

(No Model.)

2 Sheets—Sheet 1.

F. & R. A. MANN & T. DAWKINS.
MUSICAL INSTRUMENT.

No. 509,232.

Patented Nov. 21, 1893.

FIG: 4.

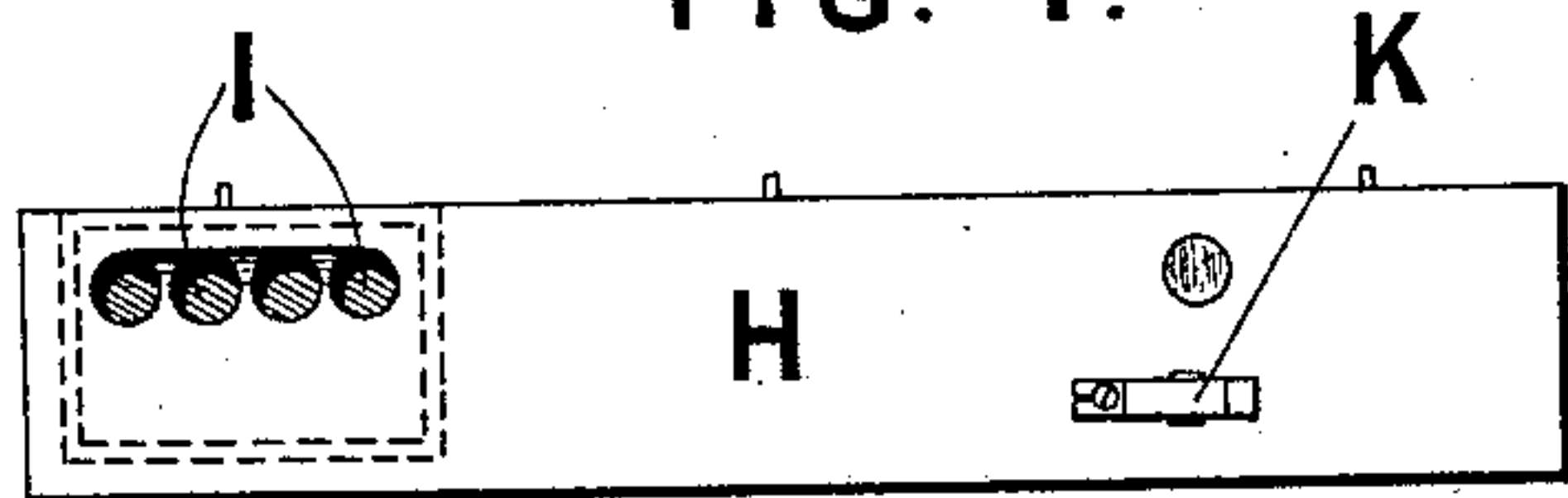


FIG: 3.

