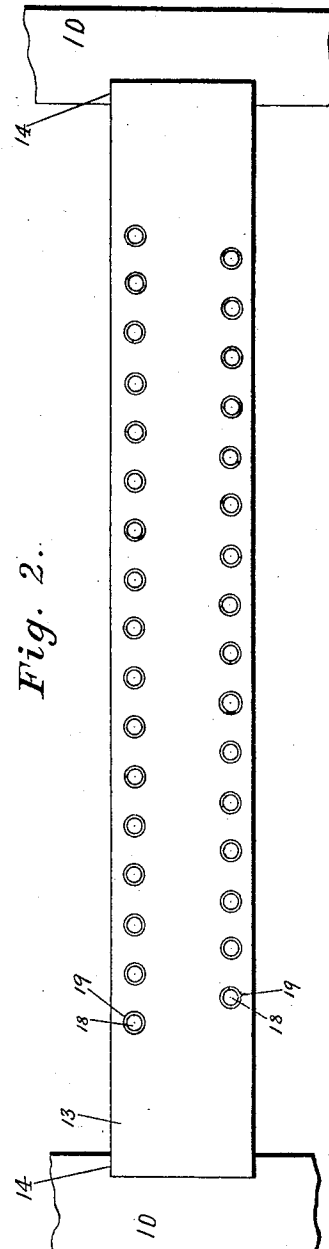
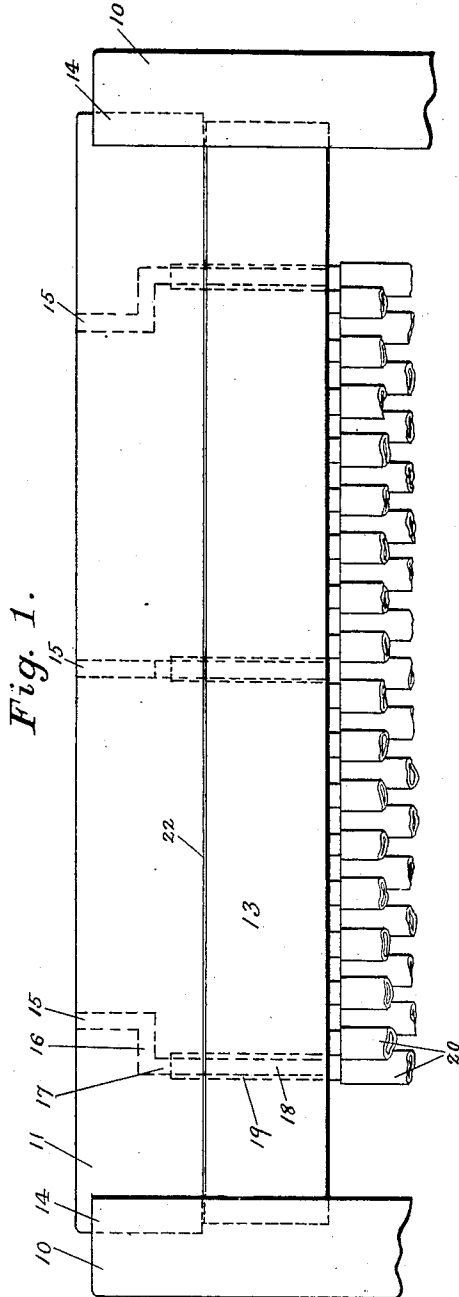


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 APPLICATION FILED APR. 20, 1903. RENEWED FEB. 26, 1910.

971,398.

Patented Sept. 27, 1910.

2 SHEETS—SHEET 1.



Witnesses:

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*H. Mallner*

Inventor:

*James O'Connor*  
 By *W. H. Honiss* Atty.

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Fig. 3.

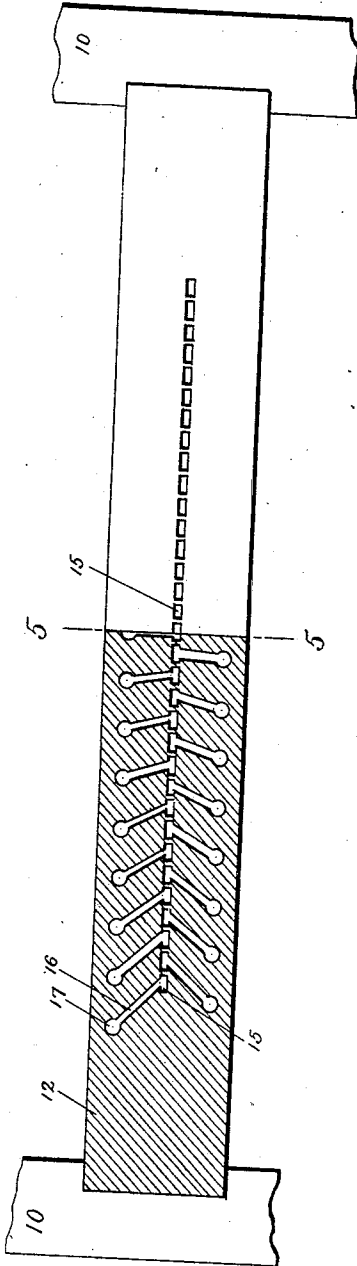


Fig. 4.

