(No Model.)

A. UHLIG.

PIANO TUNING PIN.

No. 345,743. Patented July 20, 1886.

Fig: 1

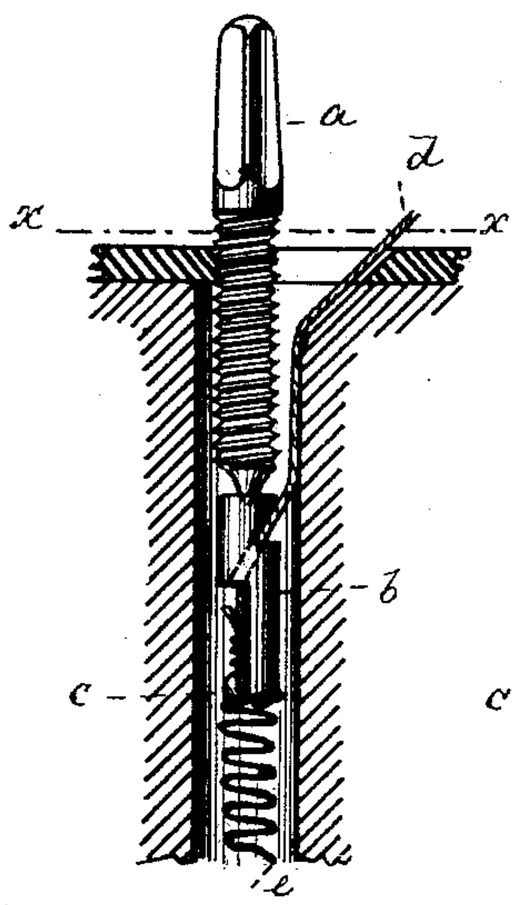


Fig: 2

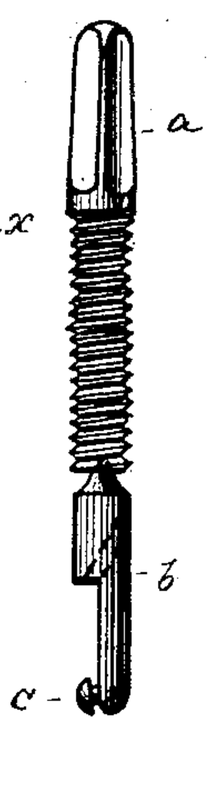


Fig: 3

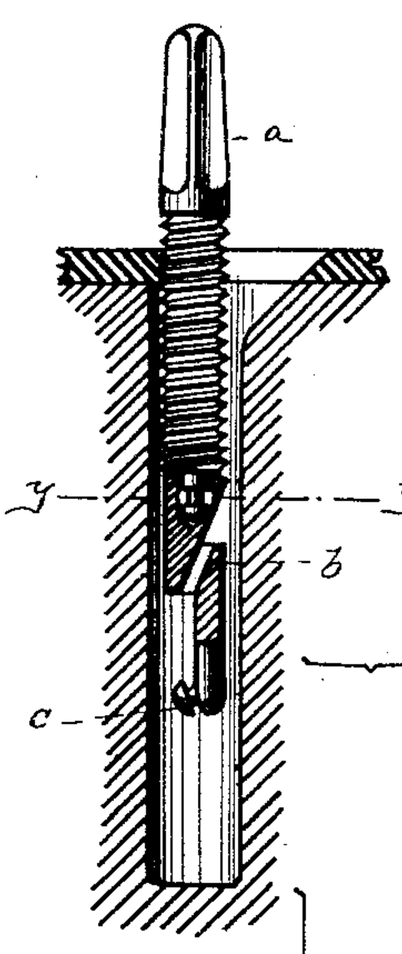


Fig: 4

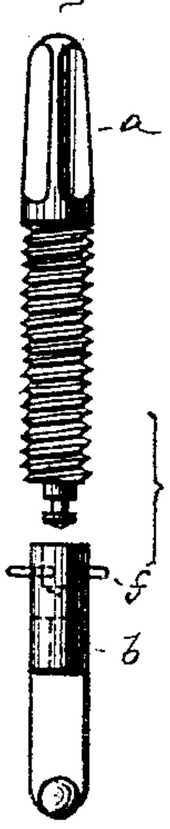


Fig: 5

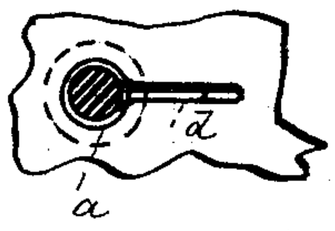
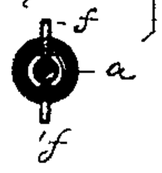


Fig: 6



Witnesses:
Wm. A. Lowe
Thomas Turner

Inventor:
Augustinus Uhlig
by his attorneys
Roeder & Briesen

UNITED STATES PATENT OFFICE.

AUGUSTINUS UHLIG, OF PEGAU, SAXONY, GERMANY.

PIANO TUNING-PIN.

SPECIFICATION forming part of Letters Patent No. 345,743, dated July 20, 1886.

Application filed August 4, 1885. Serial No. 173,487. (No model.)

To all whom it may concern:

Be it known that I, AUGUSTINUS UHLIG, of Pegau, Germany, have invented a new and Improved Tuning-Pin, of which the following specification is a full, clear, and exact description.

This invention relates to an improved tuning-pin for pianos, which permits an accurate adjustment of the tension of the string.

The invention consists in the elements of improvements hereinafter more fully pointed out.

In the accompanying drawings, Figure 1 is a side view of my improved tuning-pin. Figs. 2, 3, and 4 are similar views, partly in section, of modifications. Fig. 5 is a cross-section on the line *x x*, Fig. 1. Fig. 6 is a similar section on line *y y*, Fig. 3.

With particular reference to Fig. 1, the letter *a* represents a tuning-pin having a wrench-head at the top, a screw-threaded shank, and a pointed end. This end enters a seat formed in the upper end of a hollow block, *b*. The block *b* is notched at its lower end, and is provided with a stud, *c*, to which the end of the string *d* is attached. The string *d* is carried to the stud *c* through a transverse passage provided in block *b*, as shown.

e is a spiral spring bearing against lower end of block *b* and pressing such block against the pin *a*. It will be seen that by slightly turning pin *a* the block *b* is raised or lowered, to diminish or increase the tension of string *d*.

In Fig. 2, the block *b* is shown to be made with a pointed upper end, to fit within a seat formed at base of pin *a*.

In Figs. 3 and 4, the parts *a b* are connected by means of a head on pin *a* entering a socket in block *b*. The head of pin *a* is notched for the reception of two pins, *f*, that pass through block *b*. In this way the block *b* is withdrawn, or raised and lowered, together with the pin *a*. In this modification the spring *e* may be dispensed with.

I do not broadly claim to have invented a tuning-pin which has a separate block, to which the string is attached, as similar constructions are shown in Patent No. 186,490, granted to G. Morgan, January 23, 1877, and also in English Patent No. 9,380 of 1884; but

I do claim—

1. The combination of pin *a* and string *d* with hollow block *b*, having stud *c*, and a transverse passage for the string *d*, substantially as specified.

2. The combination of pin *a* with block *b*, having stud *c*, and with the spring *e*, substantially as specified.

3. The combination of pin *a*, having pointed end, with block *b*, having a seat for the reception of such end, and with the stud *c*, and spring *e*, that crowds the block against the pin, substantially as specified.

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

AUGUSTINUS UHLIG.

Witnesses:
EDMUND BACH,
ERNST KAMPP.