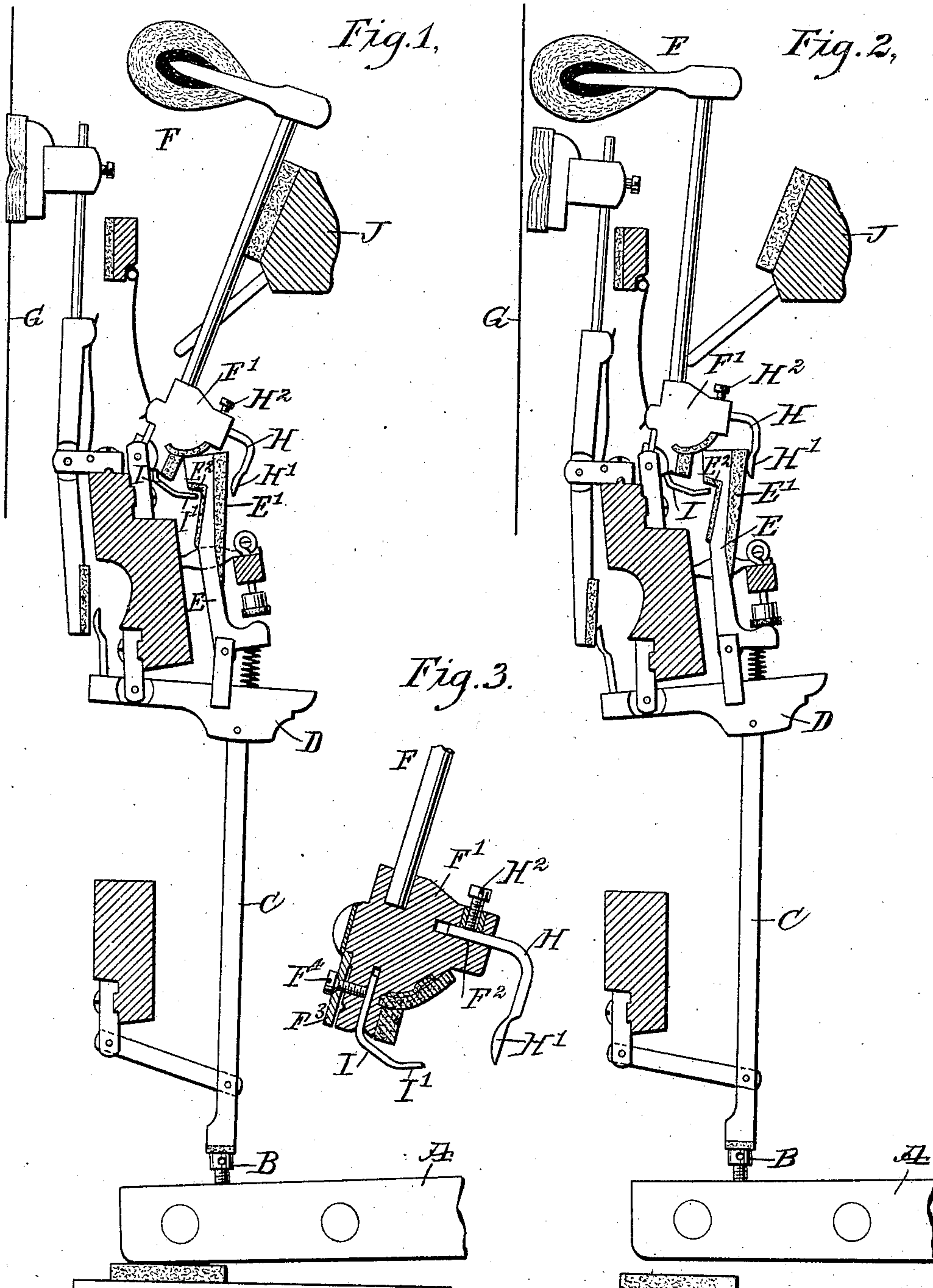


No. 847,223.

PATENTED MAR. 12, 1907.

J. AMMON.
PIANO ACTION.

APPLICATION FILED JUNE 28, 1906.



