

(No Model.)

J. W. LONG.
ATTACHMENT FOR MUSICAL INSTRUMENTS.

No. 498,853.

Patented June 6, 1893.

Fig. 1.

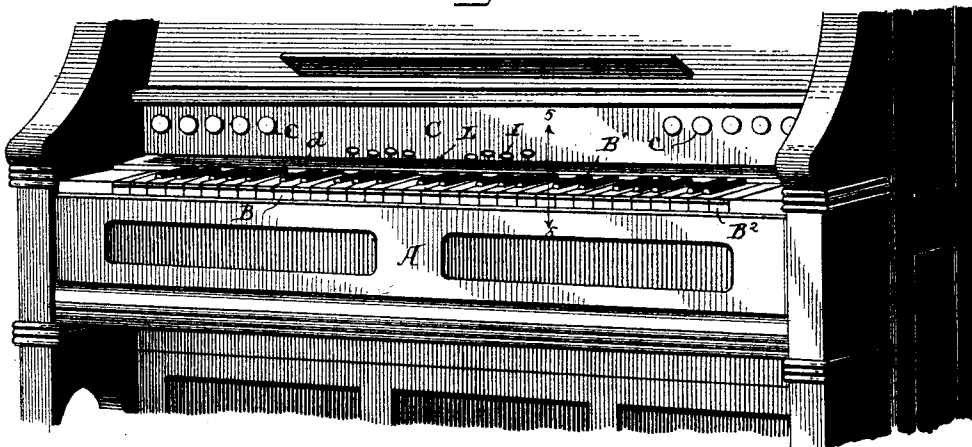


Fig. 4.

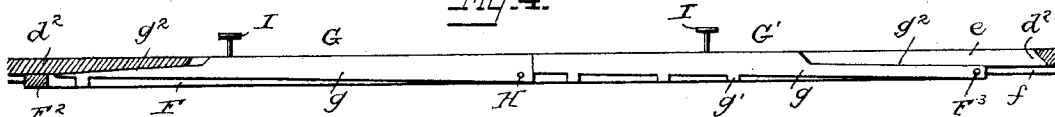


Fig. 2.

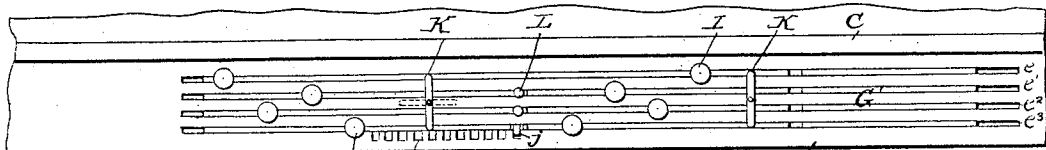


Fig. 3.

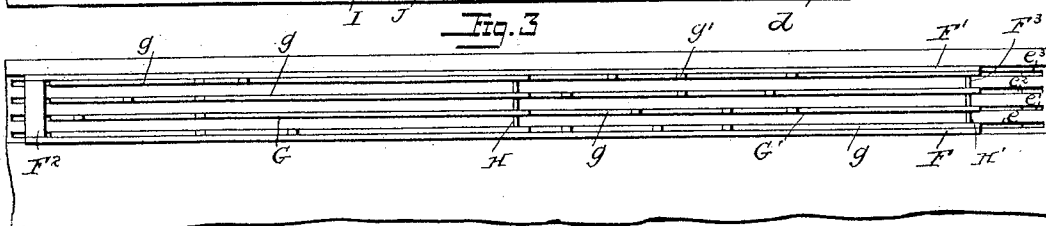
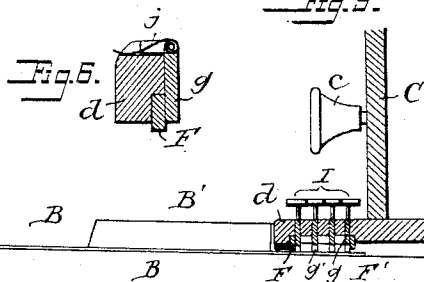


Fig. 5.



Witnesses

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ATTACHMENT FOR MUSICAL INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 498,853, dated June 6, 1893.

Application filed October 31, 1892. Serial No. 450,549. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. LONG, a citizen of the United States, and a resident of Jackson, Hinds county, Mississippi, have invented certain new and useful Improvements in Attachments for Musical Instruments, of which the following is a specification.

My invention relates to attachments for pianos, organs and the like musical instruments, and it has for its object to provide a cheap, simple and convenient construction, whereby my invention may be applied to organs and the like as now constructed without material or substantial change, and at little or no expense.

To these ends my invention consists in the various features of construction and arrangement, substantially as hereinafter more particularly set forth.

