No. 659,757. Patented Oct. 16, 1900.

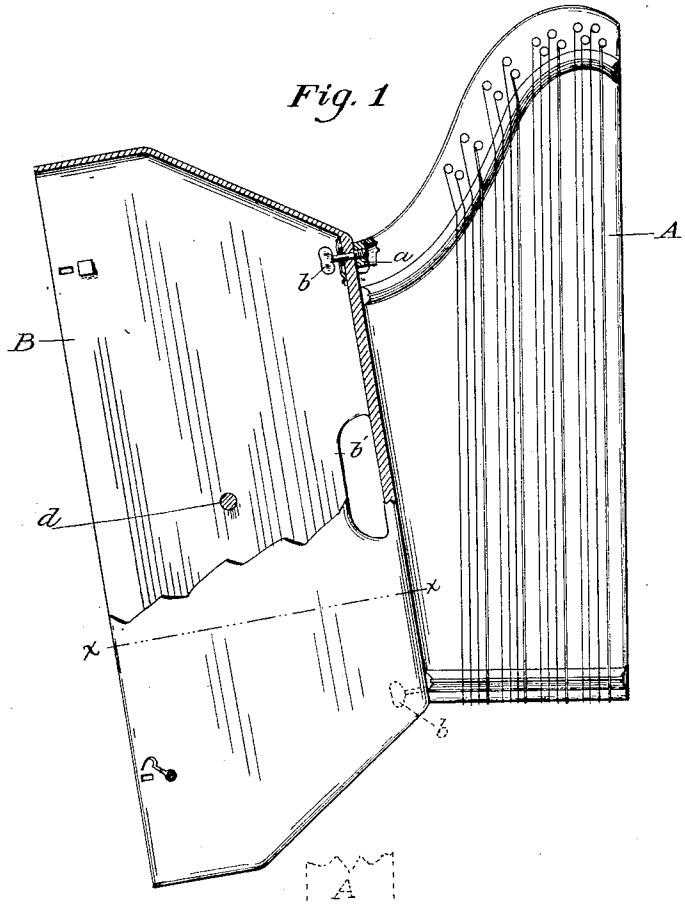
# W. W. McCALLIP.

## MUSICAL INSTRUMENT.

(Application filed Mar. 31, 1900.)

(No Model.)

*Fig. 1*



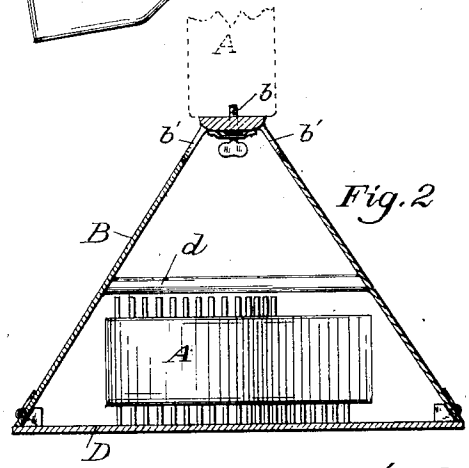




*Fig. 2*

WITNESSES:

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# UNITED STATES PATENT OFFICE.

WILLIAM W. McCALLIP, OF COLUMBUS, OHIO.

## MUSICAL INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 659,757, dated October 16, 1900.

Application filed March 31, 1900. Serial No. 10,884. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM W. McCALLIP, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Musical Instruments; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of this invention is to intensify or increase the volume and render more sustained and mellow the tone of a stringed instrument of the cithern kind. The device may be appropriately named, I think, a "resonator."

The invention is embodied in a resonating-chamber provided with means for attaching it to a cithern, so that both the cithern and chamber can be taken in the hands and played upon while so held.

The invention also contemplates the provision of means whereby the cithern can be inclosed and held within the resonating-chamber for transportation.

The several features of the invention are pointed out in the following description and claims.

In the accompanying drawings, Figure 1 is a side elevation of the cithern having the resonator attached, the resonator being broken out at the side and shown partially in section; and Fig. 2 is a transverse sectional view taken on a plane indicated by the line $x$ $x$, Fig. 1.

A designates the cithern, which can be strung on one or both sides.

B is the resonator. In the instance shown the resonator is approximately of the form of a hollow truncated pyramid; but the larger end preferably has at least two opposite portions parallel to each other the better to receive the cithern A. The smaller end of the resonator is preferably of a size and form to fit upon the edge of the cithern. The resonator can be made as a permanent part of the cithern; but it is more conveniently a separable part. Any appropriate means for connecting the resonator to the cithern can be employed. In the example shown the cithern is furnished with a permanent threaded nut $a$ to be engaged by a thumb-screw $b$, swiveled in the resonator. Several of these nuts and screws can be employed. The truncated end of the resonator is shown to be furnished with hand-holes $b'$, that afford a place to carry the resonator and for holding the instrument when it is being played upon. A bar $d$, secured between the walls of the resonator, serves to brace the walls to hold the cithern down when incased in the resonator as well as to increase the power of the resonator and improve the character of the tone of the instrument. When the resonator is to serve as a case, a removable cover D for the open end thereof is preferably provided. This cover is held in place by any suitable fastenings—such, for example, as hooks to engage eyes on the edge of the cover.

I have found by experiment that soft wood is the material best suited for securing the results sought and that the hollow flared form open at the larger end the best form in which to embody the resonator. I have also found that the attachment surprisingly increases the volume and sustentation of the tone and imparts to it a quality singularly agreeable. With this attachment therefore large results in the matter of tone and quality of tone are achieved with an instrument of small size, so far as the strung and more expensive part of it is concerned. Moreover, the best stringed instruments usually have their sounding-boards made of spruce-pine, a comparatively-expensive material; but when my resonator is to be used the sounding-boards can be made of a cheaper material—as, for example, poplar or white wood—and very excellent results attained. Incidentally the flat side of the resonator can serve as a rest for notation to guide the player.

What I claim, and desire to secure by Letters Patent, is—

1. A resonator for a stringed instrument of the cithern kind consisting of a hollow body or chamber open at one end, means on the opposite end for attaching the chamber to the cithern, and means whereby the cithern can be secured within the chamber when removed from the end thereof, substantially as described.

2. A resonator for a stringed instrument of the cithern kind consisting of a hollow flared body or chamber open at the larger end, and

means on the other end for attaching the chamber to the cithern, and a movable cover for the open end of the chamber, substantially as described.

3. A resonator for a stringed instrument of the cithern kind, consisting of a hollow body or chamber open at one end, means on the opposite end for attaching the chamber to the cithern, and a bar *d* subtending the sides of the chamber to give rigidity to the sides thereof and improve the resonating properties thereof, substantially as described.

4. A resonator for a stringed instrument of the cithern kind consisting of a hollow body or chamber of resonant material, and means for attaching the same to the edge of the body of the cithern, so that the strings of the latter can be picked upon one or both sides thereof while both the resonator and the instrument are carried and held in the hands, substantially as described.

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

WILLIAM W. McCALLIP.

Witnesses:
GEORGE M. FINCKEL,
G. W. ALFRED.