

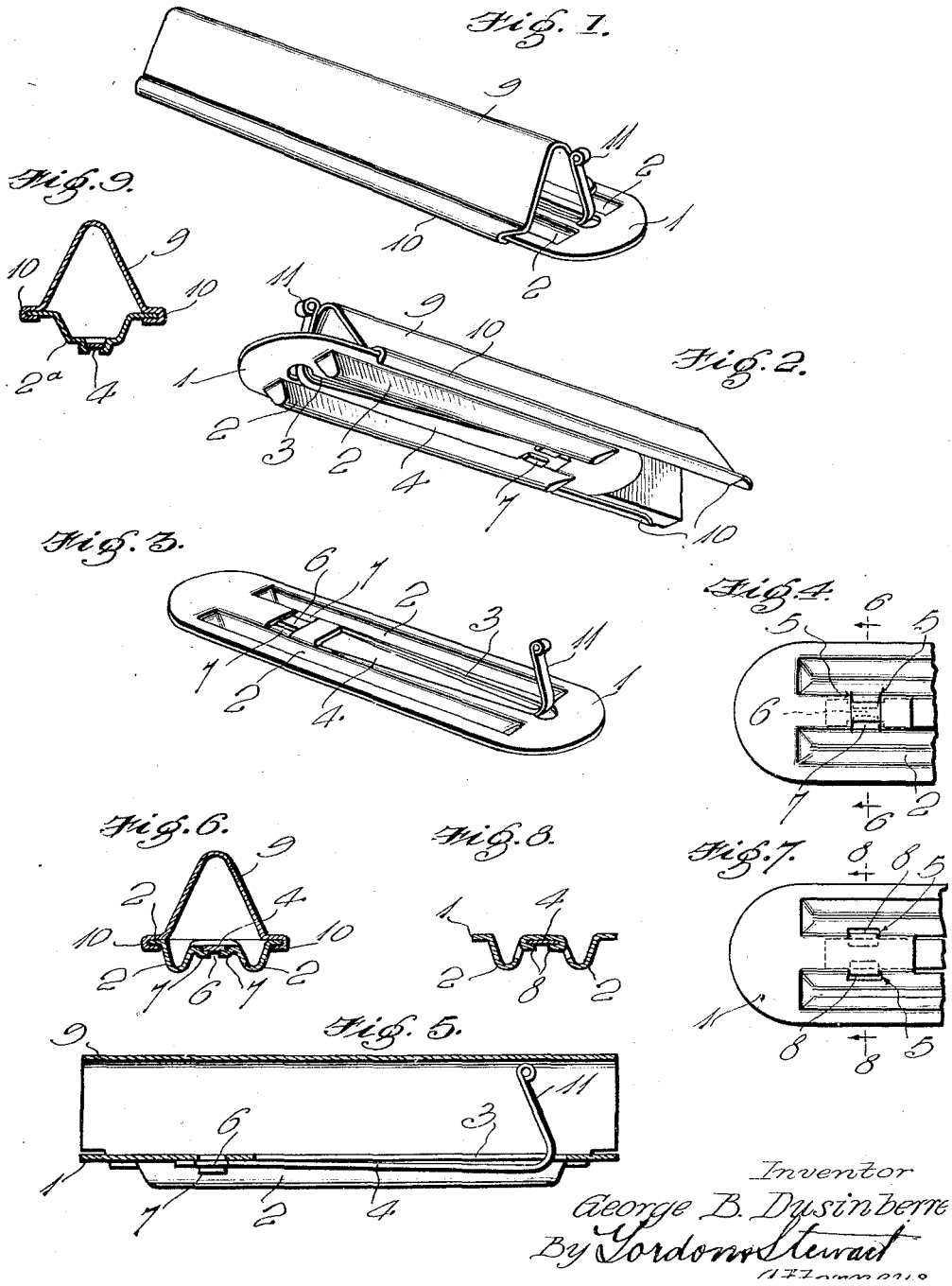
Dec. 6, 1927.

G. B. DUSINBERRE

1,651,448

JEW'S HARP

Filed Oct. 22, 1926



Inventor
George B. Dusinberre
By Gordon Stewart
ATTORNEY

UNITED STATES PATENT OFFICE.

GEORGE B. DUSINBERRE, OF WELLSBORO, PENNSYLVANIA.

JEW'S-HARP.

Application filed October 22, 1926. Serial No. 143,407.

The present invention is directed to a type of musical instrument generally known as the jew's-harp and which relies for its production of musical tones upon a vibrating tongue or reed located between two rigid members and held against the mouth of the player who by changing the form and shape of his oral cavity causes changes in the pitch of the sounds produced by the reed.

It is an object of the present invention to provide an instrument of the class described in which a rigid frame construction of stamped metal is utilized.

A further object of the present invention is the provision of a protective cover for the vibrating portion of the instrument.

A still further object of the present invention is to provide a finger guide to insure proper manipulation of the reed.

It is a still further object of the present invention to provide an improved method of fastening the reed in the frame.

Further objects will be apparent from the following specification and drawings which are illustrative of one embodiment of the invention.

In the drawings which form a part of this specification and in which similar reference characters indicate corresponding parts of all the views;

Figure 1 is a perspective view of the embodiment described;

Fig. 2 is a second perspective view of the complete instrument viewed from the bottom;

Fig. 3 is a perspective view of the reed plate with the cover removed;

Fig. 4 is a plan view of one end of the reed plate showing a method of fastening the reed in place;

Fig. 5 is a cross section of the complete instrument;

Fig. 6 is a sectional view of Fig. 4 taken along the section lines 6—6;

Fig. 7 is a view showing a modified form of mounting the reed; and

Fig. 8 is a sectional view taken along the section line 8—8 of Fig. 7.

