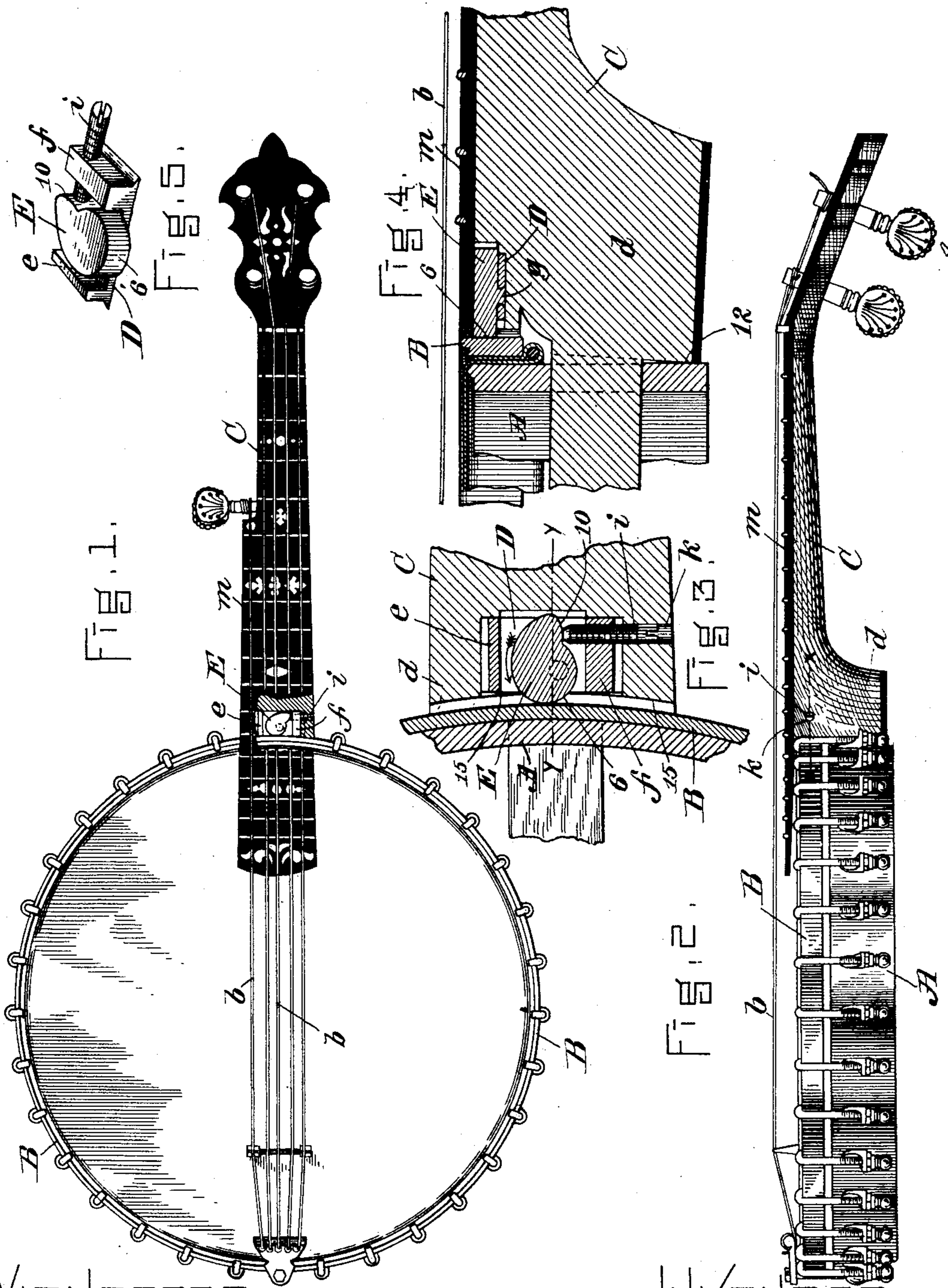


(No Model.)

B. E. SHATTUCK.
BANJO.

No. 476,083.

Patented May 31, 1892.



WITNESSES.

Henry Marsh.
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INVENTOR.

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Attg.

UNITED STATES PATENT OFFICE.

BURT E. SHATTUCK, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE L. B. GATCOMB COMPANY, OF SAME PLACE.

BANJO.

