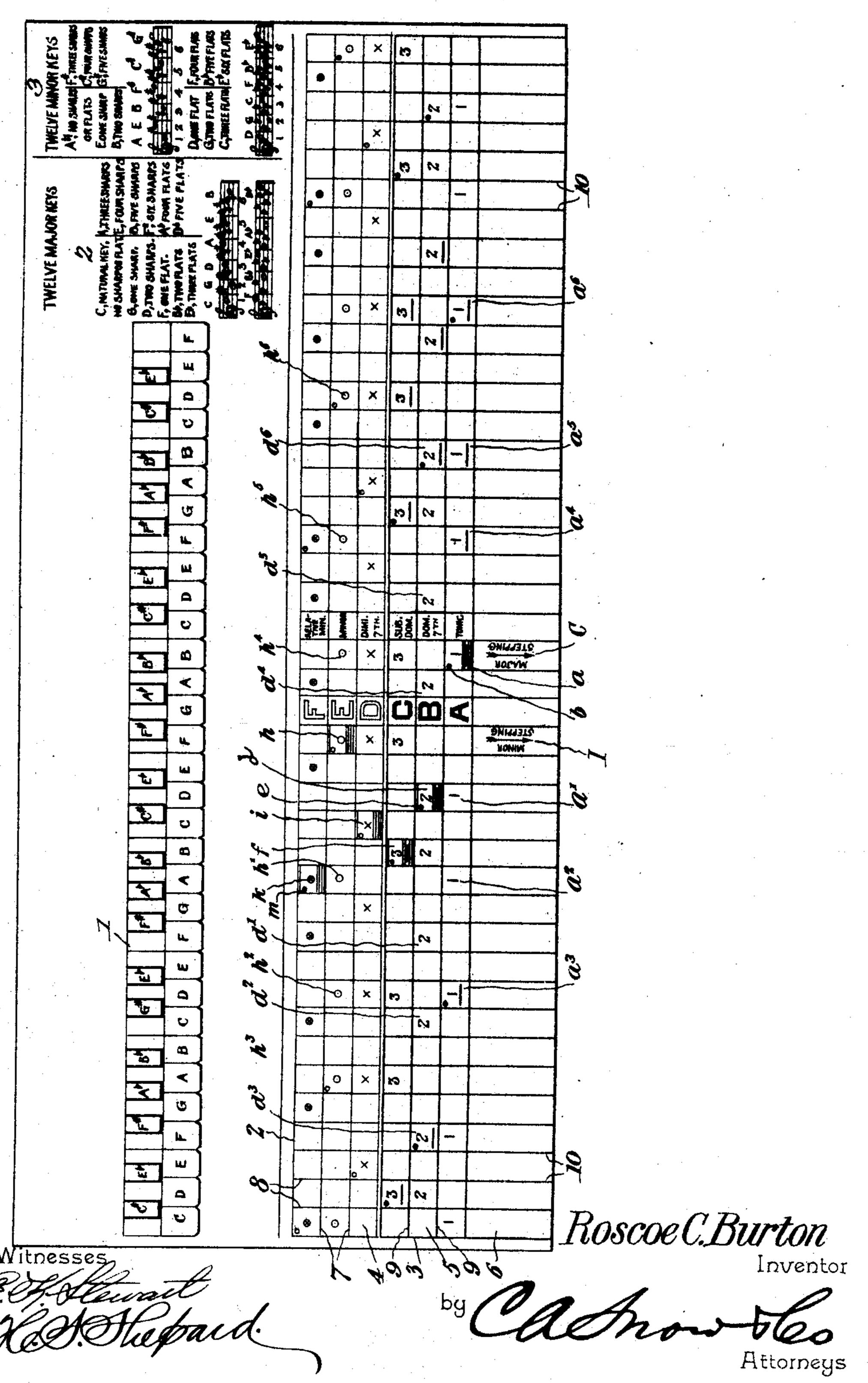
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MUSICAL TRANSPOSITION CHART.

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UNITED STATES PATENT OFFICE.

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MUSICAL TRANSPOSITION-CHART.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ROSCOE C. BURTON, a citizen of the United States, residing at Tarrytown, in the county of Westchester and 5 State of New York, have invented a new and useful Musical Transposition-Chart, of which the following is a specification.

This invention relates to musical transposition, and has for its object to provide an ro improved chart for use in connection with the keyboard of pianos and organs so as to mechanically indicate what keys should be struck to produce both major and minor chords in any key without taking into con-15 sideration the signature of the key.

Another object of the invention is to clearly distinguish between the major indications and the minor indications, so as to avoid confusion in changing from major chords to 20 minor chords, and vice versa.

