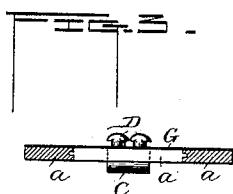
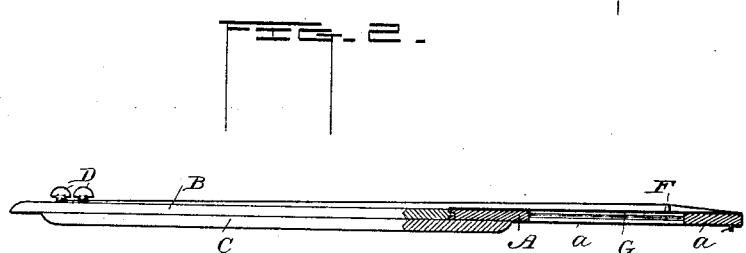
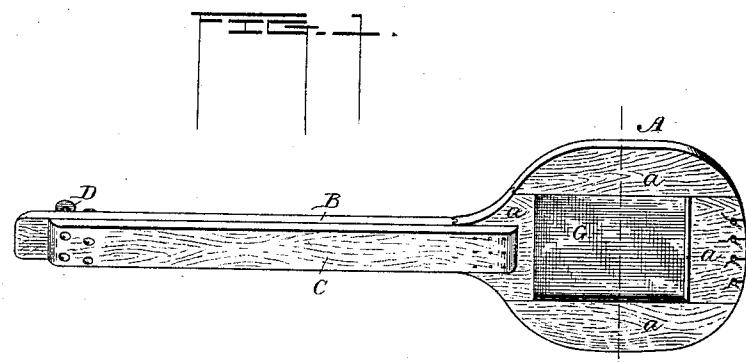


(No Model.)

F. W. CRANDALL.
TOY MUSICAL INSTRUMENT.

No. 452,835.

Patented May 26, 1891.



WITNESSES

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UNITED STATES PATENT OFFICE.

FRED W. CRANDALL, OF ELKLAND, PENNSYLVANIA.

TOY MUSICAL INSTRUMENT.

SPECIFICATION forming part of Letters Patent No. 452,835, dated May 26, 1891.

Application filed September 13, 1890. Serial No. 364,907. (No model.)

To all whom it may concern:

Be it known that I, FRED W. CRANDALL, a citizen of the United States, residing at Elkland, in the county of Tioga and State of Pennsylvania, have invented certain new and useful Improvements in Toy Musical Instruments; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

15 My invention relates to toys, and its object is to provide an improved head for resonant musical instruments—such as banjos, drums, tambourines, and the like—in which a sounding-board is formed by a stretched sheet of 20 elastic material. This is usually composed of parchment, which on account of its cost is not available for the construction of cheap instruments for children.

25 My invention aims to provide a cheap but reliable substitute for parchment; and it consists in a head made of paper or a combination of paper and cloth, as hereinafter set forth and claimed.

In the drawings, Figure 1 is a perspective 30 view of the under side of a toy banjo embodying my invention. Fig. 2 is a longitudinal section, and Fig. 3 is a cross-section.

The frame A for the head may be composed of four pieces of wood *a*, tongued and grooved 35 together to form a flat open frame. The corners may be rounded off, as shown, or any other desired shape may be given to the frame. It can, if desired, be sawed out of a single piece, or be composed of a hoop or a box with 40 walls of some height, with or without a bottom. In fact, the shape and construction of the frame A form no part of my invention,

and the construction shown is selected merely as illustrative.

To the frame A is secured the neck B. The 45 joint may be stiffened by a batten C, fastened beneath the neck and the side of the frame A.

At the outer end of the neck are inserted the straining-posts D, from which lead strings E of suitable material over the bridge F to the 50 foot of the frame A, where they are secured.

The bridge rests on the head G, which consists of a sheet of paper or a combination of paper and cloth stretched tightly over the frame A and fastened thereto by suitable 55 means, preferably by glue. When the head is made of paper, a tough thin grade should be selected, and just before gluing it to the frame it should be wet. Upon drying it will shrink and form a tight, smooth, resonant 60 head for the instrument. Instead of paper, I may use paper backed with cloth to give it greater strength.

This mode of construction conduces to the 65 production of children's toy banjos and other similar musical instruments at a very low cost, and yet such as possess sufficient musical merit to give instruction, as well as entertainment. If at any time the head becomes damaged, it can be replaced at a trifling cost. 70

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

A toy banjo consisting of an open frame A, a neck B, united thereto, a batten C for stiffening the frame and neck, and a head G of paper, substantially as described. 75

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

FRED W. CRANDALL.

Witnesses:

B. L. BALDWIN,
L. H. BALDWIN.