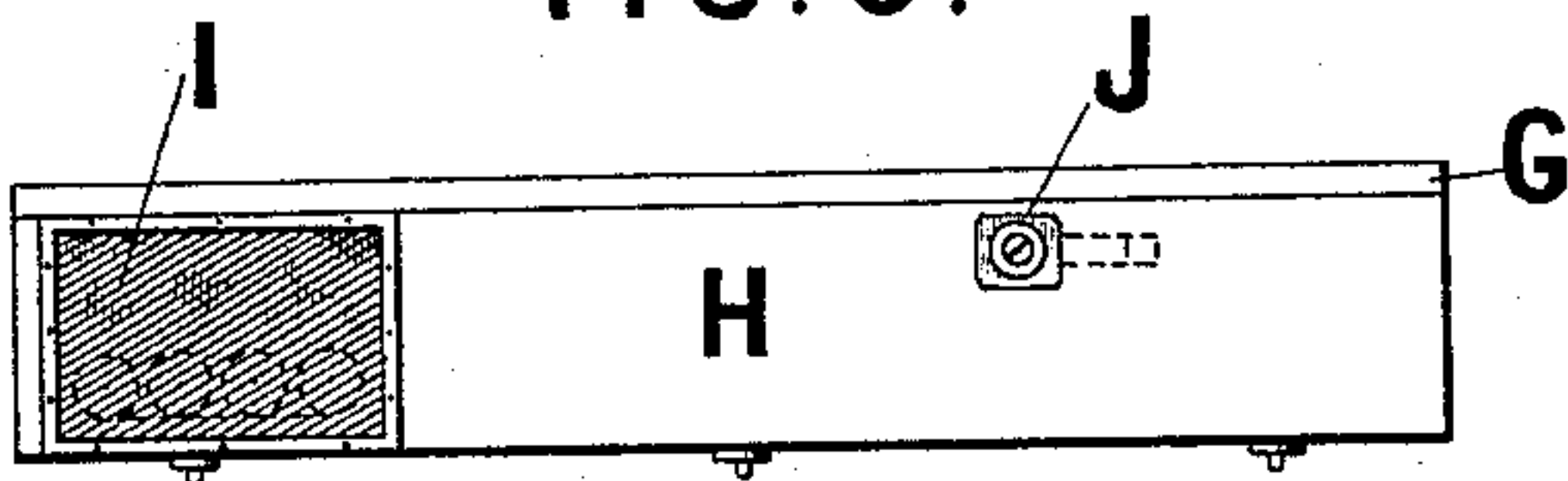
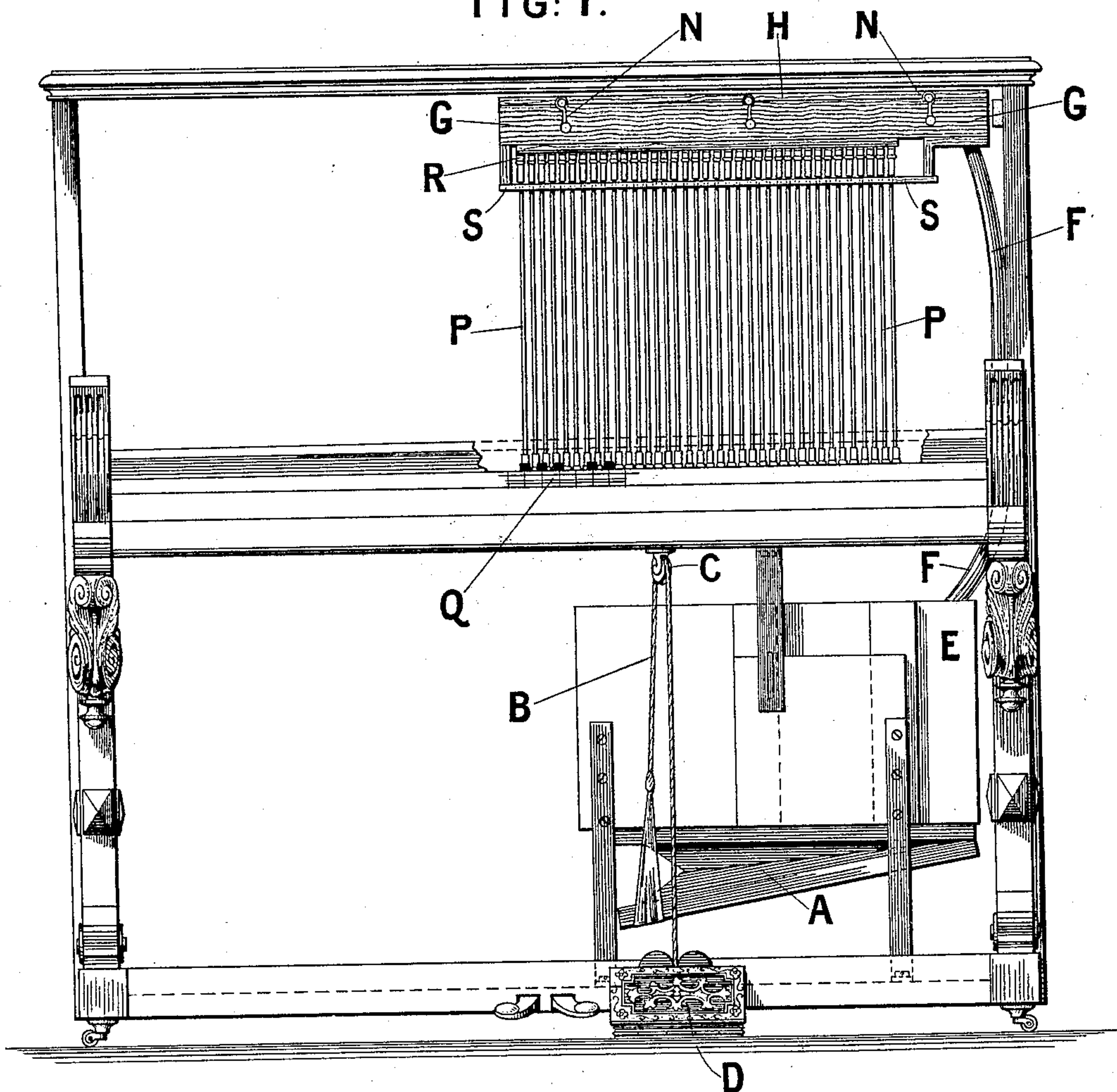


FIG: 1.



