

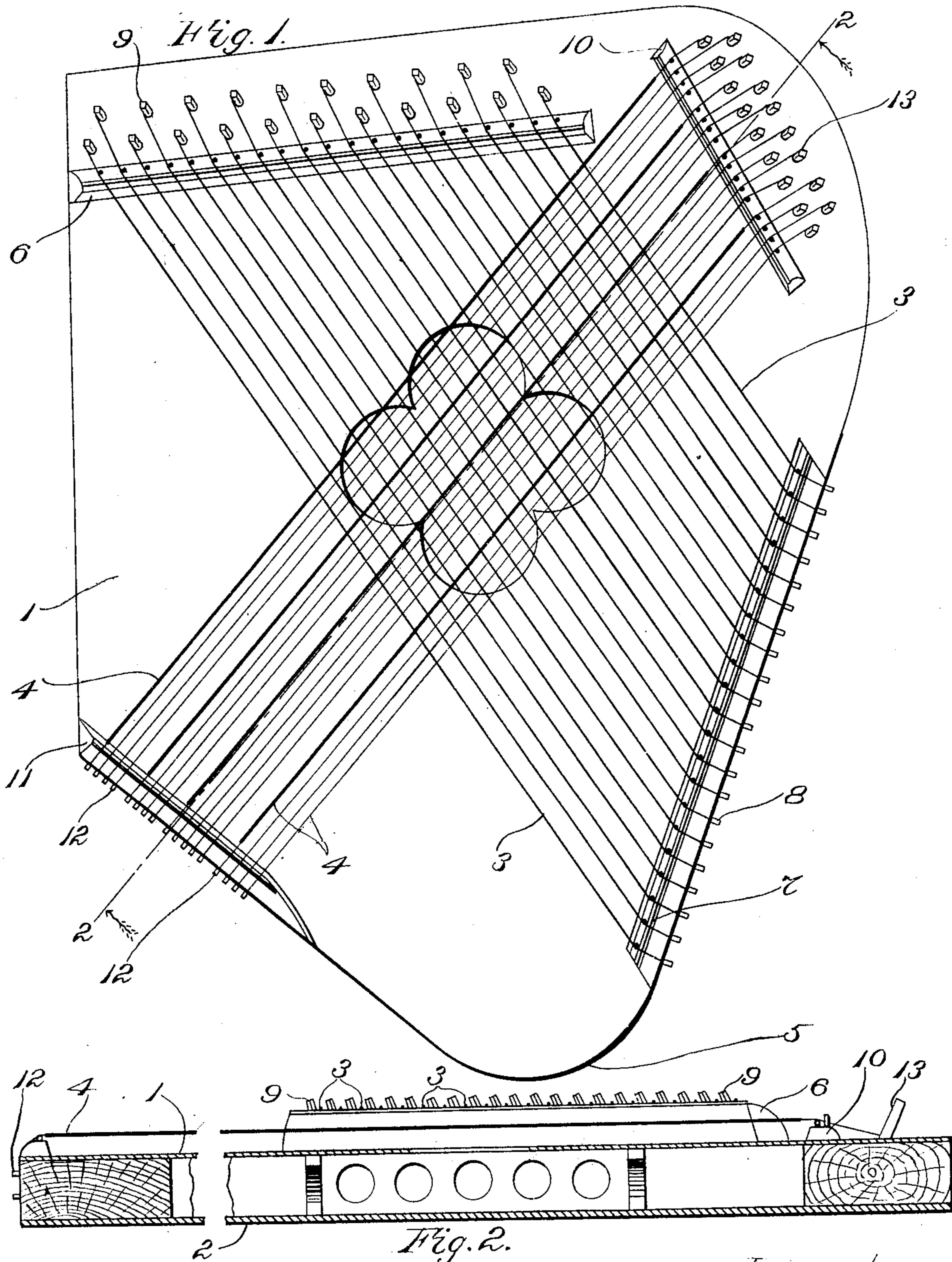
No. 672,270.

Patented Apr. 16, 1901.

J. R. GREEN.
CITHERN.

Application filed Sept. 14, 1898.

(No Model.)



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UNITED STATES PATENT OFFICE.

JOSEPH R. GREEN, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE
PHONOHARP COMPANY, OF SAME PLACE.

CITHERN.

SPECIFICATION forming part of Letters Patent No. 672,270, dated April 16, 1901.

Application filed September 14, 1898. Serial No. 690,903. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH R. GREEN, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Citherns, of which the following is a specification, reference being had therein to the accompanying drawings.

My present invention is applicable to citherns and other stringed instruments which are played in similar manner.

