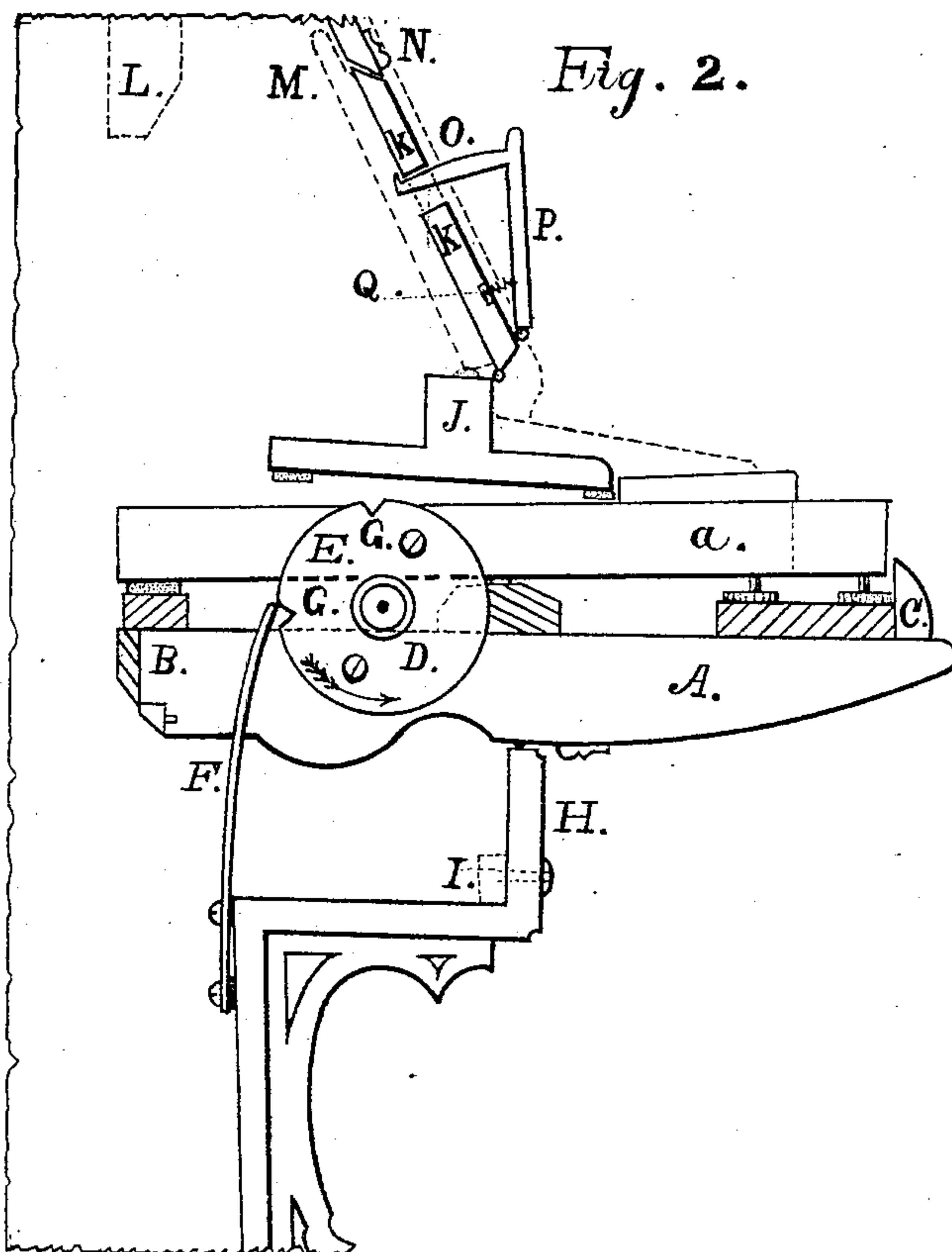
