

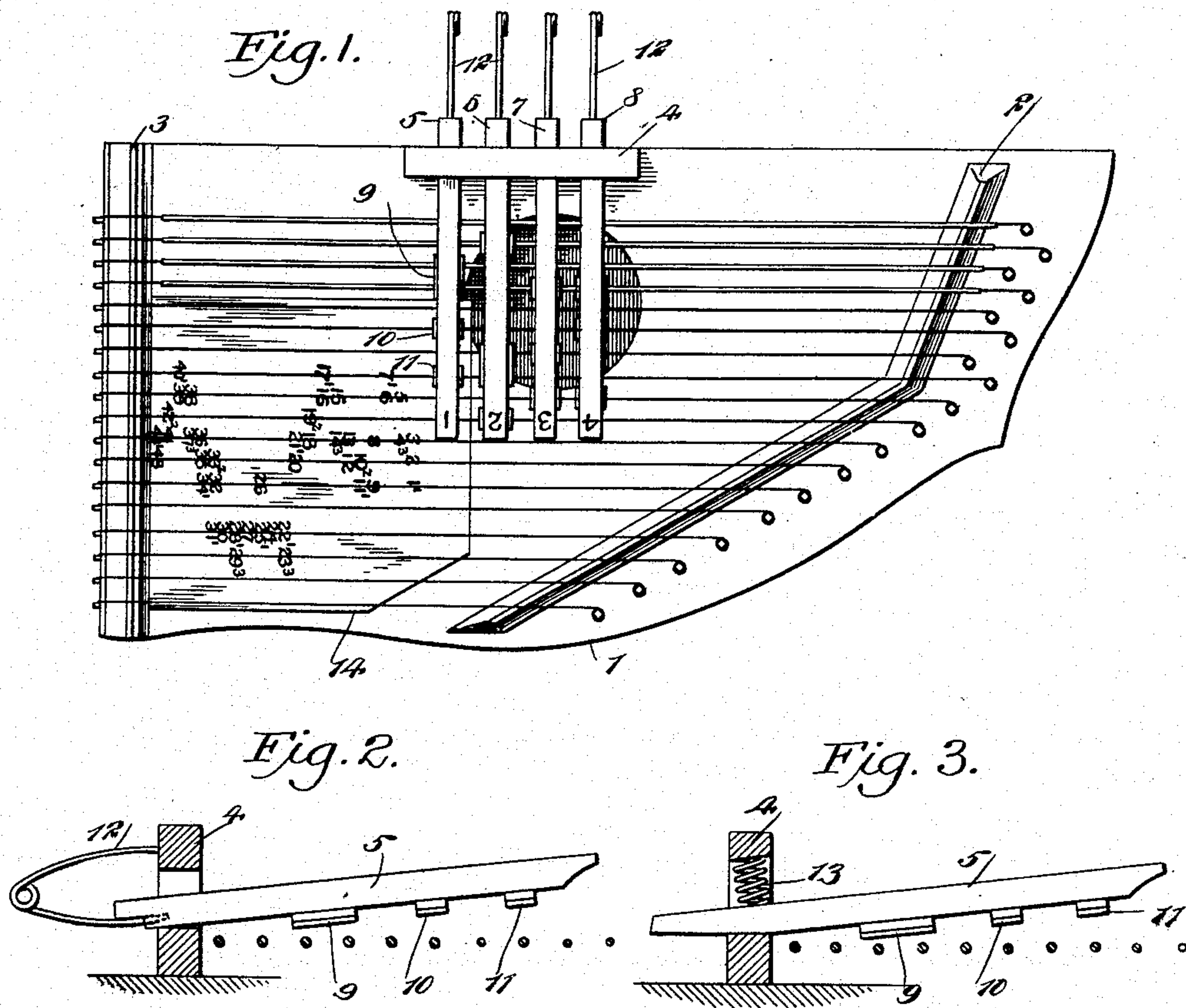
No. 675,230.

Patented May 28, 1901.

H. C. MARX.  
MUSICAL INSTRUMENT.

(Application filed Jan. 30, 1900.)

(No Model.)



WITNESSES:

James F. Duhamel  
C. R. Ferguson

INVENTOR

Henry C. Marx  
BY  
Munnell  
ATTORNEYS.



