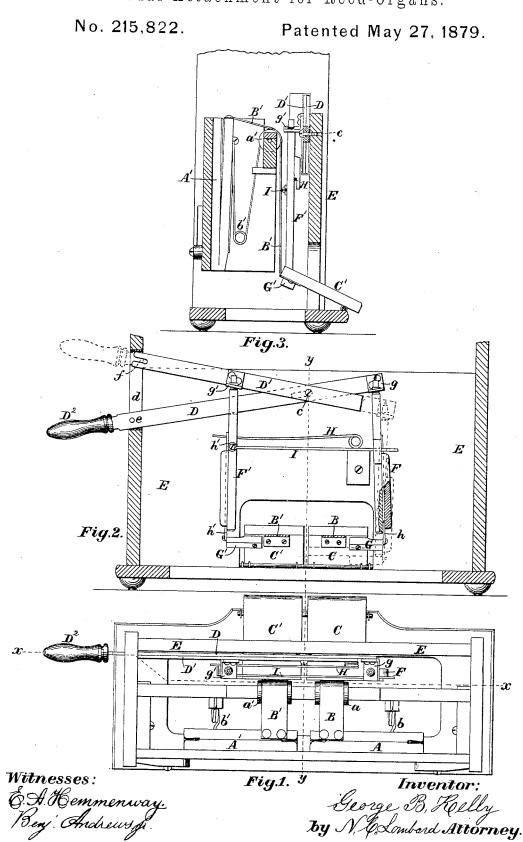
G. B. KELLY. Pedal Attachment for Reed-Organs.



## UNITED STATES PATENT OFFICE.

GEORGE B. KELLY, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO MASON & HAMLIN, OF SAME PLACE.

## IMPROVEMENT IN PEDAL ATTACHMENTS FOR REED-ORGANS.

Specification forming part of Letters Patent No. 215,822, dated May 27, 1879; application filed April 17, 1879.

To all whom it may concern:

Be it known that I, George B. Kelly, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Musical Instruments, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to an attachment to be applied to the ordinary cabinet or parlor organs, whereby the bellows may be operated by a second party when, for any reason, the player desires to be relieved from the labor of operating the bellows through the medium of the pedals, and at the same time said attachment may be readily disconnected, so as to present no impediment to operating the bellows by the pedals; and it consists, first, in the combination, with the pedals for operating the bellows, of a lever made in two parts, mounted upon a common pivot, and adapted to be coupled together, so as to be vibrated as one lever, or disconnected by moving one of said parts endwise, and a suitable pitman or connecting-rod extending downward from each of said parts to and pivoted to one of the ped-

It further consists in constructing the pitmen or connecting-rods, through which the hand-lever acts upon the pedals to operate the bellows, each in two parts, connected together by a slip or sliding joint in such a manner that when it is desired to operate the bellows by the feet of the operator acting directly upon the pedals in the usual manner, the lower portion of said connecting-rods will slide freely up and down within or upon the upper portion without affecting the levers, which are used

when operating the bellows by hand.

Figure 1 of the drawings is a plan of so much of an organ as is necessary to illustrate my invention. Fig. 2 is a vertical longitudinal section on line x x on Fig. 1; and Fig. 3 is a vertical transverse section on line y y on Figs. 1 and 2.

A and A' are the two bellows, constructed and arranged in the usual manner, and having secured to their upper ends the straps B and B', respectively, which, after passing over the rolls a and a, have their other ends attached to the rear or inner ends of the pedals | by another party, the lever D is raised to the

C and C', respectively, the bellows being held in a collapsed or closed position, and the inner ends of the treadles C C' being held in an elevated position by the springs b and b', all in a well-known manner.

So far the construction and arrangement of the parts are precisely the same as in common use in the Mason & Hamlin organs.

D and D<sup>1</sup> are two levers, pivoted by a common pin, c, to the inner side of the front board of the organ-casing E, the lever D projecting through a slot, d, cut through the right-hand end of the casing, and has attached to or formed upon its outer end the handle D2, as shown.

The fulcrum-pin c passes through a round hole in the lever D'and through an oblong slot in the lever D in such a manner that the lever D may be moved endwise upon its fulcrum-pin e, to cause the pin e, set in the lever D, to engage with the open slot f, formed in the end of the lever  $D^1$ , by which action the two levers D and D1 are secured together so as to operate as one lever.

The inner end of the lever D has attached thereto the lug or bracket g, to which is connected the upper end of the rigid rod F, which extends downward therefrom, and has fitted to a suitable bearing formed therein, so as to slide freely up and down therein, the wire or rod h, the lever end of which is pivoted to the lug G, secured to the inner or movable end of the pedal C, as shown. The lever  $D^1$  has a similar bracket, g', secured

thereto between its fulcrum-pin and its slotted end, to which is connected the rod F', similarly fitted to the wire or rod h', connected in like manner to the lug G', secured to the pedal C',

H is a spring, which serves to raise the rod F' and lever D' when the levers D and D' are uncoupled, the weight of the long arm of the lever D serving to raise the rod F at the same time, so that the lower ends of F and F' shall be raised sufficiently far above the pedals to present no obstruction to the operating of the bellows by the feet of the player in the ordinary manner.

If it is desired to have the bellows operated

upper end of the slot d, and is then pushed endwise till the pin e engages with the slot f in the outer end of the lever D, as shown in dotted lines in Fig. 2, when, if the lever D is moved up and down in the slot d, the pedals will be alternately moved up and down, and, acting through the straps B and B', will cause the bellows A and A' to be alternately expanded and collapsed in precisely the same manner as when operated directly by the feet of the player.

It is a wire connecting the two push-rods F and F', to prevent them from being rotated about their pivotal connections to the brackets g

and g'.

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

1. As a means of operating the bellows of an organ, a pair of levers mounted upon a common fulcrum or pivot pin and adapted to be coupled together to form one lever by moving one of said levers endwise, substantially as and

for the purposes described.

2. The combination of the lever D, provided with the haudle  $D^2$  and pin e, and adapted to be moved endwise upon its fulcrum-pin, as set forth, the lever  $D^1$ , provided with the openended slot f, and mounted upon and adapted to be vibrated about a fulcrum-pin common to it and the lever D, and the two push-rods F and F', connecting, respectively, the levers D

and D<sup>1</sup> with the pedals C and C', substantially as and for the purposes described.

3. In combination with the pedals C and C' and suitable means of connecting them to the bellows of a musical instrument, a lever pivoted to the casing of the instrument and projecting through the side of said casing, and two connecting-rods attached thereto upon opposite sides of its fulcrum, each made in two parts, adapted to slide one upon or within the other, and connected at its other end to one of said pedals, substantially as and for the purposes described.

4. In combination with the bellows of an organ or other musical instrument and pedals for operating them, the levers D and D¹, mounted upon a common fulcrum-pin, and adapted to be coupled together or disconnected by moving one of said levers endwise, as set forth, and the two connecting-rods F h and F'h', each made in two parts, adapted to slide one upon or within the other, substantially as and for the purposes described.

Executed at Boston, Massachusetts, this 12th

day of April, A. D. 1879.

GEORGE B. KELLY.

Witnesses:

N. C. LOMBARD, E. A. HEMMENWAY.