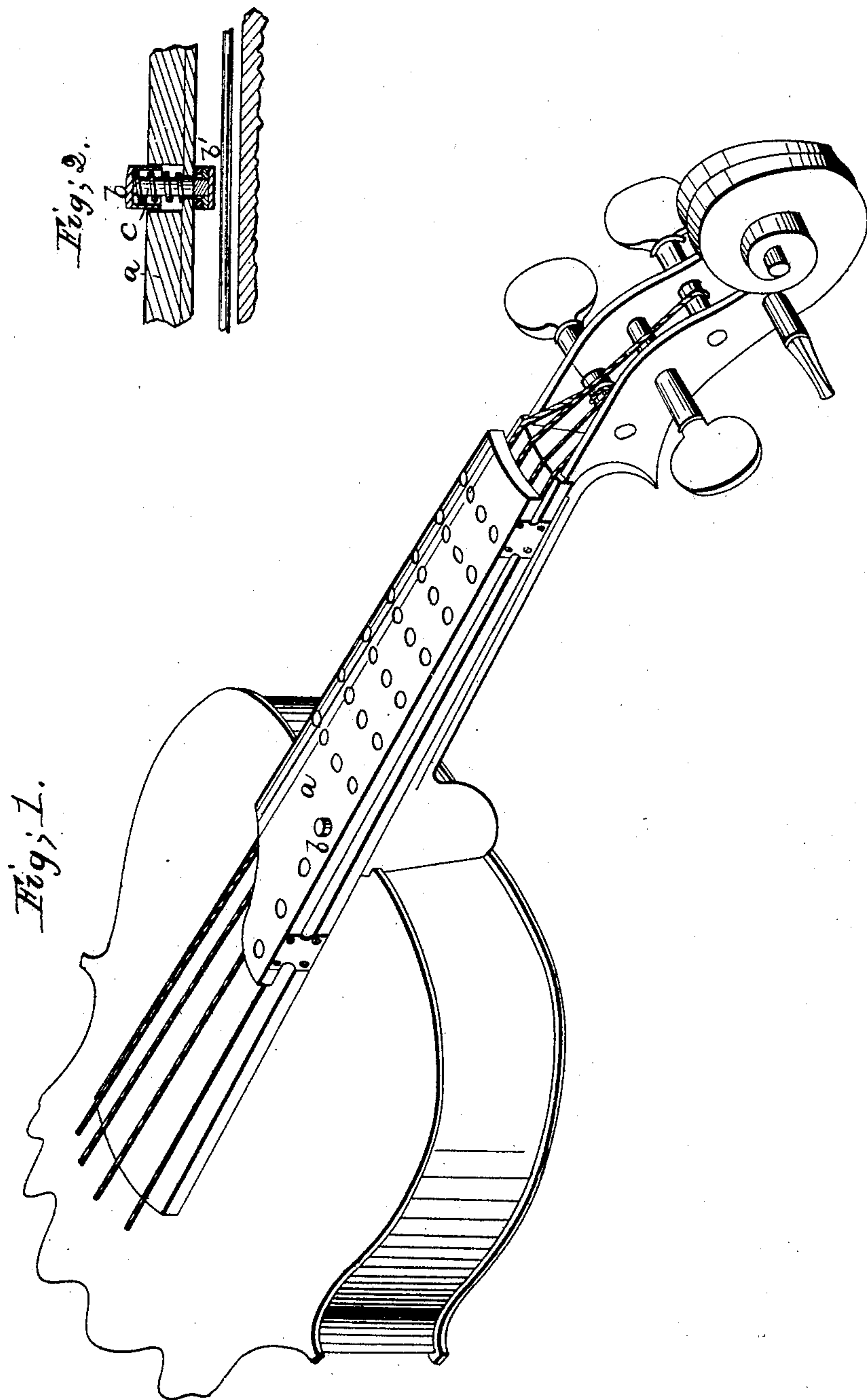


W. ROBERTSON.  
MUSICAL INSTRUMENT.

No. 10,213.

Patented Nov. 8, 1853.



# UNITED STATES PATENT OFFICE.

WILLIAM ROBERTSON, OF NEW YORK, N. Y.

## KEYED FINGER-BOARD FOR VIOLINS.

Specification of Letters Patent No. 10,213, dated November 8, 1853.

*To all whom it may concern:*

Be it known that I, WILLIAM ROBERTSON, of the city, county, and State of New York, have invented certain new and useful Improvements in Violins and other Stringed Musical Instruments; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being made to the annexed drawings, making a part of this specification, in which—

Figure I is a view in perspective of my invention as applied to a violin; Fig. II is a section in detail; and similar letters refer to similar parts throughout.

My invention has reference more particularly to stringed instruments where the sound is produced by vibrating strings by the friction of a bow drawn across them as in the violin. In all musical instruments of this character the different notes or tones must be produced by lengthening or shortening the strings; this as is well known, is done by the fingers playing along the finger board. To learn to finger correctly is the most difficult part for unless the string is stopped at the exact place a false tone will be given; hence a very nice ear is requisite.

My invention brings in mechanical aid to direct as to the precise spot to stop the string so that persons who do not intend to devote their time professionally to this peculiar class of instruments may yet become by a mechanical process as it were quite proficient.

The construction is as follows: I take a violin of ordinary construction and place immediately above the regular finger board another constructed very much like the first except in length. Between the upper and lower finger boards there is a space for the strings to pass without touching. This finger board is seen at (a) Fig. I in its proper place on the violin. A row of holes is made in (a) along the line of each string and immediately over them. The distance

that one hole is from another is such as to mark the proper spot on the lower finger board for stopping a string to sound a note say a full tone or semitone into each one of these holes is inserted a key shown at (b) and in the enlarged view Fig. II. This is a short round stud and when properly in place the top rises a little above the surface of the upper finger board. The bottom end projects through and is faced with a button of some proper flexible substance—a cork, leather, &c., as seen at (b') Fig. II which is a sectional view of the stud. Between the bottom and top a spiral or other spring (c) is placed which serves to keep the key or stud always up: each stud has play up and down in the holes in the finger board (a). The keyed finger board is fixed above the other one by short pillars screwed to the side or it may be hinged on one side and kept in place by a hook on the other. The object of a hinge is to afford more facility for taking it off when a string is to be replaced or when a person prefers to play on the instrument in the old way.

The operation is as follows each key or stud represents a certain note and the player presses down with the finger the proper one for sounding the desired note, the bow being drawn on the same string as usual, this stops the string at the right place so by drawing the bow in the usual manner the true note will be sounded.

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

Combining with the finger-board of a violin or musical instrument of like character a supplemental keyed finger board constructed and operating substantially as described.

WILLIAM ROBERTSON.

Witnesses:

S. H. MAYNARD,  
F. S. SWEET.