

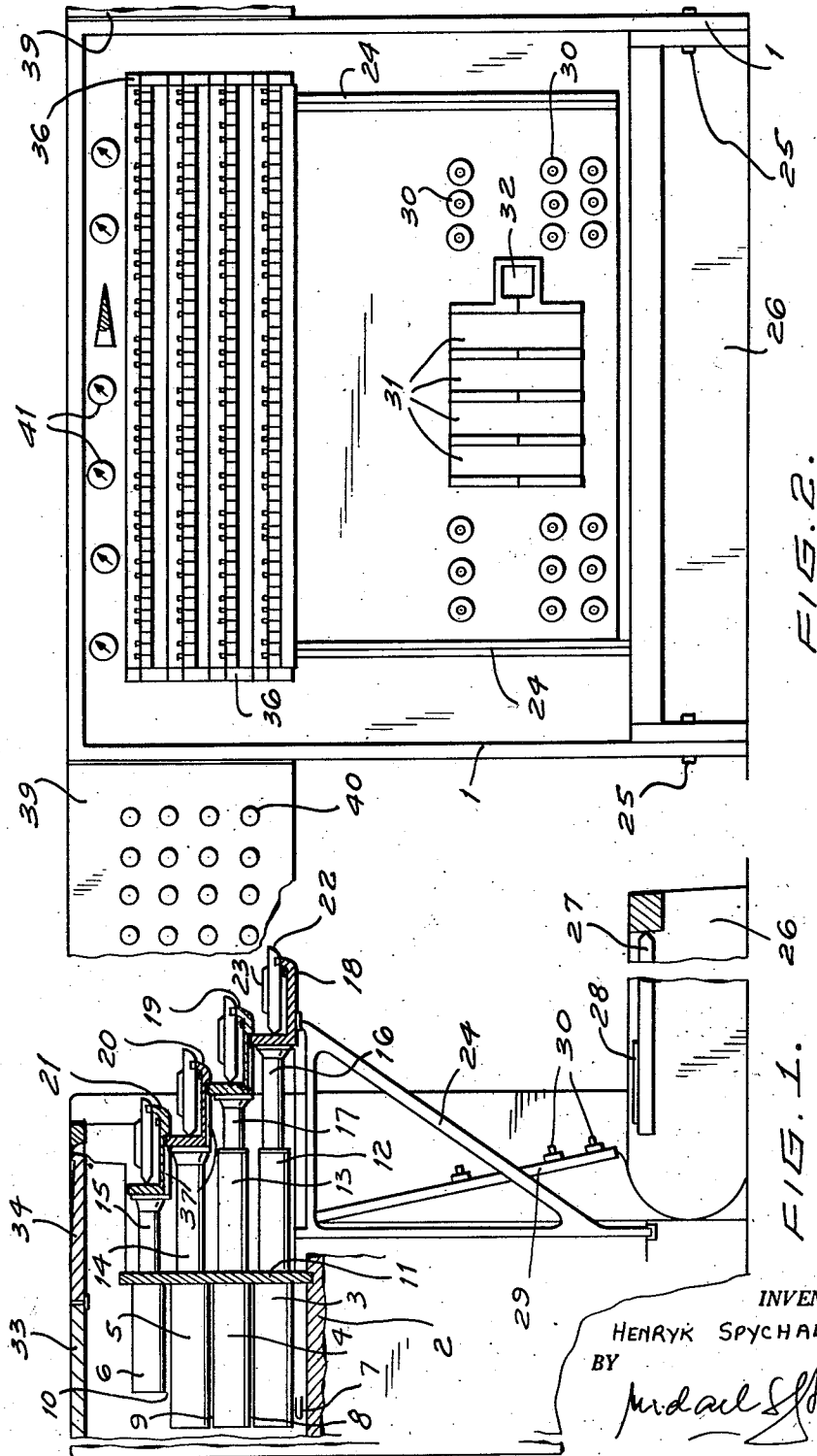
**July 16, 1957**

**H. SPYCHALA**  
CONSOLE FOR KEY ACTUATED MUSICAL INSTRUMENTS  
AND IN PARTICULAR ELECTRICAL ORGANS

**2,799,200**

Filed Aug. 23, 1954

2 Sheets-Sheet 1



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FIG. 3.

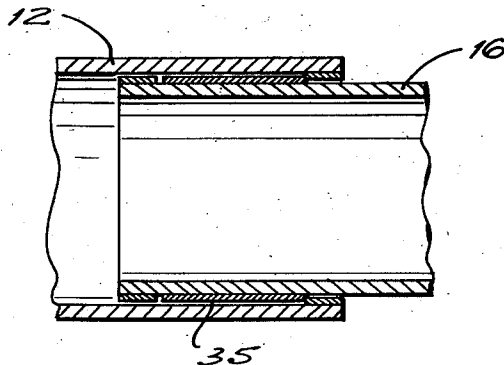


FIG. 4.

