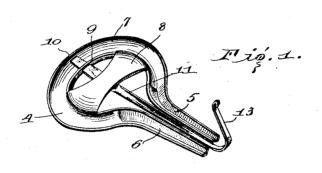
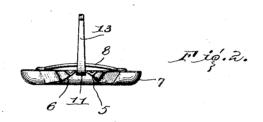
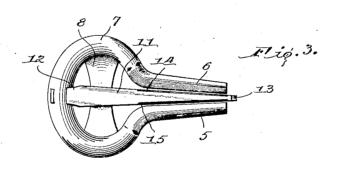
G. B. DUSINBERRE. JEW'S HARP. APPLICATION FILED APR. 26, 1921.

1,434,736.

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Jordon Stewart

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UNITED STATES PATENT OFFICE.

GEORGE B. DUSINBERRE, OF ELMIRA, NEW YORK, ASSIGNOR TO GLENORA HARMONICA COMPANY, INC., A. CORPORATION OF NEW YORK.

JEW'S-HARP.

Application filed April 26, 1921. Serial No. 464,628.

To all whom it may concern:

Be it known that I, George B. Dusin-BERRE, a citizen of the United States, and a resident of Elmira, county of Chemung and ⁵ State of New York, have invented certain new and useful Improvements in Jews'-Harps, of which the following is a full and complete specification, reference being had therein to the appended drawings.

My invention is addressed to the provision of an improved musical instrument of the type commonly known as the jew's-harp and which relies for its production of sound upon a reed vibrating in the space between two rigid members. It is an object of my invention to improve the material of which the frame of the instrument is made. According to my invention, the frame is constructed of sheet metal which insures the requisite rigidity and at the same time materially reduces the weight of the finished instrument.

It is likewise an object of my invention to provide reinforcing means integral with the frame and serving to render the latter both rigid and adapted for convenient handling by the player.

It is a further object of my invention to mount the vibrating reed in the frame in a

new and improved fashion.

Other objects of my invention will be evident from the following specificaion, due reference being had to the accompanying 35 drawings, in which

Fig. 1 is a perspective view; Fig. 2 is an end view, and

Fig. 3 is a bottom view of one form of my invention.

Musical instruments of this class are generally made of cast metal. When so constructed the intsrument while rigid is quite heavy and apt to be cumbersome. It is also found that inequalities or irregularities of 45 shape result from casting the frame.

Thave found that material improvement is obtained in constructing the frame of the jew's-harp from sheet metal by stamping operations. When this is done, the sheet

so metal blank is uniform in thickness and light in weight. When given the requisite shape by stamping the articles are uniform and conform closely to the pattern desired.

One form of my invention has been illus-55 trated in the drawings and consists in a

frame 4 made from a sheet metal blank. This blank is stamped into final form as shown in the drawings. The ends 5 and 6 of the frame are stamped into V-shaped cross section, clearly indicated in Fig. 2. The bight of the frame connecting the ends 5 and 6 is elliptical in shape as shown in 7. While this bight may be given a hollow Vshaped cross section similar to the ends 5 and 6, yet it is preferred to make this bight as 65 illustrated in circular cross-section. This is shown in Fig. 2.

Running across the major axis of the elliptical bight is an integral reinforcement 8. This member 8 which may be termed a cross plate is struck up from the blank during the stamping operation. It forms a finger rest for the operator and serves to maintain the parts of the frame rigid. The cross plate 8 is lifted above the upper plane 75 of the finger rest slightly as in Fig. 2 for the purpose of avoiding any interference with

the vibrating reed.

A slot is cut in the inner wall 9 of the 80 frame and registers with a corresponding slot in the outer wall 10 of the frame, both slots being at right angles to the axis of the cress plate 8. This brings the slots along the minor axis of the ellipse and opposite the opening between the ends 5 and 6.

A reed 11 of spring metal is provided with a tapered end 12. This tapered end is driven through the slots in the walls 9 and 10 of the frame and frictionally held in position. The 90 opposite portion of the reed 11 extends along the minor axis of the elliptical frame and is tapered to conform closely to the inner edges of the ends 5 and 6. The end of the reed may have parallel instead of tapered sides, and be held in two slots of equal size and upset to engage the reed. The extremity of the reed 11 is bent substantially at right angles to form a member 13 adapted to be engaged by the finger of the operator for the 100 purposes of setting the reed in vibration. The tapered edges of the reed are preferably sharpened to form edges 14 and 15 as shown in the drawings.

It will be apparent from Fig. 2 that the 105 stamping operation will leave the ends 5 and 6 with the sharp edges opposite the sharpened edges of the reed and closely parallel

therewith.

In using this instrument the cross plate 110

8 serves a dual function in that it provides integral with said frame and at right angles a rest for the fingers of the player and at to the reed. the same time prevents them from inter-fering with the vibration of the reed. The 5 ends 5 and 6 are, of course, held against the teeth of the player and free from vibration. edges pass close to the acute edges of the ends 5 and 6. This movement serves very 10 effectually to set up musical vibrations, the pitch of which is dependent upon the formation of the oral cavity by the player and is varied by the movement of his tongue. The mode of seating the end of the reed in the 15 two opposite walls of the handle definitely holds the reed in the proper position between the ends of the frame.

It will be evident from the above description that my invention provides an instru-20 ment which is adapted for economical manufacture with dimensions and proportions conforming closely to predetermined measurements. It also accomplishes a saving in material and is simple in assembly while 25 the cross plate serves to promote the rigid-

ity of the frame.

While I have illustrated a preferred form of my invention, it will be apparent that many changes may be made in material and 30 structure from that disclosed and yet within the scope of the appended claims.

What I claim is:

1. In a device of the class described, a frame, two arms extending therefrom, a reed 35 secured by one end to the frame and lying between the arms, and a cross-plate integral with said frame.

2. In a device of the class described, a frame, two arms extending therefrom, a reed secured by one end to the frame and lying between the arms, and a cross-plate

3. In a device of the class described, a frame, two arms extending therefrom, a 45 reed secured by one end to the frame and lying between the arms, and a cross-plate As the reed is set in motion its sharpened integral with said frame and lying out of the plane of the reed.

4. In a device of the class described, a 50 recessed frame, two recessed arms extending therefrom, and a reed secured by one end to the frame and lying between the

arms.

5. In a device of the class described, a 55 recessed frame, two recessed arms extending therefrom, a reed secured by one end to the side walls of the frame, and a plate on

said frame at an angle to said reed.
6. In a device of the class described, a 60 sheet metal frame of U-shaped cross section, two arms extending therefrom and being V-shaped in cross section, a reed secured by on end to the side walls of the frame and vibrating between the arms.

7. In a device of the class described, a frame, two channelled arms extending therefrom, said arms having sharp inner edges, a thin reed secured by one end to the frame and co-operating with the arms between the 70

sharp edges thereof.

8. In a device of the class described, a recessed frame, two arms extending therefrom, a thin reed co-operating with the arms between the edges, a slot in the inner and 75 in the outer side walls of the frame to receive one end of the reed and maintain the same in alignment between the arms.

In testimony whereof, I have hereunto

affixed my signature.

GEORGE B. DUSINBERRE.