

(No Model.)

I. HAMMERL.
HARP.

No. 510,857.

Patented Dec. 12, 1893.

Fig. 1.

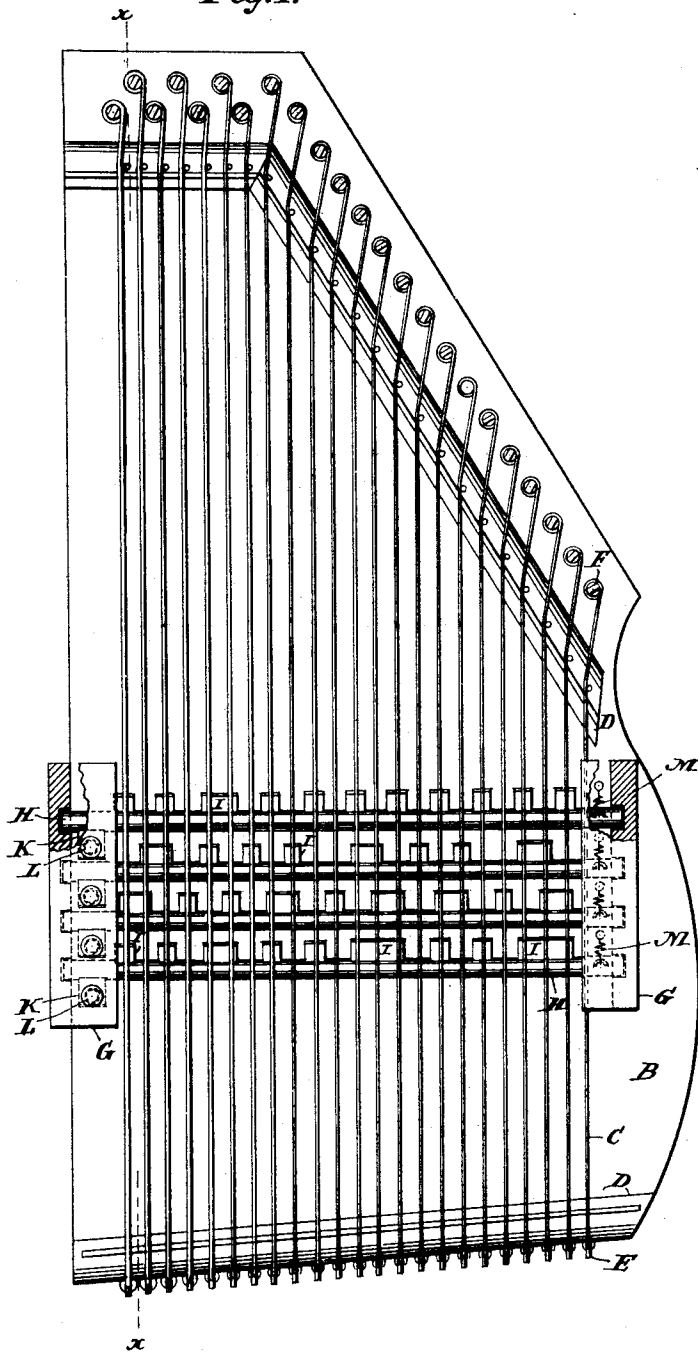
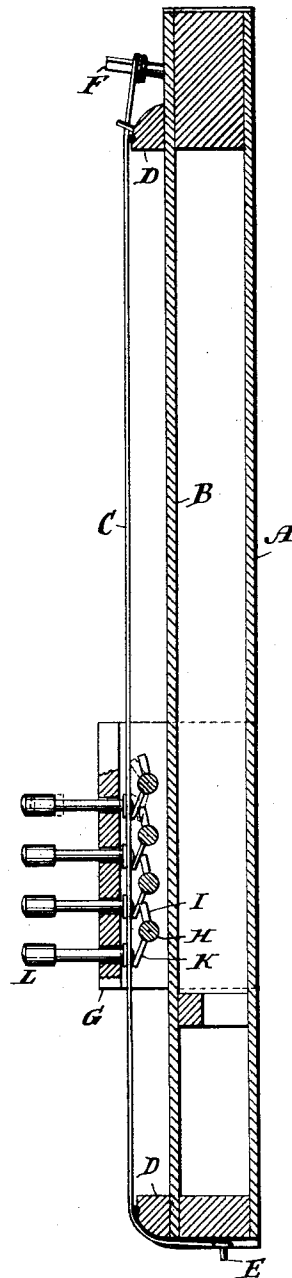


Fig. 2.



WITNESSES:

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IGNAZ HAMMERL, OF NEW YORK, N. Y., ASSIGNOR TO ALFRED DOLGE, OF
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HARP.

SPECIFICATION forming part of Letters Patent No. 510,857, dated December 12, 1893.

Application filed May 18, 1893. Serial No. 474,696. (No model.)

To all whom it may concern:

Be it known that I, IGNAZ HAMMERL, a citizen of the United States, residing at New York, in the county and State of New York, have invented new and useful Improvements in Harps, of which the following is a specification.

This invention relates to an improvement in harps and the invention consists in the novel features of construction set forth in the following specification and claims and illustrated in the annexed drawings in which—

Figure 1 is a plan view of the harp. Fig. 2 is a section along *x x* Fig. 1.

In the drawings the letter A indicates the back of a harp or zither and B is the sounding board. The strings C extending over bridges D are secured to hitch pins E and tuning pins F. From the sounding board extend risers or arms G in which are journaled bars H having fingers or dampers I. The projections or noses K on the bars are pressed by triggers or pushers L. By depressing a pusher the corresponding rod H is turned so as to swing its dampers I toward the strings. By arranging the dampers on a bar so that they will silence or cut out certain strings on contacting with the latter the bars can be used with great effect since the uncut or speaking strings may be such as to produce a certain chord. When the trigger L is released a spring M will swing the bar H to restore the dampers to the starting point away from the strings. One or more bars may be employed as desired.

By arranging the bars H underneath the strings C said bars will not obstruct the player's view of the strings nor will said bars interfere with the fingers of the player sounding the strings so that the required strings are left free or unobstructed for playing while at the same time the bars can produce their damping effect. The bars can be provided with marks or characters which are readily visible between the overlying strings and which marks or characters can indicate the strings cut out by the bar or if desired the chord or strings left free or uncut when said bar is actuated.

In the drawings is shown a series of bars

but of course the number of bars can be increased or diminished. For example, in simple instruments or toy instruments or in instruments for teaching beginners one bar may be sufficient, while by increasing the number of bars the variety of damping effects can be increased.

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

1. The combination with a harp of a series of bars (one or more) arranged transversely across underneath the strings thereof and provided with fingers or dampers for contacting with and silencing or cutting out certain strings when said bars are moved substantially as described.

2. The combination with a harp of a series of rotary bars (one or more) arranged transversely across the strings thereof and provided with fingers or dampers for contacting with and silencing or cutting out certain strings when said bars are rotated substantially as described.

3. The combination with a harp of a series of rotary bars (one or more) arranged transversely across the strings thereof and provided with fingers or dampers, triggers or pushers made to act on the bars and restoring springs for said bars substantially as described.

4. The combination with a harp of a series of bars (one or more) arranged transversely across underneath the strings thereof and provided with fingers or dampers and triggers or pushers for the bars made to extend from the latter up above the strings substantially as described.

5. The combination with a harp of a series of bars (one or more) arranged transversely across underneath the strings thereof and adapted to silence or cut out certain strings and to leave the remaining strings free or exposed substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

IGNAZ HAMMERL.

Witnesses:

RUDOLF DOLGE,
E. F. KASTENHUBER.