Referring to the accompanying drawings in which I have illustrated the preferred embodiment of my invention, Figure 1 is a part perspective view of an organ with my invention applied. Fig. 2 is a plan view of the name board lip having my arrangement applied thereto. Fig. 3 is an inverted plan view of the same. Fig. 4 is a longitudinal vertical section. Fig. 5 is an enlarged transverse section on the line 5—5 Fig. 1, showing sufficient of the organ to disclose the arrangement of my invention. Fig. 6 is an enlarged detail of the adjusting and locking key.

Heretofore it has been proposed to provide means whereby persons with little or no instruction or skill can play organs or other similar musical instruments, the general idea of such devices being that on the depression of a single key by the operator, the notes to make a proper chord will be sounded simultaneously, and in devices of this character it is generally customary to make the attachments separate from the organ or other musical instrument, and arranged to be applied to the organ in a manner to lie over the ordinary keys, and to cover them to a greater or less extent, thereby interfering with their ordinary manipulation. It is one of the leading features of my present invention to avoid the disadvantages of such attachments, and to provide and arrange the attachment in a manner that it can be if desired a permanent fixture to the organ, and so that it will not in

any way interfere with its ordinary use. Thus referring to the drawings, A, represents a portion of a well known and typical form of organ in which there are keys, B, arranged in the usual manner, back of which rises the stop or name board, C, usually having the name of the maker and perhaps the trade mark of the instrument thereon, and the various stops *c*. This name or stop board usually projects forward forming a lip, *d*, extending from the name or stop board C to the rear of the elevated portion of the black keys B'. I take advantage of this usual arrangement and construction of organ cases to apply my attachment therein, and in order that there shall be no interference with the keys of my attachment, I preferably arrange the stop keys *c*, near the outer ends of the name or stop board C. In order to apply my invention to the organ in this manner, the lip, *d* is provided with a series of slots *e* extending longitudinally of the lip, and I have shown in the present case four slots *e e' e² e³* and these can be made by simply mortising or otherwise removing the material in the lip, and I have found as the simplest and cheapest way of accomplishing this result to simply saw the openings or kerfs through the lip. The under side of this lip is recessed as shown at *f*, and fitted to slide in this recess is a frame or carriage having the side pieces F, F', united by suitable cross pieces as F², F³. Mounted in this carriage are the levers or bars G, G' there being two sets, one for the bass keys, and the other for the treble keys of the organ. These levers or bars are provided with one or more projections *g* on their under sides and I have shown some of the levers G, as provided with one projection and some with two or more, depending somewhat upon the arrangement of the organ. If for instance, the organ is provided with a coupler stop, there need be but one projection on the bass levers or bars, as the other bass keys can be operated through the medium of the coupler stop. If, however, the organ is not provided with a coupler stop, or it is not desired to use this stop, I may provide the bass keys with two or more projections.

The treble levers are each provided with three projections *g'* on their under side, and these are arranged on the different levers in

proper order so that each lever will operate the proper keys to sound one or the other of the chords, as the tonic dominant and subdominant. In some instances, however, I provide four sets of levers or bars, so that the supertonic chord can be played, and it is apparent to those skilled in the art that the chords can be extended to any desired extent by simply increasing the number of levers, and arranging their projections in the proper relative positions. These sets of levers or bars are shown as mounted in the carriage and supported upon pivotal bearings H, H', and it will be noted that both sets are pivoted at their corresponding ends, they being shown as pivoted at the right hand ends, and this I find to be an advantage, especially in connection with the bass levers, in that it allows a more extended movement of the levers at their points of contact with the keys, so that the keys are forcibly and completely depressed with the least movement of the levers. The levers are provided on their upper sides with suitable heads or finger keys I, and these may be separate keys or heads secured to the levers, or may be formed integral therewith, and I preferably arrange the keys of both the bass and treble in the order shown in the drawings; that is to say, the groups being similarly arranged on both sides of the central portion, but in reverse order so that the corresponding finger, of each hand of the performer is used to make any complete chord, as for instance, the first finger of one hand will be placed upon the key I, and the similar finger of the other hand on the key I of the other group, and both being depressed simultaneously, a proper chord will be produced, including the bass and treble notes. It will be understood, however, that I do not confine myself to this arrangement, as other arrangements may be adopted to suit the tastes and desires of the operator.

In order that music can be played in the various keys in which it is written, I make the carriage adjustable transversely of the keys of the instrument, so that the projections on the under side of the levers will be over the proper notes. To do this I provide notches J in the edge of the lip $\mathcal{L}$, and the carriage is provided with a suitable engaging device, as the spring clip j , which is secured to one of the levers G, engaging with the notch corresponding to the key in which the music is to be played, and these notches may be provided with suitable indicating marks to designate the key of the music.

