

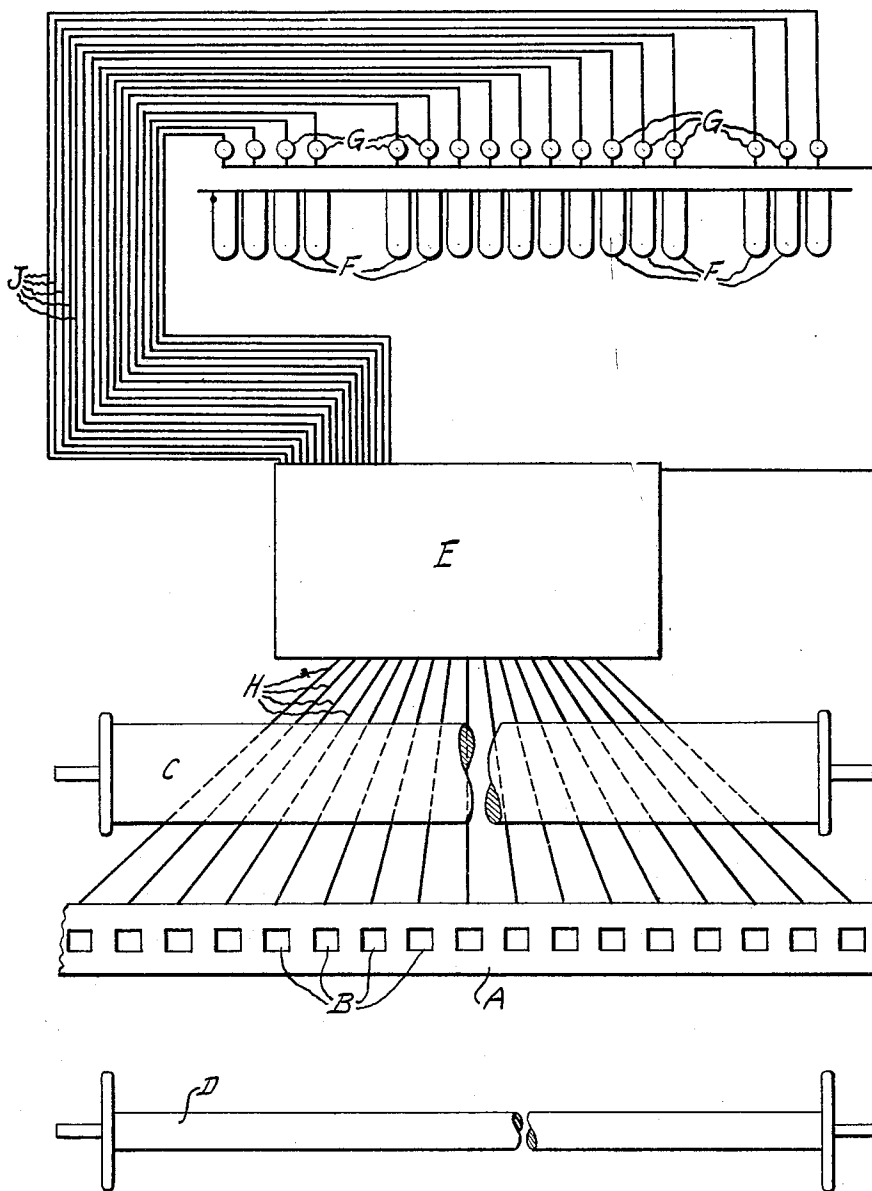
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METHOD OF PRODUCING ORGAN MUSIC

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METHOD OF PRODUCING ORGAN MUSIC

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This invention relates generally to methods of producing organ music and more specifically to a method for indicating manual, control of registration and expression during playing of organs, the predominant object of the invention being to provide an improved method whereby an organ may be played with the aid of an automatic playing mechanism in such manner that indicating means will be actuated to designate what and when certain tablets shall be manually operated and other parts actuated to obtain proper registration and expression in the rendition of the musical composition being played.

Prior to this invention organs have been played by automatic playing mechanism where the player roll was provided with perforations which controlled the entire operation of the organs including the necessary registration and expression. In other words, the player rolls employed during operation of an organ so played included perforations which cooperated with certain parts of the player and organ mechanism to cause the direct operation of the organ elements which controlled the registration and expression incident to the musical composition being played. A player mechanism of the type just referred to is called a full automatic player and during the playing of an organ with the aid thereof no manual operation of any part of the organ was necessary, the organ being as completely played by the player mechanism as if a skilled organist was seated at the console and was playing the organ by hand.

Instead of obtaining a full automatic rendition on an organ it is desirable at times to obtain a semi-automatic or partial automatic rendition; that is to say in school work and at other times it is highly desirable that the registration and expression incident to the music be controlled manually during rendition of a musical composition so that this important part of the art of playing an organ may be learned by a student or other person interested therein.