So far as I am aware it always has been the practice to dispose the strings or wires of a cithern parallel with one another in a series extending across the body of the instrument, the said strings or wires all being stretched in one and the same direction—namely, lengthwise of the instrument. Some players or performers place the instrument when in use so that one end thereof shall be presented next the player or performer, while the strings or wires shall lead directly away from him. Others who are more proficient turn the instrument quarter-way around, placing one side thereof—namely, that at which the bass or chord strings or wires are located—next the player or performer, so that the strings or wires extend in a transverse direction in front of him. This position is given to the instrument so as to dispose the treble or melody strings or wires in better position to enable a group of two, three, four, or more of them at a time to be engaged by the fingers of the player's right hand. With the said treble or melody strings or wires thus disposed they can more easily be played several at a time, as in striking chords, than when they are caused to extend straight away from the player. The advantage is so great as to cause the said position to be given to the instrument notwithstanding the fact that it is made more or less inconvenient for the player's left hand to take hold of the bass or chord strings. The said hand has to be given a more or less unaccustomed and awkward position.

It is one object of my invention so to arrange the strings or wires of a cithern or similar instrument as that the disposition thereof shall be wholly convenient and shall enable the melody or treble strings to be handled or played two or more at a time with as great or

greater facility as when the ordinary cithern is laid crosswise in front of the player and at the same time shall enable the bass or chord strings or wires to be played with facility and advantage fully equal to those of the melody or treble strings.

Another aim of the invention is to secure a better spacing of the strings or wires of a cithern.

Other aims of the invention are to produce an instrument which shall have greater resonance and one which shall remain in tune longer than the instruments at present in use.

I shall describe my invention with reference to the accompanying drawings, in which latter I have illustrated the best embodiment thereof that I have yet contrived, after which the distinguishing characteristics of the invention will be particularly pointed out and distinctly defined in the claims at the close of this specification.

Figure 1 of the said drawings is a view in plan of a cithern embodying the invention. Fig. 2 is a view in cross-section on line 2 2 of Fig. 1 looking in the direction which is indicated by the arrows at the ends of such line.

1 designates the top or face and 2 the bottom or back of the body of a cithern.

3 designates the treble or melody strings or wires of the cithern, and 4 the bass or chord strings or wires, these last being arranged in groups, as shown. Instead of arranging all of the strings or wires 3 4 in a single series and parallel with one another, as heretofore, I form the treble or melody strings or wires 3 into one series, covering substantially the face of the instrument, and the bass or chord strings or wires 4 into a second series. Also I dispose the two series at an angle to each other and cause the series 3, extending from rear to front of the instrument, to incline from left to right relatively to the front end 5 of the instrument, as shown in Fig. 1, so as to conform to the position naturally assumed by the hands and forearm of the player's right arm, the series 4 being caused to incline from right to left, as in Fig. 1, so as to conform to the position naturally assumed by the hand and forearm of the player's left arm, thus being extended obliquely over and crossing the melody-strings from one side to the other of

the sounding-board. With the two series of strings or wires thus disposed at reverse inclinations and converging from the front end of the instrument toward the rear end thereof of the player's hands naturally and easily reach, respectively, the strings or wires which they are required to manipulate. Preferably one series of the strings or wires crosses the other at a suitable distance above the same, as shown, a sufficient length of the under series being left free at and adjacent to the front end thereof to leave full opportunity for playing. This enables the width of the instrument to be kept within moderate bounds.

6 designates the rear bridge for the treble or melody strings or wires, and 7 the front bridge, 8 being the hitch-pins adjacent to the latter and 9 being the tuning-pins adjacent to the former.

10 designates the rear bridge for the bass or chord strings, and 11 the front bridge therefor, 12 being the hitch-pins adjacent to the latter and 13 the tuning-pins adjacent to the former.

By dividing the strings or wires into two series which are inclined in opposite directions I am enabled to space the wires more widely apart than otherwise would be possible without increasing the width of the instrument beyond desirable or convenient limits.

In the case of an ordinary instrument having the strings or wires all extending in one direction the pull of all of the strings or wires is all exerted in one direction, and it follows that the instrument soon gets out of tune. In the case of my improved instrument not

only is the number of strings or wires in a series reduced in number, but one part or series of the strings or wires exerts a pull in one direction and the remainder exerts a pull in a different direction, crossing the former. Thus the strains are distributed and are more equally divided, the result being that the instrument remains longer in tune. The diagonal position of the strings or wires enables me to give greater proportionate length to the bass or chord strings or wires, thereby improving the tone without necessitating any undue length of the instrument. The greater relative breadth of the instrument operates to secure greater resonance.

What I claim is—

1. A cithern comprising a sounding-board, a set of melody-strings arranged longitudinally thereon, and chord-strings arranged in groups and crossing the melody-strings from one side to the other of the sounding-board, substantially as set forth.

2. A cithern comprising a sounding-board, a set of melody-strings arranged longitudinally thereon and covering substantially the whole face thereof, and chord-strings arranged in groups and extending obliquely over and crossing the melody-strings from one side to the other of the sounding-board, substantially as set forth.

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

JOSEPH R. GREEN.

Witnesses:

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