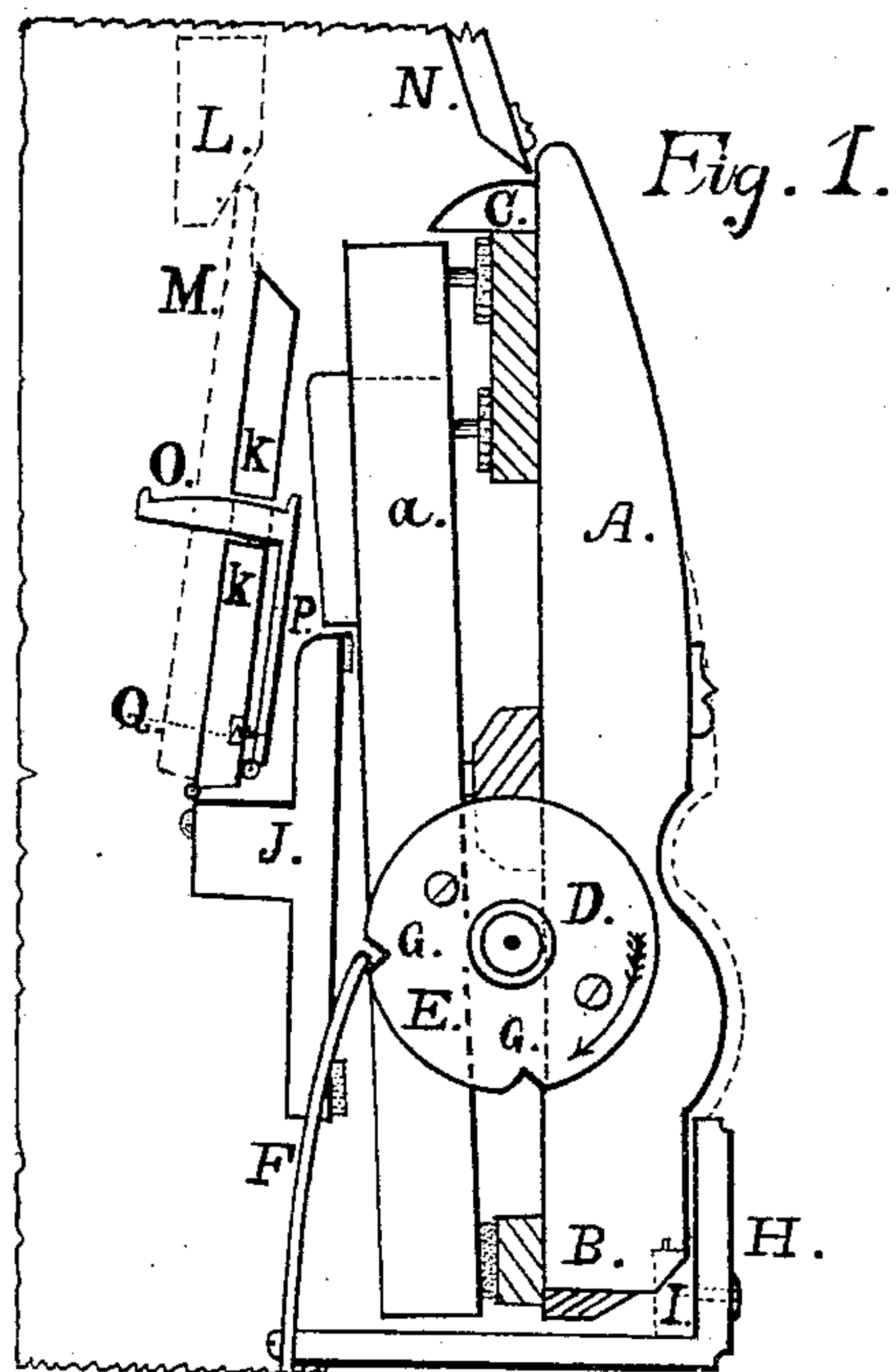