A still further object of the invention is to clearly indicate several chord changes, both major and minor, in any key and to have the indicators of these changes arranged in a re-25 lation to facilitate the change from one chord to another.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claim, it being understood that changes in the form, proportion, size, and minor details may be made within 35 the scope of the claim without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawing there has been shown an elevation of a musical trans-4° position-chart embodying the features of the present invention.

The back or body 1 of the present chart is in the form of an oblong strip of suitable proportions and may be formed of cardboard or 45 other material sufficiently stiff to permit of the chart being stood on edge at the back of the keys of a piano or organ, so as to be supported in an upright position in front of the player to be clearly visible thereto. The 5° front of the body is divided by oblong borders 2 and 3 into an upper longitudinal section 4, an intermediate section 5, and a lower section 6, the borders and the data appearing therein being printed in contrasting 55 colors. It has been found effective to print the upper section in red and the intermedi-

ate and lower sections in black. The upper section 4 is divided longitudinally or horizontally by means of two parallel lines 7 into three longitudinal columns, and these longi- 60 tudinal lines are intersected by a plurality of transverse or vertical lines 8, which divide the section into vertical columns, and the two sets of columns divide the section into a plurality of blocks. A similar arrangement 65 of longitudinal lines 9 and transverse lines 10 is employed in the intermediate section 5, the vertical or transverse lines 10 continuing to the lower edge of the chart.

About midway between the ends of the 70 chart a vertical series of the blocks of the upper section 4 are marked as follows, reading from the top to the bottom: "Relativ. min.," "Minor," and "Dimi. 7th," while the corresponding blocks of the intermediate sections 75 are marked "Sub. dom.," "Dom. 7th," and "Tonic." In the block immediately to the left of the word "Tonic" and as indicated at a is the numeral "1," which is heavily underscored, and in the upper left-hand corner of 80 the block is a solid circular spot b, and at the respective intervals of five, three, and four blocks to the left of this numeral appear other numerals "1," as indicated at a, a, and a^3 , the a^3 numeral being underscored and the 85block thereof having a solid circular spot b', corresponding to the spot b. To the right of the numeral "1," which is indicated at a, and at intervals of four, three, and five blocks, respectively, appear the underscored numerals 90 "1," designated a4, a5, and a6. In the column below the numeral "1," which is designated a, is an appropriate index—as, for instance, an arrow C, pointing to the lower edge of the chart and the words "Major stepping." 95

In the intermediate longitudinal column of the intermediate section 5 and in the fifth block to the left of the block a, as indicated at d, appears the numeral "2," heavily underscored and provided in its upper left-hand 100 corner with a solid circular spot e, and at intervals of five, three, and four blocks to the left of the block d appear other numerals "2," as indicated at d', d^2 , and d^3 . At intervals of four, three, and five blocks to the right 105 of the block d there are other numerals " $\tilde{2}$,"

designated d^4 , d^5 , and d^6 .

Beginning with the seventh block of the upper horizontal column and to the left of the block a, as indicated at f, appears the un- 110 derscored numeral "3," and other numerals "3" are placed to the left and the right of this

block at intervals corresponding to that of the subdominant chord.

The manner of using the chart as thus fardescribed is as follows: The major pointer C 5 is placed directly over the "tonic" of any key—as, for instance, C-natural—and it will be found that the underscored numeral "1" to the right of the heavily-underscored numeral "1" are located in alinement above the ro keys E, G, and C of the keyboard, so that by striking the keys indicated the major chord of C will be produced. Upon reference to the numerals "1" to the left of the heavilyunderscored numeral "1," (indicated at a,)

15 it will be seen that these numerals are in alinement with the keys G, E, and C, which when struck by the left hand produce the chord of C-major. In addition to the tonic major chord changes to the dominant and 20 subdominant may be made by striking the keys opposite the numerals "2" and "3," respectively, beginning with the heavily-underscored numerals "d" and "f" in the man-

