J. A. SMITH.
Organ Action.

No. 196,490. Patented Oct. 23, 1877.

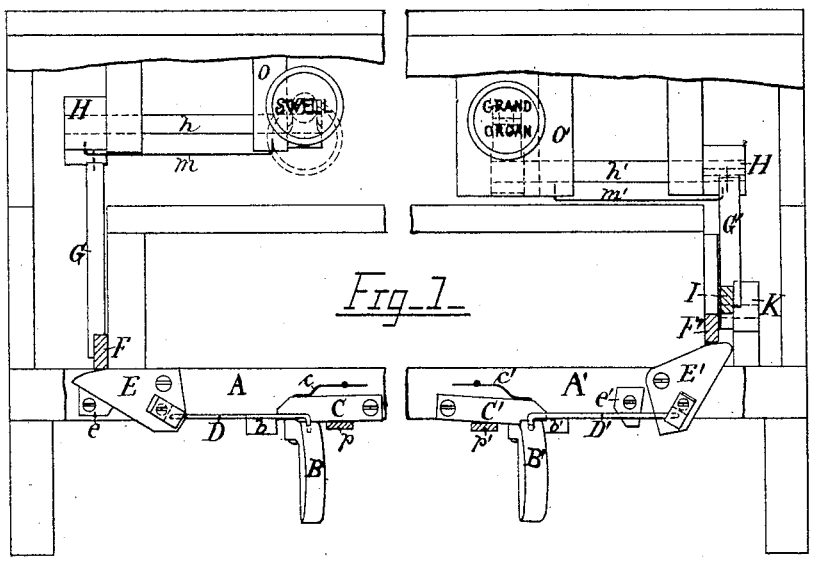

Fig. 1.

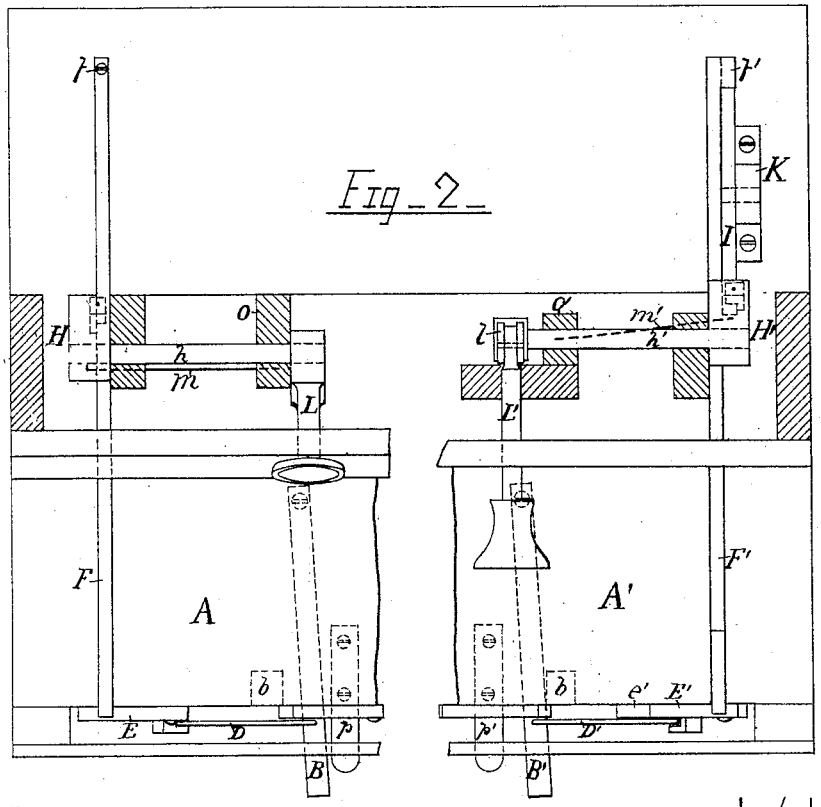

Fig. 2.

WITNESSES

M. L. Babcock

R. H. Kinney.

INVENTOR

John A. Smith

by Jno. K. Wallace

atty.

UNITED STATES PATENT OFFICE.

JOHN A. SMITH, OF NORTH EAST, PENNSYLVANIA.

IMPROVEMENT IN ORGAN-ACTIONS.

Specification forming part of Letters Patent No. **196,490**, dated October 23, 1877; application filed October 30, 1875.

To all whom it may concern:

Be it known that I, JOHN A. SMITH, of North East, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Organ-Actions; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawing, and to the letters of reference marked thereon, which form a part of this specification.

The object of my invention is to indicate, by a stop register or knob placed in the usual place, the condition of the "swell" and "grand-organ" stop-valves, when the same are operated by a knee or pedal lever, thus bringing directly before the operator's eye the condition or position of those parts, the same as all other stops or mutes are indicated.

By my drawings I show my invention applied to an oscillating stop-register, and also to a reciprocating stop knob or register, and I show two different arrangements of levers, each a modification of the other, for accomplishing the result.

In the accompanying drawing my invention is shown by two figures, as follows:

Figure 1 is an elevation or direct front view of the parts. Fig. 2 is a plan view of the same. The right of each figure shows my invention applied to a reciprocating, and the left to an oscillating, stop-register.

B and B′ are the knee-levers, of which B operates the stop-register marked "swell," and B′ that marked "grand organ," the registers for which are seen on the name-board. The knee-levers operate in the same way as usual. To communicate motion from them to the registers placed in the name-board or other usual place, I use the following arrangement of parts: Beginning at the knee-levers, there exists in most organs, and especially in those made under patents granted to me, a system of levers, connecting-rods, &c., reaching to the back part of the organ, for operating the swell and full organ. These parts are shown in the drawing, as follows: connecting-rods D and D′, tumblers E and E′, main levers F and F′. Now, if these parts do not exist in the organ, they or their equivalents must be supplied. At a convenient place on the main levers F or F′, I attach a kind of tracker-pin, G or G′, which operates upon the arm H or H′ on a rock-shaft, *h* or *h′*, which is placed back of the name-board, or back of the board upon which the registers are to be displayed.

When the register oscillates, as does L, Fig. 2, it is attached to the rock-shaft *h;* but when it reciprocates, as does L′, a connecting-arm, *l*, is used. For throwing the parts back in position when the knee-levers are released, I use the spring *m* or *m′*.

If the actuating-lever to which the tracker-pin G or G′ connects has not sufficient sweep or movement, or if, at the point where connection is desirable, it moves in the wrong direction, an auxiliary lever, I, can be used, by which the necessary amount of sweep, or the proper direction of motion, can be obtained.

What I claim as new is—

In combination with the levers B, the rods D, tumbler E, levers F and H, and rock-shaft *h*, secured to the register L or L′, as and for the purposes mentioned.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JOHN A. SMITH.

Witnesses:

JNO. K. HALLOCK,

P. C. HEYDRICK.