(No Model.)

R. W. BLAKE.

BELL ATTACHMENT FOR ORGANS.

No. 254,910. Patented Mar. 14, 1882.

Fig: 1.

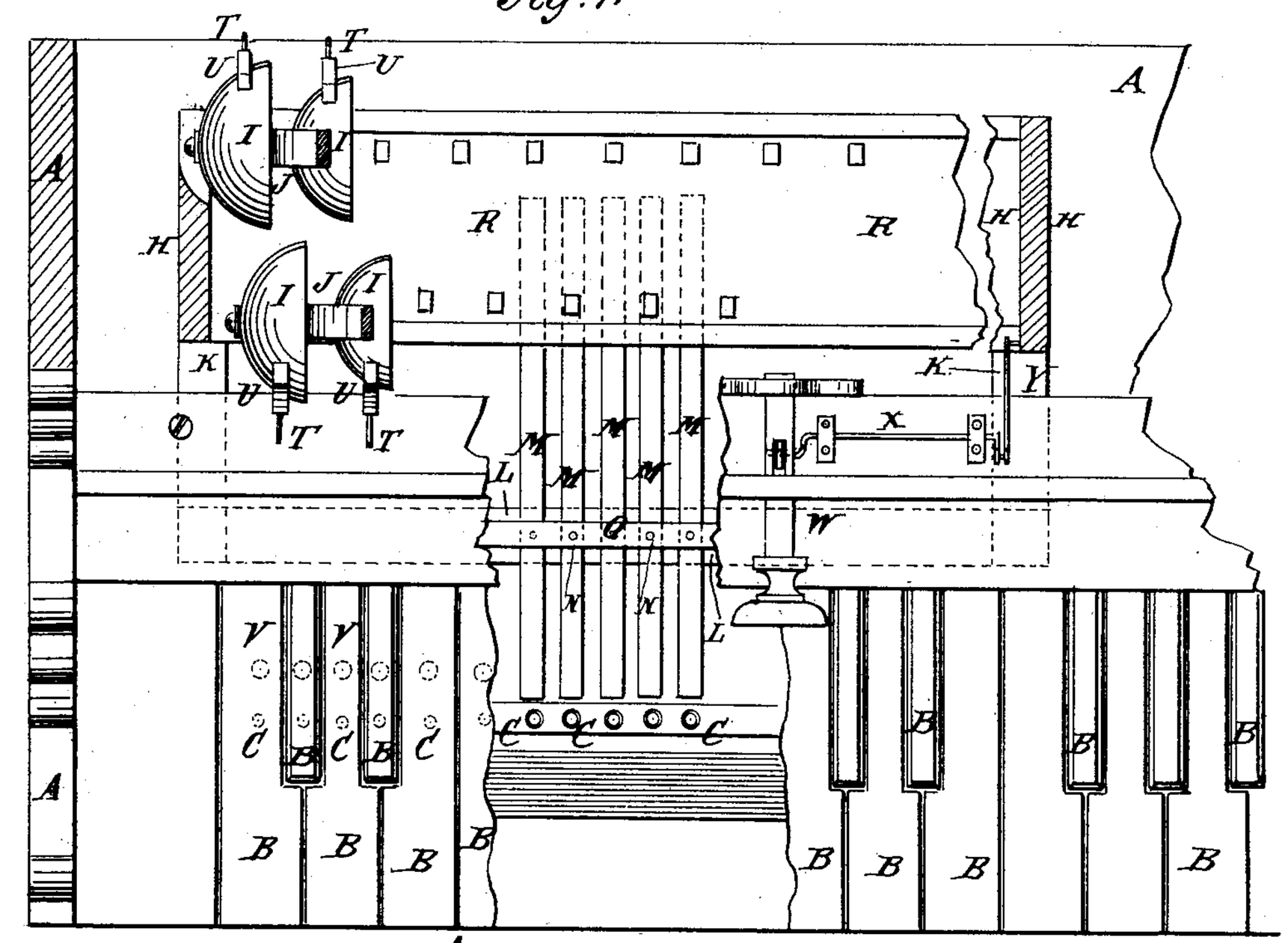


Fig: 2.

