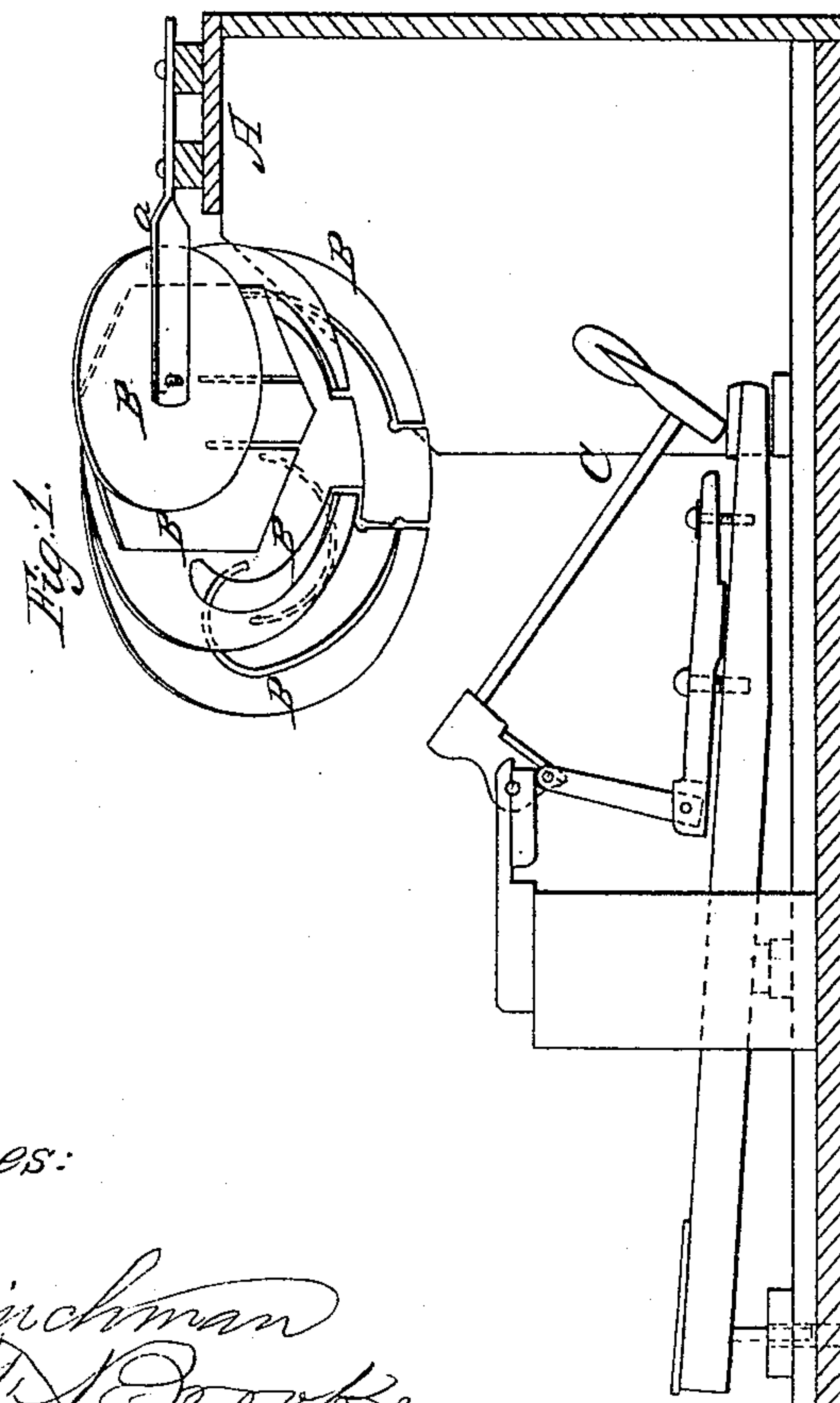
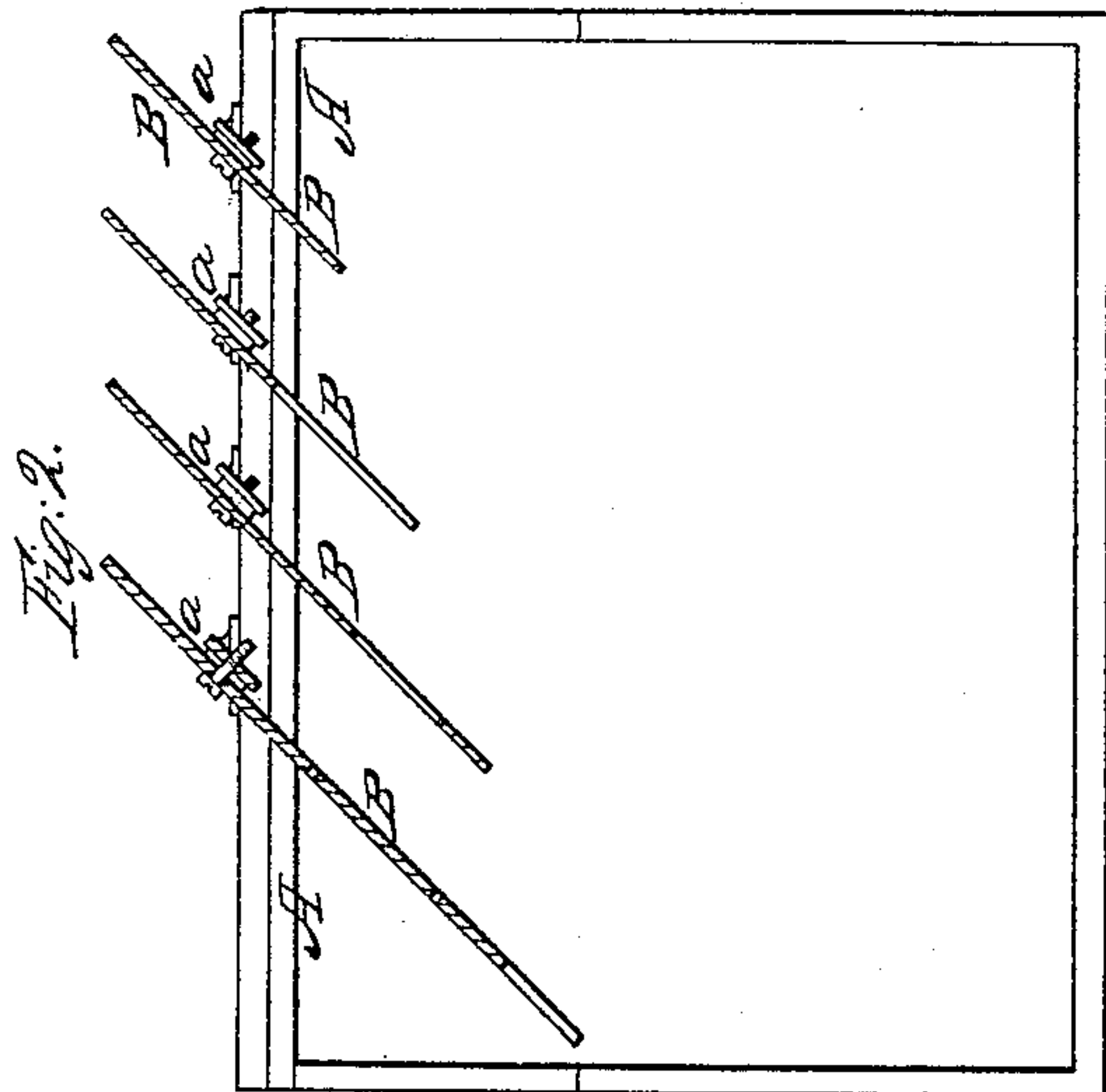


