

No. 733,351.

PATENTED JULY 7, 1903.

L. H. BESWICK.
MUSICAL NOTATION.

APPLICATION FILED DEC. 10, 1900.

NO MODEL.

Fig. 1.

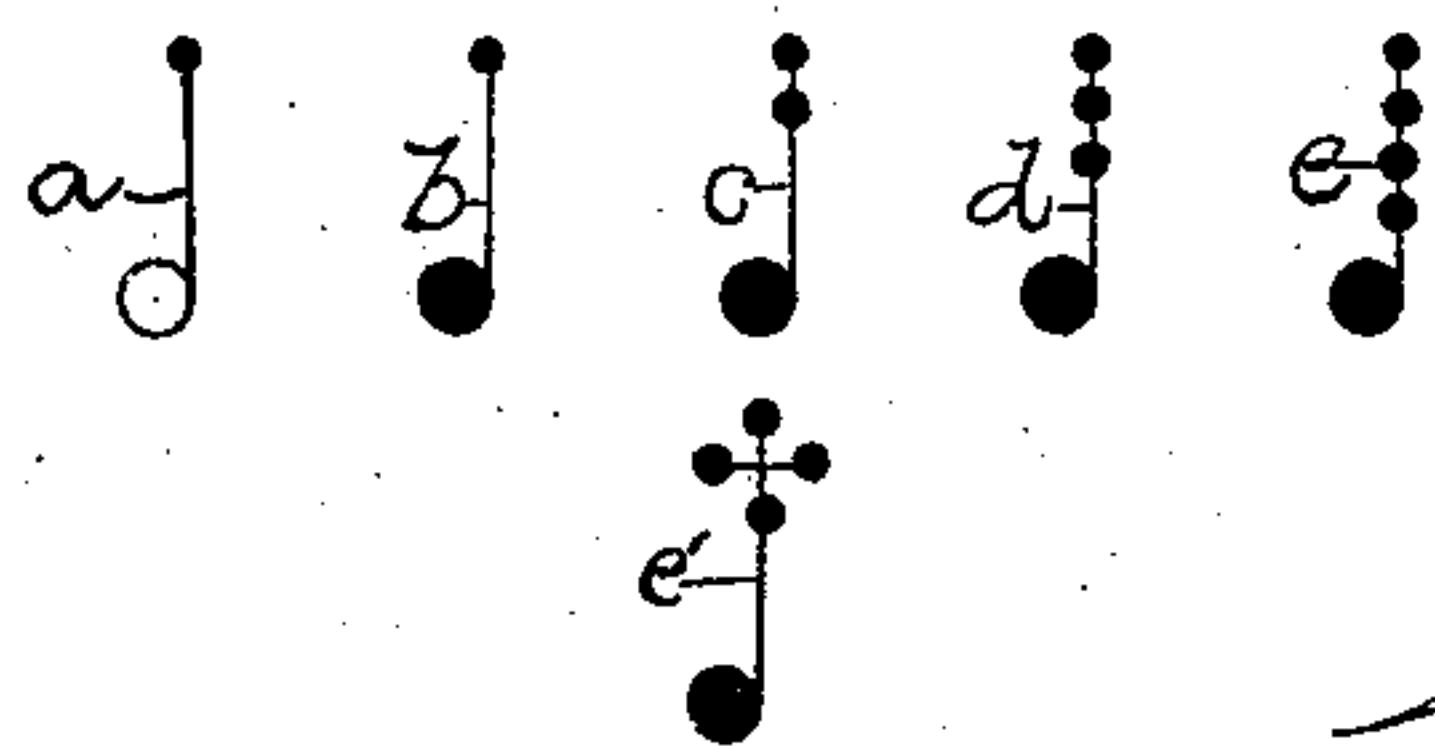


Fig. 2.

