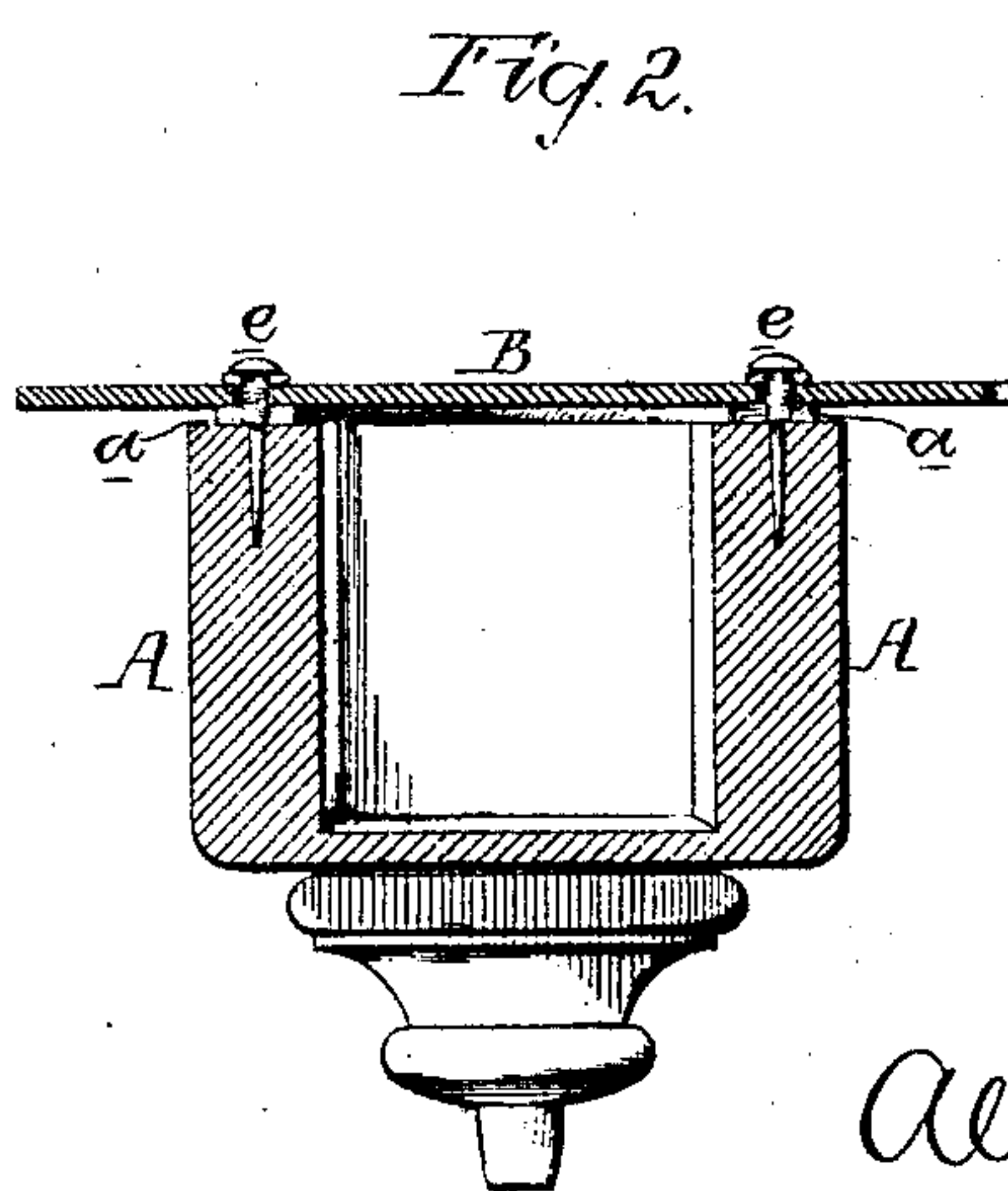
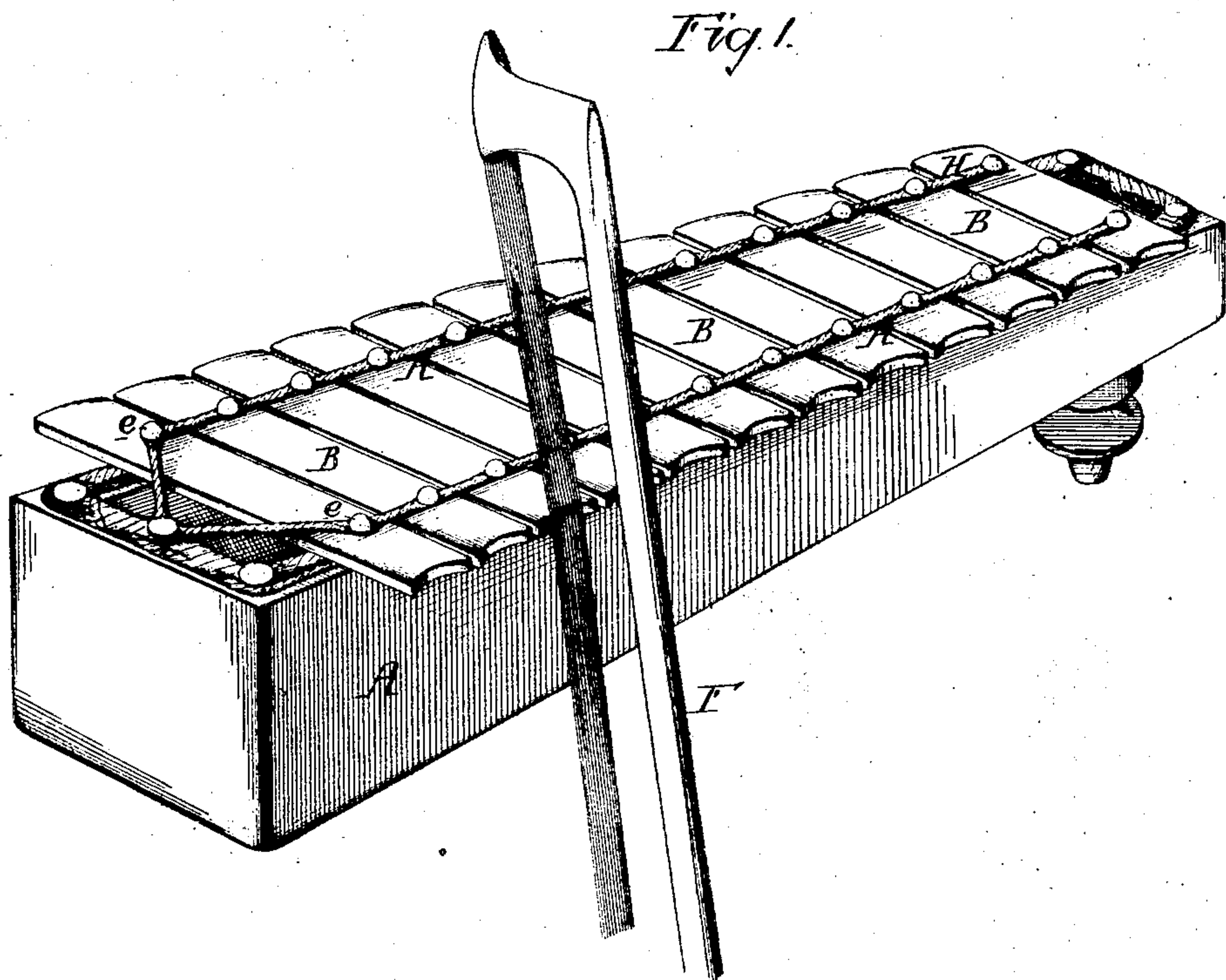


