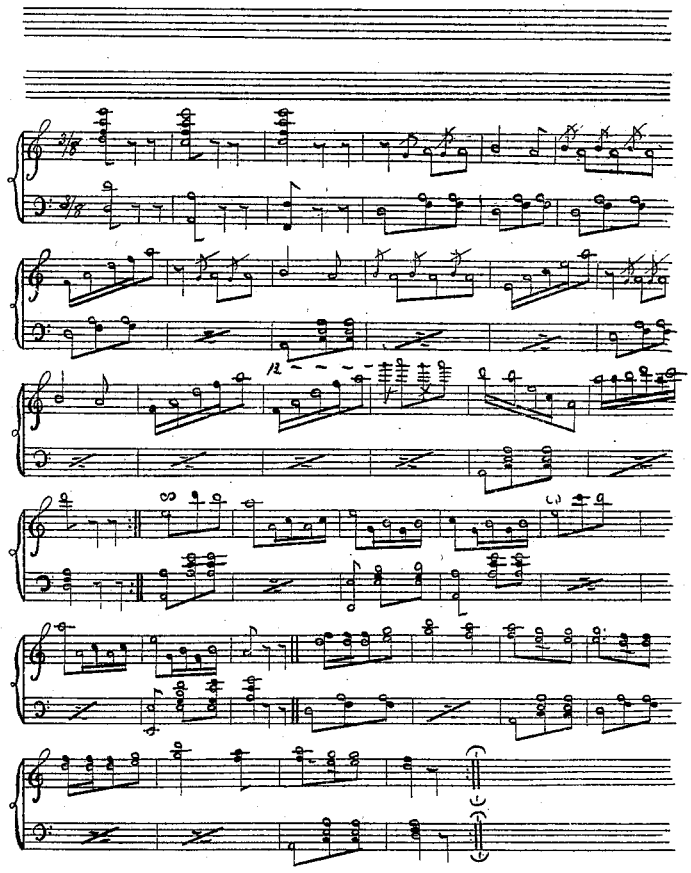
E. Von Heeringen,

Musical Notation,

No. 6528. Patented June 12, 1849.



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E. Von Heeringen,

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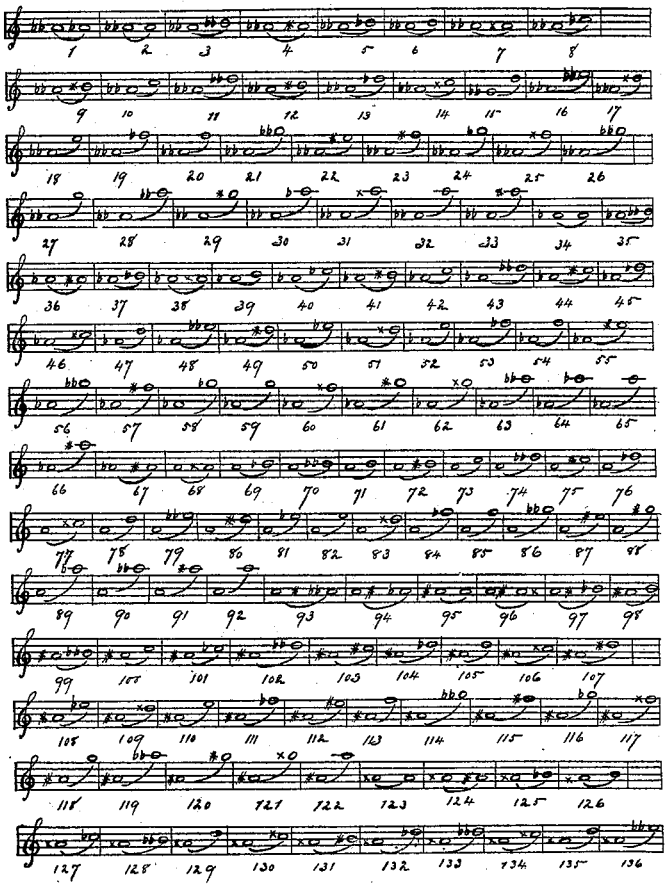
No. 6,528. Patented June 12, 1849.

The intervals from one key to the next of the same name by raising or lowering the white keys A, B, C, D, E, F and G, by single sharpt, thus ♯ double sharpt thus, x single flate, thus, ♭ and double flate thus, ♭♭ have been the following - from A to A.

