

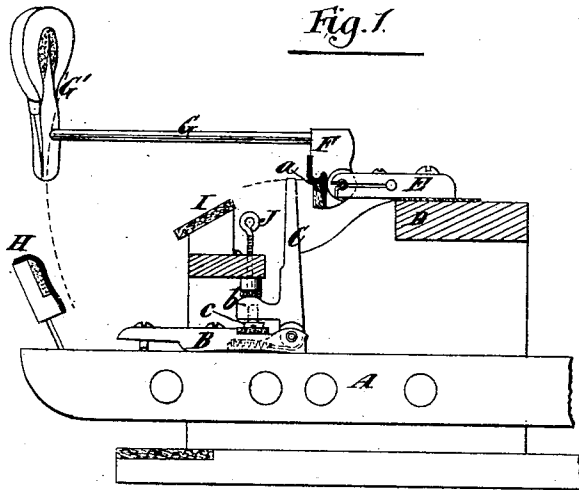
(No Model.)

J. AMMON.  
Piano Forte Action.

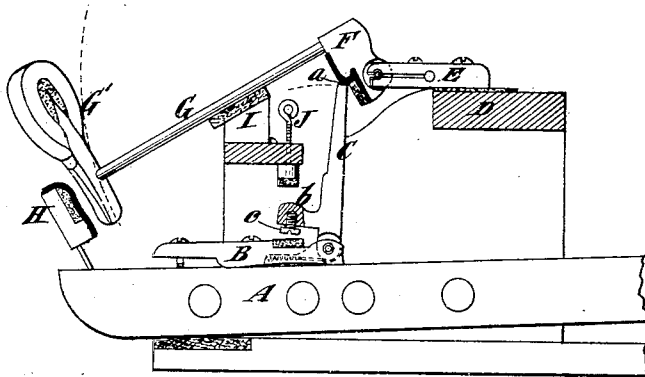
**No. 237,797.**

**Patented Feb. 15, 1881.**

Fig. 1.



*Fig. 2.*



Witnesses:-

Louis M. F. Whithead.  
2nd Major

*Inventor:-*

John Ammon  
by his Attorneys  
Branst & Brown

# UNITED STATES PATENT OFFICE.

JOHN AMMON, OF NEW YORK, N. Y., ASSIGNOR TO WESSELL, NICKEL & GROSS, OF SAME PLACE.

## PIANO-FORTE ACTION.

SPECIFICATION forming part of Letters Patent No. 237,797, dated February 15, 1881.

Application filed May 31, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN AMMON, of the city of New York, in the county and State of New York, have invented a certain new and useful  
5 Improvement in Piano-Forte Actions, of which the following is a specification.

In a piano-forte action as ordinarily constructed the jack, after acting upon the hammer-butt to raise the hammer, is thrown out  
10 from the notch in said hammer-butt, and the distance to which it is so thrown out is controlled by what is termed the "blocking" of the lower arm of the jack against a cushion on the jack-bottom, by which the jack is attached  
15 to the key. The means heretofore commonly used for regulating this blocking is to pare away the bottom of the jack, or to build up or add to the cushion, according as it is desired to let the jack fall farther, or not so far, out of  
20 the notch.

The object of this improvement is to provide more conveniently for adjusting or regulating the blocking; and to this end the invention consists in the combination, with the jack and jack-  
25 bottom, by which it is secured to the key, of a regulating-screw placed between the lower arm of the jack and the jack-bottom, whereby the said adjustment or regulation may be conveniently effected. I preferably also combine with  
30 the above a let-off screw, which may be fixed in some stationary part—as, for instance, in the hammer-rest rail.

In the accompanying drawings, Figure 1 represents a side view of the playing end of a  
35 key and the hammer-action, the hammer having been thrown up and the jack released from the butt to permit the hammer to fall; and Fig. 2 represents a similar view, in which all the parts are at rest before the key is struck.

40 Similar letters of reference designate corresponding parts in both figures.

A designates the playing end of a piano-forte key; B, the jack-bottom secured thereto, and having hinged to it the jack C. D designates  
45 the hammer-rail, to which the hammer-flanges E are secured. F designates the hammer-butt, containing the usual notch, *a*, for the jack. G designates the shank, and G' the head, of the hammer. H designates the hammer-cushion.

I designates the hammer-rest rail, and J the  
50 let-off screw, with which the lower arm, *b*, of the jack comes in contact as the key is raised, and by which the jack is thrown back out of the notch *a* in the hammer-butt F. All these parts are of ordinary construction, and there-  
55 fore need no special explanation.

In ordinary actions of the kind above described the only means of blocking the jack upon the jack-bottom, or of regulating or determining the backward movement, is by build-  
60 ing up upon the jack-bottom B with cloth, under the lower arm, *b*, of the jack, to throw the jack forward, or paring away the under side of said lower arm when it is desired to move  
65 the jack backward. In order to provide a means whereby this blocking adjustment or regulation may be conveniently effected, I employ a regulating-screw, placed between the  
70 jack-bottom and the lower arm of the jack, which may be regulated to block the jack at the required distance from the hammer-butt. This screw might be screwed into the jack-  
bottom and the cushion placed on the lower arm of the jack; but as here shown the screw  
75 *c* is inserted in the lower arm, *b*, of the jack and cushions upon the jack-bottom. The screw *c*, by being turned in or out, as the case may require, will cause the blocking of the jack to  
80 be effected with its upper end at a nearer or less distance from the notch in the hammer-  
butt.

I am aware that it is old to employ a let-off screw inserted through the lower arm of the  
85 jack, and between it and the jack-bottom, so that as soon as the jack-bottom strikes against the screw the jack will be thrown out of the notch in the hammer-butt; but my blocking-screw is different from this in that it prevents  
90 the jack from being thrown out beyond a certain point.

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

1. The combination, with a jack-bottom and a jack for a piano-forte action, of a regulating-  
95 screw between the jack-bottom and the lower arm of the jack, all constructed and arranged as described, whereby the said regulating-screw serves as a means of regulating the distance

to which the jack is thrown out of the hammer-notch, substantially as specified.

2. The combination, with a jack-bottom and jack for a piano-forte action, of a let-off screw  
5 for moving the jack out of the hammer-notch, and an independent regulating-screw between the jack-bottom and the lower arm of the jack,

and serving as a means of regulating the distance to which the jack is thrown out of the hammer-notch, substantially as specified.

JOHN AMMON.

Witnesses:

FREDK. HAYNES,  
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