# UNITED STATES PATENT OFFICE.

HENRY C. MARX, LINN, KANSAS.

## MUSICAL INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 675,230, dated May 28, 1901.

Application filed January 30, 1900. Serial No. 3,316. (No model.)

*To all whom it may concern:*

Be it known that I, HENRY C. MARX, a citizen of the United States, and a resident of Linn, in the county of Washington and State of Kansas, have invented a new and Improved Musical Instrument, of which the following is a full, clear, and exact description.

This invention relates to improvements in stringed musical instruments—such, for instance, as the cithern type; and the object is to provide an instrument of this character with keys for striking certain of the strings to produce chords, while the air or melody is played on a certain number of open strings or on certain of the strings with which the keys are designed to engage.

I will describe a musical instrument embodying my invention and then point out the novel features in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of a musical instrument embodying my invention. Fig. 2 is a section showing a form of key that may be employed, and Fig. 3 shows a modification in the key mechanism.

Referring to the drawings, 1 designates the body of the instrument, of box-like construction, similar to that of a cithern, and stretched over the bridges 2 3. On the body portion are the sound-producing strings. Mounted to swing in a block 4, attached to the body portion at one side, is a series of keys, here shown as four in number and indicated by 5, 6, 7, and 8. These keys are in the form of levers and extend over a certain number of the strings, as plainly indicated in Fig. 1. Each key is provided on its under side with cushions or hammers designed to strike the strings. As here shown, the key 5 is provided with a hammer 9, designed to engage with two strings, and hammers 10 11, adapted each to engage with a string. The other levers each strike with similar hammers, excepting those indicated at 7 8, which have hammers for engaging with one string.

The keys or levers are held normally at an upward incline relatively to the strings, as indicated in Fig. 2, by means of springs 12, which are substantially in the form of C-

springs, one end being engaged with the block 4 and the other end being engaged with the outer end of the lever. In Fig. 3 coiled springs 13 are shown as arranged in the opening in the block 4 and engaging with the levers or keys. The object in inclining the keys or levers upward, as indicated, is to cause them, when they move downward by the action of the springs, to strike all the designed strings simultaneously.

While a skilled musician may play this instrument without the use of a chart or similar device, it is a main object to provide for use with the instrument a chart upon reference to which any person may readily play the tune indicated on the chart. The chart consists of a base 14, of paper or other suitable material, adapted to be placed upon the body of the instrument, below the strings, as plainly indicated in Fig. 1. Printed upon the base are indices to show the sequence in which the strings are to be played and also indices showing the time that any particular chord-key is to be manipulated. For instance, the chart shown in the drawings shows a numeral "1" adjacent to a string to be first picked, and by the side of this numeral "1" is a small numeral "1," indicating that the key 5, which may be conveniently numbered "1," as shown in the drawings, is to be operated. In operating this key by placing a thumb or finger under the inner end and raising it and then releasing it the spring will force the key down upon the chord-strings with sufficient force to produce the sound. The next string to be picked is that indicated by "2" on the chart, then the string "3." The string "3" is then to be again picked at "4," and at this time the key-lever 7 is to be operated to produce the chord, as before described. This system is to be carried out throughout the whole numbering on the chart. Obviously, as the large numbers indicate the sequence in which the keys are to be picked and the small numbers the key-levers to be operated, a person without musical knowledge may easily manipulate the device.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A musical instrument, comprising a body portion, strings thereon, a series of levers



mounted to swing on the body portion at right angles to the plane of the body and at right angles to the strings, two of said levers each having a cushion to strike a plurality of strings  
5 and cushions for striking single strings, and two of said levers each having cushions for striking single strings, and springs for moving the levers to their striking position, substantially as specified.

10 2. In a musical instrument, the combination with a body and strings thereon, of a block secured to the body near one side, key-levers mounted to swing on said block, and

springs normally holding the levers in an inclined position relatively to the strings and  
15 operating to move the levers to strike the upper sides of the strings, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of  
20 two subscribing witnesses.

HENRY C. MARX.

Witnesses:

JNO. M. RITTER,  
C. R. FERGUSON.