

(No Model.)

L. LEHMAN.
HARP.

No. 526,630.

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Fig. 1.

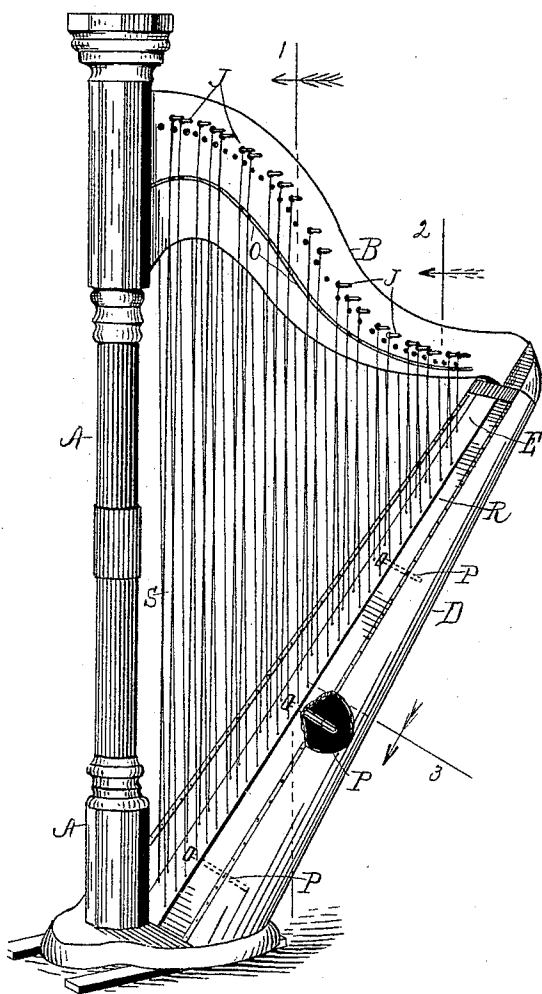


Fig. 2.

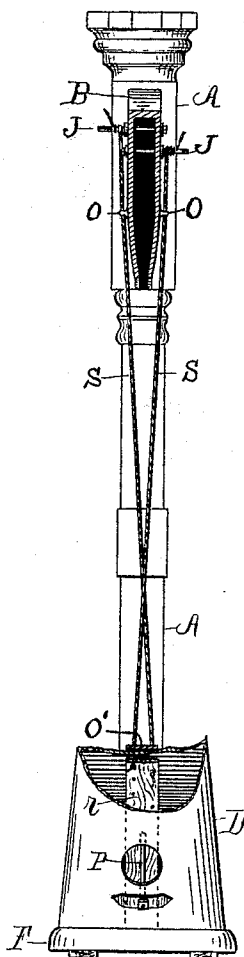


Fig. 3.

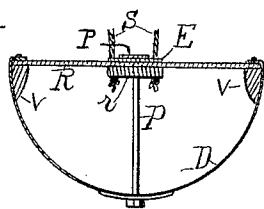


Fig. 4.

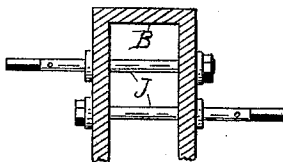
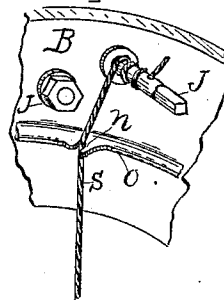


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

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HARP.

SPECIFICATION forming part of Letters Patent No. 526,630, dated September 25, 1894.

Application filed January 2, 1894. Serial No. 495,301. (No model.)

To all whom it may concern:

Be it known that I, LEOPOLD LEHMAN, a citizen of the United States of America, residing at Joliet, in the county of Will and State of Illinois, have invented certain new and useful Improvements in Harps, of which the following is a specification, reference being had therein to the accompanying drawings and the letters of reference thereon, forming a part of this specification, in which—

Figure 1 is a perspective view of the harp complete. Fig. 2 is a vertical section of Fig. 1, taken on line 1 looking in the direction of the arrow. Fig. 3, is a cross section through the body taken on line 3 of Fig. 1 looking in the direction of the arrow. Fig. 4, is a cross section through the neck taken on line 2 of Fig. 1, looking in the direction of the arrow; and Fig. 5 is a perspective view of a portion of the neck, showing two of the tuning pegs and a string wound upon one.

This invention relates to certain improvements in harps, and it consists in the novel construction and combination of parts hereinafter described and particularly pointed out in the appended claims.

Referring to the drawings D represents the body; A, the pillar, and B the neck of the harp.

The body consists of a curved metal back D having its edges secured to the edges of the sounding board R by means of screws, rivets or any other means. The interior of the body is provided with corner strips V, V, into which the screws or brads may enter to give the body sufficient strength. A strip *r* is also secured to the inner side of the sounding board R running its entire length along its center, and a similar strip E is secured to the upper side of the sounding board immediately above strip *r*, and extending the entire length of the sounding board. These strips strengthen the sounding board, and give it sufficient thickness at that place for holding the strings S which pass through apertures through said strips and sounding board, and are prevented from drawing out by reason of having knots on their ends as shown.

P are sounding posts located centrally in the body, and connect the back and sound-

ing board, and prevent the sounding board from being bowed upward by reason of said posts being provided with heads on either end as shown.

The neck B is intended to be hollow as shown in section in Figs. 2 and 4 and is provided with a double set of tuning pegs J, a set arranged to project from either side of the neck as shown particularly in said Figs. 2 and 4, so that strings may be wound upon pegs on either side of the neck.

The instrument is strung with a double row of strings S arranged so that the strings of one row cross those of the other row, but out of contact therewith, and so that the strings of each row lie in the same line at their point of crossing as shown. It is intended that the strings on one side shall be tuned a full tone apart, while those at the opposite side shall be tuned to be half tones between said full tone, so that the harp may be tuned in a chromatic scale the same as a piano, and so that all the strings may be struck by either hand, on either side of the harp by reason of the strings being crossed as shown; also by the use of the two sets of strings tuned in a chromatic scale, all pedals, or other means of shortening or lengthening the strings to give them a different tone are dispensed with.

When desired in playing all the strings can be struck by either hand at their point or line of crossing as before stated whenever it is necessary, and as the hand is moved in either direction from said line of crossing the spaces between the strings are farther apart, so that those of one set do not interfere with those of the other set or row.

The neck B is intended to be made of metal and hollow as shown in Figs. 2 and 4, and with an integral rest *o* having notches *n* for the strings to rest in as shown particularly in Fig. 5, instead of setting pegs in the side of the neck for the strings to bear against as in the ordinary construction, which is a very great improvement, as there are no pegs to get loose or bent, or get out of order in any way.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is as follows, to wit:

1. In a harp the combination of a hollow

neck B, a set of tuning pegs projecting from each side of said neck, a double set of strings arranged so that the strings of one set cross those of the other set and an integral rest o
5 on each side of said neck, said rests having notches n therein, substantially as specified.

2. In a harp, a body D consisting of a curved metal back, a sounding board having its edges secured to the edges of said back,
10 interior corner strips V V, a longitudinal interior central strip running the entire length of said sounding board, a similar exterior

strip E, sounding posts P located centrally within the body and connecting the back and the sounding board, and an exterior head on 15 each end of each of said sounding posts whereby said sounding board is prevented from being bowed upwardly, substantially as specified.

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Witnesses:

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