M. GALLY.

MUSICAL REED.

No. 315,493.

Parented Apr. 14, 1885.

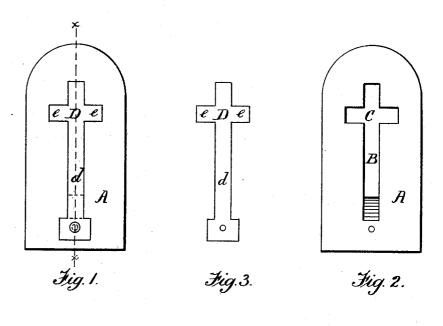


Fig. 4.

Fig. 5.

Merrett Gally

By Wallace a. Bartler.

UNITED STATES PATENT OFFICE,

MERRITT GALLY, OF NEW YORK, N. Y.

MUSICAL REED.

SPECIFICATION forming part of Letters Patent No. 315,493, dated April 14, 1885.

Application filed August 9, 1884. (No model.) Patented in England May 14, 1884, No. 7,708.

To all whom it may concern:

Be it known that I, MERRITT GALLY, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Musical Reeds, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention is patented in England, No. 10 7,708, of May 14, 1884, and in no other foreign country with the knowledge and consent of

this inventor.

My invention relates to musical reeds; and it consists in the construction hereinafter 15 pointed out and claimed.

The object of the invention is to produce a musical reed of greater power than the common straight-tongued reed.

The power and tone of a musical reed are 20 determined to a considerable extent by the extent of boundary of the reed-tongue.

Heretofore a reed-tongue has been made with a flared tongue—that is, the tongue at the end has been made wider than the body thereof. This construction gives a different tone to the reed from a straight tongue; but as the enlarged portion is at a considerable distance from the base of the tongue, the tongue does not respond very quickly to the movement of the valve.

My improved reed is constructed as shown in the drawings, in which Figure 1 is a plan view of the reed block and tongue. Fig. 2 is a similar view of the block with tongue removed. Fig. 3 is a view of the tongue. Fig. 4 is a side elevation. Fig. 5 is a section on

line x x, Fig. 1.

A indicates the body of the reed-block, of usual material and having, in addition to the usual longitudinal slot, B, a transverse slot, C, so that the two slots form a cross. The slot B may terminate toward the base of the reed in an incline, as is usual.

The tongue D is struck or cut out of one 45 piece of metal, and has a body portion, d, which corresponds with the usual straight reed-tongue, and a cross-piece or projections

from said body at *e e*, so that the vibrating portion of the tongue is a cross, a little less in dimensions than the slot in the reed-block. 50 The reed-tongue is secured to the block in usual way, either by a rivet, as shown, or by other known devices.

This reed may be used in organs, accordions, and similar musical instruments in the same 55 manner as the ordinary straight-tongued reed; but it gives a tone of much greater volume,

and can be easily tuned.

I do not herein claim, broadly, a reed having a tongue in a single piece, said tongue hav- 60 ing a plurality of prongs. The broader invention is described and claimed in my application filed February 18, 1884, to which the Patent Office gave the Serial No. 121,055.

The tone of this reed differs from that of 65 any other reed with which I am acquainted. This fact is, I think, caused by the metallic structure of the reed-tongue, which is cut from a rolled plate, the fiber of the metal being in the direction of the body of the tongue. The 70 fiber of the side extensions of the tongue, being in the direction of the length of the main body or stem, is crosswise of the branches, and the vibrations of these parts of the tongue are of a different character from the vibrations of the body portion.

I do not herein claim a reed having a plurality of tongues tied together by a unison-

bar.

What I claim is—

1. A musical reed-block having a cruciform slot for the tongue, substantially as described.

2. A cruciform tongue for a musical reed, composed of a single piece of metal, substantially as described.

3. The combination, with a reed-block having a cruciform slot, of a reed-tongue of corresponding form, substantially as described.

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

MERRITT GALLY.

Witnesses:

WM. A. GALLY, D. B. GALLY.