SPECIFICATION forming part of Letters Patent No. 476,083, dated May 31, 1892.

Application filed August 5, 1891. Serial No. 401,787. (No model.)

To all whom it may concern:

Be it known that I, BURT E. SHATTUCK, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Banjos, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a front view of a banjo embodying my invention, a portion of the heel end of the neck or arm being broken away. Fig. 2 is a side view of the same. Fig. 3 is an enlarged horizontal section on the line $x x$ of Fig. 2. Fig. 4 is a vertical section on the line $y y$ of Fig. 3. Fig. 5 is a perspective view of the spreader or separating device detached.

The constant strain of the strings of a banjo upon the outer end of its neck or arm tends to draw the latter upward, and thereby raise the strings too far above the finger-board, which injures the tone of the instrument and renders it difficult to keep it in tune. To provide a simple and effective device for regulating the pitch of the neck with respect to the rim, and thereby keeping the strings at their proper distance from the finger-board, is the object of my invention, which consists in providing the upper portion of the heel end of the neck of a banjo with a device of novel construction, whereby it is forced away or separated from the top hoop to vary the pitch or inclination of the neck or arm, as herein- after more fully set forth.

In the said drawings, A represents the rim of a banjo, and B the top hoop.

C is the neck or arm, and b the strings. Within a suitable recess in the upper portion of the heel end d of the neck C is fitted a small metal plate D, having two ribs or flanges $e f$, between which is placed a heart-shaped cam or bearing piece E, provided with a stud g , Fig. 4, which fits into a hole in the plate D, said stud, which is on one side of the center of the cam, forming a pivot therefor, and also serving, by reason of being lightly riveted at the back of the plate, to prevent the cam from being separated therefrom.

The cam E is adapted to bear constantly against the top hoop B of the banjo, as seen

in Figs. 1, 3, and 4, and is actuated to cause its rounded end 6 to project more or less beyond the inner end of the plate D, and thereby force the adjacent portion of the heel end of the neck away from the hoop B by a regulating-screw i , which passes through the flange f and bears against the projecting portion 10 of the cam E, the head of the screw i lying in an aperture k , formed in the side of the neck C and being accessible from the outside of the same, so that it can be turned by a screw-driver to move the cam in the direction of the arrow, Fig. 3, and thus force it against the hoop B, the outward thrust of the cam against the hoop at this point rocking the heel of the neck on its lower edge 12, which turns on the rim A as a fulcrum and producing a separation between the upper edge 15 of the heel of the neck and the hoop B, as seen in Figs. 3 and 4, whereby the pitch of the neck can be changed or adjusted in such manner as to at all times maintain the strings b at their proper distance from the fret or finger-board m , any change in the pitch of the neck caused by the strain of the strings thereupon being thus easily counteracted and compensated for by simply turning the regulating-screw i with a screw-driver, as above described.

The above-described spreader or separating device is simple, compact, inexpensive, and durable, while it is not liable to get out of order and can be easily applied to new instruments or to those already in use, and by this means the adjustment of the neck to vary its pitch can be readily effected without taking the instrument to pieces or removing the strings.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a banjo, the combination, with the rim, the top hoop B, and the neck or arm C, secured to the rim, of the cam or spreader E, pivoted to a plate fitted within a recess formed within the upper portion of the heel end of said neck or arm C and adapted to be forced out therefrom against the hoop or adjacent portion of the banjo, and the screw i , accessible from the outside of the neck and adapted to actuate the cam E, substantially as and for the purpose set forth.

2. In a banjo, the combination, with the

neck or arm C and the rim and top hoop, of a
separating device secured within a recess
formed within the upper portion of the heel
end of said neck or arm and adapted to pro-
5 duce a separation between said heel end of
the neck and the top hoop B, said separating
device consisting of a cam E, provided with
a projecting portion 10, a plate D, to which
said cam is pivoted, said plate having ribs or
10 flanges *e f*, and a screw *i*, accessible from the
outside of the neck and passing through the
flange *f*, said screw being adapted to bear

upon the portion 10 of the cam E, whereby
said cam is turned horizontally upon its pivot
in contact with the top hoop B, all constructed 15
and arranged to operate substantially as de-
scribed.

Witness my hand this 27th day of July, A.
D. 1891.

BURT E. SHATTUCK.

In presence of—

P. J. FARRELL,
M. B. THRASHER.