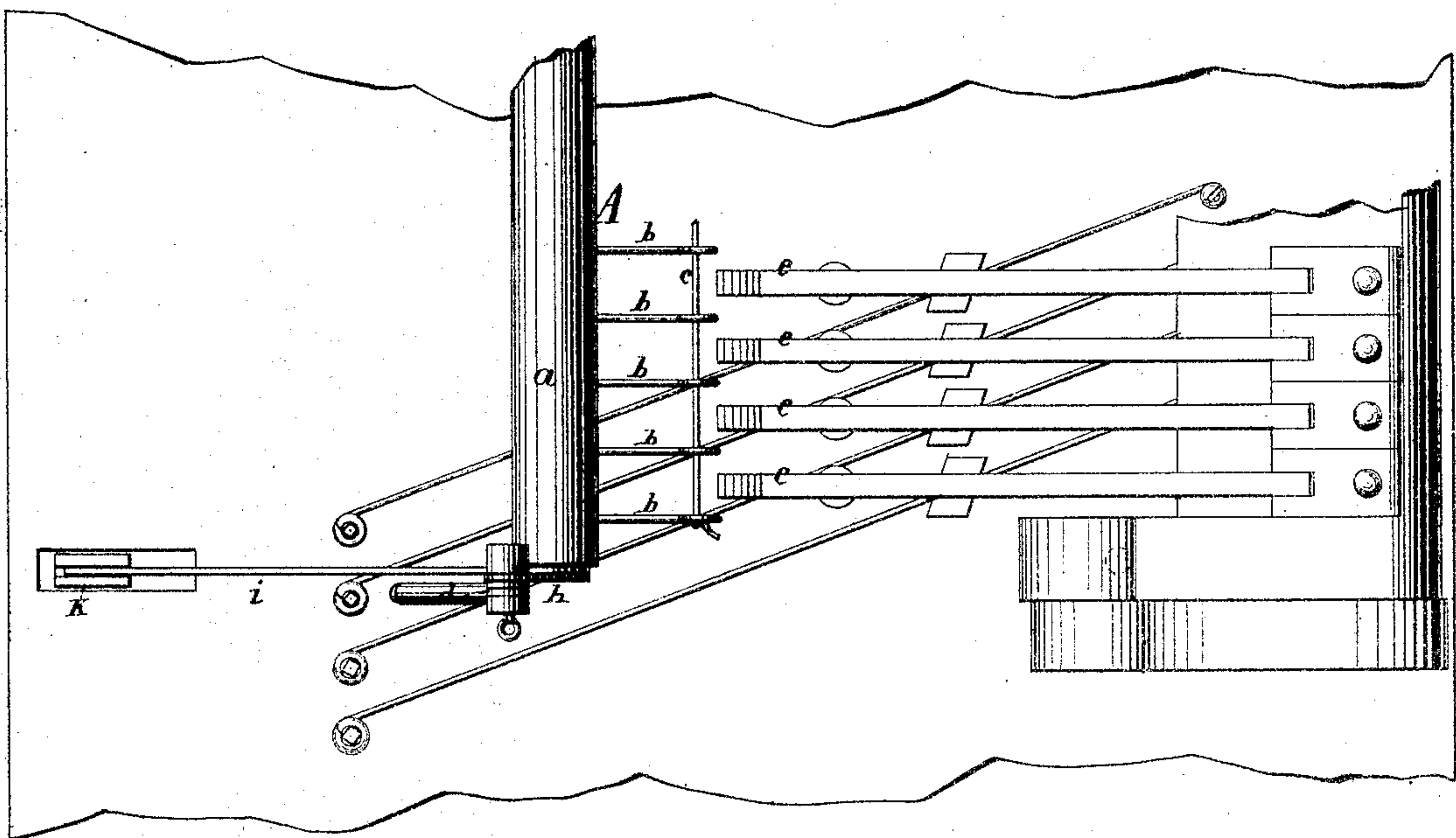


A. STEINWAY.
Piano-Forte Attachments.

No. 156,388.

Patented Oct. 27, 1874.

Fig: 1.



