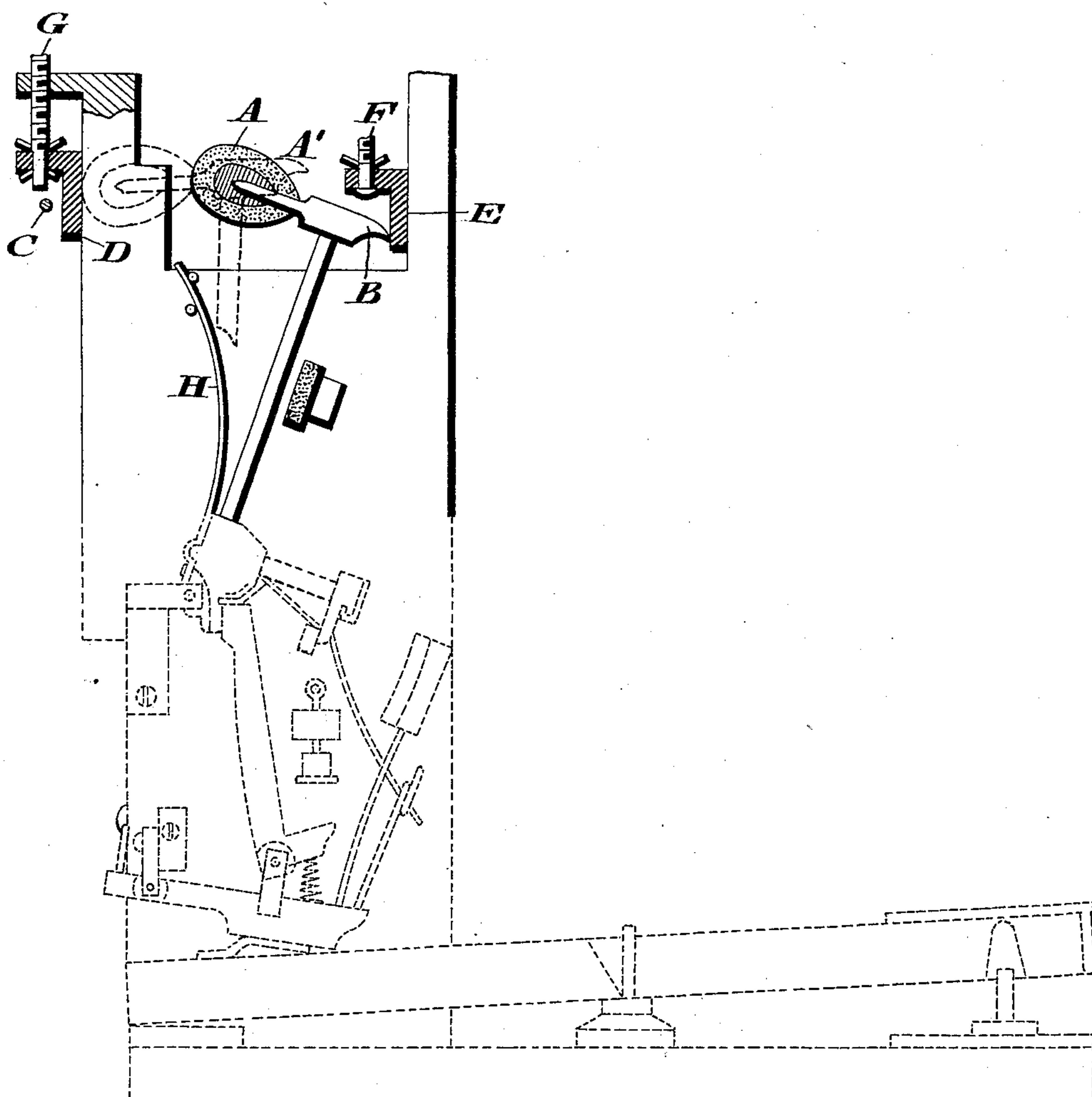


(No Model.)

R. C. SCHIRMER.
LEGATO ATTACHMENT FOR PIANOS.

No. 558,524.

Patented Apr. 21, 1896.



WITNESSES:

P. F. Bagley.
L. Douville.

INVENTOR,

Richard C. Schirmer.
BY *John A. Frederick*
ATTORNEY.

UNITED STATES PATENT OFFICE.