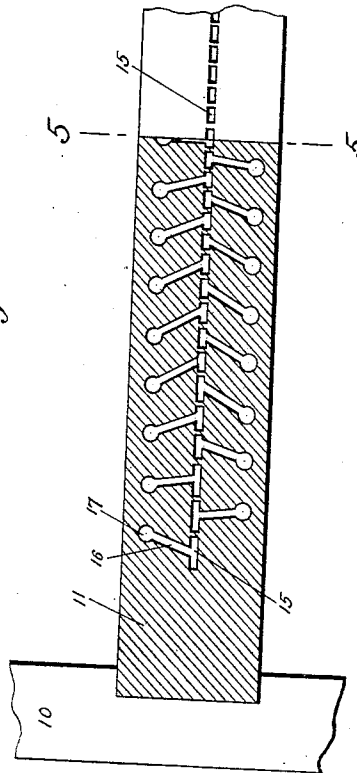
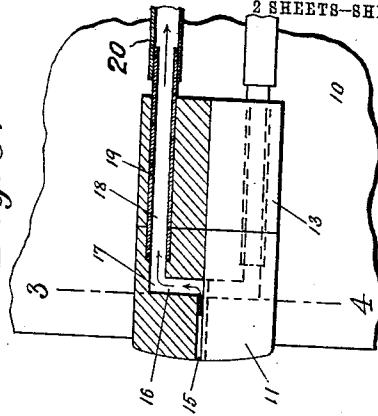


Fig. 5.



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# UNITED STATES PATENT OFFICE.

JAMES O'CONNOR, OF NEW YORK, N. Y., ASSIGNOR TO AUTO-PNEUMATIC ACTION CO.,  
OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

TRACKER-BOARD FOR MECHANICAL MUSICAL INSTRUMENTS.

971,398.

Specification of Letters Patent. Patented Sept. 27, 1910.

Application filed April 20, 1903, Serial No. 153,403. Renewed February 26, 1910. Serial No. 546,260.

*To all whom it may concern:*

Be it known that I, JAMES O'CONNOR, a citizen of the United States, and resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Tracker-Boards for Mechanical Musical Instruments, of which the following is a full, clear, and exact specification.

This invention relates to that class of apparatus which uses a tracker board in connection with a note sheet, and its object is to provide means whereby the tracker boards of different scales may be quickly and easily substituted for each other.

Figure 1 of the drawings is a side view showing a tracker board in position on the base. Fig. 2 is a plan view of the base with the tracker board removed. Fig. 3 is a plan view of a tracker board, one half being a section through the line 3, 4 of Fig. 5, and showing a means of connecting the upper and lower series of air channels. Fig. 4 is a similar view of a tracker board of a different standard or scale of spacing of its air apertures. Fig. 5 is an end view of a tracker board and base, one half being shown in section taken through the line 5, 5 of either Fig. 3 or 4, the end views of these two styles of tracker boards being identical.

The uprights 10 support the tracker board 11 and the base 13, the latter being secured to the uprights while the board 11 is detachable from the base, its sides and ends fitting the slots 14 in the uprights and its bottom resting on the base 13. The air apertures 15 are connected by means of the intermediate channels 16 with the lower channels 17 so disposed as to coincide with the air passages 18 when the tracker board is placed in operative position. The air passages 18 are preferably provided with tubes 19 extending through their entire length and preferably project at their upper ends so as to fit into the lower channels 17 or ducts of the tracker-board which are preferably counterbored to receive the tubes. The lower ends of the tubes 19 are also extended sufficiently to receive the connecting tubes 20.

When it is desired to change the tracker board, the one in use is removed and the desired one, as for instance 12, is set into position, the upper ends of the tubes 19 of the base fitting into the lower channels 17 of the

tracker board 12, thus giving the air a direct passage from the apertures 15 to the operating tubes 20 as shown by the arrows (Fig. 5).

Any desired number of tracker boards of different scales may be employed upon the same base. The spacing of the tubes in the base should be arranged to accommodate the different scales to be used, so as to conform most nearly to the average spacing, and thus provide for a minimum divergence of the air ducts or channels. The joint between the tracker board and base is preferably packed with a strip 22 of leather or similar material, so as to minimize the leakage of the air.

The tubes 19 not only serve to make a close fitting and substantially air-tight connection between the respective air passages of the base and the detachable trackers, but they serve also as registering dowels by which the two members are retained in a suitable fixed relation to each other.

I claim as my invention:—

1. The combination in a tracker board system, of a base provided with a series of air passages, a detachable tracker board provided with a series of air apertures, and a series of tubes for registering the tracker board on the base and establishing air communication between the corresponding passages and apertures of the base and tracker board.

2. The combination, in a tracker board system, of a tracker member provided with a series of air apertures, a base member having a series of air apertures registering with those of the tracker member, and a series of tubes pneumatically connecting the respective apertures of the tracker member and base.

3. The combination in a tracker board system of a base provided with a series of air passages, a detachable tracker board provided with a series of air apertures which at one end are spaced to coincide with the air passages of the base, and open at the other end in a different spacing, and a series of registering tubes for establishing the air communication between the corresponding passages and apertures of the base and tracker board.

4. The combination of a base provided with a series of air passages, a plurality of

detachable tracker boards having air apertures spaced in different scales, and a series of tubes connecting the air passages of the base with their respective apertures of the  
5 trackers.

5. The combination in a tracker board system of a base provided with a series of air passages, a plurality of detachable tracker boards having air apertures spaced  
10 in different scales, and means extending from the passages of the base for registering each tracker board with the base.

6. The combination in a tracker board system, of a base provided with a series of  
15 air passages, a plurality of tracker boards having air apertures spaced in differing scales, and a series of registering tubes for establishing communication between the air passages of the base and the corresponding

apertures of the different scale tracker  
20 boards.

7. The combination, in a tracker board system, of a tracker member provided with a series of air apertures, a base member, and a series of tubes supported by the base mem-  
25 ber in registering relation to the respective apertures of the tracker, one end of the said tubes projecting above the base member into the tracker member and the other end of the  
30 said tubes projecting below the base member to receive their respective connections with pneumatic mechanism.

Signed in the presence of two subscribing witnesses.

JAMES O'CONNOR.

Witnesses:

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