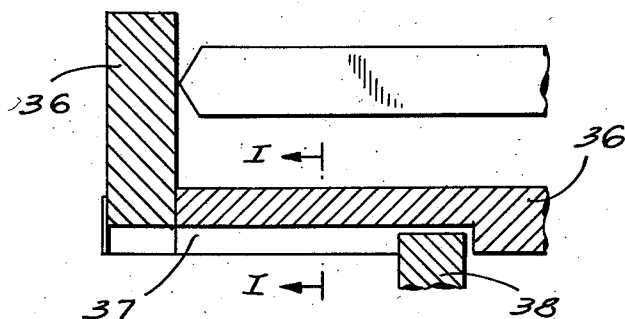
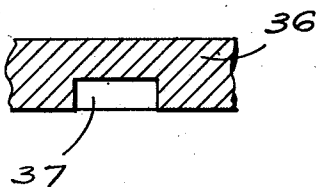


FIG. 5.



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## CONSOLE FOR KEY ACTUATED MUSICAL INSTRUMENTS AND IN PARTICULAR ELECTRICAL ORGANS

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5 Claims. (Cl. 84—424)

The invention concerns a console for key-actuated musical instruments and in particular electrical organs.

All known to date consoles of organs and other key-actuated instruments consist of some keyboards (manuals) placed in steps at different levels. These keyboards (manuals) as well as pedal keyboard are all fixed. Each of these keyboards, the number of which depends on instrument's size, is equipped with tone controls, which enable switching in single voices, few of the voices or all the voices, according to the musician's choice. In present instruments these tone controls (in a great organ several for each manual) are usually placed above the manuals, and only the rest of them which, due to lack of space cannot be placed there, are placed at the sides of the instrument close to manuals. Due to such an arrangement; manuals, tone controls and pedal keyboards, occupy nearly 50 percent of instrument's volume. This arrangement made it impossible for such instruments to be used in small rooms, and limited the number of people able to enjoy playing these instruments at home.

All the difficulties are obviated when a console according to the invention is fitted. The main difference between this new console and all other known is that each of the manuals can be moved in or out, and the pedal keyboard is hinged to the console. In consequence space occupied by the instrument not in use can be greatly reduced. The instrument is then more compact for transport and easy to handle. The invention diminishes to a great extent the possibility of external damage and the console to which the set of manuals is fixed, can easily accommodate an electronic equipment of electrical or other type of equipment.

The invention is illustrated by way of an example in the accompanying drawing in which Fig. 1 is a side view partly in section, Fig. 2—an elevation, Fig. 3—longitudinal section of one of the telescopic brackets, Fig. 4—elements of a manual, and Fig. 5—I—I section.

In this example horizontal plate 2 fixed to side walls 1 of the instrument is connected with vertical plate 11 in which all manuals are framed. Each of the four manuals is attached to a pair of telescopic brackets (tubes) each consisting of two or three elements.

The main elements 3, 4, 5 and 6 are interconnected by means of hinges 8, 9, 10 and the bottom main element 3 is hinged at 7 to the plate 2 to facilitate an access to electrical switches situated under the keyboards. In the main element 3 is telescopically fitted another element 12 and in the latter a third element 16. All other brackets are arranged in the same manner, the only difference being the size and number of elements. So the two bottom manuals have brackets 3, 12, 16 and 4, 13, 17 and the two upper manuals 5, 14 and 6, 15. Each of the manuals is provided with a wooden frame 18, 19, 20, 21. In these frames are placed white 22 and black 23 keys. The brackets are designed strongly enough, however to avoid any possibility of manual's vibration (when playing) two brackets 24 are used, pivoted vertically on the console, and supporting the bottom

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frame 18. The frame 26 of the pedal keyboard is pivoted to the side walls 1 of the console. In the frame are placed white 27 and black 28 keys. Frame 26 being pivoted to walls 1 can be placed horizontally as indicated in Fig. 1 or vertically to hide in the console thus diminishing overall dimensions of the instrument. Plate 29 pivoted also to the console is provided with foot operated tone controls 30 operated by means of balanced pedals 31 so called "Schweller" and crescendo pedal 32. To the upper plate 33 of the console is hinged a music desk 34.

A telescopic joint is represented in section in Fig. 3. To eliminate an excessive stroke of elements a distance sleeve is used. All manuals are provided with frame 36. Keyways 37 are cut in the bottom plate of frame 36 in which can slide a key 38 belonging to adjacent bottom manual. This device limits the movement of all manuals. To side walls 1 are hinged folding doors 39 provided with tone controls 40. The tone controls are connected by cables with electronic equipment. Above manuals are placed dials of electrical instruments indicating tone volume, crescendo etc.

