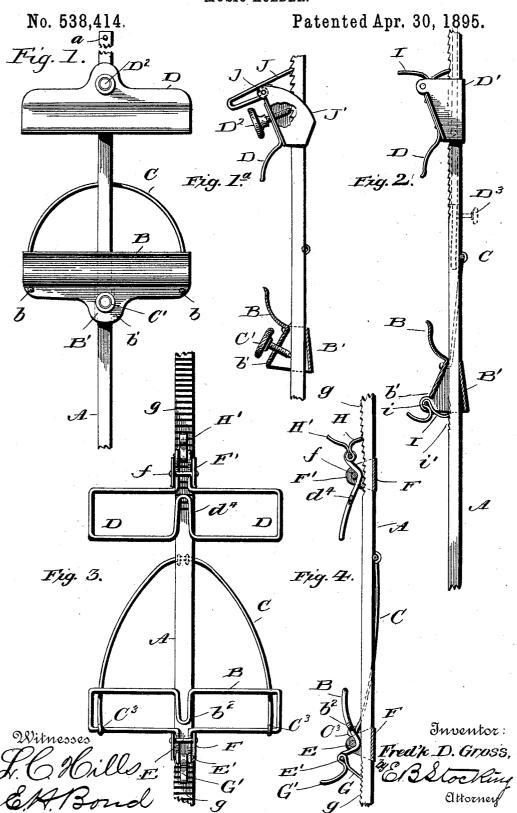
F. D. GROSS. MUSIC HOLDER.



United States Patent Office.

FREDERICK D. GROSS, OF THE UNITED STATES ARMY.

MUSIC-HOLDER.

SPECIFICATION forming part of Letters Patent No. 538,414, dated April 30, 1895.

Application filed April 3, 1894. Serial No. 506,180. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK D. GROSS, enlisted in the United States Army, and a citizen of the United States, stationed at Fort 5 McIntosh, in the county of Webb, State of Texas, have invented certain new and useful Improvements in Music-Holders, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in music-holders of that class in which adjustable means are provided for holding one portion of a book or leaf of music, and it has for its objects among others 15 to provide a simple, cheap and light music holder of this class which will so hold the music that it cannot slip out of the holder, will not become torn or damaged in any way, and the clamping devices will not interfere 20 with the clear view of the notes of the music.

A further object is to make the holder adjustable to accommodate any required size of book and adapt it to hold a single leaf equally as well as a large book. I dispense with the 25 employment of springs, and make the lower or stationary clamp so that it will normally remain open in position to receive the book, by its own weight. I may sometimes make the staff telescopic for convenience in trans-30 portation or storing the same. I propose to construct the holder of aluminum, but other materials may be employed.

Other objects and advantages of the invention will hereinafter appear and the novel fea-35 tures thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part 40 of this specification, and illustrate some of the various ways in which my invention may be embodied in practical form, and in which-

Figure 1 is a front elevation of my improved music-holder with the staff broken away. 45 Fig. 1^a is an edge view of another form. Fig. 2 is an edge view of Fig. 1, showing slight modifications. Fig. 3 is a front elevation of another form. Fig. 4 is an edge view showing the form illustrated in Fig. 3.

Like letters of reference indicate like parts throughout the several views.

Referring now to the details of the draw-

ings by letter, A designates the staff which may be of any desired material and of any required length. It is designed for attachment 55 to a tripod or to an instrument, such as a cornet, clarinet, a drum or the like. It may be of any preferred shape in cross section, square, round or polygonal.

All of the various forms herein shown and 60 hereinafter described embody the essentials of the invention and are practically the same in their mode of operation, differing only in the details of construction.

Referring then to Fig. 1, B is the lower 65 clamp which is stationary with relation to the staff as regards its distance from the end thereof, but it is pivotally mounted indirectly upon the arched wire C which is suitably held to the rear face of the said staff in any suitable 70 manner, its ends being pivotally connected one near each end of the clamp as seen best in Fig. 1, at b. This lower clamp is mounted with the preponderance of weight below its said pivot so as to normally stand with its up- 75 per or clamping edge held away from the staff by its own weight or gravity. It is provided upon its rear face with a tapered socket B' as seen best in Fig. 1a, through which the staff passes as seen in Figs. 1 and 2, and C' is 80 a thumb screw held in the depending portion b' of the lower clamp as shown and designed to bear against the staff as seen best in Fig. 1ª to tilt the clamp. Normally this thumb screw is turned so that the clamp is free to 85 hang down so as to throw its upper edge away from the staff to admit a book. When the book is in position the thumb screw is turned so as to throw the lower edge of the clamp away from the staff as seen in Fig. 1a and 90 consequently the upper edge against the book and grip the same of course the screw being necessarily furned more or less according to the thickness of the book to be clamped.

