

UNITED STATES PATENT OFFICE.

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PERFORATED MUSIC-SHEET.

SPECIFICATION forming part of Letters Patent No. 350,748, dated October 12, 1886.

Application filed December 7, 1885. Serial No. 184,952. (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
5 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 a mechanical musical instrument having its rows or lines of perforations representing the notes of the scales of the instrument to which the
15 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
20 scale, is duplicated and arranged on said music-sheet above or below the scale proper of the sheet, all substantially as hereinafter fully described.

In the accompanying sheets of drawings Figure 1 represents 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 and arranged in accordance with said musical composition and this invention. In Fig. 2 is illustrated a modification of the same tune, to be
30 hereinafter referred to.

35 This music-sheet is made of paper, or of any suitable sheet material, in any of the well-known ways, and the perforations H made or cut therein, as usual in making perforated music-sheets for mechanical musical instruments.

40 The scale of notes on this music-sheet is represented by the longitudinal lines J—one line to each note of the scale, such line indicating where the perforation is to be cut for its respective note in the sheet in relation to the
45 width of the sheet for each note of the scale or of the musical composition to be arranged thereon. At the end of each line J, at the left, is marked by the letters the respective note of the scale to which it belongs, and such letters
50 and such notes represent a scale of a series of semitones, or the "chromatic scale," so called,

from G on line K, an octave and a half below middle C, line L, up to and including A, line M, nearly two octaves above said middle C—a
compass of a little over three octaves. The
55 upper or treble notes of the scale from and including D, line N, a tone above said middle C, up to and including said A, line M, are duplicated and arranged on the sheet above the
scale, or A, line M, in a series of lines above
60 such line M, one line for each note of said treble. This upper series or duplication of treble notes is to be used for the melody of the musical composition, and all below the
said duplicated notes for the accompaniment
65 and harmony.

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

A music-sheet for a mechanical musical instrument having its upper part or treble-notes duplicated, as described, and located or arranged on said sheet above the regular scale
75 of the sheet, 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
80 row of perforations for each note. For example, a separate and independent line or row of perforations is had for each note of the melody, the accompaniment or harmony in its
higher notes also having its separate and in-
85 dependent notes, 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 can be arranged an
90 octave higher or lower, if desired; also, in adapting and arranging the musical composition for the music-sheet it can be more varied; and also it allows effects to be produced that
will represent a number of instruments, like
95 on orchestra, for instance, and also it allows for a re-enforcing or strengthening of the melody by also arranging it in the upper notes of the
scale proper, so that to each note of the melody two sounding devices will be secured,
100 which will produce an effect in certain classes of music that is very desirable.

Such an arrangement of the tune shown in Fig. 1 is illustrated in Fig. 2, where P represents the melody in the notes that are duplicated, and Q the same melody in the scale proper, the accompaniment being arranged in accordance therewith. Both notes of the melody are of the same pitch, although, as is obvious, the duplicated series of notes could have its sounding devices an octave higher. If desired, this duplicated series of treble-notes could have each note doubled or trebled, &c.—that is, arranged in pairs, or twos, or threes, &c.—which would allow for a still greater variety of effects in arranging the musical composition thereon. The short heavy line marked R indicates where the duplicated notes commence.

Although the melody-notes are represented as above the regular scale of the music-sheet, obviously they can be arranged below, the sounding devices being correspondingly arranged.

The lines J represented in the drawings can be dispensed with, they being more particularly for use in arranging the musical compo-

sition, or for marking or preparing the music-sheet to be perforated to locate the proper places for the perforations, the invention not being limited to having the lines marked on the perforated music-sheet.

I do not claim, broadly, in this application additional treble-notes to the regular scale of the music-sheet, as such is claimed in a pending application of mine, Serial No. 184,821; but,

Having thus described my invention, what I claim is—

A perforated music-sheet for a mechanical musical instrument, having its upper or treble notes or perforations duplicated or triplicated, &c., and arranged above or below the regular scale of the music-sheet, 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.