A. SCHOENHUT.
MUSICAL INSTRUMENT.

No. 183,977.

Patented Oct. 31, 1876.



Witnesses
Henry Howson Jr.
Harry Smith

Albert Schoenhut
by his Attorneys
Howson & Son

UNITED STATES PATENT OFFICE.

ALBERT SCHOENHUT, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN MUSICAL INSTRUMENTS.

Specification forming part of Letters Patent No. **183,977**, dated October 31, 1876; application filed September 26, 1876.

To all whom it may concern :

Be it known that I, ALBERT SCHOENHUT, of Philadelphia, Pennsylvania, have invented an Improved Musical Instrument and mode of playing thereon, of which the following is a specification :

My invention relates to that class of musical instruments composed of strips of glass, metal, or other resonant substances, which are usually sounded by impact; and my invention consists, first, in sounding such strips by friction on their ends; and, secondly, in constructing the instrument in the peculiar mode described hereafter, with the view of adapting it to the new mode of playing.

In the accompanying drawing, Figure 1 is a perspective view of the instrument, and Fig. 2 a transverse section of the same.

A is a sounding-box, made wider at one end than the other, and open at the top. B B are the strips, which I prefer to make of iron or steel, in the manner described in the Letters Patent No. 144,148, granted to me October 28, 1873. I attach these strips to the upper edges of the box, in the following manner: I secure a bed, *a*, of soft material, such as Berlin wool, or other flocculent yarn or soft yielding material, to the said edges, and then, placing the sounding-strips B in proper order on this bed, I drive two pins, *e e*, through holes in each strip, and through the bed *a* into the edges of the box, having first wrapped the pins with yarn, or so covered them with any other absorbent of sound that there can be no direct metallic contact of the strips with the pins. Between the heads of the pins and the upper surfaces of the strips intervenes the upper yarn H H, so that there may be no metallic contact between the said heads and the strips, which are, in fact, entirely isolated from both box and pins by soft cushions, which do not detract from the tones emitted from the said strips when friction is imparted to the ends by an ordinary bow, F, of a violin.

The hairs of the bow may be rubbed either downward or upward against the ends of the strips, the upper cushion preventing displacement of the strips or their contact with the heads of the pins during the upward movement of the bow.

In order that the hairs of the bow may be retained within proper limits when they are rubbed against the ends of the strips, I make the latter concave, as shown, so that they shall have a tendency to concentrate the hairs and insure their full frictional effect.

In playing on the instrument the bow should be applied to the concave ends of the strips with an abrupt stroke, somewhat like that adopted in playing on a bass-fiddle, so that the tones emitted may be clear and long-continued like those of an Æolian harp.

In place of the violinbow, a piece of well-rosined rawhide or leather, stretched to a suitable frame, may be used for imparting friction to the strips.

I claim as my invention—

1. A musical instrument in which a series of graduated resonant strips are combined with a sounding-box, substantially in the manner described, so as to permit the use of a bow or its equivalent in playing on the said instrument, as specified.

2. The combination of the sounding-strips with cushions above and below the same, and with cushioned pins for confining the strips.

3. The strips B, each having a concave end, as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALBERT SCHOENHUT.

Witnesses:

HENRY HOWSON, Jr.,
HARRY SMITH.