(No Model.)

J. F. STRATTON.

ACCORDION.

No. 437,059. Patented Sept. 23, 1890.

Fig. 1.

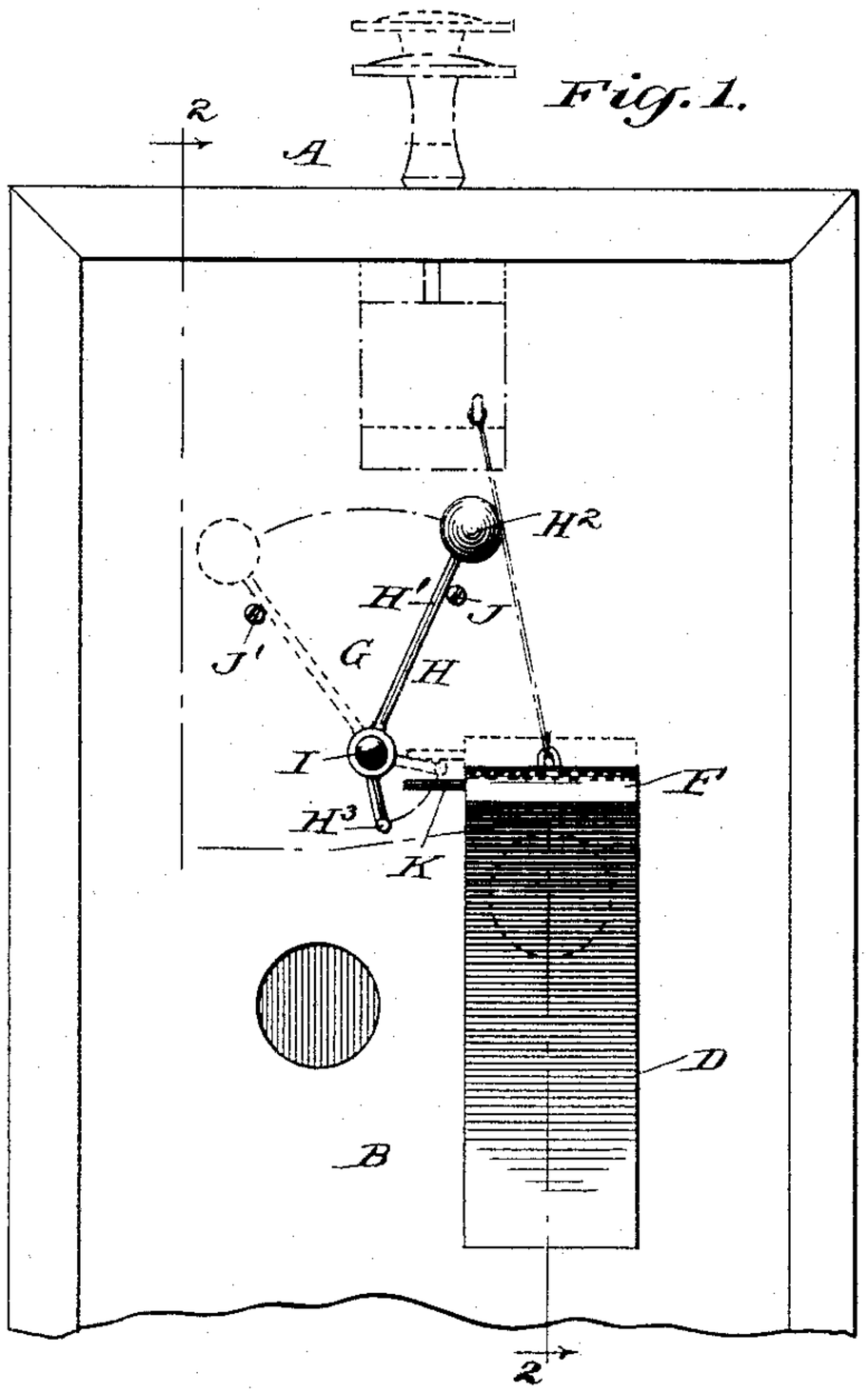


Fig. 2.