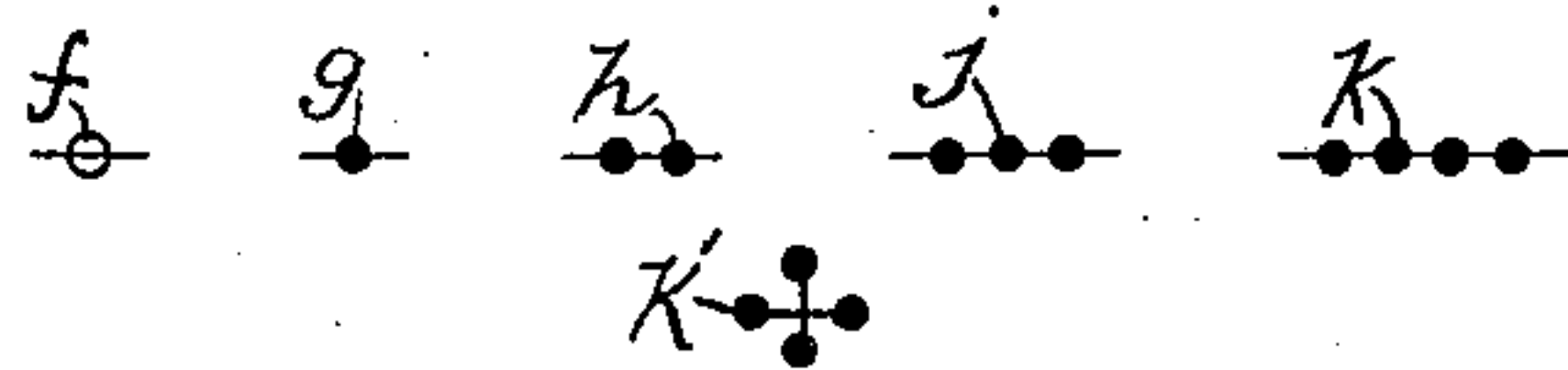


Fig. 3.



Fig. 4.

