

No. 718,065.

PATENTED JAN. 6, 1903.

L. O. WOODS.
TRANSPPOSITION CHART.

APPLICATION FILED SEPT. 3, 1901. RENEWED JUNE 16, 1902.

NO MODEL.

2 SHEETS—SHEET 1.

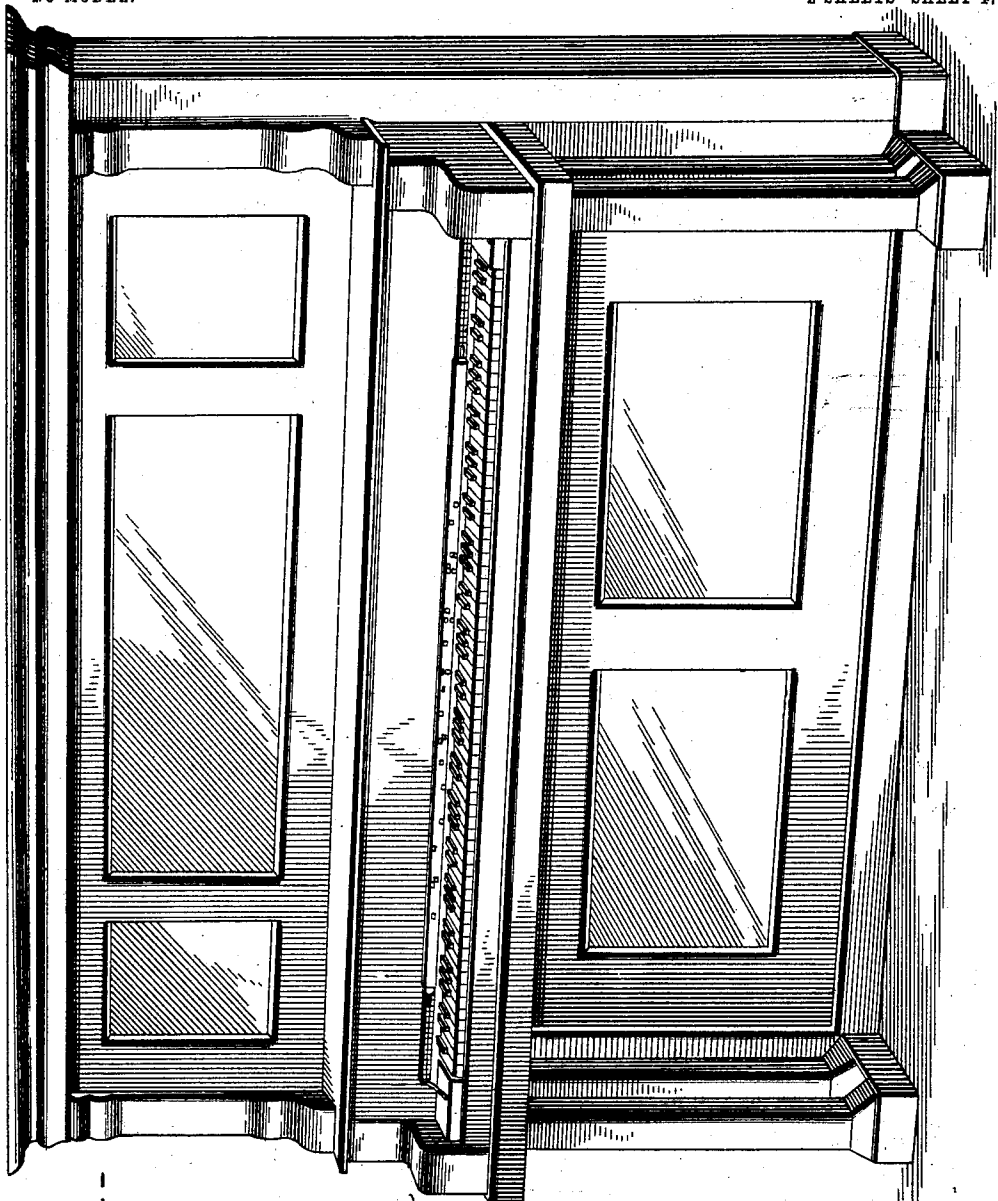
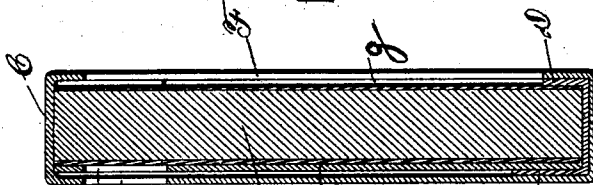