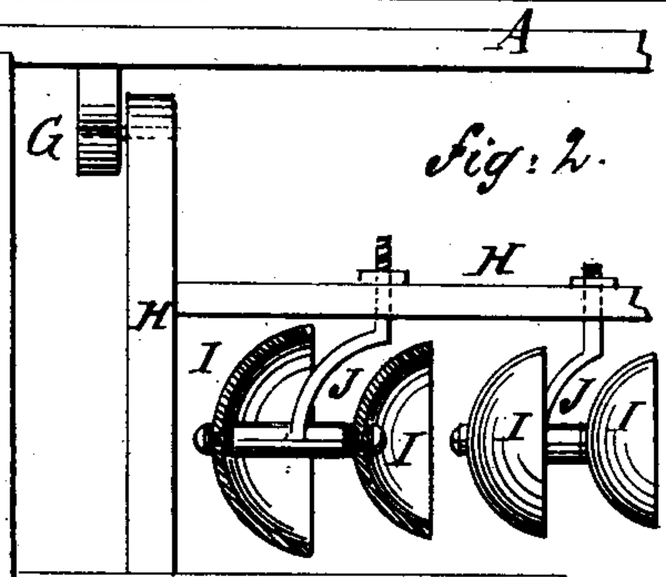
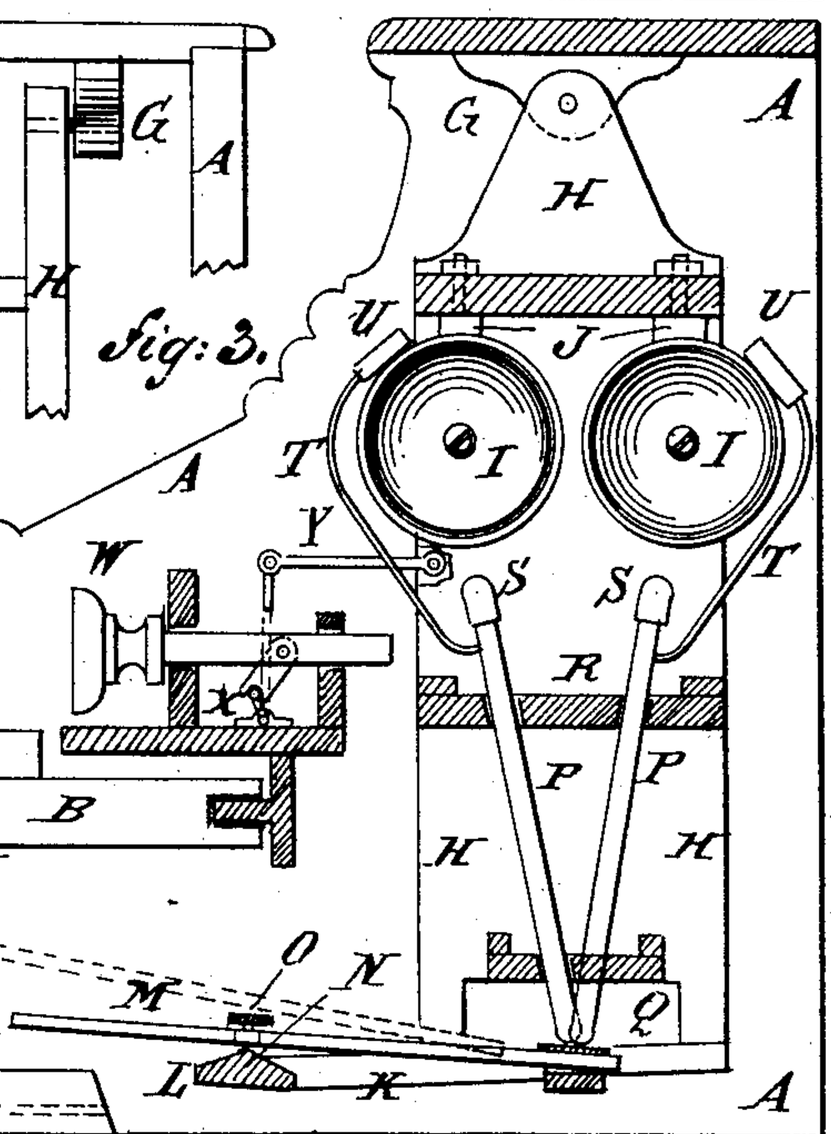


Fig: 3.



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BELL ATTACHMENT FOR ORGANS.

SPECIFICATION forming part of Letters Patent No. 254,910, dated March 14, 1882.

Application filed December 13, 1881. (No model.)

To all whom it may concern:

Be it known that I, RUFUS W. BLAKE, of Derby, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Bell Attachments for Organs, of which the following is a full, clear, and exact description.

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

Figure 1 is a sectional plan view of a part of an organ to which my improvement has been applied. Fig. 2 is a front elevation of a part of the same, partly in section. Fig. 3 is a sectional side elevation of the same.

The object of this invention is to provide bell attachments for organs constructed in such a manner that they can be conveniently applied to the organs, and can be readily thrown into and out of gear with the mechanism of the organs.

