

(No Model.)

C. E. ROGERS.
STRINGING PIANOS.

No. 293,088.

Patented Feb. 5, 1884.

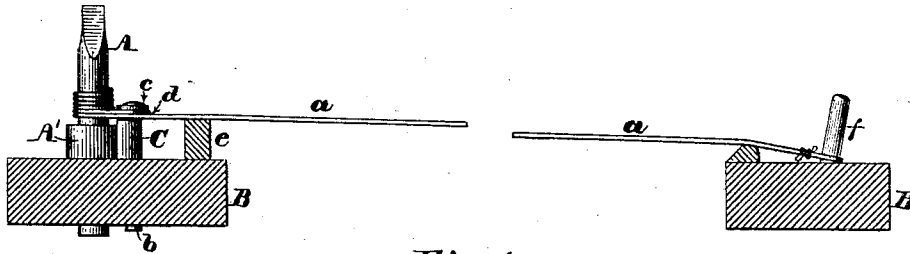


Fig. 1.

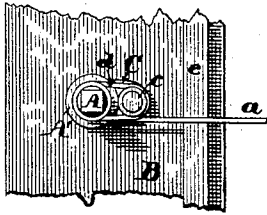


Fig. 2.

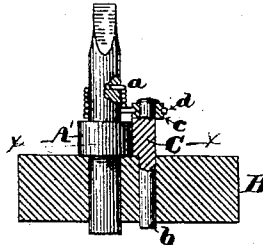


Fig. 3.

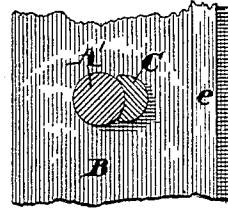


Fig. 4.

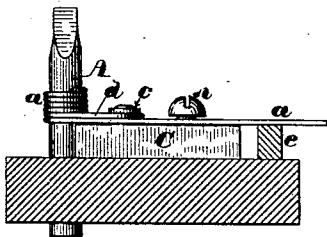


Fig. 6.

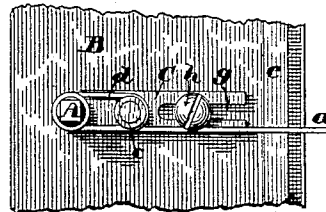


Fig. 5.

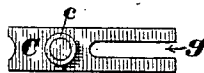


Fig. 7.

Witnesses:

Walter E. Lombard.
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Inventor:

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UNITED STATES PATENT OFFICE.

CHARLES E. ROGERS, OF BOSTON, MASSACHUSETTS.

STRINGING PIANOS.

SPECIFICATION forming part of Letters Patent No. 293,088, dated February 5, 1884.

Application filed July 27, 1883. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. ROGERS, of Boston, in the county of Suffolk and State of Massachusetts, have invented a certain new and useful Improvement in Stringing Devices for Pianos, &c., of which the following, taken in connection with the accompanying drawings, is a specification.

In stringing pianos and similar musical instruments, it is the common practice to make a bearing for the tuning-pin in the wrest-plank; but this, being made of wood, is liable to wear, loosening the pin, and consequently the string, which is a source of great annoyance, and to obviate which is the object of my present invention, which consists in certain details of construction, all of which will be more fully understood by reference to the description of the drawings, and the claims, to be hereinafter given.

In the drawings, Figure 1 is a section of the wrest-plank with my improved stringing device applied thereto. Fig. 2 is a partial plan of same. Fig. 3 is a central vertical section of same. Fig. 4 is a horizontal section of same, the section being cut on line *xx* on Fig. 3. Figs. 5, 6, and 7 are respectively a plan, sectional elevation, and detail view of a modification of my improved stringing device.

A is the tuning-pin, provided with a bearing in the wrest-plank B, in which it may revolve to tighten the string *a*, which is secured in a well-known manner. The tuning-pin A is provided with an enlargement or collar, A', against which the friction-block C bears firmly when the string *a* is tightened to a proper tension or pitch. The friction-block is provided with the shank *b*, secured in the wrest-plank B, and the sheave *c*, about which the loop *d* from the tuning-pin A passes. The string *a* at one end is inserted in a hole in the tuning-pin A, and then, after passing about said pin a few times, is formed into a loop, *d*, about both the tuning-pin A and sheave *c*, after which it is passed across the bridge *e* and the sound-board, and finally firmly secured to the hitch-pin *f*, at the other end of the wrest-plank B.

In Figs. 5, 6, and 7 a sliding block, C, is used, which is provided with a slot, *g*, and screw *h*, to hold the same from turning with the pin A. This construction may be used without altering the principles of my invention; but I prefer the method first described.

The tuning-pin may be used with or without the collar A', and may be loosely fitted to the bearing in the wrest-plank, as may be desired.

The operation of my invention is simple, and is as follows: Supposing the parts to be in their proper positions, as shown in the drawings, and that the string *a* is too loose to give the required pitch, the tuner, by means of his key, turns slightly the tuning-pin A, thereby twisting the string *a* more firmly about the pin A, tightening the loop *d*, thereby pressing the block C firmly against the pin A, holding it in any desired position. If the string is still too loose, the tuning-pin should be turned until the desired pitch is obtained, when the pin will be firmly held, as it is obvious that the greater the tension to the string *a* the greater the friction between the block C and tuning-pin A.

The shank *b* is loosely fitted to a hole in the wrest-plank in order to keep it from revolving with the tuning-pin when being turned.

The wrest-plank may be made either of wood or iron; but I much prefer iron, as a firmer bearing is given to the tuning-pin.

The friction-block may be used on any side of the tuning-pin with as good a result, and without altering the principles of my invention.

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

1. The combination, in a piano or other musical instrument, of a tuning-pin, a friction-block arranged to bear against the periphery of said tuning-pin and be prevented from revolving therewith, and a spring attached to both tuning-pin and friction-block, substantially as and for the purposes described.

2. In a stringing device for pianos and similar instruments, the combination of the pin A, string *a*, having loop *d*, sheave *c*, block C, and

means for preventing the block C from revolving with the pin A, substantially as and for the purposes described.

5 3. In a stringing device for pianos and similar musical instruments, the combination of a tuning-pin, A, string *a*, having loop *d*, block C, shank *b*, pulley *c*, wrest-plank B, and hitch-pin *f*, all arranged and adapted to operate substantially as and for the purposes described.

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

CHARLES E. ROGERS.

Witnesses:

WALTER E. LOMBARD,
E. A. HEMMENWAY.