

W. H. CLARKE.
Organ Stop-Action.

No. 199,795.

Patented Jan. 29, 1878.

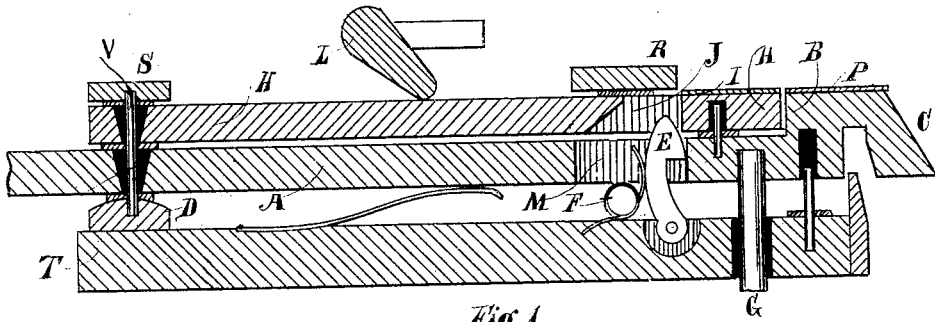


Fig 1

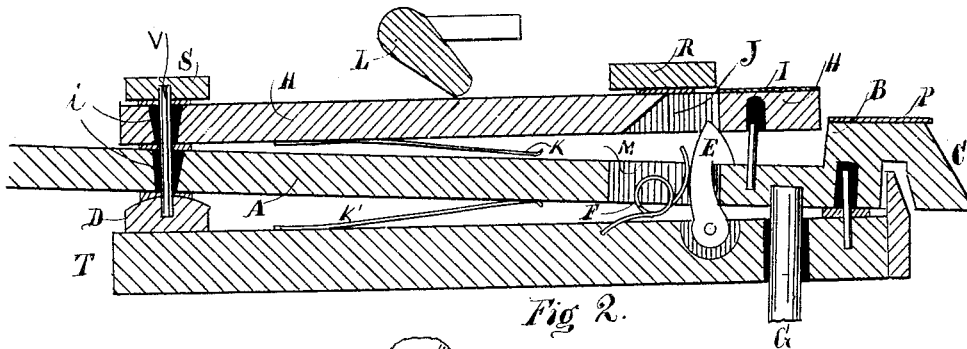


Fig 2.

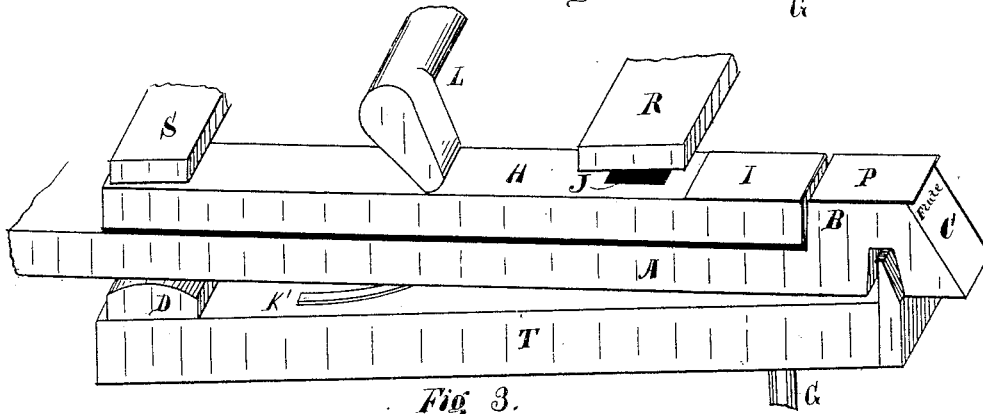


Fig 3.

WITNESSES;

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UNITED STATES PATENT OFFICE.

WILLIAM H. CLARKE, OF INDIANAPOLIS, INDIANA.

IMPROVEMENT IN ORGAN STOP-ACTIONS.

Specification forming part of Letters Patent No. **199,795**, dated January 29, 1878; application filed October 31, 1877.

To all whom it may concern:

Be it known that I, WILLIAM HORATIO CLARKE, of Indianapolis, county of Marion, State of Indiana, have invented a new and useful Improvement in Stop or Register Action as applied to Pipe or Reed Organs, of which the following is a description, reference being had to the accompanying drawings.

