

(No Model.)

J. J. JOYCE.
HARP.

No. 540,988.

Patented June 11, 1895.

Fig. 1.

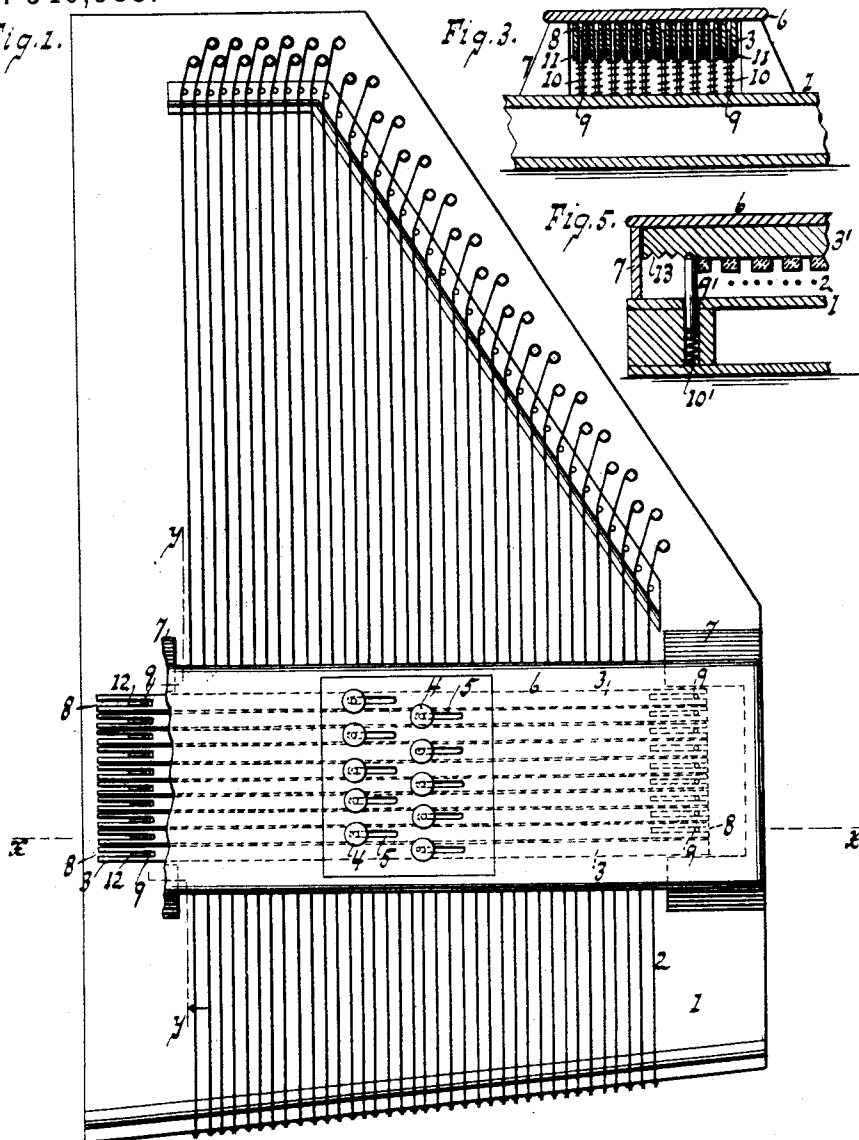


Fig. 3.

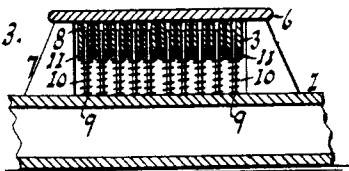


Fig. 5.

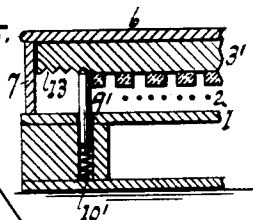


Fig. 2.

