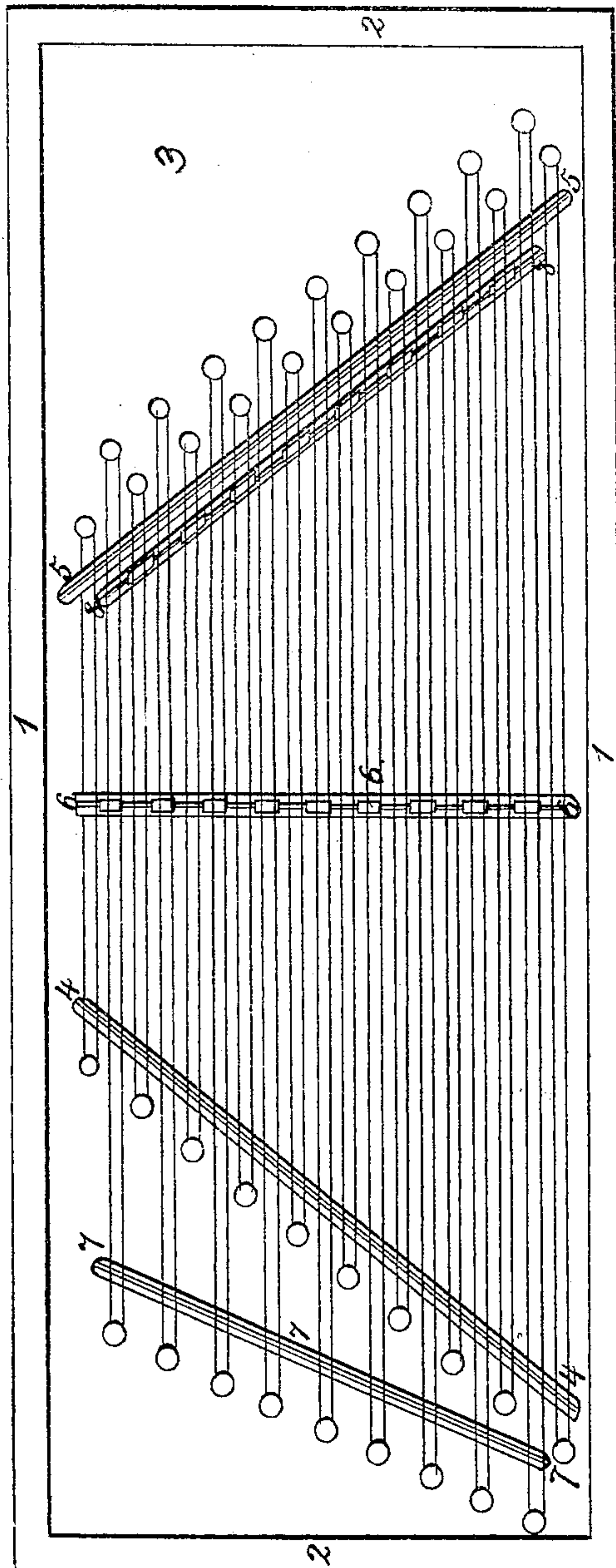


J. LOW.
DULCIMER.

No. 28,811.

Patented June 19, 1860.



Witnesses.

John Cummly
Thos D How

Inventor.

John Low

UNITED STATES PATENT OFFICE.

JOHN LOW, OF CLINTON, MASSACHUSETTS, ASSIGNOR TO NATHAN BRUCE, OF
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DULCIMER.

Specification of Letters Patent No. 28,811, dated June 19, 1860.

To all whom it may concern:

Be it known that I, JOHN LOW, of Clinton, in the county of Worcester and State of Massachusetts, have invented an Improvement in Dulcimers, the construction and operation of which I have described in the following specification and illustrated in its accompanying drawings with sufficient clearness to enable competent and skilful workmen in the arts to which it pertains or is most nearly allied to make and use my invention.

In the common dulcimer the operative portion of the strings which give the higher notes are divided into two parts by a bridge in such a manner and proportion as to cause that part of the same string which lies at the left hand side of this bridge to give a tone one fifth higher than that part of it which lies at the right hand side of it. This plan of division gives an inconvenient arrangement of the scale, and is otherwise objectionable.

My said invention consists in the arrangement of the strings in such a manner as to cause that part of each string which is upon one side of the said bridge to give a tone a half note higher than that part of it which is upon the other side of it, thereby producing a more convenient arrangement to operate, and giving to the instrument a more harmonious action, as hereinafter more fully set forth.

The accompanying drawing is a plan of my improved instrument.

1, and 2, are the sides and ends of the case. 3 is the sounding board.

4, and 5, are the two bridges which support the ends of the main strings of the instrument.

6 is the dividing bridge by which the proportionate pitch of the parts of each string is regulated. This is so placed with reference to the bridges 4 and 5, as to cause that

part of each string which is at the left hand side of this bridge to give a tone a chromatic interval higher than that portion of the same string which is at the right hand of it; the proportionate lengths of the two parts is as 1 to .944. It is obvious that the bridge may be set over the same distance upon the opposite side so as to give the same difference in the opposite direction should such an arrangement by any means or for any purpose be desired.

The long strings are supported upon separate bridges 7, and 8, as shown in the drawings, and pass through notches in the central bridge in the usual manner.

The arrangement I have described enables the operator to perform the music with greater ease and convenience, and besides otherwise operating advantageously, gives less tendency to the string to slip upon the bridge from expansion and contraction caused by atmospheric changes, and the instrument is therefore less likely to get out of tune. It also gives a systematic chromatic scale, while the common arrangement gives only a diatonic scale which is much inferior for practical purposes. The advantage in this respect of my arrangement is very important in its effect upon the capabilities of the instrument.

Having fully described my said invention, I claim—

The arrangement as described of the central bridge 6, in relation to, and in combination with the bridges 4 and 5, in the manner described, by which one part of each string is made to give a single chromatic interval of pitch higher than the other part, substantially as and for the purposes set forth.

JOHN LOW.

Witnesses:

S. D. DAVENPORT,
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