WITNESSES.

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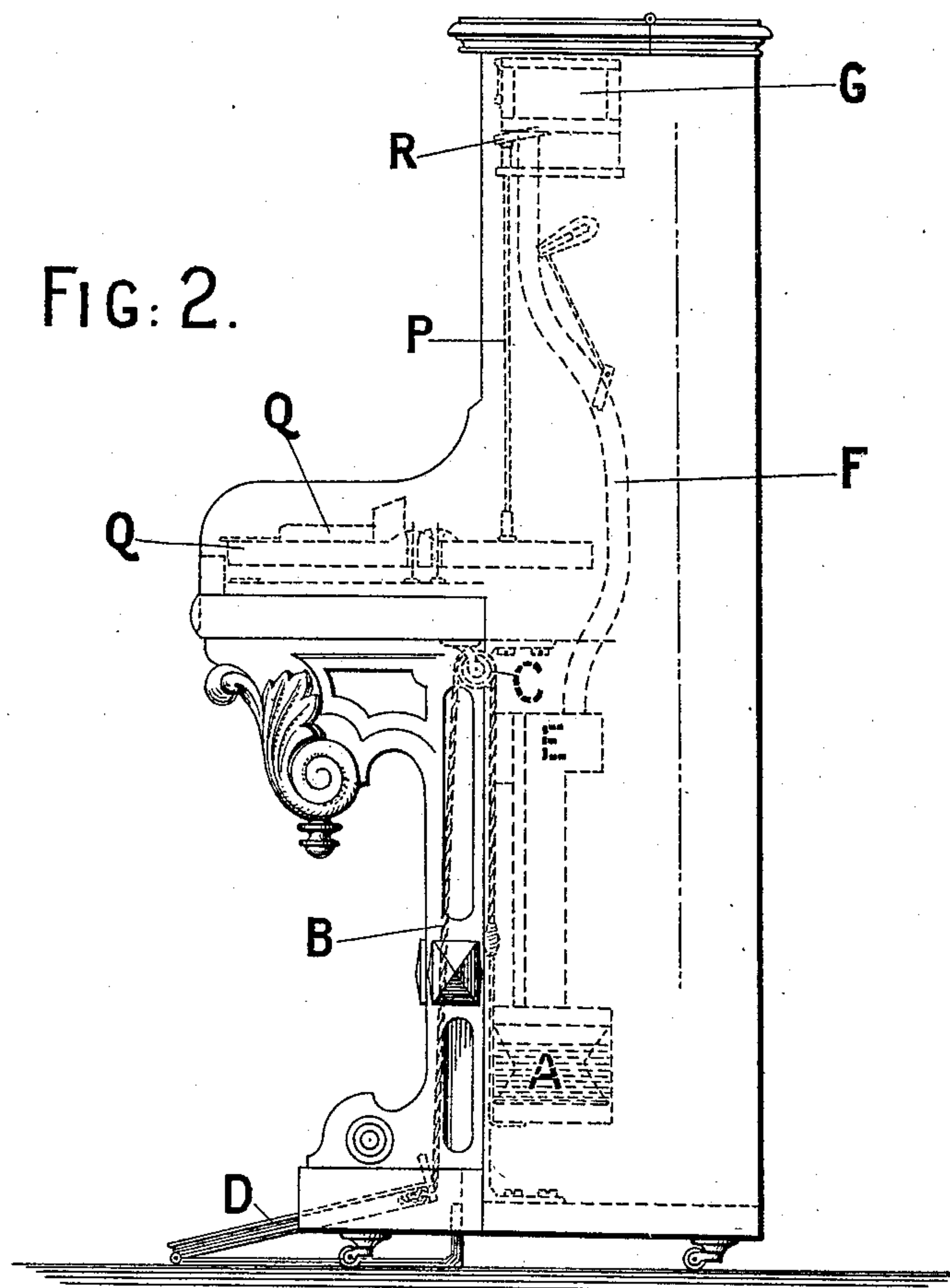
