

A. N. HANNA.
ORGAN ACTIONS.

No. 185,029.

Patented Dec. 5, 1876.

Fig. 1.

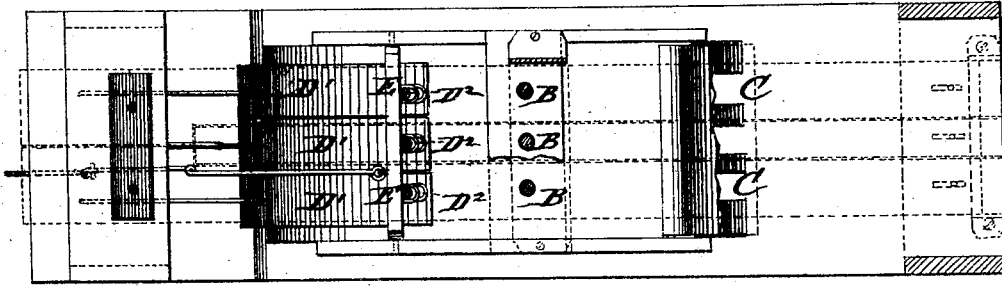
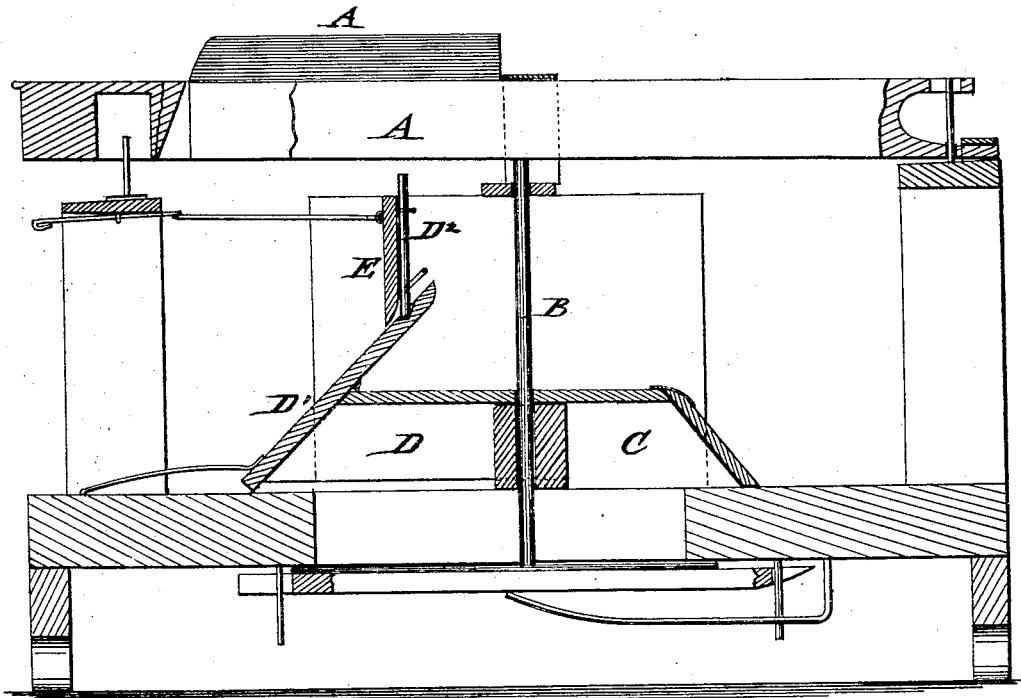


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

ARCHIBALD N. HANNA, OF MURRAY, INDIANA.

IMPROVEMENT IN ORGAN-ACTIONS.

Specification forming part of Letters Patent No. 185,029, dated December 5, 1876; application filed August 21, 1876.

To all whom it may concern:

Be it known that I, ARCHIBALD N. HANNA, of Murray, in the county of Wells and State of Indiana, have invented a new and Improved Organ, of which the following is a specification:

In the accompanying drawing, Figure 1 represents a top view of my organ improvement with key-board removed, and Fig. 2 is a vertical longitudinal section of the same.

Similar letters of reference indicate corresponding parts.

My invention has for its object to so improve the reed-organs, with or without stops, that a change of the music from a soft tone to medium or very loud tone, and, vice versa, from a loud tone to medium and a very soft tone, may be accomplished without moving the hands from the key-board, and thereby the playing of the organ facilitated, and the changes produced without intermission, and in a quick and perfectly natural manner.

The invention consists of the arrangement of several sets of reeds, that are operated with or without stops, by different pressure on the keys, a light pressure operating only the first set of reeds, a heavier pressure the first and second sets, by actuating a shorter series of pitmen or push-pins, and a still heavier pressure, a still shorter series of pins of the third set of reeds, all in the manner hereinafter described.

In the drawing, a represents the keys of an organ, which actuate in the customary manner a series of pitmen or push-pins, B, and thereby the usual set of reeds C, either with or without the use of stops. A second set of reeds, D, is arranged in front of the first set, and provided with separate lids D¹, that are extended above the reed-board, and hinged to the top of the same. The second set of reeds D are operated by a second series of pitmen or push-pins, D², which are made somewhat shorter than the first series of pins B, guided along a swinging board, E, and seated in sockets or recesses of lids D¹. A stop may be connected to the swinging board, which, when drawn, throws the pins from a vertical into an inclined position, so that they do not come in contact with the keys when they are depressed.

A third set of reeds may be arranged similar to the second set, with pitman-pins a little

shorter than those of the second set, or they can be operated by means of a knee-lever attached to the left side of the organ, and operated with the left knee.

By this arrangement the operator is enabled to produce all the changes of a three-reeded organ without lifting his hands from the key-board, by simply pressing the keys about half-way down, when the first and softest set of reeds is to be operated, pressing the keys still farther down to operate the second reeds, and produce a medium tone, and pressing them entirely down, or using the knee-lever to operate the third set of reeds, for a very loud tone.

Without pulling stops the player is enabled to produce the change of tone by operating either the first set of reeds alone, or the first and second together, or the first and third, or all three, and by closing stop on first set of reeds, the second and third set of reeds may be operated together.

When the organ is manufactured without stops, the reeds of the first set are left open, and the others operated as described. The use of stops, however, gives the advantage of combining these improvements with the old organ, and playing the same with a change of tone or without change of tone, in the old manner, by pulling the stop of the second set of pitman-pins, and throwing them out of contact with the keys.

The modulating of tone may thus be produced in a simple and easily-operated manner, without taking the hands off the keys, by merely changing the pressure on the keys, by which the effect and power of the organ are greatly heightened and increased.

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

As an improvement in organs, the combination, with the two sets of push-pins D² B, keys A, swinging guide-board E, and stop mechanism, substantially as described, of an additional set of reeds, as D, provided with a set of hinged and extended lids, D¹, substantially as and for the purpose specified.

ARCHIBALD NEWTON HANNA.

Witnesses:

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