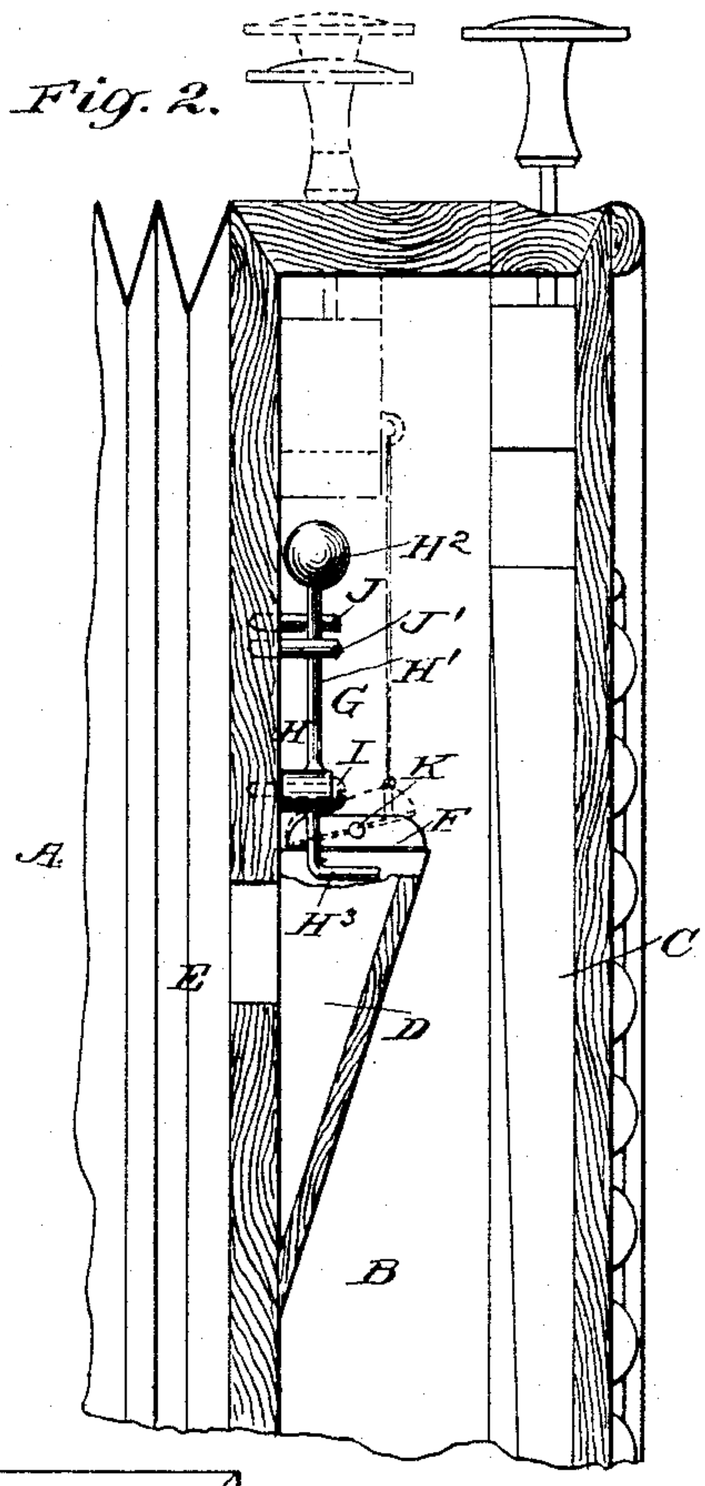
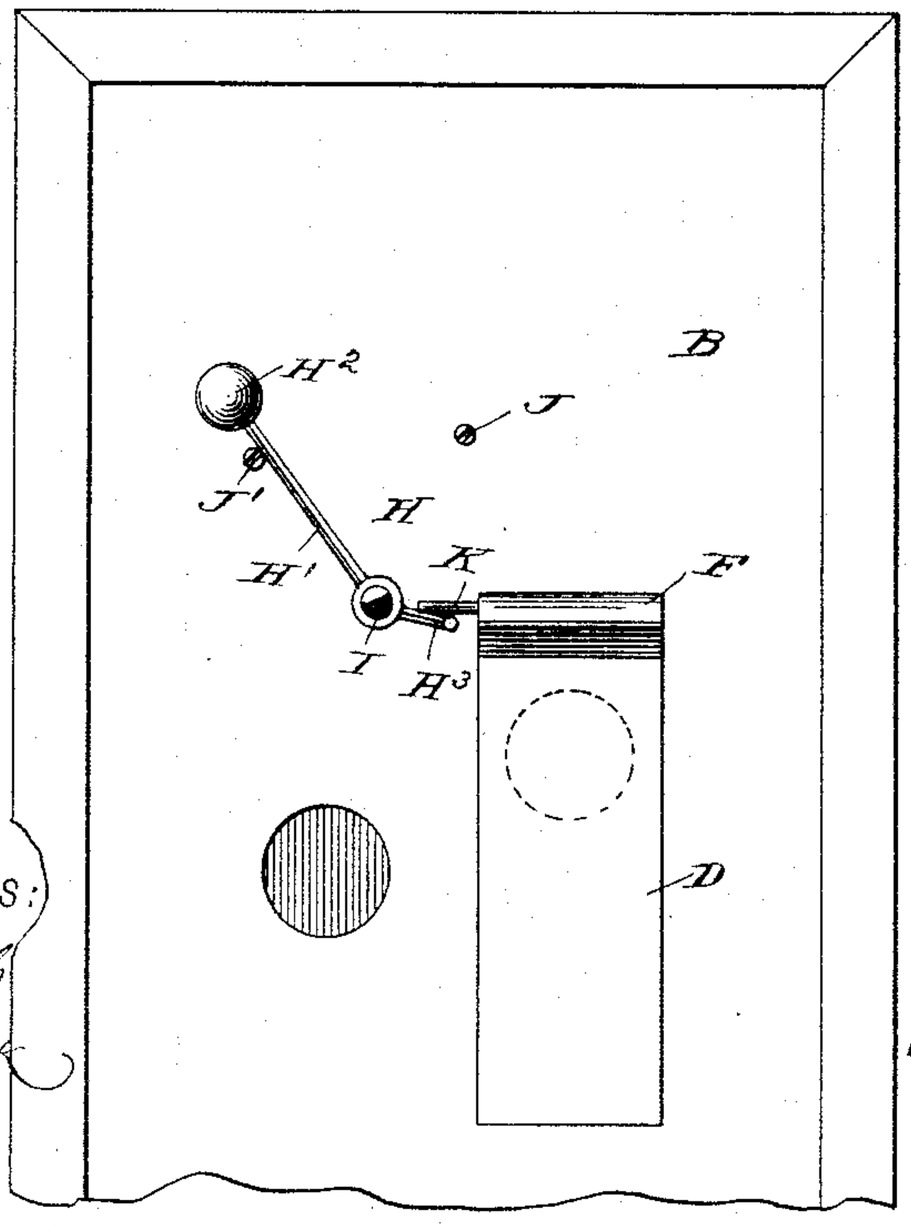