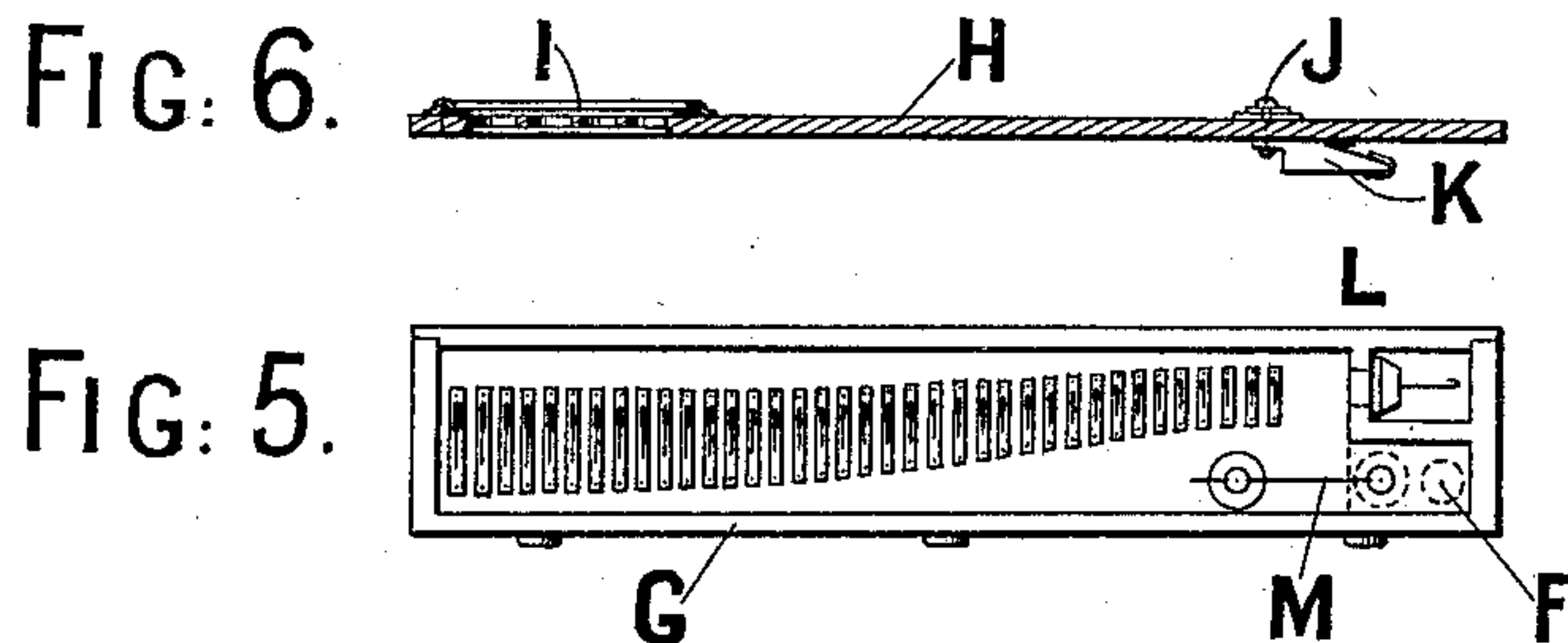
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2 Sheets—Sheet 2

