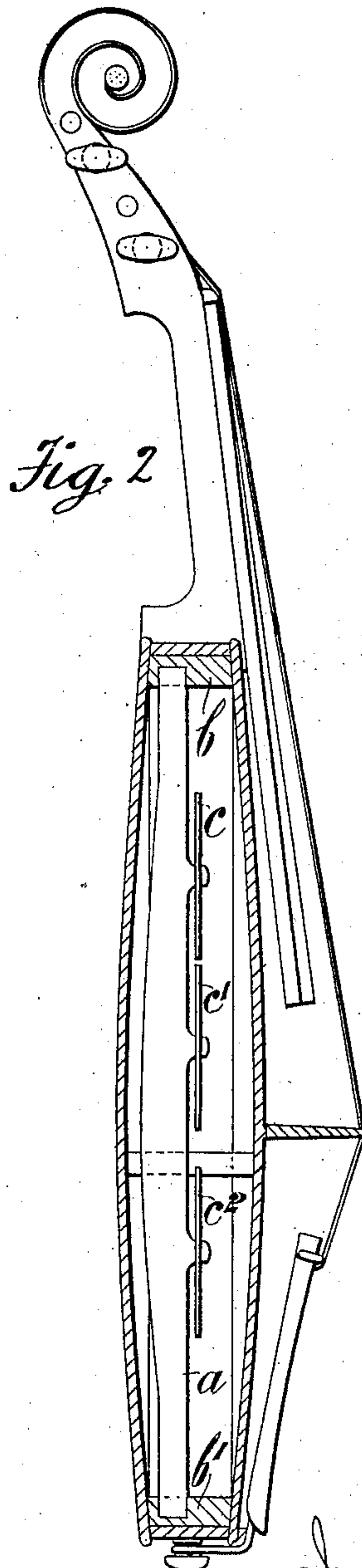
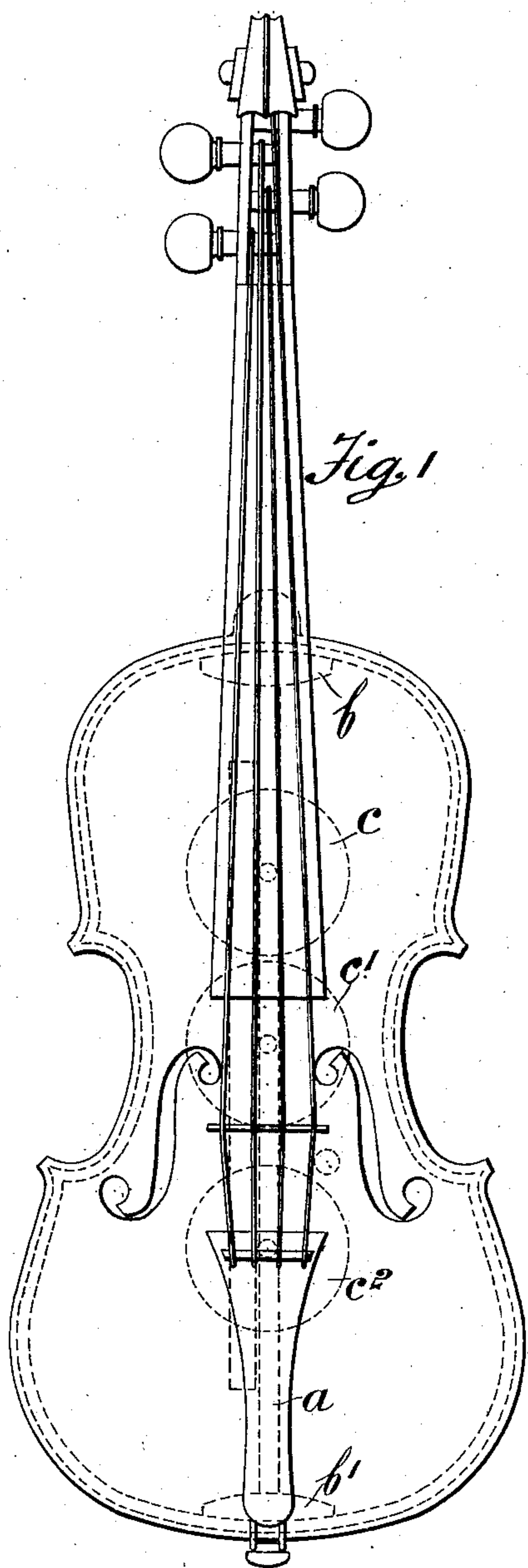


(No Model.)