Witnesses:

Henry Gentner.
Chas. Wahlers.

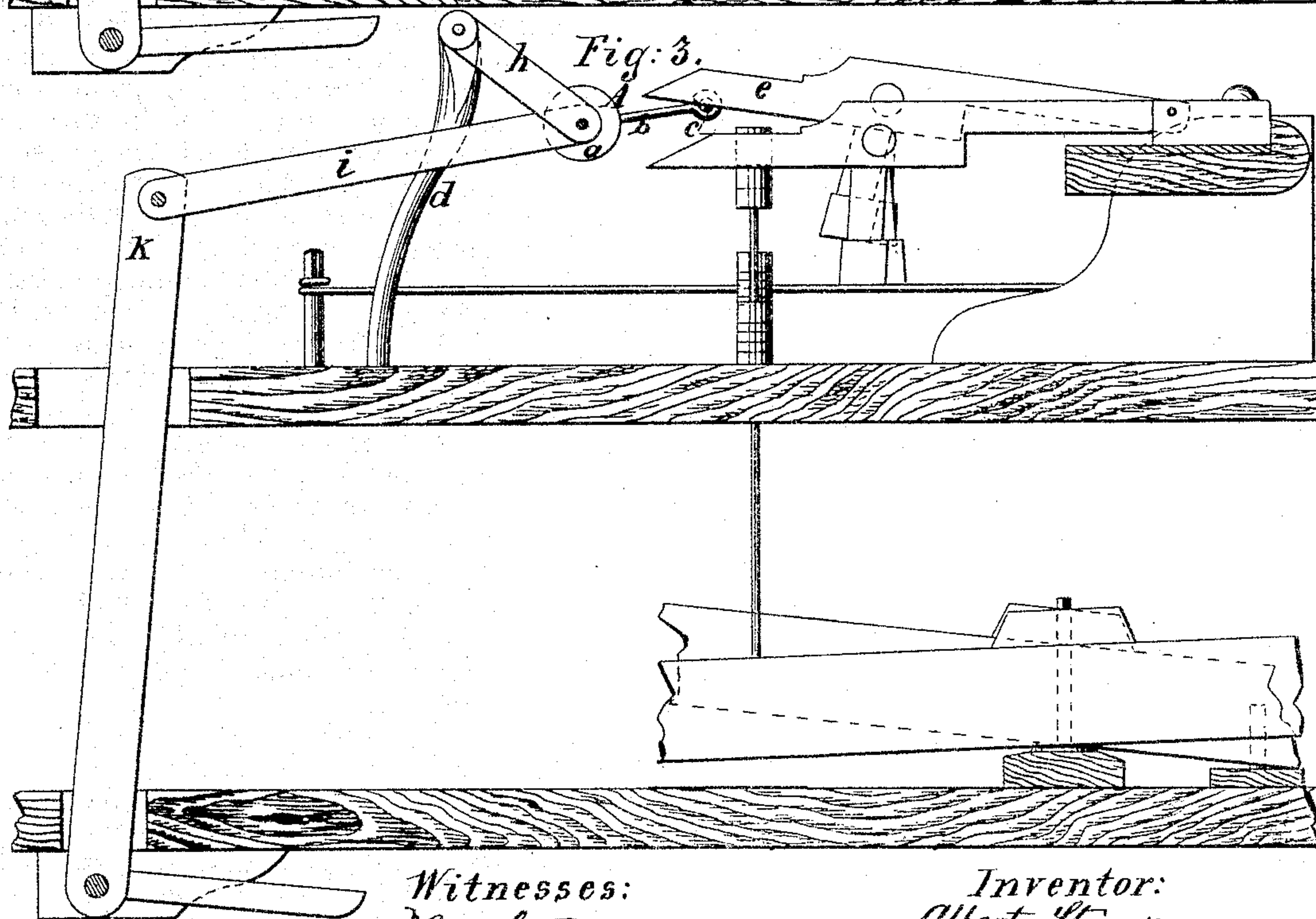