A. H. HASTINGS.
Piano Forte.

No. 232,269.

Patented Sept. 14, 1880.



Witnesses.
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PIANO-FORTE.

SPECIFICATION forming part of Letters Patent No. 232,269, dated September 14, 1880.

Application filed December 30, 1879.

To all whom it may concern:

Be it known that I, AZARIAH HORACE HASTINGS, of the city of New York, in the county and State of New York, have invented a new and useful Improvement in Piano-Fortes, of which the following is a specification.

The object of my invention is to produce an upright piano that will be more portable and occupy less depth of room without diminishing the size of scale or quantity of tone, and still retain a durable and architectural construction of case; and it consists in making the key-board front, panel, and music-rest swing on centers by moving the key-board, and in the arrangement of a center plate, in combination with a brake, to steady the key-board in its movement, and in making the case with a recess or box for the lower part or back of the key-board to swing into, and the arrangement of the lock in said recess, all of which will be hereinafter fully described.

In the accompanying drawings, Figure 1 represents a front section of a piano-case constructed on my plan closed. Fig. 2 represents the same open for use.

a is the key-board; A, the key-bottom, to which the key-frame is screwed. I make the key-bottom in the most durable way possible, and screw an iron rail, B, on the back edge, to balance and keep it from warping, and glue the key-slip C on the front in its place. On each end of this key-bottom I secure the cheeks, to which I screw the center plates, D, which I make round, or of any other shape that is most convenient, except about a quarter of a circle, E. I arrange a brake, F, having a spring-pressure strong enough to hold the key-board in any position by its pressure against the section of circle E, at the ends of which I make notches G G, for the reception of the end of the brake, thus holding the key-board safely in position when closed, as in Fig. 1, and when open, as in Fig. 2.

I construct the case with a recess or box, H, in position to receive the back of the key-board A *a*. To give strength to the case and a more desirable finish, in the front of this recess I secure the lock I.

I make a board, J, to cover the keys, wide enough to serve as a stop-rail at the back of the keys as well as at the front. About the center I thicken up high enough to come in the proper position for the lower edge of the front panel, K K, when open, to which it is centered, allowing it to swing as far in front as the keys. When the front is closed by swinging the key-board on its center, as shown in Fig. 1, the key-board and panel are admitted into the case without coming in contact with the action. At one or both ends of this panel I secure a stop, L, and cross-bar M, so that it cannot go beyond its limit when the piano is opened for use by swinging the key-board down, as shown in Fig. 2. The upper end of this bar comes in contact with the lower side of the upper panel, N, and swings into its place.

The lower end of the cross-bar M is arranged to serve as a stop against the piece to which the panel is centered, thereby holding the panel firmly in its position, as shown in Fig. 2.

I place my music-rest O about the center of the panel K K, and construct it so as to be shut into or through the panel when the piano is closed by moving the key-board. This adjustment I produce by attaching it to a spring or a guide-strip, P, operated by a spring, Q, as shown in the drawings. Lamp-stands, in some cases, may be adjusted in the same manner.

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

1. The center plate, D, in combination with the brake F and key-bottom A, substantially as shown.

2. The center plate, D, provided with notches G G, in combination with the brake F and key-bottom A, as described.

3. The recess or box H, in combination with the back and lower side of the key-bottom A, substantially as specified.

4. The lock I, attached to the recess or box H, in combination with the back and lower side of the key-bottom A, as described and set forth.

5. The key-board A *a* and panel K, hung on centers for adjustment, in combination with stops L and M, arranged to be adjusted in place by moving the key-board A *a*, substantially as described.
6. The music-rest O or lamp-stands, in combination with the key-board A *a*, hung as described, and arranged to be adjusted by moving the key-board A *a*, substantially as shown and described.

AZARIAH HORACE HASTINGS.

Witnesses:

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