(No Model.)

D. FALLON.

METHOD OF MUSICAL NOTATION.

No. 391,887. Patented Oct. 30, 1888.

Fig. 1.

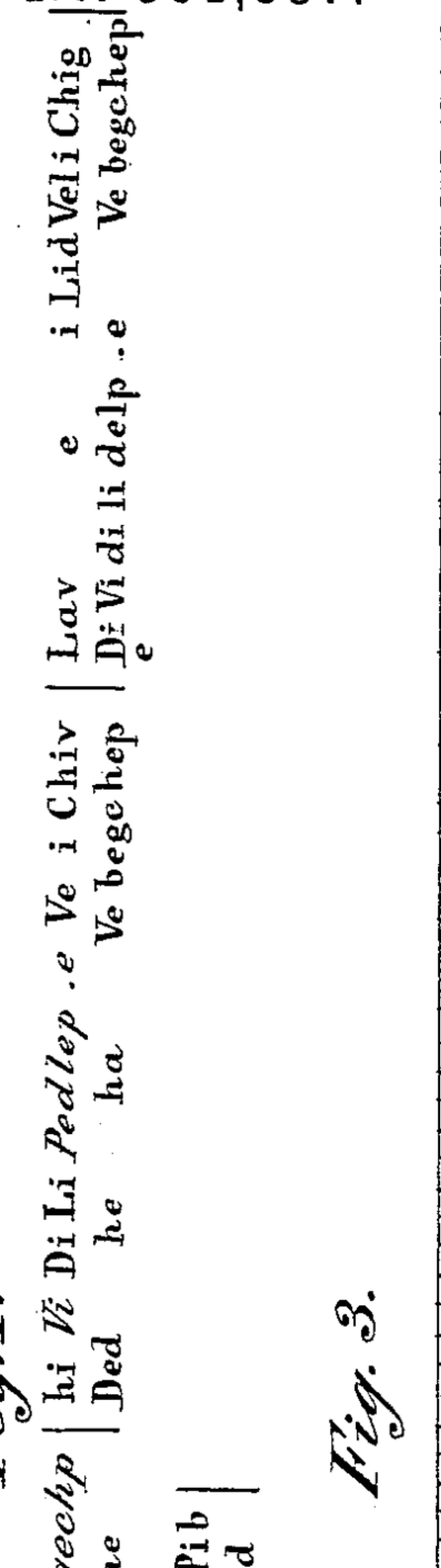


Fig. 3.

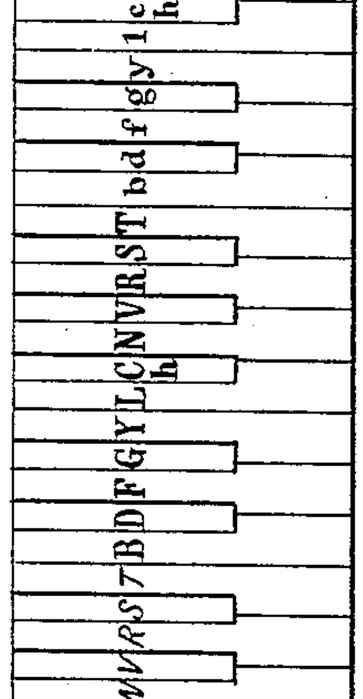
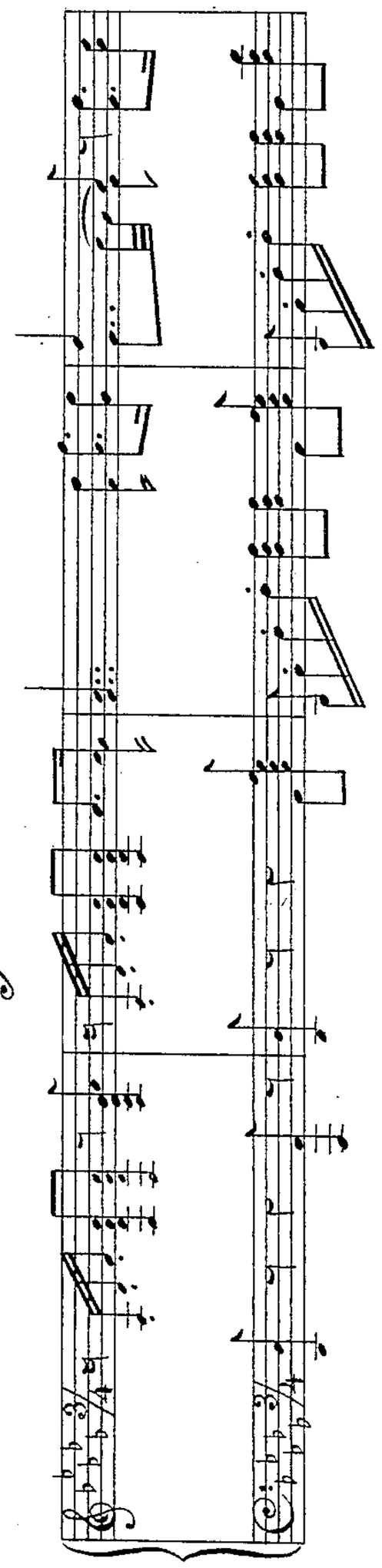


Fig. 2.



