

(No Model.)

F. MYERS.
BANJO.

No. 472,904.

Patented Apr. 12, 1892.

Fig:1.

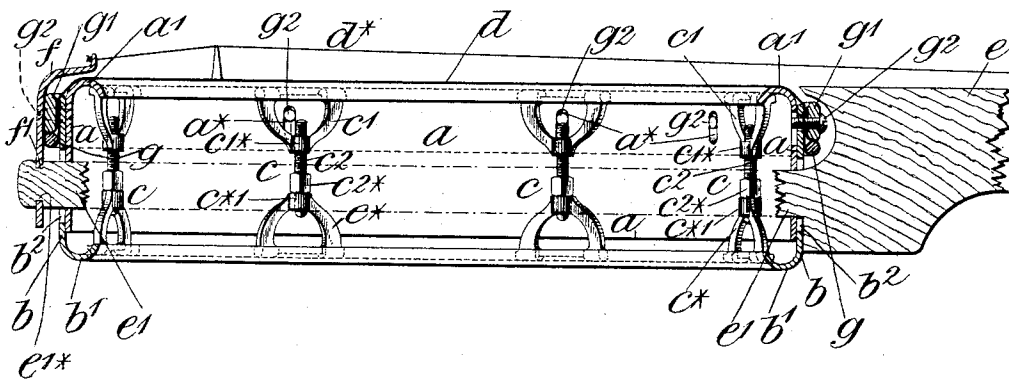
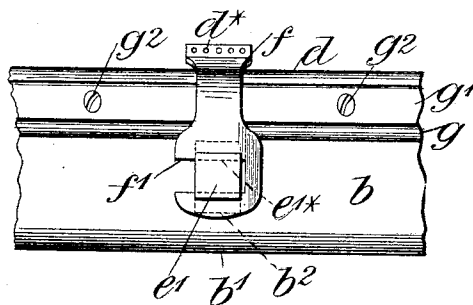


Fig:2.



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UNITED STATES PATENT OFFICE.

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BANJO.

SPECIFICATION forming part of Letters Patent No. 472,904, dated April 12, 1892.

Application filed November 3, 1891. Serial No. 410,777. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK MYERS, mechanical engineer, a citizen of the United States, and a resident of the city, county, and State of New York, but at present residing at 33 Montague Place, Russell Square, in the county of Middlesex, England, have invented certain new and useful Improvements in Banjos, of which the following is a specification.

My present invention relates to improvements upon an invention for which an application for Letters Patent was filed by me on the 5th day of August, 1891, Serial No. 401,750.

The invention described in the specification accompanying my said application consisted, primarily, in novel means of tightening the vellum or parchment head—that is to say, the usual exterior screws, nuts, and brackets were dispensed with and an inner ring adapted to slide telescopically within the annular frame and taking a bearing at its upper part against the vellum or parchment head was forced upward by means of a number of screw-tightening devices arranged upon the interior of the frame and adapted to force upward the inner ring, and thus distend the vellum or parchment head, the latter being secured to a loose ring held down by a hoop and clamping devices located upon the exterior of the frame. In this arrangement the shank and tail-piece were held stationary with the outer ring or frame, and as the inner ring was forced upward to strain the vellum head the latter was gradually brought nearer to the strings, and this was found to be undesirable, inasmuch as it is essential that a given distance be preserved between these parts. Otherwise the tone of the instrument is liable to vary.

The primary object of my present invention is to so construct the parts that the same relation of the strings to the vellum head will always be maintained, notwithstanding any variation of the position of the vellum head caused by the adjustment thereof; and my invention also comprises various details of construction hereinafter more fully described.

In order that the said invention may be clearly understood and readily carried into effect, I will proceed, aided by the accompanying drawings, fully to describe the same.

In the drawings, Figure 1 is a longitudinal

section taken through the frame and vellum head of a banjo constructed according to my invention, and Fig. 2 is a rear end view of a portion thereof.

In both figures of the drawings, in which like parts are indicated by similar letters of reference, *a* represents the circular metal frame or rim of the banjo-head, which is turned over around its upper edge to form an annular grooved flange *a'*, as hereinafter more fully described, and to constitute a rounded bearing-surface to the vellum head *d*.

