(No Model.)

J. W. FISCHER.

UPRIGHT PIANO ACTION.

No. 557,261. Patented Mar. 31, 1896.

Fig. 2.

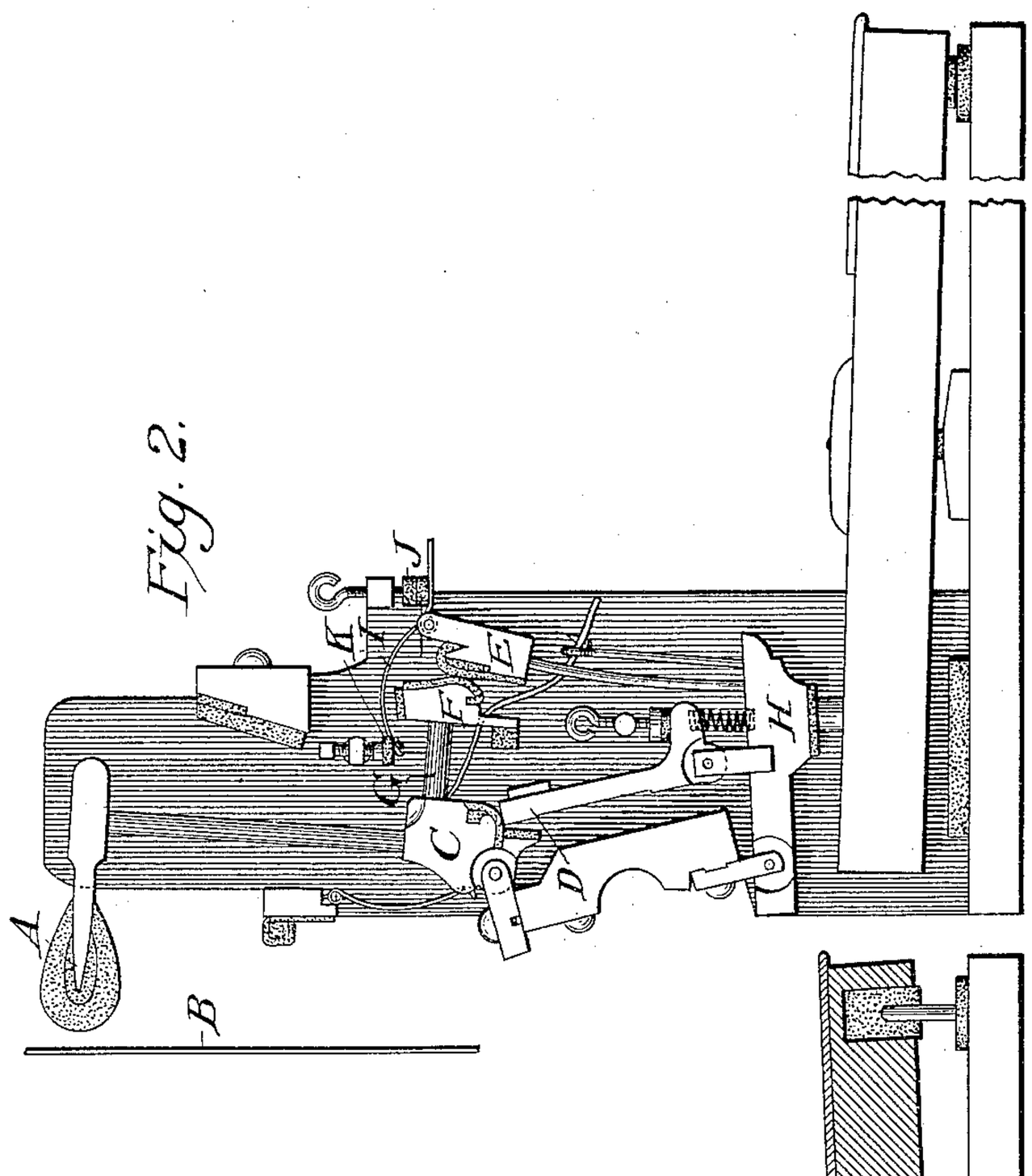
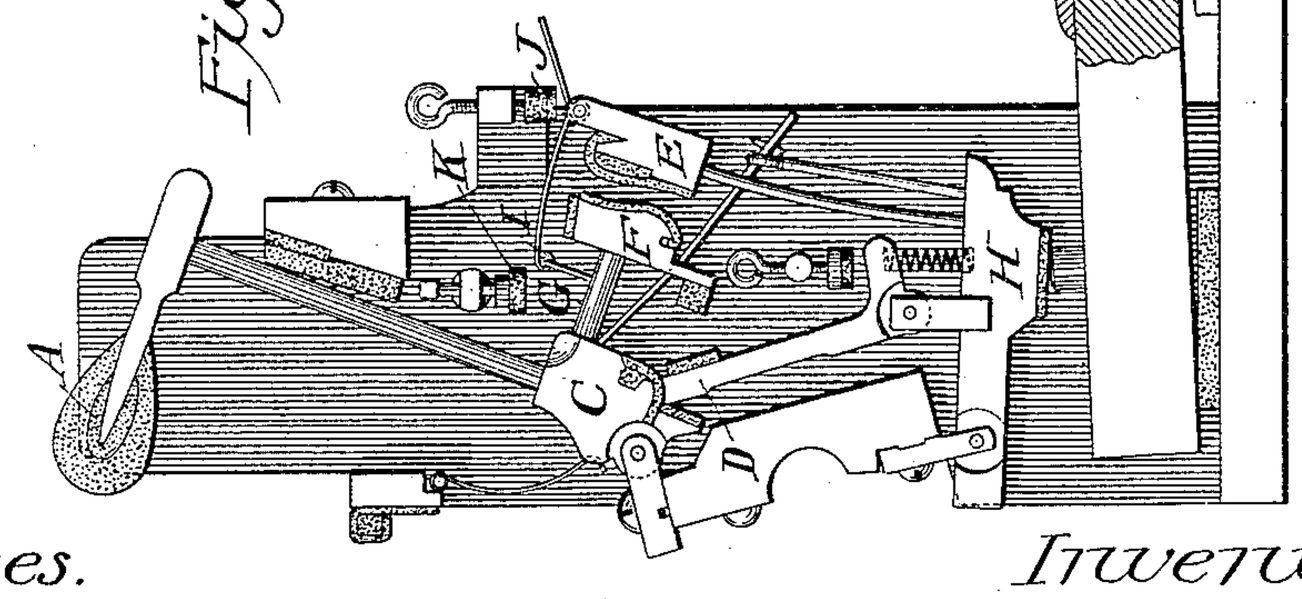


