

G. R. ELLIS.  
Organ-Stop Action.

No. 203,901.

Patented May 21, 1878.

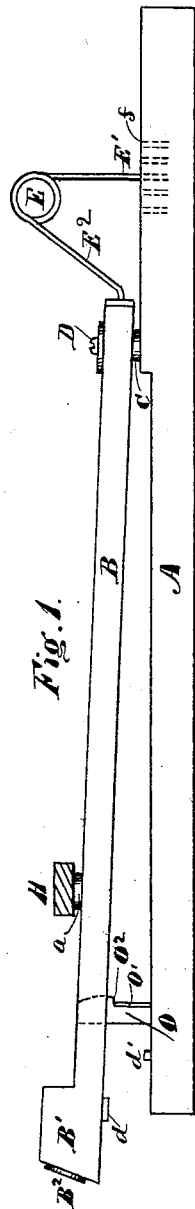


Fig. 1.

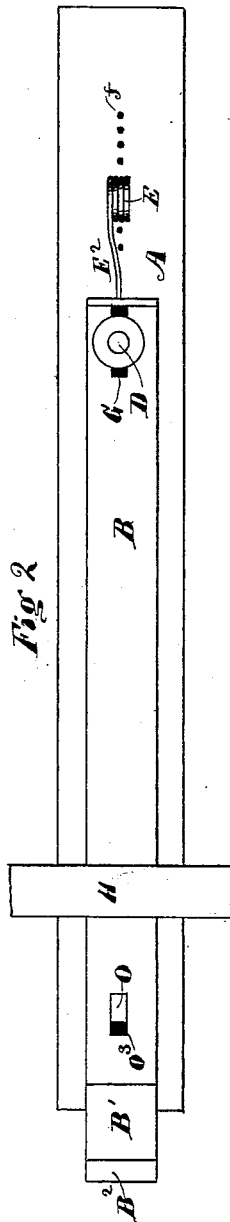


Fig. 2.

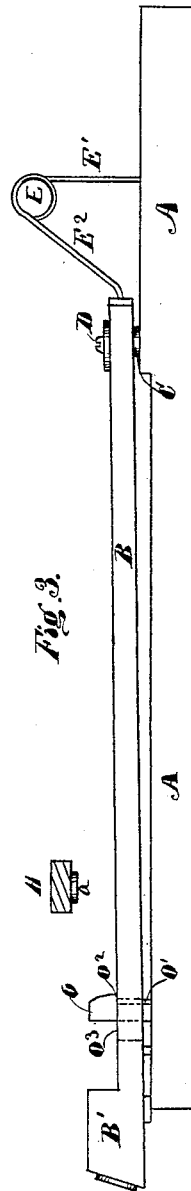


Fig. 3.

Witnesses;  
Ed. Strick  
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Inventor:  
George R. Ellis  
Per Ed. Strick his Attorney

# UNITED STATES PATENT OFFICE.

GEORGE R. ELLIS, OF INDIANAPOLIS, INDIANA.

## IMPROVEMENT IN ORGAN-STOP ACTIONS.

Specification forming part of Letters Patent No. **203,901**, dated May 21, 1878; application filed February 28, 1878.

*To all whom it may concern:*

Be it known that I, GEORGE R. ELLIS, of Indianapolis, in the county of Marion and State of Indiana, have invented a new and useful Improvement in Stop-Actions as applied to Pipe and Reed Organs, of which the following is a specification, reference being had to the accompanying drawing.

My invention relates to an improvement on the devices shown in Wm. H. Clark's patent, granted January 29, 1878, and numbered 199,795, for an improvement in organ-stop action.

The object of my invention is to provide a novel method of operating a lever whereby the musical or mechanical stops are brought into operation or released from operation, as may be desired.

My invention consists of the new construction, arrangement, and combination of elements which will be hereinafter fully set forth and described.

In the accompanying drawing, in which like letters of reference indicate like parts, Figure 1 is a side view of the lever and lever-frame, showing the lever elevated and released from its fastening. Fig. 2 is a plan view of the same; and Fig. 3 is a side elevation, showing the lever forced down and held by its fastening.

A represents the lever-frame, and B the lever. The lever may be of the form and construction shown in the drawing, and is provided with a slot, G, at its rear end, to admit the fulcrum-pin D; and immediately back of the front elevated part B<sup>1</sup> is another slot, O<sup>3</sup>. The rear end of the lever rests on the fulcrum-cushion C—that is, between the lever and the frame A—with the pin D projecting upward in said slot G.

Near the front end of the lever-frame is rigidly secured a vertical standard, O, having a hook, O<sup>2</sup>, and the part under the hook O<sup>2</sup> may be provided with a cushion, O<sup>1</sup>. This vertical hook-standard O projects through the slot O<sup>3</sup> of the lever B, as shown. At the rear end of the lever B the end E<sup>2</sup> of the spring E is attached.

The other end, E<sup>1</sup>, is secured to the frame A. This arrangement, however, of the spring may be varied, and different forms of springs used, the object being to obtain an end-pressure on the lever B of sufficient power to cause the lever to move forward under the hook O<sup>2</sup> of the vertical standard O, where it shall be retained until released, as shown in Fig. 3, and the stop is thus held open, or in operation, by any of the ordinary connections with a sticker or tracker rod in reed or pipe organs. In order to release the lever B and withdraw the stop from operation, an end-pressure is applied to the end B<sup>2</sup> of the lever by the knuckles or fingers of the operator. The lever is then forced back until released from the vertical hook O, and the lever is allowed to rise, as shown in Fig. 1. A spring may be applied between the lever and frame, for the purpose of forcing the lever up when released from the hook O<sup>2</sup>; but in practice the sticker or tracker rod operating mechanism (not shown) holds it up.

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

1. The lever B, with a fulcrum-pin slot, G, at one end, and a slot, O<sup>3</sup>, near the other end, in combination with the stationary stud or hook O and spring E, in the manner and for the purpose substantially as shown and described.

2. In an organ-stop action, the lever B, with an adjustment-slot, G, operating on a fulcrum-pin, thereby allowing an end motion to the lever, and permitting the lever to be moved forward when depressed, and retained in position by a stationary stop or hook standard, O, and released by an end-pressure on the lever, in the manner and for the purpose substantially as shown and described.

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

GEORGE R. ELLIS.

Witnesses:

E. O. FRINK,  
S. O. FRINK.