

(Model.)

E. McBRIDE.  
Piano Tuning Pin Lock.

No. 235,269.

Patented Dec. 7, 1880.

Fig. 1.

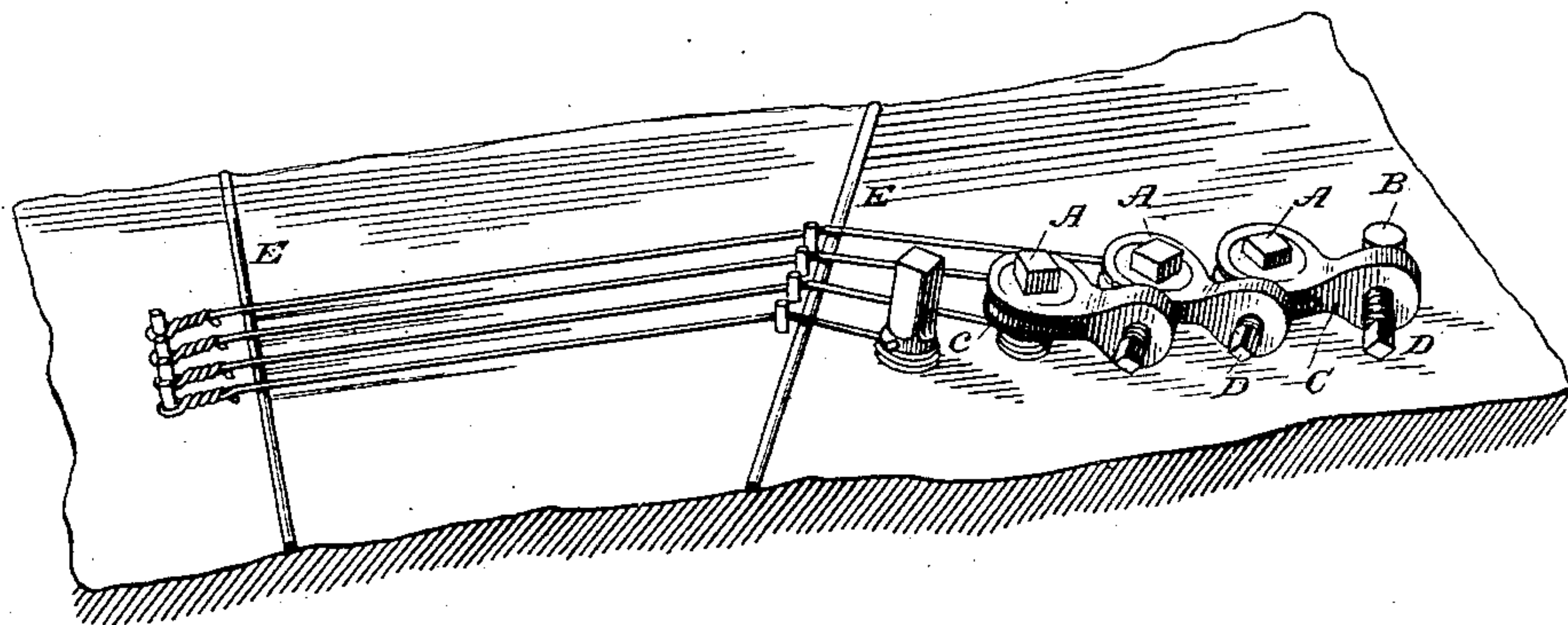


Fig. 2.

