(No Model.) 2 Sheets—Sheet 1.

# G. D. MOFFAT.

## CAPODASTRO FOR GUITARS.

No. 390,612. Patented Oct. 2, 1888.

Fig. 1.

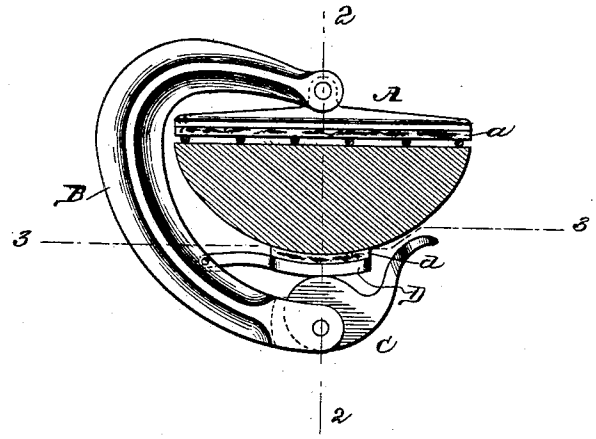



Fig. 2.

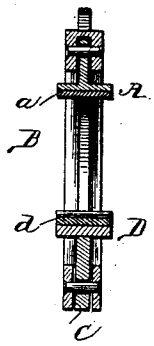
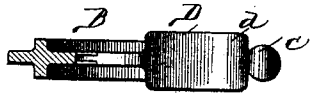



Fig. 3.




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(No Model.)

2 Sheets—Sheet 2.

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## CAPODASTRO FOR GUITARS.

No. 390,612. Patented Oct. 2, 1888.

Fig. 4.

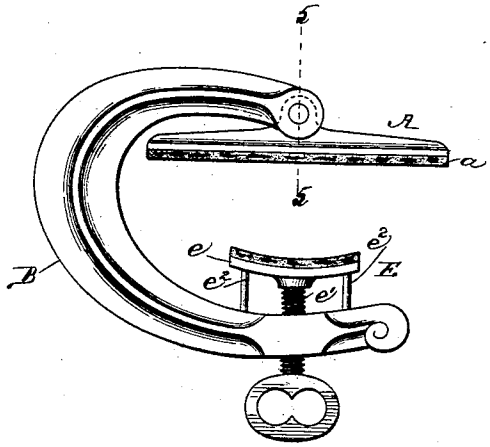



Fig. 5.

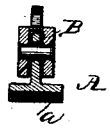



Fig. 6.




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# UNITED STATES PATENT OFFICE.

GEORGE D. MOFFAT, OF CHICAGO, ILLINOIS, ASSIGNOR TO GEORGE W. LYON, PATRICK J. HEALY, ROBERT B. GREGORY, AND CHARLES N. POST.

## CAPODASTRO FOR GUITARS.

SPECIFICATION forming part of Letters Patent No. 390,612, dated October 2, 1888.

Application filed April 12, 1888. Serial No. 270,479. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE D. MOFFAT, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Attachments for Guitars, of which the following is a specification.

This invention relates to guitar attachments of that kind in which the attachment commonly termed a "capodastro," is adapted for temporary application to the guitar-neck in such way as to hold down the strings at some desired point along the fret-board and thereby produce the effect of shortening up the strings.

A capodastro as ordinarily constructed is adapted to embrace and clamp upon the guitar-neck; and as a means for shortening the vibrating length of the strings said device has been provided with a presser-bar hinged at one end, so as to permit it to be laid across the strings. This presser-bar when placed across the strings has been locked by a catch adapted to engage its free end; and hence it has been usual to hinge the presser-bar at one end to one of the arms of a yoke adapted to receive the guitar-neck, and to provide the remaining arm of the yoke with some sort of a catch for engaging and locking the presser-bar in rigid connection with the yoke. In some instances the yoke has been provided at its middle with an adjusting-screw swiveled at one end to a bearing-plate adapted to engage the under side of the guitar-neck, so that by adjusting the screw the guitar neck could be clamped between the bearing-plate and the presser-bar. In another instance it has been proposed to substitute a spring for the adjusting-screw; but this substitution of a spring has proved inefficient and undesirable.

In all of the foregoing-mentioned instances it has been a matter of some difficulty to so apply the capodastro as to permit the production of as perfect a tone as might be desired, owing to the incapability of the presser-bar to adapt itself to the different sizes of strings and different degrees of tension to which they are subjected, it being also observed in this connection that the presence of a presser-bar rigid with the yoke required an exact positioning of the latter, and that any deviation from one precise position tended to cause the presser-bar to depress some of the strings more than the others.

The objects of my invention are to obviate said defects, and, further, to provide a durable, simplified, and otherwise improved construction of capodastro, which can be more readily applied and removed than heretofore, it being observed that in the older constructions it is frequently a matter of some labor to operate the catch, particularly when it is desirable to unlock the presser-bar.

To the attainment of the foregoing and other useful ends my invention consists in matters hereinafter described, and particularly pointed out in the claims.

