



No. 668,500.

Patented Feb. 19, 1901.

H. DAVIDSON.  
MUSICAL STRINGED INSTRUMENT.

(Application filed Mar. 8, 1900.)

(No Model.)

2 Sheets—Sheet 2.

Fig. 4.

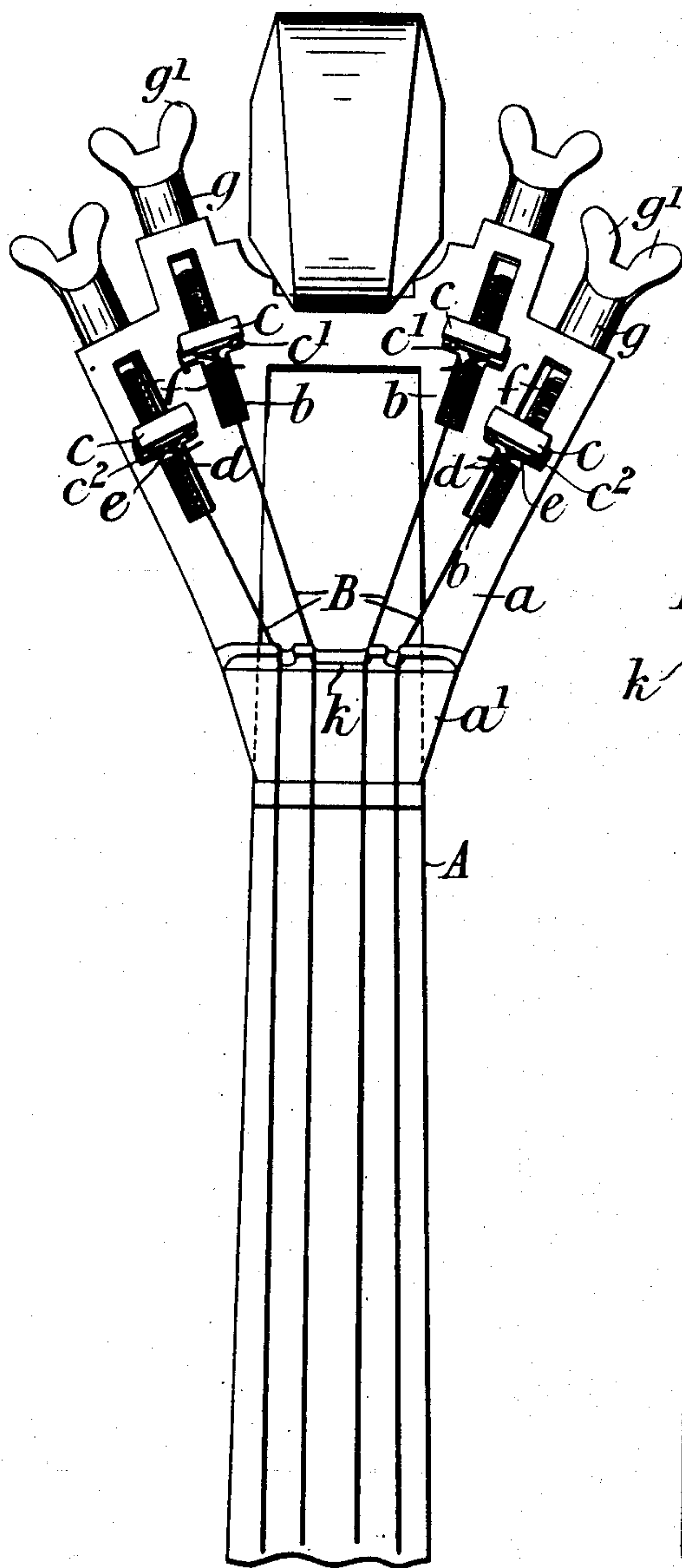
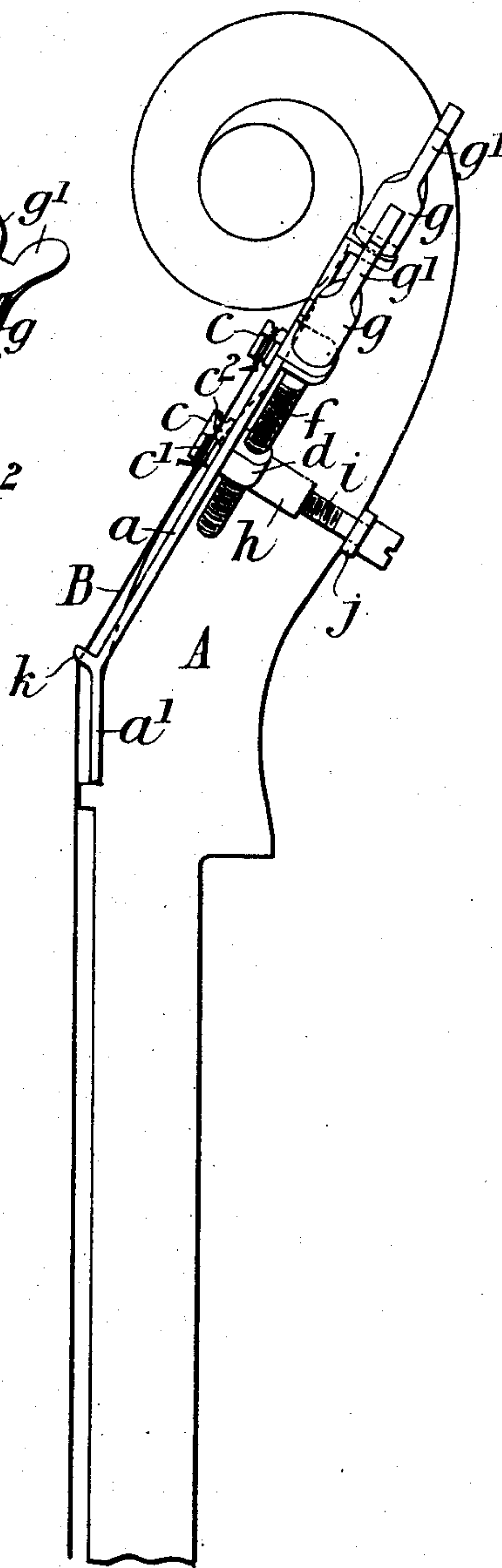


