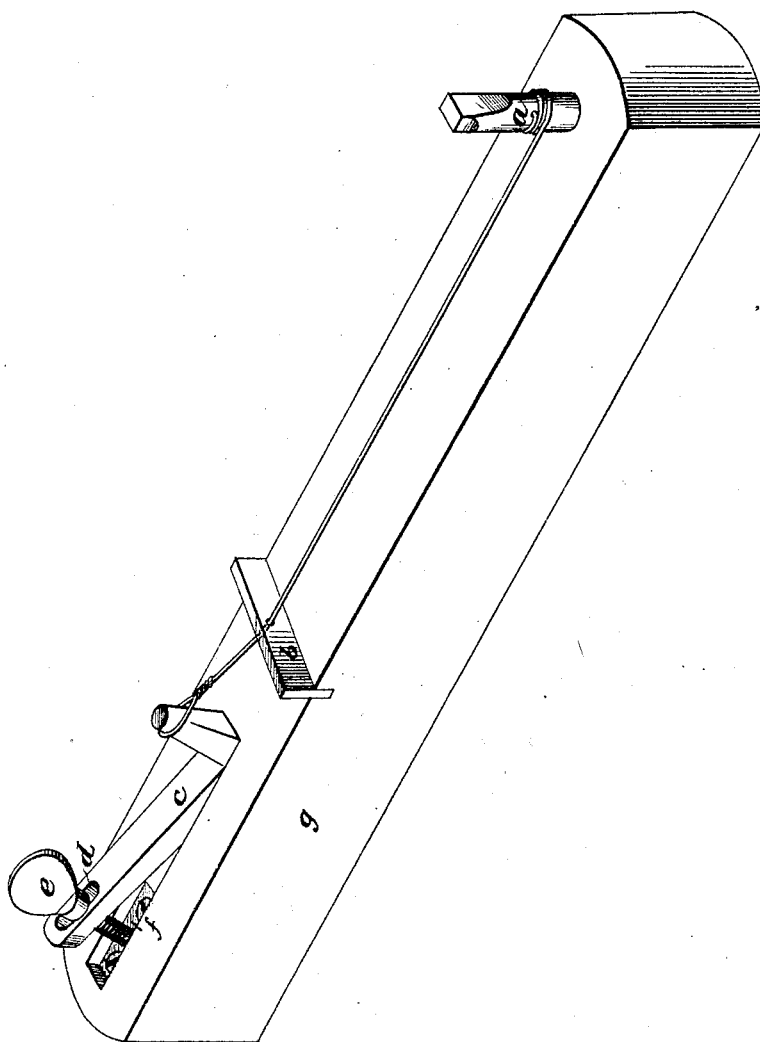


L. Rueckert

Stringing Pianos,

Nº 3940.

Patented Mar. 12, 1845



UNITED STATES PATENT OFFICE.

LOUIS RUECKERT, OF BALTIMORE, MARYLAND.

IMPROVEMENT IN PIANO-FORTES.

Specification forming part of Letters Patent No. 3,940, dated March 12, 1845.

To all whom it may concern:

Be it known that I, LOUIS RUECKERT, of the city and county of Baltimore, and State of Maryland, have invented a new and useful Improvement on Piano-Fortes, generally; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification.

The improvement referred to consists in placing the common tuning-pin *a* opposite to its usual position—viz., on the left side and in the place of the usual pin for fastening the string in the common piano. The bridge *b* is made of a plate of metal set edgewise, having at its upper edge holes corresponding in number to the number of strings of the piano. The strings pass through these holes and are attached to the extremity of the short arm of an elbow or similar lever *c*, the same in principle. The long arm of the said lever extends any optional distance in the direction of the string, and at (or near) its extremity there is a slot *d*, through which a screw *e* passes, which has a shoulder on its upper end, and the lower extremity of which passes through a female screw in a plate *f*, inserted into the tuning-block *g*. This screw may be finished at the top like a thumb-screw; but I propose to have it finished in a similar manner to the common tuning-pins—viz., with square heads—so as to apply a key to it, the principle remaining the same.

Operation: In tuning the piano the common tuning-key is applied at the tuning-pin *a* and the piano tuned in the usual manner.

This done the key is applied to the head of the screw *e*, and the most perfect tuning is accomplished by turning the same one or the other way, stretching or relaxing the string. In consequence of the shape of the lever, by advancing the screw the long arm will move down and toward the tuning-block, and the shorter one following accordingly the string will be stretched, and vice versa the string will relax. The advantage of this arrangement is that whether with a thumb-screw or key-screw the piano may be tuned with greater ease and precision than formerly, and at the shortest notice, by any professor or amateur of music, be they lady or gentleman, after the instrument comes out of the hands of the maker.

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

The fastening of the string to the shorter arm of an elbow-lever, (or any other lever or levers the same in principle,) the extremity of the longer arm of which being furnished with a perforation or slot through which a thumb or key screw passes, the lower extremity of which passes again through a plate inserted in the tuning-block, by which means the instrument may be tuned in a very simple, easy, and expeditious but precise manner by any professor or amateur of music without the aid of a professional tuner, the whole of which improvement being constructed and operates substantially as hereinabove set forth.

LOUIS RUECKERT.

Witnesses:

HENRY S. ADDISON,
FRANCIS BENNE.