

JOHN P. PERRY. Improvement in Key-Boards.

No. 115,096.

Patented May 23, 1871.

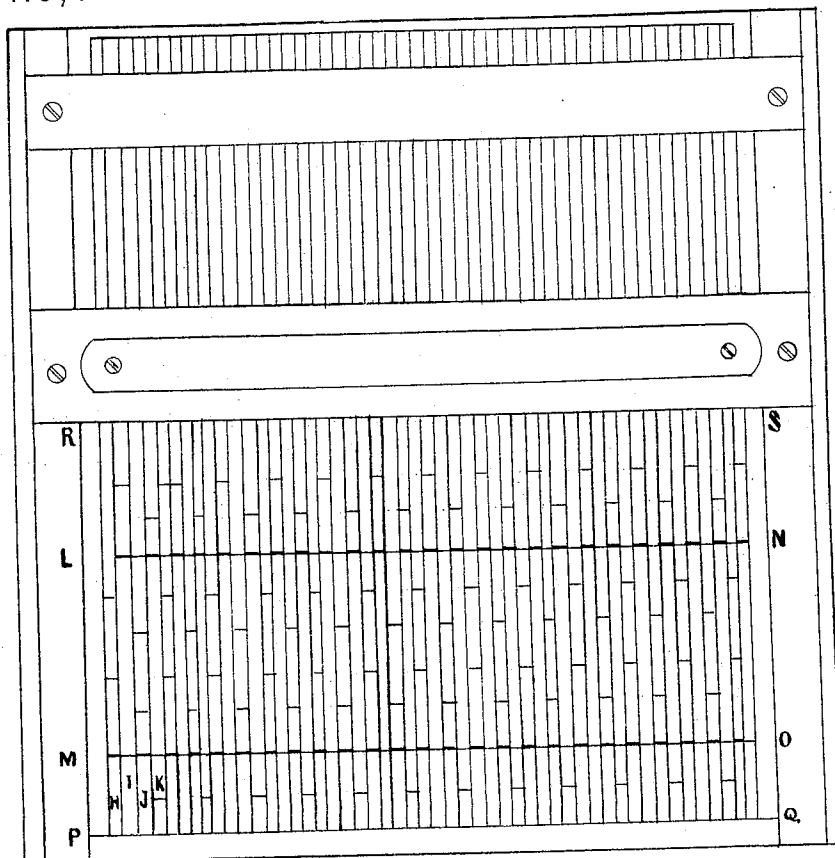


Fig. 1.



Fig. 2.

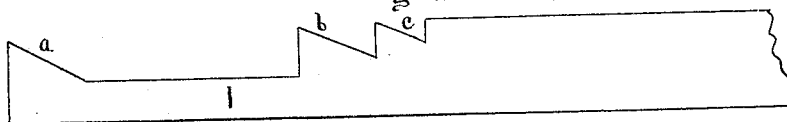


Fig. 3.

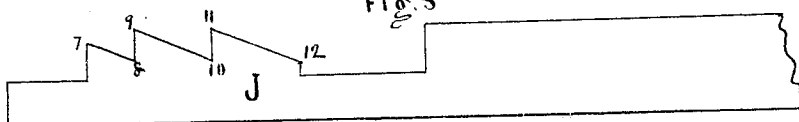


Fig. 4.

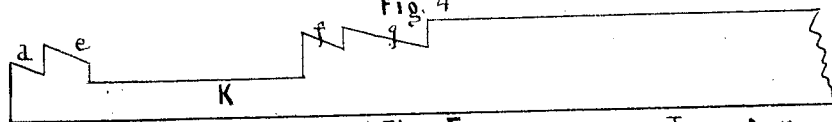


Fig. 5.

Witnesses

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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN KEY-BOARDS.

Specification forming part of Letters Patent No. 115,096, dated May 23, 1871.

To all whom it may concern:

I, JOHN P. PERRY, of Yarmouth Port, county of Barnstable, State of Massachusetts, have invented certain new and useful Key-Board, of which the following is a specification:

The Nature and Object of the Invention.

The nature of my invention consists, first, in extending every key entirely or nearly across its manual. Second, in raising parts of each key at different points above the corresponding part of the two adjacent keys. Third, in placing the centers of all the keys at equal distances from each other, there being twelve keys in each octave, commanding the twelve notes of the chromatic musical scale. Fourth, in placing a second key-board parallel with the first, so arranged that its keys may be operated by the same hand that is operating the first manual. Fifth, in extending the keys of the second key-board under, through, or between the keys of the first key-board, so that they may come to the surface and be operated either before or behind the first manual at pleasure.

The object of the invention is to equalize the action of the hand, so that similar musical effects may be produced by similar actions of the hand; also to give a greater compass and variety of effect to the action of the hand.

Description of the Accompanying Drawing.

Figure 1 is a plan, showing my compound key-board or manual. Figs. 2, 3, 4, and 5 show elevations of the different keys used.

General Description.

The key-board as made by me is divided into a central portion, L M N O, which constitutes the first or principal manual, the finger surface of which consists of the steps 1 2, 3 4, 5 6 of keys made as shown by H, Fig. 2, and steps 7 8, 9 10, 11 12 of the keys made as shown by J, Fig. 4. The parts of the key-board R L N S and M P O Q constitute together a second manual, the finger-surface of which consists of the steps *a b c* of the keys made as shown at I, Fig. 3, and steps *d e f g*, Fig. 5. The shafts of the keys forming the second manual extend under, through or between the keys of the first manual, so that they may not interfere with those keys. The

keys marked H and J form the first manual, while the keys I and K, having finger-surfaces both at R L N S and M P O Q, form the second manual. Any key in the second manual may strike a note an octave below the next key in the first manual; thus I in the second manual may strike a note an octave below the key J in the first manual.

The different kinds of keys are so arranged in relation to each other that every part of the surface of one key is above or below the surface of the adjacent key, as shown by the drawing. The effect of this arrangement is to allow each key to be depressed by the finger if placed on the high part of a step, without danger of pressing the finger on either of the adjacent keys and thus depressing that.

Also each of these steps may be placed horizontally, in which case those in front are lower and those behind are higher, each being above the one before it. Or they may be placed obliquely, the front of each step being higher than the rear part, so as to allow the shaft of the key to lie horizontally, or as nearly so as may be judged convenient.

The arrangement of the manual set forth in the fifth clause of the nature of the invention may be applied to any style of key—for instance, that of the ordinary piano-forte or organ keys.

For convenience in distinguishing by touch the surface of the keys may be ribbed, notched, or dotted in a variety of ways.

The keys of one manual may be connected with or operated for those of another by means of levers, air-tubes, or otherwise, as may be desired.

I claim as my invention—

1. The form and arrangement of the keys H and J constituting the manual L M N O, substantially as described, and for the purpose set forth.

2. The form and arrangement of the keys I and K constituting the double manual R L N S and M P O Q, substantially as described, and for the purpose set forth.

3. The combination and the arrangement of the manual L M N O and the double manual R L N S, M P O Q, substantially as described, and for the purpose set forth.

JOHN P. PERRY.

Witnesses:

FRANK G. PARKER,
JAMES S. CONANT.