Fig. 9 is a sectional view of a modified form of the instrument.

In the embodiment disclosed in the drawing, the instrument comprises a stamped metal reed plate 1 formed with depressed channels 2 which give the necessary rigidity and strength to the plate. These channels may consist of depressions on the sides only

as shown, or the channeled portion may be carried around the ends so that a continuous channel is formed entirely around the plates, this latter form of channel being desirable if relatively thin material is used for the base plate. The channels 2 besides forming strengthening members for the base plate 1 act as rests against which the teeth of the player are placed so that the instrument may be properly located with respect to the oral cavity. A narrow tapering opening 3 is formed in the reed plate between two channel portions 2 in which a vibrating reed 4 is mounted.

As shown in Figs. 3, 4 and 6 the inner end of the reed 4 is fastened to the reed plate 1 by cutting the metal of the base plate with two parallel cuts 5, 5 and then forming tongues by a third cut of the metal indicated at 6. The two tongues 7, 7, thus formed may be deformed or pressed down on the vibrating reed 4 after the same has been placed in position thereby holding it rigidly with reference to the reed plate and the slot 3.

Figs. 7 and 8 illustrate a slightly modified manner of attaching the reed which consists in stamping out tongues 8, 8 out of the channel or ridge portions 2, 2 which tongues can be subsequently folded or deformed over the end of the reed after the same has been placed in its proper position with respect to the reed plate 1. Various other methods of fastening the reed to the base plate may be employed such as spot welding or riveting.

A cover 9 also formed of sheet metal may be provided, which cover is of substantially inverted V-shape and is formed at its lower end with reentrant flanges 10, 10. These reentrant flanges form a channel or guide for the reception of the reed plate 1 and in the form shown, permit the cover to be moved relative to the reed plate along the axis thereof. The reed 4 of the instrument has an operative upstanding member 11 which is manipulated by the finger of the player to set the reed in vibration and the height of the inverted V-shaped cover 9 is such that when the cover is entirely in place over the reed plate it will entirely cover the reed and its upstanding portion 11 thus protecting the delicate portions of the instrument from injury which makes it possible to carry the instrument in the pocket without damage. The position of the cover for

this purpose is shown in the sectional view of Fig. 5.

When it is desired to play the instrument, the cover is moved with respect to the reed plate into a position in which operative up-
 5 standing portion of the reed 11 is about a quarter of an inch from the cover 9, this position being shown in Fig. 1. In this position the finger of the player is guided properly
 10 against the reed tip 11 so that the reed is caused to vibrate freely, the finger always hitting the reed tip properly without the care and practice that is necessary with the conventional type of jew's-harp.

15 In the embodiment described the cover is guided with respect to the reed by the parallel sides of the reed plate 1 but the reed plate might in certain embodiments partake of other shapes than one with parallel sides,
 20 which would of course necessitate the use of other methods of mounting movable cover 9 on the reed plate.

A modification of the reed plate structure is shown in Fig. 9, which is a sectional view
 25 corresponding with Fig. 6 of the described embodiment. It will be noted that this modification instead of being formed with two separate strengthening channels, is stamped with but a single channel having
 30 walls 2^a with the reed 4 mounted between them.

Obviously the invention is not limited to the mechanical details herein illustrated when the same can be considerably varied
 35 without departure from the scope of the invention as defined in the appended claims.

What I claim is:

1. A jew's-harp including a frame formed of sheet metal and a movable protective casing.
 40

2. In a jew's-harp, a frame, a vibrating reed, a casing slidable on said frame and enclosing and protecting said reed.

3. In a jew's-harp, the combination of a
 45 frame, a vibrating reed, and a finger guide, adjustable with respect to said reed.

4. In a jew's-harp, the combination of a frame, a vibrating reed, a casing slidable on
 50 said frame, and in one position acting to protect said reed, and in another position serv-

ing as a guide for the finger in striking said reed.

5. In a jew's-harp a frame formed of sheet metal, and having a reed slot, a vibrating reed, and means for fastening said reed
 55 to said frame comprising two ribs struck out adjacent said reed slot and forming between them a depression in which one end of said reed is fastened by crimping the sides
 60 of the ribs.

6. In a jew's-harp a frame formed of sheet metal, a vibrating reed, and means for fastening said reed to said frame including
 65 tongues struck out from said sheet metal and forced into engaging relation with the end of said reed.

7. In a jew's-harp, a frame formed of sheet metal, a vibrating reed, and means for fastening said reed to said frame including
 70 tongues struck out from said sheet metal, folded over said reed adjacent one end thereof, and forced into engaging relation with said reed.

8. In a jew's-harp, the combination of a frame oblong in shape formed of sheet metal
 75 and having ribs struck up from said metal for stiffening said frame and for providing rests for the teeth of the player; a vibrating reed and means for fastening said reed to
 80 said frame; a protective casing substantially V-shaped in cross section and having grooves longitudinally of its edges engaging the longitudinal edges of said frame beyond
 85 said ribs and maintaining said casing slidably in position longitudinally of said frame, said casing in one position acting to protect said reed from damage when not in use, and in another position serving as a
 90 guide for the finger of the performer in striking said reed.

9. In a jew's-harp, the combination with a reed, of a frame formed of sheet metal and having a reed slot, and means adjacent one
 95 end of said reed slot for fastening said reed to said frame, the other end of said slot being formed with an enlarged aperture.

In testimony whereof, I have hereunto affixed my signature.

GEORGE B. DUSINBERRE.