While it is possible to move the carriage containing the levers by means of the projecting finger keys, as this would be liable to bend or derange them, I preferably supply other means by which the carriage can be slid along to the desired position, and I have shown pins L, projecting above the lip, and secured to one or two of the levers G, near their pivotal points, and these are thus in such position that the spring clip can be dis-

engaged from the notch with one finger of the hand, and the carriage moved by means of one or two other fingers of the hand.

In order to prevent the levers being thrown upward when the attachment is not in use by the force of the keys, I provide retaining buttons K, which are secured to the top of the attachment, and when the attachment is in use, they can be arranged longitudinally of the slots or openings and parallel with the levers, as shown in dotted lines, but when the attachment is not in use, the buttons may be arranged transversely of the levers. These buttons are preferably covered with felt on their under side, so as to prevent rattling of the levers, and interference with the music, and it will be seen that they do not in any way interfere with the adjustment of the levers for playing music in different keys. Sometimes, however, it may be preferable to use only one button K, or to dispense entirely therewith, as the carriage can be drawn to one side so that the levers G' will extend into the recessed portion $\mathcal{L}^2$ of the lip, and this portion will prevent the treble levers from rising while the bass levers will be held by a corresponding lip on the other end. For this purpose the ends of the levers are cut away as shown at g^2 , so that their extremities will slide under the recessed portion $\mathcal{L}^2$ at each end. By my arrangement, that is in utilizing the projecting lip of the name or stop board for the reception of the levers, I am enabled to dispense with any springs to restore them or hold them in their normal position, as the levers are arranged so that their projections normally rest upon the rear portion of the keys B', B², of the instrument, and it will be observed that they are at the rear of the normally exposed portions of the keys, so that they do not in any way interfere with the usual operation thereof, and the springs or other devices which normally raise the ordinary keys of the instrument, and hold them in position, will also sustain the levers.

In order that there shall be no noise from contact between the keys of the instrument and the levers and to prevent injury, it may be desirable to either cover the projections on the levers with felt or similar elastic material, or to cover the tops of the keys where the projections impinge upon.

From the above construction the operation of the device will be readily understood by those skilled in the art, and it need not be specifically set forth, and it will be observed that I provide an exceedingly cheap, and simple attachment which can be applied to a portion of the ordinary organ, which is unoccupied by other mechanism, and which in no way interferes with the ordinary mechanism of the organ. The finger keys or knobs for operating the levers are arranged in a convenient position to be used either with or without the coupling stops, and the whole of the ordinary bank of finger keys is exposed so that a more skillful player or other person

can use the keys without interference from my attachment.

The parts of the attachment are exceedingly simple, all being easily made and put together, and as before intimated the lip may be arranged to receive the levers and carriage by exceedingly simple operations, which add little or no expense to its construction.

While I have thus described and illustrated what I consider to be the preferred embodiment of my invention, it will be understood that the various details of construction and arrangement may be varied by those skilled in the art without departing from the spirit of my invention, and I do not, therefore, limit myself to the precise construction shown.

What I claim is—

1. An attachment for musical instruments comprising the combination with the projecting lip of the name or stop board, of a series of levers having projections on their under sides and arranged to bear upon the keys of the instrument, substantially as described.

2. An attachment for musical instruments comprising the combination with the projecting lip of the name or stop board having openings formed therein, and having a recess on its under side, of a carriage fitting said recess, and levers mounted in the carriage and fitting the openings in the projecting lip, substantially as described.

3. An attachment for musical instruments comprising the combination with the projecting lip of the name or stop board having longitudinal openings therein, and an extended recess on its under side, of a carriage fitting the recess and adapted to slide longitudinally therein, two sets of levers mounted in the carriage and fitting the openings in the lip, the levers being cut away at their outer ends to

allow them to be slid into the recessed part of the lip to prevent their rising, substantially as described.

4. The combination in an attachment for musical instruments, with a projecting lip of the name or stop board having openings there-through, and a recess in its under side, of a carriage fitting the recess and sliding therein, two sets of levers mounted in the carriage, and pivoted at their corresponding ends, the levers being provided with projections normally resting on the keys of the instrument in rear of their normally exposed surfaces, substantially as described.

5. The combination in an attachment for musical instruments with the lip of the name or stop board having openings therethrough, and a recess in its under side, of a carriage sliding in said recess, levers pivotally mounted in the carriage, and a spring clip attached to one of the levers and the pins projecting from the lever or levers of one set near their pivotal point, substantially as described.

6. The combination in an organ, of the name or stop board having the stops arranged at its outer ends, a projecting lip having a series of levers mounted therein provided with projections on their under sides, and the finger keys on their upper sides, and arranged near the center of the lip, the lever being arranged at the rear of the ordinary exposed portions of the keys of the organ, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN W. LONG.

Witnesses:

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