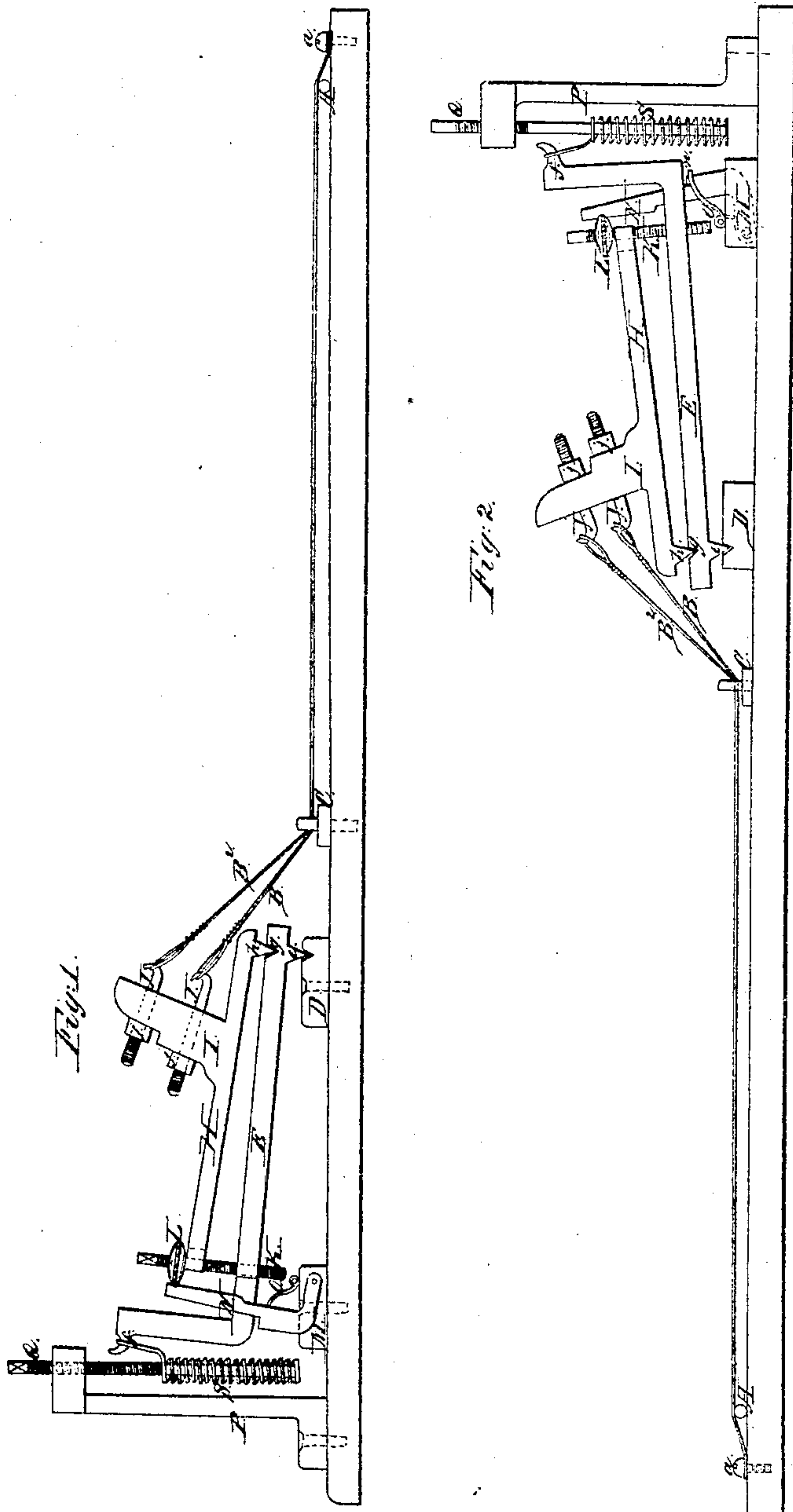


*P. E. Challet,*  
*Stringing Pianos,*

*Nº 64,407,*

*Patented May 7, 1867.*



*Witnesses,*  
*J. M. Beard,*  
*A. Turner.*

*Inventor,*  
*Pierre Eugene Challet,*  
*by his attorney,*  
*Adolphe Brand.*

# United States Patent Office.

PIERRE EUGENE CHOLLET, OF NEW YORK, N. Y.

