

(No Model.)

C. F. HARTMANN.
GUITAR.

No. 498,113.

Patented May 23, 1893.

Fig: 1.

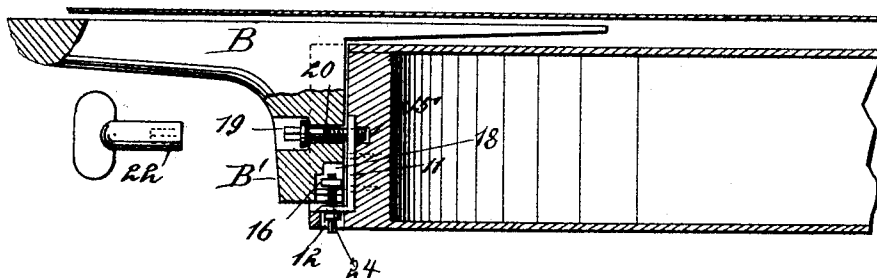


Fig: 3.

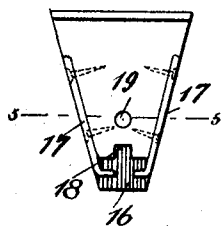


Fig: 2.

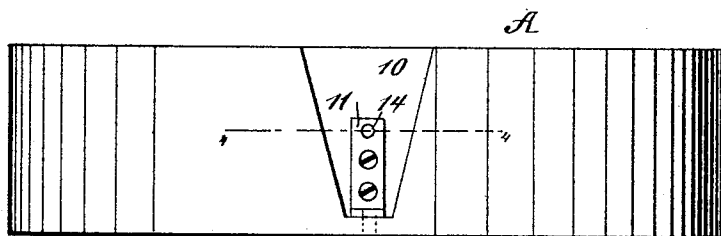


Fig: 5.

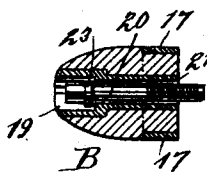


Fig: 4.

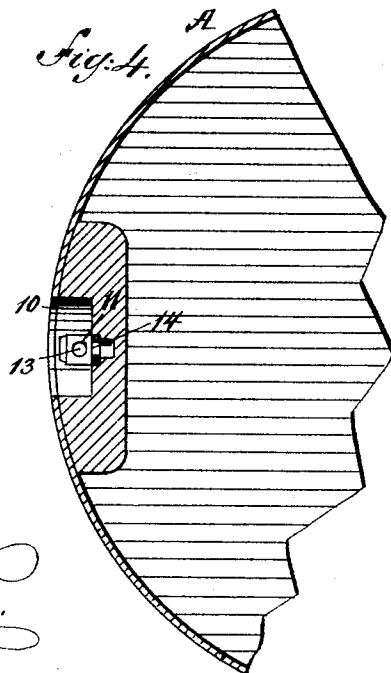
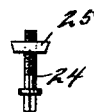


Fig: 6.



WITNESSES:

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GUITAR.

SPECIFICATION forming part of Letters Patent No. 498,113, dated May 23, 1893.

Application filed November 4, 1892. Serial No. 450,928. (No model.)

To all whom it may concern:

Be it known that I, CHRISTIAN FREDERIC HARTMANN, of Bethlehem, in the county of Northampton and State of Pennsylvania, have invented a new and useful Improvement in Guitars, of which the following is a full, clear, and exact description.

My invention relates to an improvement in the construction of guitars, and it has for its object to provide a means whereby the neck of the guitar may be expeditiously and conveniently removed from connection with the body, thus facilitating the storage or the transportation of the instrument.

A further object of the invention is to provide a means whereby the neck of the guitar may be adjusted in such a manner as to cause the strings to approach as close to the frets as the operator may desire.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth and pointed out in the claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a longitudinal vertical section through a portion of a guitar body and neck, illustrating the application of the improvement thereto. Fig. 2 is an end view of the guitar body illustrating that portion of the body to which the neck is applied. Fig. 3 is an end view of the heel of the neck. Fig. 4 is a horizontal section through the body, taken practically on the line 4—4 of Fig. 2. Fig. 5 is a horizontal section through the neck, taken essentially on the line 5—5 of Fig. 3; and Fig. 6 is a detail view of the vertical adjusting screw to be applied to the neck.