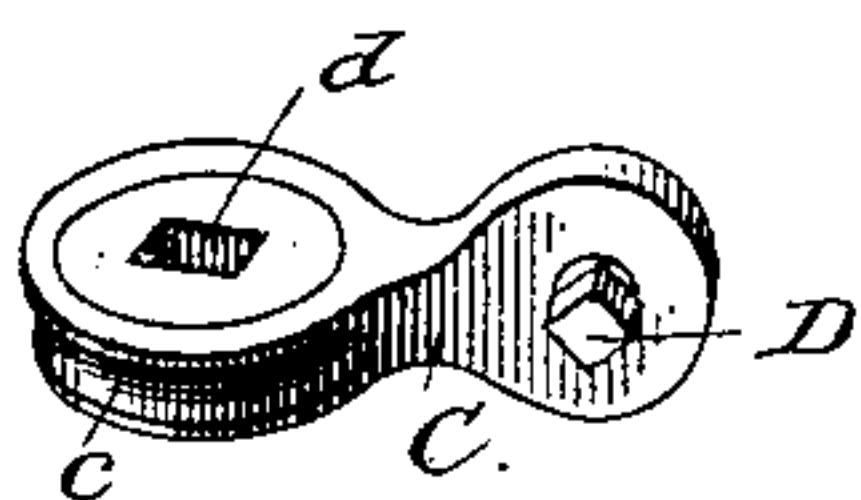
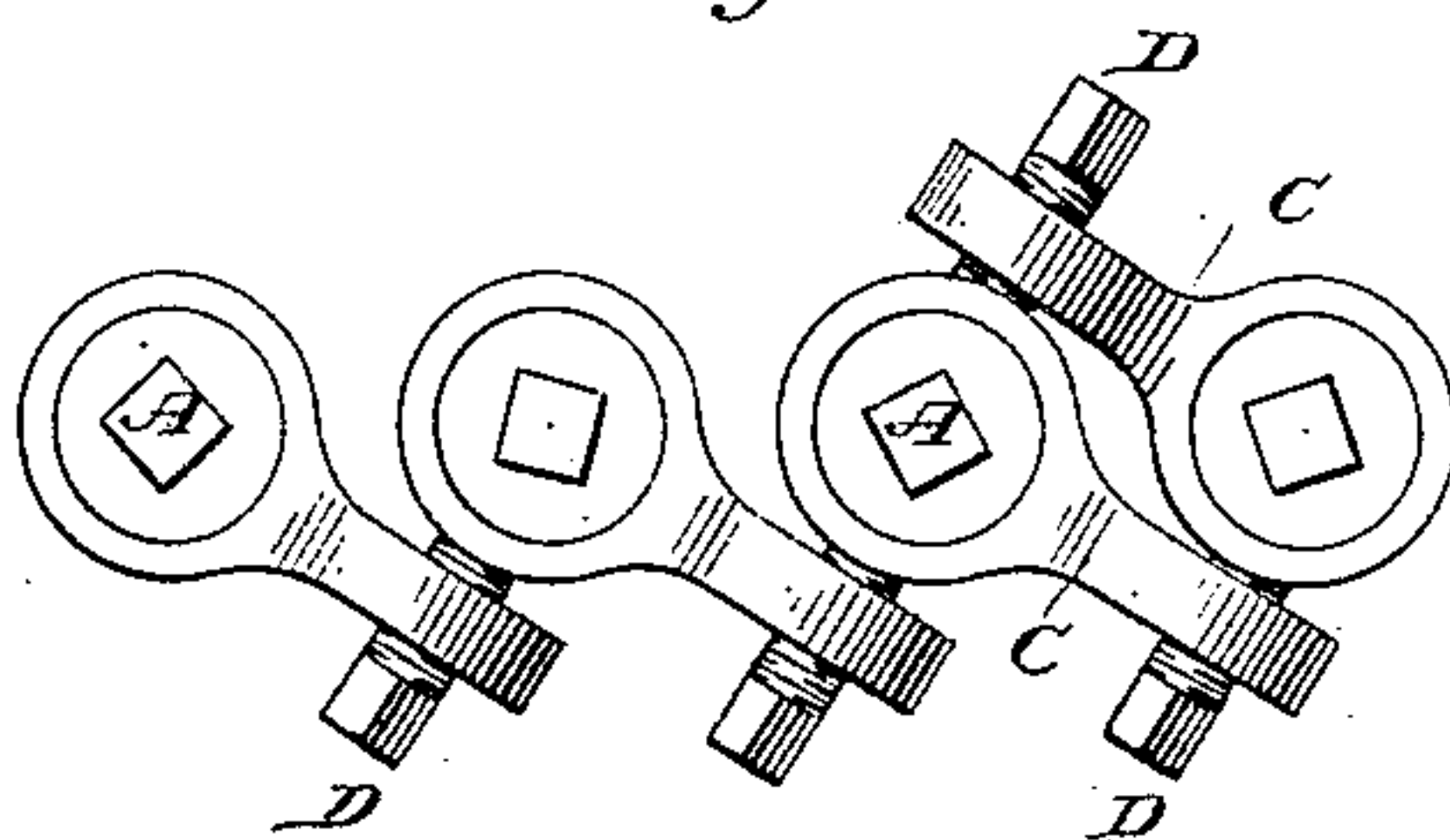


