

No. 609,882.

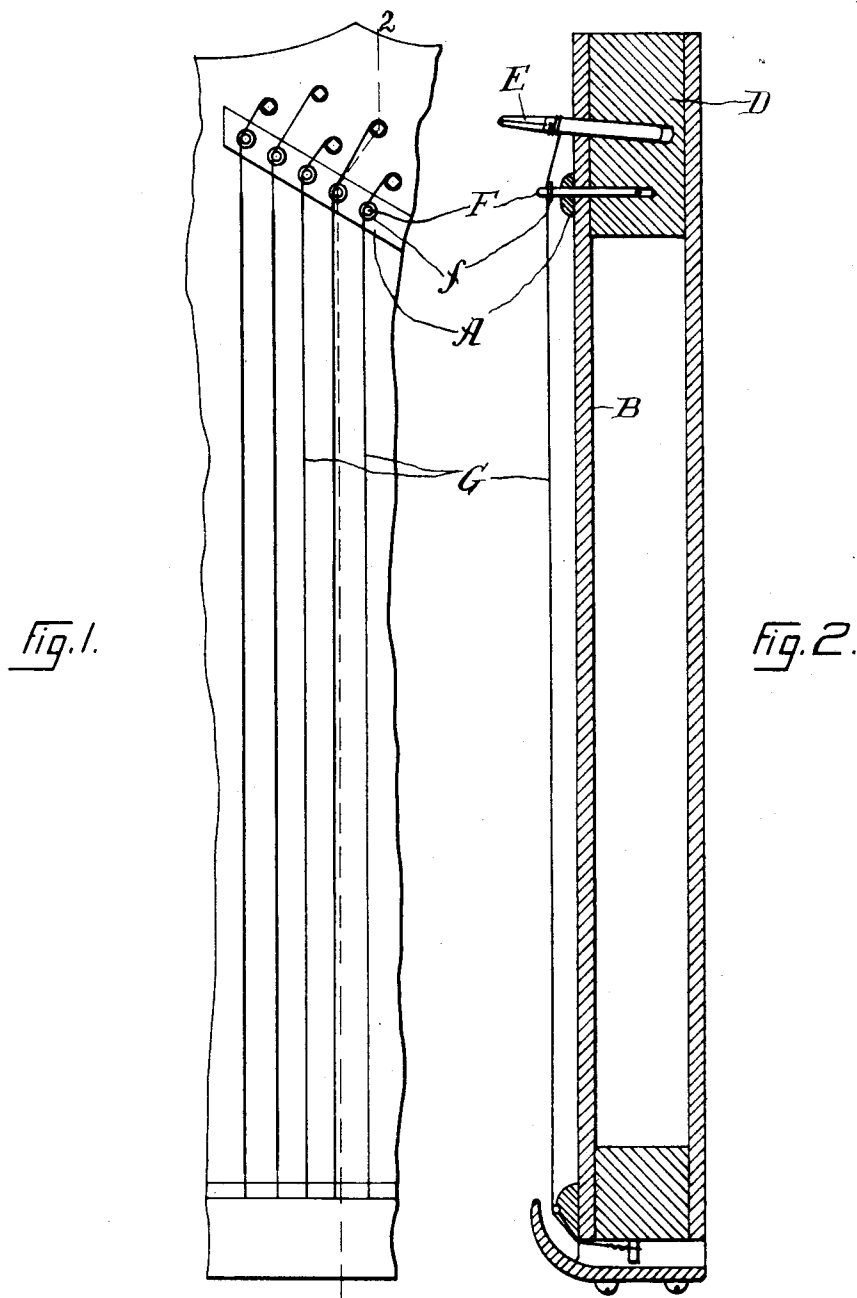
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G. A. FULLERTON.

PIN BRIDGE FOR STRING INSTRUMENTS.

(Application filed Jan. 10, 1896.)

(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—

10 Figure 1 is a plan of a portion of a cithern, 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-board B should fit in a bore through bridge A,
30 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
45 supported and stayed in the most perfect manner 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
50 D, and while the shoulder *f* of pins F need 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:

JOHN R. SNOW,
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