In a capodastro characterized by my invention the presser-bar is pivotally held at a point between its ends, but otherwise left free, whereby it is capable of a rocking or tilting action, and hence rendered self-adjusting to the size and tension of the strings and otherwise better adapted to conform to the situation. This self adjusting presser-bar can be attached to any suitable form of body-support provided with any desired construction of adjustable bearing adapted to engage the under side of the guitar-neck. As a further feature of improvement, however, I propose providing the capodastro with simplified means for more readily adapting it to the guitar-neck and properly securing it thereon, as hereinafter described.

In the drawings, Figure 1 represents a section taken transversely through a guitar-neck and a set of strings, and illustrates in elevation a capodastro involving the several features of my invention and applied to hold down the strings. Fig. 2 is a section on line 2 2, Fig. 1, with the guitar neck and strings omitted. Fig. 3 represents a sectional plan on line 3 3, Fig. 1. Fig. 4 represents the capodastro of Fig. 1 with an old form of adjustable lower bearing employed in place of the bearing and locking device shown in Fig. 1. Fig. 5 is a section on line 5 5, Fig. 4. Fig. 6 represents the self-adjusting presser-bar detached.

The self-adjusting presser-bar A is hinged or pivoted at a point intermediate of its ends to any suitable construction of body-support B, and is free to tilt about its point of pivotal suspension, in which way, regardless of the

position of the capodastro upon the guitar-neck, the presser-bar will conform to the situation and serve to properly depress the strings. In this way should such adjustable bearing as may be employed to engage the under side of the guitar-neck be applied more or less to either side of the exact middle line of the guitar-neck, such application will in no wise affect the perfect application of the presser-bar to the strings, since in such case the presser-bar is free to conform to the situation. The presser-bar can be provided with a pad, *a*, of cork or other suitable material, adapted to prevent injury to the strings, it being usual to provide the presser-bar of a capodastro with a pad for such purpose. The body B of the capodastro can, as hereinbefore stated, be of any suitable or desired construction, that herein shown being simply a substantially C-shaped metal plate, which recommends itself on account of its extreme simplicity.

In the first three figures of the drawings I have provided the capodastro with an eccentric or cam lever, C, between which and the self-adjusting presser-bar the guitar-neck can be clamped, so as to cause the presser-bar to hold down the strings, as in Fig. 1. In order to prevent the cam portion of this cam-lever from rubbing and injuring the guitar-neck, its bearing-face is in effect formed by a hinged bearing-plate, D, that is hinged to the body of the capodastro and adapted to conform to the rounded under side of a guitar-neck. This bearing-plate is provided with a suitable pad, *d*, which is to bear directly against the guitar-neck, so as to avoid all injury to the instrument. The cam portion of said cam-lever may be simply a disk provided with a lever-arm and pivoted eccentrically upon the body of the capodastro, or it can be otherwise pivoted and provided with a suitable cam-surface. Under such arrangement the hinged bearing-plate that is interposed between the cam and the guitar-neck will readily adapt itself to the latter, and hence in this respect it co-operates with the self-adjusting presser-bar.

The employment of the cam-lever permits the capodastro to be quickly applied and firmly held in place upon the guitar-neck, and after service allows the capodastro to be readily detached.

While, therefore, I regard both the hinged bearing-plate and the cam-lever as constituting features of improvement, I further regard the self-adjusting presser-bar as a distinctive feature of improvement regardless of the devices employed for application to the under side of the guitar-neck. To such end, I have in Fig. 4 illustrated in connection with the self-adjusting presser-bar an old construction of oppositely-arranged adjustable bearing E, comprising a bearing-plate, *e*, that is operated by an adjusting-screw, and provided with guide-pins $e^2$, understood to slide through guide-holes in the body of the capodastro when the screw is operated for the purpose of clamping the bearing-plate *e* against the under side of the guitar-neck. It is understood, therefore, that where desired said adjustable bearing E, or any other suitable or desired construction of bearing, can be used in connection with the self-adjusting presser-bar A.

What I claim as my invention is—

1. A capodastro provided with a self-adjusting presser-bar for holding down the strings of a guitar, substantially as set forth.

2. In a capodastro for guitars, the combination, with a presser-bar for holding down the strings, of a cam between which and the presser-bar the guitar-neck can be clamped, substantially as set forth.

3. In a capodastro for guitars, the combination, with a presser-bar arranged for holding down the strings, of the hinged bearing-plate arranged to bear against the under side of the guitar-neck, substantially as set forth.

4. In a capodastro for guitars, the combination, with the self-adjusting presser-bar arranged for holding down the strings, of the hinged bearing-plate D, arranged for engaging the under side of the guitar-neck, substantially as described.

5. In a capodastro for guitars, the combination, with the self-adjusting presser bar arranged for holding down the strings, of a bearing-plate arranged to engage the under side of the guitar-neck, and means, such as set forth, for clamping said bearing-plate against the guitar-neck, for the purpose described.

6. In a capodastro for guitars, the combination, with the self-adjusting presser-bar A, arranged for holding down the strings, of a bearing-plate, D, arranged to engage the under side of the guitar-neck, and the cam-lever arranged for forcing and locking said bearing-plate against the guitar-neck, substantially as described.

GEORGE D. MOFFAT.

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