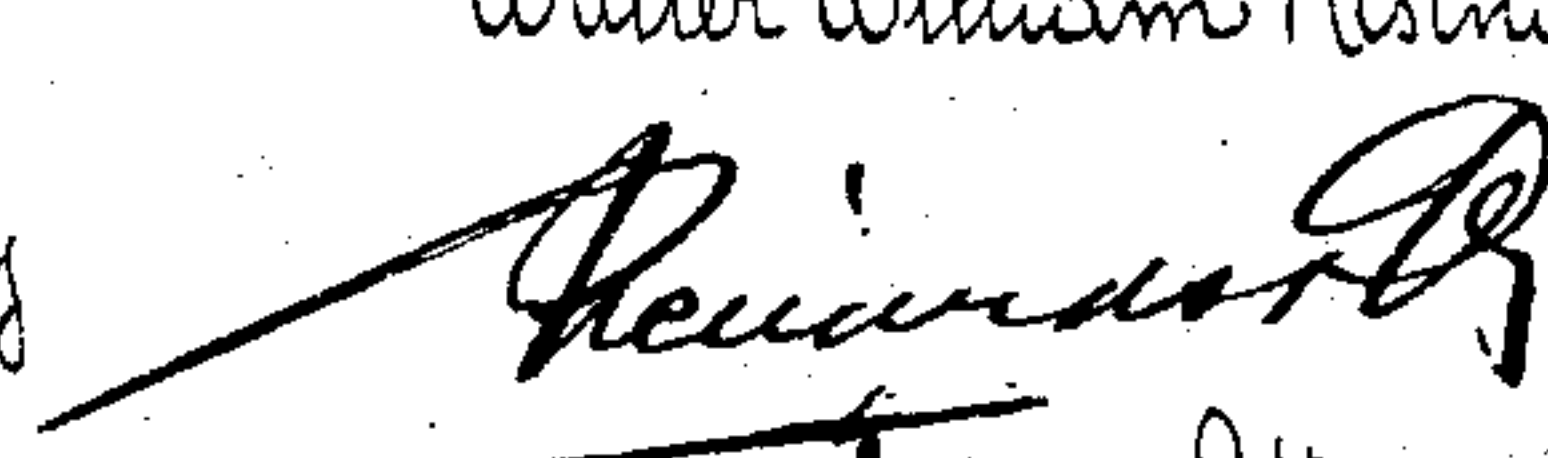
W. McKENZIE & W. W. RISING.
VIOLIN.

No. 567,607.

Patented Sept. 15, 1896.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM MCKENZIE AND WALTER WILLIAM RISING, OF WELLINGTON,
NEW ZEALAND.

VIOLIN.

SPECIFICATION forming part of Letters Patent No. 567,607, dated September 15, 1896.

Application filed June 12, 1896. Serial No. 595,285. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM MCKENZIE and WALTER WILLIAM RISING, subjects of the Queen of Great Britain, residing at 54 Lambton Quay, Wellington, in the Colony of New Zealand, have invented certain new and useful Improvements in Violins and the Like; and we do hereby declare that the following is a full, clear, and exact description of the invention.

Our invention relates to improvements whereby the tone of violins and like instruments is greatly improved in quality and volume.

Our invention consists in a bar secured inside the body of the instrument, extending longitudinally thereof, and having on its upper edge a series of projections at various points upon which a series of solid disks are supported by their centers, leaving the edge of the disks unattached.

In the drawings, Figure 1 is an exterior view of an ordinary violin with the usual bass-bar and sound-post. Fig. 2 is a longitudinal section of the same.

In the drawings, *a* is a horizontal bar supported at either end in the blocks *b* and *b'*, as

shown, and this bar has on its upper edge a series of projections or pins upon which glass disks *c c' c''* are supported by their centers. These disks are solid, about two and one-half inches in diameter, and about 15 wire-gage in thickness. The edges of these disks and, in fact, most of the body portions are left free and unattached, so that when the ordinary strings of the instrument are struck or actuated the said disks vibrate and the vibrations increase the volume of sound and the distance to which it is carried, and, moreover, the tone of the instrument is greatly improved in quality.

What we do claim as our invention, and desire to secure by Letters Patent, is—

In combination in a violin, a bar *a* extending longitudinally within the same and having projections at various points along its upper edge and a series of solid disks supported by their centers on the said projections leaving the edges of said solid disks free and unattached, substantially as described.

WILLIAM MCKENZIE.

WALTER WILLIAM RISING.

Witnesses:

W. E. HUGHES,
W. ALEXANDER.