

(No Model.)

W. A. TODD.
HEAD CLAMP FOR BANJOS.

No. 550,397.

Patented Nov. 26, 1895.

Fig. 1.

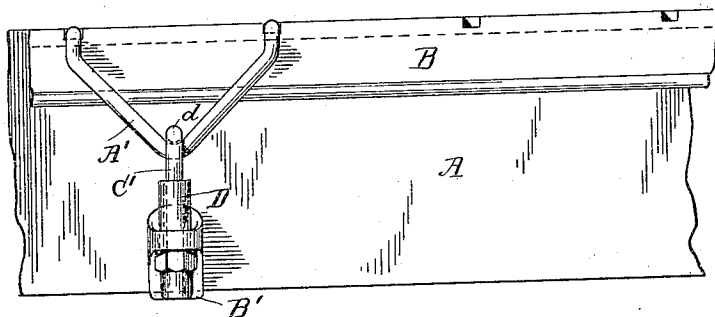


Fig. 2.

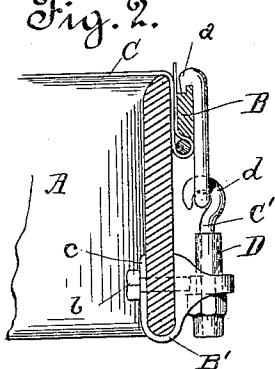


Fig. 3.

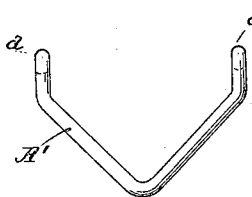


Fig. 4.

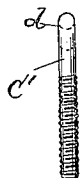


Fig. 5.

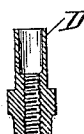
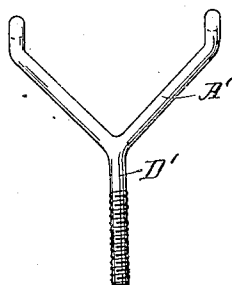


Fig. 6.



Witnesses.

H. Montevende,
Elmer Wicker

Inventor.
William A. Todd

by *W. A. L. L.*
Att'y

UNITED STATES PATENT OFFICE.

WILLIAM A. TODD, OF SAN FRANCISCO, CALIFORNIA.

HEAD-CLAMP FOR BANJOS.

SPECIFICATION forming part of Letters Patent No. 550,397, dated November 26, 1895.

Application filed February 28, 1894. Serial No. 501,800. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. TODD, a citizen of the United States, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Head-Clamps for Banjos; and I do hereby declare the following to be a full, clear, and exact description of said invention, such as will enable others skilled in the art to which it most nearly appertains to make, use, and practice the same.

The present invention relates to an improved head clamp or hook for banjos, which consists in the arrangement of parts and details of construction, as will be hereinafter more fully set forth in the drawings, described, and pointed out in the claim.

With the ordinary head clamp or hook it is necessary that about thirty-two be made use of in order to properly secure the head to the rim of the banjo, which number of clamps not only increases the weight of the instrument, but adds materially to the cost of its manufacture. This number of clamps I find to be unnecessary and may be dispensed with by so constructing the clamp as to grasp the head-retaining band of the banjo at two or more points, thus permitting one clamp to perform the duty of two of the ordinary clamps, or, in other words, making employment of one-half of the number of clamps now used to secure the head to the rim. By decreasing the number of clamps I not only lessen the weight of the instrument, but decrease the cost of its manufacture.

Referring to the drawings forming a part of this specification, Figure 1 is a side elevation of a portion of the banjo-rim, showing my improved head-clamp connected thereto; Fig. 2, an end elevation of Fig. 1; Fig. 3, a detail view of the forked clamp; Fig. 4, a similar view of the screw-threaded stem; Fig. 5, a detail sectional view of the sleeve which fits over the screw-threaded portion of the stem and regulates the tension of the forked clamp, and Fig. 6 a modification of the forked clamp.

The letter A indicates the rim of the banjo, B the head-retaining band, and C the head of the banjo.