Fig. 5.



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# UNITED STATES PATENT OFFICE.

HENRY DAVIDSON, OF LONDON, ENGLAND.

## MUSICAL STRINGED INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 668,500, dated February 19, 1901.

Application filed March 8, 1900. Serial No. 7,885. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY DAVIDSON, a subject of the Queen of Great Britain, residing at 224 Queen's road, Dalston, London, England, have invented new and useful Improvements in Musical Stringed Instruments, of which the following is a specification.

My invention relates to musical stringed instruments, and has for its object to provide means for tightening or tuning the strings with greater facility than is possible with the means heretofore used.

According to my invention I provide a plate, of metal or other suitable material, having formed therein a series of slots in which pieces hereinafter referred to as "tension-blocks" slide. Each of these tension-blocks has arranged in connection with it a screw for adjusting it in its slot and is also notched or otherwise formed to facilitate the attachment of the string to it. In applying my invention to a violin, for example, the pegs to which the strings are now attached are taken from the instrument and my slotted plate is applied and suitably secured to the head of the said instrument.

In the accompanying drawings, Figure 1 is a front elevation of my tension device. Fig. 2 is a plan and Fig. 3 is a side view thereof. Fig. 4 is a front view showing the tension device applied to the head of a violin, and Fig. 5 is a side view of the same.

$a$  is the plate, of metal or other suitable material. The said plate is advantageously formed of the shape shown—that is to say, with the lower portion  $a'$  bent at an angle to the main portion and having a central slot  $a^2$ , so that the plate can be fitted upon the heads of violins and like instruments in the manner hereinafter described.

$b b$  are the slots formed in the plate  $a$  for receiving the tension-blocks, which blocks consist of front and back pieces  $c d$ , respectively, connected by a neck  $e$ . The necks are of a length corresponding to the thickness of the metal plate  $a$  and engage the slots  $b b$ , as clearly shown.

$f f$  are the screws which engage screw-threaded holes in the back portions  $d$  of the tension-blocks, the upper ends of the said screws  $f f$  being provided with heads  $g g$ , which bear against backwardly-projecting

lugs  $a^3 a^3$  upon the metal plate  $a$  and are formed with wings  $g' g'$ , whereby they can be turned.

The front portion  $c$  of each tension-block is formed with lateral notches  $c' c'$  and with a longitudinal hole  $c^2$  for enabling the string which it is to tighten to be secured thereto, as hereinafter described.

To apply the tension device to the head of a violin, for example, I advantageously provide upon the back of the said plate  $a$  internally-screw-threaded sockets  $h h$ , so placed that when the plate is placed upon the head  $A$  of the violin, as shown in Figs. 4 and 5, the said sockets lie on either side of the head  $A$ , as clearly shown in the said figures. The plate is then secured in position by means of screws  $i i$ , which pass through holes in a clamping-plate  $j$  and engage the screw-threaded sockets, as clearly shown, so that by tightening the said screws the plate is securely clamped upon the violin-head.

$k$  is a bridge formed upon the plate  $a$ , the said bridge being notched to receive the strings  $B$  in the usual manner.

Each string  $B$  is advantageously secured to its tension-block in the following manner—that is to say, its end is passed up through the central hole  $c^2$ , around one lateral notch, underneath the block, around the other notch, over the top of the block, and then down through the first lateral notch, so that it can be tied to the string, as shown.

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

1. A tension device for a stringed musical instrument, comprising among its members, a plate provided with a series of guiding-slots extending in line with adjacent portions of the strings of the instrument, a tension-block in each of said slots having a portion on one side of the plate provided with means for the attachment of a string thereto, and a portion on the other side of the plate provided with a threaded aperture, a tension-screw secured to said plate in line with each slot having a threaded portion engaging the threaded aperture of one of said blocks and means for attaching said plate to the instrument, substantially as described.

2. A tension device for a stringed musical instrument, comprising among its members a plate provided with a series of guiding-slots extending in line with adjacent portions of  
5 the strings of the instrument, a tension-block in each of said slots having a portion on one side of the plate provided with a central opening and transverse recesses for the attachment of a string thereto, and a portion on the  
10 other side of the plate provided with a thread-

ed aperture, of a tension-screw secured to said plate in line with each slot having a threaded portion engaging the threaded aperture of one of said blocks and means for attaching said plate to the instrument, substantially as  
15 described.

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