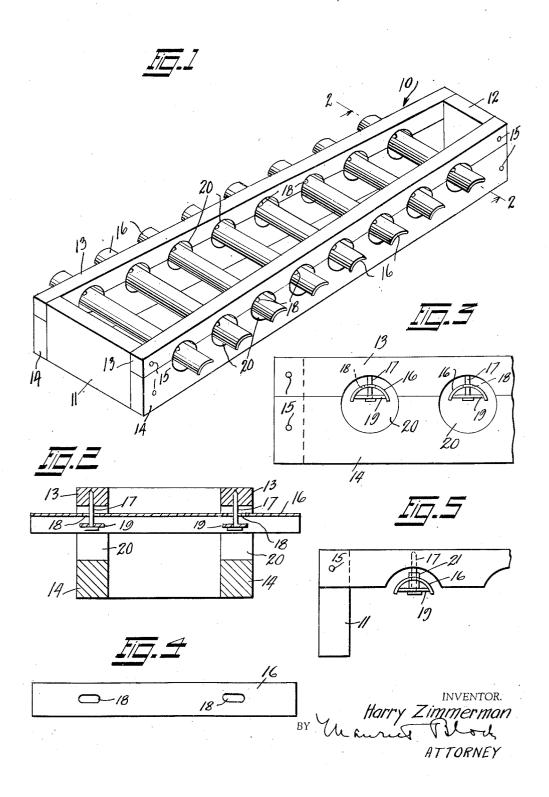
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XYLOPHONE

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## UNITED STATES PATENT OFFICE

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## XYLOPHONE

Harry Zimmerman, New York, N. Y. Application May 3, 1941, Serial No. 391,666

6 Claims. (Cl. 84-403)

This invention relates to xylophones and has for one of its objects the provision of such a musical instrument in which the sounding members are suspended in a highly efficient yet inexpensive manner.

Another object of the invention is the provision of a device of this nature comprising a pair of spaced apart rails suitably supported on a pair of end walls, and resonant bars or sounding members suspended from the said rails upon 10 sound insulated pins or the like carried by the said rails.

A further object of the invention is the provision of such a musical instrument in which the frame which supports the sounding members 15 together with the support upon which the said frame rests form a resonator or sound chamber.

Another object is to produce a device of the character described in which the maximum simplicity of construction and operation is secured.

Other objects and advantages will appear as the nature of the improvements is better understood, the invention consisting substantially in the novel arrangement and co-relation of parts herein fully described and illustrated in the accompanying drawing, wherein similar reference characters are used to describe corresponding parts throughout the several views, and then finally pointed out and specifically defined and indicated in the appended claims.

The disclosure made the basis of exemplifying the present inventive concept suggests a practical embodiment thereof, but the invention is not to be restricted to the exact details of this disclosure, and the latter, therefore, is to be understood from an illustrative rather than a restrictive standpoint.

In the accompanying drawing-

made in accordance with my invention;

Fig. 2 is cross-sectional view taken on line 2-2, Fig. 1;

Fig. 3 is a fragmental side view thereof;

Fig. 4 is a top plan view of one of the sound- 45 ing members and

Fig. 5 is a fragmental side view of a somewhat modified form of the invention.

Referring now to Figs. 1 to 4 of the drawing in detail 10 indicates the frame of my improved 50 xylophone. The said frame comprises one end wall 11 and a somewhat narrower end wall 12, a pair of upper side rails 13 and a pair of lower rails 14 each secured to the end walls 11 and 12 by means of nails 15 or by any other suitable 55

means, the said upper and lower rails forming longitudinally split side walls.

In order to avoid conflicting vibrations and consequent distortion of the musical tones, the sounding members are usually insulated from their support by means of strips of felt glued to the top surface of such supports or by providing special and expensive suspension means for the said sounding members. Both of the foregoing methods of suspending or supporting the said sounding members entail considerable work and expense. In order to overcome such extra labor and expense, I have provided a simple, inexpensive, yet highly efficient suspension means, a description of which follows.

In the present instance, I have provided suspension means for the sounding members 16 which comprises pins or nails 17 which preferably pass through elongated slots or openings 18 in the sounding members and are driven into the the upper wooden rails 13, the said nails being insulated from the sounding members by means of insulating washers or strips of cardboard or the like 19 on the nails. Due to gravity the 25 sounding members rest on the said washers or strips 19 and make frictional contact with them. This frictional contact is sufficient to normally maintain the sounding members against movement about the pins or suspension nails 17. The 30 sounding members 16 project outwardly of the frame 10 through openings 20 formed in the rails 13 and 14.

While I have shown and prefer to use semitubular sounding members, I desire it under-35 stood that wherever desirable I may use flat or tubular sounding members without departing from the scope of the appended claims.

In Fig. 5 I have shown a modified form of my Fig. 1 is a perspective view of a xylophone 40 14 and have further insulated the suspension nails or pins 17 by means of insulating collars or tubes 21 which may be integral with the washers 19 or rest thereupon and pass through the openings 18 in the sounding members 15 thus insuring against contact between the supporting nails and sounding members when the latter are accidentally moved to and fro or sidewise.

From the foregoing it will be seen that I have provided a xylophone comprising sounding members suspended from nails or the like from which they are insulated against direct contact by means of strips or washers made of sound insulating material and upon which the said sounding members are gravity supported.

It will further be seen that the above described

construction provides a simple yet highly efficient suspension means for the sounding members of xylophones or other similar musical instruments.

Having described my invention what I claim 5 as new and desire to secure by Letters Patent

1. In a xylophone, a frame having longitudinally split and apertured side walls, resonant bars extending through opposite apertures in 10 forations as and for the purpose specified. the side walls, the said bars having spaced apart openings, and insulated supporting pins in the said apertures passing through the openings in the bars and forming suspension means there-

2. In a xylophone, a frame having longitudinally split and apertured side walls, resonant bars extending through opposite apertures in the side walls, the said bars having spaced apart openings, a pin in each wall perforation depend- 20 ing downwardly therefrom and passing through an opening in its respective bar, and an insulating washer on each pin upon which the bar rests.

3. In a xylophone, a frame having a pair of from each rail, the pins in one rail being in alinement with the pins in the other of said rails, a perforated resonant bar suspended from each pair of opposing pins and sound insulating strips upon the said pins upon which the resonant bar 30 is supported.

4. In a xylophone, a frame having a pair of spaced apart rails, a plurality of pins depending from each rail, the pins in one rail being in alignment with the pins in the other of said rails, a perforated resonant bar suspended from each pair of opposing pins, sound insulating strips upon the said pins upon which the resonant bar is supported and a sound insulating collar on each of the strips passing through the bar per-

5. In a xylophone, a frame open at the top and bottom and including end walls and split perforated side walls which together with the support upon which the xylophone rests forms a 15 resonating chamber, suspension pins extending downwardly in each perforation, a perforated resonant bar suspended from each pair of opposing pins, and insulating means on the pins

upon which the bar rests.

6. In a xylophone, a frame, a plurality of semitubular spaced apart resonant bars suspended in the frame, the suspension means for each bar comprising pins passing into the frame and depending downwardly therefrom and each pin spaced apart rails, a plurality of pins depending 25 passing through an opening near each end of the bar, and an insulating washer on each pin upon which the bar rests.

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