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METHOD OF MUSICAL NOTATION.

SPECIFICATION forming part of Letters Patent No. 391,887, dated October 30, 1888.

Application filed November 17, 1887. Serial No. 255,452. (No model.) Patented in the Republic of Colombia August 9, 1881, and in England October 4, 1886, No. 12,609.

To all whom it may concern:

Be it known that I, DIEGO FALLON, of Bogota, in the State of Cundinamarca, and the United States of Colombia, South America, have invented a new and Improved Musical Notation, (for which I have obtained a patent in England, No. 12,609, dated October 4, 1886, and in the Republic of Colombia, dated August 9, 1881,) of which the following is a full, clear, and exact description.

My invention relates to a new and improved musical notation; and it has for its object to express the sounds of music in writing without the use of notes, clefs, keys, staffs, flats, or sharps, and to enable the beginner to learn quickly and to transpose a piece of music instantly from one key to another.

The method consists of designating the sounds of music by consonants and of representing the value and duration of the sounds by vowels.

The invention also consists of details hereinafter more fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 represents a piece of music as written according to my improved method. Fig. 2 is the same piece of music as written according to the old style of music; and Fig. 3 is a plan view of the key-board of a piano, with the keys named according to my improved method.

In my improved method I make use of the natural law of human speech and its representation in writing by means of alphabetical characters or letters. In this law of the human speech the consonants represent the organ of speech and the articulate sounds, while the vowels represent the voice sounds and give life and sound to the consonants.

In my improved method the consonants are the denominating sounds of the notes, dots, and rests, while the vowels designate the life of the consonants—that is, the duration or value of the sound or note. The twelve chromatic sounds of an octave are represented by the twelve consonants B, D, F, G, Y, L, Ch, N, V, R, S, and T, in the order given, and the consonants Y, Ch, and V have also synonyms, which are as follows: Y equals J, Ch equals Sh, and V equals P. It will be seen that each of these twelve consonants or notes, which are ascending in chromatic succession from C-natural, inclusive, to B-natural, inclusive, has an unalterable, exclusive, and untransferable name.

The twelve consonants of one octave are printed in one form of type, and the several octaves are distinguished from each other by using the different style of type for the consonants of each octave, so that the same consonant representing a certain note or sound in all the different octaves is distinguished by its different style of type, as illustrated in Fig. 3. It will thus be seen that the different degrees of pitch in which one and the same consonant or note may be reproduced along the whole range of musical sounds are represented by the different styles of type in which the consonants are printed. The vowels with which the consonants are pronounced indicate the respective durations or values of the sounds of the consonants or notes, and the vowels uo ui a e i o u indicate correspondingly full notes, half-notes, quarter-notes, eighth-notes, sixteenth-notes, &c. The first two vowels, uo and ui, may also be written ô, û, respectively. The dots are expressed in two ways—absolute and relative. The relative dots are indicated by ui, a, e, i, o, and u, and have a relative value to each other in the same manner as above described in relation to the duration of the sound. The general or absolute dots are represented by the consonants c and x. The letter c stands at the end of a note, chord, or rest, and represents a simple or single dot. The letter x is also an ending, but designates a double dot. These dots are called absolute or general, because their lengths remain the same whatever be the duration of the note, chord, or rest to which they are adjoined. Thus the letter c makes the duration longer by one-half of its original value and x by three-quarters, whereas if the duration a were to be augmented by one-

half of its value through a relative dot the vowel e must be added, because the value of e is one-half that of a. If the duration of e is to be increased in the same proportion, then the vowel i must be added, because the duration i is one-half of that of e, &c. The rests and pauses are represented by the letter h, which in this system stands for the general expression of silence. The duration or length of each rest depends on the vowel with which h is printed—thus huo, hui, ha, he, hi, ho, hu.

