

(No Model.)

F. G. McPHERSON.
MUSICAL INSTRUMENT.

No. 602,352.

Patented Apr. 12, 1898.

Fig. 1.

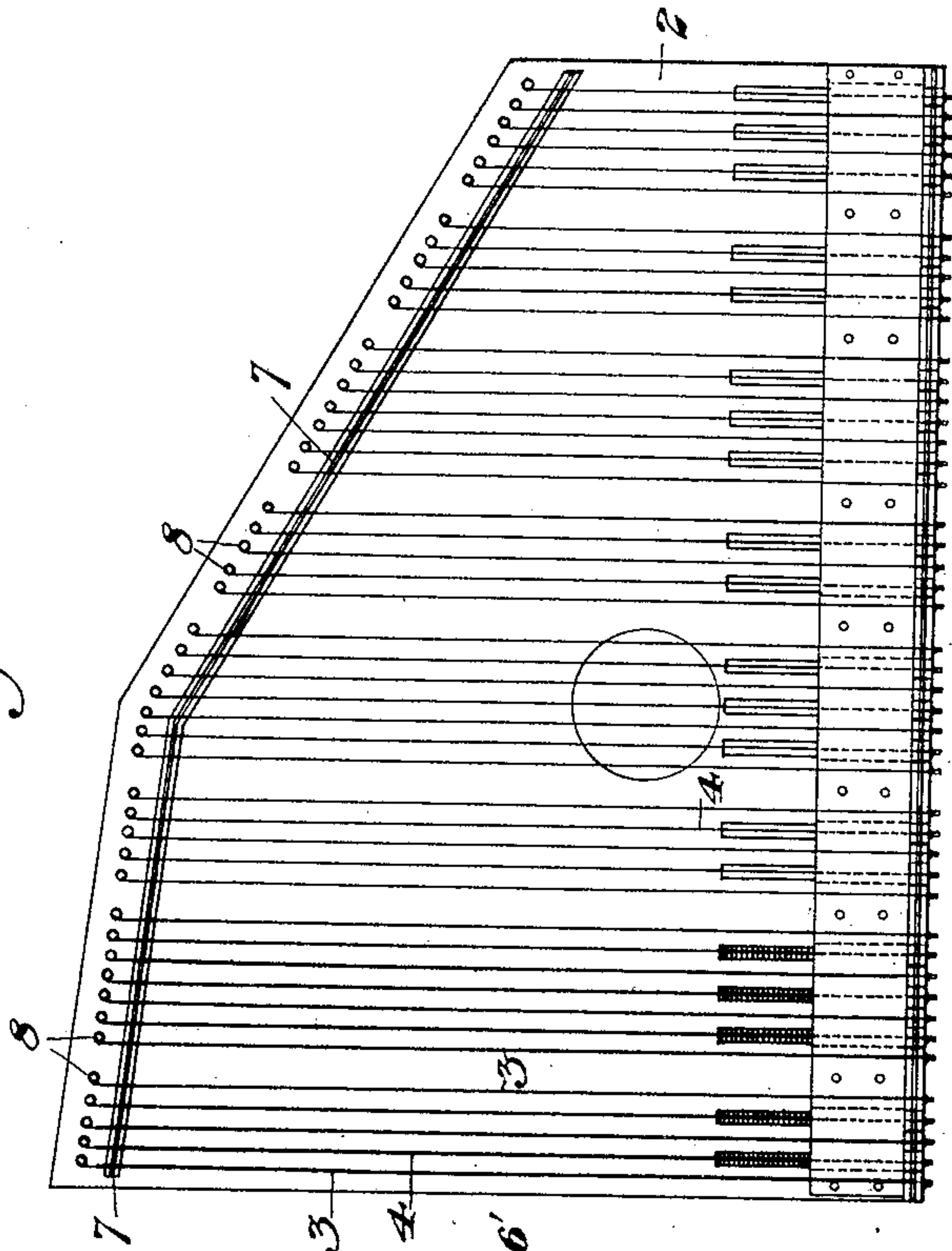


Fig. 4.

