G. B. KELLY.

REED-ORGAN STOP-ACTIONS.

No. 186,847. Patented Jan. 30, 1877.

FIG. 1.

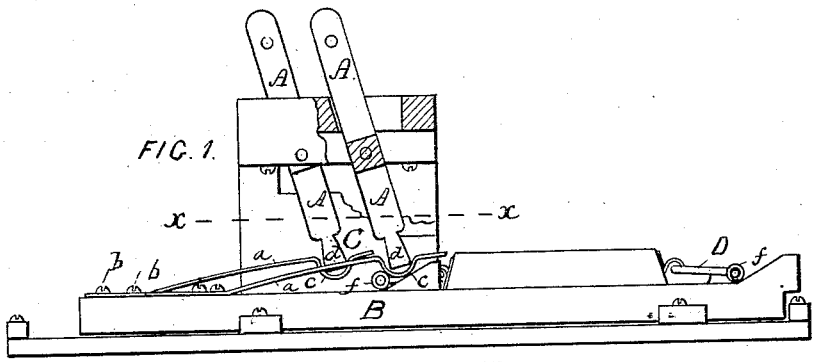


FIG. 2.

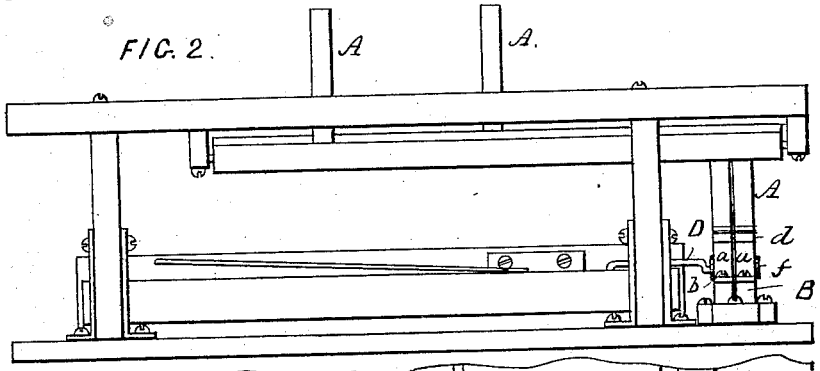


FIG. 3.

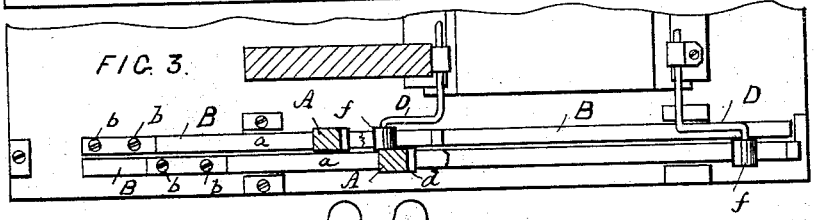


FIG. 4.

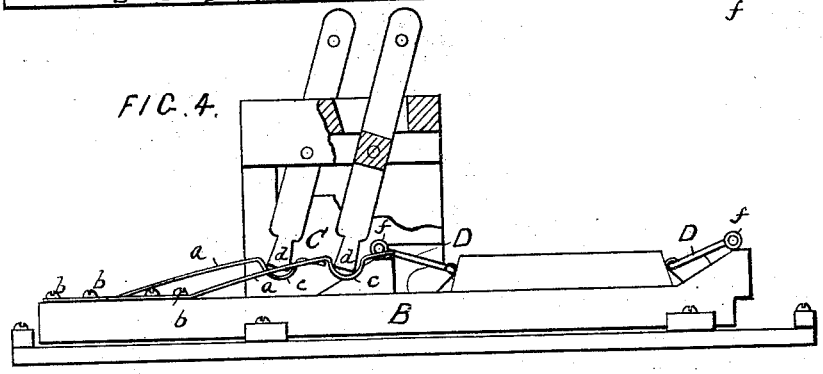
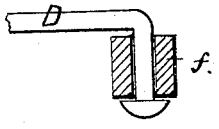


FIG. 5.



WITNESSES.

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UNITED STATES PATENT OFFICE.

GEORGE B. KELLY, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN REED-ORGAN STOP-ACTIONS.

Specification forming part of Letters Patent No. **186,847**, dated January 30, 1877; application filed August 17, 1876.

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 certain new and useful Improvement in Stop-Action for Reed-Organs, of which the following is a specification:

This invention mainly relates to the connection between the stop slide-bar and the operating-lever through which the stop is opened and closed by pulling out and pushing in the stop knob or handle. Heretofore this connection has been made by pivoting the lever directly to the slide, and by entering the lever in a notch of the slide, and in all cases the connection has been rigid and unyielding under the movement of the lever and slide to open and close a stop. The present improved connection is yielding and elastic under the movement of the lever and slide; and it is composed of a yielding band or link, which is applied to both lever and slide, all substantially as hereinafter described.

In the accompanying plate of drawings, Figure 1 is an end view or elevation, showing my improved stop-connection with the stop closed; Fig. 2, a side elevation of Fig. 1; Fig. 3, a section on line *x x*, Fig. 1; and Fig. 4, a similar view to Fig. 1, with the stop opened.

In the drawings, A represents a lever, which is connected with a stop knob or handle, and, except as to the present improvement, it is otherwise constructed and arranged as usual; B, the stop slide-bar, constructed and arranged to slide forward and backward, and in one direction to open the stop, and in the other direction to close it; C, my improved connection between lever A and slide-bar B. This connection C is made of a bent spring or yielding metal band, *a*, which, at one end, is suitably fastened by screws *b* to the upper side of the slide-bar B, and near the other end is made with a notch or depression, *c*, to receive the lower end *d* of the lever A, and thereby connect it to the slide-bar B. Between the two connected ends of the band *a* with the lever A and slide-bar B, above described, the band *a* is free to yield and bend under the movement or swing of the lever A, while at the same time, because of the elasticity or spring, it keeps its connection with the lever.

My improved connection C, above described, obviously prevents any bind, either of the slide-bar or of the lever, or of both, in their respective movements to open and close a stop, and in applying a stop-lever to its stop-slide no particular care is necessary, as a simple swing of the lever at any time will bring it into its seat of the connection C.

If desired, the stop-lever A and connection C may be pivoted together; but the construction described is simple, and, in respect to the ease and freedom with which the stop-lever A and connection C can be interlocked, is also much superior.

Through the movement of the bar the stop gate or register opens and closes as usual; but in this invention I provide the register-arm D, on which the slide-bar A works, with a loose roll, *f*, for relieving the friction between the parts, as the slide-bar works forward and backward under said arm in opening and closing the stop.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, with a stop-lever, A, and slide-bar B, of an elastic connection, C, constructed and arranged to operate substantially as described.

2. The frictional roll *f* on register-arm D, in combination with slide-bar B, as and for the purpose specified.

GEO. B. KELLY.

Witnesses:

EDWIN W. BROWN,

GEO. H. EARL.