

(No Model.)

B. H. MONNEUSE.
MUSICAL INSTRUMENT.

No. 521,662.

Patented June 19, 1894.

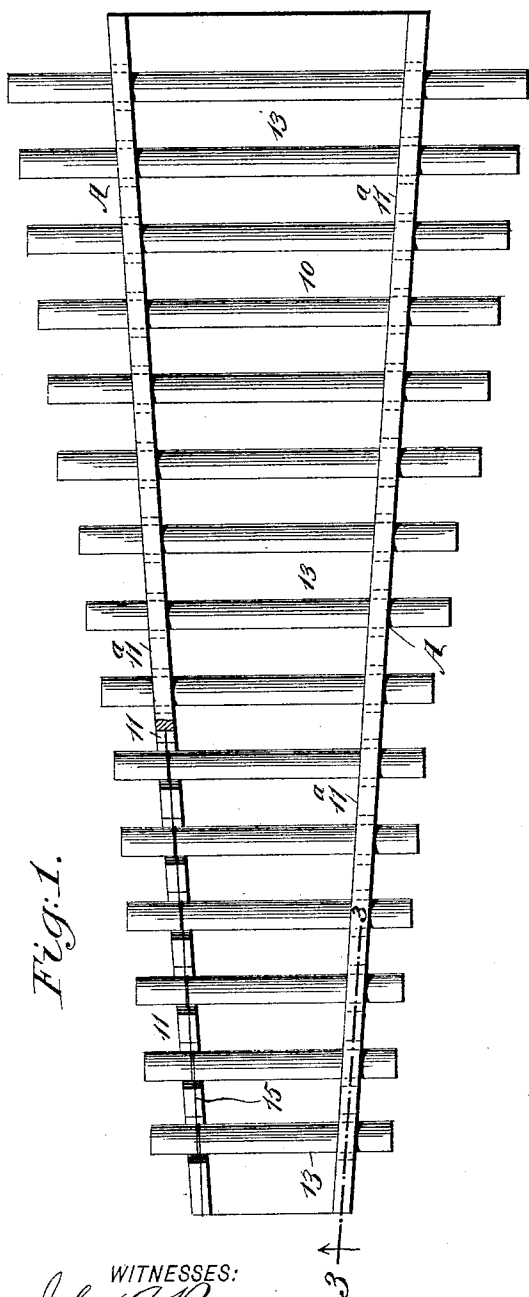


Fig. 1.

WITNESSES:
John A. Rennie
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Fig. 2.

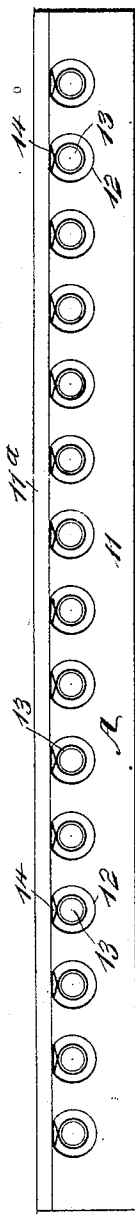
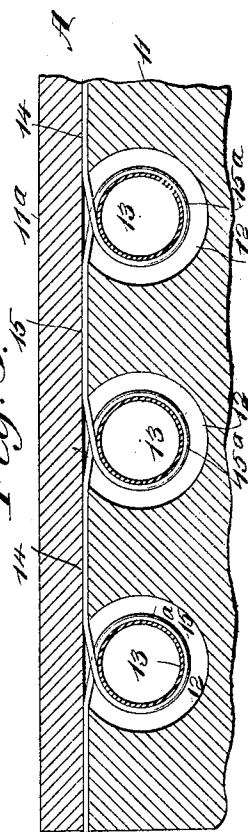


Fig. 3.



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MUSICAL INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 521,662, dated June 19, 1894.

Application filed April 19, 1894. Serial No. 508,156. (No model.)

To all whom it may concern:

Be it known that I, BERNHARD H. MONNEUSE, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Musical Instruments, of which the following is a full, clear, and exact description.

My invention relates to an improvement in musical instruments, and especially to that class of instruments which are played upon by means of hammers or their equivalents, and the object of the invention is to provide a tubeophone, or an instrument which is made up of a series of tubes, the tubes being arranged in such order that when struck by a hammer or its equivalent the scale may be played thereon in whatever key the tubes have been tuned to, or any piece of music written in such key.