The application of the different alphabetical characters or letters in writing a piece of music is as follows: The respective alphabetical characters designating the respective sounds of music and their duration are written on a real or imaginary straight horizontal line from left to right. In music with an accompaniment the treble is written in one line and the bass is written in another line placed directly below the treble line and as near together as possible, but without running the different alphabetical characters of the different lines into each other. The consonants or notes receive their value or duration by writing the respective vowels alongside of the consonant. Thus, Ba indicates that the value of the note or sound B is one-fourth. Placing a vowel or combination of vowels upon a consonant signifies its absolute or longer duration when it belongs to two different themes at the same time. If the said note occurs in the bass in piano-forte or organ music, then the aforesaid vowel is placed underneath the note or consonant. The consonant that represents a note, or the several consonants which represent a chord are suppressed and the vowel that indicates its value is retained in place of such note or chord, so as to express a certain kind of tie used in common notation. Such a tie is employed between two notes or between two chords which are identical in form and pitch in order to indicate that the first of the two notes or the two chords is to be held and increased in duration by a quantity of time equal to the value of the second note or the second chord and is not played again, though actually written twice. This is the process employed in common notation.

Now, in my method, instead of writing the note or chord again and connecting it to the preceding one by one or more ties, I suppress the consonant character or characters that indicate the notes and also the tie or ties, and merely write the vowel that represents the duration to be added to the note or chord which is to be held. The following note—for instance, gi--is equivalent to E♩ with the duration of a semi-quaver. If it is to be increased in value one crotchet more, then it is expressed

gi a, and not gi ga. In like manner the chord gins will be increased by a crotchet by writing

it thus: gins a, instead of gins gans. In fact, the process of joining the notes by means of curved dashes, as employed in common notation, is not necessary in the system of my improved method. The use of a dot on the left of a vowel—thus, .uo .ui .a .e .i .o .u—indicates that the preceding note or chord is to be repeated with the value expressed by the vowel to the left of which the dot is marked. Thus the following passage Blar e .e .a .a is to be played as if it were written Blar e Bler Blar Blar. This kind of repetition may also be expressed by a capital vowel without a dot, so that the foregoing passage may be written Blar e E A A. The use of the comma on the right of a consonant—for instance, b,—indicates that the note represented by such a consonant should be retained until the corelative apostrophe (') is met with farther along the same line. This apostrophe may appear before the end of the bar or several bars distant from the comma. The latter may also be seen marked at the foot of the duration that accompanies the note—thus, ba,.

The different degrees of thickness and the different style of type in which the letters making the syllabic phrase are printed answer the purpose of indicating the amount of force with which a note or chord is to be played or sung. This device supplies the place of the italic letters *p pp ppp f ff fff* on convenient occasions.

The hyphen (-) between two or more notes or chords indicates that such notes or chords constitute a clause which is to be repeated. The number of repetitions is indicated by a numeral placed above the clause, and the value of the note that constitutes the clause by the vowel or diphthong placed upon the hyphen or to the right of each note or in the center of each chord. Thus the following passage 6 big-ni is to be played thus: big ni big ni big ni big ni big ni big ni. The abbreviation may also be written thus: 6 bg*i*n.

Vowels when employed as initials represent the different octaves of the key-board of a piano or organ in the following order, (from the bass to the treble:) uo u a e i o u, (French.) Thus the chord blir, which represents C-natural, F-natural, and A-natural with the value of a semi-quaver, as written in the seven octaves would be oublir, ublir, ablir, eblir, iblir, oblir, and ublir. The old Latin conjunction (&) indicates the repetition of the clause that precedes it.

Chords are written horizontally like common words—thus, Larbal nasbay. The chords are distinguished from melody by their ending, which is always a consonant, and likewise by having more consonants than vowels.

The first vowel of a chord is the only one that represents duration, while the other vowels in the same chord are merely euphonical. For instance, the value of baynsb is that of one crotchet, and if the same chord is written bayansb or bayanasb, then its value will remain that of one single crotchet.

The first consonant of a chord is the only one that corresponds to the peculiar form of type that indicates its relative place on the

key-board. The remaining consonants of the same chord may be printed in small letters of the corresponding type to which the first consonant belongs.

The pause (⁀) is expressed by the common exclamation-mark (!).