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WITNESSES.

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Marion Hall

INVENTORS:

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UNITED STATES PATENT OFFICE.

FREDERICK MANN AND ROBERT ADOLPHUS MANN, OF COLCHESTER, AND
THOMAS DAWKINS, OF LONDON, ENGLAND; SAID FREDERICK MANN AND
ROBERT ADOLPHUS MANN ASSIGNORS TO SAID DAWKINS.

MUSICAL INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 509,232, dated November 21, 1893.

Application filed February 14, 1893. Serial No. 462,243. (No model.) Patented in England September 13, 1892, No. 16,411.

To all whom it may concern:

Be it known that we, FREDERICK MANN and ROBERT ADOLPHUS MANN, music-sellers, both of High Street, Colchester, in the county of Essex, and THOMAS DAWKINS, importer and manufacturer of musical instruments, of 17 Charterhouse Street, in the city of London, England, all subjects of the Queen of Great Britain, have invented a Combined Reed or Wind Instrument and Pianoforte, (for which Letters Patent were granted to us in Great Britain, No. 16,411, dated September 13, 1892,) of which the following is a specification.

This invention is more especially designed for the purpose of adapting, arranging and combining a reed or other like wind instrument to an ordinary pianoforte of the character of the well-known cottage or upright pianofortes (hereinafter called "pianos" only) so that such reed or the like wind instrument is arranged and mounted and operates entirely within the ordinary piano case in such a manner that no modification or alteration of such piano or piano case is necessary and therefore our invention can be adapted and readily applied to most pianos of the upright or cottage type. Having applied our said invention—the tone and action of the piano is not detrimentally affected thereby and the piano can be played at will either with or without the wind instrument being played; and in order that our present invention may be fully understood we will proceed to fully describe the same with reference to the drawings hereunto annexed.

Figure 1 is a front elevation of an ordinary piano—having our improvements applied thereto—with the front of the case removed. Fig. 2 is an end elevation of Fig. 1 showing in dotted lines our combination reed or wind instrument as arranged and mounted inside the piano case. Fig. 3 is a plan of the top of the reed box (or "reed pan" as it is termed). Fig. 4 is an under side view of the detachable lid or cover to such reed box. Fig. 5 is a plan view of the interior of the reed box with said lid removed. Fig. 6 is an edge view of said cover.

Similar letters of reference indicate corresponding parts throughout.

A is a suitable bellows actuated in any suitable manner for instance by a cord B passing over a pulley C and passing down to a pedal D placed as shown outside the piano case (see Fig. 2) and this pedal D and part of cord B are the only parts in connection with our invention which are visible outside the piano case.

E is wind chest.

F is pipe leading from the wind chest up to reed box G.

G is reed box. H is removable cover thereto.

I is a loosely mounted piece of parchment or fabric over perforations in lid H.

J is "button" or slide moving in slot H to throw the "tremulo" into action by means of the projection K—on J inside box G—closing the valve L and so diverting the wind from pipe F as to pass under the vibrating arm near its jointure or connection to the bottom of G and thus give the "tremulo" sound as is well understood.

N are catches to hold lid H on the body of the box G.

The box or reed pan G is mounted on the "damper rail" of the piano or may be mounted on brackets or other suitable supports just over the said "damper rail" so as not to interfere with the tone or action of the piano.

P are the upright rods (valve operating rods) which are mounted at their lower ends upon pins or studs (not shown) fixed on the inner ends of the ordinary piano keys; Q, ordinary piano keys which when operated in the usual way will raise up the rods P.

R are the valves or reed pallets (on the under side of box G) which at the front ends thereof are pushed up by the rods P so that whichever note (or notes) may be played on the piano keys Q the vertical rod (or rods) P will operate the corresponding reed pallet or valve R and so the valves of the wind instrument are operated all the time the piano is being played; all that is necessary to start the playing or sounding of the reed or wind instrument being to operate the bellows and both piano and reed instrument will then be heard.

S is a perforated guide bar for the rods P so as to keep said rods in place and also to

keep same all together when taken out of the piano. The guide-bar S is supported by brackets attached to the bottom of the reed-box G and is provided with a row of perforations for guiding the upper ends of the upright rods P. The reed-pallets R are supported on the under side of the reed-box G in such a manner that each reed-pallet R is arranged vertically above its upright rod P.

10 This wind instrument is usually only intended to be applied to the treble or higher part of a "piano."

The operation is as follows:—When the bellows are operated (so as to charge the wind chest) and the piano played every piano note (i. e., of those having our improvements applied thereto) operates and sounds a correspondingly toned reed in the wind instrument and so the two instruments (wind and string) work in unison and harmony so as to produce very striking effects.

All or any of the parts of our improvements can be easily removed for cleaning or tuning or other purposes as desired.

25 Having thus described our invention, what

we claim as new, and desire to secure by Letters Patent of the United States, is—

The combination, with an upright piano-casing, key-levers and action, of a reed-box that is supported in the upper front-part of the casing on or above the damper-rail, a perforated guide-bar supported below the reed-box, reed-pallets supported on said reed-box, upright actuating rods resting on the rear-ends of the key-levers and guided in the perforations of the guide-bar, a wind-chest located at the lower part of the casing, bellows below said wind-chest, pedals for operating the bellows, and a duct connecting the wind-chest with the reed-box, substantially as set forth.

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