

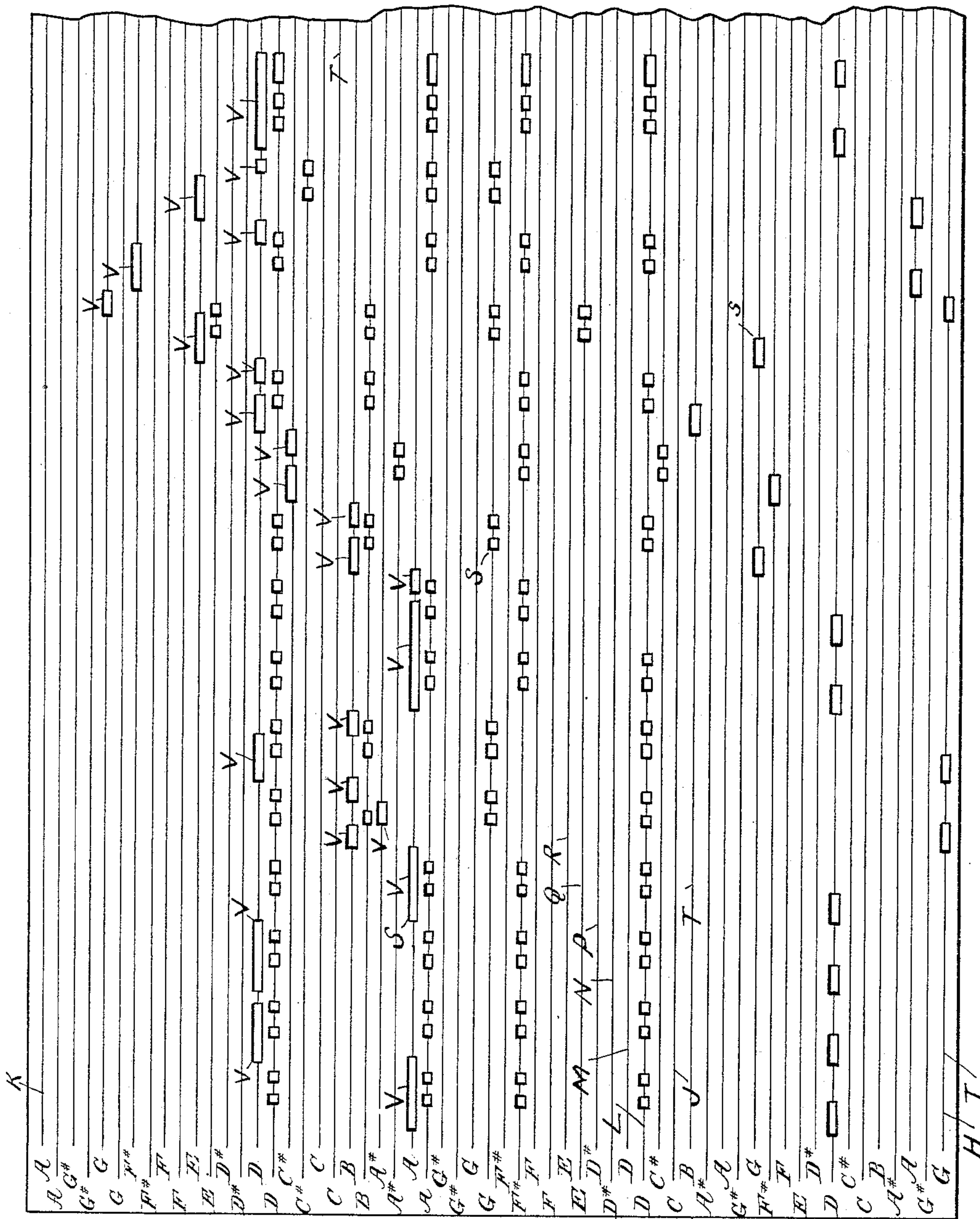
(No Model.)

G. B. KELLY.

PERFORATED MUSIC SHEET FOR MECHANICAL MUSICAL INSTRUMENTS.

No. 350,747.

Patented Oct. 12, 1886.



WITNESSES.

Arthur D. Flood.
Zurich, Arnold

INVENTOR.

George B. Kelly.
Per Brown Bros.
Attorneys.

UNITED STATES PATENT OFFICE.

GEORGE B. KELLY, OF BOSTON, MASSACHUSETTS.

PERFORATED MUSIC-SHEET FOR MECHANICAL MUSICAL INSTRUMENTS.

SPECIFICATION forming part of Letters Patent No. 350,747, dated October 12, 1836.

Application filed December 5, 1885. Serial No. 184,821. (No model.)