The invention consists in certain combinations, which will first be described in connection with the drawings and then pointed out in the claims.

A represents the case, B are the keys, C are the tracker-pins, D is the reed-board, E is the valve-board, and F are the valves, of an ordinary organ, all of which parts are constructed in the usual manner.

To brackets G, attached to the upper part of the case A, are hinged the projecting upper ends of the side bars of a frame, H, or arms attached to the said frame, so that by varying the said hinging parts the frame H can be applied to different organ-cases. From the top board of the frame H are suspended a series of bells, I, corresponding in number with the keys B of the organ, and tuned to give the same note as the reeds connected with their corresponding keys. The bells I are arranged in two rows, and are attached to brackets J, which are secured to the top board of the frame H by screw-arms and nuts, or other suitable means. I prefer to connect two bells, I, with one bracket, J, as shown in Figs. 1 and 2; but one or more brackets may support single bells, and this will be necessary where there is an odd number of bells in a row.

To the bottom board or bar of the frame H are attached arms K, to which is secured the fulcrum-board L. The upper side of the fulcrum-board L is beveled into V shape, as shown in Fig. 3, to allow the levers M, pivoted to it, to have free play. The levers M are fulcrumed to the beveled board L by pins N, and are kept in place by a cap-board, O, placed above the said levers M, and attached to the upper ends of the said pins. The ends of the levers M rest upon the bottom board or bar of the frame H, and upon the upper sides of the said ends rest the lower ends of the hammer-pitmen P. The hammer-pitmen P pass through guide-holes in the boards Q R, attached to the frame H, the said guide-holes being formed in such directions that the hammer S of each pitman P will strike its bell I squarely.

To each pitman P, near its upper end, is attached the stem T of a damper, U, the said stem being so bent as to bring the said damper above its bell I, and nearly opposite the hammer S, as shown in Fig. 3, so that the damper U will be raised out of contact with the bells I, when the hammers are raised to strike the bells, and will be lowered into contact with the bells by the downward movement of the hammers as the said hammers drop back into place.

The levers M are operated to throw the hammers S upward to strike the bells by regulating-buttons or screw-pins V, screwed into the lower sides of the keys B, as shown in Fig. 3, so that the said pins V can be adjusted to give a greater or less movement to the levers M, and consequently a greater or less impulse to the hammers S.

The suspension of the frame H by a hinge-connection allows the frame H to be drawn forward to bring the ends of the levers M beneath the screw-pins V, as indicated in dotted lines in Fig. 3.

The hinged frame H is moved to throw the bell attachment into and out of connection with the keys B by the draw-stop W, which is connected with a crank-arm formed upon one end of a rod, X. The rod X has a crank-arm upon its other end, which is connected with the frame H by a rod, Y. The crank-rod X works in bearings attached to the casing A, as shown in Figs. 1 and 3.

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

1. A bell attachment for organs, made sub-

stantially as herein shown and described, and consisting of a swinging bell-frame suspended within the organ-case and carrying the bells, their hammers, dampers, and hammer-operating devices, the whole adapted to be swung forward by the movement of a pull-stop, so as to bring the hammer-levers under the pins of the organ-keys and cause the sounding of the bells when the organ-keys are depressed, and by the contrary movement of the pull-stop to swing the bell-frame back, and thereby carry the hammer-levers away from the organ-keys, so that the latter will not sound the bells, all as set forth.

2. In a bell attachment for organs, the combination, with the case and the keys of an organ, of the hinged frame H, the bells I, the hammers S, the dampers U, the levers M, and the screw-pins V, substantially as herein shown and described, whereby the bells can be operated by the organ-keys and thrown into and out of gear, as set forth.

3. The combination, with the case A, having brackets G at the upper part, of the frame H, hinged at the projecting upper ends of its side bars to said brackets, whereby said frame may be applied to different organ-cases, as described.

4. The combination, with the case A, of the hinged frame H and bells I, attached in two rows by brackets J to the top board of said frame, as and for the purpose set forth.

5. The combination, with the bells, dampers T U, and hammer-pitmen P, passing through the boards Q, of the hinged frame H, having the top-beveled fulcrum-board L, the levers M, pivoted to the highest part of said board, and the cap-board O, as and for the purpose specified.

6. The combination of the keys B, having screw-pins V on the under side, the levers M, fulcrumed on board L, and the hinged frame H, whereby the ends of said levers are brought beneath the screw-pins, as described.

7. The combination, with the bell attachment and keys B, of the hinged frame H and draw-stop W, connected by rod Y, and crank-rod X, as and for the purpose specified.

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Witnesses:

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