Fig. 1



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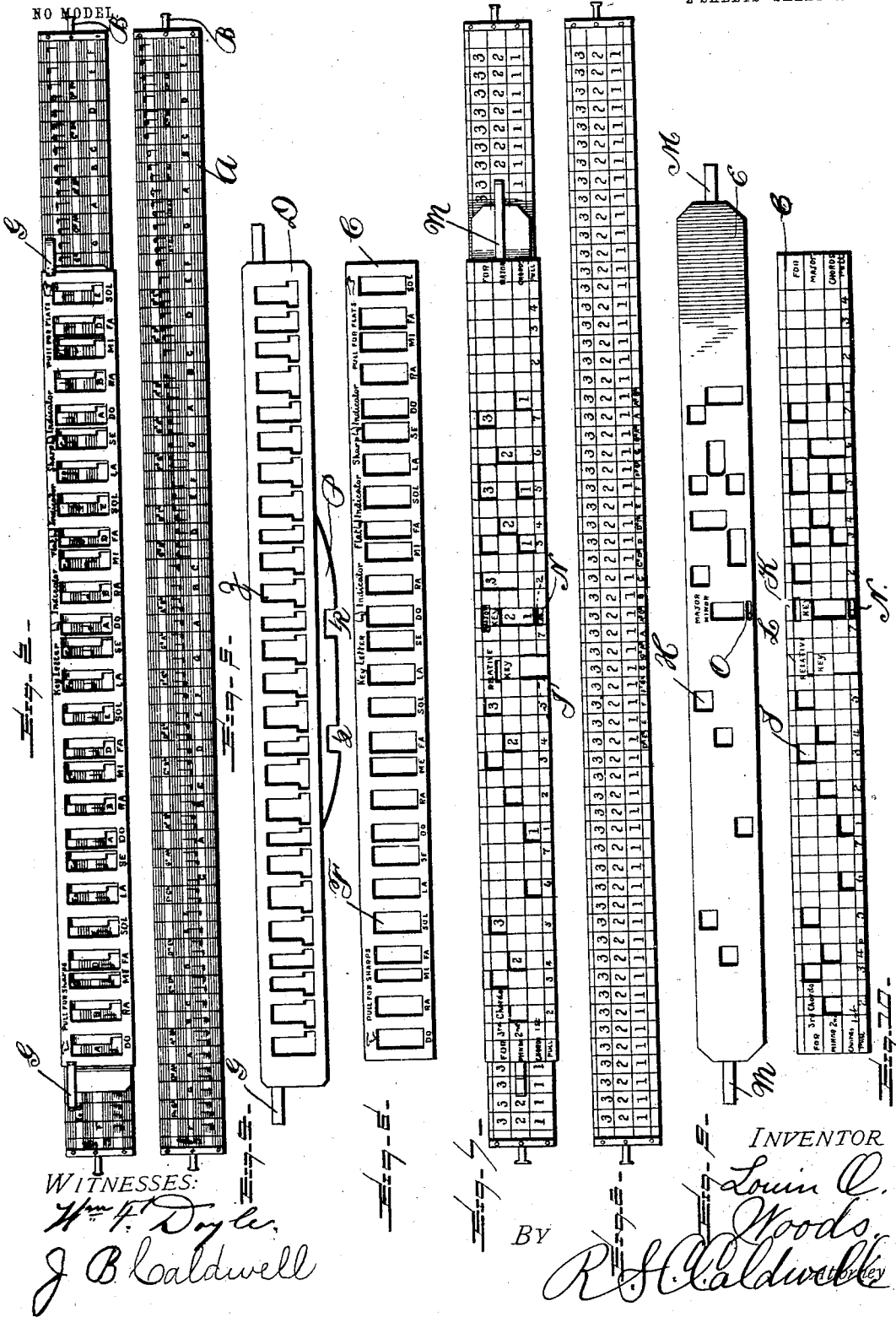
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UNITED STATES PATENT OFFICE.

