

(No Model.)

C. E. ROGERS.
TUNING PIN FOR PIANOS.

No. 331,825.

Patented Dec. 8, 1885.

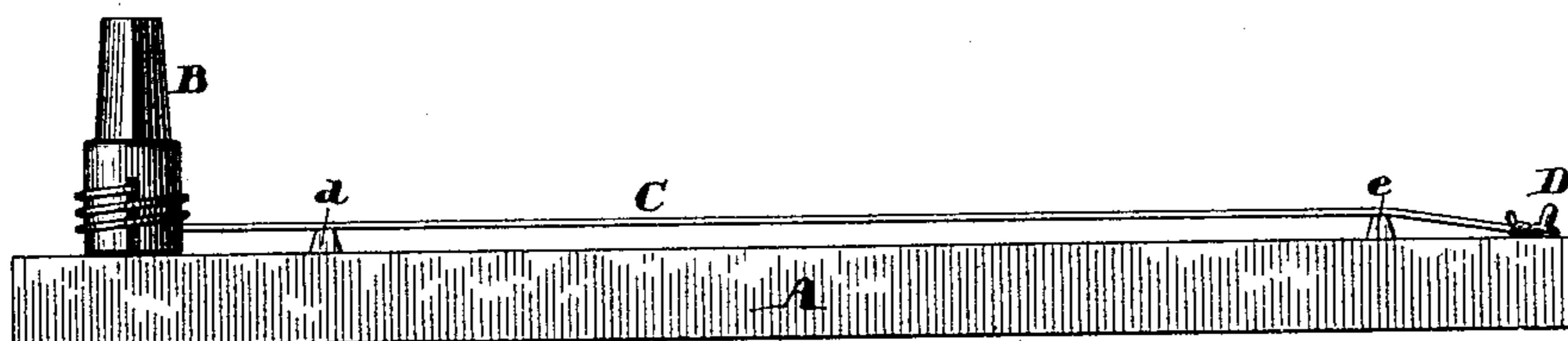


Fig. 1.

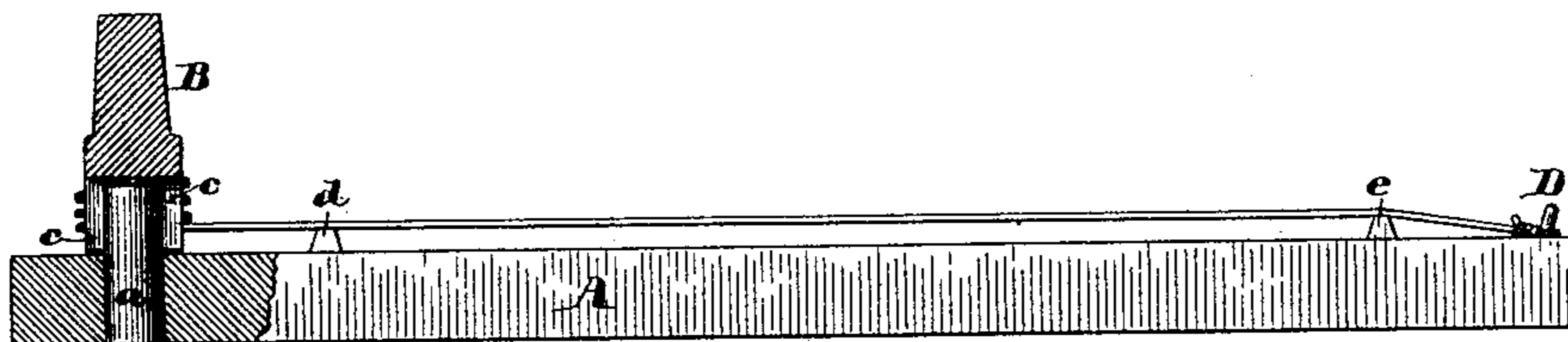


Fig. 2.

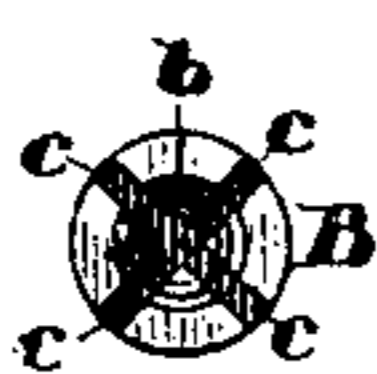


Fig. 4.

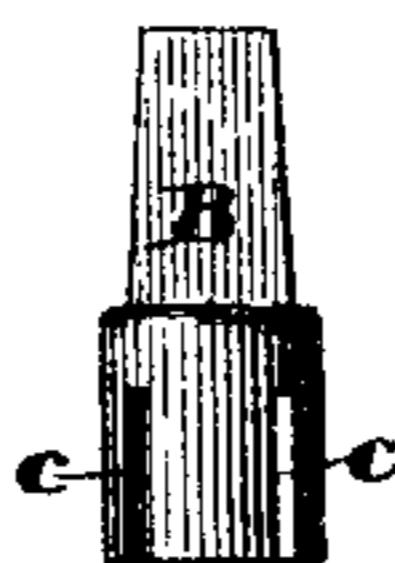


Fig. 3.

