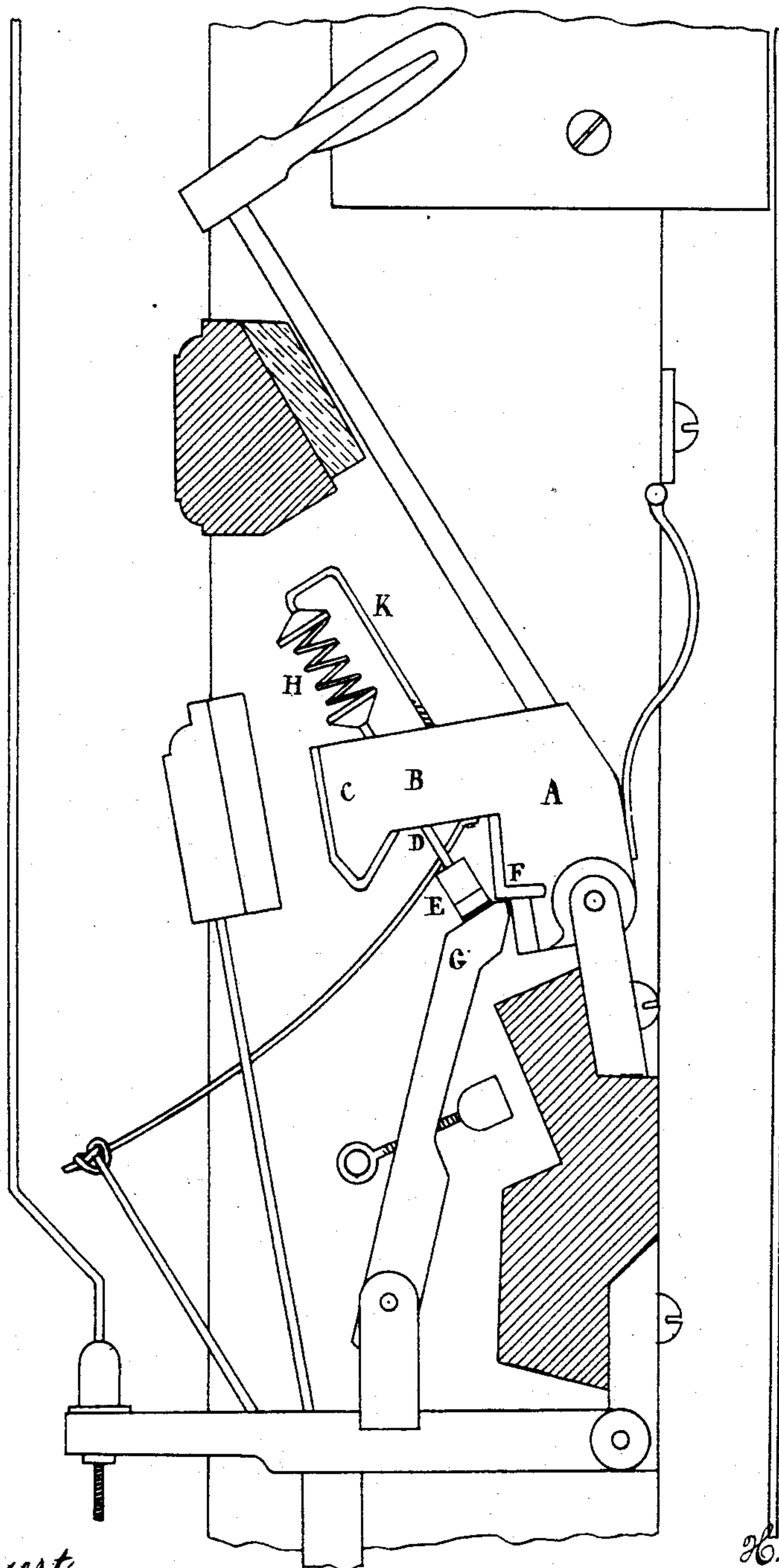


(No Model.)

H. SCHALLEHN.
REPETITION ACTION FOR PIANOS.

No. 338,617.

Patented Mar. 23, 1886.



Witnesses:
Henry Bossert.
Harry Drury

Inventor:
H. Schallehn
by his Attorneys
Howson & Sons

UNITED STATES PATENT OFFICE.

HENRY SCHALLEHN, OF LONDON, ENGLAND, ASSIGNOR OF ONE-HALF TO
HENRY BARTON WAREING, OF SAME PLACE.

REPETITION-ACTION FOR PIANOS.

SPECIFICATION forming part of Letters Patent No. 338,617, dated March 23, 1886.

Application filed March 18, 1885. Serial No. 159,303. (No model.)

To all whom it may concern:

Be it known that I, HENRY SCHALLEHN, a subject of the Queen of Great Britain and Ireland, and a resident of London, England, have invented certain Improvements in Piano-Forte Actions, of which the following is a specification.

The object of my invention is so to improve the actions of piano-fortes that an extremely quick repetition of a note is rendered sure and certain of attainment, while at the same time a fuller and better tone is also obtained.

My invention consists of certain improvements in the detailed construction of piano-forte actions, as fully described hereinafter.

In the accompanying drawing, I show an elevation of an ordinary piano-forte, with the addition of my improvements, as hereinafter stated. The hammer-butt A is enlarged at its rear part, and this enlargement, B, preferably includes and incorporates with itself the usual little check, C, at the rear, as shown in the drawing, or the said check C can be attached to the enlargement B in any convenient manner. A rod or sticker, D, passes freely through and works freely in an aperture in the enlargement B, and on the lower end of this sticker D is a suitably covered head. In its normal position this head E is a little below the level of the usual notch, F, in the hammer-butt A, in which notch F the hopper G engages. The upper end of this hopper G is preferably made rather broader than is usual, and is slightly beveled, so that when the hammer is in the retired position, as shown in the drawing, the hopper G engages both the notch F and the head E of the sticker D. The latter preferably passes, as aforesaid, through the enlargement B of the hammer-butt A at right angles or perpendicular to the beveled end of the hopper G. The sticker is kept pressed against the hopper by a coiled spring, H, placed above the enlargement B, and between a bent rod or bracket, K, and the end of the rod of the sticker D. The bent rod or

bracket K is screwed into the enlargement B, whereby the pressure of the spring H on the end of the rod of the sticker D can be regulated and adjusted as desired.

The action of this apparatus is as follows: When the key is struck, the hopper immediately projects the hammer against the string, in effecting which the said hopper disengages itself from the notch in the hammer-butt. The said hopper is still engaged, however, with the head of the sticker, which, through the resistance of the spring, keeps the said hammer in juxtaposition to the string, and then when the said key is released the spring, acting through the said sticker on the beveled end of the hopper, instantaneously forces the hopper again under the notch in the hammer-butt, in readiness for the next stroke of the key.

In the same manner my improved construction of spring rod or sticker can be applied to and used with any other known action.

I am aware that piano-forte actions have been heretofore provided with hammers having enlargements at the butt, and combined with spring rods or stickers on bent brackets, and with hoppers having beveled ends; but, so far as I am aware, it is new to have the bent bracket K adjustably screwed into the enlarged end of the hammer-butt.

I claim as my invention—

The combination of the hopper G with the hammer-butt having an enlargement, B, sticker-rod D, bracket K, screwed into said enlargement, to be adjustable thereon, and spring H, between said bracket and sticker-rod, substantially as described.

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

HENRY SCHALLEHN.

Witnesses:

JAMES HALL DAVIES,
FREDERICK WILLIAMS.