Fig. 3.



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JOHN F. STRATTON, OF BROOKLYN, NEW YORK.

ACCORDION.

SPECIFICATION forming part of Letters Patent No. 437,059, dated September 23, 1890.

Application filed May 17, 1890. Serial No. 352,224. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. STRATTON, of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Accordions, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved accordion which is simple and durable in construction and permits the performer to constantly bring the tremolo attachment into or out of use without stopping the playing or using any of the fingers to manipulate the mechanism, as is usually done in accordions as heretofore made.

The invention consists of a gravity device adapted to connect or disconnect with the fluttering-valve commanding the air-duct leading from the bellows to the wind-chest.

The invention also consists of certain parts and details and combinations of the same, as will be fully described hereinafter, and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a face view of the improvement as applied, the reed-board being removed. Fig. 2 is a transverse section of the same on the line 2 2 of Fig. 1, and Fig. 3 is a face view of the improvement in a different position from the one shown in Fig. 1.

In accordions as heretofore constructed the tremolo device was actuated by the performer manipulating with one or more of his fingers or his hands a separate mechanism—usually called "tremolo-stop"—connected with the fluttering valve of the air-duct, and in order to do this during the execution of a piece of music the playing had to be interrupted to enable the performer to set the tremolo device. This stopping of the music could not well be avoided, no matter how much dexterity was displayed by the performer, and necessarily caused a disagreeable pause.