Intervals in one octave in the old system 152.



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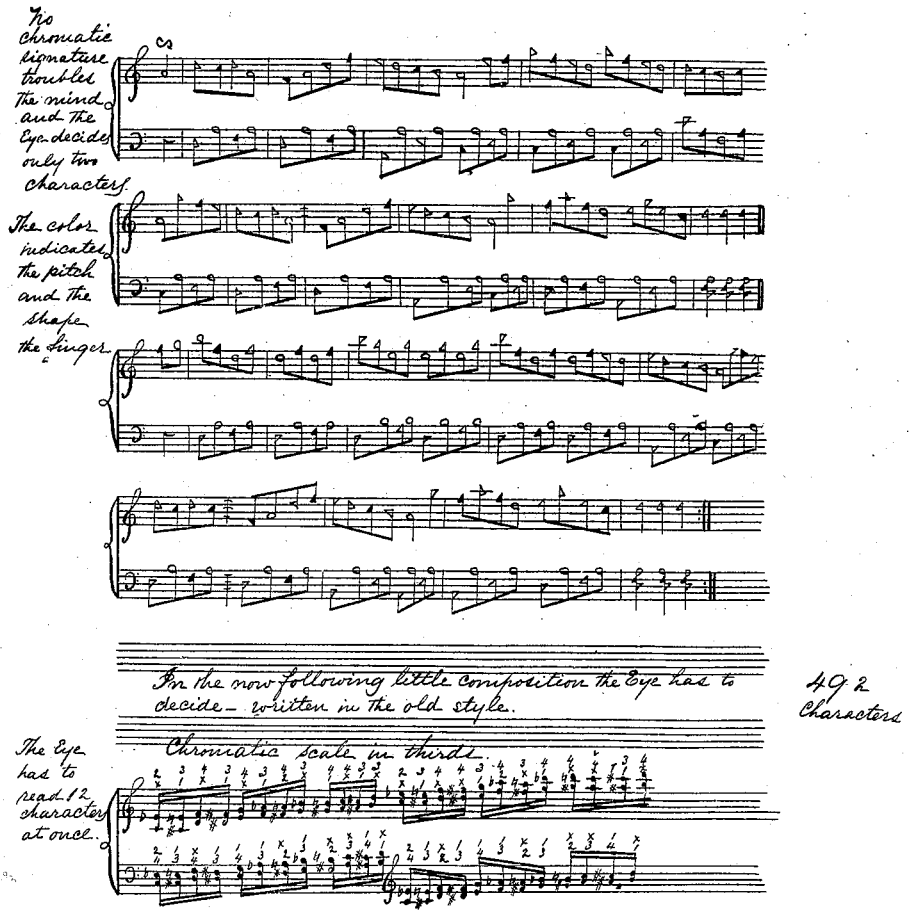
Thumb 1 2 3 4 Finger.



49 2 Characters

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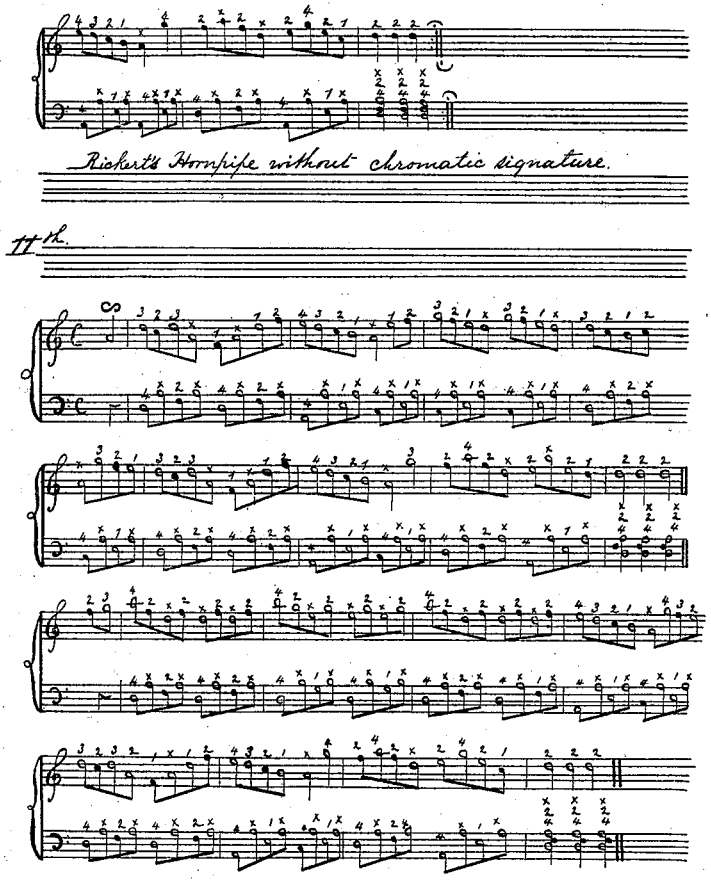