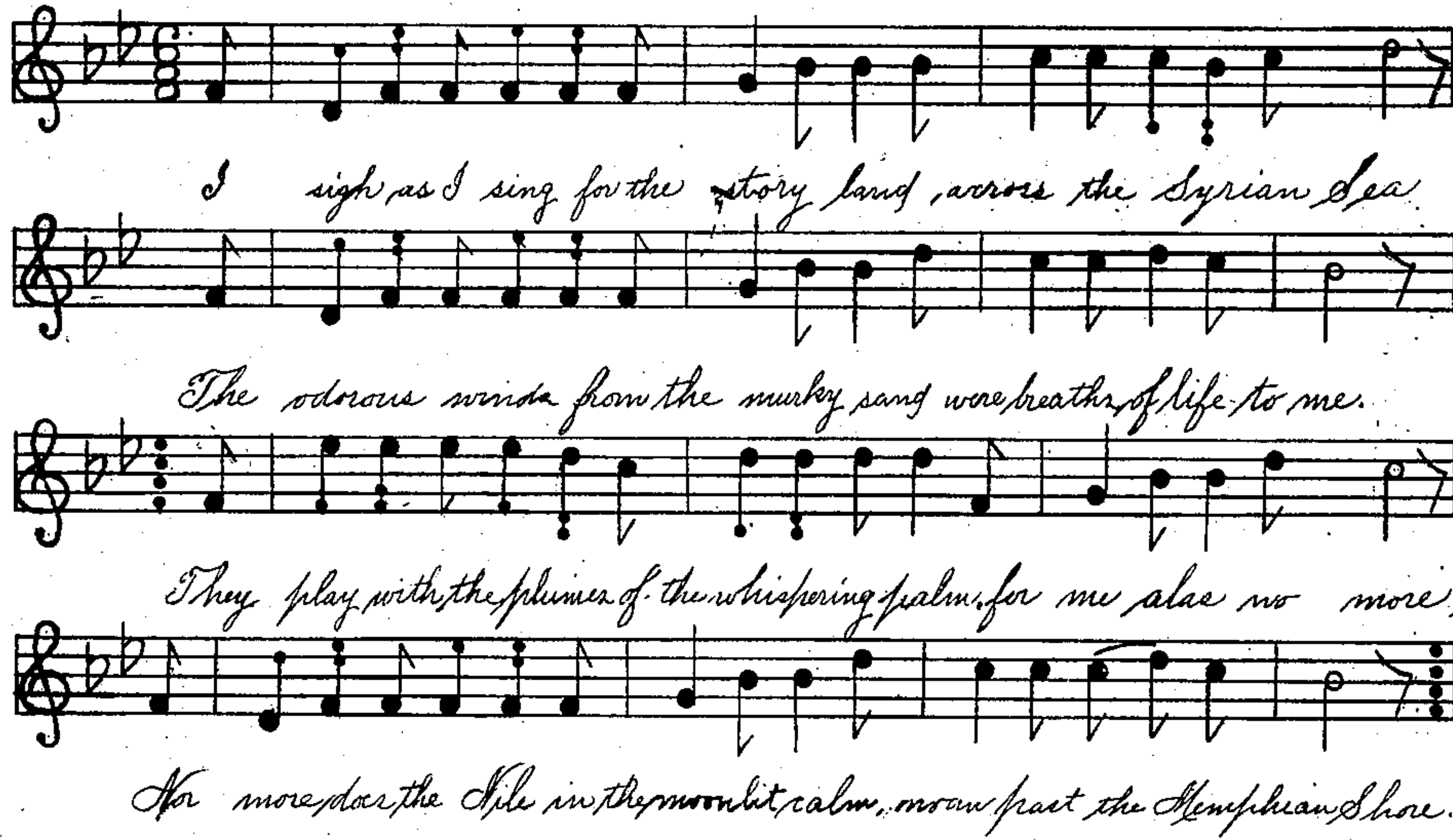


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

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MUSICAL NOTATION.

SPECIFICATION forming part of Letters Patent No. 733,351, dated July 7, 1903.

Application filed December 10, 1900. Serial No. 39,344. (No model.)

To all whom it may concern:

Be it known that I, LAURA H. BESWICK, a citizen of the United States, residing at Memphis, in the county of Scotland and State of Missouri, have invented a certain new and useful Improvement in Musical Notation, (Case No. 1,) of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to musical notation—that is to say, to the art of designating musical tones by characters or symbols and to the system of characters, symbols, or sounds by which such tones can be designated.

The feature toward which the invention is particularly directed is the designation of the duration or time length of tones or pauses.

Prominent objects of the invention are to make possible the indication and use of certain tone lengths and pauses not at present employed in the rendering and noting of music; to facilitate the designation of other tone lengths at present so employed; to provide simple, effective, and practical means for designating such tone lengths and pauses; to secure certain novel, desirable, and striking effects in both vocal and instrumental music not possible to attain under the system of notation at present in use, and to arrange for the better, in fact, for the substantially perfect adaptation of music to words in vocal music.

My improved system of musical notation is based upon the division of a third of a whole tone into even divisional parts, so that the system embraces notes and rests or of course other suitable characters or symbols representing tones or silences one-third, one-sixth, one-twelfth, one twenty-fourth, one forty-eighth, or like divisional part of a whole tone in length. The notes and rests or other fitting characters or symbols of my notation designate their respective tones and silences individually—that is to say, each note or rest indicates the length or duration of the tone or silence by itself without any further associated symbol or symbols in the music-score. In this way I permit the incorporation in music-scores and works of characters or symbols designating tone lengths and pauses of the kind I have specified, and so allow their

general and extensive use in the rendition of music. I also facilitate and simplify the designation of tone lengths of this character, so that there is no difficulty or hindrance to their employment. Furthermore, I permit their combination with notes of the present musical system in any desired way, so that notes and rests indicating thirds, sixths, twelfths, and like divisional parts of a whole tone can be associated in any way desired with notes and rests indicating halves, quarters, eighths, and like divisional parts of a whole tone. The association or combination of these two sets of notes, or, in other words, the combination of the notes of my system with those of the present system, produces novel and striking results whose number and variety are unlimited and whose utility is unquestioned. Certain of these advantages and results will be pointed out fully hereinafter after reference has been made to the drawing for an understanding of the invention more in detail.

