

(No Model.)

C. W. PECK.
TUNING PIN SOCKET.

No. 575,850.

Patented Jan. 26, 1897.

Fig. 1.

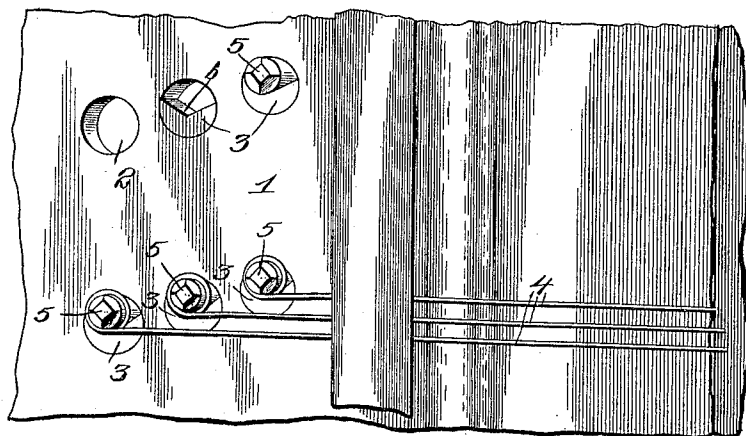


Fig. 2.

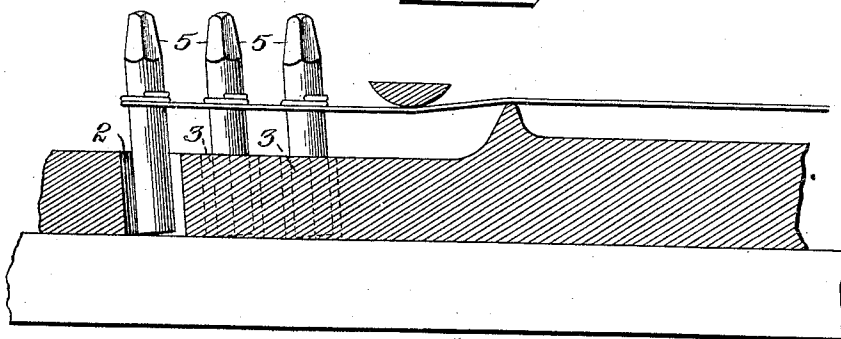


Fig. 3.

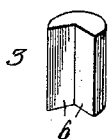
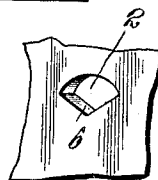


Fig. 4.



Witnesses

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CLARANCE W. PECK, OF ATHENS, PENNSYLVANIA.

TUNING-PIN SOCKET.

SPECIFICATION forming part of Letters Patent No. 575,850, dated January 26, 1897.

Application filed November 8, 1895. Serial No. 568,307. (No model.)

To all whom it may concern:

Be it known that I, CLARANCE W. PECK, a citizen of the United States, residing at Athens, in the county of Bradford and State of Pennsylvania, have invented a new and useful Tuning-Pin Socket, of which the following is a specification.

My invention relates to improved means for securing tuning-pins in the frame of a piano or other stringed instrument; and the object in view is to provide novel and efficient means whereby a pin arranged in a metallic frame may be held by frictional contact from loosening or accidental turning, the friction increasing in proportion to the tension of the string attached to the pin.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a plan view of a section of a piano-frame with tuning-pin sockets constructed in accordance with my invention. Fig. 2 is a vertical section of the same. Fig. 3 is a detail view of a friction-plug employed in connection with the pin. Fig. 4 is a plan view of a tuning-pin socket embodying my invention, the plug being dispensed with and the desired cross-sectional form of socket being provided by an integral construction of the frame.

Similar numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a portion of a frame provided with cross-sectionally circular openings 2, which may be bored or otherwise formed therein, and 3 represents a plug, one of which is fitted in each opening in the frame. In transverse section this plug has one round or segmental side and an opposite angular side, the angle being of the class known as "reentrant." Therefore when the plug is fitted in an opening in the frame the resulting opening is cross-sectionally sector-shaped. The plug is placed in the opening of the frame in such a position that a line connecting the outer angles thereof will be substantially parallel with the wire or string 4, whereby the draft upon the pin 5 will be toward one of

the beveled surfaces of the plug. The string leaves the pin upon the side adjacent to the inner or angular surface of the plug and thus has a tendency to crowd the pin into the angle between one of the beveled surfaces of the plug and the contiguous concave surface of the opening 2. Thus the pin has three points of bearing, one of which is upon the side of the opening and the others upon the plane surfaces of the plug. The first-named bearing is concave, while the other two are plane and are contiguous to an angle formed at the junction of the plane surfaces.

In practice I have found it desirable to first bore or otherwise form the round opening 2 and subsequently introduce the friction-plug 3 to provide the cross-sectionally sector-shaped socket, as above described, but it will be understood that the socket may be formed by an integral construction of the frame, as shown in Fig. 4, the plane angularly-disposed surfaces 6 being arranged, as above specified, opposite the concave surface of the socket with the angles at the intersections of said plane surfaces with the concave surface approximately upon a line parallel with the string which is attached to the pin seated in the socket. It is also important in order to secure all of the advantages of my invention to wind the string upon the pin in such a direction that the string will leave the pin upon the side contiguous to the angularly-disposed plane surfaces 6, inasmuch as the tendency of the pin to turn in a direction to unwind or loosen the string is resisted by the contiguous angularly-disposed plane surface against which that side of the pin which has a tendency to move in the direction of strain is in contact. Furthermore, said relative arrangement of the string, pin, and socket provides for more easily turning the pin in the opposite direction to increase the tension of the string.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having described my invention, what I claim is—

1. A frame for a musical instrument hav-

ing tuning-pin sockets provided at one side with angularly-disposed plane or flat bearing-surfaces arranged to form a reëntrant angle, and a diametrically opposite concave bearing-
5 surface, substantially as specified.

2. A frame having tuning-pin sockets comprising a cylindrical opening, and a friction-plug fitted in said opening and having plane surfaces arranged to form a reëntrant angle
10 arranged opposite the exposed portion of the

wall of the cylindrical opening, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

CLARANCE W. PECK.

Witnesses:

GEORGE S. PECK,
CHARLES L. PECK.