My clamp consists of the forked rod or plate A', the arms of which are turned over at their

ends so as to form the hooks *a*, which grasp the upper edge of the head-retaining band, which band fits over the rim, as shown. It will be observed that the ends of the forked rod grasp or engage the band B at two distinct points a distance of about one inch to each side of the center. Consequently one clamp rod or plate covers a distance of about two inches or the space ordinarily occupied by two clamps.

To the lower portion of the rim A, I secure the clip or heel-strap B', which consists of a single piece of metal stamped, turned, or cast as to embrace both sides of the rim when secured thereto, (see Fig. 2,) said clip or heel-plate being held in place by means of the bolt *b*, which passes through the upturned end *c* of the clip or plate, the banjo-rim, and into the under face or exposed portion of the clip or plate. By uniting the clip or heel-plate to the rim, as described, the upturned end *c* serves as a washer for the nut of the bolt *b*. Through an opening formed in this clip or heel-plate works the sleeve D, which sleeve is connected to the forked rod or clamp through the medium of the stem C', the upper end of which is hooked, as shown at *d*, so as to fit over the fork of the clamp. (See Fig. 2.) The lower end of the stem is screw-threaded and fits into the hollow sleeve D. By means of this sleeve, the lower portion of which is internally screw-threaded, the threads of the screw-threaded stem are covered and hidden from view. This covering of the threads not only improves the appearance of the banjo, but prevents the clothes of the operator from being torn thereby. By means of this sleeve I am also able to use a much shorter stem than would otherwise have to be employed, inasmuch as the sleeve extends upward and grasps the stem. Consequently it is not necessary that the stem extends through the clip or heel-plate, as heretofore. The clip or heel-plate, it will be noticed, serves as a guide for the sleeve.

The hooked end of the screw-threaded stem fitting over the fork of the clamp provides a swiveled connection between the forked clamp and stem, which acts as an equalizer for the distribution of the strain and insures an even pressure upon the head-retaining band, which prevents the head-retaining band

from springing up or one clamp becoming loose while another is being tightened. This is an important feature of my clamping device, for from an inspection of the ordinary banjo it will be noticed that out of the number of clamps employed certain ones will be loose while the others are tight. This looseness or uneven pressure of the clamps or hooks upon the banjo-head rim causes a rattling of the head when the instrument is played, consequently causing an improper sound to be produced.

By so constructing the clip or heel-plate as to embrace both faces of the rim the strain or tension of the clamp during tightening falls upon the lower edge of the rim and upper edge of the head-retaining band, or gives a direct vertical pressure. This manner of securing the clip or heel-plate overcomes defacing of the rim, which does result where the heel-plate is secured to only one face of the rim. This defacing is due to the fact that when secured to only one face the strain of tightening the head-clamp causes the upper edge of the heel-plate to be thrown inward or into the face of the rim.

It will be understood that the forked clamp and stem may be made in one piece, as will be seen by reference to Fig. 6, where the stem D' is formed integral with the forked clamp rod or plate. However, I prefer to form a swiveled connection, as above stated.

By referring to the drawings it will be noticed that each end of the sleeve is open. Consequently the downward movement of the yoke or forked clamp-stem is not limited in any manner, but, if desired, may move downward until the top of the sleeve impinges against the forked clamp. This permits me

to secure a much tighter clamp than where the downward movement of the stem is limited.

I am aware that it is not broadly new to provide a forked clamp to engage the head-retaining band, nor is it broadly new to adjust such a clamp by means of a sleeve mounted in a clip on the lower edge of the rim and engaging a threaded stem depending from the clamp.

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

The combination with the rim and the head retaining band, of a forked clamp engaging the said band, a substantially U-shaped clip engaging the lower edge of the rim and having its vertical branches bearing against the inner and outer sides of the rim, and provided on its outer face with a horizontal lug or projection, a bolt inserted through the inner branch of the clip and the rim and into the outer branch of the clip, a threaded stem depending from the forked clamp, and a sleeve mounted in the lug on the outer branch of the clip and inclosing the threaded stem, the lower portion of the sleeve being internally threaded to engage the threads of the stem and its lower end being open to permit uninterrupted movement of the stem, the sleeve being further provided with an annular shoulder bearing against the under side of the lug.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM A. TODD.

Witnesses:

N. A. ACKER,
LEE D. CRAIG.