In the accompanying drawings, Figure 1 is a view illustrating the preferred style of character or symbol for indicating tone lengths of the kind hereinbefore specified. Fig. 2 is a view of the preferred form of rests. Fig. 3 is an instrumental composition adapted especially for the violin, in which my improved musical notation is shown combined with the musical notation now in general use. Fig. 4 is a vocal composition having notes of the two systems combined. Fig. 5 is a view of a composition, showing the combination of the two sets or systems of notes in a way different from the manner in which the same are combined in the composition shown in Figs. 3 and 4.

I could of course employ for designating the tone lengths and pauses of my system of notation any suitable or desired form of character or symbol. As a preferred arrangement, however, I employ a form or style similar in general arrangement to the notes of the musical system now in common use—that is to say, notes having a head and a vertically-arranged stem extending upwardly or downwardly from the head. The employment of notes similar to those now in common use has the advantage of being simple and practical, while at the same time it gives a composition

in which the two systems of notation are employed a uniform appearance. In such case—that is to say, when notes similar to the notes of the present system are employed—I provide the stems with dots instead of with the flags or hooks of the notes of the common system, the number of dots upon the stem indicating, as in the present system, the time length of the tone or pause.

Referring to Fig. 1, *a* is a third note, consisting of an open head and a stem having a dot at the end, this third note being in form a half-note of the present system, with a dot at the end of the stem. The sixth note *b* similarly consists of a solid head and a stem having a single dot at its end, this being similar to a quarter-note with a dot on the end of its stem. In a similar manner *c*, consisting of a solid head, a stem, and two dots placed on the stem, designates a twelfth note; *d*, consisting of a solid head and a stem having three dots, a twenty-fourth note; and *e*, consisting of a solid head and a stem having four dots, a forty-eighth note. If desired, the dots of the forty-eighth note instead of being arranged in vertical order, as shown in the note *e*, can be arranged in the form of a square, as shown in the note *e'*.

In Fig. 2 are illustrated rests adapted to designate the pauses of my system. These consist of lines having one or more dots, the character or number of the dots indicating the duration of the pause. The rest *f*, consisting of a line with an open dot or circle, is a third rest; the rest *g*, consisting of a line and a single solid dot, is a sixth rest; the rest *h*, consisting of a line and two solid dots, is a twelfth rest. In like manner the rests *j* and *k* are twenty-fourth and forty-eighth rests. If desired, the dots of the forty-eighth rest can be arranged as shown in the rest *k'* instead of as shown in the rest *k*.

In Fig. 3 is illustrated a musical composition containing notes of my improved system, in combination with notes of the now commonly-employed system. This composition is intended particularly for the violin. In this composition it will be seen that twelfth and twenty-fourth notes particularly are employed in combination with ordinary eighth notes. The rhythmic effect secured by the twelfth and twenty-fourth notes is different from that of the eighth notes, and consequently I secure an entirely novel result in rhythm. The twelfth note is of course but two-thirds of the time length of the eighth note, and the twenty-fourth is but one-half the time length of the twelfth. The twelfth and twenty-fourth together occupy the same time as one of the eighth notes. Therefore the twelfth and twenty-fourth produce an effect of two different tones, one twice as long as the other and the two tones together being as long as one of the other notes employed in the composition.

In Fig. 4 is illustrated a vocal musical composition in which, it will be seen, the music is

particularly adapted to the words. For instance, the word "I" is given an eighth note; the word "sigh" a sixth note, somewhat longer than an eighth note. The word "as," being quite short, is given a twelfth note. Again, the word "I" is given an eighth, the word "sing" a sixth, somewhat longer than an eighth, and so on. In this way the length of the various words and syllables is accommodated fully by the notes of my system and those of the commonly-employed system.

