April 22, 1952 A. T. CRISTELL 2,593,990

MINIATURE TOY STRING INSTRUMENT

Filed July 29, 1950

Fig. 1

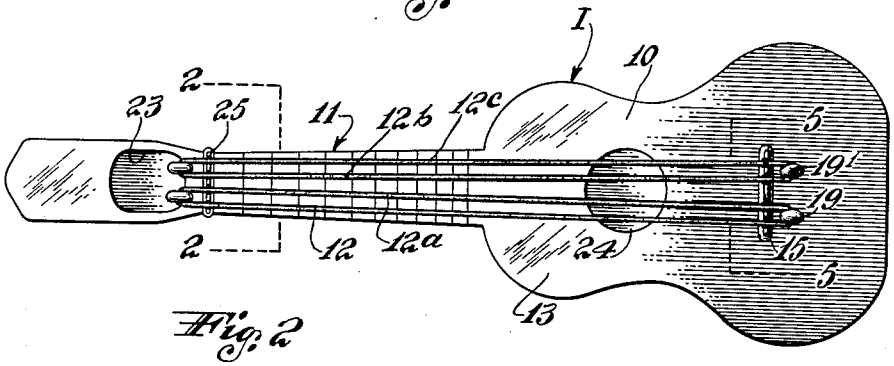


Fig. 2

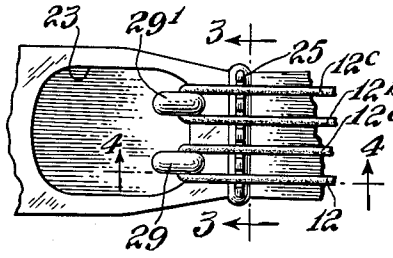


Fig. 3

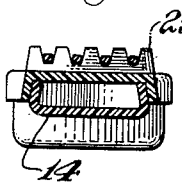


Fig. 4

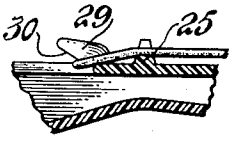


Fig. 5

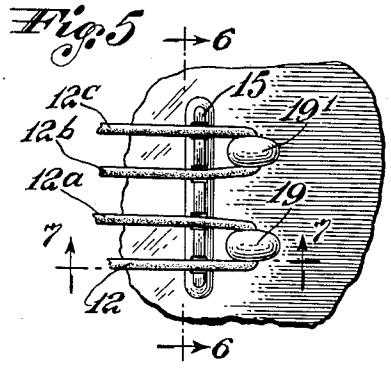


Fig. 6

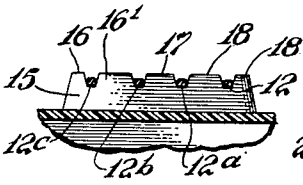


Fig. 7

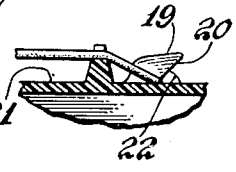


Fig. 10

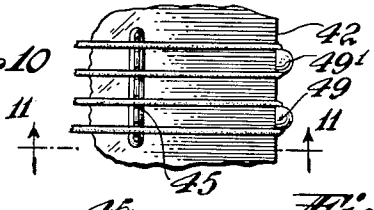


Fig. 8

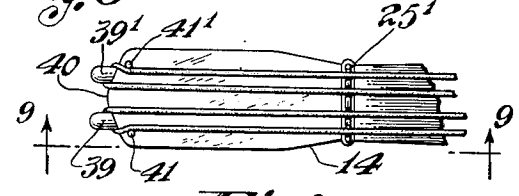


Fig. 11

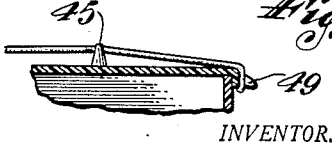
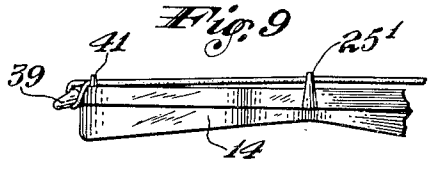


Fig. 9



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MINIATURE TOY STRING INSTRUMENT

Anton T. Cristell, Scotch Plains, N. J.

Application July 29, 1950, Serial No. 176,643

1 Claim. (Cl. 84—297)

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This invention relates to miniature toy string instruments. It is an object of the invention to provide an instrument of the type referred to having novel structural features for holding strings to be vibrated and adapted to be readily manufactured in quantity production at a very low price range so as to make it available to a large segment of the purchasing public.

These and other advantageous objects, which will appear from the drawings and from the description hereinafter, are accomplished by the structure of my invention, of which embodiments are illustrated in the drawings. It will be apparent, from a consideration of said drawings and the following description, that the invention may be embodied in other forms suggested thereby, and such other forms as come within the scope of the appended claim are to be considered within the scope and purview of the instant invention.