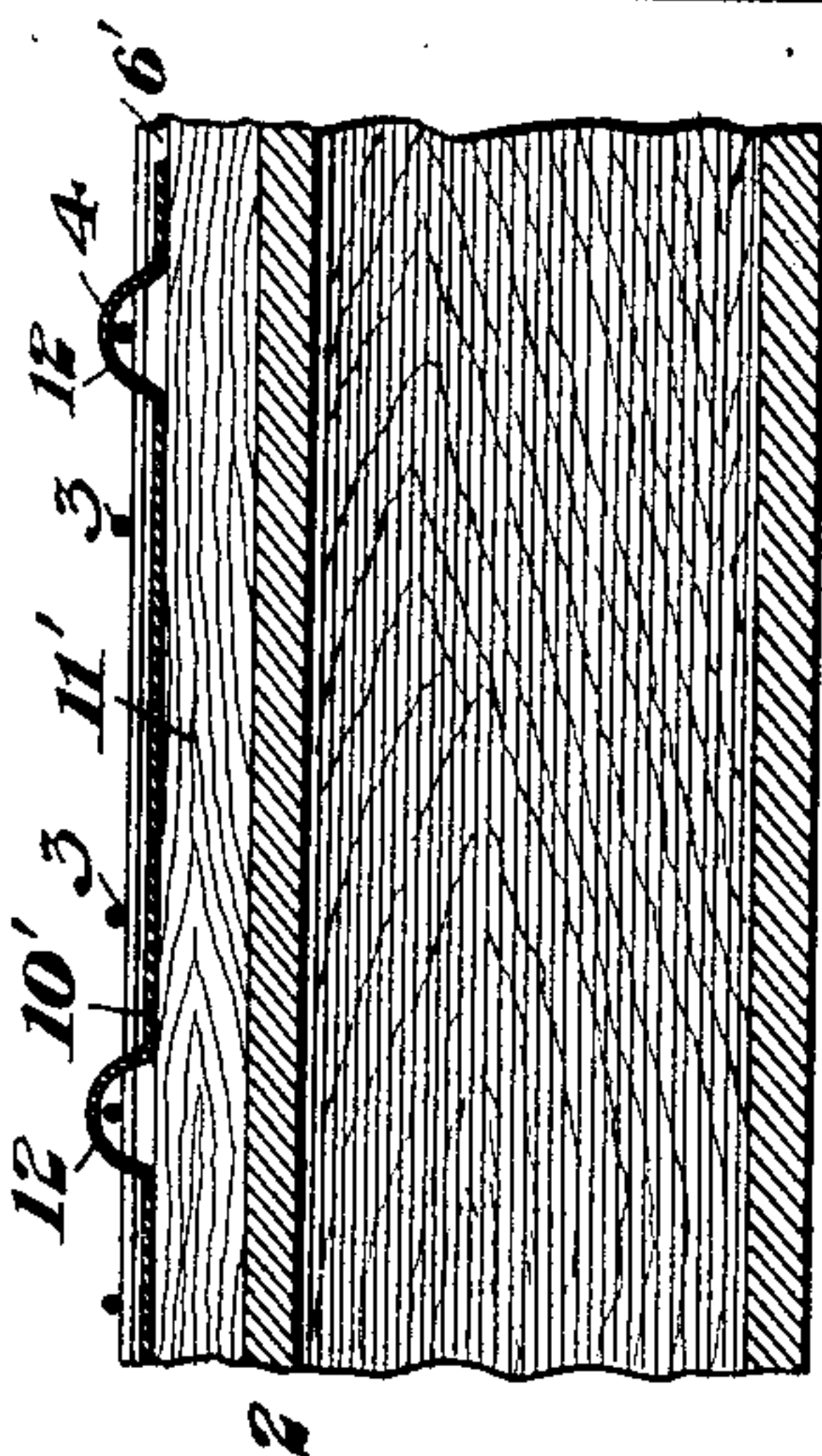


Fig. 3.