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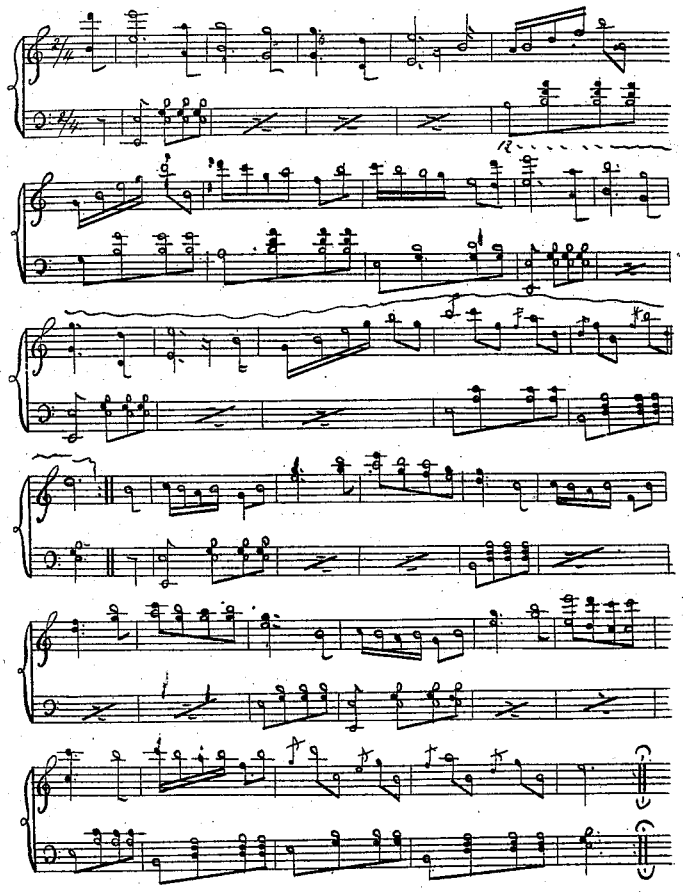

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E. Von Heeringen,

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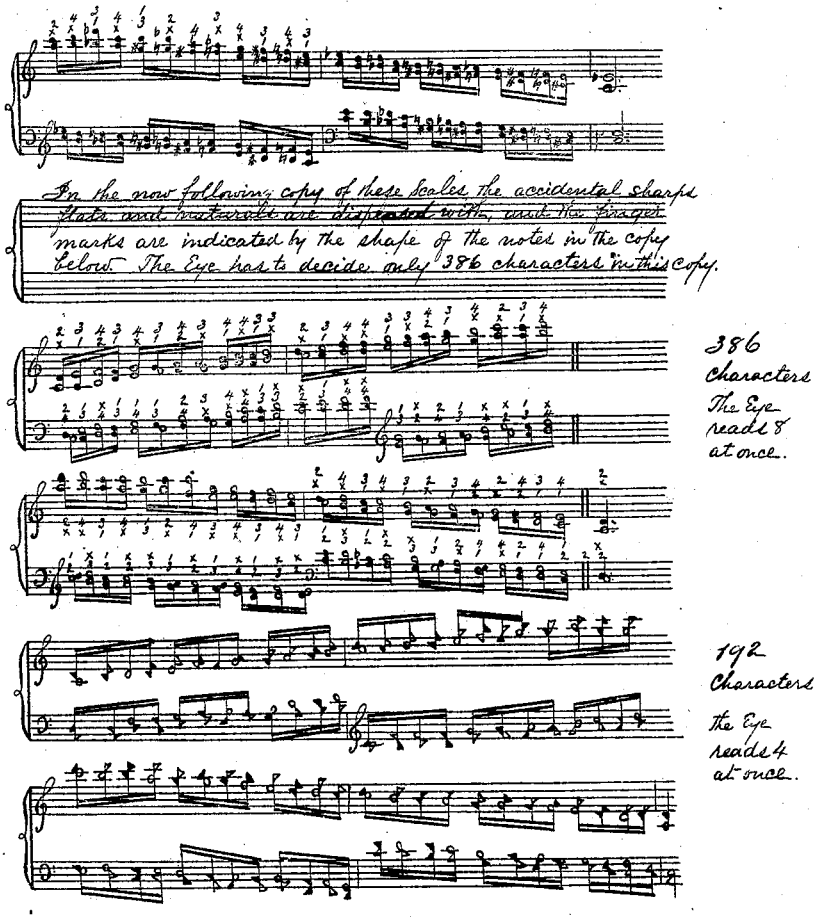
No. 6,528. Patented June 12, 1849.



