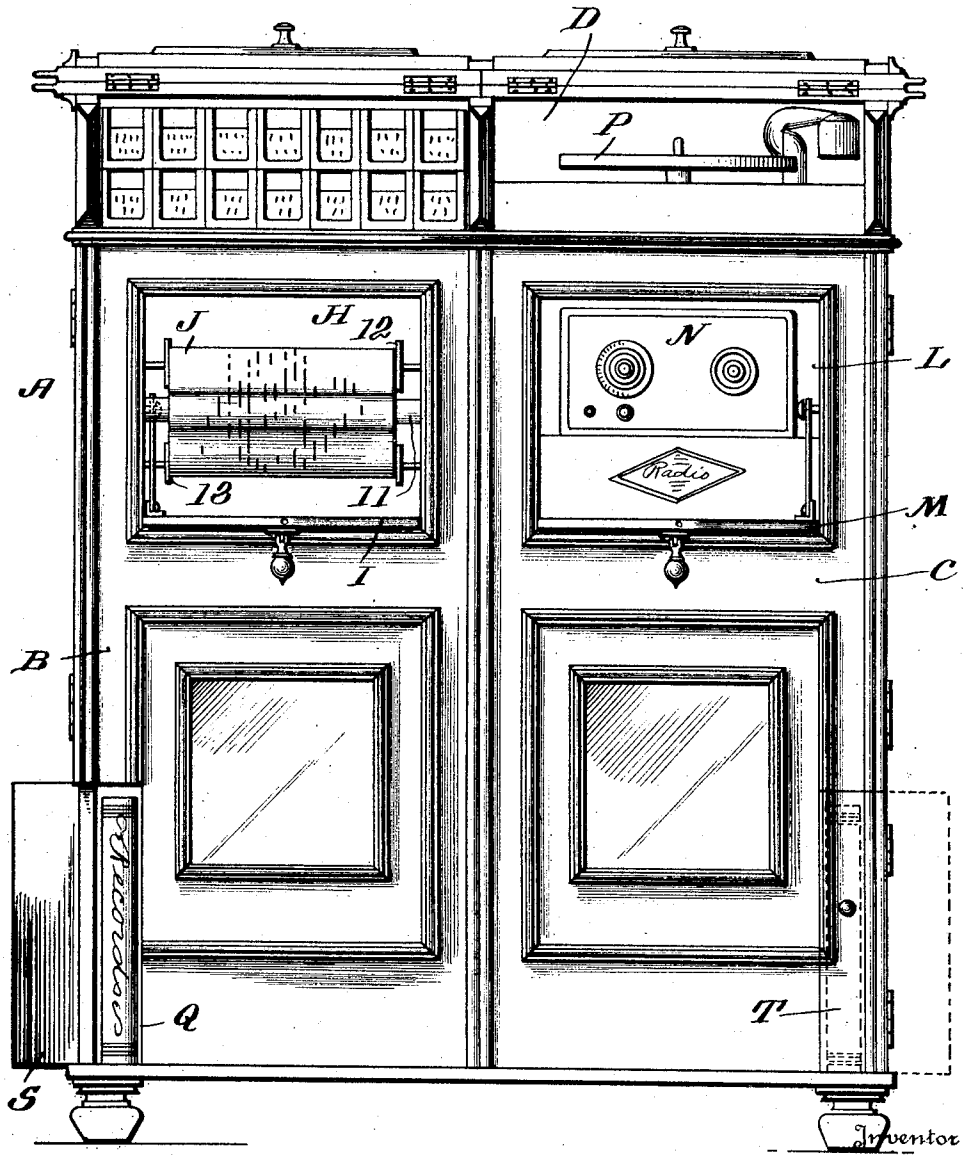
Dec. 17, 1929. H. J. LA JOIE 1,739,680

COMBINATION PLAYER PIANO, RADIO, AND PHONOGRAPH

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FIG. 1.