Fig. 1.



Witnesses.
Eugene Geary
John Lock

Inventor.
John W. Fischer.

UNITED STATES PATENT OFFICE.

JOHN W. FISCHER, OF BALTIMORE, MARYLAND.

UPRIGHT-PIANO ACTION.

SPECIFICATION forming part of Letters Patent No. 557,261, dated March 31, 1896.

Application filed August 2, 1895. Serial No. 558,036. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. FISCHER, a citizen of the United States of America, and a resident of Baltimore, Maryland, have invented new and useful Improvements in Upright-Piano Actions, of which the following is a specification.

This invention relates to repetition action, and has for its object to provide in its construction a cheap and simple means to produce what is known as "trilling."

In the accompanying drawings, forming part of this specification, Figure 1 is a side view showing the position of the parts when at rest. Fig. 2 is a side view showing the position of the parts after the stroke of the key.

Similar letters have due reference to similar parts throughout figures.

The letter A represents the hammer; the letter B, the string; C, the butt; D, the jack; E, the back-check; F, the counter-check; G, the counter-check shank; H, the whip of any ordinary upright-piano action. The letter I represents the spring, which is pivoted to an extended end of the back-check E at its center or coiled part, and has at its inner end an eye for the reception of a cord or tape. Said cord or tape is attached to the counter-check shank G. The letter J is an adjustable cushioned button for regulating the tension of spring I at its outer end. The letter K is an adjustable cushioned button for limiting the action of the spring I at its inner or eyed end. These form the component parts relative to my present invention.

It will be understood that at the stroke of the key the hammer A, from the resistance of the string B, is forced back and causes the engagement of the counter-check F with the back-check E, whereby the hammer A is held at a limited distance from the string B according to the force exerted. At the same time the back-check E has made an upward and rearward motion, which causes the engagement of the outer end of the spring I with the adjustable cushioned button J. This contact produces a tension of the spring I at its inner or eyed end. As the key is slightly released, the grip of the counter-check F and the back-check E has become modified and the hammer A is forced rearward by the inner or eyed end of the spring I through the medium of the cord or tape attached to the counter-check shank G. At the same instant the inner or eyed end of the spring I engages with the adjustable cushioned button K and limits the aforesaid motion of the hammer A.

It will also be understood that when the key has been allowed to rise one-third of its upward motion the jack D engages with the butt C, and thereby the repetition of the tone can be produced without entirely releasing the key, as in ordinary upright-piano actions.

What I claim is—

1. In an upright-piano action the combination of the back-check and hammer-butt through the medium of a cord or tape, attached to the counter-check shank, a spring connected to the extended end of the back-check, and engaging with said cord or tape; and means for regulating the tension of said spring substantially as specified.

2. In an upright-piano action the combination of the back-check and hammer-butt, a cord or tape attached to the counter-check shank, a spring connected to an extended end of the back-check, and engaging with said cord or tape, an adjustable cushioned button which engages with said spring, at its outer end, which regulates tension of said spring, with means of limiting action of spring, substantially as specified.

3. In an upright-piano action, the combination of the back-check and hammer-butt by means of a cord, or tape attached to counter-check shank; a spring connected to back-check, by means of an extension, said spring engaging with the cord or tape, an adjustable cushioned button regulating tension of said spring; an adjustable cushioned button limiting the action of said spring substantially as specified.

JOHN W. FISCHER.

Witnesses:
EUGENE GEARY,
JOHN LOCK.