In Fig. 5 are illustrated certain other uses of my invention. In this figure I have shown the shorter note employed before the longer one—that is to say, in the first measure, for instance, a twelfth note is situated before a sixth note—whereas in the compositions Figs. 3 and 4 the shorter note has been situated after the longer note. In the third measure is shown a sixth note associated with a third note, the former having a time length just one-half of the latter and the two together having the same length as the two quarter-notes of the preceding measure. In the sixth measure are shown sixth and twelfth notes arranged on opposite sides of the quarter-note, it being obvious from this arrangement that the various notes of the system can be disposed in any way whatsoever with reference to other notes of either my system or the system now commonly used. In the seventh measure is shown the same arrangement of sixth and twelfth notes on opposite sides of a quarter-note, the twelfth note being before the quarter-note in this measure.

From the foregoing the following general advantages can be seen: First, new rhythms can be obtained in both vocal and instrumental music. Under the old system, the notes being halves, quarters, eighths, and so on, the time lengths of the tones had to bear the relation of one to two and one to four, and so on. In other words, every tone had to be either an even divisional part or an even multiple of every other tone. Consequently, the only effects that could be secured were the doubling or halving of time lengths. By my system, however, tones having the ratio of two to three, three to four, and so on, are introduced, and an entirely novel rhythm is thereby produced. I have shown, for instance, that the composition shown in Fig. 3 when played gives a striking sparkling effect which is very pleasing and has been heretofore unknown.

Again, my system allows the thorough adaptation of music to words in vocal music. This is well shown by reference to Fig. 4. The very short words, such as "a," "the," "is," &c., should not properly be given the same time length as ordinary one-syllable words—such, for example, as "shore," "sway," &c., and yet they are entitled to more than one-half of the time length given the latter. Under the old notation they would have to be given either one or the other—that is to say, either the same length

or only one-half of that time length. In the phrase "the shore," for instance, if the word "the" were given an eighth note the word "shore" would have to be given either an eighth or a quarter or even a longer note. In the former instance the two words each having eighth notes would each have to be given the same length of time, which would be either too long for the "the" or too short for the "shore." In the latter instance the "the" having an eighth and the "shore" a quarter the former would have but one-half the length of the latter, which would be either too short for the "the" or too long for the "shore." In my notation, however, the "the" could be given a sixth and the "shore" a quarter, for example, in which case the "the" would be given only two-thirds as much time as the "shore." This is about the relative time length the two words would naturally be given in expressing them. The same principle can be applied throughout the entire list of words and syllables. Each one can be given its proper time value relatively to the others, and thus vocalization will be perfectly smooth and natural. This system not only permits the acquisition of novel effects in rhythm, but also in vocal music allows the adaptation of music to words and thereby permits correct interpretation and assists in correct enunciation and expression. Again, my system of notation permits and promotes natural expression. As an instance, when a series of six notes, each of the same length, are being sung, the voice naturally gives the first one in each beat a length slightly longer than its proper length and the second one a slightly-shorter length—that is to say, the first and fourth will be given a time length slightly greater than their proper length and the second and fifth a length slightly shorter. This natural expression is very pleasing and desirable and relieves the monotony of six tone lengths exactly alike; but under the old system there was no way of indicating it, and so, even though the composer intended it to be sung in that way, he could not so express it, but would have to depend upon each musician giving it that way by instinct or not having it given that way at all. By my system the first and fourth notes can be made slightly longer and the second and fifth slightly shorter, as desired. In a series formerly consisting of six eighth notes I can make the first and fourth notes sixths, the second and fifth twelfths, and leave the third and sixth eighths. In this way the first and fourth have the desired slight increase in time, the second and fifth the slight decrease, and the natural expression is thereby secured. Another example of this natural expression is in waltz music, where naturally the three notes of each measure, although alike, are unconsciously rendered as though the first were longer and the second shorter than the third. In the way just mentioned in connection with the series of six like notes I can designate

this natural time value in waltz music. Doubtless many other advantages in the use of my system will manifest themselves as the system becomes better known and developed.