Fig. 3.



Attest:

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# UNITED STATES PATENT OFFICE.

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## PIANO TUNING-PIN LOCK.

SPECIFICATION forming part of Letters Patent No. 235,269, dated December 7, 1880.

Application filed July 8, 1880. (Model.)

*To all whom it may concern:*

Be it known that I, EDWARD McBRIDE, of St. Mary's, in the county of Elk and State of Pennsylvania, have invented certain new and useful Improvements in Piano Tuning-Pin Locks; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to pianos and metallic stringed instruments, tuning the same, but more particularly to increasing and improving the tone and keeping and holding the instrument in tune.

It is well known that it is no small matter to properly tune a piano, and while tuning one string may fall back out of tune while another is being operated upon, and after the whole instrument is put in perfect and proper tune it will not remain so for any length of time.

To secure a perfect and simple plan or device or attachment by which a piano can be readily and accurately tuned and then securely locked and kept in tune has been a great want. By my plan and device I am convinced that this want is supplied, the tuning is made easier, and a nicer adjustment secured, and when tuned the instrument will remain in perfect tune almost indefinitely.

Figure 1 represents a section of a piano with the device attached; Fig. 2, the device or attachment; Fig. 3, a modified application of the same.

The device consists of a dependent collet-wrench, one for each string or peg of the instrument, having square openings or holes *d* to fit over and on each peg, said openings cut or placed at different angles from the arm or shoulder of the wrench to suit the relative position of the pegs. In the arm or shoulder of the wrench I have a set-screw, *D*, by means of which the wrench is operated and the tuning accomplished.

In order to apply my device, which can be placed and used upon any style of piano, I

simply have to drive an additional peg or pin of iron or steel at the end of each row of pegs, as shown by *B*, Fig. 1, against which the adjusting-screw of the first collet-wrench works or rests, and the adjusting-screw of each following collet-wrench rests and works upon the preceding one, as shown in Fig. 1.

I have a groove cut in the edge of the wrench, as shown in Fig. 2, at *c*, for the purpose of keeping the adjusting-screws in place when in a proper and fixed position.

The wrenches will be manufactured in sets or series, and having the holes or openings for the pegs at different angles to adjust them to the corresponding angles of the heads of the pegs or pins, and each wrench numbered according to the angle, a gage-wrench being used for this purpose.

The piano is first put in proper tune in the ordinary way, and by means of the gage-wrench the correctly-numbered collet-wrench is selected for each string. The proper collet-wrench is then placed upon the peg, and by means of a tuning-hammer or wrench the adjusting-screw *D* is operated, the strings brought to a finer tune, and firmly held in position, where they will remain for an indefinite period of time, and not require, as is the case now, to be tuned from time to time.

It may be found in some instruments not advisable to use the peg *B*, in which case it can be dispensed with, and the first wrench reversed can rest against its next neighbor, as shown in Fig. 3.

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

1. The collet-wrench *C*, with square or angular hole *d*, the groove *c*, and adjusting-screw *D*, constructed and arranged to operate substantially as shown, and for the purpose set forth.

2. In a piano, the combination of the wrench *C* and the pins *A* and *B*, constructed to operate as described, and for the purpose set forth.

EDWARD McBRIDE.

Witnesses:

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