

(No Model.)

J. W. TRAINER.  
REED ORGAN STOP ACTION.

No. 251,002.

Patented Dec. 13, 1881.

*Fig. 1*

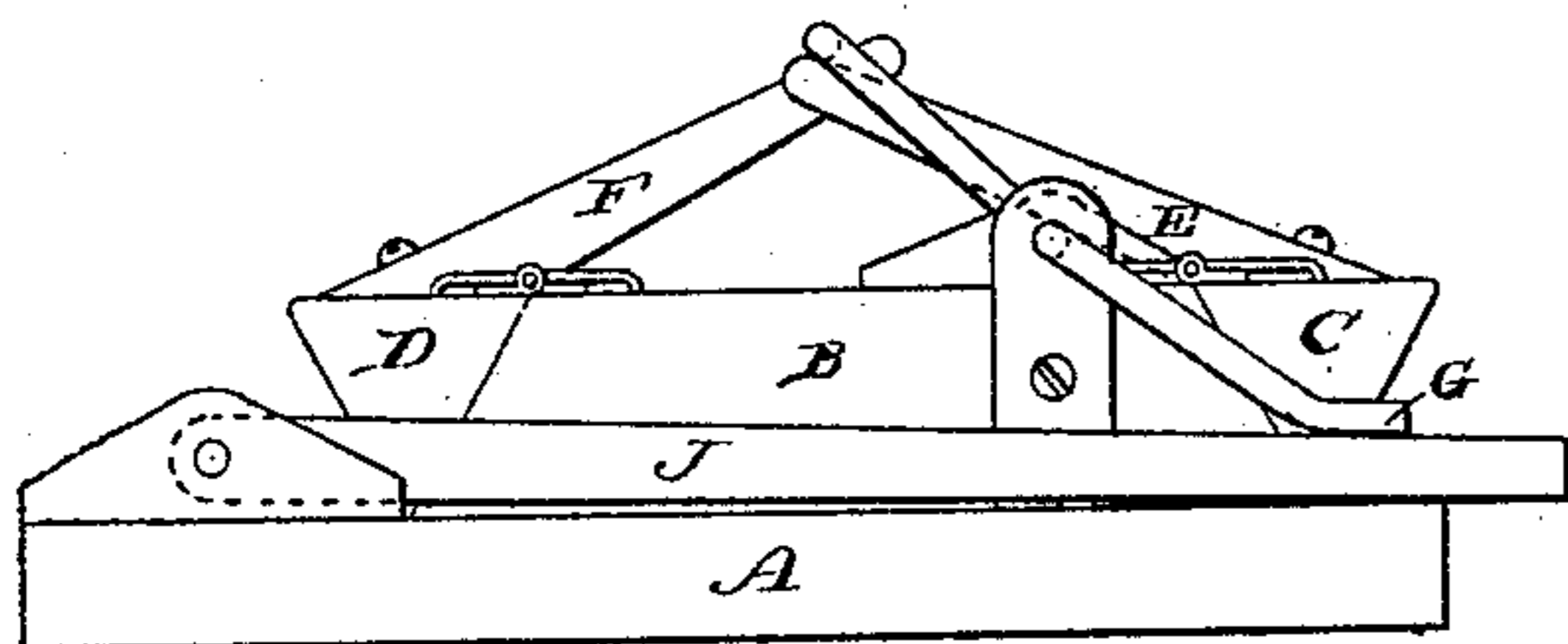
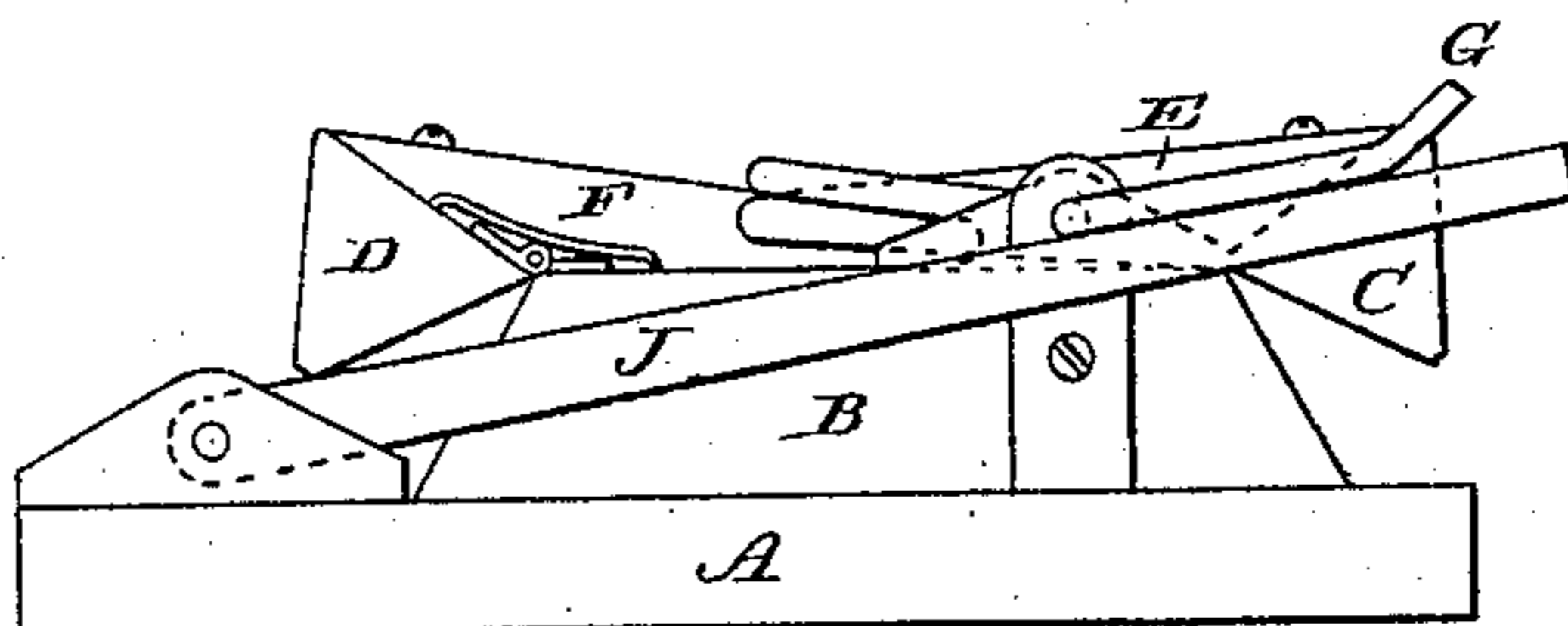
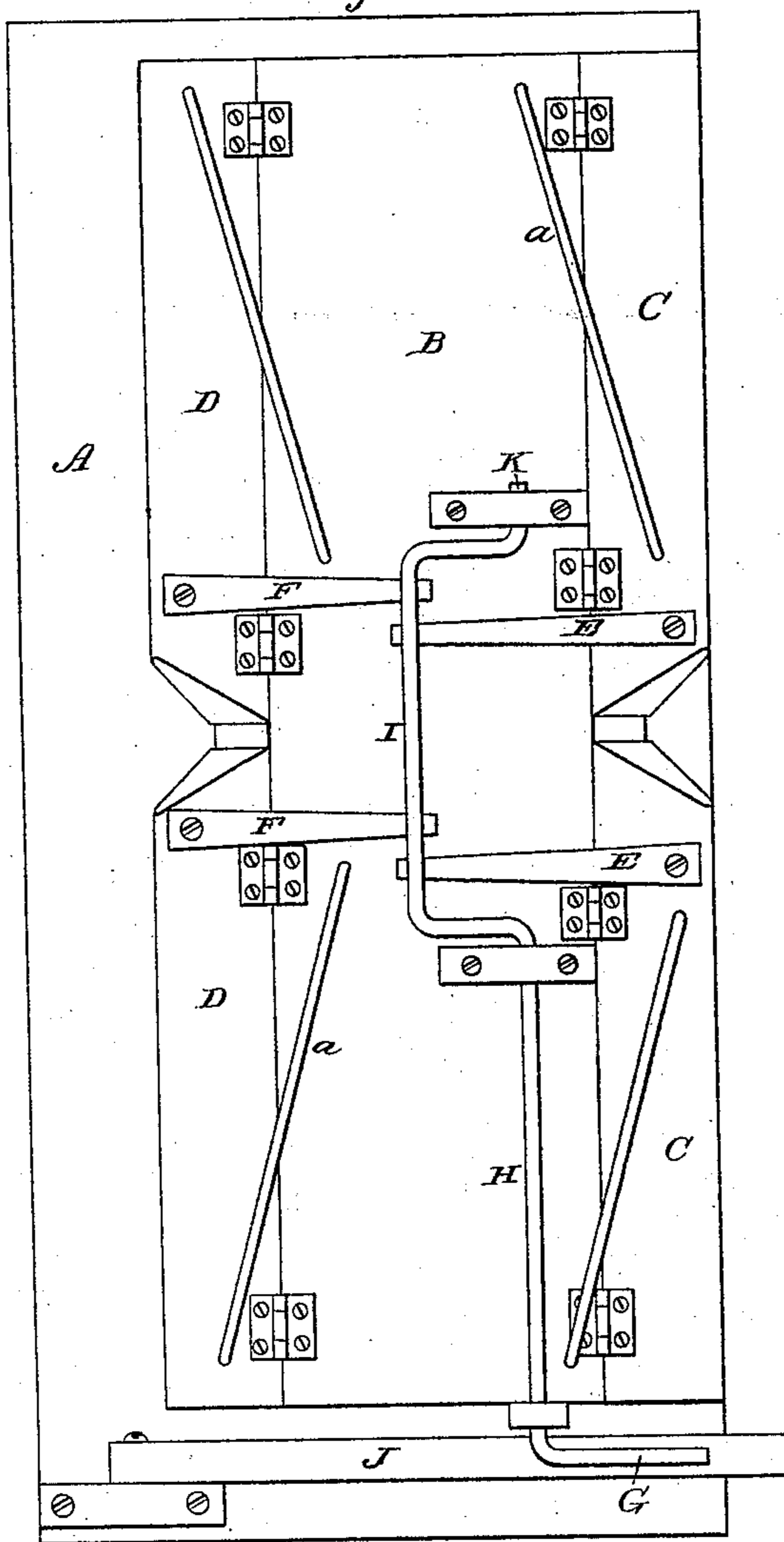