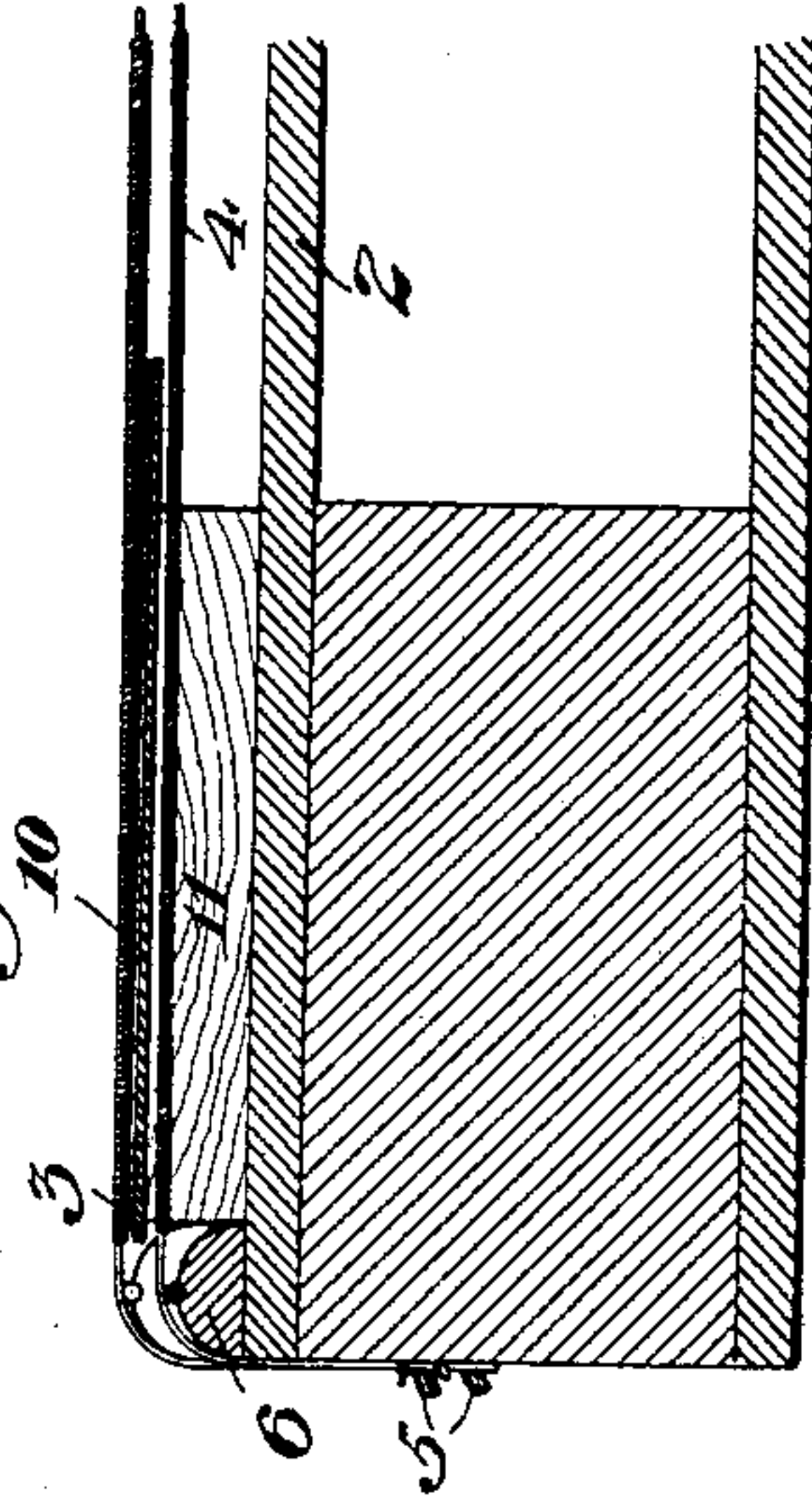