*Letters Patent No. 64,407, dated May 7, 1867.*

## IMPROVEMENT IN PIANO-FORTES.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, PIERRE EUGENE CHOLLET, of the city, county, and State of New York, have invented, made, and applied to use certain new and useful improvements in Stringing the Strings of Piano-Fortes, by the use of which invention parties unaccustomed to tuning piano-fortes may readily tune the same; and I do declare the following to be a full, clear, and correct description of the same, reference being had to the accompanying drawings, making part of this specification, and the letters of reference marked thereon, in which—

Figure 1 is a side elevation showing my improvements.

Figure 2, a side elevation showing my improvements.

In the drawings, like parts of the invention are pointed out by the same letters of reference.

The nature of the invention consists in new and useful improvements in stringing the strings of piano-fortes, so that any one unaccustomed to tune a piano-forte can readily and correctly tune the same.

To enable others skilled in the arts to make and use the invention, I will proceed to describe the same.

A shows the bridge of the piano-forte, and B B<sup>2</sup> are two strings of the same. These strings may be passed over a screw, *a*, secured in the piano-forte, and their opposite ends are passed through the eyes in the metal support C inserted in the instrument at the proper point. These eyes, when the support C is inserted in the instrument, are on a line with the top of the bridge A, so that the strings B B<sup>2</sup> shall be the same height their entire length. D shows a support inserted in the instrument, which support has a portion of its face cut away, forming a slot to receive the toe *e* of the lever E. E shows a lever, provided with the toe *e* resting in the slot of the support D, and also with the hook *f*. This lever E has its upper surface slotted near its front end, as at *g*, to receive the toe *h* of a second lever, H. H shows a second lever, provided with the toe *h*, and also with the upright I, in which are inserted the hooks J J, to which the ends of the strings B B<sup>2</sup> are held. These hooks J J are threaded, and the strings B B<sup>2</sup> may be tightened by tightening the nuts *j j* upon the threaded hooks J J, the nuts bearing upon the back of the upright I. The second lever H has one end slotted to receive the screw K, which also passes through the lever E, which is provided with the opening for such purpose. Upon this screw K is the notched head L. Upon the support M, inserted in the instrument, directly below the rear of the lever E, is attached the pointer N, so held that it may move freely forward and backward when desired. This pointer N has a portion of itself turned down, as at *n*, to form a foot upon which the rear end of the lever E may impinge. Attached to the support M is the spring O, one end of which bears against the under side of the foot *n*. P shows a standard, through which the screw Q passes, and S is a spiral spring, through which the screw Q operates, one end of said spring being attached to the hook *f* upon the lever E.

### *Operation.*

My improvement being thus constructed, the operation is as follows: The strings B B<sup>2</sup> are first tuned by a competent party, by means of the threaded hooks and nuts, the nuts upon the threaded hooks being loosened or tightened, as may be requisite. When the strings are in tune the pointer N falls into one of the notches of the notched head. When from the change of temperature or other causes the strings become out of tune, the spring S becomes relaxed, releasing the levers E and H and throwing back the pointer N from contact with the notched head. To place the strings in tune, the notched head is turned, causing the levers E and H to approach each other, and as the lower lever is raised the spring O is relaxed until the pointer N (against the foot of which the spring O operates) is thrown forward into one of the notches upon the notched head, when the strings will be found to be in tune. The advantages of the present invention are found in the facility and celerity with which any one, even a child, though no musician, can tune a piano-forte.

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

In combination with the levers E and H, the latter of which is provided with the hooks or their equivalents, I claim the use or employment of the notched head, screw, and pointer, for the purposes set forth.

PIERRE EUGENE CHOLLET.

Witnesses:

WILLIAM T. WELLER,  
A. SIDNEY DOANE.