F. B. LONG.

PIANO ACTION.

APPLICATION FILED JAN. 28, 1909.

947,644. Patented Jan. 25, 1910. INVENTOR
ErankB.Long

ATTORNEYS

## UNITED STATES PATENT OFFICE.

FRANK B. LONG, OF LOS ANGELES, CALIFORNIA.

## PIANO-ACTION.

947,644.

Specification of Letters Patent. Paten

Patented Jan. 25, 1910.

Application filed January 28, 1909. Serial No. 474,729.

To all whom it may concern:

Be it known that I, Frank B. Long, a citizen of the United States, and a resident of Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Piano-Actions, of which the following is a full, clear, and exact description.

The object of the invention is to provide certain new and useful improvements in piano actions, whereby the action is rendered noiseless by quieting the rebound of the hammer and deadening the fall of the key and the vibration thereof.

For the purpose mentioned, the hammer rail, key board, key or other member of the piano action, is provided on one face with a recess into which is fitted and secured a piece of cork projecting beyond the face of the member, and in the case of the hammer rail or key frame, a strip of felt is secured to the rail and the frame, to overlie the projecting portion of the piece of cork.

A practical embodiment of the invention is represented in the accompanying drawing forming a part of this specification, in which the figure is a sectional side elevation of a piano action provided with the improvement.

The hammer rest rail A, is provided in its active face with a recess A', into which is fitted and glued or otherwise secured a piece of cork B, projecting beyond the said face of the hammer rest rail A, and to the said face is also secured a strip of felt C, overlying the projecting portion of the piece of cork B. Thus by the arrangement described the felt C forms a cushion for the hammer D, and the underlying piece of cork B quiets the rebound of the hammer D, thus rendering it noiseless.

The key frame E is provided on its upper

face with a recess E', into which fits and is secured a piece of cork F, projecting beyond the upper face of the key frame E, and on 45 the latter is secured a strip of felt G, overlying the piece of cork F and forming a cushion for the rear end of the key H, the said piece of cork F deadening the fall of the key H.

The under face of the key H is provided with a recess H', into which fits and is secured a piece of cork I, projecting beyond the said under face of the key H, the piece of cork being apertured for the passage of 55 the key pin J, extending in the usual key pin hole of the key H. The under side of the piece of cork I rests on the button K of the balance rail L. Thus by the use of the piece of cork I the vibration of the key H is 60 deadened.

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

1. A piano action having a member pro- 65 vided on one face with a recess, a piece of cork fastened in said recess and projecting beyond the face of said member, and a felt covering secured to said member and overlapping the said projecting portion of said 70 piece of cork.

2. A piano action provided with a key frame having a recess in its face, a piece of cork fastened in said recess and projecting beyond the face thereof, and a strip of felt 75 secured to said frame and overlying said piece of cork.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

FRANK B. LONG.

Witnesses:

THEO. G. HOSTER, JOHN P. DAVIS.