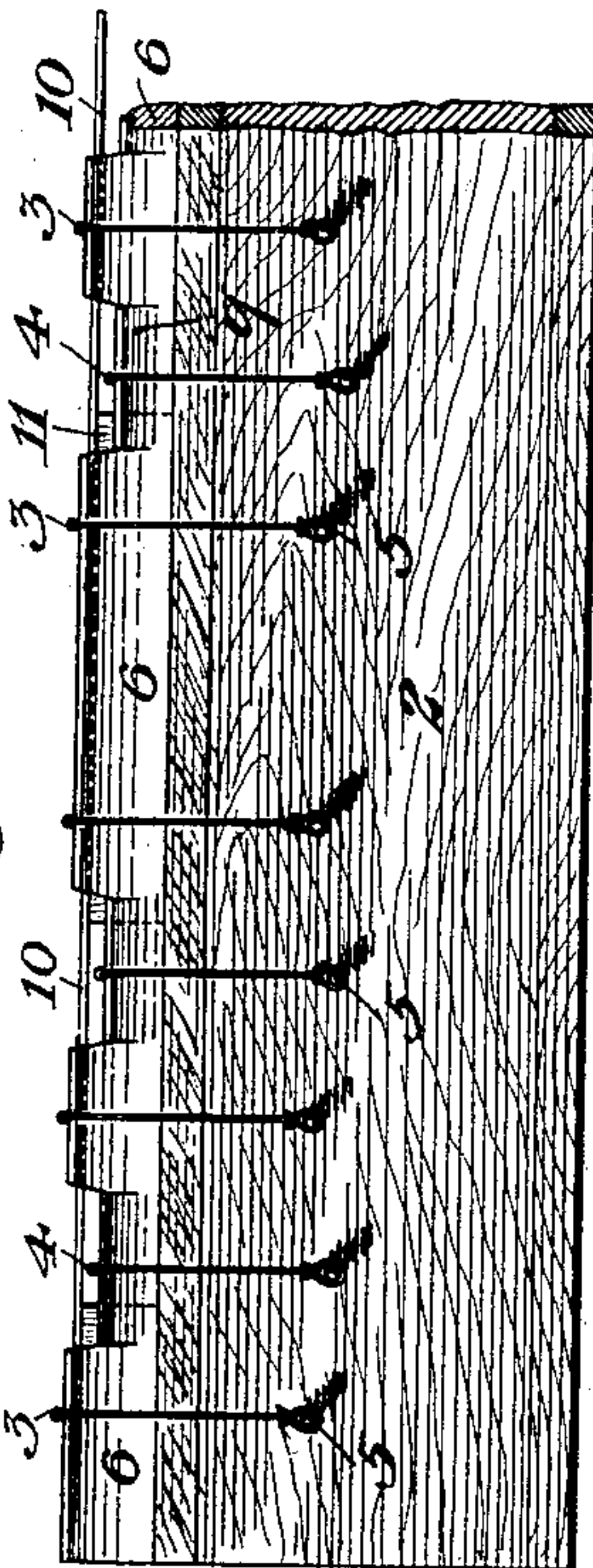