ner hereinbefore described for the row of nu-25 merals "1." The minor chords are indicated upon the same general principle as set forth for the major chords, suitable arbitrary designations or symbols being employed for alinement 30 with the respective keys of the keyboard. It is perferred to have the symbols of one section differ from those of the other section, so as to avoid confusion, and the symbols for the minor chord have been arranged in the 35 intermediate longitudinal column of the upper section 4, consisting of an underscored circle h, located in the third vertical column to the left of the column C, there being an arrow I located at the bottom of this col-40 umn, with the words "minor stepping" associated therewith, the arrow and the words, of course, being printed in red to correspond with the minor symbols. To the left of the circle-symbol h and at intervals of five, four, and three blocks appear the circle-symbols h', h^2 , and h^3 , while at intervals of three, four, and five blocks to the right of the circle-symbol h appear other circle-symbols h^4 , h^5 , and h^{6} . The chord of the diminished seventh is 50 indicated in the lower horizontal column of the upper section by means of the heavilyunderscored cross-symbol i, located at an interval of three blocks to the left of the circlesymbol h and other cross-symbols disposed 55 at the left and right of the cross-symbol i at intervals in accordance with those of the chord of the diminished seventh. The relative minor chord is indicated in the upper

horizontal column of the upper section by 65 means of the symbol designated a, located at an interval of five blocks to the left of the circle-symbol h and consisting of a cross inclosed within a circle and heavily underscored, there being similar symbols to the 65 left and the right of the symbol k, arranged l

minor chords.

at intervals in accordance with the relative

It will of course be understood that the minor-section of the chart is employed in the same manner as the major section thereof, the 70 minor indicator I always being in alinement with the proper key of the keyboard, which brings the several minor symbols into proper relation with the other keys. The minor chord is indicated by the symbols h, the rela- 75 tive minor by the symbols k, and the diminished seventh by the symbols i.

The solid black spots in the major section of the chart indicate the opposite ends of the respective octaves, and a similar arrange- 80 ment of red spots m are employed in the minor section of the chart to indicate the ends of the respective octaves and the key note of

each chord.

The heavily-underscored symbols indicate 85 that the corresponding key of the keyboard is to be struck by the thumb, while the lighter underscored symbols indicate those keys which should be struck to produce the full chords. It will here be noted that the 90 lightly-underscored symbols at the left of the chart are disposed at octaves from the corresponding heavily-underscored symbols, indicating that only octaves are to be struck by the left hand. However, the intermediate 95 symbols which are not underscored indicate those keys which may be struck to produce a complete chord with the left hand whenever desired.

Above the chart proper there is provided 100 the representation of a keyboard 1, with all of the keys lettered in accordance with the usual musical nomenclature. There is also provided a table 2 of the signatures of the twelve major keys and a table 3 of the signa- 105 tures of the twelve minor keys, including a staff or staffs with the signatures of the several keys appearing thereon in the usual manner, each signature being lettered in accordance with the key which it designates.

In using the complete chart for playing an accompaniment and assuming that the player is entirely ignorant of musical notation the signature at the beginning of the sheet of music is determined and reference is had to 115 the staffs of the tables 2 and 3 to locate the signature thereon which corresponds to the signature on the sheet of music—say, for instance, one sharp found in the table 2 and lettered "G." The letter "G" is located 120 upon the miniature keyboard 1, after which the corresponding key is located upon the keyboard of the piano or organ, and the arrow C of the chart is then placed over the "G" key of the keyboard and the chart is then in 125 proper position for playing chords in the manner hereinbefore explained.

It will now be understood that the present chart is intended for the use of persons who are entirely ignorant of musical notation as 130

well as for the use of those who have slight and also complete knowledge of music, as the playing of accompaniments by the aid of the chart is purely mechanical after the chart 5 has been properly set. The chart can of course be properly set by reference to the key-tables and the miniature key-board without any understanding whatsoever of the relative arrangement of the keys on the key-to board.

The upright column of the chart containing the expression "Relative min." and so on is for the guidance of musicians, while the upright column lettered "A B C D E F" is for the use of those who are not musicians, the letters being arbitrary distinguishments of the several chord changes.

Having fully described the invention, what is claimed is—

A musical chart divided into upper and lower sections, the upper section being provided with the representation of a miniature

keyboard lettered in accordance with the musical nomenclature, and a table of key25 signatures expressed graphically and ver-

bally, the lower section of the chart being divided into a series of vertical columns extending to the bottom of the chart and intersected by two transverse sets of three columns each, a tonic-index provided at the 30 lower edge of the chart substantially midway of its ends, the members of one set of transverse columns being provided at opposite sides of the tonic-index with chord-symbols disposed at major intervals, and the other 35 set of transverse columns having chord-symbols disposed at minor intervals, the successive sets of major-chord symbols being disposed at tonic, dominant seventh, and subdominant intervals, and the successive sets 40 of minor-chord symbols being disposed at diminished seventh, minor and relative minor intervals.

In testimony that I claim the foregoing as my own I have hereto affixed my signature 45 in the presence of two witnesses.

ROSCOE C. BURTON.

Witnesses:

T. B. VAN NORMAN, MARY E. BURTON.