It will be seen that no knowledge of keys is necessary, as each one of the twelve notes or consonants that make up the chromatic scale has its own exclusive separate name, and, as a consequence, any chord, whatever be the key to which it belongs, is only a simple combination of two, three, four, or, at the utmost, of five of the twelve consonants, and this combination of consonants becomes a fixed word, indicating the chord. It will also be seen that any successive series of single notes must consist of a group or number of the twelve consonants which never change, though the form of type and the vowels may constantly vary. Hence music written with my method is perceived by the sight and the mind of the reader as written in one single key, in one single clef, and without any sharps, flats, or naturals. The same piece of music written according to my method or to the notation now in use, when executed in both ways, sounds the same. No knowledge of clefs is necessary, as the ordinary staff is excluded and the notes of the bass and the treble do not intrude upon each other. No mistakes are made by the reader as regards the notes or consonants which should be played. From the very first lesson the beginner reads harmony correctly, however rich and full it may be, for the faculty of attention, being free from keys, clefs, and accidental sharps and flats, he can apply all his power to the simple task of deciphering groups of three, four, or five consonants of the invariable and limited character above mentioned. The identification of different forms of type, representing different degrees of pitch, is mastered with a few lessons. With the combination of consonants and vowels a musical language is written in which the words can be distinctly pronounced, each word or syllable conveying an idea regarding the performing of the music—that is, the notes, their locality, their value, and also the number of repetitions—and expression is conveyed by the voice of the reader to the performer.

In order that the beginner on the piano-forte may be able to transpose a certain piece of music from one key to another, I provide the respective keys of the key-board with printed consonants, and on a movable board I place the same corresponding arrangement of consonants, which are placed such distances apart as to correspond with the width of the keys. If the piece of music is written in the key bayan, (this is in the key of the consonants b y n,) and it is required to transpose this piece of music to the key of G, (of my method,) then the beginner places the movable board over the key-board in such a manner that its consonant g is on the consonant b of the key-board, and all the required changes are now indicated on the movable board—that is, wherever the consonant b occurs in the piece of music the operator plays g, and instead of d he plays y, and instead of l he plays v, &c. Thus the movable board transposes the piece of music from one key to another.

Any piece of music, whether harmonious and complicated, for piano-forte, organ, &c., or of a simpler form for other instruments, or for singing, can be written in a far simpler manner than with the notation now in use, and is easily transmitted by the telegraph and the telephone, as has been proved by experiment.

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

1. The herein-described method, consisting of designating the sounds of music by consonants and of representing the value or duration of the sounds by vowels, as specified.

2. A method of musical notation, consisting in designating the sounds as regards pitch by a series of consonants alone, and suitably indicating the length or duration of the said sounds, substantially as set forth.

3. A method of musical notation, which consists in designating the sounds of each octave by means of consonants and in employing different styles of type for the different octaves, substantially as set forth.

4. A method of musical notation, consisting in designating the sounds by consonants, the value or duration of such sounds by vowels, and the octave in which such sounds belong by the character of the lettering of said consonants, substantially as set forth.

5. The herein-described method of musical notation, consisting of designating the sounds of music by twelve different consonants and of representing the value or duration of sound by seven vowels, substantially as specified.

6. The herein-described method of musical notation, consisting of representing the value or duration of sound by seven vowels, as specified.

7. The herein-described method of musical notation, consisting of representing the value or duration of sound by the vowels uo ui a e i o u, substantially as specified.

8. The herein-described method of musical notation, consisting of designating the sounds of music by the consonants B, D, F, G, Y, L, Ch, N, V, R, S, and T, and by representing the value or duration of the sound by the vowels uo ui a ei o u, substantially as specified.

9. The herein-described method of musical notation, consisting of designating the sounds of music by the twelve consonants B, D, F, G, Y, L, Ch, N, V, R, S, and T, and of representing the value or duration of the sound by seven vowels, uo ui a e i o u, and representing the rests and pauses by the letter h, the length of the rest or pause depending on the vowel with which h is printed, substantially as specified.

10. The herein-described method of musical notation, consisting of designating the sounds of music by the twelve consonants B, D, F, G,

Y, L, Ch, N, V, R, S, and T, representing the value or duration of the sound by seven vowels, uo ui a e i o u, and representing the single and double dots by the consonants c and x, substantially as specified.

11. A piece of music written in consonants designating the sounds of music, and in vowels representing the value or duration of the sound, substantially as described.

12. A piece of music written in twelve consonants designating the sounds of music, and in seven vowels representing the value or duration of the sound, substantially as described.

13. A piece of music written in the twelve consonants B, D, F, G, Y, L, Ch, N, V, R, S, and T, representing the twelve sounds of an octave, and in the seven vowels uo ui a e i o u, representing the value or duration of the said sounds, substantially as specified.

14. A piece of music written in the twelve consonants B, D, F, G, Y, L, Ch, N, V, R, S, and T, representing the twelve sounds of an octave, the consonants of each octave being printed in different styles of type, and the seven vowels uo ui a e i o u, representing the value or duration of the said sound, substantially as specified.

DIEGO FALLON.

Witnesses:

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