Fig. 2.



WITNESSES

J. A. [Signature]
G. S. [Signature]

INVENTOR

Frank G. McPherson
by [Signature]
his atty.

UNITED STATES PATENT OFFICE.

FRANK G. McPHERSON, OF BEAVER FALLS, PENNSYLVANIA, ASSIGNOR OF
ONE-HALF TO GEORGE W. MILLER, OF ROCHESTER, PENNSYLVANIA.

MUSICAL INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 602,352, dated April 12, 1898.

Application filed April 27 1897. Serial No. 634,075. (No model.)

To all whom it may concern:

Be it known that I, FRANK G. MCPHERSON, of Beaver Falls, in the county of Beaver and State of Pennsylvania, have invented a new and useful Improvement in Musical Instruments, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a top plan view of my improved instrument. Fig. 2 is a partial end elevation of the same. Fig. 3 is a partial cross-section, and Fig. 4 is a partial longitudinal section illustrating a modified form.

My invention relates to musical instruments of the harp or cithern class, and is designed to provide an instrument of this character in which the strings shall be arranged in the manner of piano-keys, the strings for the sharps and flats being covered for a portion of their length, so that the operator in striking a sharp or flat must slide his hand along the strings to a point corresponding to the black keys upon a piano.

To that end it consists in a harp or cithern, the ends of whose strings are preferably secured along a common line, in combination with a shield which covers the end portions of the strings tuned for sharps and flats, so that the operator can more easily and readily select the strings desired to be picked, the sharps or flats being reached only by sliding the hand along to a point intermediate of their length.

In the drawings, 2 represents the general case of an instrument of the harp or cithern class, having a series of strings arranged thereon, 3 being the major strings and 4 the strings tuned for sharps and flats. These strings at one end are secured to suitable pegs 5 in the front edge of the instrument, whence they pass over the bridge 6 and thence across the instrument over a bridge 7 to tuning-pegs 8. The bridge 6 in the form of Figs. 1, 2, and 3 is provided with depressed portions 9, over which the strings tuned for sharps and flats pass, so that these strings are at a lower level at this end of the instrument than the natural strings 3. Between the strings 3 and the strings 4 at the front or

playing end of the instrument I provide a shield or cover-plate 10, which is suitably secured to blocks 11, fastened to the face of the instrument. These supporting-blocks may, if desired, be formed into a continuous strip, although I prefer the separated blocks on account of lightness. The effect of the cover-plate is that the operator, in order to reach the strings 4, which are tuned for sharps and flats, must slide his hand forward over the strings to a point beyond the cover-plate. In this way the sharps and flats are easily and quickly distinguished from the natural strings and the playing resembles exactly the striking of the keys upon a piano, the player striking the natural strings over the shield, and when he desires to strike a sharp or flat he slides his hand forward and reaches the strings 4, which correspond to the black keys of a piano. The strings are preferably arranged in banks or slightly-separated groups, as shown, similarly to the keys of a piano.

Instead of providing the bridge 6 with depressed portions for the strings tuned to sharps and flats I may employ an ordinary bridge 6', as shown in Fig. 4, and in this case the cover-plate or shield 10' is provided with raised portions 12, which extend over the strings tuned for sharps and flats, the other portions of the shield extending under the natural strings 3, as shown in the figure.

The advantages of my invention will be apparent to those skilled in the art, since the cover-plate or shield serves to differentiate the natural strings from those tuned for sharps and flats, thus enabling the operator to strike the natural strings without danger of striking an accidental, while by sliding the hand forward he reaches the sharps and flats. It is evident that the instrument can be easily played by any person who has learned to play the piano, and the use of the cover-plate or shield in a simple and inexpensive way attains this result with little change from the ordinary construction.

It is evident that the strings may be arranged otherwise than in the manner shown and that the construction and arrangement of the shield may be varied in many ways without departing from my invention, since

What I claim is—

1. In a musical instrument of the harp or cithern class, a shield or cover-plate arranged to cover the end portions of the strings tuned
5 for sharps and flats, the natural strings being above this cover-plate.

2. An instrument of the harp or cithern class having at the front thereof a bridge provided with depressed portions for the strings tuned

to sharps and flats, and a shield arranged to cover the end portions of such strings adjacent to the bridge.

In testimony whereof I have hereunto set my hand.

FRANK G. MCPHERSON.

Witnesses:

G. L. EBERHART,
ROBERT MURRAY.