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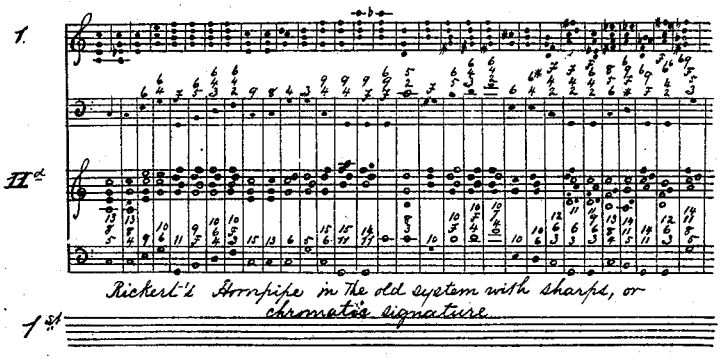
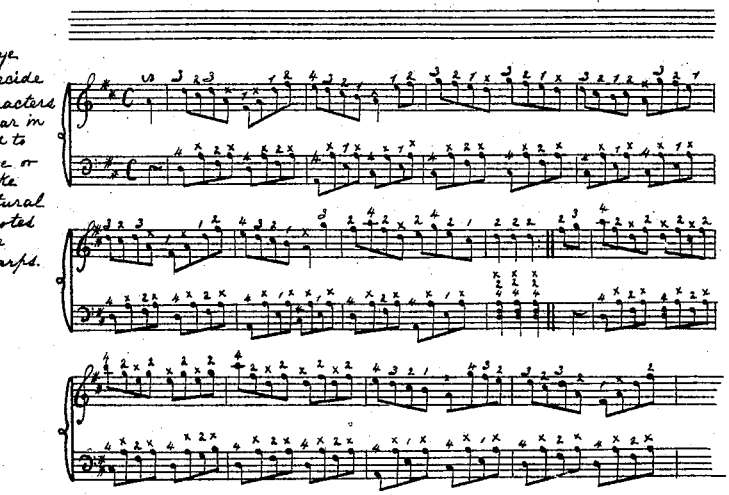
All the Chords necessary in thoroughbass, I^st according to the old system, II^d according to the new system.



Rickert's Stromfife in the old system with sharps, or chromatic signature.



The Eye has to decide 4 characters and bear in mind to change or make unnatural two noted by the sharps.

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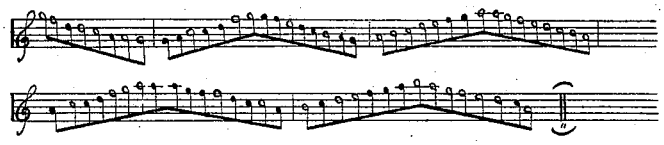

