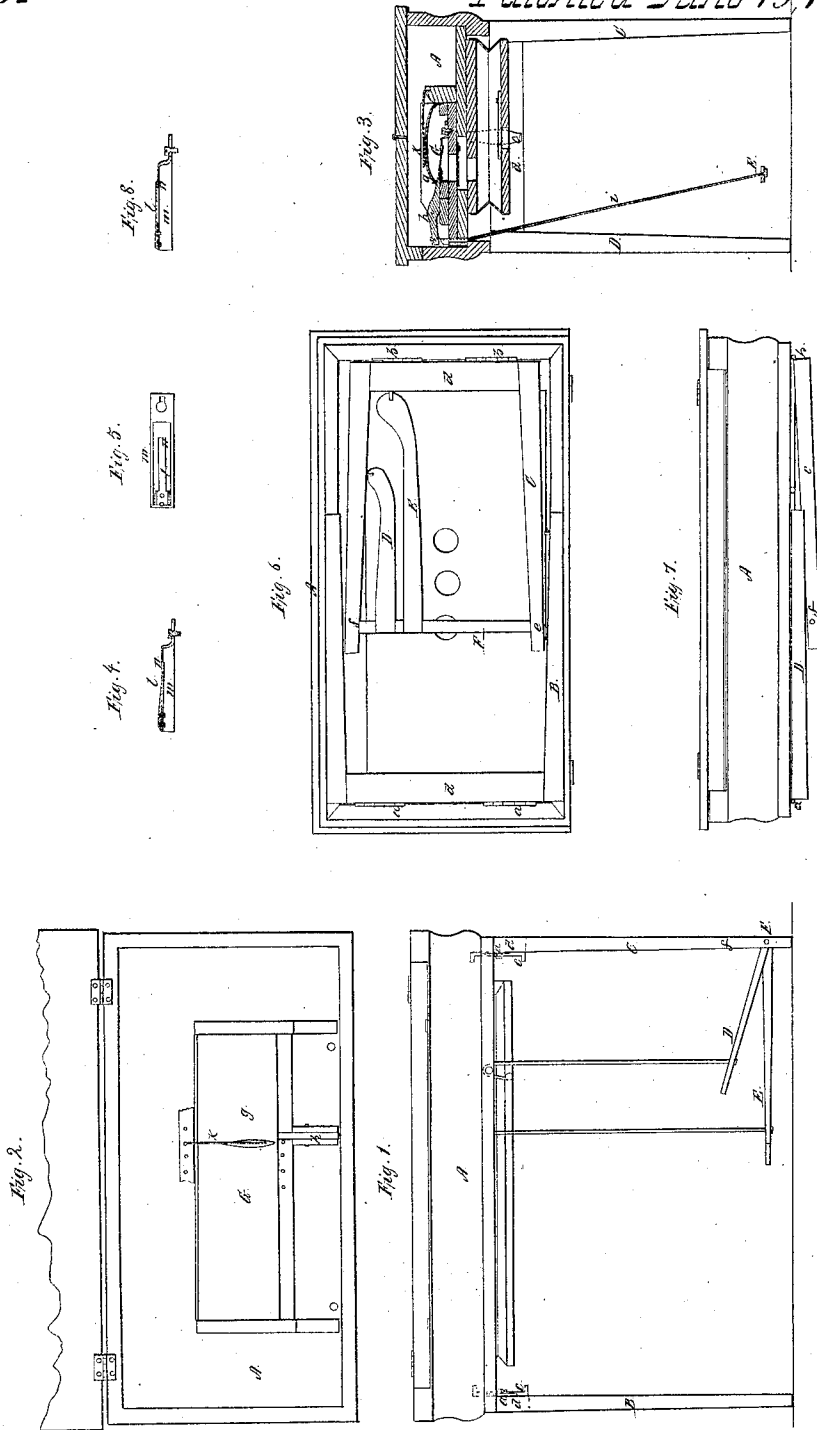


# C. Austin, Melodeon Reed

N<sup>o</sup> 6543.

Patented June 19, 1849.



# UNITED STATES PATENT OFFICE.

CHARLES AUSTIN, OF CONCORD, NEW HAMPSHIRE.

## MELODEON.

Specification of Letters Patent No. 6,543, dated June 19, 1849.

*To all whom it may concern:*

Be it known that I, CHARLES AUSTIN, of Concord, in the county of Merrimack and State of New Hampshire, have invented certain new and useful Improvements in the Reed Musical Instrument usually termed the "Melodeon;" and I do hereby declare that the same is fully described and represented in the following specification and accompanying drawings, letters, figures, and references thereof.

Of the said drawings, Figure 1, exhibits a front elevation of my improved instrument. Fig. 2, is a top view of it, the cover of the case being supposed to be removed, Fig. 3 is a transverse and vertical section of it taken through one of the reeds, Fig. 4, is a longitudinal section of one of the reeds, and reed holders, Fig. 5 is a top view of the same, the last two figures being of full size representations.

In said figures A, represents the case or body of the instrument, B, and C, are two pair of folding legs, which are respectively hinged to the ends of the case, by any number of hinges as seen at *a*, *b*, so as to allow of their being folded against the case (for the purpose of portability) as seen in Figs. 6, and 7, the former of which denotes a bottom view of the case, and legs, folded down upon or against it. The latter of said figures is a front view of said case and legs, when so folded together. Each set of legs when turned out in the position exhibited in Fig. 1, is kept there so long as may be necessary by a turn button *c*, which revolves on a pin or screw, inserted in the cross bar *d*, of either set of legs. When turned into a vertical position, the turn button holds the set of legs out at right angles to the plane of the bottom of the case.

D and E, are the bellows and swell pedals or pedal levers. They are applied to and turn upon a cross shaft F, (as a fulcrum) extending from the leg *e* to the leg *f*, of one set of legs, as seen in the Fig. 6. They are made to turn upon said shaft and so as to fold down with the set of legs, as seen in Fig. 6.

G represents the swell chest, within which

the reeds are usually situated. In all instruments I have seen, made by others, the top Z, of the said swell box has been made perfectly flat. I give to it or the bottom of it, the curved form as represented in section 55 in Fig. 3, and by so doing I find I produce a very perceptible improvement in the tone of the reeds, while a swell is being produced. The cover of said swell box, is raised by a lever *h*, which is connected to the 60 pedal below it, by a string *i*, or any other proper contrivance. A spring *k*, serves to press the cover down.

In Fig. 8, I have exhibited a longitudinal section of a reed *l* and reed holder *m*, as 65 they are usually constructed and arranged. In this it will be observed that the reed *l*, is not depressed below the opening or passage *n*, in the reed holder. The vibration of such a reed takes place in consequence of 70 the air being made to act against its underside throughout its length, or throughout the length of the opening *n*. In this case the air lifts the reed and passes between its bottom and the top edges of the opening *n*. 75

In my improved instrument each of the reeds is bent down, so that a part of it shall be below the bottom of the opening *n*, as seen in Fig. 4. When the reed is so bent down the air in vibrating it passes out of 80 the opening *n*, and over the top surface of the reed, and acts on only a part of said top surface, and in such manner, as to produce a highly important and exquisite improvement in the tone of the reed. 85

I claim—

My improved manner of arranging the reed with respect to the air passage or opening *n*, the same being represented in Fig. 4, and consisting in bending the thin end of the 90 reed down below the bottom of the opening substantially in manner and so as to allow the air to operate on it as explained.

In testimony whereof I have hereto set my signature this sixth day of October A. D. 95 1847.

CHARLES AUSTIN.

Witnesses:

JNO. WHIPPLE,  
J. E. LANG.