D is the upper clamp. It is provided with 95 a tapered socket D' through which the staff passes as seen in Fig. 2. This socket is mounted upon the staff to slide lengthwise thereof but is however tapered inversely to that of the lower clamp so that when tilted it will 100 bring the clamping portion against the book, as will be readily understood from Fig. 2. This upper clamp is adjustably mounted on the staff and is held in its adjusted position

by the thumb screw D2 which passes through the clamp and engages the staff as shown in Fig. 1^a. In clamping a book with this form, the lower edge of the book is placed in the 5 lower clamp which is then tightened in the manner above described. The upper clamp is then adjusted on the staff until its lower clamping edge comes into the proper position when the thumb screw is turned to tilt 10 the clamp so that it will clamp or grip the top edge of the book, and if the notes are arranged close to the upper edge of the book the extreme edge of the clamp may be adjusted so as to clamp the book without hid-15 ing any of the notes; or, if the notes appear close to the bottom edge of the book or leaf the book may be held by the upper clamp alone. Either or both clamps may be employed as the necessities of the case require. 20 Suitable means, as a lug or pin a, may be employed, held in the upper end of the staff, to prevent displacement of the upper clamp. I may sometimes make the staff telescopic as indicated by dotted lines in Fig. 2, and in 25 this case a set screw D3 is provided for holding the parts in their adjusted positions. In lieu of making the upper and lower clamps of sheet metal as illustrated in Figs. 1 and 2 I may make them of wire as indi-30 cated in Fig. 3, in which case the arched wire C is held to the staff the same as in the form shown in Fig. 1 and its ends somewhat curved to bring them to the front of the staff as seen in Fig. 3 where they are formed into eyes C³ 35 in which is pivotally supported the lower clamp which is formed of a single piece of wire with its lower cross-portion held in said eyes and its upper cross portion formed with a central depending loop or bend b^2 to en-40 gage the book at the center to better hold the same. The ends of the wire are bent around a cross rod or pin E as seen best in Fig. 4 and upon which they work as on a pivot and in the extreme ends of the wire is 45 held a pin E'. The rod or pin E is held in a plate F one portion of which rides against the rear face of the staff while its two ends are extended parallel with each other and at right angles to its rear portion, the bend of 50 the wire around said pin or rod lying between the same and the front face of the staff as seen in Fig. 4. On the pin E' is mounted a pawl G which is provided with a finger-piece G', the other end being adapted to engage teeth g on the staff as seen in Figs. 3 and 4. In this form the plate F has a tilting movement upon the staff similar to that of the sockets B' and D' in the form illustrated in Figs. 1 and 2. In the form illus-60 trated in Figs. 3 and 4 the upper clamp is also made of wire, although I may sometimes employ one clamp of wire and another of the form shown in Fig. 1. When made of wireit is substantially a duplicate of that just deos scribed in connection with the lower wire

clamp. It is formed preferably with a cen-

tral loop d^4 as seen in Fig. 3, and a plate F'

is employed in which is held a cross rod or pin f and the ends of the wire carry a pawl H with a thumb-piece H' as seen in Figs. 3 70 and 4

I may sometimes employ a pawl I in connection with the form shown in Figs. 1 and 2, which, as shown in Fig. 2, is pivoted as at i at one corner of the socket as seen in the lower 75 clamp in Fig. 2. In this case the thumb screw is dispensed with and the staff should be toothed as seen at i'.

The form of pawl may be varied. At the top of Fig. 1° I have shown one of the numer-so ous forms which may be adopted. In this instance the pawl J has one end bent or coiled around the pin j held in the socket D' and its other end is adapted to engage the teeth of the staff, the longer arm of the pawl serving so both as a pawl and as a thumb piece. The socket also may vary in form as shown at the upper end of Fig. 1° where it is shown as having its upper face curved as seen at J' and this curved portion is slotted to allow of the 90 necessary movement of the socket upon the staff.

Various other modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of 95

its advantages.

What I claim as new is—

1. A music-holder comprising a staff, a holder embracing the staff and mounted to tilt, a clamp connected with the holder, and a 100 device connected with the clamp and bearing against the staff to regulate the pressure of the clamp, substantially as specified.

2. A music-holder comprising a staff, a holder embracing the staff and mounted for 105 tilting movement, a clamp pivotally mounted on the holder, and a device operatively connected with the clamp and bearing against the staff to regulate the pressure of the clamp, substantially as specified.

3. A music holder comprising a staff, a holder embracing the staff, a clamp operatively connected with the holder and a device operatively connected with the clamp and bearing against the staff to regulate the pressure of the clamp, substantially as specified.

4. In a music holder comprising a staff, the combination therewith, of two holders one of which is pivotally mounted against longitudinal movement on the staff and the other of which is mounted for longitudinal movement on the staff and a clamp operatively connected with each of said holders and provided with means bearing against the staff for regulating the pressure of the clamp and a device for adjusting the longitudinally movable holder upon the staff, substantially as specified.

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

FREDERICK D. GROSS.

Witnesses:
W. J. Sames,
Emilio Floris.