Jan. 15, 1929. 1,699,465

R. EDWARD

ADJUSTMENT FOR PIANO ACTIONS

Filed Nov. 8, 1926

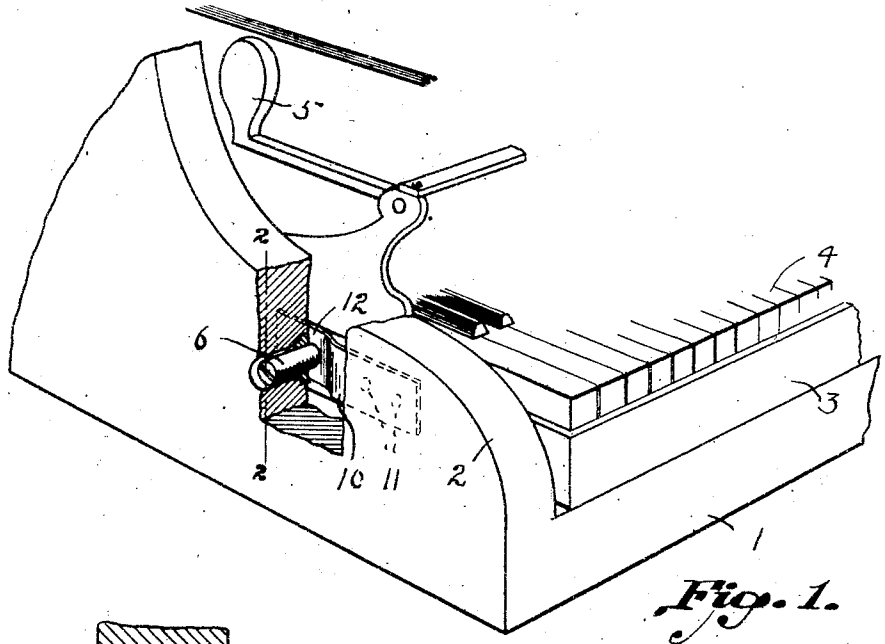


Fig. 1.

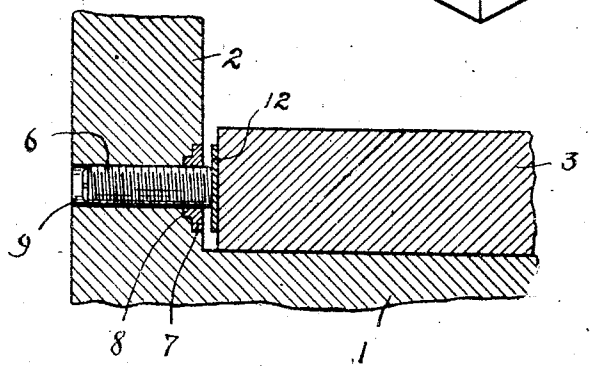


Fig. 2.

Inventor

ROBERT EDWARD.

By

Attorney

Patented Jan. 15, 1929. 1,699,465

UNITED STATES PATENT OFFICE.

ROBERT EDWARD, OF DULUTH, MINNESOTA.

ADJUSTMENT FOR PIANO ACTIONS.

Application filed November 8, 1926. Serial No. 146,957.

This invention relates to adjustments for piano actions, the principal object being to provide simple, convenient and positive means for varying the horizontal relation of the hammers of the piano to the strings, whereby to prolong the efficiency of the wearing surfaces of the hammers.

Other objects and advantages of the peculiar structure will appear in the further description of the invention.

Referring now to the accompanying drawing, forming part of this application, and wherein like reference characters indicate like parts:

Figure 1 is a perspective view of a fragmental portion of one corner of a grand piano; and

Figure 2 is a vertical section through the center of the improved adjustment for the action taken on line 2—2, Fig. 1.

1 represents the key bottom of the piano and 2 the left side arm thereof, while 3 represents the adjustable key frame as commonly found in such pianos, said frame moving horizontally with the keys when operated by the sound varying pedals as is common in grand pianos. 4 represents the keys of the piano, the 5 the hammers thereof, the face of which are covered with felt for engagement with the strings. It is well known to those versed in the art that the felt upon the hammers, after continued use, becomes grooved by constant contact with the strings in the same spot. To avoid this grooving and early hardening of the felt by such repeated contact in the identical spot, I have provided means for varying the throw of the action by installing the adjusting externally screw threaded bolt 6 within the arm 2, opposite the side of the key frame.

This installation comprises preferably a plate 7 with a central projecting hub portion 8, which is mortised into the inner wall of the arm 2, the hole in said plate being internally screw threaded for the reception of the adjusting bolt 6, and a hole 9 is bored entirely through the arm 2 for registration with the hole in the plate 7, so that the bolt 6 may be readily adjusted externally of the piano as for example by a screw driver manipulating the bolt through the hole; it being desirable to avoid any projection from the side of the arm, as is obvious. The plate 7 may be secured within its mortise by any desired arrangement of screws, and, in the preferred engagement of the end of the adjusting bolt 6 with the side of the key frame 3, I install a spring clip 10 which is offset intermediate of its ends, the supporting end being illustrated at 11 and fastened as by screws to the inner face of the arm 2 in the same horizontal plane with the bolt 6, resulting in the opposite end as illustrated at 12 overlapping the end of the adjusting screw 6, so that the screw at all times engages one side of the offset free end of the clip 10, the other side engaging the side of the key frame 3 when the latter is adjusted for such engagement, which occurs during the normal operation of the piano when no pedals are employed. The principal object of the clip 10 is to permit of the convenient removal or installation of the action without frictionally engaging the end of the adjusting bolt 6.

From the above it is apparent that when it is desired to vary or change the striking relation of the hammers with the strings, the same may be readily accomplished by longitudinal adjustment of the screw 6.

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

1. A piano action adjustment comprising an adjustable screw installed within the side of the piano adjacent the action, and a spring like member also installed upon the side of the piano adjacent the screw and interposed between it and the action.

2. A piano action adjustment of the character described comprising an adjustable screw threaded member, and a fixed yieldable wearing plate interposed between the end of the member and the action.

In testimony whereof I affix my signature.

ROBERT EDWARD.