In the drawings:

Fig. 1 is a top plan view of a string instrument embodying the invention,

Fig. 2 is an enlarged fragmentary sectional view thereof, taken on line 2—2 of Fig. 1,

Fig. 3 is a vertical sectional view taken on line 3—3 of Fig. 2,

Fig. 4 is an enlarged vertical sectional view, taken on line 4—4 of Fig. 2,

Fig. 5 is a fragmentary enlarged plan view, taken on line 5—5 of Fig. 1,

Fig. 6 is a vertical fragmentary sectional view, taken on line 6—6 of Fig. 5,

Fig. 7 is a fragmentary vertical sectional view taken on line 7—7 of Fig. 5,

Fig. 8 is a fragmentary plan view of one end of another form of string instrument embodying the invention,

Fig. 9 is a side elevational view thereof, taken on line 9—9 of Fig. 8,

Fig. 10 is a fragmentary plan view of another form of string instrument embodying the invention, and

Fig. 11 is a vertical sectional view taken on line 11—11 of Fig. 10.

As shown in the drawings, the string instrument I of my invention comprises a body member 10 having an elongated neck portion 11 of less width than the body portion at one end defining therewith the outline of a string instrument. The instrument may be manufactured in the form shown in the drawings by the utilization of any conventional manufacturing process and materials and may be made of a plastic material including a top plate 13 which is generally

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flat, and a bottom shell 14 of three dimensions secured to the plate 13 by gluing same thereto or otherwise securing the same to said plate and defining therewith the configuration of a string instrument in miniature. The plate and shell may be made of the same or contrasting colors. The body member 10 is provided with a string aligning bar 15 which is disposed transversely to the general longitudinal axis of the instrument and is provided (Fig. 6) with studs 16, 16', 17, 18, 18' extending upwardly of said plate in spaced relation, said studs being of frusto-conical outline and defining therebetween spaced wedge-shaped guide pockets to receive the strings 12, 12a, 12b, 12c of the instrument. The body member is further provided with a lug 19 spaced from and aligned with a pair of said studs and cooperating therewith to define means for holding the ends of said strings on the body member. The lug 19 (Fig. 7) is provided with an undercut face 20 remote from aligning bar 15 on which the end of the string may be anchored, and defining, with the surface 21 of body 10, an acute angle 22. A second lug 19' may be provided for a similar purpose, as shown in Fig. 1. The neck portion 11 of the instrument is provided with a neck bar 25 disposed in generally transverse relation to the longitudinal axis of the instrument, said bar being preferably of the same general configuration as the bar 15 and serving the same purpose at the neck end of the instrument.

Lugs 29, 29' on the neck end of the instrument (Figs. 2 and 4) cooperate with neck bar 25 to hold the ends of the strings in a manner corresponding to that above described in connection with lugs 19, 19' of the body end of the instrument. The lugs 19, 19' and 29, 29' are aligned with the studs of the bars 15, 25 and may be disposed either immediately adjacent said bars as in Fig. 1, or remote therefrom as in Fig. 8. In the latter case, the neck bar 25' is provided, corresponding generally with bar 25 in Fig. 2, but the studs 39, 39' in Fig. 8 example are spaced substantially from bar 25' and, in fact, project beyond the free end 40 of the neck portion of the instrument. If desired, pins 41, 41' may be provided adjacent said lugs inwardly of the free end of the neck portion of the instrument in the form shown in Fig. 8 to cooperate with said lugs and bar in the holding of the strings. The other end of the instrument may likewise be provided with lugs 49, 49' (Fig. 10) located remote from the bar 45 and overhanging the body end 42 of the instrument.

The structure above described, makes it pos-

sible to utilize a flexible and stretchable unit to define two strings, as, for example, the strings 12, 12a. The flexible unit is looped over a lug at one end of the instrument, as, for example, the neck end thereof, and looped over the aligned lug at the other end of the instrument, the portions of the unit intermediate the lugs readily aligning themselves within the pockets defined between the studs of bars 15, 25. The units described above may be of generally ovate outline and may be made of a relatively stretchable material of elastic characteristics which is initially of loop or ovate form substantially less length than in the attached form, shown in Fig. 1, and may be readily stretched to that form. In Fig. 1, two such units are provided. It will be apparent that the number might be increased or decreased to suit the requirements of the particular instrument made pursuant to the invention. The invention is applicable to any form of string instrument which may be simulated by forming the body member and neck portion in the outline required for simulation purposes.

The flexible unit which constitutes the strings 12, 12a, may be an elastic band which is stretched to a length several times greater than normal and engaged over the members 29, 19 to hold the band in taut, highly stretched condition, so that it will have a high degree of vibration and resonance when struck or plucked. The same observation is applicable to the flexible unit which constitutes the strings 12b, 12c.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

A toy stringed instrument comprising a body, a neck extending from said body, a bar integrally formed on said body and extending transversely thereof, a second bar integrally formed on and extending transversely of said neck, said bars being formed with string-receiving recesses spaced from each other longitudinally of the bars, lugs formed on said body and said neck and spaced from the outer sides of the bars, the lugs on the body and the neck being arranged between pairs of adjacent recesses, and pairs of strings extending longitudinally of the body and the neck, each pair of strings consisting of a rubber band stretched longitudinally and having its end portions passing through pairs of recesses in the bars, the ends of the stretched rubber bands being looped around the respective lugs on the body and the neck, said lugs having round ends remote from the respective bars, and being undercut to retain the ends of the stretched rubber bands on the lugs.

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