Having now described the arrangement, what I claim as new is:

1. In a musical instrument, in combination, a cabinet having a vertical cabinet front face; a supporting frame within said cabinet; a plurality of telescopic tube means having rear ends mounted on said supporting frame and free front ends, said telescopic tube means being arranged superimposed to each other and being movable in a direction normal to said cabinet front face between a collapsed position in which said free front ends are aligned with each other within the cabinet and rearwardly spaced from said cabinet front face and an extended operative position in which said free front ends are advanced different distances and are in staggered position; and a plurality of manuals respectively fixedly mounted on said free front ends of said telescopic tube means for movement therewith, said manuals being located rearwardly spaced from said cabinet front face when said telescopic tube means are in collapsed position.

2. In a musical instrument, in combination, a cabinet having a vertical cabinet front face and a pair of side walls; a supporting frame within said cabinet; a plurality of supporting means having rear ends mounted on said supporting frame and free front ends, said supporting means being arranged superimposed to each other and being movable in a direction normal to said cabinet front face between a collapsed position in which said free front ends are aligned with each other within the cabinet and rearwardly spaced from said cabinet front face and an extended operative position in which said free front ends are advanced different distances and are in staggered position; a plurality of manuals respectively fixedly mounted on said free front ends of said supporting means for movement therewith, said manuals being located rearwardly spaced from said cabinet front face when said supporting means are in collapsed position; and a pair of panel doors hingedly mounted on said side walls of said cabinet and having an outer face, said panel doors movable between an open position in which said doors extend laterally and respectively in opposite directions from said cabinet and a closed position in which said outer face is flush with said cabinet front face and said panel doors cover said manuals when said supporting means are in collapsed position.

3. In a musical instrument, in combination, a cabinet having a vertical cabinet front face and a pair of side walls; a supporting frame within said cabinet; a plurality of supporting means having rear ends mounted on said supporting frame and free front ends, said supporting means being arranged superimposed to each other and

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being movable in a direction normal to said cabinet front face between a collapsed position in which said free front ends are aligned with each other within the cabinet and rearwardly spaced from said cabinet front face and an extended operative position in which said free front ends are advanced different distances and are in staggered position; a plurality of manuals respectively fixedly mounted on said free front ends of said supporting means for movement therewith, said manuals being located rearwardly spaced from said cabinet front face a given distance when said supporting means are in collapsed position; a pair of panel doors hingedly mounted on said side walls of said cabinet and having an outer face and an inner face, said panel doors movable between an open position in which said doors extend laterally and respectively in opposite directions from said cabinet and a closed position in which said outer face is flush with said cabinet front face and said inner face is spaced from said cabinet front face a distance smaller than said given distance; and a plurality of tone controls mounted on said inner face of said panel doors.

4. In a musical instrument, in combination, a cabinet having a vertical cabinet front face and a pair of side walls; a supporting frame within said cabinet; a plurality of supporting means having rear ends mounted on said supporting frame and free front ends, said supporting means being arranged superimposed to each other and being movable in a direction normal to said cabinet front face between a collapsed position in which said free front ends are aligned with each other within the cabinet and rearwardly spaced from said cabinet front face and an extended operative position in which said free front ends are advanced different distances and are in staggered position; a plurality of manuals respectively fixedly mounted on said free front ends of said supporting means for movement therewith, said manuals being located rearwardly spaced from said cabinet front face when said supporting means are in collapsed position; a pair of panel doors hingedly mounted on said side walls of said cabinet and having an outer face, said panel doors movable between an open position in which said doors extend laterally and respectively in opposite directions from said cabinet and a closed position in which said outer face is

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flush with said cabinet front face and said panel doors cover said manuals when said supporting means are in collapsed position; and a pedal keyboard frame having an outer frame face and being pivotally mounted on said side walls for movement between an open position in which said outer frame face extends substantially normal to said cabinet front face and at least partially beyond the same and a closed position in which said outer frame face is flush with said cabinet front face.

5. In a musical instrument, in combination, a cabinet having a vertical cabinet front face; a supporting frame within said cabinet; a plurality of telescopic tube means having rear ends mounted on said supporting frame and free front ends, said telescopic tube means being arranged superimposed to each other and being movable in a direction normal to said cabinet front face between a collapsed position in which said free front ends are aligned with each other within the cabinet and rearwardly spaced from said cabinet front face and an extended operative position in which said free front ends are advanced different distances and are in staggered position; a plurality of manuals respectively fixedly mounted on said free front ends of said telescopic tube means for movement therewith, said manuals being located rearwardly spaced from said cabinet front face when said telescopic tube means are in collapsed position each of said manuals having a bottom plate formed with a key-way extending from the rear end toward the front end thereof and closed at said front end; and a plurality of key means respectively connected to said bottom plates, each of said key means engaging the key way formed in the bottom plate superimposed to the respective bottom plate, so that when the lowest manual is moved outwardly to an extended position all of said manuals are moved to an extended and staggered position.

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