Inventor

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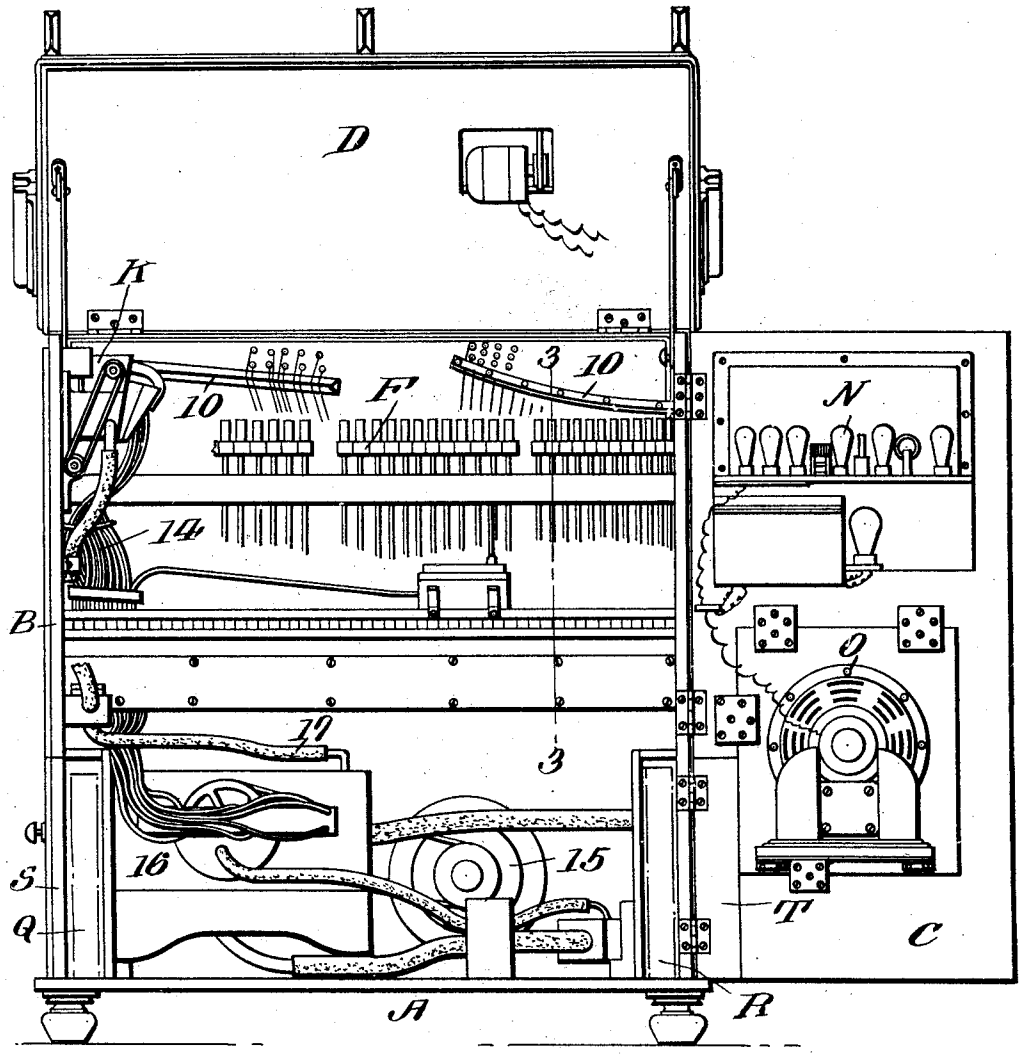
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COMBINATION PLAYER PIANO, RADIO, AND PHONOGRAPH

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FIG. 2.