LOUIN O. WOODS, OF STILLWATER, OKLAHOMA TERRITORY.

TRANSPOSITION-CHART.

SPECIFICATION forming part of Letters Patent No. 718,065, dated January 6, 1903.

Application filed September 3, 1901. Renewed June 16, 1902. Serial No. 111,972. (No model.)

To all whom it may concern:

Be it known that I, LOUIN O. WOODS, a citizen of the United States, residing at Stillwater, in the county of Payne, Territory of Oklahoma, have invented certain new and useful Improvements in Transposition-Charts; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain new and useful improvements in transposition-charts, and has for its object to produce such a chart by which a beginner in music can easily transpose the scale from one key to another for instrumental or vocal music by mechanical means.

A further object of my invention is to produce such a chart of a simple and cheap construction, which will be durable and easily operated.

With the above and other objects in view my invention consists in the novel details of construction and combination of parts to be clearly described in the following specification and fully set forth in the claims.

Referring to the accompanying drawings, in which like characters of reference indicate similar parts throughout, Figure 1 is a perspective view of a piano having my improved transposition-chart mounted thereon. Fig. 2 is a front elevation of the obverse side of my invention. Fig. 3 is a transverse sectional view thereof. Fig. 4 is a front elevation of the base alone. Fig. 5 is a front elevation of the sharp and flat slide. Fig. 6 is a front elevation of the obverse side of the sleeve. Fig. 7 is a front elevation of the obverse side of the chart complete. Fig. 8 is a front elevation of the reverse side of the base. Fig. 9 is a front elevation of the chord-slide, and Fig. 10 is a front elevation of the reverse side of the sleeve.

In the drawings, A represents a base or long flat rod having projecting pins B on its ends, by which it may be attached to a piano or organ in any suitable manner just above the keyboard, as clearly shown in Fig. 1. A sleeve C, having a number of perforations on each side, fits over the base A and is slidable thereon. A sharp and flat slide D and a chord-slide E are slidably held within the sleeve C against the

obverse and reverse sides of the base A, respectively. The obverse side of the base has printed thereon a double great staff—that is, a great staff, with an additional staff above and below—and written thereon is the ascending chromatic scale in the key of C-natural. The entire scale is divided into measures by bars extending from edge to edge of the base, which bars are so spaced as to correspond to and register with the lines between the respective keys at the rear edge of the keyboard of the piano or organ. In this scale each natural note occupies a bar by itself, and each intermediate half-tone is duplicated within a single bar by being written in both its forms—as, for instance, the half-tone between F and G is represented by both F-sharp and G-flat. Throughout the scale each note is provided with its corresponding letter in vertical alinement therewith, either above or below, according to convenience, and the letters of the half-tones are written on a different horizontal line to the others to avoid confusion.

The slide D and obverse side of the sleeve C are provided with slots Z and F, respectively, which are adapted to register and expose to view a portion of the notes on the scale. The slots F are regularly spaced, except between the third and fourth, seventh and eighth, tenth and eleventh, fourteenth and fifteenth, and so on, corresponding to the location of the half-tones in the natural scale. The slots Z are arranged in a similar manner and are provided with lateral extensions at their lower ends. Just beneath the slots F there are printed the names of the notes of the scale, "Do," "Re," "Mi," "Fa," &c. Above one of these slots F, marked "Do," is printed a hand pointing at such slot with the words "Key letter indicator." Likewise above one of the slots marked "Fa" there is printed a hand with the words "Flat indicator," and above one marked "Si" is printed the hand marked "Sharp indicator." Secured to each end of the slide D is a finger-loop G, by which the side slide is adapted to be operated, and these finger-loops are also attached to the sleeve C to limit the extent of the movement of slide D. At the upper left-hand corner of the sleeve is a hand pointing to that finger-loop marked "Pull for sharps," and at

the other end is a similar hand marked "Pull for flats."