RICHARD C. SCHIRMER, OF PHILADELPHIA, PENNSYLVANIA.

LEGATO ATTACHMENT FOR PIANOS.

SPECIFICATION forming part of Letters Patent No. 558,524, dated April 21, 1896.

Application filed February 9, 1895. Serial No. 537,745. (No model.)

To all whom it may concern:

Be it known that I, RICHARD C. SCHIRMER, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Legato Attachments for Pianos, which improvement is fully set forth in the following specification and accompanying drawing.

My invention consists of a novel construction of legato attachment for pianos, which is especially adapted for purposes of instruction, and which can be readily applied to existing pianos and moved into and out of operative position when desired, whereby the player will hear a click when a key is depressed and a similar click when the finger is removed and the key returns to its normal position; and since the clicks should be heard simultaneously or as one in strict legato playing the performer is thus enabled by the employment of the above attachment to acquire a strict legato touch or smooth and connected style of playing.

It further consists of novel details of construction, all as will be hereinafter set forth.

The figure represents a partial side elevation and partial section of a legato attachment for pianos embodying my invention.

Referring to the drawing, A designates the head of the hammer A', and B designates the rear portion of the same, the above parts being pivotally mounted or supported and actuated by any suitable mechanism.

C designates a piano-string, and D a strip of suitable material which is adapted to be interposed between said string and the head A of said hammer.

G designates an adjusting-screw by means of which said strip D can be adjusted vertically, so as to be interposed between the head A and the piano-string, when desired, as shown in the present instance, or it can be raised so that the head A of the hammer in its forward movement will clear said strip and hit said piano-string C.

E designates a strip placed in the rear of said hammer and adapted to be struck by the rear portion B of the same when said strip E is in its inferior position.

F designates an adjusting-screw by means of which said strip E is capable of vertical

adjustment and thus place the strip into and out of the path of the back of the hammer-head.

H designates a spring employed, which is suitably supported and is adapted to accelerate the movement of the hammer in one direction, or, if desired, it is evident that the spring may be inserted under the key, according to requirements.

The operation is as follows: Whenever a key is depressed, the head A of the hammer will not contact with the string C when the parts are in the position seen, but will hit the strip D and produce a click, and when the finger is taken from the key said head will fall back to its normal position in the same time that it took to depress it and will contact with the strip E, thereby causing a click to be heard, and as the two clicks should fall together and be heard as one, this being what is required in strict legato playing, the performer will thus ascertain if the legato is correct.

It will be seen from the foregoing that by the aid of the above attachment a legato touch can be acquired with ease and certainty, since legato playing requires that in a succession of tones the second tone must begin at the precise instant that the first one ceases, and there must accordingly be no break between or offensive lapping, and in order to produce this result the fingers must be trained so that the first finger shall leave the key at the exact instant that the second finger strikes its key, and since the keys when this attachment is used give forth sound when they rise as well as when they fall if one is released before or after the other is struck the error is at once made apparent to the performer by the clicks caused by the keys not falling simultaneously.

It will further be evident that the above device can be readily applied to existing pianos, and when not in use by manipulating the screws F and G in any suitable manner the strips E and D, respectively, can be easily moved out of contact with the head and rear portion of the hammer A', thereby allowing said head to contact with the string C, as is customary.

It will further be evident that the strips D and E are capable of adjustment relative to

the hammer by other means than that shown, and it will be further noted that various changes may be made by those skilled in the art which will come within the scope of my invention, and I do not therefore desire to be restricted in every instance to the exact construction I have herein shown and described.

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

1. In a device of the character named, strips of suitable material, one located in front and the other in the rear of the hammer of a piano, and means for moving said strips into and out of the path of said hammer, substantially as described.

2. In a device of the character described, a piano-hammer, strips located one in front and the other in the rear of said hammer, a

piano-string, means for moving one of said strips to and from a position intermediate said hammer and string, and means for moving the other of said strips into and out of contact with the back of said hammer when desired, substantially as described.

3. In a device of the character described, a piano-string, a hammer, a movable strip adapted to be interposed between said hammer and string, and a second strip adapted to be moved into engagement with the rear of the hammer, in combination with means for accelerating the back movement of the latter substantially as described.

RICHARD C. SCHIRMER.

Witnesses:

JOHN A. WIEDERSHEIM,
E. H. FAIRBANKS.