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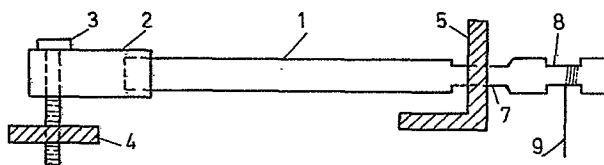
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64 **Device for stringing of strings in pianos and the like.**

67 A device for facilitating precision tuning and stringing of pianos and the like comprises a two-armed rocker (1) one end (8) of which is attached to the string (9) and the other end (2) of which is coupled to the frame (4) of the instrument via a tuning screw (3) to provide precision tuning, rough tuning being provided by turning the rocker (1) around its longitudinal axis in a groove (6) in another part (5) of the frame.



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Device for stringing of strings in pianos and the like.

The present invention refers to a device for stringing of strings in pianos, grand pianos, harpsichords, zithers and the like where a two-armed rocker is journalled in a frame and where one end of the rocker is attached to the string
5 and the other end is affected by a tuning screw or the like.

Devices hitherto used for stringing of pianos, grand pianos, and similar stringed instruments usually consist of a so-called tuning pin or a similar screw formed means around which the string is wound. The tuning pin is threaded in
10 a so-called tuning block or the like whereby the friction of the thread must be high enough to resist the tractive force of the string. This force is very high in pianos and grand pianos and therefore high manual force is required to prolong or shorten the string at tuning. This gives rise to difficulties to adjust rather small deviations in pitch,
15 as the tuning screw has a tendency to move by leaps at the stringing. One way to solve this problem is to replace the tuning pins by so-called tuning rockers, which are two-armed rockers journalled in the frame of the instrument, one arm of the rocker being attached to the string and the
20 other end being affected by a tuning screw or the like. One example of such a construction is shown in the U.S. patent 613900 and a further improved tuning rocker is shown in the Swedish patent 7304806-8. However, both these constructions require that the rough tuning and the
25 precision tuning take place at the same working moment, which puts great demands on the piano tuner, among other things a relatively exact estimate of the length of the string must be made from the beginning.

An object of the present invention is therefore to
30 provide a device for stringing in which rough tuning takes place in a simple way reminding of the conventional tuning

pin principle, but which also offers a possibility of precision tuning whereby the rough tuning as well as the precision tuning imply an absolute fixing of the string stretch which gives a stable pitch of sound.

5 The invention will now be explained in detail reference being made to the attached drawing in which:

Fig. 1 schematically shows a tuning device according to the invention in the position it takes at rough tuning, Fig. 2 shows the corresponding device in the position
10 for precision tuning; and

Fig. 3 shows a frame in which the rocker according to Figs. 1 and 2 is journalled in such a way that it can be turned and locked.

In the drawing reference 1 denotes a tuning rocker
15 journalled in a groove 6 in a part 5 of a frame in a piano or the like. At one end of the rocker a string 9 is attached and the other end of the rocker is coupled to another part 4 of the frame of the instrument by means of a screw 3 and a casing 2 in which the rocker 1 can be
20 turned. At the embodiment according to the figure the rocker has two thin sections 7 and 8, the section 7 being intended to rest in the groove 6 at rough tuning as shown in Fig. 1 while the section 8 is the section around which the string 9 is wound at rough tuning.
25 Between the two sections 7 and 8 the rocker according to the drawing has a six-sided cross-section as is apparent from Figure 3 and when the rocker is moved to the left in the figure so that this part will rest in the groove 6, the rocker is locked as regards the turning around its
30 own longitudinal axis. This takes place after the rough tuning has been made by turning of the rocker either manually or by means of some suitable tool. When the rocker thereafter is brought to take the position shown in Fig. 2 a precision tuning of the string stretch takes
35 place by means of turning the screw 3.

We claim:

1. Device for stringing of strings in pianos, grand pianos, harpsichords, zithers and the like in which a two-armed rocker (1) is journalled in a frame (5) and where one end of the rocker is attached to the string (9) and the other end is affected by a tuning screw (3) or the like, characterized in that the rocker can be turned and locked around its own longitudinal axis, the string attached to the rocker at the turning of the rocker being wound around the rocker in order to provide a rough tuning and the rocker after the rough tuning has been made being locked as regards this turning movement and that the other end of the rocker is turnably coupled to the frame via said turning screw the turning of which implies a precision tuning of the string.

2. Device according to claim 1, characterized in that said journalling consists of a groove in the frame in which the rocker rests and that the rocker is provided with sections of different diameters and is axially moveable, so that the different sections can be brought to rest in the groove, one section permitting a turning of the rocker in the groove and the other section at the insertion in the groove locking the rocker as regards the turning movement.

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Fig. 1

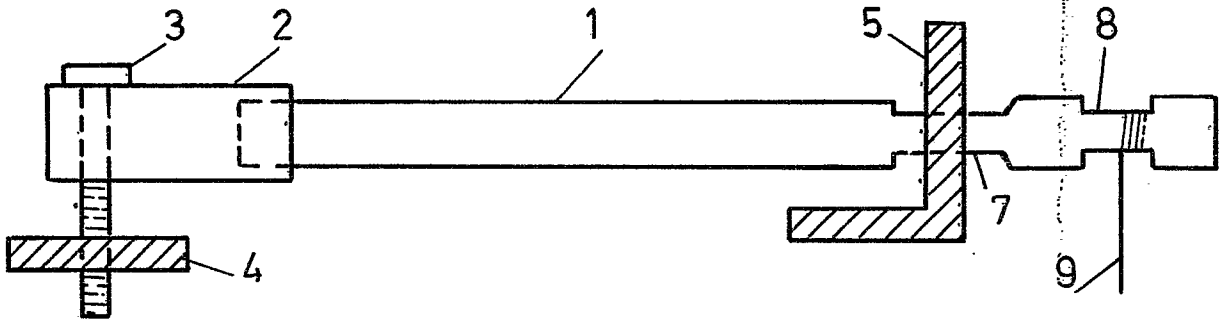


Fig. 2

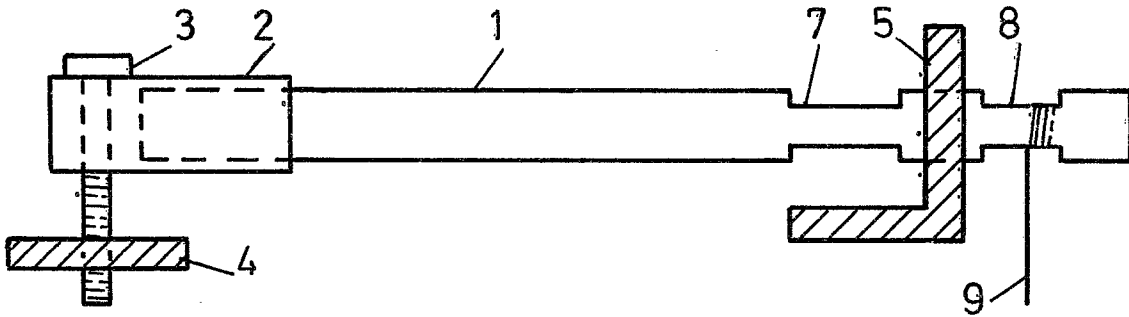


Fig. 3