To avoid the interruption of the music, to enable the performer to keep on playing without stopping to set the tremolo device, and to instantly bring the tremolo into or out of use are the main objects of the invention presently to be described.

The accordion A is provided with the usual wind-chest B, covered by the reed-board C and connected by the air-duct D with the interior of the bellows E. The air-duct D is adapted to be closed on top by the usual fluttering valve F, which when seated permits the performer to produce tremolo by compressing the bellows in the usual manner. When the valve is unseated, the air passes freely from the bellows through the duct into the wind-chest and from the latter past the reeds of the reed-board without producing tremolo tones.

In order to hold the valve F off of its seat when the tremolo is not desired and to permit the valve to seat itself for the tremolo, I provide a gravity device G, having a bell-crank lever H, pivoted at I in the wind-chest B, as is plainly shown in the drawings. This bell-crank lever H has one of its arms H′ extending upward, the outer end supporting a weight H^2. The arm H′ is limited in its movement between two stop-pins J and J′, secured to the inner wall of the wind-chest, as is plainly shown in the drawings. The other arm H^3 of the bell-crank lever H is preferably made in L shape, the outer end being adapted to engage a pin K held on one end of the fluttering valve F. When the bell-crank lever H is in the position shown in Figs. 1 and 2, the arm H′ rests against the said pin J, and the other arm H^3 is disengaged from the pin K, so that the valve F is free to open and close when the accordion is played to produce tremolo.

When the operator desires not to use the tremolo, he tips the upper end of the accordion A slightly toward himself, so that the bell-crank lever changes its position, the arm H′ swinging against the stop-pin J′, and the other arm H^3 engaging the pin K, so as to lift the valve F off of its seat to permit the air from the bellows to pass freely through the duct D into the wind-chest B and through the reeds of the reed-board C. When the performer again desires to use the tremolo, he tips the upper end of the accordion outward, so that the bell-crank lever again

changes position and disengages the pin K, so as to permit the valve F to seat itself by its own weight. When the accordion is now played, the tremolo is produced in the usual manner by the fluttering of the valve F.

Thus it will be seen that while the performer plays a piece of music he can instantly change the regular sounds to tremolo without interrupting the playing, as the slight tipping of the accordion does not hinder the playing of the keys or drawing or pushing the bellows.

In dotted lines in Figs. 1 and 2 is illustrated the ordinary tremolo-stop for manipulating the fluttering valve F, the said means consisting of a string connected with the valve and fastened to a block held on a rod passing through the end of the wind-chest to the outside, the outer end of the rod being provided with a button, which when moved outward causes an upward movement of the block, so that the valve F is held open by the string. When the button is pushed downward, the valve F seats itself. Other devices have also been put in use to accomplish the same result; but all had to be manipulated by the performer's fingers, so that an interruption of the music was necessary.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. In an accordion, a gravity device adapted to connect or disconnect with the fluttering valve, according to the position of the accordion, substantially as shown and described.

2. In an accordion, a weighted lever pivoted in the accordion and adapted to connect or disconnect with the fluttering valve, according to the position of the accordion, substantially as shown and described.

3. In an accordion, the combination, with the fluttering valve, of a gravity device arranged in the accordion and adapted to connect and disconnect with the said fluttering-valve, according to the position of the accordion, substantially as shown and described.

4. In an accordion, the combination, with a fluttering valve, of a weighted bell-crank lever held in the wind-chest and adapted to connect with or disconnect from the fluttering valve, substantially as shown and described.

5. In an accordion, the combination, with a fluttering valve, of a weighted bell-crank lever held in the wind-chest and adapted to connect with or disconnect from the fluttering valve, and stop-pins for limiting the movement of the said bell-crank lever, substantially as shown and described.

6. In an accordion, the combination, with a fluttering valve provided with a pin, of a weighted bell-crank lever adapted to engage with one arm the said pin and carrying a weight on its other arm, substantially as shown and described.

7. In an accordion, the combination, with a fluttering valve provided with a pin, of a weighted bell-crank lever adapted to engage with one arm the said pin and carrying a weight on its other arm, and stop-pins for limiting the movement of the said bell-crank lever, substantially as shown and described.

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