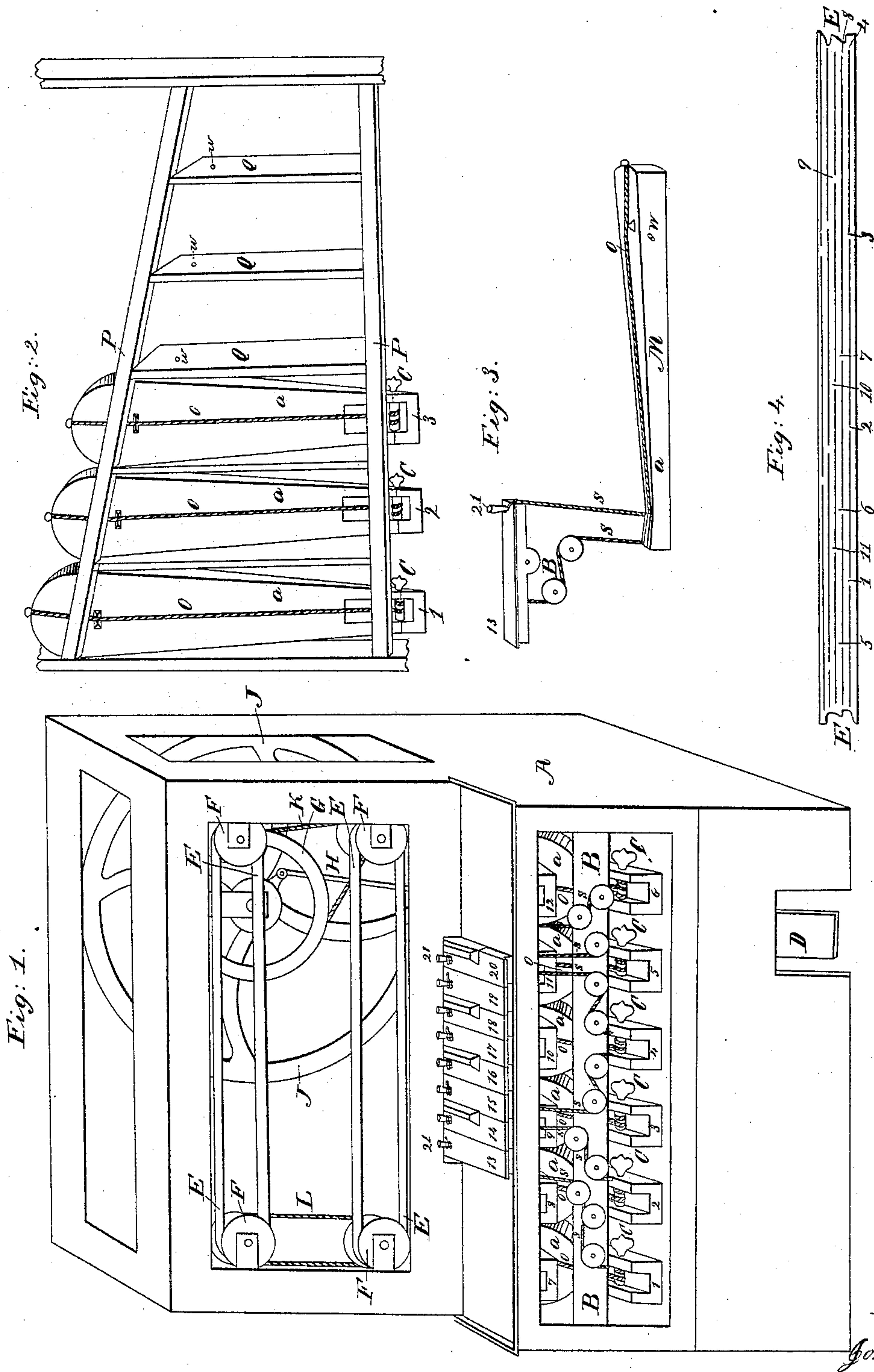


J. D. Akins,

Violin,

Nº 20,397.

