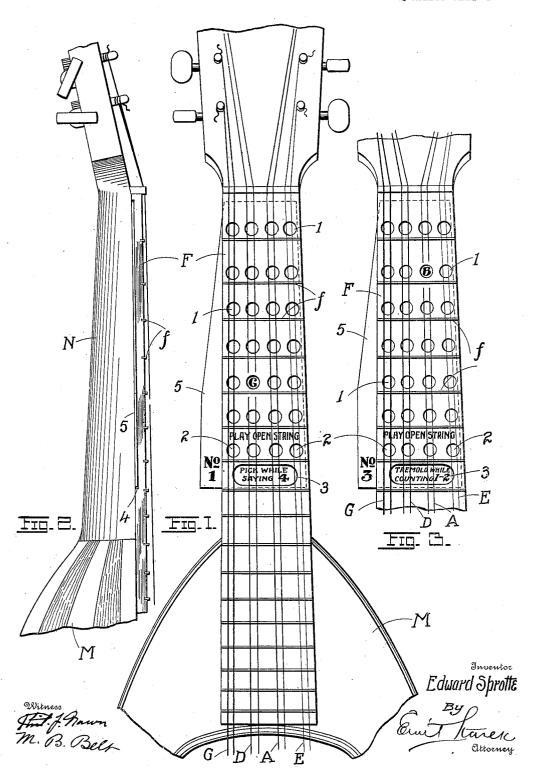
E. SPROTTE. STRINGED MUSICAL INSTRUMENT. APPLICATION FILED NOV. 16, 1904.

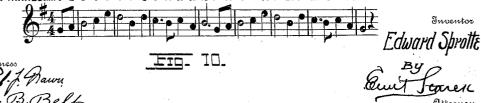
2 SHEETS—SHEET 1.



E. SPROTTE. STRINGED MUSICAL INSTRUMENT.

APPLICATION FILED NOV. 16, 1904. 2 SHEETS-SHEET 2. G No Νo PICK WHILE PICK WHILE SAYING 4 1 2 PLAY OPEN STRING **(4)** (7) PICK WHILE В TREMOLO WHILE REST WHILE SAYING 3

Name of note is... GABCEDBDCBCABGABCEDBDCBCAGR Play with finger. 3 0 1 2 0 3 1 3 2 1 2 0 1 3 0 1 2 0 3 1 3 2 1 2 0 3 Card number... 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27



THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

EDWARD SPROTTE, OF ST. LOUIS, MISSOURI.

STRINGED MUSICAL INSTRUMENT.

No. 826,379.

Specification of Letters Patent.

Patented July 17, 1906.

Application filed November 16, 1904. Serial No. 232,993.

To all whom it may concern:

Be it known that I, EDWARD SPROTTE, a citizen of the United States, residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Stringed Musical Instruments, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in stringed musical instruments; and it consists in the novel construction and arrangement of parts more fully set forth in the specification and pointed out in the claims.

specification and pointed out in the claims.

In the drawings, Figure 1 is a plan view of the finger-board end of a mandolin, showing my invention applied thereto with reference to a given note of a piece of music. Fig. 2 is a side view thereof. Fig. 3 is a view similar to Fig. 1, showing the invention applied to another note. Fig. 4 shows its application to still another note. Fig. 5 is a transverse section on line 55 of Fig. 4. Figs. 6, 7, 8, and 9 are plans of cards bearing the names or symbols of different notes of a piece of music intended to be sounded by the strings of the instrument and showing the necessary directions to be observed in the playing of said notes; and Fig. 10 is an illustration of a number of bars of a musical composition in connection with notes of explanation to be observed in the practice of my invention.

The object of my invention is to provide stringed musical instruments with means for 35 holding a series or succession of cards (or other devices) bearing the consecutive notes constituting any piece of music in such a position and in such relation to the strings and frets of the instrument that the pupil (or be-40 ginner) may be properly directed and informed as to the particular string to be played or picked, the proper finger to use in conjunction with any fret, the number of beats or interval of time during which any 45 string shall be played, and the period of rest which shall intervene between two consecutive notes. In other words, the invention becomes a self-instructing one, and when followed according to the directions which con-50 stitute its details a musical composition may be produced in the hands of one whose knowledge of music is limited or elementary.

In detail the invention may be described as follows:

Referring to the drawings, M represents a

mandolin; N, the neck thereof; F, the finger-board, and f the frets thereof. Disposed transversely across the finger-board and adjacent to the frets and opposite the neck are two series of openings or sight-holes 1 and 2, 60 the latter having coupled thereto the instruction "Play open string." There is a single transverse sight-opening 3 formed in the finger-board opposite the base of the neck. Of the openings 12 there are four in a 65 series adjacent to each fret, the several openings of any series being located directly behind the four pairs of strings of which the instrument is composed. These are respectively the G, D, A, and E strings, as well ungerstood and as indicated on the drawings.