The chart as thus far described is used in the following manner: In the absence of any sharps or flats at the beginning or signature of the music slide the sleeve over the base until the key-letter indicator points to the letter "C," and the slide D being in an intermediate position, so that its slots Z are clearly exposed through the slots F, the notes and their letters shown through the slots are those of the key of C—namely, "C," "D," "E," "F," "G," "A," and "B"—which are then properly named on the sleeve, as "Do," "Re," "Mi," "Fa," "Sol," "La," and "Si." When the signature contains sharps, place the sharp-indicator so as to point to the sharp on the scale corresponding to the last sharp in the signature—G-sharp, for instance—as shown in Fig. 2. Then pull the slide D to the left by the left-hand finger-loop, so that the edges of the slots Z cover the exposed flats and present the scale in the key of three sharps, which is shown by the key-letter indicator to be the key of A, and the notes are again properly named on the sleeve, as shown in Fig. 2. When flats appear in the signature of the music, the flat-indicator is placed upon the flat on the scale corresponding to the last flat of the signature and the slide D drawn to the right to cover the exposed sharps, and the proper scale is presented, as before. The reverse side of the base is divided throughout its length into three horizontal rows of squares, each square of the first row having the number "1" printed thereon, the second row number "2," and the third row number "3," and in the lower margin near the center of the base the spaces are lettered similarly to the bars of the staff on the obverse side of the base—that is, D-sharp and E-flat in the first space, E in the second, F in the third, F-sharp and G-flat in the fourth, and soon. The chord-slide E and the reverse side of the sleeve C are provided with perforations H and I, respectively, corresponding in location to the rows of squares on the base and are adapted to register to expose the number of said squares to view. The vertical lines of these squares are reproduced on the sleeve, so that after the adjustment on the obverse side of the chart is completed and the chart reversed these lines will correspond with the lines between the keys of the piano or organ, and the keys beneath the perforations exposing like numbers to view will when pressed simultaneously produce chords. Beside the perforations I the sleeve is provided with two narrow horizontal slots K and L, the former being slightly higher than and to the right of the latter and having the single word "Key" printed therebeneath, while the latter is between the words "Relative key." The spaces beneath the vertical lines are numbered from "1" to "7" consecutively and at the left-hand end of the sleeve are printed the words "For minor chords pull," which refers to the finger-loop

M on that end of the slide E, while on the right-hand end are the words "For major chords pull," referring to the corresponding loop M on that end of the slide E. In the lower margin of the sleeve C beneath the slot K is a narrow horizontal slot N, and the perforation to the left thereof is extended downward in alinement therewith and is marked I'. The slide E has the words "Major" and "Minor" printed one above the other, so that the word "Major" will appear through slot K when the slide E is in one position and the word "Minor" will appear at slot L when the slide is in another position. In the lower margin of the slide E beneath the words "Major" and "Minor" is a narrow horizontal slot O to register with slot N and the lower end of perforation I', respectively. After the chart has been adjusted for the key in which the music is written in the manner described and is reversed on the pins B and the slide E is drawn to the right, so that the word "Major" appears through the slot K, then all of the keys of the piano above which like numbers appear through the registering slots H and I will produce the major chords of the proper key, and by drawing the slide E to the left, so that the word "Minor" appears through slot L, the chart indicates the chords of the relative minor key. When in position to show the chords of the major key, the name of that key appears through slot N, slot O being in register therewith, and when the parts are in position to show the chords of the relative minor key the name of that key will appear at the lower end of the perforation I', as slot O then registers there. When a division having two letters, as F-sharp and G-flat, is exposed, one or the other of these letters is hidden by the shutter P, which is carried by the slide D and extends around the lower edge of the base up to the level of the top of slot N and is provided with a pair of notches Q and R, which exactly register with perforation I' and slot N, respectively, when slide D is in its intermediate position for the key of C, but which cover one-half of the slot N and lower part of perforation I' on either right or left hand side when the slide D is pulled to the right or left for sharps or flats in the signature, so that only the proper letter of these double-lettered spaces is shown through these places, the other being masked by the shutter P.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a device of the character described, a base having marked thereon a staff containing the chromatic scale, a sleeve slidable on the base and provided with slots to expose to view some of the notes of the scale, and a slide located between the base and sleeve and provided with slots to register with the slots of the sleeve.