	Major Scales in Numbers.	Minor Scales in Numbers.
Scale of	Doe 1 — 3 — 5 — 6 — 8 — 10 — 12 — 1	1 — 3 — 4 — 6 — 8 — 10 — 12 — 1.
"	Dee 2 — 4 — 6 — 7 — 9 — 11 — 1 — 2	2. 4. 5. 7. 9. 11. 1. 2.
"	Ray. 3 — 5 — 7 — 8 — 10 — 12 — 2 — 3	3. 5. 6. 8. 10. 12. 2. 3.
"	Ree 4. 6. 8 — 9 — 11 — 1. 3 — 4	4. 6. 7. 9. 11. 1. 3. 4.
"	Mee — 5 — 7 — 9 — 10 — 12 — 2 — 4 — 5	5. 7. 8. 10. 12. 2. 4. 5.
"	Fah — 6 — 8 — 10 — 11 — 1 — 3 — 5 — 6	6. 8. 9. 11. 1. 3. 5. 6.
"	Fee 7 — 9 — 11 — 12 — 2 — 4 — 6 — 7	7. 9. 10. 12. 2. 4. 6. 7.
"	Sole — 8 — 10 — 12 — 1. 3. 5 — 7. 8.	8. 10. 11. 1. 3. 5. 7. 8.
"	Lee — 9 — 11 — 1. 2. 4. 6. 8. 9.	9. 11. 12. 2. 4. 6. 8. 9.
"	Lah 10 — 12 — 2 — 3 — 5 — 7 — 9 — 10	10. 12. 1 — 3. 5. 7. 9. 10.
"	Lee — 11. — 1. 3. 4. 6. 8. 10. 11.	11. 1 2 4. 6. 8. 10. 11.
"	Pa — 12 — 2. 4. 5. 7. 9. 11. 12.	12. 2. 3. 5. 7. 9. 11. 12.

Scales by numbers the easiest for the young pupil.

	Major Scales in Syllables	Minor Scales in Syllables
Scale of	Doe, Ray, Me, Fah, Sole, Lah, Pa.	Doe, Ray, Ree, Fah, Sole, Lah, Pa.
"	Dee Re Fah, Fee Lee, Lee Doe.	Dee, Ree, Me, Fee, See, Lee, Doe.
"	Ray Me, Fee, Sole, Lah, Pa, Dee.	Ray, Me, Fah, Sole, Lah, Pa, Dee.
"	Ree Fah, Sole, See, Lee, Doe, Ray.	Ree, Fah, Fee, See, Lee, Doe, Ray.
"	Me, Fee, See, Lah, Pa, Dee, Ree.	Me, Fee, Sole, Pa, Pa, Dee, Ree.
"	Fah, Sole, Lah, Lee, Doe Ray, Me.	Fah, Sole, See, Doe, Dee, Ray, Me.
"	Fee, Lee, Lee, Pa, Dee, Ree, Fah,	Fee, Lee, Lah, Dee, Dee, Ree, Fah.
"	Sole, Lah, Pa, Doe, Ray, Me, Fee,	Sole, Lah, Lee, Ray, Ray, Me, Fee
"	Lee, Lee, Doe, Dee, Ree, Fah, Sole,	Lee, Lee, Pa, Ree, Ree, Fah, Sole
"	Lah, Pa, Bee, Ray, Me, Fee, See,	Lah, Pa, Doe, Me, Me, Fee, See,
"	Lee, Doe, Ray, Ree, Fah, Sole, Lah,	Lee, Do, Dee, Fah, Fah, Sole, Lah,
"	Pa, Dee, Ree, Me, Fee, See, Lee.	Pa, Dee, Ray, Fee, Fee, See, Lee.

Scales in Syllables answer best for teaching vocal and instrumental music together.