In my notation it will be observed that each of the notes and rests designates its tone or pause length individually—that is to say, by itself alone—without reference to any associated symbol or character in the score. In this the notation differs from the triplet, for in the triplet the time length of the notes or notes and rests composing the triplet is indicated by the entire structure—that is to say, by the three notes or one or more notes and rests, the slur joining the three together and the numerals "3" arranged above or below the slur. Among the results secured by this difference are facility and convenience in notation and ease in reading the music, the possibility which my system affords of separating the various notes from one another and thus permitting their combination in any desired way with other notes of either my system or the old system, and the possibility which it likewise affords of employing any desired number of notes. Regarding the first of these features—namely, convenience of notation and ease of reading—it is obvious that the writing of notes each standing by itself for a given tone length or pause is more easy than the arrangement of a number of symbols to secure a tone length or pause and that it is also easier to read such an individual note than a plurality of symbols. Regarding the second feature, it will be observed that in the triplet all three notes must remain together. By the nature of the combination-symbol the slur ties the three notes together, and the numeral "3" indicates that the three are to be played together. It, therefore, is impossible to separate one from the other two or to separate all three from one another. Consequently, if it is desired to arrange one of the triplet notes on one side of a note of different character and the other two on the other side of that note this is impossible by the triplet. In my system, however, this can be readily done, as well shown in the sixth and seventh measures of the composition shown in Fig. 5 of the drawings. Regarding the third of these features it will be seen that only three or six or nine or like number of triplet notes can be employed. This must follow from the fact that the triplet provides for only three notes or multiples of three. In my system, however, any number of notes can be employed, it being necessary only to arrange for such notes as are desired and then employ them, be the number two, four, five, seven, or any other number.

What I claim as my invention is—

1. In musical notation, characters, signs or symbols individually adapted to designate tones having lengths equal to an even divisional part of a third of a whole tone.

2. As an improvement in musical notation, characters, signs or symbols individually

adapted to designate tones having lengths equal to an even divisional part of a third of a whole tone, in combination with characters, signs or symbols adapted to designate half, 5 quarter, eighth or like tone lengths.

3. As an improvement in musical notation, notes adapted to designate tones having lengths equal to an even divisional part of a third of a whole tone, and comprising notes 10 having heads and stems and provided with different numbers of dots associated with their stems, substantially as described.

4. The improvement in notation, consisting of notes individually adapted to designate 15 tones having lengths equal to an even divisional part of a third of a whole tone, and constructed with heads and stems and also with dots associated with their stems, in combination with notes adapted to indicate half, 20 quarter, eighth or like tone lengths, and constructed with heads and stems.

5. As an improvement in musical notation, rests individually adapted to designate silences having a length equal to an even divisional part of a third of a whole tone. 25

6. As an improvement in musical notation, rests adapted to designate silences, having a duration equal to an even divisional part of a third of a whole tone, and comprising dif-

ferent numbers of dots associated together, 30 substantially as described.

7. As an article, a music-score in which are employed characters, symbols or signs, individually adapted to designate tones or rests, or both, having lengths equal to an even divisional part of a third of a whole tone. 35

8. As an article, a music-score in which are employed notes or rests, or both, adapted to designate tone lengths or silences having lengths equal to an even divisional part of a third of a whole tone, and formed substantially as described. 40

9. As an article, a music-score containing characters adapted to designate tones or rests, or both, having lengths equal to an even divisional part of a third of a whole tone, in combination with characters adapted to designate tones or rests or both, having lengths equal to one-half or an even divisional part thereof, of such whole tone. 45 50

In witness whereof I hereunto subscribe my name this 6th day of December, A. D. 1900.

LAURA H. BESWICK.

Witnesses:

GRACE E. BESWICK,
CASSIE L. BUTLER.