2. In a device of the character described, a base having marked thereon a staff contain-

ing a chromatic scale, a sleeve slidable on the base and provided with slots to expose to view some of the notes of the scale, and a slide located between the base and the sleeve and provided with slots registering with the slots of the sleeve, said slide being adapted to be moved in one direction to cover the exposed sharps of the scale and to be moved in the other direction to cover the exposed flats of the scale.

3. In a device of the character described, a base having marked thereon a staff containing a chromatic scale, a sleeve slidable on the base and provided with slots to expose to view some of the notes of the scale, a slide located between the base and the sleeve and provided with slots registering with the slots of the sleeve, and a key-letter indicator, a flat-indicator and a sharp-indicator on the sleeve.

4. In a device of the character described, a base having thereon a number of rows of marks, the marks in each row being similar but the marks of the several rows being different, a sleeve slidable on the base and provided with a number of perforations exposing some of the marks of the base to view, and a slide located between the base and the sleeve and having a number of perforations to register with the perforations of the sleeve and expose some of the marks of the base to view when in one position and to expose others of these marks to view when in another position.

5. In a device of the character described, a base having thereon a number of rows of marks, the marks in each row being similar but the marks of the several rows being different, a sleeve slidable on the base and provided with a number of perforations exposing some of the marks of the base to view, and a slide located between the base and the sleeve and having a number of perforations to register with the perforations of the sleeve and expose some of the marks of the base to view when in one position and to expose others of these marks to view when in another position, said sleeve having a slot N and perforation I' with which slot O on the slide is adapted to register to expose the name on the base of the major key and its relative minor key respectively.

6. In a device of the character described, a

base having marked on its obverse side a staff containing a chromatic scale, a sleeve slidable on the base and provided with slots on its obverse side to expose to view some of the notes of the scale, a sharp and flat slide located between the sleeve and base on the obverse side thereof and provided with slots to register with slots of the sleeve, said slide being movable to cover some of the exposed notes, said base having on its reverse side a number of rows of marks some of which are adapted to show through the perforations in the reverse side of the sleeve, and a chord-slide located between the sleeve and the reverse side of the base, said chord-slide having perforations to register with perforations of the sleeve to expose some of the marks of the base to view when in one position and to expose others of these marks to view when in another position.

7. In a device of the character described, a base having marked on its obverse side a staff containing the chromatic scale, a sleeve slidable on the base and provided with slots on its obverse side to expose to view some of the notes of the scale, a sharp and flat slide located between the sleeve and base on the obverse side thereof and provided with slots to register with slots of the sleeve, said slide being movable to cover some of the exposed notes, said base having on its reverse side a number of rows of marks some of which are adapted to show through perforations in the reverse side of the sleeve, said sleeve having a slot N and perforation I' with which a slot O on the chord-slide is adapted to register to expose the name on the base of the major key and its relative minor key respectively, and a shutter carried by the sharp and flat slide extending beneath the edge of the base to the reverse side thereof and having notches to register with the slot N and perforation I' when the sharp and flat slide is in one position and to partially cover these openings when the sharp and flat slide is in another position.

In testimony whereof I affix my signature in presence of two witnesses.

LOUIN O. WOODS.

Witnesses:

J. S. WORKMAN,
PEARL M. WRIGHT.