F. Suter

Musical Instrument

N^o 90,793.

Patented Jun. 1, 1869.



Witnesses:

Winchman
Geo. L. Brooks

Inventor:
F. Suter

PER *M. M. H. Co.*
Atty.

United States Patent Office.

FREDERICK SUTER, OF WILLIAMSBURG, NEW YORK.

Letters Patent No. 90,793, dated June 1, 1869.

MUSICAL INSTRUMENT.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, FREDERICK SUTER, of Williamsburg, Kings county, New York, have invented a new and improved Musical Instrument; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents an end elevation of my improved musical instrument.

Figure 2 is a vertical longitudinal section of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new musical apparatus which is operated by means of keys on a finger-board, like a piano-forte.

The invention consists in hanging a series of sonorous metallic disks in inclined positions upon horizontal arms projecting from the frame-work, and adapted to be struck from below by any suitable mechanism, as will be hereinafter more fully described.

A, in the drawing, represents a frame of suitable construction, on which a series of projecting arms, *a a*, is arranged at suitable distances apart.

B B are a series of metallic disks or plates of suit-

able form and thickness, fastened in suitable manner to the arms *a*. They are thus held at the requisite distances apart, so as to be within reach of a series of hammers, or other striking-devices, C.

The thickness and composition, as well as the form of each plate or disk, regulate the number of vibrations produced by it, and the consequent sound.

I propose to facilitate the regulation of the sounds by slotting or perforating some or all of the plates, as indicated in fig. 1, so that they may thereby be made more or less elastic, as may be desired.

The metals from which the disks or plates are made, must be of some metal or metallic alloy possessing sonorous qualities.

Having thus described my invention,

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

The sonorous metallic disks B, hung in inclined positions upon the arms *a*, and adapted to be struck from below by any suitable mechanism, as herein described for the purpose specified.

FRED. SUTER.

Witnesses:

FRANK BLOCKLEY,
ALEX. F. ROBERTS.