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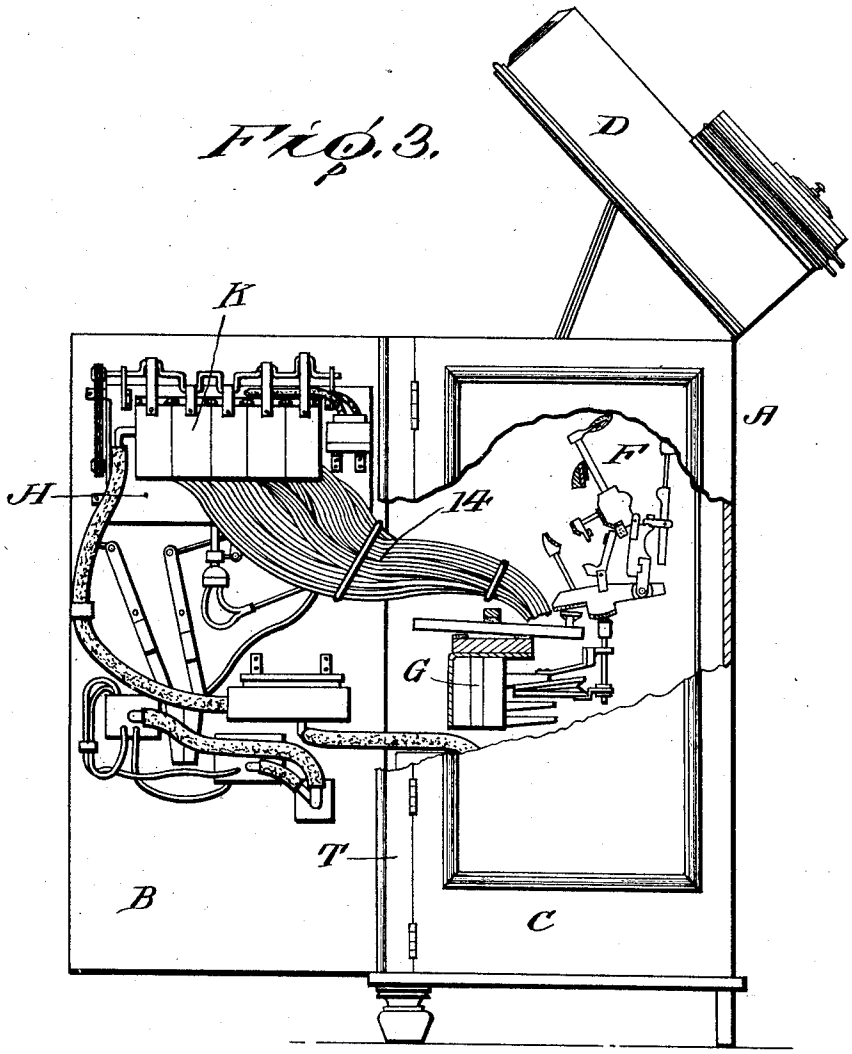
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COMBINATION PLAYER PIANO, RADIO, AND PHONOGRAPH

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Fig. 3.



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Patented Dec. 17, 1929 1,739,680

UNITED STATES PATENT OFFICE

HUBERT J. LA JOIE, OF MAPLEWOOD, NEW JERSEY, ASSIGNOR TO AUTO PNEUMATIC ACTION COMPANY, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK

COMBINATION PLAYER-PIANO, RADIO, AND PHONOGRAPH

Application filed December 22, 1928. Serial No. 328,010.

The object of this invention is to provide a combination player-piano, radio and phonograph, so arranged that the three instruments will be contained in one casing whereby the owner will have any one of the three instruments at his disposal within a very small space.

The instrument is particularly desirable for use in apartments and rooms where space is not available for a plurality of instruments.

The improved combination instrument is illustrated in the accompanying three sheets of drawings, in which

Figure 1 is a front elevation thereof.

Figure 2 is a front elevation with the doors and lid open showing how easy access can be had to the various instrumentalities, and

Figure 3 is a cross elevation taken on the line 3—3 of Figure 2.

The invention will be best understood by a detailed description of the drawings.

In detail A designates a rectangular case, which has doors B and C hinged thereto in vertical lines, the door B being capable of opening approximately 90°, and the door C approximately 180°.

A supplementary case or box D is horizontally hinged to the back of the casing A so that the same can be lifted up to an angle of approximately 45°, as illustrated in Figures 2 and 3. The top of this supplemental box D is split both longitudinally and laterally so that lids are provided, which are hinged horizontally to the remaining portion of the top, as illustrated in Figures 1 and 3.

A stringed piano frame or harp 10 is arranged vertically in the back of the casing A, and a piano action F, including hammers, &c., is arranged in the casing A in front of the strings.

A pneumatic player action which may comprise a series of pneumatics G is arranged in front of the piano action, as shown in Figure 3.

This player action preferably is constructed along the lines of the patent to Thomas Danquard, No. 776,601, dated August 2, 1904, and has dummy keys for tuning.