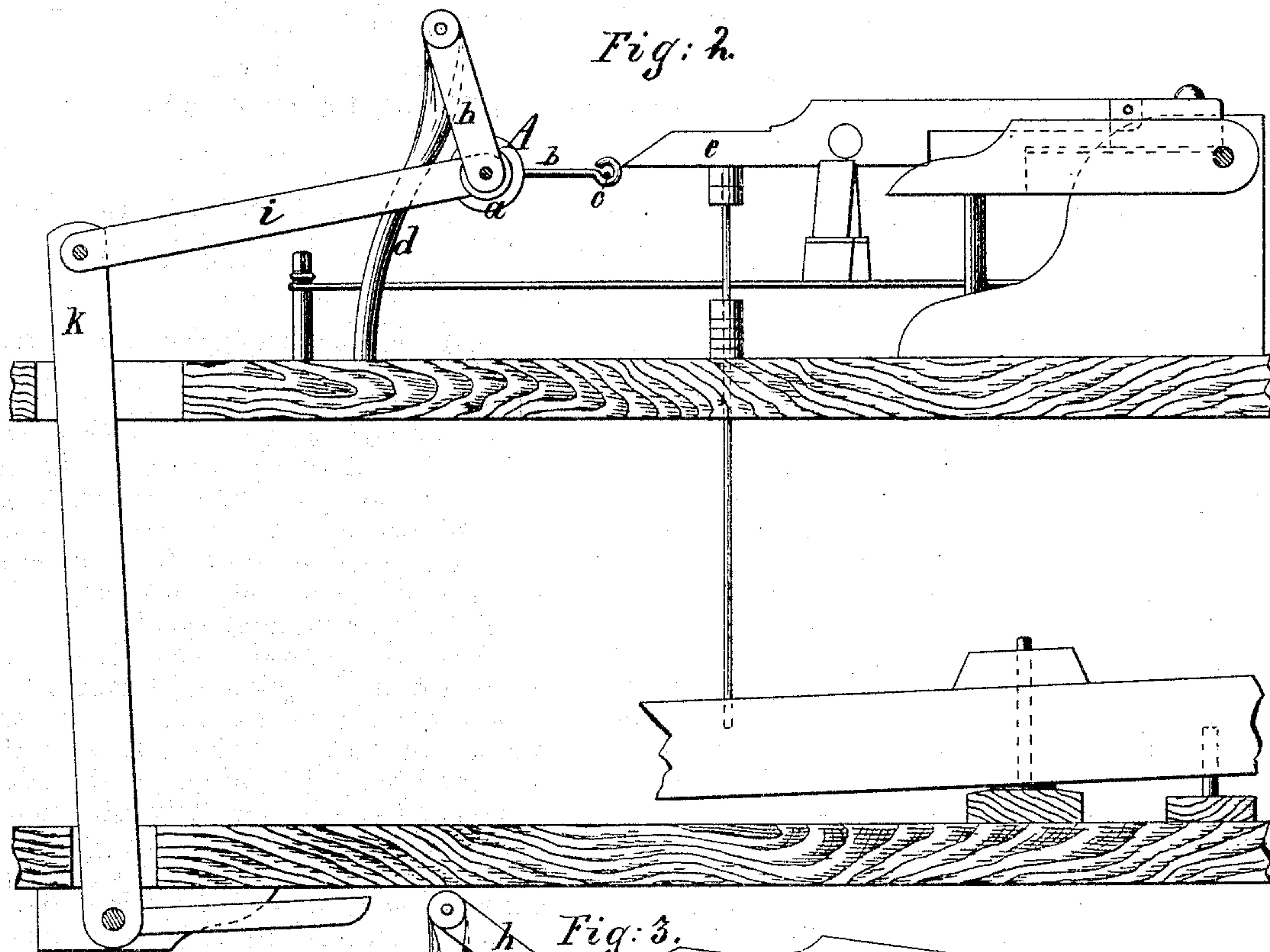
Inventor:

