

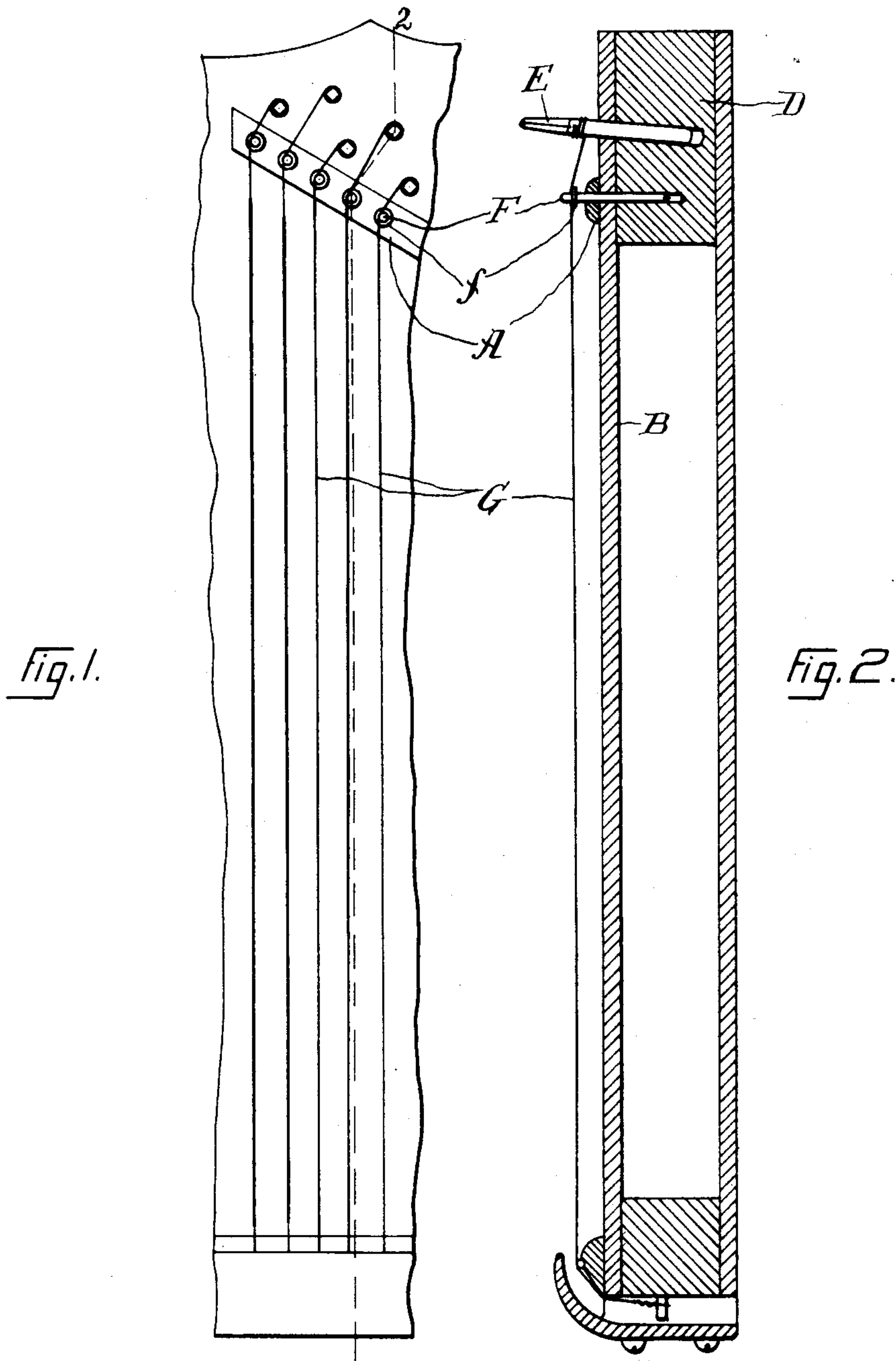
No. 609,882.

Patented Aug. 30, 1898.

G. A. FULLERTON.  
PIN BRIDGE FOR STRING INSTRUMENTS.

(Application filed Jan. 10, 1898.)

(No Model.)



Witnesses:  
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# UNITED STATES PATENT OFFICE.

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## PIN-BRIDGE FOR STRING INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 609,882, dated August 30, 1898.

Application filed January 10, 1898. Serial No. 666,162. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE ARTHUR FULLERTON, of Boston, in the county of Suffolk and State of Massachusetts, have invented a  
5 new and useful Pin-Bridge for String Instruments, of which the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a plan of a portion of a cithern,  
10 showing my pin-bridge in place. Fig. 2 is a section on line 2 2 of Fig. 1.

My invention is a new bridge for string instruments; and it consists in pins each provided near its upper end with a shoulder, over  
15 which a string passes, while the portion of the pin above the shoulder serves as a guide for the string, each of these pins passing through a bridge and the sounding-board and into the pin-block of the instrument.

20 In the drawings, A is the bridge; B, the sounding-board; D, the pin-block for the tuning-pins E, and F the bridge-pins, each with a shoulder *f*. Each string G extends from its tuning-pin E over the shoulder *f* of its bridge-pin F, that shoulder *f* forming with the bridge  
25 A my new pin-bridge. For the best results the shoulder *f* should be flush with the upper edge of the bridge A, and that part of the bridge-pin F which is above the sounding-  
30 board B should fit in a bore through bridge A, for the function of bridge A is to prevent vibration of the upper part of the bridge-pin F. The function of the shoulder *f* is to support the string G, and the function of that part of  
35 the pin immediately above shoulder *f* is to stay the string; but obviously one or more or-

dinary stay-pins may be used between bridge-pin F and tuning-pin E, although one advantage of my new pin-bridge is that it effectually prevents aftertones due to the vibration of  
40 that part of the string between the bridge and the tuning-pin if the tuning-pin E be not too far from bridge A; but the main advantage of my new pin-bridge is that each string is supported and stayed in the most perfect man-  
45 ner and that the quality of tone is much improved. In practice I bore the bridges A for the pins F and then force each pin through the sounding-board B and well into the pin-block D, and while the shoulder *f* of pins F need  
50 not be against bridge A, yet for the best results I prefer to slightly embed shoulders *f* in the upper surface of bridge A, and thereby the shoulder on each pin acts to clamp the  
55 bridge A and sounding-board B against pin-block D, which not only improves the construction of the instrument, but also improves the tone and practically does away with the need of stay-pins between the bridge-pins F  
60 and tuning-pins E.

What I claim as my invention is—

In a string instrument the pin-bridge above described made up of shouldered pins and a bridge, the pins extending through the bridge  
65 and sounding-board and into the pin-block, the shoulders of the pins supporting the strings and the heads of the pins staying the strings, all substantially as set forth.

GEORGE ARTHUR FULLERTON.

Witnesses:

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