In view of the foregoing I have devised the improved method disclosed herein which, briefly stated, involves providing each tablet,

or other controlling element of the console of an organ, which is operated in controlling the registration and expression of the organ, with a small electric lamp or other indicating means. The actuation of the indicating means referred to is controlled by the same perforations in the player roll which in the case of a full automatic rendition causes the actuation of the registration and expression controlling mechanism of the organ, but in the case of the semi-automatic or partial automatic rendition the perforations referred to merely serve to actuate the indicating means. To be more specific in connection with the operation of an organ in accordance with my improved method, let it be assumed that a semi-automatic rendition of a musical composition is being played on the organ, the person who is to control the registration and expression during rendition of the composition being seated at the console of the organ. The player roll employed with the player mechanism is the same type of roll used when the organ is operated full automatic and as the perforations of the player roll, which in the case of a full automatic rendition would directly operate the registration and expression controlling elements of the organ, pass over the tracker bar of the player mechanism certain electric lamps located adjacent to tablets and other registration and expression controlling elements would be lighted and the lighting of these electric lamps would be a signal to the person at the console to operate the particular tablets or other controlling elements associated with said electric lamps. Each tablet or other registration and expression controlling element at the console of the organ has a small electric lamp or other signaling device arranged in association therewith and as the perforation in the player roll which is correlated with a particular electric lamp passes the tracker board of the player, that electric lamp will be lighted whereby the person at the console will be notified by such lighting of the electric lamp that the tablet or other controlling element associated therewith should be actuated.

Thus during rendition of a musical composition the electric lamps or other signaling

devices associated with the registration and expression controlling elements of the organ are actuated when said registration and expression controlling elements should be operated to obtain the proper registration and expression and the person at the console of the organ need only move the controlling elements to their operative positions when the signaling devices associated therewith are actuated. The signaling devices will remain in an actuated condition only during the period the associated controlling elements should be in operative positions and when said signaling devices cease to function, the person at the console of the organ will restore the controlling elements to their inoperative position.

By virtue of my improved method a person may learn the registration and expression of musical compositions so that eventually such person may control the registration and expression during rendition of said musical compositions on organs which are not automatically played, it being necessary, merely, that the person in question be able to properly operate the keys of the organ.

In the drawing which shows diagrammatically for the purpose of illustration, merely, an embodiment of the invention, A designates the tracker bar of an automatic organ-playing mechanism which is provided with the usual perforations B. C designates the player roll and D designates the spool on which said player roll is wound during playing of the organ. E designates switching mechanism, the elements of which are operated when predetermined perforations of the player roll D pass over certain perforations B in the tracker bar, such switching mechanism being of the well known construction common to automatic playing mechanism for organs. The reference character F designates tablets or other elements which are employed to control registration and expression during playing of an organ, and G designates signal devices such as electric lamps, which are associated with the controlling elements F, there being one of said signaling devices associated with each controlling device. The tracker bar A is connected by suitable electric conductors H to the switching mechanism E and said switching mechanism is in turn connected by electric conductors J to the signaling devices G.

During the automatic playing of an organ in accordance with my improved method a player roll is used which is of the type employed when full automatic playing of an organ is obtained; that is to say said player roll is provided with perforations which in the case of the full automatic operation of an organ directly actuates the elements which control registration and expression during playing of the organ. However, in playing an organ in accordance with this invention

the perforations referred to do not actually operate the registration and expression controlling elements but instead these perforations, with the aid of the switching mechanism E, merely cause the proper signaling devices G to be actuated. The person who is to control registration and expression manually during playing of the organ is seated at the console of the organ and as the various signaling devices are actuated in the manner set forth this person will operate the controlling elements associated with the actuated signaling devices. The signaling devices remain in an actuated condition only during the period the controlling elements should be in operative positions and when said signaling devices cease to function this will be a signal to the person controlling registration and expression to restore the controlling elements to their inoperative positions.

Thus it is obvious that the person controlling registration and expression during rendition of a musical composition played in accordance with this invention, need only operate the controlling elements when the signals to do so are automatically given, and restore said controlling elements when said signals cease to function, and when this is done registration and expression will be properly controlled.

While in this specification I refer to the signaling devices as being electric lamps I do not wish to be limited to the use of these precise devices as various other signaling devices may be employed. Also in referring to "organs" I mean to include all musical instruments of this general type including pipe organs and reed organs. Finally I wish to direct attention to the fact that the diagrammatical drawing shows only the elements to which the present invention refers, all other parts of the player mechanism and organ being eliminated.

I claim:

1. In combination with an automatic organ-playing mechanism, an element for controlling the actuation of said playing mechanism in a manner to cause the operation of parts only of an organ with which the playing mechanism is associated, and signaling means apart from said element and actuated thereby for indicating when the parts of the organ not controlled by said element should be manually actuated.

2. In combination with an automatic organ-playing mechanism, an element for controlling the actuation of said playing mechanism in a manner to cause the operation of parts only of an organ with which the playing mechanism is associated, and signaling means apart from and controlled by said element for indicating when the parts of the organ not controlled by said element should be manually actuated, said signaling means being correlated with the controlling ele-

ments of the organ parts which are manually operated on actuation of said signaling means.

3. In combination with an automatic organ-playing mechanism, a player roll for controlling actuation of said playing mechanism in a manner to cause the operation of parts only of an organ with which the playing mechanism is associated, and signaling means apart from said player roll and controlled thereby for indicating when parts of the organ not controlled by said player roll should be manually actuated.

4. In combination with an automatic organ-playing mechanism, an element for controlling the actuation of said playing mechanism in a manner to cause the operation of parts only of an organ with which the playing mechanism is associated, and electrically operated signaling means apart from said element and actuated thereby for indicating when the parts of the organ not controlled by said element should be manually actuated.

5. In combination with an automatic organ-playing mechanism, an element for controlling the actuation of said playing mechanism in a manner to cause the operation of parts only of an organ with which the playing mechanism is associated, and signaling means apart from and controlled by said element for indicating when parts of the organ not controlled by said element should be manually actuated, said signaling means comprising electrically actuated signaling devices which are arranged adjacent to manually operated members for controlling actuation of parts of the organ not controlled by said element.

In testimony whereof, I have hereunto set my hand.

HARRY F. WATERS.