The constructive details above outlined are complementary to and are used in conjunction with a system of cards of instruction which must necessarily be referred to to 75 understand the purpose of said details. In the drawings I have outlined as an example the first nine bars of the musical composition "Home, Sweet Home." As seen from the drawings, the first note is G, the second A, and 80 the third B, the eleventh C, and so forth, the twenty-seventh being a rest R. Nowformed in the rear of the finger-board is a recess or chamber 4 for the insertion and temporary retention of a succession or series of cards 5, 85 there being as many cards as there are notes (and rests) in the musical composition to be played, the cards being numbered consecutively, beginning with number "1," the ordinal marked on the card corresponding to the 90 ordinal of the note as it occurs in the music. Thus card No. 1 would correspond with note G, or the first note of the music. 3 corresponds with note B, the third note of the music. Card 14 corresponds with note 95 G, the fourteenth note of the music. Card No. 27 corresponds to a rest. The cards, moreover, have the name or symbol of the particular note to which they correspond indicated thereon, the point or position of in- 100 dication being such that when the card is inserted fully into the chamber 4 the name or symbol marked thereon will come not only opposite to one of the sight-openings 1 2, formed in the finger-board, but it will come 105 opposite the proper string and fret at which the string must be played to sound the said note. For example, the first note of the music is G. Card No. 1 has the name "G" marked thereon, and upon insertion of the 110

826,379 2

card behind the finger-board the name "G" appears through the second sight-opening 1 opposite string D and over the fifth fret, (counting from the top.) At the same time there appears through sight-opening 3 the words "Pick while saying 4," marked on the card. Thus the player presses his finger against string D over the fret adjacent which the name "G" appears through the sight-hele and night the D others the hele and night the D 10 hole and picks the D-string thus held against said fret for a period of time while saying "four." The particular finger which he runs over the fret is indicated in the instructions accompanying the music and which 15 will presently be referred to, Fig. 10. As another example, let us take and insert card No. 3 behind the finger-board. There the name "B" appears opposite string A (third string) and over the second fret. Opposite
the sight-opening 3 appear the words "Tremolo while counting 1, 2." Thus the player plays the A-string against the second fret and tremolos the string while counting one, two. Again, taking card No. 2, the name of 25 the note A appears through the sight-opening 2 opposite string A and adjacent to the seventh fret; but since the instructions as to sight-openings 2 are "Play open string," as marked on the finger-board, the player does 30 not depress the A-string, but simply picks it while saying "and." What is true of the cards cited as examples is true of them all. In other words, the insertion of any card behind the finger-board brings the name of the 35 note behind the sight-opening opposite the proper string to be fretted or played open and bringing behind the transverse opening 3 the proper instructions as to the length of time to be picked or tremoloed.

While any finger can of course be used in playing over the frets, yet for the sake of proper fingering certain fingers are better adapted for certain notes, and in conjunction with the music is a series of directions, Fig.

45 10, as to which finger to use. In the same connection are indicated the names of the notes and the numbers of the cards corresponding thereto, and while the player or beginner may have only a faint idea or limited 50 knowledge of notes he can be made to appreciate their character by associating the cards consecutively numbered with the notes to which they correspond and the names of which they bear. These instructions or di-55 rections are shown in Fig. 10 in conjunction with the first bars of the musical composition

above referred to.

By successively and persistently inserting the several cards 5 behind the finger-board 60 and playing the strings as per instructions indicated thereon after several trials the beginner will remember the order of their insertion and in a short time be able to mechanically play a tune or produce a piece of music 65 without any oral instruction from a tutor.

Thus the system becomes self-instructing. While the card system is herein shown applied to a mandolin, it may with equal propriety be applied to any stringed instrument. Nor is it essential that the names of the notes be 70 marked or numbered on "cards" specifically as such, for in lieu of the cards I may substitute panels, frames, or any means which will indicate the name or symbol of the note to be The provision here made in the 75 form of sight-openings in the finger-board is not necessarily the only method of bringing the notes marked on the cards into contiguous relation to the strings intended to sound said notes, for the finger-board may be trans- 80 parent, in which event no sight-holes would be necessary, or the note characters might be otherwise mounted so as to bring them opposite to the strings designed to play them. The invention obviously is applicable to any 85 stringed instrument of any nature whatsoever. Of course the "rest-cards" have the rest character always appearing opposite the opening 3.

Having described my invention, what I go

claim is

1. A stringed musical instrument having a neck and finger-board and strings therefor, a chamber being formed between said neck and said finger-board, in combination with a se- 95 ries of removable cards, said cards containing note representations forming, when taken in succession, a piece of music, the finger-board being provided with a series of sight-openings, and each card being of such a size as to fit 100 within said chamber in such a position as to expose the designation of the note thereon opposite one of the sight-openings, substantially as described.

2. A stringed musical instrument having a 105 neck and finger-board and strings therefor, a chamber being formed between said neck and finger-board, in combination with a series of cards, said cards containing note representations forming, when taken in succession, a 110 piece of music and each being of such a size that it will fit within said chamber leaving a projecting edge, whereby said card may be easily removed, the finger-board being provided with a series of sight-openings located in prox- 115 imity to the frets of said board, and the card being of such a size that when slipped into position in said chamber the designation of the note will come opposite one of the sight-openings, substantially as described.

3. A stringed musical instrument having a neck and finger-board and strings therefor, a chamber being formed between said neck and finger-board, in combination with a series of removable cards, said cards containing note 125 representations forming, when taken in succession, a piece of music and each card being provided with directions for playing, the finger-board being provided with a series of sight-openings, located beneath the strings in 130

proximity to the frets of said board, and said finger-board being also provided with a larger opening through which the directions for playing may be read, said card being of such 5 a size and shape that when slipped into position in the chamber the printed matter on said cards will come opposite the sight-openings and leaving a projecting edge, whereby

said card may be easily removed, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

EDWARD SPROTTE.

Witnesses:

EMIL STAREK, M. B. BELT.