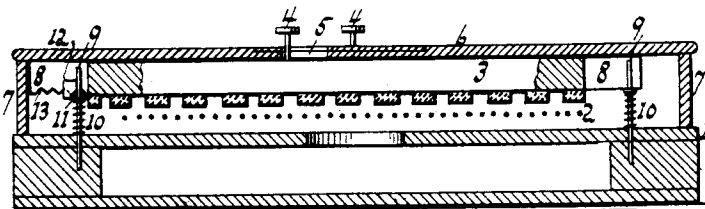


Fig. 4.



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HARP.

SPECIFICATION forming part of Letters Patent No. 540,988, dated June 11, 1895.

Application filed April 11, 1895. Serial No. 545,360. (No model.)

To all whom it may concern:

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

The object of this invention is to provide a damper bar arrangement for a stringed musical instrument such as a harp or zither which arrangement is simple and reliable and the invention resides 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 a stringed musical instrument with damper-bars. Fig. 2 is a section along *x x*, Fig. 1. Fig. 3 is a section along *y y*, Fig. 1. Fig. 4 is a detail view of a guide-block. Fig. 5 is a sectional view of a modification.

The instrument 1 has strings 2 and is provided with a damper bar 3. A plurality of damper bars as understood will enable more varied effects to be obtained, but one damper bar can be made to answer in some cases, as in simple instruments or toys. The damper bar is movable toward and from the strings, and is also shiftable so that as the bar is shifted longitudinally it will be in position to cut out different strings or sets of strings. The button or handle 4 enables the bar to be moved and shifted, the stem of the button projecting through slot 5 in cover 6 so as to be free for the shifting movement. The cover 6 is carried by supports 7.

The damper bar 3 has the ends open or slotted as at 8, the pins 9 projecting into these slots 8 and the springs 10 about said pins yieldingly supporting the bar to hold the latter normally away from the strings.

The guide block 11 is perforated to sit loosely or movably about a pin 9, said guide block being interposed between a spring 10 and the damper bar so that said block with the damper bar is normally held away from the strings. Said block has a tongue 12 extending into a bar slot 8.

The block 11 is ridged and the bar 3 has recesses or inverted ridges 13 adapted for engagement with the ridged block 11. After the bar 3 has been shifted as desired and is

moved toward damping position the engagement of block 11 with a ridge 13 will serve in guiding or holding the damper bar in proper required position relatively to the strings. The tongue 12 sitting loosely in slot 8 will not interfere with the shifting of the bar while preventing the block 11 from turning.

In the modification shown in Fig. 5 the bar 3' has recesses 13 as before named, and the pin 9' supported on spring 10' normally holds the bar 3' away from the strings, but when the bar 3' has been shifted the free end of pin 9' engaging a recess 13 will serve for bringing or holding the bar in proper required position.

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

1. A stringed musical instrument provided with a shiftable damper bar, and a guide block for said bar made movable toward and from the strings with said bar substantially as described.

2. A stringed musical instrument provided with a shiftable spring supported damper bar, and a spring supported guide block for said bar made movable toward and from the string with said bar substantially as described.

3. A stringed musical instrument provided with guide pins, a spring supported damper bar guided by said pins, and a spring supported guide block for the damper bar guided by one of said pins substantially as described.

4. A stringed musical instrument provided with guide pins, a spring supported slotted damper bar guided by said pins, and a spring supported guide block for the damper bar guided by one of said pins, said guide block having a tongue projecting into the slotted damper bar substantially as described.

5. A stringed musical instrument provided with guide pins and springs placed about said pins, a slotted damper bar guided by said pins and made to rest on said springs, and a guide block guided by one of said pins and interposed between the bar and a spring substantially as described.

6. A stringed musical instrument provided with guide pins and springs placed about said pins, a slotted damper bar guided by said pins and made to rest on said springs, and a guide block guided by one of said pins and interposed between the bar and a spring, said dam-

per bar and guide block being ridged to secure proper respective engagement substantially as described.

5 7. A stringed musical instrument provided with a ridged shiftable damper bar, and a yielding support for the bar adapted to engage the ridges of said bar substantially as described.

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

JOHN JOSEPH JOYCE.

Witnesses:

THEO. H. ROTH,
EDUARD DEDICKE.