, the tendency of said hinges being to raise the leaf and its anti-slipping 65 fabric 5 out of contact with the floor. The leaf 4 is provided on its upper side with a preferably metallic plate formed with a socket 7 designed to receive the lower rounded end of an actuating rod 8. This rod is preferably mounted and guided at its lower end in a plate 9 70 secured and embedded in the bottom board 3 of the case and the upper end of the said rod extends through and is guided by the base board 2. A lever 10 is fulcrumed intermediate of its ends on any suitable support within the case of the automatic player and one end of 75 said lever bears upon a cap 8<sup>a</sup> secured or formed integral with the upper end of the actuating rod 8. The other arm of the lever 10 rests upon a lever 11 also suitably fulcrumed at its rear end, in the case of the automatic player and extending at right angles to the lever 80 10, as shown best in Fig. 2. The forward end of the lever 11 rests upon an actuating screw 12 which is mounted in the base board in any convenient position for manipulation by the person operating the automatic playing attachment. A spring 13 is coiled 85 around the upper end of the actuating rod 8, the tension of the spring being directed to raising the rod when the pressure of the adjacent arm of the lever 10 is relieved therefrom.

From the foregoing description in connection with 90 the accompanying drawing, it is evident that the case of the automatic player may be firmly held to the floor as against any slipping movement by adjusting the screw 12 upwardly. This, as is manifest, will result in raising the lever 11 and rocking the lever 10 to cause 95 one arm of the latter to bear downwardly upon the rod 8 and thereby press the pad, constituted by the block or leaf 4 into frictional engagement with the floor.

It is to be noted that the device of my invention is of simple construction that may be readily embodied in 100 any automatic piano player without material changes or alterations of the parts of the same, and which may be easily operated by merely adjusting the screw 12 either up or down.

Having thus described the invention, what is claimed as new is:

1. The combination with the case of an automatic piano player, of a friction pad carried thereby, and means for pressing said pad into contact with the floor upon which the player is resting.
2. The combination with the case of an automatic piano player, of a friction pad hinged to the bottom thereof, an actuating rod mounted in the case and movable vertically therein and designed to bear at its lower end against said pad, and means for adjusting said rod in a downward direction against the pad.
3. The combination with the case of an automatic piano player embodying a main base board 2 and a bottom board 3, of a friction pad hinged to the bottom board 3 and spring pressed upwardly, an actuating rod engaging with its lower end the upper surface of said pad and designed to press it downwardly against the spring action, said rod being mounted to move vertically through the bottom board and the base board above it, and a manually operable adjusting device designed to press downwardly on the upper end of said rod.
4. The combination with the case of an automatic piano player, of a friction pad hinged to the bottom thereof, an

actuating rod mounted within the case and engaging with its lower end, the upper face of the pad, a lever operatively engaging the upper end of said rod and designed to press the rod downwardly against the pad, and an adjusting screw mounted in the case and arranged to effect the movement of said lever to depress the rod.

5. The combination with the case of an automatic piano player, of a friction pad hinged to the bottom thereof, an upwardly extending rod mounted in the case and engaging the upper surface of said friction pad with its lower end, a lever 10 fulcrumed intermediate of its ends within the case, one end of said lever being in contact with the upper end of the actuating rod, a second lever 11 also fulcrumed in the case and extending at right angles to and underneath the arm of the first named lever, and an adjusting screw 12 arranged to bear against the under side of the free end of the lever 11, as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN W. DAVIS. [L. s.]

Witnesses:

EUNICE C. FREEMAN,  
BEN CHILDERS.