

UNITED STATES PATENT OFFICE.

JAMES A. GRAY, OF ALBANY, NEW YORK.

PIANOFORTE-ACTION.

Specification of Letters Patent No. 16,832, dated March 17, 1857.

To all whom it may concern:

Be it known that I, JAMES A. GRAY, of Albany, in the county of Albany and State of New York, have invented a new Improvement in the Action of Pianofortes; and I do hereby declare that the following is a full and exact description.

The nature of my invention consists in the application of the spring L in such manner as that one leg or end of the spring may rest on the jack fly A, and the other end or leg connected by an elastic band or connection a, to the upper end of the ordinary hammer butt B, the coil or angle of the spring to be pivoted on a center at C, thereby causing the hammer to be so raised and kept in position that it will allow the jack fly A to have free play under the shoulder of hammer butt B, when the key is pressed down and the various parts put in motion, thus being at all times ready to repeat the blow of the hammer against the string. I also claim the application of the hook H in such manner to the hammer butt B, as to drop down and hook to the fly or jack A by notch or otherwise thereby uniting the hammer butt B and jack fly A in such manner as to work to-

gether with more precision, causing the hammer to be brought down to its place after the key has been struck and released. 30

I do not claim the general arrangement of the action composed of the various parts as shown which is known as the French action and in common use.

What I claim as my invention and desire to secure by Letters Patent is— 35

1. The application of a spring to the hammer butt and jack fly, causing the hammer to be so raised and kept in position that it will allow the jack fly free play under the shoulder of the hammer butt when the key is pressed down and the action in motion, as hereinabove specified. 40

2. I also claim the application of the hook to the hammer butt and jack fly, as herein described, so as to cause them to work together with more precision and also to bring the hammer to its place after the key has been struck and released. 45

JAMES A. GRAY.

Witnesses:

R. J. NELSON,
SIBERIA OTT.