A further object of the invention is to provide a means whereby such tubes may be suspended in a frame in an exceedingly simple, durable and economic manner, and whereby should the support of a tube become accidentally broken or worn, the said support may be replaced by any one of ordinary intelligence.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a plan view of the improved musical instrument, a portion of one side being broken away to illustrate the support for the tubes. Fig. 2 is a side elevation of the instrument; and Fig. 3 is a longitudinal section taken practically on the line 3—3 of Fig. 1.

In carrying out the invention a frame A, is employed to receive the tubes. This frame is usually made to taper in direction of one end, and comprises a bottom 10 and sides 11. The frame may be made of metal, wood, or any desired material, and each side 11 is provided with a cap strip 11^a which extends along its upper face preferably from end to end; and the said cap strip may be provided

with a groove extending longitudinally in its under face, or the groove may be produced in the upper edge of the side of the frame. In Fig. 3 the groove is designated as 14, and is illustrated as produced in the top of the sides of the frame. Thus it will be observed that each side of a frame is virtually made in two sections, the body section 11 and the cap section 11^a. The body section of each side of the frame is provided with a series of longitudinally arranged openings 12, preferably of a circular character, said openings being so located that they will extend through the upper edge of the body of each side to a predetermined extent. The tubes 13, which are graduated in length in order that they shall produce a proper tone, are preferably made of brass, although they may be made of any metal that in practice may be found desirable. These tubes are made to extend through transversely aligning openings 12, and are held in place, or are held suspended in said openings in such manner as not to come in contact with the walls, by means of threads or cords 15 of any desired material, one thread or cord being employed in connection with each side of the frame; and in the manipulation of these supporting threads or cords one end of a cord is secured in any suitable or approved manner to one end of the body of a side of the frame, and the cord is then carried over the top surface of the said side body along the groove 14, if produced in said surface, and is passed around the tube located in the nearest opening 12, a loop 15^a being thereby formed. The cord is then passed through the groove to the next tube, looped around that one, and thus the cord is taken from one tube to another until the last tube is reached and supported, whereupon the cord is then secured to a side of the frame and the cap section 11^a is placed over the cord upon the body section of the side treated, and secured in place by means of nails, screws or equivalent fastening devices. The tubes are then supported in like manner at the opposite side of the frame. Under this construction it is obvious that the tubes will be suspended in the openings 12 in the frame in such manner as not to touch the walls of the said openings, and likewise in such man-

ner as not to interfere with the vibratory qualities of the tubes. Furthermore, an instrument of this character under the above construction is rendered exceedingly simple
 5 and consequently economic, and in the event the support for any of the tubes should become broken, any person of ordinary intelligence will be enabled to add a new support to the frame. It will be understood that al-
 10 though a continuous cord is preferred for holding the tubes at each side of the frame, the cords may be made in sections if in practice it is found desirable, and that instead of cords, tapes may be employed for this pur-
 15 pose although cord is usually preferred.

The letter of the scale represented by each tube is produced upon the upper face of the cover strip, opposite the correspondingly tuned tube, thus rendering the instrument
 20 readily understood to even a novice in music.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A musical instrument, the same consist-
 25 ing of a frame, open at the top and provided with openings in its sides, tubes constructed to produce predetermined sounds when struck, and extending through transversely opposing openings, and a flexible support
 30 maintaining said tubes in suspension within the openings through which they pass, and out of contact with the walls of said openings, as and for the purpose set forth.

2. A musical instrument, the same consist-
 35 ing of a frame having openings produced in its sides, tubes constructed to give forth a

predetermined tone, passed through aligning apertures in the frame, and a cord or tape at-
 40 tached to the frame, passed across the openings therein and looped around the tubes, maintaining the tubes in pendent position, free from contact with the walls of the open-
 ing, substantially as described.

3. A musical instrument, the same consist-
 45 ing of a frame having openings in its sides, tubes arranged to produce the tones of a pre-determined scale and passed through align-
 ing apertures in the frame, and flexible hang-
 50 ers secured to the frame, extending within the said openings and surrounding and receiving the said tubes, and a cap strip whereby the
 hangers are concealed and protected, as and
 for the purpose set forth, the hangers serving
 to hold the tubes out of contact with the walls
 55 of the said openings, as and for the purpose set forth.

4. A musical instrument, the same consist-
 50 ing of a frame having openings in its sides, tubes arranged to produce the tones of a pre-determined scale and passed through align-
 ing apertures in the frame, a cord or tape at-
 55 tached to each side of the frame near one end, passed over all the openings in a side and looped around all of the tubes within said
 60 openings, and a cap strip covering and con-
 cealing the upper portions of the said tapes
 65 or cords, the said cap strip being removable, as and for the purpose set forth.

BERNHARD H. MONNEUSE.

Witnesses:

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