Fig. 2



*Fig. 3*



*Witnesses:*

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# UNITED STATES PATENT OFFICE.

JOHN W. TRAINER, OF FORT WAYNE, INDIANA.

## REED-ORGAN STOP-ACTION.

SPECIFICATION forming part of Letters Patent No. 251,002, dated December 13, 1881.

Application filed June 15, 1881. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN W. TRAINER, a citizen of the United States of America, residing at Fort Wayne, in the county of Allen and State of Indiana, have invented certain new and useful Improvements in Reed-Organ Stop-Actions; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to a simple, cheaply-constructed, and very effective device for actuating two or more of the stops of a reed-organ simultaneously.

Figure 1 is an end view of so much of an organ as is necessary to illustrate my invention, the stops being shown closed. Fig. 2 is a similar view, showing the stops open. Fig. 3 is a top or plan view.

In the drawings, A represents the reed-board, or enough thereof to show its relations to the other parts, and B the cell-board. These parts, together with the reeds and cells, may be of any desired character. In the construction shown there are two sets of reeds on the front side and two sets on the rear side, there being also two valves, C C, on the front and two, D D, on the rear.

Each stop is held in place by a spring, a, which also may be of any suitable style. The stops can be opened by any of the ordinary mechanisms adapted to the purpose; but under some circumstances it is desirable to open several or all of the stops at once. This I accomplish by means of the following devices:

E E are inclined arms secured to and projecting upwardly from the front stops, respectively, and F F are similar arms attached to the rear stops.

Upon the cell-board B, between the two sets of stops, there is mounted a peculiarly-shaped lever, represented by G H I K. It is formed preferably of a strong wire bent to have rocking parts H and K, a crank portion, I, and a

crank, G. The crank part I is arranged to bear downward against the arms E E and F F, and it will be seen that if the crank be depressed all of the stops will be simultaneously opened. This lever is operated by means of another lever, J, which may be pivoted, as shown, and may be elevated by any suitable mechanism. When it is elevated it bears against the crank G on the end of the rocking lever and causes the crank I to engage with the arms E and F.

By using the mechanism above described I do away with the complicated devices that have been heretofore employed, and provide a simple but very effective stop-action.

Although I have shown four stops combined with the opening devices I do not confine myself to that number, for it will be readily seen that substantially the same mechanism may be combined with two or more stops, as may be desired.

What I claim is—

1. The combination, with the stop-valves and the cell-board lying between said valves, of the inclined arms attached directly to the valves at points between the ends thereof, and the bent lever mounted directly upon the upper side of the cell-board and provided with the part I, which bears against two or more of the inclined arms simultaneously, substantially as set forth.

2. The combination, with the stop-valves and the inclined arms E, attached to the upper sides of the valves at points between the ends thereof, of the bent lever having the parts H and K, both mounted directly upon the upper side of the cell-board, the swinging crank part I, between the parts H and K, and arranged to bear downward upon the inclined arms E, and the crank-arm G, as and for the purposes set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN W. TRAINER.

Witnesses:

JAMES E. GRAHAM,  
JOSEPH C. WILLIARD.