A. Newell,

Reeds for Organs.

No. 112,483. Patented Mar. 7, 1871.

Fig. 1.

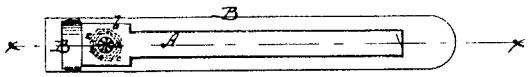

Fig. 2.

Fig. 3.

Witnesses:
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United States Patent Office.

AUGUSTUS NEWELL, OF CHICAGO, ILLINOIS.

Letters Patent No. 112,483, dated March 7, 1871.

IMPROVEMENT IN REEDS FOR ORGANS AND MELODEONS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, AUGUSTUS NEWELL, of Chicago, in the county of Cook and State of Illinois, have invented a new and improved Reed for Organs and Melodeons; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

Figure 1 represents a plan or top view of my improved reed for organs and melodeons.

Figure 2 is a longitudinal section of the same, *x x*, fig. 1, being the section line.

Figure 3 is an edge view, partly in section, of the same, showing it previous to completion.

Similar letters of reference indicate corresponding parts.

The object of this invention is to so construct the tongue-butts or shanks of musical reeds that the same cannot, during the vibratory motion of the tongues, be raised from their seats.

The principle of my invention consists in imparting a downward spring pressure to the edges of the tongue-butt, to take up the upward vibration of the tongue itself, yielding to it as it travels up, but following it as fast as it moves down.

Whenever straight tongues which are riveted or otherwise secured upon true block-faces are vibrated, they will be lifted from said block-faces right at the verges of the slots in which they play. The least displacement of the tongues at their butt ends will produce a disharmonious sound, which will materially reduce the value of the instrument of which they form a part.

To overcome this difficulty the bending of the tongues near their shoulders or butt ends has been proposed, so that the tongue can only play at the bends, and not influence the position of their butts. But this bending throws each tongue into the slot, and requires it to be bent back during tuning, making it liable to settle out of true, besides interfering with the tone and weakening the tongue.

In order to obtain the stated object without exposing my reed to the objections justly raised against other means toward the same end, I change the construction of the butt end, which is to be held steady, and do not interfere in the least with the position, shape, or operation of the tongue proper.

My invention consists in stretching or enlarging by mechanical means the upper surface of the tongue, imparting thereby a degree of spring to the butt end which will tend to retain the same at all times in proper contact with the block-face.

A in the drawing represents the tongue of a reed.

B is the plate or block, to which it is secured by a rivet or other fastening device, *a*.

The butt end or shank *b* of the tongue is stamped on its upper face to receive a series of indentures, grooves, or depressions, *c c*, of suitable shape. By such stamping the upper surface of said butt end is so much stretched as to spring and hold its lower face snugly upon the block-face during all vibrations of the tongue.

Preparatory to stamping, the butt end may be slightly crowned or made convex, as is shown, somewhat exaggerated, in fig. 3.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

The tongue A of a melodeon-reed, having its shank *b* grooved on the upper face, to give elasticity thereto and enable it to spring closely to its seat, when combined with the rivet and block, as set forth.

AUGUSTUS NEWELL.

Witnesses:

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