A recess 10, is made in that portion of the body A of the guitar where the neck B is to be located. The recess extends from the top of the body to a point near its bottom, the body being made sufficiently thick at its side edge at that point to enable the recess 10 to be readily produced in it. The shape of the recess is preferably made to approximate the shape of a V, and in the vertical front wall of the recess an angular or L-shaped metal

plate 11, is preferably located, the vertical portion of the plate being flush with the said vertical wall of the recess, while the horizontal or lower member of the plate rests upon the base wall of the recess, as shown in both Figs. 1 and 2. An opening is made in the lower or horizontal member of the inserted plate 11, which opening is immediately over another opening 12, which is produced in the bottom of the body, as shown in Fig. 1, the opening in the foot or lower member of the plate 11 being indicated by the reference numeral 13, and its position shown in Fig. 4.

Near the upper end of the vertical member of the plate 11 an opening or aperture 14, is made the wall of which is threaded, and a recess 15, shown in Fig. 1, is produced in the body immediately back of the aperture 14. The heel B' of the neck is of the ordinary shape; that is, essentially V-shaped in cross section, and is so made that it will readily slide into the body recess 10. In the front lower portion of the heel, a recess 16, is made, as shown in Figs. 1 and 3; and the side portion of the heel at its front edge is protected by bracket plates 17, which plates are sunk into the side edges of the heel, and extend over and within the bottom recess 16 at the central portion of said recess, as shown in Fig. 3.

The recess 16 has preferably produced in its upper wall a counter recess 18, as is likewise best shown in Figs. 1 and 3. The inwardly-bent portion of the neck brackets I will for convenience denominate feet, and the feet and brackets are located some distance apart.

A transverse opening or bore 19, is made in the heel of the neck above the lower recess 16; this opening or bore is in two diameters, the outer end of said bore being of the largest diameter. The bore 19, is adapted to receive a clamping screw 20, and the screw may be and preferably is, provided with a square outer end to receive a key 22, shown in detail in Fig. 1, or a like tool, and the outer end of the clamping screw is further provided with a collar 23 limiting its inward movement when placed in the bore 19. An adjusting screw 24, is also employed, and is shown in Fig. 6; this adjusting screw, while smaller, is prefer-

ably of like construction to the screw 20. The adjusting screw 24, however, is adapted to receive upon its threaded end a nut 25. This nut is placed within the recess 16, between the feet of the brackets 17 and the upper main wall of the recess, as shown in Fig. 1. Thus while the nut may be readily removed from its seat upon the bracket and from the recess 16 it cannot turn.

10 In placing the neck upon the body the neck is carried down into the body recess 10, the nut 25 having been placed in position in the neck. The adjusting screw 24 is then passed up through the opening 13 in the foot of the body plate 11, and then the said adjusting screw 24, is made to enter the nut 25 in the neck.

It will be understood that the bore through which the horizontal screw passes is larger in diameter than the diameter of that screw; thus the neck may be raised and lowered to a slight extent, and the adjustment of the neck upon the body is accomplished by turning the adjusting screw 24, while the neck is held in proper engagement with the body by passing the clamping screw 20 through the bore 19 in the neck and through the opening 14 in the vertical portion of the body plate 11, in which opening it is screwed, the opening 15 in the body permitting the screw to pass some distance through the plate, or until its collar 23 can firmly clamp the shoulder in the bore 19, formed by reason of its two diameters.

35 It will be understood that when the neck is to be adjusted upon the body the clamping screw is to be loosened to a slight degree. Thus it is evident that the neck may be conveniently and expeditiously removed from the body by the removal of the two screws 20 and 24, enabling the neck and body to be packed in a much smaller compass than heretofore, and the operator will be able to carry the instrument in an ordinary trunk or in a large valise. It is further evident that by reason of the adjustment of the neck upon the body

the frets of the neck may be made to approach close to the strings, or quite a distance may be secured between the strings and the frets if so desired.

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

1. In a guitar, the combination, with a body, of a neck having sliding movement thereon and removable therefrom, an attaching or clamping screw passed through an aperture in the neck of larger diameter than the screw and into the body, and an adjusting screw supported by the body and entering the lower portion or heel of the neck and an object within the neck, held from turning yet capable of vertical movement, as and for the purpose specified.

2. The combination with the body of the instrument provided with a recess 10 containing the angle plate 11 having an aperture 13 in its transverse member and an aperture 14 in its vertical member, of the neck, the heel B' of which enters said recess 10, and is provided with a recess 16 in its lower edge, the plates 17 secured to the opposite sides of the heel and having inturned lower ends entering the recess 16, a transverse screw passed through a bore 19 in the heel into the aperture 14 and the vertical screw 24 extending up through the aperture 13, between the said inturned ends and into a nut 25 thereabove, substantially as set forth.

3. The combination with the body of the instrument of the removable and adjustable neck having a heel B exterior to the forward end of the body and secured movably thereto by a set screw extending in a plane parallel with the neck and a set screw at right angles to the plane of the neck and connecting it adjustably with the head, substantially as set forth.

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Witnesses:

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