

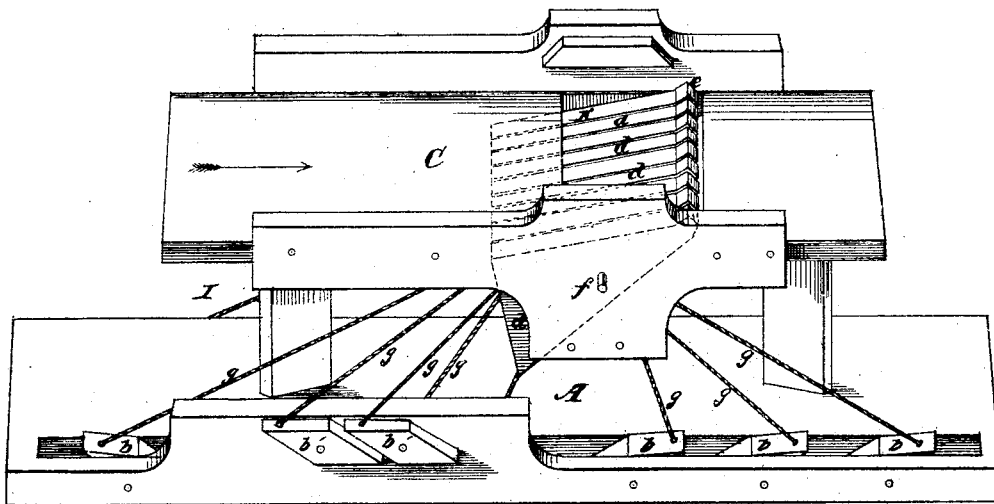
H. DOWNES.

Improvement in Automatic Attachments for Keyed  
Musical Instruments.

No. 115,286.

Patented May 30, 1871.

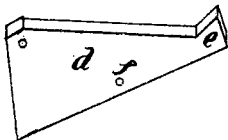
*Fig. 1.*



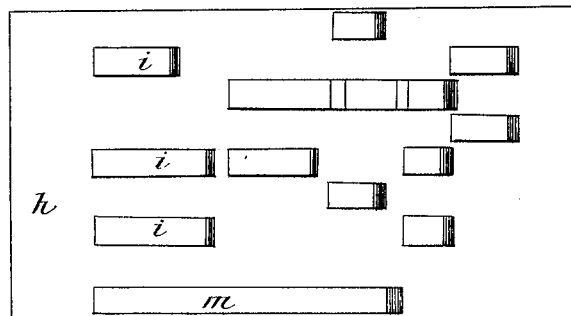
*Fig. 2.*



*Fig. 4*



*Fig. 3.*



Witnesses:

Chas W Thomas.

John Calahan.

Inventor.

Harrison Downes.

# UNITED STATES PATENT OFFICE.

HARRISON DOWNES, OF NEW YORK, N. Y.

## IMPROVEMENT IN AUTOMATIC ATTACHMENTS FOR KEYED MUSICAL INSTRUMENTS.

Specification forming part of Letters Patent No. 115,286, dated May 30, 1871.

*To all whom it may concern:*

Be it known that I, HARRISON DOWNES, of the city of New York, in the county and State of New York, have invented a new and Improved Automatic Attachment for Keyed Musical Instruments; and I do hereby declare that the following is a clear, full, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the drawing accompanying and forming a part of this specification, in which—

Figure 1 is a side view of my automatic attachment. Figs. 2, 3, and 4 are side views of parts detached.

Similar letters of reference indicate like parts.

This invention relates to a new and improved device for producing automatic music upon a melodeon, piano, organ, or other keyed instrument; and consists in an arrangement of raised surfaces corresponding in length and position to the notes of music; also, a set of feelers or elbows, connected to fingers in such a way that when properly attached to the key-board a depression of one of the feelers produces a corresponding depression of the finger, and so of the key. The tune-board being moved over the feelers by a spring or other convenient means, the projections upon its surface strike the feelers at proper intervals, depressing the corresponding keys and producing the tune. This device produces any tune desired, the tune-board only being changed. It is simple, inexpensive, and effectual, dispensing with the services of a skilled performer for public worship or private entertainment, and may be made to reproduce with great accuracy new and difficult pieces.

A is a plate attached to the key-board of the instrument to be operated upon. *b b b'* are levers or buttons, corresponding in number and position to the keys of the instrument, *b b'* being raised to rest upon the black keys

to produce sharps and flats. *c* is a table fastened to the plate A. A set of feelers or elbows, *d d*, working between guide-pins, is fastened to the under side of the table *c* in such a way that their points *e e* rise above the surface of the table. These feelers *d d* are pivoted at *f* and connected to the corresponding buttons or levers *b b* by any suitable substance, as wires or inelastic cords, *g g*. *h* is the tune-plate, with projections *i i* upon its surface corresponding to the notes of a tune. *k* is a feeler, to be connected, by the cord or wire I, to the swell of the instrument. *m* is a raised surface for actuating the feeler *k*.

To operate with this device the plate A is placed upon the key-board, and a tune-board, *h*, being selected, is placed upon the table *c* and caused to move uniformly over the feelers *d d*. The projections *i i*, successively striking the points of the feelers *e e*, depress them, and a corresponding motion is communicated, through the connections *g g*, to the levers or buttons *b b*, and so to the keys of the instrument. The projection *m* on the tune-plate *h*, raising or lowering the feeler *k* in connection with the swell of the instrument, governs the volume of sound.

Having described my invention and its operation, I claim as new and desire to secure by Letters Patent—

1. The feelers or elbows *d d*, in connection with the wires or cords *g g* and the levers or buttons *b b*, and with the plate *h* having the projections *i i*, arranged and operating substantially as and for the purpose set forth.

2. The feeler *k*, in connection with the connecting wire or cord I and the projection *m*, arranged and operating substantially as and for the purpose herein specified.

HARRISON DOWNES.

Witnesses:

CHS. W. THOMAS,  
JOHN CALAHAN.