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Sheet 9-11 Sheets

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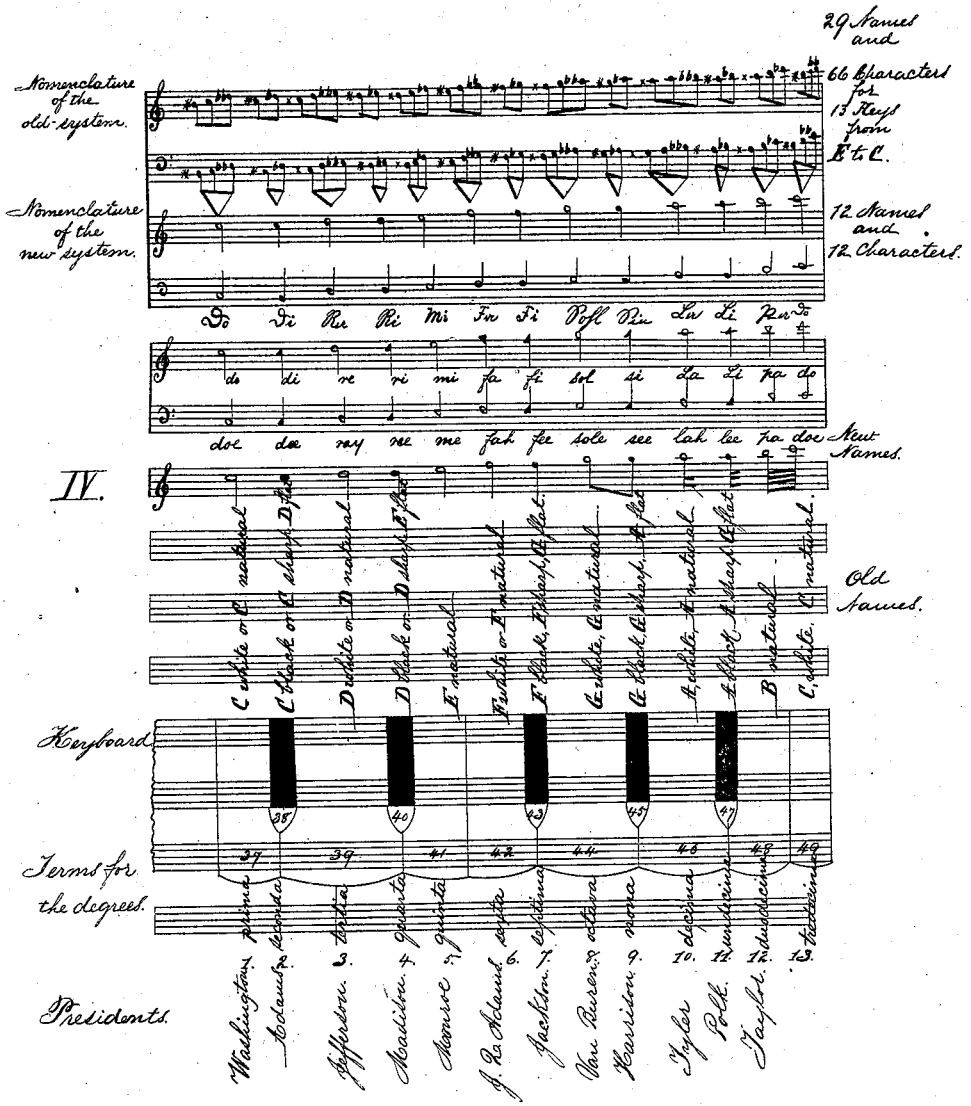

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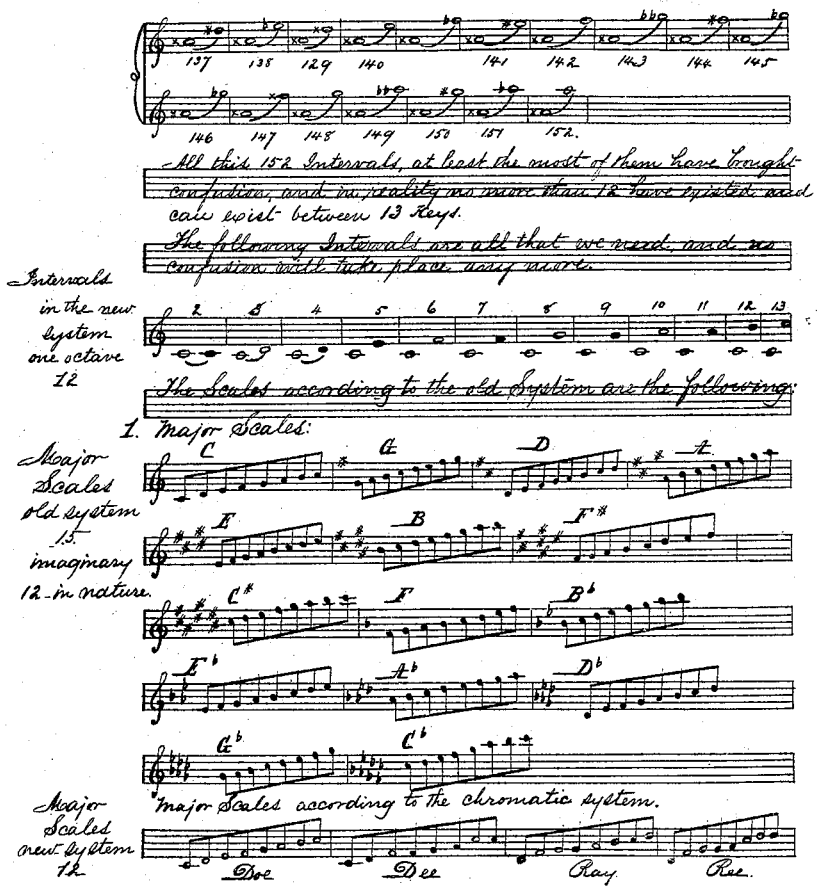