Upon the exterior of the circular metal frame or ring *a* is placed a metal ring *b*, which is adapted to slide telescopically thereon and to which the vellum head *d* is secured, as hereinafter explained, and this ring *b* is turned over similarly to the frame or ring *a*, but at its lower edge, so as to form a grooved flange *b'*, and arranged around the interior of the frame or ring *a* and ring *b* and held in place by and taking a bearing within the grooves of the flanges *a'* *b'* are a number of screw-regulating devices *c*, whose ends are formed by saddles or forks *c'* *c''*, so as to obtain a broad bearing upon the grooved flanges *a'* *b'*. These saddles *c'* *c''* are connected centrally by means of a screw *c²*, the lower end of which loosely fits a hole or recess provided for it in a boss *c'''*, formed upon the saddle *c''*, while the opposite end of the screw *c²* screws through a tapped hole formed in the boss *c'''* of the saddle *c'*, a square or nut *c^{2*}*, formed upon the screw *c²* and taking a bearing upon the boss *c'''* and adapted to receive a key, as is well understood, enabling the saddles *c'* *c''* to be forced apart in order to stretch or distend the vellum head *d*.

The square shank *e'* of the handle or finger-board *e* is passed through and fitted into rectangular holes formed in the frame *a*, so that the frame *a* will be carried by the shank *e'*, while the outer ring *b* is formed with long openings *b²* therein, through which the shank *e'* passes, so as to allow of its sliding telescopically a given distance upon the frame *a*.

The tail-piece *f*, to the upper part of which are attached the strings *d**, is formed with a lateral open-ended slot *f'* therein, and the shank *e'* is correspondingly grooved at *e''*, so that the tail-piece *f* may be laterally slid thereon, as indicated in the drawings, when

it will be securely held in place by the tension of the strings d^* , and also firmly hold the handle in its place, but with capability of easy detachment.

5 In my said former specification I described the employment of hooked rods for securing the bezel g' and parchment head d upon the frame a ; but according to my present invention I secure it to the ring b , and for this purpose I have found the following simple device
10 to answer all purposes and to give a neater appearance:

The vellum head d is stretched over the frame a and passed around the usual wire
15 ring g , which is in this case fitted over the ring b , and the vellum is then turned back and there held by means of a hoop or bezel g' , which is secured in position by means of screws g^2 , screwing through tapped holes in
20 the bezel g' and loosely passing through plain perforations in the ring b into long slots a^* , formed in the frame or ring a . It will thus be seen that the parchment head d is securely fixed to the ring b , and the finger-board e ,
25 neck e' , frame a , tail-piece f , and strings d^* are fixed together or move in unison, and it therefore follows that any pressure exerted by the regulating devices c will tend to separate the frame a and ring b , and therefore
30 stretch or distend the parchment head d over the upper part a' of the frame a , and inasmuch as the finger-board e , tail-piece f , and frame a are held stationary while the ring b is moved the strings d^* will always preserve
35 the same relative position with regard to the parchment head d .

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed,
40 I declare that what I claim is—

1. In a banjo, the combination of a frame a ,

fixed to the neck, a loose ring b , adapted to slide upon the exterior of the frame a and having the vellum or parchment head attached thereto, and means for forcing the
45 ring and frame apart, substantially as herein shown and described, and for the purpose stated.

2. In a banjo, the combination of a frame a , fixed to the shank e' , a loose ring b , adapted
50 to slide upon the frame a , a bezel g' , fixed to the ring b by screws to secure the vellum or parchment head in place, and means for forcing the ring and frame apart, substantially as
55 herein shown and described, and for the purpose stated.

3. In a banjo, the combination of a frame a , fixed to the shank e' , a loose ring b , adapted to slide upon the frame a and having the vellum or parchment head d attached thereto, a
60 tail-piece f , formed with a lateral slot therein to fit upon the shank e' , and corresponding grooves formed in the shank, substantially as herein shown and described, and for the purpose
65 stated.

4. In a banjo, the combination of a frame a , formed with a grooved flange and fixed to the shank e' , a loose ring b , formed with a similar
70 flange and adapted to slide upon the exterior of the frame a and having the vellum or parchment head d attached thereto, and a number of regulating devices c , each formed with saddle or forked ends to take a bearing in the
75 grooved flanges, and a screw for forcing the saddles apart, substantially as herein shown and described, and for the purpose stated.

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