The object of my invention is to provide a facile method of bringing on or off, or bringing into operation, or withholding from operation, as may be desired, the musical or mechanical stops of either a pipe or reed organ.

My invention consists of the construction, arrangement, and combination of parts, as will be hereinafter fully set forth and described.

Figure 1 represents a longitudinal sectional view of two levers, showing their relative position when the stop is not on or not in operation. Fig. 2 represents a longitudinal sectional view of the two levers, and shows their relative position when the stop is on or in operation. Fig. 3 is a perspective view of the two levers, and shows the relative position of the levers when the stop is brought into operation by a cam, and also when the negative or off lever is brought into position to release the positive lever.

T represents the lever-frame. A is the longer and lower lever. H is the upper or shorter lever. These levers are pivoted to one common fulcrum-pin, V. The base or fulcrum D, in which the fulcrum-pin V is secured, is attached to the lever-frame T, as shown.

The pin V is inserted in this fulcrum-base D, and extends upward through the conical holes *i* in the levers A H, and is held secure at the top by the heel-rail S, thus keeping both levers H and A in their proper position on the fulcrum-pin. The lever A, or positive lever, extends from or beyond the fulcrum-pin V toward the operator, and has its extreme front B elevated in height sufficient to allow the upper or negative lever H to be flush with it at its upper face, as shown in the drawings. The end of the lever A nearest the operator is provided with a beveled face, C, which has a slope downward to the extreme lower front corner of the lever, as shown, on which the

name of the stop is inscribed; or the name may be inscribed on the upper face P, if desired. The hook E is pivoted to the lever-frame T, and a spring, F, is also secured to the same frame at the rear of the hook, and is designed to hold the hook E forward, so that when the lever A is depressed at P the hook E is forced forward by the spring F, and holds it down, as shown in Fig. 2. The stop is thus held open, or, in other words, is in operation, by any ordinary connections with the sticker rod or lever G and stops in reed-organs, or by connections not shown, which are attached to the rear end of the lever A, back of the fulcrum-pin V, in pipe-organs.

In order to release the positive lever A and withhold the stop from operation, the upper or negative lever H is depressed at I. This depression of the lever causes the front edge of the slot J (which is formed in the lever H, as shown,) to press on the beveled head of the hook E, thus forcing it back, so as to release the lever A and allow them both to rise up to an even surface, the thumper-bar R keeping them in position. The spring K between the upper and lower levers keeps the negative lever H always up against the thumper-bar R, except when it is depressed for the purpose of releasing the hook E from the positive lever A. The spring K' between the lever A and lever-frame T is designed to force the positive lever up against the negative lever H when pressure is removed from the end P, and the hook E is forced back or disconnected.

In order to produce a crescendo or diminuendo effect, or for bringing on or taking off any or all of the stops, either successively or simultaneously, by means of a crescendo-pedal, composition pedals, combination or knee stops, a cam, L, is placed on a shaft over the upper lever, with any ordinary connections with the pedals, which, when pressed on the upper or negative lever H (shown in Fig. 3) will bring on the stop, and while in this position the hook E is released from the lever A.

When the cam L is in the position shown in Figs. 1 and 2 no pressure downward is applied to the negative lever H, and the stop is off or withdrawn from operation.

What I claim as new, and wish to secure by Letters Patent, is—

1. The combination of the levers A and H, the hook E, and spring F, all constructed to operate as specified, with the cam L, substantially as and for the purpose described.

2. The lever H, pivoted to the fulcrum-pin V, and provided with a recess or slot, J, in combination with hook E and slotted lever A, substantially as shown, and for the purposes specified.

3. In reed or pipe organs, the combination of the levers A and H, the hook E, spring F, and lever-frame T, all constructed to operate as specified, with the sticker rod or lever G, substantially as and for the purposes specified.

4. The lever A, pivoted on the fulcrum-pin V, and formed with a raised portion, B, at the front end, in combination with the hook E and spring F, attached to the frame T, in the manner and for the purposes specified.

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

WILLIAM H. CLARKE.

Witnesses:

G. F. ADAMS,

E. O. FRINK.