R. KUENSTLER. BANJO.

No. 523,042. Patented July 17, 1894. E F1G. 1. B B INVENTOR by his attency Chas a Reliter

UNITED STATES PATENT OFFICE.

RICHARD KUENSTLER, OF PHILADELPHIA, PENNSYLVANIA.

BANJO.

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To all whom it may concern:

Be it known that I, RICHARD KUENSTLER, a citizen of the United States, and a resident of the city and county of Philadelphia, State of 5 Pennsylvania, have invented certain new and useful Improvements in Banjos, of which the

following is a specification.

My invention relates to improvements in devices for adjusting the stems and the strings 10 of banjos or similar musical instruments, and the object of my invention is to furnish a device by means of which the stem and the finger board, which is carried by the stem, and the strings of a banjo or similar musical in-15 strument may be readily and quickly moved toward or away from one another so that the proper distance may always be obtained between the strings and the finger board.

In that class of musical instruments of 20 which the banjo is the type, difficulty is always experienced in preserving the proper distance between the strings and the finger board. This distance may be changed in a number of ways; if a new head is put upon 25 the instrument it may be higher or lower than the old one and in consequence the strings will be farther away from or nearer to the finger board. Bridges of different height also raise or lower the strings, and the same effect 30 may be caused by differences in temperature or humidity. If the strings are too far away from the finger board it is impossible to finger them properly, if too near they strike the frets and cause a buzzing or rattling sound.

It is the purpose of my invention to furnish a device by means of which the stem and head of the instrument may be moved in such a manner as to cause the strings to approach or recede from the finger board.

In the accompanying drawings, Figure 1, is a bottom view of a banjo showing my attachment in place; Fig. 2, a side elevation of a banjo furnished with my attachment, part of the rim of the instrument being broken away 45 and Fig. 3, a side elevation of a modification of my attachment.

A represents the rim of a banjo, B the stem, C the heel of the stem, D the rod or post which is secured to the lower part of the stem and 50 which passes through one side of the rim and is secured to the other side of the rim.

My adjusting device consists preferably of two rods E, F, furnished at their inner ends, one with a right or left handed, the other with a left or right handed thread, and of a sleeve 55 nut G which is placed upon the threaded ends of the rods E, F. The outer end of rod E is attached to the heel C of the stem by means of screws H, and the outer end of rod F is atrached to post D by screws I or other suit- 60 able means. By setting up nut G, which shortens rods E, F, the head of the instrument and the stem are caused to turn downward upon an imaginary fulcrum which is situated at the point of contact of the heel of the stem 65 and the rim, and the strings are moved to-ward the finger board. If the strings are too close to the finger board, the nut G is unscrewed lengthening the rods E, F, this causes the head and the stem to turn in the opposite 70 direction, or upward, and the strings are moved away from the finger board.

The rods E, F, are formed by the nut G into one rod which may be shortened or length-

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ened at pleasure.

In the modification of my invention shown in Fig. 3 but one rod is used, the outer end of this rod is attached to the heel C of the instrument, its inner end is threaded and passes through a bracket L which is carried by post 80 D, and it is furnished with nuts J, K, one bearing upon one side of the bracket the other upon the other side of the bracket. By loosening one of the nuts and setting up on the other the head and stem of the instru- 85 ment may be caused to turn upon the imaginary fulcrum and the strings be moved toward or away from the finger board as above described.

I am aware that banjos have before been 90 fitted with braces one end of which is rigidly attached to the stem and the other swiveled to the rim by means of a screw passing through the rim. This device was intended to adjust the strings and finger board, its working, ow- 95 ing to the attachment being made to the rim, is unsatisfactory, and it can only be operated in one direction.

Having thus described my invention, I

1. The combination with a banjo of a rod secured to the stem, or the heel of the stem,

and to the post and means whereby said rod may be shortened or lengthened.

2. The combination with a banjo of a rod one end of which is attached to the heel of the stem and the other end of which is furnished with a right or left thread, a rod one end of which is attached to the post and the other end of which is furnished with a left or right thread, and a sleeve nut joining the ends of said rods, all substantially as and for the purposes set forth.

RICHARD KUENSTLER.

Witnesses:

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