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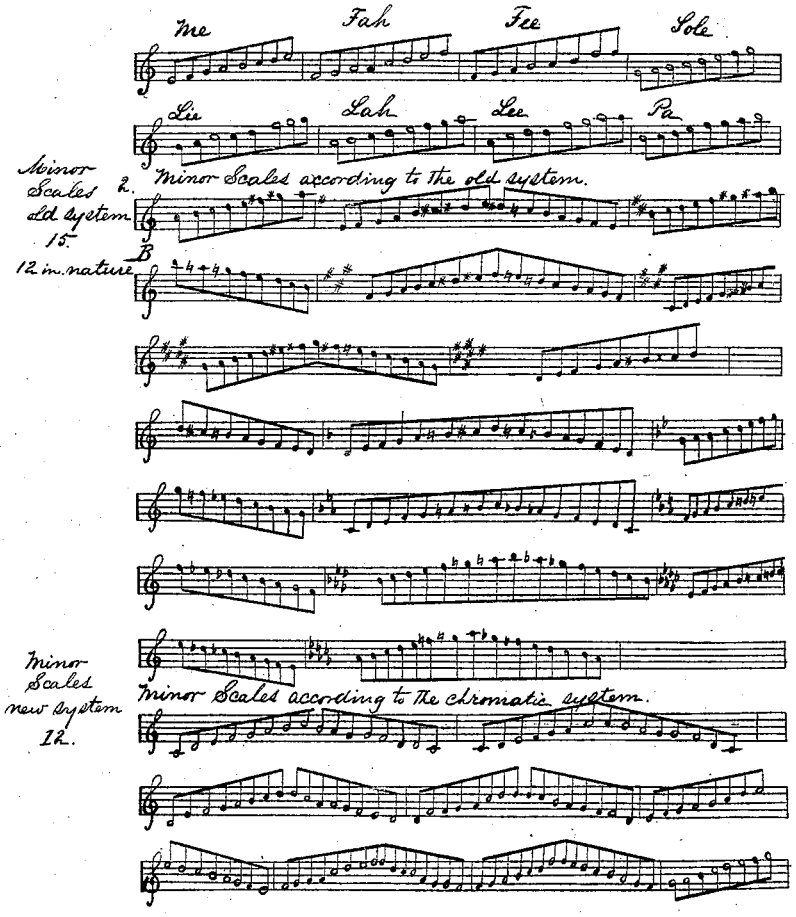

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UNITED STATES PATENT OFFICE.

ERNEST VON HEERINGEN, OF PICKINSVILLE, ALABAMA.

MUSICAL NOTATION.

Specification of Letters Patent No. 6,528, dated June 12, 1849.

To all whom it may concern:

Be it known that I, ERNEST VON HEERINGEN, of Pickensville, in the county of Pickens and State of Alabama, have invented certain new and useful Improvements in Musical Notation, of which the following is a full, clear, and exact description, reference being had to the accompanying scores, which show the difference between the old method and my improved notation.

The first portion of my invention is designed to enable beginners to acquire the fingering of any keyed instrument without numbering the notes on the score, as is usually done. To accomplish this I make all notes to be played by the thumb of a circular form thus ϙ, which may be cued in the usual manner to show the length of the note; and to direct the proper finger to the remaining notes I divide this thumb note into four portions by a horizontal and vertical line crossing each other within the circle thus ⊕; each of those portions when taken by itself will form a distinct character, one of which corresponds with each finger of the hand, the lower left hand one ◻ being touched by the first finger, the upper left hand one ◿ by the second finger, the upper right hand quarter ◺ by the third finger, and the lower right hand one ▽ by the fourth finger. I prefer the circular form to others, but it is evident that any geometrical figure which can be divided into four distinct portions will answer the purpose, thus a square ◇ placed diagonally on the lines might be used to denote the thumb, and the four triangular quarters ◁ ▷ △ ▽ the four fingers.