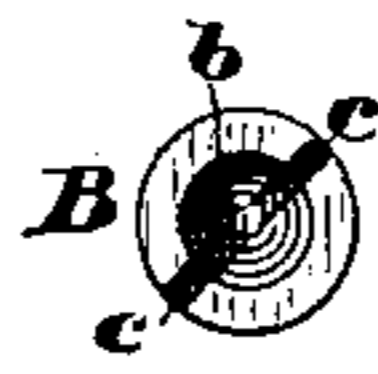


Fig. 5.

Witnesses:

Walter E. Lombard.
William H. Parry.

Inventor:
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UNITED STATES PATENT OFFICE.

CHARLES E. ROGERS, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO GEORGE M. GUILD, OF SAME PLACE.

TUNING-PIN FOR PIANOS.

SPECIFICATION forming part of Letters Patent No. 331,825, dated December 8, 1885.

Application filed January 28, 1885. Serial No. 154,225. (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 new and useful Improvement in Stringing and Tuning Devices for Pianos, of which the following, taken in connection with the accompanying drawings, is a specification.

My invention relates to stringing and tuning devices for pianos; and it consists in the combination of a fixed pin set in or formed upon the metal plate or driven in the wooden-pin block, so as to be practically immovable therein, and a tuning-pin having one end made square or prismatic in cross section and its other end made in the form of a hollow cylinder adapted to fit closely upon said fixed pin, said hollow cylindrical portion being divided into two or more parts by radial slots cut through the walls of said tubular portion and extending longitudinally thereof, as will be more fully described.

Figure 1 of the drawings is a side elevation of my improved stringing and tuning device. Fig. 2 is a sectional elevation, the cutting-plane being through the axis of the tuning-pin. Fig. 3 is a side elevation of the tuning-pin detached. Fig. 4 is an inverted plan of said tuning-pin, and Fig. 5 is an inverted plan of a modified form of the tuning-pin in which the tubular portion is divided longitudinally into only two parts instead of four.

In the drawings, A represents the iron frame or pin-block, as the case may be, in which is set in a fixed position the pin *a*. B is the tuning-pin, made of steel and having its upper portion made square or prismatic in cross-section, and its lower portion in the form of a hollow cylinder by drilling therein the chamber *b*, the wall of which is divided by the longitudinal slots *c c* into two or more parts or segments, as shown in Figs. 1, 3, 4, and 5. The chamber *b* is made to fit closely the pin *a*, and has wound thereon one end of the string C, its end being first passed through the slots *c c*, as shown in Fig. 1. The opposite end of the string C is se-

cured to the hitch-pin D, and said string is supported upon the bridges *d* and *e* in a well-known manner.

The operation of my invention is as follows: The string C being made fast to the hitch-pin D and drawn over the bridges *d* and *e*, its other end is inserted through a slot, *c*, and the pin B is turned so as to wind the string upon the cylindrical portion thereof from the upper ends of the slots *c* downward until the slack is all taken up and the string brought to the desired tension or pitch. The strain of the string upon the pin B causes the segments of the tube surrounding the pin *a* to spring inward, so as to nip said pin *a* more firmly the greater the tension that is applied to said string, thus firmly holding the string up to the desired tension by the increased friction caused between the surface of the pin *a* and the inner periphery of the tubular portion of the tuning-pin. The pin *a*, not being designed to be moved in its bearing after it is once set, may be made very rigid, even when set in the old style wooden-pin block, so that very little trouble will be experienced from the yielding of the pin and the consequent lowering of the pitch of the string, which is quite a serious difficulty when the string is wound directly upon a pin set in the plate or pin-block, and which must be revolved in its bearing in said plate or block to tune the string.

The pin *a* may be cast in one piece with the iron frame, if desired, and be milled off to the desired diameter to form a good bearing fit for the tuning-pin B; or the pins *a* may be so cast and finished upon a malleable-iron plate, which may be screwed to the wooden-pin block or frame.

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

A tuning-pin made tubular at one end and slotted longitudinally through said tubular portion, in combination with a fixed or non-movable pin, upon which said tubular pin is mounted, and about which it may be revolved, and a piano-string having one end inserted through one of the slots and wound

upon the slotted tubular portion of said first-
mentioned pin, whereby the tension of said
string contracts said slotted tubular portion
of said pin, and thus increases the friction of
5 said tubular pin upon the fixed pin, substan-
tially as and for the purposes described.

In testimony whereof I have signed my name

to this specification, in the presence of two
subscribing witnesses, on this 20th day of Janu-
ary, A. D. 1885.

CHARLES E. ROGERS.

Witnesses:

WALTER E. LOMBARD,
WILLIAM H. PARRY.