A spool box H is secured to the back of the door B and the door B is provided with a supplemental horizontally hinged door I which can be swung down to expose the parts in this spool box, as shown in Figure 1. The parts in the spool box consist of the usual tracker bar 11 and take up roll or spool 12 and the usual bearings of spindles so that a music roll 13 can be placed in the bearings and the usual perforated music sheet J drawn forward over the tracker bar for playing, or backward for rewinding.

The motor K and gearing for manipulating or drawing the music sheet forward or backward over the tracker is secured on the back of the spool box H as illustrated in Fig. 3. Thus the music sheet manipulating mechanism is arranged on the inside of the door B.

The pneumatic governor and the controlling valves for the music sheet manipulating motor K are also secured on the back of the door B, as shown in Fig. 3, and the usual connections or finger pieces for adjusting the operation of the motor are set in the spool box.

The apertures in the tracker bar are connected by flexible tubes 14 to the pneumatic action, these tubes being so arranged and placed that the door B can be opened or closed without affecting their connection to the tracker bar and action, the flexibility and slack of the tubes allowing this action.

An electric motor 15 and pneumatic pump 16 are arranged in the bottom of the casing A and are connected by a flexible pipe 17 to the valves on the inside of the door B which control the operation of the motor K.

The player piano mechanism is preferably provided with accent controlling mechanism so that the dynamic effects thereof can be controlled through the music sheet, these parts being of the well known type of "Welte" construction. It is not thought necessary to detail these parts at length.

The door C is provided with an opening L and a supplemental door M is horizontally hinged to the door C to cover this opening.

A radio receiving set N is secured on the back of the door C so that access to the controls thereof can be had through the opening L.

A loud speaker O is secured to the inside

lower part of the inside of the door C and suitably connected or wired to the radio receiving set N.

A phonograph P is arranged in the right hand compartment of the supplemental box D, and the same is wired to the loud speaker O. The phonograph is operated by an electric motor secured to the bottom of the supplemental box.

The compartment at the left in the supplemental box D is arranged for the reception of music rolls, and the case A is provided with two small compartments Q and R at the bottom thereof, which are covered by doors S and T, these compartments being useful for the storing of books of phonograph records.

The radio and the phonograph are wired up in any suitable manner and the three instruments are, of course, provided with the usual appurtenances to make the same effective.

The instrument when closed up presents a very pleasing and effective design.

When the player piano is to be operated, all that is necessary is to open the supplemental door I whereby the spool box will be exposed and the proper music sheet can be inserted and the pneumatic motor set in operation.

When it is desired to play the radio, the supplemental door N is opened and the radio receiving set can be manipulated, as desired.

While it is desired to play the phonograph, all that is necessary is to raise the lid E′ of the supplemental box D whereby the table of the phonograph is accessible, for the insertion or replacement of records.

By opening up the instrument, by swinging out the doors B and C and raising supplemental box D, as shown in Figure 2, all of the mechanisms are accessible for inspection and adjustment, and particularly the player piano is accessible for tuning. The opening of the doors and the supplemental box does not disturb any of the connections; hence there is no disability encountered from the compact arrangement of the parts.

The details and arrangements herein shown and described may be greatly varied by a skilled mechanic without departing from the scope of the invention as expressed in the claims.

Having thus fully described my invention, what I claim and desire to secure by United States Letters Patent is:—

1. A musical instrument comprising a case, a piano frame, action and pneumatic player mechanism arranged in the back thereof, a door vertically hinged to the case, a spool box having a tracker bar and music sheet manipulating mechanism carried by said door and flexible tubes connecting said tracker bar and pneumatic player action.

2. A musical instrument comprising a case, a piano frame, action and pneumatic player mechanism arranged in the back thereof, a door vertically hinged to the case, a spool box having a tracker bar and music sheet manipulating mechanism comprising a pneumatic motor, take up spool, music spool bearings and gearing carried by said door, and flexible tubes connecting said tracker bar and pneumatic player action.

3. A musical instrument comprising a case, a pumping mechanism in said case, a piano frame, action and pneumatic player mechanism arranged in the back thereof, a door vertically hinged to the case, a spool box having a tracker bar and music sheet manipulating mechanism and pneumatic motor carried by said door, flexible tubes connecting said tracker bar and pneumatic player action, and a flexible tube connecting said pneumatic motor with said pumping mechanism.

In testimony whereof I have hereunto affixed my signature.

HUBERT J. LA JOIE.