To all whom it may concern:

Be it known that I, GEORGE B. KELLY, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Perforated Music-Sheets for Mechanical Musical Instruments, of which the following is a full, clear, and exact description.

This invention relates to a perforated music-sheet for mechanical musical instruments; and the invention consists of a music-sheet for mechanical musical instruments having its rows or lines of perforations representing the scale of the instrument to which the music-sheet is to be applied so arranged that each note of the upper part or treble-notes of the scale to be arranged on the music sheet, and as many of said treble-notes as are desired or according to the length or compass of the scale, is doubled, or trebled, or quadrupled, &c., or arranged in pairs, or twos, threes, or fours, &c., all substantially as hereinafter fully described.

In the accompanying drawing is represented in plan view one end of a music-sheet for a mechanical musical instrument having the scale of the notes for which the music-sheet is adapted arranged thereon, and a musical composition indicated by marks representing perforations in said sheet, all in accordance with this invention.

This music-sheet is made of paper or any suitable sheet material, and the perforations are made therein in any of the usual and well-known ways of making perforated music-sheets for such musical instruments. This scale of notes on this musical sheet is represented by the longitudinal lines T—one line to each note of the scale, such line indicating where the perforations are to be cut or made in the sheet in relation to the width of the sheet for each note of the scale or of the musical composition to be arranged therein. At the end of each line T, at the left, is marked by the letters the respective note of the scale to which such line belongs, and such letters and notes so marked represent a scale of a series of semi-tones, or the "chromatic scale," so called, from G on line H, an octave and a half below middle C, line J, up to and including A, line K, nearly two octaves above said middle C, making a scale of the compass of a little over

three octaves. The upper or treble notes of the scale from and including D, line L, a whole tone above said middle C, up to and including said A, line K, are represented as doubled or arranged in pairs, or by twos—as, for instance, there are two D's, lines L M, two D-sharps, lines N and P, two E's, lines Q and R, and so on up to and including A, line K. Of each pair of notes the upper one of the two is used for the melody-notes of the musical composition which is arranged thereon, and the lower one of each pair for the accompaniment or harmony, although they can be reversed, as is obvious.

The musical instrument to which such a musical sheet is to be applied has its reeds or other sounding devices arranged according to the scale indicated on the music-sheet, one reed or sounding device for each note.

In lieu of arranging the upper or treble notes by twos, as herein particularly described, they can be in threes, fours, &c., or any number desired, and this invention is not limited to any particular number of each of the upper or treble notes of the scale.

A music-sheet for a mechanical musical instrument having its upper part or treble-notes arranged in accordance with this invention, and having the sounding devices of the musical instrument correspondingly arranged, has many and important advantages over the present manner of arranging the scale on such sheets, where there is only one line or row of perforations for each note. For example, a separate and independent line or row of perforations is secured for each note of the melody, the accompaniment or harmony in its higher notes also having its separate and independent note, so that each part can be arranged thereon separately and independently and irrespective of the other; also, the melody-notes can have their sounding devices of a different quality of tone, or it can be arranged an octave higher or lower, if need be; also, in adapting and arranging a musical composition for the instrument it can be more varied, as the sounding devices can represent a number of instruments, producing an orchestral effect, and where the notes are in threes, or fours, &c., a much greater orchestral effect can be produced, as each series of notes of each triplet,

&c., can have its sounding device of a different quality of tone from the others, as is obvious. In a proper arrangement of the musical composition an effect can be produced which will
5 be much superior to the present manner of arranging the scale on such music-sheets, where only one row of perforations is arranged for each note.

In arranging or adapting this invention to a
10 music-sheet in which it is desired to reduce or limit the compass of the scale, as is often done for musical instruments having a small number of notes in its scale, and to which simple musical compositions are arranged, and
15 which do not necessarily require the full scale, one or more notes at intervals determined can be left out, which can be done without departing from this invention, as in such case what notes are used in the treble or upper part of
20 the scale would be doubled or trebled, &c., as herein described.

The lines T represented in the drawing can be dispensed with when cutting or perforating the music-sheet or after it is perforated;
25 but when arranging the musical composition,

or marking or preparing the sheet to be cut, the lines are essential for the proper location of the place where the perforations in the sheet are to be made; but the invention is not to be limited to having the lines marked on
30 the perforated music-sheet.

The perforations or notes representing the melody of the tune arranged on the music-sheet shown in the drawing are each marked with the letter V.
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Having thus described my invention, what I claim is—

A perforated music-sheet for a mechanical musical instrument, having the upper or treble notes or perforations of its scale doubled or
40 trebled, &c., or arranged by twos or threes, &c., for the purpose specified.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

GEO. B. KELLY.

Witnesses:

EDWIN W. BROWN,
OLIVER H. ARNO.