Patented June 1, 1858.



Inventor;
John D. Akins

UNITED STATES PATENT OFFICE.

JNO. D. AKIN, OF SPARTANSBURG, PENNSYLVANIA.

MUSICAL INSTRUMENT.

Specification of Letters Patent No. 20,397, dated June 1, 1858.

To all whom it may concern:

Be it known that I, JOHN D. AKIN, of Spartansburg, in the county of Crawford, State of Pennsylvania, have invented a Violinellodian, a new and useful musical instrument; and I hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings and the letters of reference marked thereon.

Figure 1 is a perspective view of my machine with all its parts adjusted in working order.

A is the box or frame of my instrument. J, J, is a balance or fly wheel. This wheel is made to revolve by a crank *i* a pitman H and a treadle D which is worked by the foot of the operator.

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, are violin shells made to diminish in size from bass to tenor. These shells have one or two strings on each (as may be desired) attuned in unison by means of the keys *e, e, e, e, e, e*, constructed like those of a violin or bass viol. These violin shells are hung in a frame P, P, Fig. 2 by means of a pin W Fig. 3. placed in holes *w, w, w*, in the cross pieces Q, Q, Q, Fig. 2. There are four or more rows of shells as may be desired. The bottom row is suspended between the said cross pieces Q, Q, Q, with the strings up, the next with the strings down, the next row with the strings up, the next down and so on, leaving a space between the shells (as seen *a a a a a*, Fig. 1) sufficient for the bow to revolve between them, as hereafter described.

E E, E E, represent the bow; and for the purpose of better showing its construction the third and fourth rows of violins are not represented. This bow is constructed as follows to wit: E E, Fig. 4, is a strap of stretched leather made to revolve over the rollers F F, F F, Fig. 1, by means of a band $\frac{1}{2}$ from the band wheel, G, (which is bolted on the fly wheel J, J,) which passes around a groove in one end of the roller F. L is also a band from the lower roller F to the upper one F and by this construction all the rollers and bands are made to revolve by the treadle D. On the out side (*i. e.*, the side next to the violins) the horse hair is placed, and to make a smooth surface the hair is laid at irregular intervals, that is the hair 1 2 Fig. 4 is laid on the band, a hole

is made through the leather at 1 and 2 and the ends of the hair are put through and glued on the inside, (*i. e.* next the rollers), the hair 2, 3, is placed with its end as near as can be to 1, 2, and then 6, 7, is laid so as to extend past the space between 1, 2, and 2, 3, or (as a mason or carpenter would call it) the hairs are laid so as to "break joints" on the leather, the ends passing through the leather and glued on the inside of the band, and then covered with a piece of thin leather glued over them thus making a smooth band on the inside to pass over the rollers; and a continuous or unbroken surface of hair on the outside.

Between the two rows of violins is a narrow piece of wood or metal B B Fig. 1 and on this is a number of small pulleys, as seen between B, B.

s, s, s, s, s, s are cords, one end of each of which is attached to the violins and passing over the said pulleys is attached to the keys 13, 14, 15, 16, 17, 18, 19, 20, by passing around the pins 21 21, by which the length of the said cords can be adjusted.

Fig. 3, shows the manner in which the keys are made to operate the violin shells.

M is a side and top view of a shell.

o is the "fiddle string."

B are two pulleys. Now on the shells below the bow the cord *s* is attached to the key on the end 13, as shown at 21 and then by depressing the key 13, the shell M is brought in contact with the revolving bow; and when the shell is above the bow, the cord *s* passes over the pulleys and is attached to the key 13 near its middle. Then by depressing the key the shell is lowered onto the bow, and thus the instrument may be played similar to a "melodian."

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

The construction of the violins suspended on pins W and by cords *s s s s s* attached to keys so they may be brought in contact with the bows by depressing the keys, in the manner described or any other substantially the same and which will produce the same results.

JOHN D. AKIN.

Witnesses:

ELISHA CLARK,
DANIEL BAKER,
A. B. RICHMOND.