WITNESSES

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JOHN AMMON, OF NEW YORK, N. Y.

PIANO-ACTION.

No. 847,223.

Specification of Letters Patent.

Patented March 12, 1907.

Application filed June 28, 1906. Serial No. 323,819.

To all whom it may concern:

Be it known that I, JOHN AMMON, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Piano-Action, of which the following is a full, clear, and exact description.

The invention relates to upright pianos; and its object is to provide new and improved piano-action, arranged to simplify the action by dispensing with the bridle and bridle-wires, and at the same time insuring a proper return movement of the hammers without danger of sticking of the coacting parts, and to cause a quick response of the hammers according to the touch on the keys.

The invention consists of novel features and parts and combinations of the same, which will be more fully described herein-after and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a cross-section of the improvement, showing the action at rest. Fig. 2 is a like view of the same, showing a key pressed and the hammer in action; and Fig. 3 is a sectional side elevation of the butt of the hammer, showing more particularly the adjustment of the back-stop.

The key A of the piano-action is provided with a capstan B, engaging the lower end of the thrust-rod C, pivotally connected with the wippen D, on which is pivoted the lower end of the jack E, engaging the hammer-butt F' of the hammer F for sounding the string G. The hammer-butt F' is provided with a bearing F² for slidably receiving one end of an angular or L shaped back-check H, preferably in the form of a wire terminating at its depending member in a spoon H', adapted to be engaged by the felt E' on the jack E to limit the movement of the same and the throw of the hammer F. The back-check H is adjustably secured in the hammer-butt F' by a set-screw H², which when loosened allows adjustment of the back-check H to bring the spoon H' in proper relation to the felt E' on the jack E. On the bottom of the hammer-butt F' is secured a pull-back I, preferably in the form of a wire having a forwardly-bent member I', adapted to be engaged by a felted shoulder E², formed on the

jack E, so that when the key A is released and the thrust-rod C moves downward then the shoulder E² engages and exerts a downward pressure on the pull-back I to swing the hammer F back to the position of rest against the usual hammer-rail J. The pull-back I is adjustably secured in the hammer-butt F' by a set-screw F⁴, employed for securing the cap F³ of the hammer-butt bearing in place.

By the arrangement described a return movement of the hammer F is insured without the use of a bridle and bridle-wire heretofore mainly used, and the device for accomplishing the result is very simple and durable in construction and is not liable to get so easily out of order as the bridle and bridle-wire heretofore used. The back-check arrangement shown and described is also simplified over that of the ordinary construction now used, and it is evident that when the key A is pressed and the hammer F is thrown forward then the felt E' finally moves in contact with the spoon H' at the time the hammer F is in contact with the string, so that a proper yielding back-check is provided as the spoon H' and the felt E' come together.

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

1. In a piano-action, the hammer provided with a butt, a bearing therein, a cap over said bearing and the set-screw for attaching the cap to the bearing, the jack for engaging the butt and provided with a shoulder, the wippen to which the jack is pivoted said butt having openings in the front and the bottom thereof, a back-check comprising a portion received in the front opening of the butt and an angular portion terminating in a spoon which engages the front of the jack, a set-screw traversing the butt and engaging the back-check whereby to secure it in place, and a pull-back received in the bottom opening of the butt and retained in place by the set-screw of the cap, said pull-back having a forwardly-projecting portion for engaging beneath the shoulder of the jack.

2. In a piano-action, a hammer, a jack engaging the butt of the hammer, said jack being provided with a shoulder, the wippen to which the jack is pivoted, said butt having openings in the front and the bottom thereof, a back-check comprising a portion received in the front opening of the butt and an angular portion terminating in a spoon which en-

gages the front of the jack, a set-screw traversing the butt and engaging the back-check whereby to secure it in place, and a pull-back received in the bottom opening, and means for securing said pull-back in place, said pull-back having a forwardly-projecting portion for engaging beneath the shoulder of the jack.

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

JOHN AMMON.

Witnesses:

THEO. G. HOSTER,
EVERARD B. MARSHALL.