The second portion of my improvement is in the method of counting the musical intervals or notes, taking the chromatic scale, instead of the diatonic for my base. In the usual method the notes are numbered from 1 to 7 in the order in which they occur in the diatonic scale skipping the half tones which fall between the full notes, thus C being numbered 1; D is numbered 2; E, 3; F, 4; G, 5; A, 6; and B, 7. In my method C being numbered 1 C# will be 2; D, 3; D#, 4 &c. and the two methods will compare as follows:

Usual method.	Improved method.
C 1	1 0
C#	2 0
D 2	3 0
D#	4 0
E 3	5 0
F 4	6 0
F#	7 0
G 5	8 0
G#	9 0
A 6	10 0
A#	11 0
B 7	12 0
C 1	1 0

Any appropriate name or letter may be given to each of these twelve notes but as the syllables do, dee, ray, ree, me, fa, fee, sol, see, la, lee, pa, have proved excellent in teaching vocal, and instrumental music combined, I prefer to retain them; and thus all the confusion and trouble experienced by a beginner, in mastering the difficulties, and distinctions between sharps, flats and naturals is entirely avoided. In the third portion of my improved method of notation, the exact sound of the note whether sharp, flat, or natural is shown by the musical characters themselves without the assistance of chromatic signatures. This is accomplished by making all the characters which represent the natural sounds, or those usually denoted by the letters C, D, E, F, G, A, B, of one uniform color, (and making those characters which are to represent the sharps or flats usually denoted by the letters C#, D#, F#, G#, or D^b, E^b, G^b, A^b, and B^b of an other uniform color, distinct from that of the natural sounds). Thus the color of the first may be white, corresponding with the white keys of a piano or organ, and the color of the second may be black corresponding with the black keys of the same instruments. If then the note placed in the third space of the trebble stave be colored white, it will represent the sound usually called C (C natural), while if the note in the same space be colored black, it will represent a

sound raised one half tone higher or that musical sound commonly called C# or D^b, (C sharp or D flat); the same will be the case with the other notes of the stave, thus if the note on the uppermost line of the trebble stave be white it represents the musical sound commonly called F (F natural) and if it be black it will represent F# (F sharp) or G^b (G flat) being one half tone higher than F (F natural); and the characters on the stave will appear as in AIV of the score hereunto annexed. It is evident that any other colors might be used, but these are most convenient both for printing and instruction. The value of the notes indicated by the cue attached to them, will be the same as those in the ordinary notation, the only difference being in the head.

The advantages of this improved notation will be evident to any one who has had to contend with the difficulties incidental to the old system. First, the fingering of any piece of music is clearly shown by the characters themselves without requiring any additonal figures above or below the stave to denote what finger is to be applied to each key. Second, all the confusion arising from calling sharps and flats by the same names as the naturals intervening between them is avoided. Each of the twelve names or letters will represent a distinct musical sound, which will not be confounded with the preceding or succeeding one. Third, chromatic signatures either at the commencement of the stave or at accidental sharps or flats within the stave are entirely done away with, and much less labor or expense is required to write or print music, and if chromatic signatures are desired for the purpose of transposition, no more than five black notes are needed to express any number of flats or sharps. Fourth, the color of the notes corresponds with that of the keys of the piano, organ, eolian, &c., it is therefore extremely easy to find the correct note on any such instrument, when the white notes represent the white keys, and the black notes the black keys. Fifth, music written in this manner is much easier to read because the eye does not become confused by the uniformity in the color of the notes. Sixth, pupils can become performers in less than half the time required by the old system. Seventh, pupils are encouraged by it to attempt pieces that it would be impossible for them to play if written in the old method, where the mind is not only required to recollect the key of the instrument corresponding with the note of the written music, but also to recollect the signature at the end of the stave and the peculiar method of fingering. Eighth, all old music, or music written in the old style is easily transposed into this new system (the piece No. 3 that accompanies this specification having been transposed by one of my pupils.)

Having thus described my improved notation, what I claim therein as new and desire to secure by Letters Patent, is—

1. The arrangement of distinct characters to denote the fingering of music, made and arranged substantially in the manner herein described.

2. Giving the twelve musical intervals distinct names so that the use of the words flat and sharp is entirely avoided, and with them all the confusion naturally arising in the mind of a beginner.

3. Representing the sounds usually called natural by one uniform color, and those commonly called flats and sharps by another uniform color so that they may be distinguished from each other by a mere inspection of the musical character representing the note without the use of chromatic signatures.

ERNEST VON HEERINGEN.

Witnesses:
P. H. Watson,
Stephen W. Wood.