

UNITED STATES PATENT OFFICE.

FLORENCE LEOLA, OF CAMPERDOWN, NEAR SYDNEY, NEW SOUTH WALES, AUSTRALIA.

PIANO.

No. 930,869.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FLORENCE LEOLA, a subject of the King of Great Britain and Ireland, residing at 120 George street, Camperdown, near Sydney, in the State of New South Wales, Australia, have invented certain new and useful Improvements in Pianos and Such like Instruments, of which the following is a specification.

This invention relates to improvements in pianos. The tuning pin at present used in this class of instrument is retained in the requisite position against the strain of the wire by means of a pressure screw and lock-nut manipulated from the back of the instrument, but this construction necessitates the removal of a portion of the back covering of the piano in order to replace a broken pin and usually requires the employment of a second person to manipulate the said retaining screws.

Now this invention has for its object to provide a tuning pin, the retaining screw of which can be adjusted from the front of the wrest-plate.

The invention consists essentially of a tuning pin the exposed portion of which is of ordinary construction but the portion which is bedded in the wrest-plate consists of a conical enlargement forming a shoulder against which bears the retaining screw. A corresponding aperture, tapered to receive this enlarged portion of the pin, is provided in the wrest-plate and so constructed that the shoulder of the enlargement is nearly flush with the face of the wrest-plate. The retaining screw is inserted in the wrest-plate immediately above the tuning pin, in such a position that the under surface of its head bears against the shoulder formed by the conical enlargement of the pin. But in order that the invention may be clearly understood reference is made to the accompanying sheet of drawings in which:—

Figure 1 is a sectional perspective view of a portion of the wrest plate of a piano showing some of the improved tuning pins in position. Fig. 2 is a vertical section showing

two pins in position one in elevation the other in section. Fig. 3 shows a perspective view of the pin and retaining screw also the tapered aperture in the wrest-plate to receive the pin.

The pin 4 is formed with a very slightly conical enlargement 5 fitting into a correspondingly tapered aperture 6 in the wrest-plate 7. The retaining screw 8 is let into the frame immediately above the pin in such a position that the under surface of its head 9 bears against the shoulder 10 of the pin. It will follow from this construction that the downward strain on the pin will, when the wire is at tension, tend to cause the shoulder of the pin to bear continuously against the head of the screw. To provide for the possibility of the parts becoming worn a recess 11 is formed in the frame to receive the head of the screw. To permit of lubrication a small hole 12 is provided extending transversely from the end of the tapered aperture 6 to the back of the wrest-plate. This hole will also serve to enable a broken pin to be driven out of its seat.

The method of operating my invention is as follows:—The key having been fitted on to the free end of the pin and the wire having been strained to the requisite tension, the retaining screw 8 is screwed hard against the shoulder 10 of the pin, thus firmly binding same and assuring the necessary friction thereon to prevent its being revolved backward by the pull of the wire.

What I claim as my invention is:—

1. In a piano, in combination, a metallic wrest plate having tapered pin holes therein and screw holes immediately thereabove, a plurality of tuning pins having tapered shanks and a shoulder at the front end of said shanks, and a corresponding number of screws inserted in said screw holes and having heads adapted to engage the shoulders of said pins.

2. In a device of the class described, in combination, a metallic wrest plate having a plurality of tapered holes therein and

screw holes one above each of said tapered holes, said tapered holes having openings extending through the plate, a plurality of tuning pins having enlarged inner tapered
5 ends forming a shoulder at the front portion of said tapered ends and inserted in said tapered holes in the wrest plate, and screws, one inserted in each of said screw holes above a tuning pin and having a head en-

gaging the shoulder of its corresponding 10 pin.

Signed at Sydney New South Wales this 23rd day of November 1908.

FLORENCE LEOLA.

Witnesses:

ARTHUR GIPPEL,
JOHN P. BRAY.