Albert Steinway
per
Van Santvoord & Hauff
Attys

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UNITED STATES PATENT OFFICE.

ALBERT STEINWAY, OF NEW YORK, N. Y.

IMPROVEMENT IN PIANO-FORTE ATTACHMENTS.

Specification forming part of Letters Patent No. **156,388**, dated October 27, 1874; application filed October 15, 1874.

To all whom it may concern :

Be it known that I, ALBERT STEINWAY, of the city, county, and State of New York, have invented a certain new and Improved Piano-Forte Attachment, of which the following is a specification:

This invention is illustrated in the accompanying drawing, in which—

Figure 1 represents a plan or top view. Fig. 2 is a longitudinal vertical section when the attachment is at rest. Fig. 3 is a similar view of the same when the attachment is in operation.

Similar letters indicate corresponding parts.

My invention consists in a frame supporting either a wire, cord, or strip of flexible or rigid material, which runs parallel to the ends of the damper-levers, in combination with a pedal which imparts to said frame a motion toward and from the damper-levers in such a manner that when one or more of the dampers are raised, and the frame is caused to move forward, said damper or dampers are caught by the wire or strip of the frame, and prevented from dropping back upon the string or strings, while the remaining dampers can rise and fall without obstruction, the swinging frame being so constructed that, by its action, the damper or dampers are raised above the position to which the same are carried by their keys, and thereby a player on the piano-forte is enabled to produce a continuation of sound of one or more notes or unisons together, after the hammer or hammers striking the strings have fallen back on the key or keys, the latter having returned to their normal position, and the frame holding the dampers of such notes as are desirable to continue to sound to complete the harmony.

In the example shown in the drawing, the letter A designates a frame, which consists of a rigid bar or back rail, *a*, in which are secured a series of arms, *b b*, which extend toward the spaces between the damper-levers *e*. Said arms support a wire, *c*; or for said wire a cord may be substituted, or a strip of any suitable flexible or rigid material; and this strip, cord, or wire may be fastened to the frame A by any desirable means, in such a manner, however, that it runs parallel to the ends of the damper-levers. The frame A is suspended,

by means of arms *h*, from the ends of standards *d*, which are secured to the iron frame, or to the wrest-plank, or to the body of the piano-forte. One of the arms *h* connects, by a rod, *i*, with the pedal *k*. This pedal is situated under the piano-forte in the lyre which contains the ordinary damper-pedals, but it works entirely independent from said damper-pedals. An inclined or curved plane may be substituted for the swinging arms *h*.

While my apparatus is at rest it is entirely isolated from the action or dampers of the piano-forte, and the frame A is made to move forward or back, at the pleasure of the performer, through the action of the additional pedal *k*, so that immediately after the note or notes have been struck, whereby one or more damper-levers are raised, the wire, cord, or strip *c* is moved under the raised damper lever or levers, preventing the same from falling back on the string or strings, and permitting said string or strings to continue to vibrate as long as the additional pedal is pressed down, and the apparatus held in the position shown in Fig. 3. At the same time, when the apparatus is retained in this position it does not interfere with the use of the remaining notes, which may be played, as before, with or without the use of the ordinary damper-pedal, the frame A being so arranged that it carries the damper or dampers on which it acts somewhat beyond the point to which the same are raised by the action of their keys, so that the damper-levers of the notes subsequently played will not touch the frame or any part thereof. By these means all rattling or jingling sounds are avoided, and an apparatus is obtained which is simple, strong, and durable, not subject to the influence of the atmosphere, and not liable to get out of order.

The wire, cord, or strip *c* of my moving frame can be made to act on the bass-notes only; or it can readily be carried to the full extent of the dampers, thus allowing varied and beautiful effects and modulations to be attained in bringing into play the singing qualities not only of the fundamental bass-notes, but also of the middle register of the instrument.

My apparatus is applicable to all kinds of

piano-fortes, with but slight modifications in form.

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

The attachment for piano-fortes herein described, consisting of a movable frame, *a b*, provided with a wire, cord, or strip, *c*, of either flexible or rigid material, arranged parallel with the ends of the damper-levers, in combination with a pedal to operate said frame, sub-

stantially in the manner and for the purpose herein shown and set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 10th day of October, 1874.

ALBERT STEINWAY.

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.